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ABSTRACT

Bias and Careers: Evidence from the Aid Effectiveness Literature*

We investigate whether estimates of the effect of aid on growth are influenced by authors' careers. We collect data on the careers of 190 authors and apply meta-regression analysis to investigate the impact of authors' age and tenure status on the reported magnitude of aid effectiveness, and on the degree of selectivity in which results are reported. On average, authors without tenure report much larger effects and they also exhibit substantial publication selection bias. These findings are consistent with differences in publication incentives between tenured and non-tenured authors. Older non-tenured researchers report the most biased findings in this literature. One explanation for this latter result is these authors' links with aid agencies.

JEL Classification: A11, C18, F35, I23

Keywords: aid, tenure, incentives to publish, meta-regression analysis

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"People are people" Gordon Tullock (2002)

1 Introduction

In this article, we explore the economics of economics.[1] Are researchers altruistic truth seekers striving to maximize social welfare through science, or are we rational humans concerned with the broader good but also seeking to advance our careers?[2] The results of empirical studies in economics often fail to replicate and they often suffer from publication selection bias, with preferential reporting of statistically significant results and inflation of estimates of parameters of interest (e.g., Camerer et al., 2016; Ioannidis et al., 2017; Christensen and Miguel, 2018; Andrews and Kasy, 2019). Such biases emerge when authors are engaged in data mining and specification search designed to achieve statistical significance, when some empirical studies remain unpublished and unavailable to the public (Franco et al. 2014), or when results are reported only when they are consistent with researchers' priors. These concerns are, or course, not new. Tullock (1959), for example, emphasizes the need for replication in economics. Tullock also argues that "scientists are not much better than other men" (2005: 124). Frey (2003) points out that success and survival in academia depends on publishing and that authors are tempted to give into the demands of referees to secure publication. Paldam (2018) shows how rational economics researchers distort the research record. Moreover, industry links and funding may affect reported outcomes. For example, industry sponsored research on drug effectiveness tends to be more favorable to the sponsor than non-industry sponsored research (Baker et al., 2003; Lundh et al., 2017). Improving research quality and credibility requires collective action with all the difficulties that entails (Blanco-Perez and Brodeur, 2019).

[1] Other disciplines face similar issues regarding the credibility of their research (e.g., Ioannidis (2005) for medicine and Stanley et al. (2018) for psychology).

[2] As authors of this article, we are interested in advancing economics as a science but we have also derived a lot of satisfaction working on this project.

The objective of this article is to investigate some of the individual researcher career characteristics that may affect the prevalence and magnitude of publication selection biases. We augment the existing meta-data on aid effectiveness on growth (Doucouliagos and Paldam, 2015) with individual properties of the underlying authorship of empirical growth studies and test which of these properties are associated with reporting biases. At the foreground of our interest is the effect of career age and academic tenure (hereafter tenure) on publication bias. Researchers are rational and will seek to achieve their objectives in the best possible manner. The incentives to engage in specification search might be higher for younger researchers as they are under greater pressure to publish to move their academic careers forward. The "publish or perish" literature in different fields discusses the potential harmful effects of this pressure (e.g., see De Rond and Miller 2005). Publication bias is one of these effects. On the other hand, established senior researchers might use their skills to find a specification which looks credible, is in line with expectations of scientific community and thus, is easier to publish, rather than to show the specification which genuinely reflects the data at hand. Moreover, there are tradeoffs between incentives to conform to established scientific consensus versus the rewards of innovation and original findings (Thomas and Thomas, 2020). These varying effects suggest that the net effect is an empirical matter.

Our study contributes to the literature on the determinants of publication selection bias, by studying the role of age and tenure in generating publication selection bias and artificial heterogeneity in reported results. The effects of these biases is to create artificial heterogeneity in the evidence base, suggest poor replication of results, and typically inflate estimates of aid effectiveness, potentially distorting public policy in terms of funds allocated towards aid.[3] Past studies have identified several individual and institutional variables that affect the degree of

[3] Tullock (2005) notes the "pressure to make false discoveries or to present trivial discoveries as major". We here look at exaggeration of results but not false discoveries.

publication bias. For example: Jarrell and Stanley (2004) on the authors' gender, Costa-Font et al. (2013) on the journals' impact factor, Doucouliagos and Stanley (2013) on theoretical contests and bias, Fidrmuc and Lind (2018) on the type of institution the authors are affiliated with, and Blanco-Perez and Brodeur (2019) on the impact of journal editorial policies. To our knowledge, Brodeur et al. (2016) is the only study to examine academic age and tenure with respect to publication bias. Investigating the statistical properties of estimation results on the population of studies from three top economics journals across seven years, these authors find that non-tenured or younger authors are more likely to inflate their results. Unlike Brodeur et al. (2016), we are able study the role of age and tenure in a multivariate context and we investigate the role of institutions the researchers are affiliated with. Moreover, compared to Brodeur et al. (2016) who can only study publication selection bias, we investigate bias due to selection, heterogeneity, and exaggeration of the research record.[4]

Our case study is the enormous aid effectiveness literature. Aid allocations totaled $160US billion in 2018,[5] with practically all countries involved as either donor or recipient. The effectiveness of aid is debated by scholars (Arvin and Lew, 2015). This literature offers an interesting case study. According to Doucouliagos and Stanley (2013), there will be greater publication bias in areas where there is broad theoretical agreement. In contrast, in areas such as aid effectiveness, where there is strong theoretical disagreement, referees and journals make available space for a wide range of empirical results. Thus, there is relatively small publication bias found in this literature. Nevertheless, there may be pockets of bias, within an overall relatively low bias literature. Studying the process by which research is conducted in the aid

[4] Brodeur et al. (2016) analyse different subsets of *t*-values and calculate the bias in each subset (e.g., "tenured" *versus* "non-tenured" *t*-values). However, their data does not allow them to study the effects of data, specification, and estimation on reported estimates. The benefit of our data is that we have a more complete information on estimates of aid-effectiveness, including partial correlations, *t*-values, and a long list of variables that affect reported estimates.

[5] Net official development assistance and official aid received (constant 2016 US$). Source: World Development Indicators.

effectiveness literature is not merely an academic exercise. To the extent that policy decisions regarding aid allocations are made on the basis of evidence, then understanding the way in which research is produced and distributed and revealing biases within, are also critically important for 'evidence based policy'. Some of the research effort may be directed at lobbying governments to allocate resources towards aid, or not to allocate, depending on the direction of the bias.[6]

In the next section we provide an overview of the literature on publication bias in empirical economics and discuss the role academic career and tenure could exert on publication bias. In Section 3 we discuss the data on estimates of aid effectiveness and authors' career characteristics. In Section 4, we review the meta-regression methodology. The results are presented in Section 5. The last section concludes.

2 Bias in empirical economics

Paldam (2018) shows that in conducting research, economists behave as predicted by economic theory. For example, we make rational choices with regard to how many regressions we produce and which results are submitted to the market (conferences, working papers, and journals).[7] The number of estimates produced is determined by the marginal costs and benefits of running regressions. Which regressions are reported is a function of researcher preferences and which regressions are published is influenced by referee and journal preferences.

There are several processes by which research is generated and communicated to the public. At one level, arguably most authors merely apply the best methods to the available data and report the findings of models that meet the prevailing protocols and standards in reporting.[8]

[6] Some of the research may involve rent seeking and lead to social loses. See Hagen (2015) on rents associated with development aid.
[7] Our data includes estimates reported in journal articles, books, and unpublished works.
[8] These standards obviously change over time. There has been increased effort in recent years to increase transparency in economics, especially with regard to sharing of data and code and preregistration (Christensen and Miguel, 2018), and development of codes of ethics (Levy and Peart, 2008).

These estimates can be taken to be unbiased in the sense that the authors are neutral and not seeking to report a particular *type* of result (though they may still suffer from other biases such as endogeneity and omitted variable bias). However, some authors might report biased estimates if 'industry norms' are such that journals have a revealed preference for statistically significant results, on average. This would add pressure on some authors to re-estimate models until they find a statistically significant result. Another possibility is that some authors are actively engaged in seeking results that meet their theoretical priors. This is distinct from the incentives to publish, as researchers might have theoretical and ideological priors. In our case study, some authors may believe that aid 'works' and seek evidence that encourages policy makers to use aid to eradicate the miseries arising from poverty. Others might be convinced that aid is a misallocation of scarce resources, that it leads to Samaritan's dilemma (Buchanan, 1975), fuels conflict, and has other unintended consequences that end up doing more harm than good to the very people it is trying to help. Such priors may affect the type of evidence reported and potentially distort inferences and policy decisions.

Research on measurement and moderators (i.e. determinants) of publication bias in economics is growing but remains relatively thin. Broadly speaking, there are two methodological approaches. One strand of research uses meta-research that pools estimates from several research areas (e.g., Ioannidis et al., 2017; Blanco-Perez and Brodeur, 2019) and only investigates publication bias from the distribution of the *t*- or *p*-values. We use here the second approach, where a population of estimates on the same parameter (aid effectiveness in our case) along with its *t*-values is collected. Armed with these estimates, we can derive an estimate of the 'true' effect of aid on growth and we can then identify which studies deviate from this 'true' effect and by how far, and we can identify some of the characteristics that result in bias. This is not possible using meta-research which typically relies on *t*-statistics from various distinct research issues.

Several factors have been documented to moderate publication bias in economics. In their study of the effects of labor unions on productivity, Doucouliagos and Laroche (2003), find that management journals publish much larger positive effects, while published effects were on average small and negative in labor economics journals. Costa-Font et al. (2013) investigate the price elasticities of prescription drugs and income elasticities of health care published by health economic journals and find that the reported absolute values of these elasticity estimates are larger in higher impact journals.[9] Well-tailored journal policies might mitigate the prevalence of publication bias. The editorial statement issued by eight health economic journals in 2015 called their reviewers to judge submitted papers by their scientific merit, rather than the statistical significance of the reported estimates. The effect of this journal intervention on publication bias was studied by Blanco-Perez and Brodeur (2019), who find a 17 percentage points decrease in the proportion of test statistics rejecting the null hypothesis.

Field and affiliation specific bias have also been revealed as moderators of publication bias. A meta-meta-analysis of 81 different economic fields by Doucouliagos and Stanley (2013) shows that publication bias is smaller in fields with no settled agreement on the sign and magnitude of the studied effect. An interesting institutional bias in reported estimates was revealed by a recent study by Fidrmuc and Lind (2018). These authors show that studies by authors from private banks estimate larger effects of the Basel III macroeconomic regulation. Bruns et al. (2019) study publication biases in innovation research, and find that biases are far more prevalent in research results associated with the field of management, than economics.

Bias might be related to econometric methods. Evaluating 20 different kinds of development programs, Vivalt (2019) shows that estimates from randomized control trials (RCT) present less bias than quasi-experimental (QE) approaches. Moreover bias in RCTs

[9] In contrast, Havránek (2015) finds no difference in the magnitude of reported estimates of intertemporal substitution in consumption between the top and all other journals.

decreases over time, while the QE bias does not. In a similar vein, in their analysis of the population of *t*-statistics from the 25 top economic journals in the year 2015, Brodeur et al. (2018) find that empirical estimates based on RCT and regression discontinuity approaches are less inflated than difference-in-difference results, while the most inflation of estimates resides in empirical estimates based on instrumental variables regressions.[10]

Finally, the focus of our article, individual author characteristics, are less studied in relation to publication bias, but there is some relevant evidence. There are two consecutive meta-studies analyzing estimates of the gender wage gap in the US; Stanley and Jarrell (1998) and Jarrell and Stanley (2004). Given the gender wage gap is a gender sensitive topic, Jarrell and Stanley studied, among other aspects, the role of the gender of the authors on the size of the reported wage gap. Surprisingly, studies by only male authors showed on average larger estimates of the gender wage gap, compared to studies where at least one author was female. Brodeur et al. (2016) estimate publication bias in the population of *t*-statistics collected from three top journals in economics and find that non-tenured and younger authors are more likely to statistically "inflate" their results.

Age, tenure, and bias

In this article we study how two career characteristics of researchers, the number of years since PhD and tenure, matter to reported magnitudes of parameter estimates. Unlike Brodeur et al. (2016), we look at bias in one specific literature, namely the population of estimates on the effects of development aid on growth. Studying a specific literature on the same effect allows us to use a meta-analytic approach where we can detect the extent of bias in both reported statistical significance and reported magnitudes.

[10] None of the estimates of aid effectiveness in our data come from RCTs.

Our focus is on the effects of age and tenure on bias. Age is correlated with tenure, but they seem to be distinct dimensions in our data. The correlation between the average age and average tenure is 0.42 (p-value = 0.000). Nevertheless, as we show below, there is an important characteristic of the aid effectiveness literature of older non-tenured academics, many of whom have direct links with the aid industry.

The effect of age on reported findings could be varied. Younger researchers may be more up to date with regards to latest research methods, be more curious, energetic, and innovative, and thus less bound to `what was said before'. In contrast, older researchers, protected by tenure, may choose to conform with the literature, not seek to innovate, and may thus produce more biased research. Age could also be correlated with research craftsmanship. With experience, researchers could become more efficient in producing and communicating research, thus finding it easier to publish. On the other hand, younger researchers may be under greater pressure to publish to meet tenure requirements. Tenure is highly prized in academia, providing job and income security, career progression, and research support. The incentives are substantial for young non-tenured researchers to meet publication requirements. Younger researchers may thus be under more pressure to engage in publication selection to secure publication. For the majority of academics, tenure requires publications; though the number and quality of publications varies between institutions and over time and publications may not be sufficient. Graber et al. (2008) estimate that during the 1970-2011 period, researchers in German speaking countries were required to publish the equivalent of 1.5 top-five articles to secure tenure, while they predict the tenure requirement to the equivalent of 4 top-five articles after 2011.

Getting published might involve doing what referees demand (Frey 2003). However, since the aid on growth literature theoretically 'allows' for varied results, young scholars might be swayed either way if all they seek is to be published. That is, *a priori*, we cannot predict

the direction of the bias; it could be positive or negative. However, if our hypothesis is correct, then we expect an exaggeration in one direction; it is an empirical matter as to which direction this will be.[11] Not all young researchers will do this. Rather this is a possibility that will be revealed in the data and thereby can be tested. The situation is less clear if the authors' team is mixed in age or tenure. If the team includes some tenured and more senior academics, then there could be less inclination to exaggerate results for publication. On the other hand, such teams may 'gift' a paper or be more flexible so that the junior researcher gets published.

Some authors argue that academics become less productive after tenure, while others argue that this depends on whether incentives to produce remain weak after tenure (e.g. Rauber and Ursprung, 2008). Moreover, the effect of tenure will depend on the age of the researcher. Older tenured researchers may face different incentives and productivities compared to young tenured researchers. Similarly, young non-tenured researchers are eager to get tenure but older non-tenured researchers not so. Therefore, it is the interaction between age and tenure that is the critical dimension, and bias may vary over the course of researchers' careers.

3 Data

We use two sources of data. First, we commence with the meta-data collected by Doucouliagos and Paldam (2015).[12] This data is the population of estimates of the effect of aid on growth. Second, we match these estimates with data on authors' careers using information on tenure and post-PhD age from the curricula of the authors of studies included in this meta-analysis. Table 1 presents the self-collected meta-data, while we report descriptive statistics of the

[11] This assumes that the primary objective is tenure. Researchers may also be concerned about their reputation and this may limit the degree to which they are willing to report results that quantitatively or qualitatively differ after tenure; this would then result in autocorrelation in their reported findings over time. We do not have the data to explore this dimension.

[12] Doucouliagos and Paldam (2015) is the most recent version of earlier meta-analyses by the same authors. For the purposes of replication of the original meta-results with our extension, we mostly used the working paper version of Doucouliagos and Paldam (2015), namely Doucouliagos and Paldam (2011) which presents the most extensive set of estimation results.

original Doucouliagos and Paldam meta-analysis data in the Appendix. They collect 1,361 comparable estimates of the aggregate effects of aid on growth. These estimates of the effect of aid stem from 133 papers written by 190 distinct authors over the period 1970 and 2011.

Our own self-collected meta-data summarized in Table 1 concentrate on career age and tenure of the authors from the authors' CVs, author's websites or LinkedIn profiles. We calculate age as the number of years elapsed since an author's PhD graduation and the year of the published paper in our dataset.[13] We call this the post-PhD age. Our core specification uses the average post-PhD age of all authors where there are multiple authors. The Appendix considers two variants of this measure, which we use for sensitivity analysis: we assign to the study either the highest post-PhD age or the lowest where there are multiple authors. We also consider the tenure status of authors. Tenure conditions differ between countries. Hence, we looked specifically at authors of the study and identified from their CV, whether at the time they published their aid effectiveness study, had already attained tenure. This was based on information about their academic rank and country of their current affiliation.[14] To account for lags between submission and publication, we looked at the tenure status of each co-author two years before the official publication year of a study. Again for the core models presented here, we calculated the mean tenure for co-authored papers. The Appendix reports sensitivity analysis using two alternative measures of tenure. First we code one if all coauthors are tenured, and second we coded one if at least one author is tenured.

We also specifically look at the effect of affiliation with an international aid organization. For this, we coded a study as one if at least one coauthor was affiliated with an international aid organization. This information was also collected from CVs.

[13] For 44 authors we found no information on PhD year. In these cases, we assumed the PhD year to be the birth year plus 30. Where the birth year was not known (36 cases), we assigned the PhD year as the year of the first publication available in https://ideas.repec.org/. For 10 authors, the highest degree was a Master or a Bachelor degree; for these authors the post-PhD age was calculated as years since this degree.

[14] The Appendix, Table A1, lists the lowest academic rank by which tenure is granted by country.

Table 1
Descriptive statistics of authors' characteristics

Autobiographical variable	Mean	(Std. dev.)	Min	Max
Post-PhD age (average)	8.56	(6.85)	-5	26.5
Highest post-PhD age	12.54	(9.98)	-5	45
Lowest post-PhD age	4.50	(6.58)	-6	25
Tenure (average)	0.37	(0.38)	0	1
All tenured (share)	0.18	(0.39)	0	1
At least one tenured (share)	0.56	(0.50)	0	1
At least one author aid link (share)	0.49	(0.50)	0	1

Notes: Statistical measures are calculated per study.

In our sample of 190 researchers, 63% were non-tenured at the time they reported aid effectiveness results. For eight multiple publishing authors we observed change in tenure at later published studies. Another 38 researchers in our sample (20%) attained tenure after publishing an aid effectiveness paper. This is not to say that they secured tenure because of these articles, but it consistent with the notion that publications may have been an incentive to get tenure. Among those who achieved tenure, on average, it took 3.5 years to secure it. Those without academic tenure at later stage reported in their CV employment as post-docs, some became consultants, economists, or managers in an aid organization, and some left academia to work in the private sector.

Outliers and leverage points

In their meta-analysis, Doucouliagos and Paldam use 1,361 estimates of aid effectiveness. These authors did not accommodate outliers in their data. Following the MAER-Net guidelines and current practice in meta-regression (Havranek, 2020), we removed outliers and leverage points from the data. To identify outliers, we first run an unrestricted weighted least squares meta-regression (i.e. $r_{ij} = \beta_0 + \varepsilon_{ij}$, with inverse variance weights). We then identify as an outlier any estimate of aid effectiveness whose standardized residual was greater than 2.5.

With outliers removed, we then identified as leverage point any estimate whose DFBETA was greater than $2/\sqrt{n}$ (see Belsley et al., 1980). This process identifies 32 estimates as outliers and 39 estimates as leverage points. The Appendix also reports our baseline estimation results without outliers and leverage points removed.

4 Empirical approach

A primary objective of meta-analysis is to provide an estimate of the overall *effect size* based on the population of research results; known as the meta-average. Three steps are necessary to minimize bias and provide credible estimates of the meta-average. First, meta-averages are weighted using either sample size or inverse variance weights (Hunter and Schmidt, 2004; Stanley and Doucouliagos, 2012). Inverse variance weights are either fixed-effect or random-effects.[15] Fixed-effect weights are constructed as $\frac{1}{SE_{ij}^2}$, where i and j denote the ith estimate from the jth study, and *SE* denotes the standard error of the partial correlation. Random effect weights are constructed as $\frac{1}{SE_{ij}^2+\tau^2}$, where τ^2 is the estimated between-study heterogeneity variance. While random effects are widely used, recent research reveals that they produce more biased estimates when there is publication selection, i.e. when some of the reported estimates are preferentially chosen based on their statistical significance (Stanley and Doucouliagos, 2015 and 2017). Kvarven *et al*. (2019) show that random effects exaggerate meta-averages by nearly three-fold and have high rates of false positives, finding evidence of an empirical effect when there is none. In this article, we use fixed effects meta-analysis estimated using unrestricted weighted least squares (UWLS). Simulations show that UWLS

[15] In meta-analysis, these terms refer to the weights used and not to the structure of panel data.

produces meta-averages with smaller bias, especially when there is heterogeneity and publication selection bias in the evidence base (Stanley and Doucouliagos, 2015 and 2017).[16]

A second necessary step is to *correct* the evidence base of publication selection bias. Publication selection bias typically results in inflated reported estimates and hence any average (be it based on meta-analysis or a narrative review) of a biased evidence base will itself be biased. The most widely used method for correcting the evidence base of publication selection bias involves some variant of the Egger regression (Egger *et al*., 1997; Stanley, 2001; Stanley and Doucouliagos, 2012):

$$(1)\quad r_{ij} = \beta_0 + \beta_1 SE_{ij} + \varepsilon_{ij}.$$

Eqn. (1) is known as the 'Funnel Asymmetry, Precision Effect Test' (FAT-PET); see Stanley and Doucouliagos (2012). Simulations show that β_1 provides an estimate of the magnitude and direction of publication selection bias, while β_0 provides an estimate of the underlying empirical effect, corrected for publication selection bias (see Stanley and Doucouliagos, 2012 and references therein).

If enough researchers are engaged in publication selection bias, then their actions will leave a statistical trail. Specifically, if researchers are searching for statistically significant results, they will then search through datasets, specifications, and estimators until they attain a given level of statistical significance. This would then result in an association between the reported estimated effect size and its estimated standard error. Hence, if there is no publication selection, then $\beta_1 = 0$. Eqn. (1) has low power to identify publication selection bias, i.e. the test can reject the presence of publication selection bias when it is present. Further, it does not identify the factors that may drive the propensity to differentially report results. Following

[16] UWLS produces the same meta-averages as fixed effects weights, but with wider confidence intervals.

Stanley *et al* (2008) and Stanley and Doucouliagos (2012), we estimate a more general publication selection bias model:

$$(2)\quad r_{ij} = \beta_0 + \beta_1 SE_{ij} + \sum \delta_k \boldsymbol{k}_{ij} \cdot SE_{ij} + v_{ij},$$

where $\boldsymbol{k}$ is a vector of variables that influence publication selection. In our study, we are particularly interested in the effects of age and tenure. Specifically, we estimate the following publication selection bias model:

$$(3)\quad r_{ij} = \beta_0 + \beta_1 SE_{ij} + \delta_1 Age_{ij} \cdot SE_{ij} + \delta_2 Tenure_{ij} \cdot SE_{ij} + \delta_3 Age_{ij} \cdot Tenure_{ij} \cdot SE_{ij} + \sum \delta_k \boldsymbol{k}_{ij} \cdot SE_{ij} + v_{ij},$$

where *Age* denotes the average year post-PhD of all co-authors of study j and *Tenure* is the percentage of authors of this study who have tenure. This model investigates whether researchers are selectively reporting results and whether this preferential reporting is a function of post-PhD age and researchers' tenure status. In Eqn. (3), publication bias is a complex function of *all* the moderator variables. Eqn. (3) enables us to test whether selection bias is a function of age and tenure. Following the discussion in Section 2, we investigate whether tenured researchers or non-tenured researchers are more likely to engage in publication selection. In a literature that is free of bias, there should be no differences in publication selection by age and tenure.

A third consideration is heterogeneity. Reported estimates can vary because of random sampling errors, model misspecification and omitted variable bias, and because of genuine heterogeneity arising from underlying structural differences in aid effectiveness (e.g., the

effects of aid on growth could vary over time and between countries). These sources of heterogeneity can be modelled through meta-regression:

$$(4) \qquad r_{ij} = \beta_0 + \beta_1 SE_{ij} + \sum \beta_x \boldsymbol{x}_{ij} + u_{ij},$$

where $\boldsymbol{x}$ is a vector of control variables that include spatial and temporal differences and also researchers' modelling choices. We test for the effects of age and tenure by estimating the following meta-regression model:

$$(5) \qquad r_{ij} = \beta_0 + \beta_1 SE_{ij} + \beta_2 Age_{ij} + \beta_3 Tenure_{ij} + \beta_4 Age_{ij} \cdot Tenure_{ij} + \sum \beta_x \boldsymbol{x}_{ij} + u_{ij}.$$

The difference between Eqn. (3) and (5) is that the former focuses on publication selection bias and the later focuses on heterogeneity bias. In Eqn. (3), we model whether Age, $Tenure$, and $Age \cdot Tenure$ influence researchers' decision to report a given estimate. In Eqn. (5), we model whether Age, $Tenure$, and $Age \cdot Tenure$ influence the heterogeneity in reported estimates, as measured by differences in the reported magnitude of aid effectiveness.[17] Again, there is no genuine reason why the reported results should vary by researchers' age and tenure status. Hence, in a literature that is free of bias, we should find age and tenure to be statistically insignificant in moderating estimates of aid effectiveness.

In addition to the moderators of our interest, we include in the $\boldsymbol{k}$ and $\boldsymbol{x}$ vectors the same variables used in the original meta-analysis by Doucouliagos and Paldam (2015). Before presenting our results, we briefly discuss what the evidence base concludes regarding aid

[17] A more general model can include both types of bias. However, multicollinearity is a major problem for such models and hence we focus on Eqns. (3) and (5).

effectiveness. This is important in terms of understanding the impact of incentives on which empirical results are reported to the public.[18]

Table 2
Meta-average effect of aid on economic growth

	UWLS (1)	FAT-PET (2)	Top 10% most precise (3)	Top 1 estimate (4)	Top 5 journals (5)
		Without outliers			
Meta-average	0.035	0.006	0.024	0.048	0.028
	(4.84)***	(0.53)	(5.01)***	(2.76)**	(1.32)
N	1,290	1,290	129	1	30
K	133	133	18	1	4
I^2	66%	65%	69%	-	62%
		Doucouliagos and Paldam (2015) data			
Meta-average	0.042	0.028	0.039	0.048	0.052
	(4.52)***	(1.83)*	(3.39)***	(2.76)**	(1.03)
N	1,361	1,361	136	1	33
K	133	133	12	1	4
I^2	74%	74%	83%	-	80%

Notes: The dependent variable is the partial correlation between aid and growth. Except for Column (4), all estimations use unrestricted weighted least squares with inverse variance weights. Figures in round brackets are *t*-statistics, using standard errors adjusted for clustering of estimates within studies. N and K denote the number of estimates and studies, respectively. The first panel uses the data without outliers and leverage points. The second panel uses all the data from Doucouliagos and Paldam (2015). I^2 measures the percent of variation in reported estimates attributed to heterogeneity. *, **, *** denote statistical significance at the 10%, 5%, and 1% levels, respectively.

As in Doucouliagos and Paldam (2015), we use meta-analysis to provide an overall estimate of the overall average effect of aid on growth. We follow Ioannidis et al. (2017) and use four alternate estimates of the 'true' effect of aid on growth. Table 2, Column (1) reports the UWLS meta-average.[19] This produces a small partial correlation, $r = 0.04$. Column (2) reports the FAT-PET, Eqn. (1). Corrected for publication bias, the estimated meta-average 'true' effect is effectively zero. Column (3) reports the UWLS using only the top 10% most precise estimates (Stanley *et al*., 2010). Column (4) reports the estimated effect from the single

[18] Doucouliagos and Paldam (2015) focus entirely on economic growth. For discussion and evidence on other aid impacts, such as education, health, and conflict, see Arvin and Lew (2015) and Doucouliagos (2019).
[19] Table 2 reports unconditional meta-averages. These are fairly representative of the evidence base unless heterogeneity (I^2) exceeds 80%. The Appendix reports conditional averages. These range from -0.09 to +0.09, with 95% confidence intervals that always included zero. So, the basic conclusion of aid ineffectiveness remains.

most precise estimate, Top 1. Column (5) reports an additional meta-average using only those estimates published in the top 5 economics journals.[20] The top panel uses the data with outliers and leverage points removed, while the second panel includes all estimates. The estimates reported in Columns (3) to (5) are reported merely for sensitivity analysis; there is no scientific reason to remove most of the data as these columns do.

Table 2 informs that the average partial correlation lies between 0.01 to 0.05. According to Cohen (1988), a correlation of 0.1 or less is small. We conclude that the effect of aid on growth is negligible and of no practical policy significance. If the underlying effect of aid on growth were large, it would be easier to detect in the data and easier to replicate prior findings. With a small to zero effect, it becomes harder to find a statistically significant positive effect of aid on growth. Consequently, more effort is needed among those researchers engaged in publication selection.

5 Results

We commence our analysis with descriptive evidence for the differences in reported effects of aid on growth by researchers' post-PhD age and tenure. In Table 3 we present the average partial correlation for relevant subgroups, and report *t*-tests for differences in means between tenured and non-tenured researchers.[21] The partial correlation for articles when *all* authors are tenured is 0.045, compared to a correlation of 0.079 for articles where *none* of the authors are tenured. This difference is statistically significant (*p*-value = 0.012). Table 3 also compares the average correlation for younger and older researchers, where younger is here defined as

[20] In our data, Top 5 journals are *American Economic Review* and *Journal of Political Economy*.

[21] Ideally, we would analyze longitudinal data and compare the estimates reported by authors before and after tenure. However, in our data, we have only four instances where the same team of authors changed tenure status and only one of these involved a single author for which we can compare before and after tenure. Hence, we are not able to explore such changes and resort to looking at a cross-sectional data. For the four cases we can compare before and after, we find that absolute degree of research exaggeration is much larger before tenure (141%) compared to tenure (38%).

less than or equal to five years post-PhD and older is defined as greater than or equal to 15 years post-PhD. Across all age groups, tenured researchers report statistically and practically significantly smaller correlations. The largest partial correlations are reported by younger non-tenured researchers, which is the group with the largest number of estimates in our sample.[22]

Table 3
Age, tenure, and the reported effects of aid on growth

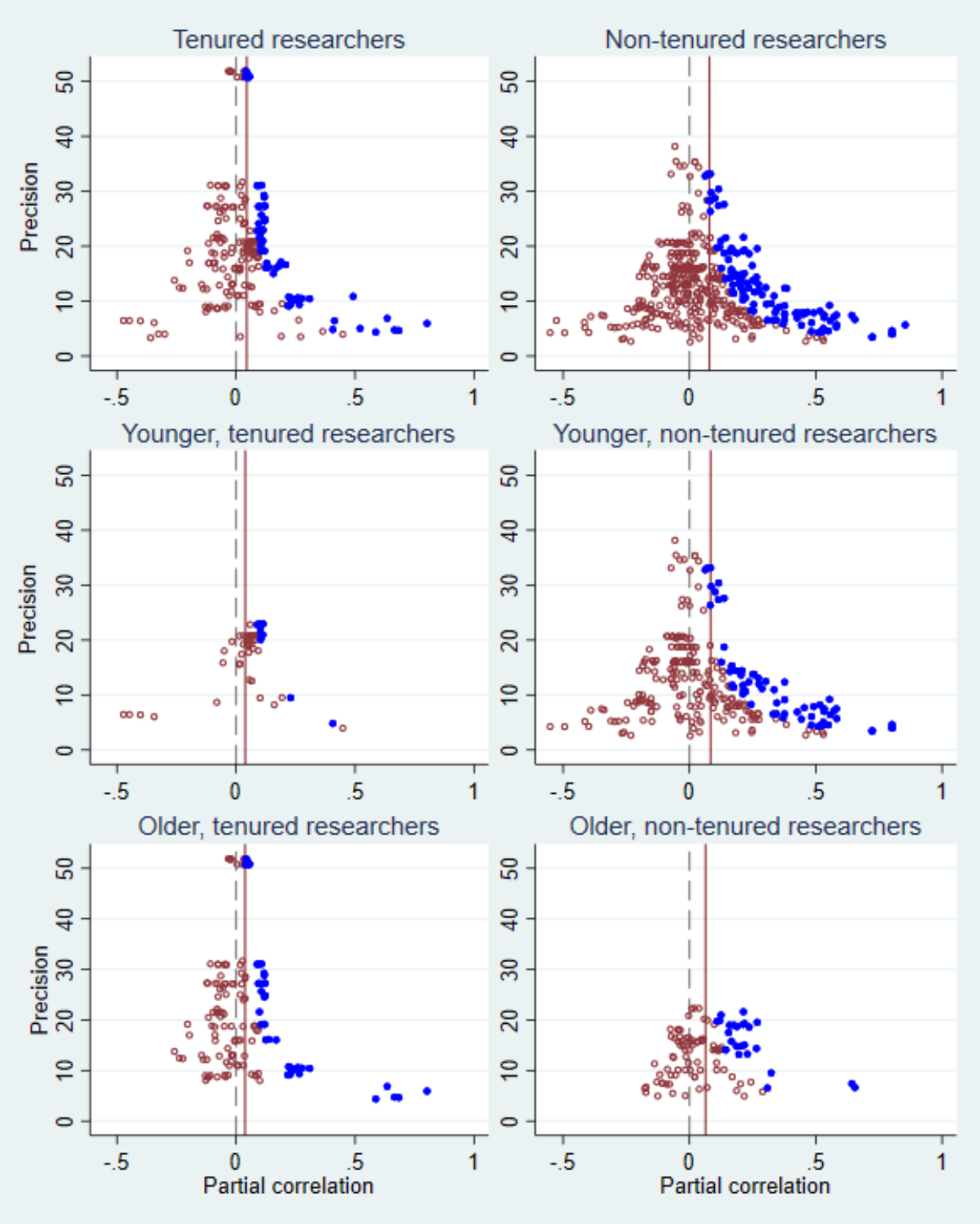
	Number of estimates (1)	Partial correlation (2)	Differences in means (3)
All tenured	223	0.045 [0.172]	-0.034 (0.012)
None tenured	452	0.079 [0.213]	
Younger tenured	51	0.039 [0.162]	-0.045 (0.048)
Younger non-tenured	269	0.084 [0.234]	
Older tenured	149	0.038 [0.161]	-0.026 (0.085)
Older non-tenured	107	0.064 [0.141]	

Notes: Younger and Older are defined as less than or equal to five years, and greater than or equal to 15 years post-PhD, respectively. Square brackets in Column (2) report standard deviations. Round brackets in Column (3) report *p*-values for a one-tailed test of differences in means between tenured and non-tenured researchers.

These descriptive differences between tenured and non-tenured researchers are illustrated also through funnel plots, Figure 1. These plots illustrate the distribution of the reported aid on growth correlations and they can also indicate publication selection bias which manifests as an asymmetrical distribution of reported estimates (Stanley and Doucouliagos, 2012). The top panel of Figure 1 compares all tenured to all non-tenured research results. The distribution of results for both groups are moderately skewed; 0.93 and 0.70 for all tenured and all non-tenured researchers, respectively. This asymmetry in the distribution of results is consistent with publication selection bias, but it may also reflect heterogeneity. We investigate this formally in the following section.

[22] This group also has the largest standard deviation in reported findings.

Figure 1
Comparison of tenured and non-tenured researchers, by age subgroups



Notes: Continuous red line denotes the meta-mean of the underling subgroup (See Table 3). Filled blue circles denote statistically significant positive correlations.

The descriptive analysis of meta-averages is based on raw differences in reported estimates. Moreover, Table 3 compares estimates of all tenured and all non-tenured researchers, and abstracts from studies with mixed teams. While these two groups produce 52% of the reported aid on growth estimates, we are also interested in mixed research groups, i.e. groups with both tenured and non-tenured researchers. In the following analyses we delve more deeply into these dimensions.

Publication selection bias

Table 4 reports the results of meta-regressions of publication bias, Eqn. (3).[23] For comparison, Column (1) reports the FAT-PET model, Eqn. (1). These results suggest that there is statistically significant publication selection bias (coefficient on *SE*) and that there is no effect of aid on growth after correcting for this bias (the constant). The coefficient on *SE* is positive confirming that researchers in this literature are, on average, preferentially reporting larger effects of aid on growth. The magnitude of this bias is however modest. Doucouliagos and Stanley (2013) show that there is 'modest' selectivity when the publication selection bias coefficient is less than 1.

Columns (2) to (6) report estimation results based on Eq. (3), where we investigate whether age and tenure influence the propensity to report statistically significant estimates. Column (2) reports the baseline results that only include a constant, post-PhD age, tenure, and the post-PhD age and tenure interaction. In Column (3) we extend the baseline model including 39 moderator variables that account for other factors that might determine publication selection bias. In Column (4) we report the general model with an additional 10 moderator variables, relating to journal dummies and author characteristics.[24] To explore the robustness of these

[23] The table reports only the results of the variables of interest; see the Appendix for the full set of results.
[24] Column (3) includes variables on the type of data used, the number of countries analyzed, measurement and econometric specification differences, and the estimator used. Column (4) additionally includes journal, influence, institutional and gender dummies. See the Appendix for details and estimated coefficients.

results, in Column (5) we report the results of a reduced model where statistically insignificant moderator variables are removed sequentially (as recommended by Stanley and Doucouliagos, 2012). As a further robustness check, in Column (6) we add author fixed effects to control for any unobservable author specific factors.

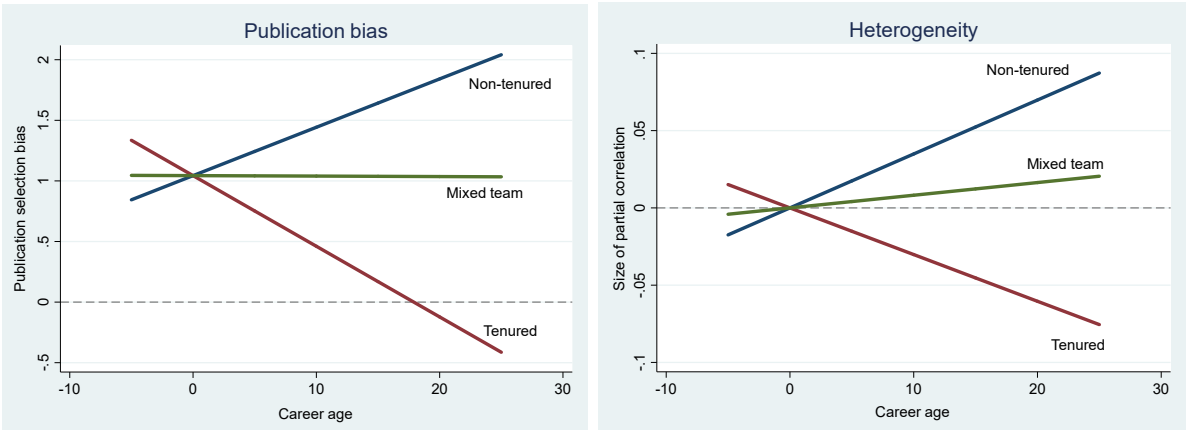
Table 4
Age, tenure, and publication selection bias in the aid effectiveness literature

	FAT-PET (1)	Baseline (2)	Expanded (3)	General (4)	Reduced (5)	With author fixed effects (6)
Standard error	0.566	0.540	0.649	1.044	1.373	0.686
	(2.07)**	(1.72)	(0.93)	(1.45)	(4.23)***	(0.68)
Post-PhD Age	-	-0.003	0.017	0.040	0.035	0.167
		(-0.10)	(0.63)	(1.61)	(1.32)	(2.89)***
Tenure	-	0.998*	1.147	1.119	0.851	2.885
		(1.92)	(2.30)**	(2.32)**	(1.97)*	(3.19)***
Post- PhD	-	-0.073	-0.082	-0.098	-0.089	-0.265
Age*Tenure		(-1.78)*	(-1.95)*	(-2.53)**	(-2.23)**	(-4.95)***
Constant	0.006	0.010	0.012	0.002	-0.004	0.036
	(0.53)	(0.82)	(0.74)	(0.15)	(-0.29)	(1.52)
Specification and data variables	NO	NO	YES	YES	YES	YES
Other journal and author characteristics	NO	NO	NO	YES	YES	YES
Joint test - age	-	3.37	2.30	3.20	2.83	12.97
		[0.037]	[0.104]	[0.044]	[0.063]	[0.000]
Joint test - tenure	-	2.01	2.71	3.52	2.63	12.99
		[0.138]	[0.070]	[0.033]	[0.076]	[0.000]
N	1,290	1,290	1,273	1,273	1,273	1,273
Adjusted R^2	0.01	0.03	0.19	0.22	0.20	0.43

Notes: The dependent variable is the partial correlation between aid and growth. Table reports results of estimating the publication selection bias model: $r_{ij} = \beta_0 + \beta_1 SE_{ij} + \delta_1 Age_{ij} \cdot SE_{ij} + \delta_2 Tenure_{ij} \cdot SE_{ij} + \delta_3 Age_{ij} \cdot Tenure_{ij} \cdot SE_{ij} + \sum \delta_k \boldsymbol{k}_{ij} \cdot SE_{ij} + v_{ij}$. All estimations use unrestricted weighted least squares with inverse variance weights. Sample size varies due to incomplete information on country composition in some studies. Figures in round brackets are *t*-statistics, using standard errors adjusted for clustering of estimates within studies. *, **, *** denote statistical significance at the 10%, 5%, and 1% levels, respectively.

Post-PhD Age has (in most cases) a positive but statistically insignificant coefficient, *Tenure* has a positive and statistically significant coefficient, and the age and tenure interaction has a negative coefficient. Tests for the joint tests of the age and tenure terms suggest that these terms are jointly statistically significant in explaining publication selection bias.

Figure 2
Age, tenure, and bias



Without loss of generality we discuss our results based on the general model, Column (4). These suggest that publication selection bias is increasing with age for non-tenured researchers. Specifically, the degree of publication selection bias is estimated to be 0.20 higher for research teams consisting of non-tenured researchers, five years from receiving their PhD, increasing publication bias to 1.24 (p-value = 0.091), holding all other factors constant. Publication selection bias rises by 0.60 to 1.64 for research teams with non-tenured researchers 15 years from receiving their PhD (p-value = 0.044), which denotes 'substantial' selectivity according to Doucouliagos and Stanley (2013). In contrast, selection bias is estimated to be 0.75 for all tenured researcher teams (p-value = 0.33), five years from receiving their PhD, falling to 0.17 for researchers 15 years from receiving their PhD (p-value = 0.81). We visualize these relationships in Figure 2.

Nearly half (47%) of the reported research is produced by mixed teams of tenured and non-tenured researchers. To see the extent of publication bias for these groups we evaluated bias at the sample mean proportion of authors with tenure (0.41) and calculate publication selection bias of 1.042 for researchers five years from receiving their PhD and 1.038 for

researchers 15 years from receiving their PhD. Both are statistically insignificant with *p*-values of 0.162 and 0.202, respectively.[25]

We conclude that in the aid effectiveness literature, selection bias is substantial among all non-tenured researchers and that there is no publication selection among all tenured research teams.[26] These results are consistent with the notion that tenure reduces the incentives to report results that are statistically significant. Older researchers without tenure are the most biased. Older, tenured academics are the least biased. Nevertheless, age and tenure explain only a small proportion of the selection process.[27]

Heterogeneity bias

Figure 1 illustrates the large heterogeneity in reported findings. This heterogeneity may be real, indicating that there is a distribution of aid on growth effects, e.g., where there are spatial and temporal differences in aid effectiveness.[28] Or, the heterogeneity may be an artefact of the way in which research was conducted, e.g., through the choices of econometric specification, estimator, and datasets. In Table 5, we report results of estimating Eqn. (5), where the dependent variable is the partial correlation and we investigate whether tenure and post-PhD age influence the reported heterogeneity in this literature, i.e. whether they impact the magnitude of the reported partial correlation.[29]

[25] Increasing tenure holding post-PhD age constant does not have a statistically significant effect on selection bias. Evaluated at the mean post-PhD age (10.5 years), a one standard deviation increase (0.356) in the percentage of authors with tenure increases publication selection bias to 1.073 (*p*-value = 0.126).
[26] For these estimates, we set the other variables in the MRA to zero.
[27] The publication selection process is largely an unobservable process. Hence, we expect that these models will have low explanatory power as measured by R^2.
[28] In this case, the meta-average is the estimate of the average value of this distribution and meta-regression moderator variables identify the distribution.
[29] Authors can make methodological errors or they may have inadequate data for the tasks at hand. These can lead to specification or omitted variable bias. Our meta-regressions condition estimates of age and tenure on these other variables/factors.

Table 5
Age, tenure, and heterogeneity in the aid effectiveness literature

	Baseline (1)	Expanded (2)	General (3)	Reduced (4)	With author fixed effects (5)
Standard error	0.562	0.972	1.070	0.810	0.721
	(2.02)**	(2.83)***	(3.13)***	(3.73)***	(1.43)
Post-PhD Age	0.001	0.002	0.003	0.004	0.010
	(0.54)	(0.99)	(1.91)*	(2.95)***	(2.20)**
Tenure	0.075	0.084	0.072	0.084	0.206
	(2.72)***	(2.52)**	(2.17)**	(3.24)***	(2.23)**
Post-PhD Age*Tenure	-0.005	-0.006	-0.007	-0.007	-0.017
	(-2.04)**	(-1.95)*	(-2.44)**	(-3.69)***	(-3.18)***
Constant	-0.010	-0.010	-0.010	-0.025	-0.025
	(-0.45)	(-0.11)	(-0.10)	(-1.32)	(-0.23)
Specification and data variables	NO	YES	YES	YES	YES
Other journal and author characteristics	NO	NO	YES	YES	YES
Joint test - age	4.98	2.11	3.00	6.80	5.07
	[0.008]	[0.123]	[0.053]	[0.002]	[0.008]
Joint test - tenure	3.75	3.18	3.32	7.22	5.07
	[0.026]	[0.045]	[0.039]	[0.001]	[0.008]
N	1,290	1,273	1,273	1,290	1,273
Adjusted R^2	0.05	0.19	0.22	0.18	0.46

Notes: The dependent variable is the partial correlation between aid and growth. The table reports results of estimating Eqn. (5): $r_{ij} = \beta_0 + \beta_1 SE_{ij} + \beta_2 Age_{ij} + \beta_3 Tenure_{ij} + \beta_4 Age_{ij} \cdot Tenure_{ij} + \sum \beta_x X_{ij} + u_{ij}$. See notes to Table 4.

The coefficients of interest have a similar sign to the results of Table 4. *Post-PhD Age* and *Tenure* have positive coefficients, whilst the interaction term has a negative coefficient. The MRA coefficients can again be used to evaluate the impact of age for tenured and non-tenured researchers. Using the coefficients from the general model, Column (3), we find that, on average, younger non-tenured researchers report correlations that are 0.017 larger, and older non-tenured researchers report correlations that are 0.050 larger. Considering that the meta-average is about 0.035 (recall Table 2), these are large effects. In contrast, younger tenured researchers report correlations that are about 0.015 smaller and older tenured researchers report correlations that are about 0.045 smaller, on average. Recall from Table 2, that the raw difference in means between younger tenured and younger non-tenured was -0.045, and the difference between older tenured and non-tenured was -0.026. After controlling for other factors, Table 5 suggests that the difference in means between younger tenured and non-tenured

is -0.032, culminating to a much larger difference of -0.095 between older tenured and non-tenured researchers.[30]

Table 6
Age, tenure, and research inflation in the aid effectiveness literature

	Baseline (1)	Expanded (2)	General (3)	Reduced (4)	With author fixed effects (5)
Post-PhD Age	0.060	0.059	0.105	0.111	0.247
	(1.03)	(1.14)	(1.97)*	(2.60)**	(1.96)*
Tenure	1.916	2.414	2.324	2.94	7.150
	(2.37)**	(2.47)**	(2.41)**	(3.73)***	(2.94)***
Age*Tenure	-0.169	-0.162	-0.189	-0.215	-0.512
	(-2.61)**	(-2.03)**	(-2.46)**	(-3.99)***	(-3.38)***
Constant	-0.426	2.409	2.967	0.633	1.693
	(-0.91)	(1.09)	(1.32)	(0.68)	(0.75)
Specification and data variables	NO	YES	YES	YES	YES
Other journal and author characteristics	NO	NO	YES	YES	YES
Joint test -age	5.29	2.11	3.05	8.07	6.07
	[0.006]	[0.113]	[0.051]	[0.001]	[0.003]
Joint test - tenure	3.59	3.07	3.64	8.72	5.93
	[0.030]	[0.050]	[0.029]	[0.000]	[0.003]
N	1,290	1,273	1,273	1,290	1,273
Adjusted R^2	0.03	0.17	0.20	0.16	0.46

Notes: The dependent variable is research inflation. The table reports results of estimating: $RI_{ij} = \beta_0 + +\beta_2 Age_{ij} + \beta_3 Tenure_{ij} + \beta_4 Age_{ij} \cdot Tenure_{ij} + \sum \beta_x X_{ij} + u_{ij}$. See notes to Table 4.

Research Inflation

To corroborate the heterogeneity bias findings, we investigate whether researchers are engaged in research exaggeration or research inflation whereby empirical effects are reported to be larger than they truly are. Following Ioannidis et al. (2017) we calculate research inflation (*RI*) as:

$$RI_{ij} = \frac{r_{ij} - UWLS}{UWLS},$$

[30] As an additional test of whether the pursuit of tenure leads to larger selection bias and larger reported aid on growth effects, we calculate the difference between sole authored and co-authored studies. The average correlation for articles by sole authored non-tenured researchers is $r = 0.109$ compared to $r = 0.022$ for co-authored studies. This difference is consistent with the tenure hypothesis.

where UWLS denotes the unrestricted weighted least squares estimate. These results are reported in Table 6 with qualitatively similar findings to Tables 3 and 4. The coefficients imply that a young non-tenured researcher will, on average, exaggerate their research findings by 53%, whilst an older non-tenured researcher will on average exaggerate research findings by 158%.

Robustness and further analysis

The Appendix presents results of further analyses: (1) age and tenured entered separately; (2) replacing average age with maximum age; (3) replacing average age with the minimum age; (4) replacing average tenure with a dummy taking the value of 1 if at least one researcher has tenure; and (5) replacing average tenure with a dummy taking value of 1 if all researchers are tenured. Here we explore correlations with aid industry links, while in the Appendix we additionally look at differences between journals.

Links with aid organizations

Tenure is a young persons' game and the above findings for older non-tenured researchers are not likely to be driven by the pursuit of tenure; motivations must differ for this group. Our finding of large bias in the results of older non-tenured researchers also deviates from the findings of Brodeur et al. (2016). One possible explanation of this difference is that in the field of aid effectiveness these authors might be predisposed to support aid. One unique feature of the aid effectiveness literature is that some authors have direct links with aid funding agencies. For example, several authors have worked for the World Bank, while others are affiliated with

other aid funding agencies.[31] To dig deeper into the careers of older non-tenured researchers, we investigate whether links with aid agencies might be driving the above findings with regard to age and tenure.

Table 7
Links with aid agencies and the reported effects of aid on growth

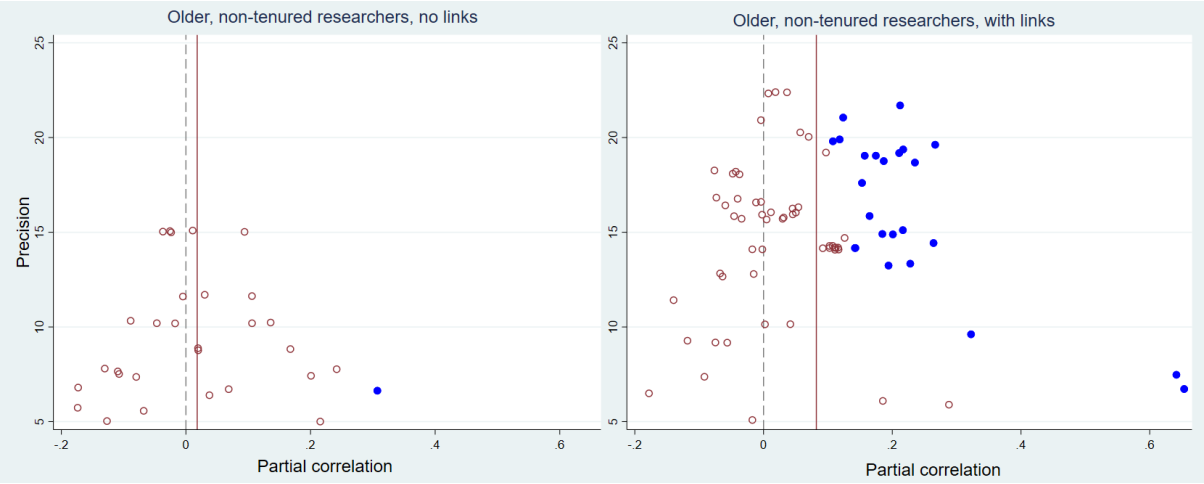
	Number of estimates (1)	Partial correlation (2)	Differences in means (3)
Older tenured, no links	81	0.073 [0.198]	0.075 (0.001)
Older tenured, with links	68	-0.003 [0.087]	
Older non-tenured, no links	30	0.018 [0.125]	-0.064 (0.013)
Older non-tenured, with links	77	0.082 [0.144]	

Notes: Older is defined as greater than or equal to 15 years post-PhD. Square brackets in Column (2) report standard deviations. Column (3) reports *p*-values for a one-tail test of differences in means between researchers with and without aid industry links.

Table 7 compares the means between authors with and without links to aid agencies and Figure 3 illustrates the whole dispersion of reported estimates. Older non-tenured researchers with aid agency links report much larger correlations. This evidence suggests that aid links might be a plausible explanation for the higher correlations reported by non-tenured older researchers. Nevertheless, we caution that the cell numbers are small and these results are only suggestive.

[31] This variable covers the following institutions: Asian Development Bank, African Development Bank, Inter-American Development Bank, IMF, DFID, USAID, AusAID, UNU-WIDER, UNICEF, OECD, and the World Bank.

Figure 3
Comparison of older non-tenured researchers, with and without aid agency links



Notes: Continuous lines denote the mean of 0.018 for older, non-tenured researchers without aid agency links and 0.082 with aid agency links, respectively. Filled blue circles denote statistically significant positive correlations. Older refers to researchers 15 years or more post-PhD.

6 Conclusions

In this article we investigate whether career incentives affect researchers' publication decisions and the type of results communicated in the aid effectiveness literature. There is wide heterogeneity in reported results of the effectiveness of aid. Some of this heterogeneity appears to be an outcome of researcher incentives. Publication selection bias, heterogeneity bias, and research inflation are all higher among non-tenured researchers. These findings are consistent with greater incentives faced by younger non-tenured researchers to exaggerate research findings and to preferentially report statistically significant results. We also find that older non-tenured researchers inflate research findings on aid effectiveness, on average. One plausible explanation for this is their links with aid agencies.

Our findings confirm that researchers are rational; they choose the best strategies to attain their objectives. In our case study of the aid effectiveness literature, we evidenced that career incentives influence the type of results reported. These results also speak to an important

debate regarding the nature of economics research. Levy and Peart (2016) note that James Buchanan saw economists as 'truth-seekers', whereas to Gordon Tullock, economics was not a science but a "racket". Our findings suggest that a range of forces are at play in the aid effectiveness literature. While some researchers exaggerate their research findings, others do not. Free from some of the pressures faced by non-tenured researchers, tenured authors appear to report estimates that are closer to the 'true' value of a near zero effect of aid on growth.

We are not recommending that research by non-tenured academics or with aid industry links be ignored. There is a lot of excellent research produced by these scholars. All research should be considered and inform policy. With research synthesis tools such as meta-analysis, it is possible to make sense of the conflicting evidence base and to understand the process by which the market for ideas functions.

The analysis presented here can be extended in at least three directions. First, we have looked at only one case study and thus cannot claim that the results generalize; further research is needed to explore whether our findings replicate in other research areas. Second, we investigated only at one aspect of researchers' publications; aid effectiveness research. Most authors publish across a range of research areas and will thus be maximizing their tenure potential across a range of research issues. Assessing full publication histories with meta-analyses across several research areas would shed additional light on these matters. Third, we considered only one objective; tenure. Academic and non-academic researchers have other objectives, e.g., career progression, citations, esteem, travel budgets, and access to PhD and Post-Doctoral Fellows, as well as intellectual curiosity. The effects of these other objectives on research are potentially important avenues for future research.

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Appendix

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Table A1

Lowest academic ranks which are tenured by country

Country	First tenured rank
Australia	lecturer, senior lecturer (after 2000)
Austria	full professor
Belgium	docent after 3 years (Flemish), lecturer (French)
Canada	associate professor
China	associate professor (6-8 years of assist. prof)
Cyprus	associate professor
Denmark	lektor/associate professor
Finland	lecturer (lehtori)
France	maître de conférences
Germany	full professor
Greece	assistant professor after 3 years
Hong Kong	associate professor
Ireland	permanent lecturer
Israel	senior lecturer
Italy	ricercatore (until 2005), professore associato (after 2005)
Japan	Lecturer/assist prof (70s-90s, as of 2000s it depends)
Korea	tenured position are at each level, for sure tenured are professors
Netherland	after 6 years of assist prof
New Zealand	lecturer
Norway	Førsteamanuensis (=associate professor)
Singapore	associate professor
Spain	Professor B
Switzerland	associate professor
Sweden	Adjunkt or Lecturer
UK	lecturer
USA	associate professor

Notes: The basic source for this table is the website of the European University Institute in Florence: www.eui.eu/ProgrammesAndFellowships/AcademicCareersObservatory/AcademicCareersbyCountry, crosschecked via personal communications with researchers having internal knowledge of the academic career systems in the respective countries.

Table A2

Descriptive statistics of the original moderators from Doucouliagos and Paldam (2015)

Variable	Description	N	Mean	Std. Dev.
Dependent var.	The partial correlation of aid and economic growth	1,361	0.063	0.192
SEALL	Standard error of the estimate	1,361	0.093	0.059
Publication outlet				
WorkPap	BD for unpublished paper	1,361	0.249	0.433
Cato	BD for Cato Journal	1,361	0.012	0.111
JDS	BD for Journal of Development Studies	1,361	0.047	0.212
JID	BD for Journal of International Development	1,361	0.065	0.246
EDCC	BD for Economic Development and Cultural Change	1,361	0.036	0.186
AER	BD for American Economic Review	1,361	0.019	0.137
AE	BD for Applied Economics	1,361	0.040	0.197
Author details				
Danida	BD for author(s) affiliated with the Danida group	1,361	0.047	0.212
WorldBank	BD for author(s) affiliated with the World Bank	1,361	0.067	0.250
Female	BD if at least one of the authors is female	1,361	0.206	0.404
Influence	BD for authors acknowledge feedback … from other authors in the aid effectiveness literature	1,361	0.269	0.444
Data				
Panel	BD for use of panel data	1,361	0.747	0.435
NrCountries	Number of countries included in the sample	1,359	58.927	37.130
NrYears	Number of years covered in the analysis	1,361	25.943	9.807
Africa	BD for countries from Africa included	1,345	0.877	0.328
Asia	BD if countries from Asia included	1,344	0.856	0.351
Latin	BD if countries from Latin America included	1,344	0.801	0.400
SingleCo	BD if data from a single country	1,361	0.042	0.200
Y1960s	BD if data for the 1960s	1,361	0.304	0.460
Y1970s	BD if data for the 1970s	1,361	0.796	0.403
Y1980s	BD if data for the 1980s	1,361	0.877	0.329
Y1990s	BD if data for the 1990s	1,361	0.799	0.401
Y2000	BD if data for the 2000s	1,361	0.251	0.434
SubSample	BD if data relate to a sub-sample of countries	1,361	0.292	0.455
LowIncome	BD if data relate to a sub-sample of low income countries	1,361	0.108	0.311
EDA	BD for use of EDA data	1,361	0.271	0.445
Outliers	BD if outliers were removed from the sample	1,361	0.153	0.360
Conditionality				
Nonlinear	BD for aid squared added	1,361	0.162	0.368
Aid*Policy	BD for aid interacted with policy	1,361	0.245	0.430
Aid*Institut	BD for other aid interacted terms (mainly institutions)	1,361	0.046	0.210
Specification and control				
Capital	BD for control for domestic savings or investment	1,361	0.292	0.455
FDI	BD for control for foreign capital inflows (other than aid)	1,361	0.152	0.359
GapModel	BD for two-gap model	1,361	0.126	0.332
Theory	BD for paper developing a theory	1,361	0.209	0.407
Average	Number of years involved in data averaging	1,361	7.127	7.594
LagUsed	BD for use of lagged value of aid	1,361	0.248	0.432
Inflation	BD for control for inflation	1,361	0.291	0.454
Instability	BD for control for political instability	1,361	0.422	0.494
Fiscal	BD for control for fiscal stance	1,361	0.190	0.392

Variable	Description	N	Mean	Std. Dev.
GovSize	BD for control for size of government	1,361	0.132	0.339
FinDev	BD for control for financial development	1,361	0.407	0.491
Ethno	BD for control for ethnographic fractionalization	1,361	0.370	0.483
Region	BD for regional dummies	1,361	0.441	0.497
HumCap	BD for control for human capital	1,361	0.161	0.368
Open	BD for control for trade openness	1,361	0.357	0.479
PopSize	BD for control for population size	1,361	0.184	0.387
GDPLev	BD for control for per capita income	1,361	0.691	0.462
Policies	BD for control for policies	1,361	0.302	0.459
Estimation				
OLS	BD for use of OLS	1,361	0.608	0.488
Growth&Aid	BD eqns. system with both a growth and an aid eqn.	1,361	0.043	0.202
Growth&Savs	BD eqns. system with both a growth and a savings eqn.	1,361	0.029	0.169

Notes: BD: binary dummy that is 1 if condition holds, otherwise 0; [a]; moderators *Africa* and *Y1960s* are reference categories in the general models.

Table A3

Age and tenure in **publication selection models** (Full Table 4 of the main text)

	FAT-PET	Baseline	Expanded	General	Reduced	With auth. FE
	(1)	(2)	(3)	(4)	(5)	(6)
Standard error	0.566	0.540	0.649	1.044	1.373	0.686
	(2.07)**	(1.72)*	(0.93)	(1.45)	(4.23)***	(0.68)
Post-PhD Age		-0.003	0.017	0.040	0.035	0.167
		(-0.10)	(0.63)	(1.61)	(1.32)	(2.89)***
Tenure		0.998	1.147	1.119	0.851	2.885
		(1.92)*	(2.30)**	(2.32)**	(1.97)*	(3.19)***
Post-PhD Age*Tenure		-0.073	-0.082	-0.098	-0.089	-0.265
		(-1.78)*	(-1.95)*	(-2.53)**	(-2.23)**	(-4.95)***
Panel			0.502	0.455		0.397
			(1.00)	(0.90)		(0.84)
NrCountries			0.002	0.002		-0.009
			(0.57)	(0.47)		(-1.49)
NrYears			-0.029	-0.006		-0.024
			(-1.41)	(-0.30)		(-1.07)
Asia			-0.420	-0.597	-0.509	-0.007
			(-1.19)	(-1.69)*	(-1.86)*	(-0.01)
Latin			0.060	0.222		0.254
			(0.20)	(0.66)		(0.55)
SingleCo			-0.302	-0.524	-1.150	0.081
			(-0.38)	(-0.60)	(-2.60)**	(0.06)
SubSample			-0.409	-0.466		0.069
			(-1.77)*	(-2.00)**		(0.33)
LowIncome			0.401	0.390		-0.102
			(1.54)	(1.51)		(-0.36)
EDA			0.166	0.237		-0.203
			(0.76)	(1.10)		(-0.87)
Outliers			-0.162	-0.203		-0.344
			(-0.84)	(-1.09)		(-1.72)*
Nonlinear			0.342	0.246		-0.093
			(1.65)	(1.29)		(-0.53)
Aid*Policy			-0.600	-0.610	-0.564	-0.291
			(-2.40)**	(-2.53)**	(-2.67)***	(-1.43)
Aid*Institut			-0.875	-0.599	-0.936	-0.649
			(-2.20)**	(-1.53)	(-2.64)***	(-1.22)
Policies			0.338	0.210		-0.022
			(1.05)	(0.75)		(-0.09)
Capital			0.120	0.013		0.283
			(0.42)	(0.05)		(0.88)
FDI			0.197	0.294		-0.807
			(0.60)	(0.87)		(-2.07)**
GapModel			0.524	0.407		0.594
			(1.15)	(0.93)		(0.60)
Theory			0.109	0.040		0.049
			(0.37)	(0.14)		(0.13)
Average			0.006	-0.014	-0.039	-0.001
			(0.23)	(-0.51)	(-4.00)***	(-0.04)
LagUsed			0.279	0.392		0.743
			(0.85)	(1.17)		(1.46)
Inflation			-0.057	-0.227		0.132
			(-0.16)	(-0.68)		(0.32)
Instability			-0.551	-0.230	-0.417	0.022

	FAT-PET	Baseline	Expanded	General	Reduced	With auth. FE
	(1)	(2)	(3)	(4)	(5)	(6)
			(-2.21)**	(-1.00)	(-2.01)**	(0.07)
Fiscal			0.026	0.059		0.180
			(0.07)	(0.18)		(0.51)
GovSize			0.796	1.004	0.959	0.677
			(3.33)***	(4.01)***	(3.68)***	(1.65)
FinDev			0.323	0.266		0.249
			(1.48)	(1.06)		(1.20)
Ethno			0.059	-0.122		0.032
			(0.22)	(-0.52)		(0.13)
Region			-0.138	-0.154		-0.032
			(-0.73)	(-0.82)		(-0.17)
HumCap			-0.029	0.065		-0.042
			(-0.11)	(0.23)		(-0.15)
Open			0.338	0.268		0.329
			(1.43)	(1.19)		(1.84)*
PopSize			0.258	0.359	0.380	0.504
			(1.11)	(1.56)	(1.76)*	(1.70)*
GPDLev			-0.069	-0.123		-0.098
			(-0.23)	(-0.43)		(-0.22)
OLS			-0.179	-0.201		-0.191
			(-0.89)	(-1.00)		(-0.76)
WorkPap			0.023	0.268		-0.766
			(0.11)	(1.17)		(-2.39)**
Growth&Aid			-0.323	-0.503		-0.736
			(-0.83)	(-1.43)		(-1.37)
Growth&Savs			-0.279	-0.291		0.424
			(-0.47)	(-0.54)		(1.03)
Y1970s			0.045	-0.173		0.507
			(0.11)	(-0.45)		(1.25)
Y1980s			-0.325	-0.399		0.228
			(-0.84)	(-1.03)		(0.43)
Y1990s			0.434	-0.077		0.358
			(1.62)	(-0.24)		(1.15)
Y2000s			-0.093	-0.194		0.170
			(-0.38)	(-0.80)		(0.53)
Female				-0.308		-0.913
				(-1.57)		(-1.43)
Cato				-0.484		-4.091
				(-0.78)		(-5.31)***
JDS				0.829	0.632	0.272
				(2.10)**	(2.24)**	(0.49)
JID				0.149		0.231
				(0.38)		(0.42)
EDCC				-1.489	-1.246	-3.399
				(-3.09)***	(-4.40)***	(-2.15)**
AER				0.238		5.699
				(0.49)		(3.11)***
AE				-0.163		-1.412
				(-0.27)		(-0.74)
Danida				0.933	1.105	-2.511
				(1.95)*	(2.91)***	(-2.83)***
WorldBank				-0.337		-6.194
				(-0.83)		(-2.48)**
Influence				0.034		1.476

	FAT-PET	Baseline	Expanded	General	Reduced	With auth. FE
	(1)	(2)	(3)	(4)	(5)	(6)
				(0.13)		(2.72)***
Constant	0.006	0.010	0.012	0.002	-0.004	0.036
	(0.53)	(0.82)	(0.74)	(0.15)	(-0.29)	(1.52)
Joint test-age		3.369	2.303	3.200	2.831	12.974
		[0.037]	[0.104]	[0.044]	[0.063]	[0.000]
Joint test-tenure		2.011	2.713	3.516	2.626	12.989
		[0.138]	[0.070]	[0.033]	[0.076]	[0.000]
N	1290	1290	1273	1273	1273	1273
Adjusted R2	0.030	0.055	0.212	0.246	0.221	0.449

Notes: The dependent variable is the partial correlation between aid and growth. Table reports results of estimating the publication selection bias model: $r_{ij} = \beta_0 + \beta_1 SE_{ij} + \delta_1 Age_{ij} \cdot SE_{ij} + \delta_2 Tenure_{ij} \cdot SE_{ij} + \delta_3 Age_{ij} \cdot Tenure_{ij} \cdot SE_{ij} + \sum \delta_k \boldsymbol{k}_{ij} \cdot SE_{ij} + v_{ij}$. All estimations use unrestricted weighted least squares with inverse variance weights. Sample size varies due to incomplete information on country composition in some studies. Figures in round brackets are *t*-statistics, using standard errors adjusted for clustering of estimates within studies. Figures in square brackets are *p*-values of the underlying joint tests. *, **, *** denote statistical significance at the 10%, 5%, and 1% levels, respectively.

Table A4:

Age and tenure in **publication heterogeneity** models (Full Table 5 of the main text)

	(1) Baseline	(2) Expanded	(3) General	(4) Reduced	(5) With auth. FE
Standard error	0.562	0.972	1.070	0.810	0.721
	(2.02)**	(2.83)***	(3.13)***	(3.72)***	(1.43)
Post-PhD Age	0.001	0.002	0.003	0.004	0.010
	(0.54)	(0.99)	(1.91)*	(2.95)***	(2.20)**
Tenure	0.075	0.084	0.072	0.084	0.206
	(2.72)***	(2.52)**	(2.17)**	(3.24)***	(2.23)**
Post-PhD Age*Tenure	-0.005	-0.006	-0.007	-0.007	-0.017
	(-2.04)**	(-1.95)*	(-2.44)**	(-3.69)***	(-3.18)***
Panel		0.025	0.039		0.073
		(0.39)	(0.63)		(1.67)*
NrCountries		0.000	-0.000		-0.000
		(0.19)	(-0.25)		(-0.36)
NrYears		-0.002	-0.000		-0.000
		(-1.40)	(-0.17)		(-0.35)
Asia		-0.036	-0.046		0.009
		(-1.01)	(-1.24)		(0.15)
Latin		0.030	0.047		0.018
		(0.93)	(1.25)		(0.29)
SingleCo		-0.116	-0.115		-0.050
		(-0.96)	(-0.95)		(-0.23)
SubSample		-0.026	-0.029	-0.015	0.010
		(-1.38)	(-1.66)*	(-1.76)*	(0.66)
LowIncome		0.022	0.017		-0.019
		(1.02)	(0.85)		(-1.00)
EDA		0.015	0.017		-0.014
		(1.12)	(1.22)		(-1.11)
Outliers		-0.009	-0.013		-0.020
		(-0.69)	(-1.02)		(-1.60)
Nonlinear		0.025	0.017		-0.013
		(1.73)*	(1.24)		(-1.13)
Aid*Policy		-0.041	-0.049	-0.044	-0.019
		(-2.22)**	(-2.48)**	(-3.77)***	(-1.46)
Aid*Institut		-0.061	-0.031		-0.039
		(-1.87)*	(-0.87)		(-0.94)
Policies		0.009	0.016		0.007
		(0.35)	(0.68)		(0.34)
Capital		-0.006	-0.011		0.001
		(-0.30)	(-0.53)		(0.03)
FDI		0.012	0.008		-0.086
		(0.41)	(0.27)		(-2.28)**
GapModel		0.082	0.075	0.092	0.121
		(1.58)	(1.47)	(2.17)**	(0.79)
Theory		-0.001	-0.008		-0.038
		(-0.05)	(-0.38)		(-1.10)
Average		-0.003	-0.004	-0.004	-0.001
		(-1.24)	(-1.58)	(-2.73)***	(-0.60)
LagUsed		0.023	0.034		0.062
		(0.90)	(1.24)		(2.08)**
Inflation		0.021	0.017		0.016
		(0.88)	(0.72)		(0.62)
Instability		-0.029	-0.008		0.004

	(1) Baseline	(2) Expanded	(3) General	(4) Reduced	(5) With auth. FE
		(-1.65)	(-0.48)		(0.20)
Fiscal		0.010	0.015		0.013
		(0.39)	(0.62)		(0.65)
GovSize		0.045	0.064	0.046	0.031
		(2.34)**	(3.26)***	(3.32)***	(1.15)
FinDev		0.017	0.012		0.021
		(1.03)	(0.61)		(1.30)
Ethno		-0.005	-0.018		-0.007
		(-0.29)	(-1.22)		(-0.44)
Region		-0.007	-0.011	-0.024	0.001
		(-0.62)	(-0.97)	(-2.52)**	(0.07)
HumCap		0.011	0.029		0.015
		(0.48)	(1.30)		(0.85)
Open		-0.013	-0.021		0.013
		(-0.79)	(-1.09)		(0.94)
PopSize		-0.003	0.003		0.025
		(-0.17)	(0.16)		(1.03)
GPDLev		-0.018	-0.015		-0.004
		(-1.12)	(-0.85)		(-0.13)
OLS		-0.010	-0.011		-0.008
		(-0.73)	(-0.76)		(-0.48)
WorkPap		0.017	0.030	0.029	-0.053
		(1.16)	(1.66)*	(2.28)**	(-2.26)**
Growth&Aid		-0.015	-0.018		-0.049
		(-0.60)	(-0.73)		(-1.13)
Growth&Savs		-0.007	0.027		0.104
		(-0.11)	(0.47)		(1.85)*
Y1970s		0.022	0.008		0.014
		(0.72)	(0.24)		(0.29)
Y1980s		-0.011	-0.037		0.014
		(-0.35)	(-1.21)		(0.31)
Y1990s		0.019	-0.011		0.022
		(1.03)	(-0.64)		(1.09)
Y2000s		0.003	0.000		0.006
		(0.27)	(0.00)		(0.37)
Female			-0.019		-0.059
			(-1.27)		(-1.16)
Cato			-0.104		-0.261
			(-1.51)		(-3.32)***
JDS			0.051		0.017
			(1.49)		(0.31)
JID			-0.011		-0.024
			(-0.41)		(-0.75)
EDCC			-0.131	-0.052	-0.397
			(-2.84)***	(-1.83)*	(-2.21)**
AER			0.032		0.423
			(0.87)		(2.86)***
AE			-0.002		-0.022
			(-0.04)		(-0.08)
Danida			0.081	0.112	-0.175
			(2.16)**	(3.64)***	(-2.22)**
WorldBank			-0.026		-0.481
			(-0.83)		(-2.33)**
Influence			-0.013		0.116

	(1) Baseline	(2) Expanded	(3) General	(4) Reduced	(5) With auth. FE
			(-0.62)		(3.03)***
Constant	-0.010	-0.010	-0.010	-0.025	-0.025
	(-0.45)	(-0.11)	(-0.10)	(-1.32)	(-0.23)
Joint test-age	4.981	2.107	3.003	6.805	5.072
	[0.008]	[0.126]	[0.053]	[0.002]	[0.008]
Joint test-tenure	3.753	3.176	3.318	7.216	5.070
	[0.026]	[0.045]	[0.039]	[0.001]	[0.008]
N	1290	1273	1273	1290	1273
Adjusted R2	0.051	0.186	0.220	0.180	0.461

Notes: The dependent variable is the partial correlation between aid and growth. The table reports results of estimating Eqn. (5): $r_{ij} = \beta_0 + \beta_1 SE_{ij} + \beta_2 Age_{ij} + \beta_3 Tenure_{ij} + \beta_4 Age_{ij} \cdot Tenure_{ij} + \sum \beta_x X_{ij} + u_{ij}$. All estimations use unrestricted weighted least squares with inverse variance weights. Sample size varies due to incomplete information on country composition in some studies. Figures in round brackets are *t*-statistics, using standard errors adjusted for clustering of estimates within studies. Figures in square brackets are *p*-values of the underlying joint tests. *, **, *** denote statistical significance at the 10%, 5%, and 1% levels, respectively.

Table A5

Age, tenure in **research inflation** models (Full Table 6 of the main text)

	(1) Baseline	(2) Expanded	(3) General	(4) Reduced	(5) With auth. FE
Post-PhD Age	0.060	0.059	0.105	0.111	0.247
	(1.03)	(1.14)	(1.97)*	(2.60)**	(1.96)*
Tenure	1.916	2.414	2.324	2.939	7.150
	(2.37)**	(2.47)**	(2.41)**	(3.73)***	(2.94)***
Post-PhD Age*Tenure	-0.169	-0.162	-0.189	-0.215	-0.512
	(-2.61)**	(-2.03)**	(-2.46)**	(-3.99)***	(-3.38)***
Panel		-0.461	-0.321		1.152
		(-0.27)	(-0.19)		(1.10)
NrCountries		0.000	-0.005		-0.010
		(0.04)	(-0.82)		(-0.93)
NrYears		-0.072	-0.030	-0.056	-0.024
		(-2.10)**	(-0.83)	(-2.54)**	(-0.73)
Asia		-1.118	-1.516		-0.065
		(-1.07)	(-1.34)		(-0.03)
Latin		0.383	1.039		0.257
		(0.44)	(1.01)		(0.15)
SingleCo		-0.507	-0.413		0.226
		(-0.15)	(-0.12)		(0.04)
SubSample		-0.912	-1.049	-1.022	0.228
		(-1.70)*	(-2.15)**	(-2.12)**	(0.55)
LowIncome		1.114	0.964	1.106	-0.426
		(1.82)*	(1.78)*	(1.88)*	(-0.84)
EDA		0.491	0.496		-0.492
		(1.22)	(1.22)		(-1.46)
Outliers		-0.244	-0.353		-0.582
		(-0.62)	(-0.98)		(-1.62)
Nonlinear		0.802	0.595		-0.400
		(1.87)*	(1.46)		(-1.22)
Aid*Policy		-1.075	-1.219	-1.090	-0.511
		(-2.00)**	(-2.16)**	(-3.12)***	(-1.31)
Aid*Institut		-1.671	-0.902		-1.097
		(-1.64)	(-0.79)		(-0.89)
Policies		0.298	0.476		0.204
		(0.39)	(0.68)		(0.35)
Capital		-0.211	-0.323		0.017
		(-0.33)	(-0.51)		(0.03)
FDI		0.162	0.070		-2.424
		(0.18)	(0.08)		(-2.22)**
GapModel		3.293	3.060	3.379	3.577
		(2.16)**	(1.99)**	(2.91)***	(0.82)
Theory		0.052	-0.137		-0.694
		(0.10)	(-0.24)		(-0.72)
Average		-0.039	-0.062		0.004
		(-0.62)	(-1.07)		(0.10)
LagUsed		0.418	0.792		1.720
		(0.57)	(0.98)		(1.94)*
Inflation		0.339	0.144		0.218
		(0.50)	(0.22)		(0.33)
Instability		-0.750	-0.212		0.068
		(-1.45)	(-0.44)		(0.13)

	(1) Baseline	(2) Expanded	(3) General	(4) Reduced	(5) With auth. FE
Fiscal		0.666	0.778		0.434
		(0.95)	(1.15)		(0.79)
GovSize		1.401	1.956	1.159	0.854
		(2.36)**	(3.29)***	(2.59)**	(1.01)
FinDev		0.582	0.535		0.594
		(1.16)	(0.95)		(1.26)
Ethno		-0.094	-0.444		-0.225
		(-0.19)	(-1.04)		(-0.46)
Region		-0.367	-0.484	-0.834	0.027
		(-1.13)	(-1.57)	(-2.74)***	(0.08)
HumCap		0.687	1.216		0.528
		(1.08)	(1.87)*		(1.08)
Open		-0.324	-0.513		0.496
		(-0.67)	(-0.93)		(1.19)
PopSize		-0.270	-0.090		0.782
		(-0.50)	(-0.17)		(1.06)
GPDLev		-0.363	-0.366		-0.056
		(-0.77)	(-0.71)		(-0.07)
OLS		-0.395	-0.392		-0.284
		(-1.00)	(-0.98)		(-0.58)
WorkPap		-0.543	-0.551		-1.278
		(-0.69)	(-0.72)		(-0.97)
Growth&Aid		-0.111	0.802		2.995
		(-0.06)	(0.50)		(1.82)*
Growth&Savs		0.617	0.195		0.284
		(0.70)	(0.21)		(0.21)
Y1970s		-0.361	-1.084		0.460
		(-0.40)	(-1.13)		(0.34)
Y1980s		0.463	-0.357		0.504
		(0.90)	(-0.67)		(0.87)
Y1990s		0.025	-0.161		0.183
		(0.06)	(-0.35)		(0.38)
Y2000s		0.488	0.822	1.024	-1.528
		(1.12)	(1.56)	(2.51)**	(-2.12)**
Female			-0.583		-2.054
			(-1.25)		(-1.38)
Cato			-2.624		-7.545
			(-1.27)		(-3.30)***
JDS			1.223		0.923
			(1.23)		(0.60)
JID			-0.902		-0.634
			(-1.20)		(-0.67)
EDCC			-3.591		-10.050
			(-2.56)**		(-1.99)**
AER			0.550		10.089
			(0.50)		(2.67)***
AE			-0.349		-0.601
			(-0.26)		(-0.08)
Danida			2.364	2.928	-4.962
			(2.31)**	(3.45)***	(-2.18)**
WorldBank			-0.599		-11.556
			(-0.62)		(-2.14)**
Influence			-0.340		2.871
			(-0.55)		(2.61)**

	(1) Baseline	(2) Expanded	(3) General	(4) Reduced	(5) With auth. FE
Constant	-0.426	2.409	2.967	0.633	1.693
	(-0.91)	(1.09)	(1.32)	(0.68)	(0.75)
Joint test-age	5.294	2.215	3.048	8.071	6.073
	[0.006]	[0.113]	[0.051]	[0.000]	[0.003]
Joint test-tenure	3.593	3.065	3.640	8.716	5.926
	[0.030]	[0.050]	[0.029]	[0.000]	[0.003]
N	1290	1273	1273	1290	1273
Adjusted R2	0.025	0.169	0.201	0.165	0.457

Notes: The dependent variable is research inflation. The table reports results of estimating $RI_{ij} = \beta_0 + +\beta_2 Age_{ij} + \beta_3 Tenure_{ij} + \beta_4 Age_{ij} \cdot Tenure_{ij} + \sum \beta_x X_{ij} + u_{ij}$. All estimations use unrestricted weighted least squares with inverse variance weights. Sample size varies due to incomplete information on country composition in some studies. Figures in round brackets are *t*-statistics, using standard errors adjusted for clustering of estimates within studies. Figures in square brackets are *p*-values of the underlying joint tests. *, **, *** denote statistical significance at the 10%, 5%, and 1% levels, respectively.

Table A6

Age, tenure, and **publication selection bias** in the aid effectiveness literature
(outliers and leverage observations not removed)

	(1) FAT-PET	(2) Baseline	(3) Expanded	(4) General	(5) Reduced	(6) With auth. FE
Standard error	0.329	0.317	0.676	1.223	1.293	1.357
	(1.20)	(0.89)	(0.76)	(1.36)	(3.60)***	(1.13)
Post-PhD Age		0.005	0.033	0.060	0.041	0.253
		(0.13)	(1.05)	(2.15)**	(1.50)	(3.97)***
Tenure		0.660	0.727	0.825	0.508	1.308
		(1.02)	(1.18)	(1.38)	(0.93)	(1.05)
Post-PhD Age*Tenure		-0.081	-0.075	-0.089	-0.078	-0.250
		(-1.47)	(-1.50)	(-1.90)*	(-1.78)*	(-3.58)***
Panel			0.299	0.361	0.478	0.564
			(0.54)	(0.64)	(1.89)*	(0.99)
NrCountries			-0.005	-0.007	-0.007	-0.012
			(-1.10)	(-1.37)	(-1.76)*	(-1.98)**
NrYears			-0.029	-0.010	-0.039	-0.028
			(-1.23)	(-0.43)	(-3.14)***	(-1.21)
Asia			-0.209	-0.424		0.247
			(-0.51)	(-1.06)		(0.33)
Latin			0.117	0.376		0.323
			(0.33)	(1.01)		(0.67)
SingleCo			-0.558	-0.737		-0.691
			(-0.63)	(-0.82)		(-0.48)
SubSample			-0.468	-0.569	-0.346	-0.129
			(-2.02)**	(-2.39)**	(-1.96)*	(-0.57)
LowIncome			0.255	0.301		-0.086
			(0.88)	(1.06)		(-0.31)
EDA			0.134	0.190		-0.082
			(0.49)	(0.74)		(-0.44)
Outliers			0.029	-0.024		-0.258
			(0.11)	(-0.10)		(-1.12)
Nonlinear			0.244	0.142		-0.111
			(0.91)	(0.57)		(-0.55)
Aid*Policy			-0.565	-0.493	-0.734	-0.159
			(-2.06)**	(-1.86)*	(-3.51)***	(-0.68)
Aid*Institut			-0.817	-0.566	-1.035	-0.565
			(-2.04)**	(-1.44)	(-2.73)***	(-1.09)
Policies			0.166	-0.006		-0.262
			(0.43)	(-0.02)		(-0.74)
Capital			0.134	-0.011		0.315
			(0.38)	(-0.04)		(0.99)
FDI			0.376	0.379		-0.882
			(0.98)	(0.97)		(-2.04)**
GapModel			0.657	0.468		-0.204
			(1.18)	(0.88)		(-0.16)
Theory			0.321	0.323		0.306
			(0.87)	(0.92)		(0.78)
Average			0.013	-0.005		-0.003
			(0.49)	(-0.17)		(-0.11)
LagUsed			0.354	0.538		0.849
			(0.80)	(1.20)		(1.17)

	(1) FAT-PET	(2) Baseline	(3) Expanded	(4) General	(5) Reduced	(6) With auth. FE
Inflation			0.012	-0.126		0.157
			(0.03)	(-0.31)		(0.31)
Instability			-0.473	-0.065		0.337
			(-1.44)	(-0.21)		(0.84)
Fiscal			-0.118	-0.151		0.221
			(-0.30)	(-0.40)		(0.69)
GovSize			0.885	1.237	1.115	0.904
			(3.17)***	(4.25)***	(4.11)***	(2.38)**
FinDev			0.442	0.336		0.211
			(1.57)	(1.07)		(0.93)
Ethno			-0.141	-0.432		-0.063
			(-0.43)	(-1.42)		(-0.19)
Region			-0.205	-0.226	-0.454	-0.168
			(-0.97)	(-1.07)	(-2.05)**	(-0.69)
HumCap			0.068	0.246		-0.049
			(0.21)	(0.71)		(-0.18)
Open			0.256	0.119		0.130
			(0.96)	(0.47)		(0.55)
PopSize			0.271	0.334		0.570
			(1.03)	(1.31)		(1.81)*
GPDLev			-0.096	-0.222		-0.327
			(-0.32)	(-0.79)		(-0.87)
OLS			-0.502	-0.507		-0.302
			(-1.89)*	(-1.94)*		(-0.94)
WorkPap			0.208	0.509		-1.052
			(0.82)	(1.65)		(-3.55)***
Growth&Aid			-0.531	-0.879		-0.836
			(-1.21)	(-2.30)**		(-1.43)
Growth&Savs			-0.584	-0.504		-0.194
			(-0.92)	(-0.89)		(-0.52)
Y1970s			-0.105	-0.319		0.466
			(-0.21)	(-0.71)		(1.02)
Y1980s			-0.311	-0.441		0.120
			(-0.67)	(-0.98)		(0.23)
Y1990s			0.497	-0.187		0.486
			(1.54)	(-0.51)		(1.49)
Y2000s			-0.308	-0.356		0.015
			(-1.06)	(-1.18)		(0.04)
Female				-0.336		-0.981
				(-1.34)		(-1.43)
Cato				-0.656		-4.160
				(-0.85)		(-6.00)***
JDS				0.901		-0.773
				(1.89)*		(-1.30)
JID				-0.034		0.138
				(-0.07)		(0.24)
EDCC				-2.467	-2.028	-4.045
				(-3.62)***	(-5.24)***	(-2.21)**
AER				-0.285		8.616
				(-0.50)		(4.31)***
AE				0.083		1.258
				(0.14)		(0.53)

	(1) FAT-PET	(2) Baseline	(3) Expanded	(4) General	(5) Reduced	(6) With auth. FE
Danida				1.047	1.153	-3.126
				(1.90)*	(2.24)**	(-3.05)***
WorldBank				0.037		-10.176
				(0.07)		(-3.61)***
Influence				0.219		2.209
				(0.71)		(3.60)***
Constant	0.028	0.037	0.053	0.042	0.045	0.038
	(1.83)*	(2.76)***	(3.31)***	(2.26)**	(3.58)***	(1.34)
Joint test-age		1.905	1.130	2.532	1.616	8.669
		[0.153]	[0.326]	[0.083]	[0.203]	[0.000]
Joint test-tenure		1.090	1.130	1.803	1.752	7.698
		[0.339]	[0.326]	[0.169]	[0.178]	[0.001]
N	1361	1361	1344	1344	1344	1344
Adjusted R2	0.008	0.034	0.191	0.237	0.196	0.460

Notes: The dependent variable is the partial correlation between aid and growth. Table reports results of estimating the publication selection bias model: $r_{ij} = \beta_0 + \beta_1 SE_{ij} + \delta_1 Age_{ij} \cdot SE_{ij} + \delta_2 Tenure_{ij} \cdot SE_{ij} + \delta_3 Age_{ij} \cdot Tenure_{ij} \cdot SE_{ij} + \sum \delta_k \boldsymbol{k}_{ij} \cdot SE_{ij} + v_{ij}$. All estimations use unrestricted weighted least squares with inverse variance weights. Sample size varies due to incomplete information on country composition in some studies. Figures in round brackets are *t*-statistics, using standard errors adjusted for clustering of estimates within studies. Figures in square brackets are *p*-values of the underlying joint tests. *, **, *** denote statistical significance at the 10%, 5%, and 1% levels, respectively.

Table A7

Age, tenure, and **heterogeneity** in the aid effectiveness literature
(outliers and leverage observations not removed)

	(1) Baseline	(2) Expanded	(3) General	(4) Reduced	(5) With auth. FE
Standard error	0.199	0.497	0.611	0.305	0.796
	(0.69)	(1.36)	(1.63)	(1.24)	(1.49)
Post-PhD Age	0.001	0.002	0.004	0.005	0.014
	(0.37)	(0.87)	(2.07)**	(3.26)***	(2.81)***
Tenure	0.026	0.030	0.059	0.039	0.132
	(0.64)	(0.79)	(1.43)	(1.24)	(1.14)
Post-PhD Age*Tenure	-0.003	-0.004	-0.006	-0.006	-0.016
	(-0.87)	(-1.16)	(-2.12)**	(-2.88)***	(-2.55)**
Panel		0.006	0.037		0.088
		(0.09)	(0.53)		(1.84)*
NrCountries		-0.000	-0.000	-0.000	-0.000
		(-1.39)	(-1.49)	(-3.87)***	(-0.74)
NrYears		-0.002	-0.001		-0.000
		(-1.47)	(-0.38)		(-0.03)
Asia		-0.022	-0.031		0.037
		(-0.50)	(-0.71)		(0.58)
Latin		0.031	0.045		0.019
		(0.81)	(1.12)		(0.32)
SingleCo		-0.154	-0.133		-0.119
		(-1.14)	(-0.98)		(-0.64)
SubSample		-0.024	-0.029	-0.024	0.001
		(-1.38)	(-1.72)*	(-2.54)**	(0.08)
LowIncome		0.005	0.006		-0.018
		(0.25)	(0.33)		(-1.11)
EDA		0.008	0.010		-0.004
		(0.52)	(0.70)		(-0.40)
Outliers		0.007	0.002		-0.008
		(0.37)	(0.12)		(-0.42)
Nonlinear		0.018	0.012		-0.007
		(0.96)	(0.68)		(-0.53)
Aid*Policy		-0.033	-0.037	-0.047	-0.005
		(-1.69)*	(-1.81)*	(-3.07)***	(-0.31)
Aid*Institut		-0.063	-0.029		-0.036
		(-2.06)**	(-0.83)		(-0.88)
Policies		-0.016	-0.008		-0.020
		(-0.55)	(-0.33)		(-0.78)
Capital		-0.007	-0.017		-0.011
		(-0.25)	(-0.66)		(-0.58)
FDI		0.014	0.020		-0.057
		(0.39)	(0.52)		(-1.46)
GapModel		0.098	0.100	0.096	0.094
		(1.69)*	(1.76)*	(2.12)**	(0.57)
Theory		0.014	0.011		-0.029
		(0.64)	(0.50)		(-0.83)
Average		-0.003	-0.003	-0.003	-0.001
		(-1.07)	(-1.30)	(-1.90)*	(-0.45)
LagUsed		0.020	0.033		0.042
		(0.66)	(0.96)		(0.86)

	(1) Baseline	(2) Expanded	(3) General	(4) Reduced	(5) With auth. FE
Inflation		0.022	0.018		0.012
		(0.80)	(0.70)		(0.37)
Instability		-0.022	0.009		0.029
		(-0.98)	(0.43)		(1.20)
Fiscal		-0.009	-0.004		0.019
		(-0.33)	(-0.15)		(0.99)
GovSize		0.052	0.074	0.046	0.031
		(2.34)**	(3.46)***	(3.40)***	(1.21)
FinDev		0.029	0.019		0.022
		(1.44)	(0.80)		(1.30)
Ethno		-0.025	-0.046	-0.036	-0.010
		(-1.18)	(-2.27)**	(-2.42)**	(-0.46)
Region		-0.002	-0.011		-0.015
		(-0.19)	(-1.02)		(-1.02)
HumCap		0.008	0.038		0.008
		(0.28)	(1.42)		(0.48)
Open		-0.014	-0.031		-0.008
		(-0.76)	(-1.43)		(-0.47)
PopSize		-0.007	-0.006		0.022
		(-0.32)	(-0.34)		(0.91)
GPDLev		-0.025	-0.022		-0.018
		(-1.98)**	(-1.74)*		(-1.12)
OLS		-0.034	-0.028		-0.014
		(-1.86)*	(-1.54)		(-0.63)
WorkPap		-0.034	-0.044		-0.038
		(-1.25)	(-1.56)		(-0.88)
Growth&Aid		-0.030	-0.012		-0.012
		(-0.70)	(-0.36)		(-0.79)
Growth&Savs		0.023	0.000		-0.009
		(0.70)	(0.00)		(-0.19)
Y1970s		-0.018	-0.054	-0.055	-0.007
		(-0.52)	(-1.56)	(-1.96)*	(-0.15)
Y1980s		0.027	-0.017		0.023
		(1.27)	(-0.74)		(1.16)
Y1990s		0.002	-0.007		-0.007
		(0.10)	(-0.37)		(-0.38)
Y2000s			0.037	0.036	-0.090
			(1.54)	(2.57)**	(-3.03)***
Female			-0.027		-0.057
			(-1.44)		(-1.03)
Cato			-0.106		-0.149
			(-1.47)		(-3.31)***
JDS			0.039		-0.065
			(1.04)		(-1.05)
JID			-0.019		-0.014
			(-0.68)		(-0.42)
EDCC			-0.190	-0.122	-0.787
			(-2.69)***	(-3.29)***	(-3.20)***
AER			-0.004		0.566
			(-0.10)		(3.66)***
AE			0.002		0.138
			(0.05)		(0.48)

	(1) Baseline	(2) Expanded	(3) General	(4) Reduced	(5) With auth. FE
Danida			0.087	0.124	-0.218
			(2.12)**	(3.32)***	(-2.40)**
WorldBank			-0.002		-0.711
			(-0.06)		(-3.28)***
Influence			0.015		0.171
			(0.66)		(3.63)***
Constant	0.035	0.096	0.080	0.095	0.037
	(1.30)	(0.89)	(0.69)	(2.37)**	(0.32)
Joint test-age	0.489	0.677	2.495	5.372	4.580
	[0.614]	[0.510]	[0.086]	[0.006]	[0.012]
Joint test-tenure	0.380	0.686	2.249	4.837	4.426
	[0.685]	[0.505]	[0.110]	[0.009]	[0.014]
N	1361	1344	1344	1344	1344
Adjusted R2	0.017	0.189	0.239	0.192	0.487

Notes: The dependent variable is the partial correlation between aid and growth. The table reports results of estimating Eqn. (5): $r_{ij} = \beta_0 + \beta_1 SE_{ij} + \beta_2 Age_{ij} + \beta_3 Tenure_{ij} + \beta_4 Age_{ij} \cdot Tenure_{ij} + \sum \beta_x X_{ij} + u_{ij}$. All estimations use unrestricted weighted least squares with inverse variance weights. Sample size varies due to incomplete information on country composition in some studies. Figures in round brackets are *t*-statistics, using standard errors adjusted for clustering of estimates within studies. Figures in square brackets are *p*-values of the underlying joint tests. *, **, *** denote statistical significance at the 10%, 5%, and 1% levels, respectively.

Table A8

Age, tenure, and **research inflation** in the aid effectiveness literature
(outliers and leverage observations not removed)

	(1) Baseline	(2) Expanded	(3) General	(4) Reduced	(5) With auth. FE
Post-PhD Age	0.030	0.063	0.101	0.048	0.203
	(0.55)	(1.33)	(2.15)**	(1.08)	(1.96)*
Tenure	0.583	1.266	1.528	-0.048	5.865
	(0.61)	(1.41)	(1.59)	(-0.08)	(2.94)***
Post-PhD Age*Tenure	-0.083	-0.115	-0.143	-0.046	-0.420
	(-1.04)	(-1.64)	(-2.21)**	(-0.84)	(-3.38)***
Panel		-0.167	0.248		0.945
		(-0.11)	(0.16)		(1.10)
NrCountries		-0.004	-0.009	-0.013	-0.009
		(-1.12)	(-1.79)*	(-5.92)***	(-0.93)
NrYears		-0.055	-0.023		-0.019
		(-1.82)*	(-0.75)		(-0.73)
Asia		-0.453	-0.802		-0.054
		(-0.46)	(-0.77)		(-0.03)
Latin		0.585	0.903		0.211
		(0.73)	(0.99)		(0.15)
SingleCo		-2.185	-1.805		0.185
		(-0.70)	(-0.56)		(0.04)
SubSample		-0.649	-0.789	-0.654	0.187
		(-1.66)*	(-2.05)**	(-2.71)***	(0.55)
LowIncome		0.443	0.384		-0.350
		(0.96)	(0.87)		(-0.84)
EDA		0.304	0.263		-0.404
		(0.77)	(0.75)		(-1.46)
Outliers		0.163	0.052		-0.477
		(0.36)	(0.13)		(-1.62)
Nonlinear		0.532	0.368		-0.328
		(1.20)	(0.83)		(-1.22)
Aid*Policy		-0.803	-0.786	-1.060	-0.419
		(-1.72)*	(-1.62)	(-3.89)***	(-1.31)
Aid*Institut		-1.280	-0.673		-0.899
		(-1.64)	(-0.78)		(-0.89)
Policies		-0.240	-0.174		0.167
		(-0.35)	(-0.28)		(0.35)
Capital		-0.080	-0.375		0.014
		(-0.13)	(-0.63)		(0.03)
FDI		0.276	0.393		-1.988
		(0.32)	(0.43)		(-2.22)**
GapModel		2.998	2.680	2.125	2.934
		(2.18)**	(1.97)*	(2.35)**	(0.82)
Theory		0.303	0.258		-0.569
		(0.59)	(0.52)		(-0.72)
Average		-0.035	-0.053		0.003
		(-0.63)	(-1.00)		(0.10)
LagUsed		0.507	0.721		1.411
		(0.72)	(0.89)		(1.94)*
Inflation		0.259	0.216		0.179
		(0.44)	(0.39)		(0.33)

	(1) Baseline	(2) Expanded	(3) General	(4) Reduced	(5) With auth. FE
Instability		-0.397	0.221		0.056
		(-0.73)	(0.45)		(0.13)
Fiscal		0.130	0.115		0.356
		(0.21)	(0.19)		(0.79)
GovSize		1.314	1.786	1.321	0.700
		(2.55)**	(3.46)***	(3.67)***	(1.01)
FinDev		0.677	0.537		0.487
		(1.43)	(0.98)		(1.26)
Ethno		-0.663	-1.017		-0.185
		(-1.29)	(-2.16)**		(-0.46)
Region		-0.222	-0.348		0.022
		(-0.88)	(-1.40)		(0.08)
HumCap		0.405	1.102	1.054	0.433
		(0.70)	(1.78)*	(1.78)*	(1.08)
Open		-0.274	-0.656		0.407
		(-0.63)	(-1.30)		(1.19)
PopSize		-0.333	-0.245		0.641
		(-0.65)	(-0.53)		(1.06)
GPDLev		-0.457	-0.490		-0.046
		(-1.56)	(-1.58)		(-0.07)
OLS		-0.779	-0.674	-0.607	-0.233
		(-1.84)*	(-1.59)	(-1.74)*	(-0.58)
WorkPap		-0.763	-1.014	-1.417	-1.049
		(-1.13)	(-1.48)	(-2.19)**	(-0.97)
Growth&Aid		-0.638	-0.246		2.456
		(-0.66)	(-0.32)		(1.82)*
Growth&Savs		0.371	0.004		0.233
		(0.47)	(0.00)		(0.21)
Y1970s		-0.401	-1.283	-1.397	0.377
		(-0.49)	(-1.54)	(-2.10)**	(0.34)
Y1980s		0.546	-0.417		0.413
		(1.13)	(-0.78)		(0.87)
Y1990s		-0.097	-0.240		0.150
		(-0.26)	(-0.56)		(0.38)
Y2000s		0.621	0.827		-1.254
		(1.49)	(1.49)		(-2.12)**
Female			-0.633	-0.772	-1.685
			(-1.42)	(-2.30)**	(-1.38)
Cato			-2.326	-3.290	-6.188
			(-1.34)	(-2.16)**	(-3.30)***
JDS			0.812		0.757
			(0.93)		(0.60)
JID			-0.711		-0.520
			(-1.14)		(-0.67)
EDCC			-4.425	-3.178	-8.243
			(-2.62)***	(-3.46)***	(-1.99)**
AER			-0.244		8.275
			(-0.26)		(2.67)***
AE			-0.071		-0.493
			(-0.06)		(-0.08)
Danida			2.064	1.952	-4.070
			(2.20)**	(2.41)**	(-2.18)**

	(1) Baseline	(2) Expanded	(3) General	(4) Reduced	(5) With auth. FE
WorldBank			-0.016		-9.478
			(-0.02)		(-2.14)**
Influence			0.331		2.355
			(0.60)		(2.61)**
Constant	0.041	1.927	2.782	2.752	1.209
	(0.08)	(0.92)	(1.31)	(3.15)***	(0.65)
Joint test-age	0.609	1.347	2.703	0.592	6.073
	[0.545]	[0.264]	[0.071]	[0.555]	[0.003]
Joint test-tenure	0.634	1.364	2.461	0.899	5.926
	[0.532]	[0.259]	[0.089]	[0.409]	[0.003]
N	1361	1344	1344	1359	1273
Adjusted R2	0.015	0.190	0.235	0.198	0.457

Notes: The dependent variable is research inflation. The table reports results of estimating $RI_{ij} = \beta_0 + +\beta_2 Age_{ij} + \beta_3 Tenure_{ij} + \beta_4 Age_{ij} \cdot Tenure_{ij} + \sum \beta_x X_{ij} + u_{ij}$. All estimations use unrestricted weighted least squares with inverse variance weights. Sample size varies due to incomplete information on country composition in some studies. Figures in round brackets are *t*-statistics, using standard errors adjusted for clustering of estimates within studies. Figures in square brackets are *p*-values of the underlying joint tests. *, **, *** denote statistical significance at the 10%, 5%, and 1% levels, respectively.

Table A9

Publication selection models: Only Post-PhD age

	(1) Baseline	(2) Expanded	(3) General	(4) Reduced	(5) With auth. FE
Standard error	0.834	1.127	1.424	0.960	1.298
	(3.51)***	(1.72)*	(2.15)**	(2.80)***	(1.21)
Post-PhD Age	-0.028	-0.008	0.004	-0.005	0.012
	(-1.21)	(-0.43)	(0.23)	(-0.37)	(0.33)
Panel		0.373	0.305	0.757	0.391
		(0.77)	(0.61)	(2.98)***	(0.86)
NrCountries		0.001	-0.000		-0.013
		(0.16)	(-0.08)		(-2.37)**
NrYears		-0.032	-0.013	-0.031	-0.036
		(-1.50)	(-0.63)	(-2.84)***	(-1.56)
Asia		-0.308	-0.474		0.071
		(-0.89)	(-1.39)		(0.10)
Latin		-0.090	0.122		0.336
		(-0.29)	(0.38)		(0.73)
SingleCo		-0.545	-0.731		-0.183
		(-0.72)	(-0.90)		(-0.11)
SubSample		-0.469	-0.538	-0.319	-0.003
		(-2.21)**	(-2.44)**	(-1.70)*	(-0.02)
LowIncome		0.388	0.375		-0.169
		(1.54)	(1.50)		(-0.58)
EDA		0.158	0.248		-0.236
		(0.65)	(1.04)		(-0.84)
Outliers		-0.156	-0.187		-0.309
		(-0.79)	(-0.99)		(-1.53)
Nonlinear		0.318	0.234		-0.031
		(1.54)	(1.20)		(-0.16)
Aid*Policy		-0.598	-0.592	-0.712	-0.272
		(-2.36)**	(-2.43)**	(-4.52)***	(-1.31)
Aid*Institut		-0.939	-0.664	-0.967	-0.639
		(-2.47)**	(-1.76)*	(-3.24)***	(-1.16)
Policies		0.309	0.168		0.197
		(0.94)	(0.58)		(0.72)
Capital		0.193	0.106		0.070
		(0.68)	(0.39)		(0.24)
FDI		0.125	0.245	0.513	-0.883
		(0.38)	(0.73)	(1.76)*	(-2.35)**
GapModel		0.398	0.316		0.111
		(0.90)	(0.75)		(0.14)
Theory		0.215	0.120		0.363
		(0.70)	(0.40)		(0.85)
Average		0.003	-0.014		0.009
		(0.14)	(-0.55)		(0.42)
LagUsed		0.213	0.308		0.795
		(0.65)	(0.92)		(1.60)
Inflation		-0.055	-0.180		0.330
		(-0.16)	(-0.52)		(0.84)
Instability		-0.465	-0.127		-0.071
		(-1.88)*	(-0.55)		(-0.24)

	(1) Baseline	(2) Expanded	(3) General	(4) Reduced	(5) With auth. FE
Fiscal		0.080	0.080		0.270
		(0.23)	(0.25)		(0.82)
GovSize		0.808	1.056	1.093	0.576
		(3.56)***	(4.51)***	(4.74)***	(1.45)
FinDev		0.315	0.241		0.220
		(1.32)	(0.92)		(1.01)
Ethno		-0.041	-0.216		-0.030
		(-0.15)	(-0.91)		(-0.11)
Region		-0.064	-0.090		0.011
		(-0.32)	(-0.46)		(0.06)
HumCap		-0.048	0.031		0.318
		(-0.16)	(0.10)		(1.28)
Open		0.387	0.326		0.295
		(1.68)*	(1.52)		(1.62)
PopSize		0.246	0.347		0.629
		(1.06)	(1.58)		(2.02)**
GPDLev		-0.045	-0.099		-0.086
		(-0.15)	(-0.34)		(-0.19)
OLS		-0.190	-0.206		-0.177
		(-0.90)	(-0.99)		(-0.70)
WorkPap		-0.476	-0.697	-0.640	-0.279
		(-1.13)	(-1.73)*	(-2.41)**	(-0.45)
Growth&Aid		-0.261	-0.267		0.096
		(-0.45)	(-0.52)		(0.26)
Growth&Savs		0.136	-0.048		0.498
		(0.33)	(-0.12)		(1.12)
Y1970s		-0.300	-0.320		0.341
		(-0.79)	(-0.84)		(0.62)
Y1980s		0.401	-0.055		0.456
		(1.52)	(-0.17)		(1.58)
Y1990s		0.039	-0.023		0.250
		(0.15)	(-0.09)		(0.78)
Y2000s		-0.054	0.203		-0.946
		(-0.23)	(0.89)		(-2.60)**
Female			-0.273		0.084
			(-1.25)		(0.13)
Cato			-0.732		-4.351
			(-1.13)		(-5.79)***
JDS			0.826	0.758	-0.219
			(1.84)*	(2.41)**	(-0.35)
JID			0.071		0.013
			(0.20)		(0.02)
EDCC			-1.172	-1.046	-1.961
			(-2.66)***	(-5.07)***	(-1.29)
AER			0.135		2.534
			(0.28)		(2.11)**
AE			-0.201		1.271
			(-0.38)		(0.69)
Danida			0.945	0.854	0.000
			(1.84)*	(2.00)**	(.)
WorldBank			-0.168		-3.023
			(-0.39)		(-1.43)

	(1) Baseline	(2) Expanded	(3) General	(4) Reduced	(5) With auth. FE
Influence			0.105		1.012
			(0.36)		(1.69)*
Constant	0.008	0.013	0.005	0.005	0.033
	(0.74)	(0.85)	(0.33)	(0.48)	(1.49)
N	1290	1273	1273	1273	1273
Adjusted R2	0.043	0.201	0.232	0.212	0.439

Notes: The dependent variable is the partial correlation between aid and growth. Table reports results of estimating the publication selection bias model: $r_{ij} = \beta_0 + \beta_1 SE_{ij} + \delta_1 Age_{ij} \cdot SE_{ij} + \delta_2 Tenure_{ij} \cdot SE_{ij} + \delta_3 Age_{ij} \cdot Tenure_{ij} \cdot SE_{ij} + \sum \delta_k \boldsymbol{k}_{ij} \cdot SE_{ij} + v_{ij}$. All estimations use unrestricted weighted least squares with inverse variance weights. Sample size varies due to incomplete information on country composition in some studies. Figures in round brackets are *t*-statistics, using standard errors adjusted for clustering of estimates within studies. *, **, *** denote statistical significance at the 10%, 5%, and 1% levels, respectively.

Table A10

Publication selection models: Only tenure

	(1) Baseline	(2) Expanded	(3) General	(4) Reduced	(5) With auth. FE
Standard error	0.579	0.870	1.331	0.901	1.477
	(2.10)**	(1.26)	(1.79)*	(2.29)**	(1.23)
Tenure	-0.048	0.186	0.207	0.105	-0.068
	(-0.13)	(0.60)	(0.61)	(0.37)	(-0.08)
Panel		0.413	0.344	0.769	0.415
		(0.85)	(0.69)	(2.97)***	(0.90)
NrCountries		-0.000	-0.001		-0.013
		(-0.06)	(-0.18)		(-1.97)*
NrYears		-0.032	-0.015	-0.033	-0.036
		(-1.52)	(-0.73)	(-3.30)***	(-1.55)
Asia		-0.292	-0.489		0.062
		(-0.87)	(-1.46)		(0.09)
Latin		0.009	0.195		0.319
		(0.03)	(0.57)		(0.69)
SingleCo		-0.418	-0.668		-0.179
		(-0.55)	(-0.82)		(-0.11)
SubSample		-0.476	-0.548	-0.347	0.009
		(-2.26)**	(-2.46)**	(-1.90)*	(0.04)
LowIncome		0.362	0.379		-0.171
		(1.45)	(1.50)		(-0.59)
EDA		0.173	0.246		-0.250
		(0.73)	(1.04)		(-0.94)
Outliers		-0.170	-0.200		-0.311
		(-0.88)	(-1.09)		(-1.53)
Nonlinear		0.326	0.240		-0.037
		(1.57)	(1.23)		(-0.20)
Aid*Policy		-0.591	-0.588	-0.700	-0.280
		(-2.33)**	(-2.37)**	(-4.28)***	(-1.36)
Aid*Institut		-0.915	-0.683	-0.952	-0.641
		(-2.41)**	(-1.81)*	(-3.16)***	(-1.16)
Policies		0.333	0.172		0.201
		(0.98)	(0.60)		(0.77)
Capital		0.241	0.097		0.071
		(0.86)	(0.35)		(0.24)
FDI		0.115	0.277	0.539	-0.880
		(0.36)	(0.84)	(1.71)*	(-2.34)**
GapModel		0.488	0.334		-0.022
		(1.12)	(0.79)		(-0.02)
Theory		0.248	0.082		0.391
		(0.79)	(0.27)		(0.92)
Average		0.005	-0.013		0.011
		(0.20)	(-0.49)		(0.50)
LagUsed		0.222	0.315		0.799
		(0.68)	(0.94)		(1.60)
Inflation		-0.062	-0.166		0.335
		(-0.18)	(-0.50)		(0.87)
Instability		-0.473	-0.127		-0.101
		(-1.91)*	(-0.55)		(-0.36)

	(1) Baseline	(2) Expanded	(3) General	(4) Reduced	(5) With auth. FE
Fiscal		0.068	0.056		0.249
		(0.19)	(0.18)		(0.75)
GovSize		0.842	1.086	1.107	0.543
		(3.68)***	(4.48)***	(4.70)***	(1.38)
FinDev		0.307	0.230		0.228
		(1.29)	(0.87)		(1.04)
Ethno		-0.040	-0.200		-0.024
		(-0.14)	(-0.84)		(-0.09)
Region		-0.083	-0.101		0.021
		(-0.41)	(-0.53)		(0.11)
HumCap		-0.037	0.028		0.337
		(-0.12)	(0.09)		(1.32)
Open		0.409	0.329		0.300
		(1.78)*	(1.50)		(1.67)*
PopSize		0.250	0.341		0.639
		(1.09)	(1.55)		(2.01)**
GPDLev		-0.011	-0.092		-0.073
		(-0.04)	(-0.32)		(-0.16)
OLS		-0.207	-0.207		-0.179
		(-1.03)	(-1.02)		(-0.70)
WorkPap		-0.459	-0.708	-0.611	-0.263
		(-1.15)	(-1.77)*	(-2.39)**	(-0.42)
Growth&Aid		-0.274	-0.281		0.119
		(-0.48)	(-0.55)		(0.32)
Growth&Savs		0.079	-0.051		0.472
		(0.19)	(-0.13)		(1.06)
Y1970s		-0.277	-0.303		0.336
		(-0.74)	(-0.79)		(0.61)
Y1980s		0.365	-0.056		0.465
		(1.39)	(-0.18)		(1.61)
Y1990s		0.035	-0.029		0.244
		(0.13)	(-0.11)		(0.77)
Y2000s		0.036	0.232		-0.986
		(0.19)	(1.07)		(-2.49)**
Female			-0.279		-0.033
			(-1.30)		(-0.05)
Cato			-0.684		-4.398
			(-1.07)		(-5.61)***
JDS			0.856	0.767	-0.245
			(1.91)*	(2.51)**	(-0.38)
JID			0.024		0.050
			(0.06)		(0.09)
EDCC			-1.080	-1.044	-1.867
			(-2.56)**	(-5.19)***	(-1.11)
AER			0.161		2.453
			(0.33)		(2.13)**
AE			-0.192		1.333
			(-0.37)		(0.66)
Danida			0.896	0.861	-1.583
			(1.81)*	(2.03)**	(-1.70)*
WorldBank			-0.099		-3.019
			(-0.22)		(-1.48)

	(1) Baseline	(2) Expanded	(3) General	(4) Reduced	(5) With auth. FE
Influence			0.166		0.934
			(0.54)		(1.61)
Constant	0.007	0.014	0.005	0.005	0.034
	(0.54)	(0.92)	(0.33)	(0.44)	(1.56)
N	1290	1273	1273	1273	1273
Adjusted R2	0.029	0.201	0.233	0.212	0.439

Notes: The dependent variable is the partial correlation between aid and growth. Table reports results of estimating the publication selection bias model: $r_{ij} = \beta_0 + \beta_1 SE_{ij} + \delta_1 Age_{ij} \cdot SE_{ij} + \delta_2 Tenure_{ij} \cdot SE_{ij} + \delta_3 Age_{ij} \cdot Tenure_{ij} \cdot SE_{ij} + \sum \delta_k \boldsymbol{k}_{ij} \cdot SE_{ij} + v_{ij}$. All estimations use unrestricted weighted least squares with inverse variance weights. Sample size varies due to incomplete information on country composition in some studies. Figures in round brackets are *t*-statistics, using standard errors adjusted for clustering of estimates within studies. *, **, *** denote statistical significance at the 10%, 5%, and 1% levels, respectively.

Table A11

Publication selection models: Post-PhD age and tenure, but no interaction

	(1) Baseline	(2) Expanded	(3) General	(4) Reduced	(5) With auth. FE
Standard error	0.813	0.968	1.328	0.961	1.518
	(3.36)***	(1.44)	(1.89)*	(2.78)***	(1.26)
Post-PhD Age	-0.032	-0.013	0.000	-0.009	0.028
	(-1.23)	(-0.55)	(0.02)	(-0.49)	(0.67)
Tenure	0.224	0.260	0.204	0.178	-0.424
	(0.55)	(0.68)	(0.54)	(0.49)	(-0.42)
Panel		0.463	0.344	0.765	0.392
		(0.94)	(0.68)	(3.07)***	(0.86)
NrCountries		0.000	-0.001		-0.013
		(0.07)	(-0.17)		(-1.96)*
NrYears		-0.033	-0.015	-0.032	-0.036
		(-1.54)	(-0.72)	(-3.13)***	(-1.54)
Asia		-0.311	-0.488		0.077
		(-0.90)	(-1.41)		(0.11)
Latin		0.011	0.195		0.323
		(0.03)	(0.57)		(0.70)
SingleCo		-0.382	-0.669		-0.290
		(-0.50)	(-0.81)		(-0.17)
SubSample		-0.470	-0.548	-0.327	0.005
		(-2.20)**	(-2.48)**	(-1.75)*	(0.02)
LowIncome		0.375	0.379		-0.171
		(1.51)	(1.52)		(-0.59)
EDA		0.164	0.246		-0.254
		(0.70)	(1.05)		(-0.96)
Outliers		-0.172	-0.200		-0.307
		(-0.89)	(-1.08)		(-1.51)
Nonlinear		0.334	0.240		-0.043
		(1.61)	(1.22)		(-0.23)
Aid*Policy		-0.596	-0.587	-0.697	-0.278
		(-2.37)**	(-2.41)**	(-4.14)***	(-1.35)
Aid*Institut		-0.962	-0.682	-0.975	-0.635
		(-2.56)**	(-1.83)*	(-3.36)***	(-1.15)
Policies		0.323	0.172		0.183
		(0.97)	(0.59)		(0.70)
Capital		0.180	0.098		0.080
		(0.64)	(0.36)		(0.27)
FDI		0.142	0.275	0.503	-0.886
		(0.44)	(0.82)	(1.74)*	(-2.36)**
GapModel		0.443	0.335		-0.107
		(1.01)	(0.79)		(-0.10)
Theory		0.183	0.084		0.426
		(0.61)	(0.28)		(1.04)
Average		0.007	-0.013		0.009
		(0.28)	(-0.48)		(0.40)
LagUsed		0.233	0.315		0.798
		(0.71)	(0.94)		(1.59)
Inflation		-0.041	-0.168		0.309
		(-0.11)	(-0.48)		(0.81)

	(1) Baseline	(2) Expanded	(3) General	(4) Reduced	(5) With auth. FE
Instability		-0.471	-0.126		-0.047
		(-1.92)*	(-0.55)		(-0.16)
Fiscal		0.057	0.057		0.294
		(0.16)	(0.18)		(0.90)
GovSize		0.836	1.086	1.099	0.593
		(3.64)***	(4.50)***	(4.71)***	(1.47)
FinDev		0.307	0.230		0.209
		(1.30)	(0.88)		(0.94)
Ethno		0.002	-0.201		-0.031
		(0.01)	(-0.83)		(-0.12)
Region		-0.088	-0.101		0.009
		(-0.45)	(-0.53)		(0.05)
HumCap		-0.032	0.028		0.332
		(-0.11)	(0.09)		(1.30)
Open		0.392	0.330		0.290
		(1.70)*	(1.52)		(1.60)
PopSize		0.245	0.342		0.658
		(1.07)	(1.56)		(2.03)**
GPDLev		-0.009	-0.092		-0.101
		(-0.03)	(-0.32)		(-0.22)
OLS		-0.187	-0.207		-0.175
		(-0.89)	(-1.00)		(-0.68)
WorkPap		-0.460	-0.708	-0.614	-0.270
		(-1.10)	(-1.77)*	(-2.28)**	(-0.44)
Growth&Aid		-0.264	-0.281		0.035
		(-0.46)	(-0.55)		(0.09)
Growth&Savs		0.103	-0.052		0.500
		(0.25)	(-0.13)		(1.12)
Y1970s		-0.311	-0.303		0.327
		(-0.81)	(-0.78)		(0.60)
Y1980s		0.369	-0.057		0.457
		(1.42)	(-0.18)		(1.58)
Y1990s		0.015	-0.028		0.244
		(0.06)	(-0.11)		(0.78)
Y2000s		-0.010	0.234		-0.961
		(-0.05)	(1.04)		(-2.56)**
Female			-0.278		0.053
			(-1.30)		(0.08)
Cato			-0.682		-4.399
			(-1.04)		(-5.61)***
JDS			0.857	0.755	-0.403
			(1.93)*	(2.50)**	(-0.58)
JID			0.024		0.011
			(0.06)		(0.02)
EDCC			-1.084	-0.988	-1.747
			(-2.24)**	(-3.52)***	(-1.00)
AER			0.160		3.178
			(0.33)		(1.81)*
AE			-0.190		1.807
			(-0.36)		(0.79)
Danida			0.899	0.826	-1.614
			(1.79)*	(1.97)*	(-1.72)*

	(1) Baseline	(2) Expanded	(3) General	(4) Reduced	(5) With auth. FE
WorldBank			-0.099		-3.914
			(-0.22)		(-1.51)
Influence			0.164		1.012
			(0.56)		(1.68)*
Constant	0.007	0.013	0.005	0.004	0.031
	(0.58)	(0.80)	(0.32)	(0.39)	(1.39)
N	1290	1273	1273	1273	1273
Adjusted R2	0.044	0.202	0.232	0.212	0.438

Notes: The dependent variable is the partial correlation between aid and growth. Table reports results of estimating the publication selection bias model: $r_{ij} = \beta_0 + \beta_1 SE_{ij} + \delta_1 Age_{ij} \cdot SE_{ij} + \delta_2 Tenure_{ij} \cdot SE_{ij} + \delta_3 Age_{ij} \cdot Tenure_{ij} \cdot SE_{ij} + \sum \delta_k \boldsymbol{k}_{ij} \cdot SE_{ij} + v_{ij}$. All estimations use unrestricted weighted least squares with inverse variance weights. Sample size varies due to incomplete information on country composition in some studies. Figures in round brackets are *t*-statistics, using standard errors adjusted for clustering of estimates within studies. *, **, *** denote statistical significance at the 10%, 5%, and 1% levels, respectively.

Table A12

Publication selection models: Replacing average age with maximum age

	(1) Baseline	(2) Expanded	(3) General	(4) Reduced	(5) With auth. FE
Standard error	0.580	0.658	1.062	1.289	-0.317
	(1.90)*	(0.95)	(1.42)	(4.40)***	(-0.33)
Post-PhD Age	-0.003	0.016	0.030	0.021	0.093
	(-0.12)	(0.84)	(1.57)	(1.07)	(2.90)***
Tenure	0.769	1.189	1.248	0.853	3.149
	(1.70)*	(2.61)***	(2.62)***	(2.14)**	(3.50)***
Post-PhD Age*Tenure	-0.043	-0.070	-0.085	-0.067	-0.176
	(-1.50)	(-2.16)**	(-2.73)***	(-2.33)**	(-5.00)***
Panel		0.534	0.508		0.436
		(1.08)	(1.02)		(0.95)
NrCountries		0.004	0.004		-0.008
		(0.98)	(0.95)		(-1.21)
NrYears		-0.029	-0.007		-0.025
		(-1.45)	(-0.34)		(-1.11)
Asia		-0.411	-0.603		-0.054
		(-1.19)	(-1.74)*		(-0.08)
Latin		0.089	0.263		0.247
		(0.30)	(0.78)		(0.54)
SingleCo		-0.272	-0.413	-0.902	0.643
		(-0.34)	(-0.48)	(-2.02)**	(0.45)
SubSample		-0.410	-0.466		0.076
		(-1.82)*	(-2.04)**		(0.36)
LowIncome		0.431	0.433		-0.076
		(1.68)*	(1.70)*		(-0.27)
EDA		0.113	0.169		-0.217
		(0.51)	(0.78)		(-0.98)
Outliers		-0.169	-0.218		-0.357
		(-0.90)	(-1.20)		(-1.77)*
Nonlinear		0.331	0.243		-0.098
		(1.62)	(1.28)		(-0.55)
Aid*Policy		-0.600	-0.625	-0.667	-0.303
		(-2.39)**	(-2.56)**	(-3.05)***	(-1.48)
Aid*Institut		-0.912	-0.624	-1.073	-0.614
		(-2.36)**	(-1.59)	(-3.22)***	(-1.14)
Policies		0.308	0.175		-0.017
		(0.93)	(0.62)		(-0.07)
Capital		0.139	-0.028		0.245
		(0.49)	(-0.10)		(0.78)
FDI		0.227	0.342		-0.874
		(0.68)	(1.00)		(-2.25)**
GapModel		0.464	0.354		1.145
		(1.04)	(0.80)		(1.15)
Theory		0.106	-0.008		0.022
		(0.35)	(-0.03)		(0.06)
Average		0.004	-0.014	-0.044	0.002
		(0.18)	(-0.54)	(-4.91)***	(0.11)
LagUsed		0.276	0.374		0.752
		(0.84)	(1.12)		(1.48)
Inflation		-0.060	-0.217		0.148

	(1) Baseline	(2) Expanded	(3) General	(4) Reduced	(5) With auth. FE
		(-0.17)	(-0.64)		(0.36)
Instability		-0.599	-0.294	-0.521	-0.095
		(-2.40)**	(-1.26)	(-2.38)**	(-0.31)
Fiscal		-0.032	-0.006		0.126
		(-0.09)	(-0.02)		(0.36)
GovSize		0.777	0.988	1.008	0.628
		(3.29)***	(3.93)***	(3.93)***	(1.58)
FinDev		0.293	0.245		0.306
		(1.36)	(0.99)		(1.44)
Ethno		0.093	-0.059		0.058
		(0.36)	(-0.26)		(0.23)
Region		-0.193	-0.225		-0.026
		(-1.02)	(-1.22)		(-0.14)
HumCap		-0.075	0.048		-0.012
		(-0.28)	(0.17)		(-0.05)
Open		0.316	0.242		0.358
		(1.32)	(1.05)		(2.06)**
PopSize		0.236	0.324		0.449
		(0.99)	(1.40)		(1.52)
GPDLev		-0.047	-0.111		-0.066
		(-0.16)	(-0.39)		(-0.15)
OLS		-0.175	-0.177		-0.206
		(-0.88)	(-0.90)		(-0.82)
WorkPap		-0.349	-0.573		-0.820
		(-0.84)	(-1.45)		(-1.46)
Growth&Aid		-0.213	-0.236		0.474
		(-0.37)	(-0.46)		(1.08)
Growth&Savs		0.051	-0.152		0.460
		(0.13)	(-0.39)		(1.11)
Y1970s		-0.324	-0.384		0.257
		(-0.85)	(-0.99)		(0.48)
Y1980s		0.465	-0.048		0.367
		(1.75)*	(-0.16)		(1.20)
Y1990s		-0.020	-0.169		0.162
		(-0.08)	(-0.67)		(0.51)
Y2000s			-0.286		-0.368
			(-1.45)		(-0.57)
Female			0.219		-0.811
			(1.00)		(-2.30)**
Cato			-0.521		-3.968
			(-0.84)		(-5.00)***
JDS			0.746	0.586	0.288
			(1.90)*	(1.84)*	(0.49)
JID			0.030		0.143
			(0.08)		(0.27)
EDCC			-1.412	-1.201	-2.740
			(-3.12)***	(-4.90)***	(-1.76)*
AER			0.398		2.468
			(0.82)		(2.11)**
AE			-0.261		-2.147
			(-0.44)		(-1.16)
Danida			0.920	0.960	-1.398

	(1) Baseline	(2) Expanded	(3) General	(4) Reduced	(5) With auth. FE
			(1.96)*	(2.46)**	(-1.64)
WorldBank			-0.433		-2.848
			(-1.08)		(-1.44)
Influence			0.083		1.258
			(0.31)		(2.43)**
Constant	0.009	0.005	-0.004	-0.010	0.036
	(0.83)	(0.32)	(-0.24)	(-1.00)	(1.52)
Joint test-age	3.827	3.165	4.172	4.631	12.839
	[0.024]	[0.045]	[0.017]	[0.011]	[0.000]
Joint test-tenure	1.557	3.482	4.232	3.053	13.010
	[0.215]	[0.034]	[0.017]	[0.051]	[0.000]
N	1290	1273	1273	1273	1273
Adjusted R2	0.049	0.216	0.248	0.213	0.449

Notes: The dependent variable is the partial correlation between aid and growth. Table reports results of estimating the publication selection bias model: $r_{ij} = \beta_0 + \beta_1 SE_{ij} + \delta_1 Age_{ij} \cdot SE_{ij} + \delta_2 Tenure_{ij} \cdot SE_{ij} + \delta_3 Age_{ij} \cdot Tenure_{ij} \cdot SE_{ij} + \sum \delta_k \boldsymbol{k}_{ij} \cdot SE_{ij} + v_{ij}$. All estimations use unrestricted weighted least squares with inverse variance weights. Sample size varies due to incomplete information on country composition in some studies. Figures in round brackets are *t*-statistics, using standard errors adjusted for clustering of estimates within studies. Figures in square brackets are *p*-values of the underlying joint tests. *, **, *** denote statistical significance at the 10%, 5%, and 1% levels, respectively

Table A13

Publication selection models: Replacing average age with minimum age

	(1) Baseline	(2) Expanded	(3) General	(4) Reduced	(5) With auth. FE
Standard error	0.506	0.763	1.004	1.294	2.874
	(1.69)*	(1.13)	(1.40)	(4.88)***	(2.31)**
Post-PhD Age	0.002	0.021	0.048	0.038	0.209
	(0.06)	(0.84)	(2.20)**	(1.71)*	(2.32)**
Tenure	0.472	0.570	0.642	0.371	1.592
	(1.03)	(1.39)	(1.60)	(1.04)	(1.72)*
Post-PhD Age*Tenure	-0.056	-0.051	-0.073	-0.058	-0.317
	(-1.20)	(-1.30)	(-2.06)**	(-1.67)*	(-2.97)***
Panel		0.368	0.306		0.373
		(0.71)	(0.59)		(0.76)
NrCountries		-0.000	-0.001		-0.014
		(-0.09)	(-0.17)		(-2.10)**
NrYears		-0.030	-0.008		-0.030
		(-1.43)	(-0.39)		(-1.32)
Asia		-0.361	-0.531	-0.593	0.063
		(-1.04)	(-1.55)	(-2.28)**	(0.09)
Latin		-0.007	0.209		0.288
		(-0.02)	(0.63)		(0.63)
SingleCo		-0.458	-0.667	-1.182	-1.049
		(-0.58)	(-0.79)	(-2.52)**	(-0.74)
SubSample		-0.457	-0.494	-0.355	0.022
		(-2.05)**	(-2.17)**	(-2.20)**	(0.10)
LowIncome		0.348	0.322		-0.180
		(1.34)	(1.25)		(-0.62)
EDA		0.199	0.297		-0.153
		(0.88)	(1.27)		(-0.55)
Outliers		-0.154	-0.179		-0.309
		(-0.79)	(-0.95)		(-1.56)
Nonlinear		0.331	0.239		-0.073
		(1.59)	(1.22)		(-0.40)
Aid*Policy		-0.578	-0.566	-0.631	-0.276
		(-2.34)**	(-2.36)**	(-3.63)***	(-1.34)
Aid*Institut		-0.871	-0.642	-0.850	-0.730
		(-2.25)**	(-1.59)	(-2.28)**	(-1.36)
Policies		0.353	0.231		0.101
		(1.09)	(0.81)		(0.38)
Capital		0.214	0.128		0.244
		(0.79)	(0.49)		(0.78)
FDI		0.128	0.255	0.536	-0.759
		(0.40)	(0.77)	(1.91)*	(-1.86)*
GapModel		0.547	0.477		-0.471
		(1.24)	(1.10)		(-0.45)
Theory		0.223	0.124		0.124
		(0.74)	(0.42)		(0.32)
Average		0.003	-0.015	-0.041	0.004
		(0.11)	(-0.56)	(-4.33)***	(0.17)
LagUsed		0.241	0.399		0.748
		(0.74)	(1.20)		(1.45)
Inflation		-0.059	-0.238		0.200

	(1) Baseline	(2) Expanded	(3) General	(4) Reduced	(5) With auth. FE
		(-0.17)	(-0.71)		(0.50)
Instability		-0.488	-0.170		0.071
		(-1.96)*	(-0.75)		(0.25)
Fiscal		0.064	0.118		0.280
		(0.19)	(0.37)		(0.79)
GovSize		0.827	1.064	1.061	0.681
		(3.54)***	(4.29)***	(4.48)***	(1.69)*
FinDev		0.352	0.269		0.178
		(1.50)	(1.04)		(0.88)
Ethno		-0.049	-0.220		-0.019
		(-0.18)	(-0.93)		(-0.07)
Region		-0.061	-0.097		-0.005
		(-0.30)	(-0.49)		(-0.03)
HumCap		-0.024	0.072		0.079
		(-0.08)	(0.25)		(0.28)
Open		0.384	0.317		0.272
		(1.64)	(1.45)		(1.45)
PopSize		0.277	0.391	0.370	0.615
		(1.19)	(1.70)*	(1.74)*	(1.94)*
GPDLev		-0.059	-0.102		-0.082
		(-0.20)	(-0.36)		(-0.18)
OLS		-0.211	-0.212		-0.168
		(-1.05)	(-1.05)		(-0.65)
WorkPap		-0.318	-0.367		-0.217
		(-0.82)	(-0.99)		(-0.36)
Growth&Aid		-0.305	-0.262		0.290
		(-0.51)	(-0.50)		(0.79)
Growth&Savs		0.058	-0.160		0.557
		(0.14)	(-0.43)		(1.32)
Y1970s		-0.273	-0.357		0.231
		(-0.72)	(-0.92)		(0.44)
Y1980s		0.403	-0.100		0.399
		(1.47)	(-0.32)		(1.30)
Y1990s		-0.026	-0.068		0.232
		(-0.10)	(-0.28)		(0.73)
Y2000s			-0.249		-1.311
			(-1.22)		(-1.73)*
Female			0.380		-0.820
			(1.61)		(-2.56)**
Cato			-0.494		-4.391
			(-0.76)		(-5.83)***
JDS			0.962	0.831	0.316
			(2.26)**	(2.87)***	(0.58)
JID			0.106		0.218
			(0.27)		(0.39)
EDCC			-1.541	-1.181	-3.975
			(-3.38)***	(-4.16)***	(-2.29)**
AER			0.071		9.723
			(0.15)		(2.95)***
AE			-0.119		0.635
			(-0.21)		(0.35)
Danida			1.084	1.205	-4.072

	(1) Baseline	(2) Expanded	(3) General	(4) Reduced	(5) With auth. FE
			(2.23)**	(2.95)***	(-3.08)***
WorldBank			-0.164		-9.966
			(-0.39)		(-2.69)***
Influence			-0.025		1.567
			(-0.09)		(2.49)**
Constant	0.008	0.017	0.008	-0.002	0.039
	(0.65)	(1.08)	(0.51)	(-0.18)	(1.73)*
Joint test-age	1.544	0.867	2.635	1.589	5.480
	[0.217]	[0.422]	[0.075]	[0.208]	[0.005]
Joint test-tenure	0.778	1.121	2.243	1.387	4.407
	[0.462]	[0.329]	[0.110]	[0.253]	[0.014]
N	1290	1273	1273	1273	1273
Adjusted R2	0.043	0.205	0.241	0.220	0.444

Notes: The dependent variable is the partial correlation between aid and growth. Table reports results of estimating the publication selection bias model: $r_{ij} = \beta_0 + \beta_1 SE_{ij} + \delta_1 Age_{ij} \cdot SE_{ij} + \delta_2 Tenure_{ij} \cdot SE_{ij} + \delta_3 Age_{ij} \cdot Tenure_{ij} \cdot SE_{ij} + \sum \delta_k \boldsymbol{k}_{ij} \cdot SE_{ij} + v_{ij}$. All estimations use unrestricted weighted least squares with inverse variance weights. Sample size varies due to incomplete information on country composition in some studies. Figures in round brackets are *t*-statistics, using standard errors adjusted for clustering of estimates within studies. Figures in square brackets are *p*-values of the underlying joint tests. *, **, *** denote statistical significance at the 10%, 5%, and 1% levels, respectively

Table A14

Publication selection models: Replacing the average tenure with a dummy taking the value of 1 if at least one researcher has tenure

	(1) Baseline	(2) Expanded	(3) General	(4) Reduced	(5) With auth. FE
Standard error	0.545	0.730	1.167	1.301	0.271
	(1.69)*	(1.03)	(1.61)	(4.64)***	(0.29)
Post-PhD Age	0.008	0.019	0.044	0.040	0.066
	(0.23)	(0.64)	(1.63)	(1.43)	(1.02)
Tenure	0.674	0.576	0.590	0.423	3.541
	(1.63)	(1.53)	(1.61)	(1.35)	(4.69)***
Post-PhD Age*Tenure	-0.063	-0.052	-0.069	-0.062	-0.173
	(-1.43)	(-1.39)	(-2.07)**	(-1.90)*	(-2.49)**
Panel		0.418	0.351		0.423
		(0.83)	(0.70)		(0.92)
NrCountries		0.002	0.001		-0.012
		(0.45)	(0.28)		(-2.10)**
NrYears		-0.029	-0.005		-0.027
		(-1.39)	(-0.24)		(-1.21)
Asia		-0.401	-0.591	-0.538	0.003
		(-1.12)	(-1.62)	(-2.14)**	(0.01)
Latin		-0.003	0.191		0.321
		(-0.01)	(0.57)		(0.71)
SingleCo		-0.385	-0.596	-1.019	0.087
		(-0.48)	(-0.69)	(-2.14)**	(0.06)
SubSample		-0.419	-0.473	-0.286	0.037
		(-1.84)*	(-2.09)**	(-1.82)*	(0.18)
LowIncome		0.399	0.356		-0.076
		(1.53)	(1.40)		(-0.27)
EDA		0.149	0.205		-0.158
		(0.66)	(0.91)		(-0.62)
Outliers		-0.128	-0.159		-0.348
		(-0.65)	(-0.85)		(-1.82)*
Nonlinear		0.325	0.233		-0.071
		(1.53)	(1.18)		(-0.39)
Aid*Policy		-0.606	-0.616	-0.739	-0.305
		(-2.47)**	(-2.60)**	(-4.25)***	(-1.46)
Aid*Institut		-0.856	-0.602	-0.800	-0.642
		(-2.27)**	(-1.60)	(-2.38)**	(-1.20)
Policies		0.351	0.244		0.122
		(1.07)	(0.86)		(0.46)
Capital		0.157	0.054		0.172
		(0.55)	(0.20)		(0.58)
FDI		0.191	0.308	0.532	-0.756
		(0.57)	(0.90)	(1.98)**	(-1.96)*
GapModel		0.519	0.374		1.666
		(1.13)	(0.83)		(1.98)*
Theory		0.175	0.095		-0.049
		(0.58)	(0.33)		(-0.12)
Average		0.004	-0.014	-0.035	-0.000
		(0.18)	(-0.55)	(-3.92)***	(-0.02)
LagUsed		0.293	0.420		0.772
		(0.88)	(1.25)		(1.55)

	(1) Baseline	(2) Expanded	(3) General	(4) Reduced	(5) With auth. FE
Inflation		-0.028	-0.152		0.167
		(-0.08)	(-0.45)		(0.42)
Instability		-0.475	-0.168		0.075
		(-1.95)*	(-0.73)		(0.25)
Fiscal		0.097	0.112		0.190
		(0.29)	(0.36)		(0.54)
GovSize		0.774	1.028	1.075	0.584
		(3.27)***	(4.28)***	(4.86)***	(1.41)
FinDev		0.308	0.299		0.129
		(1.28)	(1.12)		(0.63)
Ethno		-0.000	-0.148		-0.017
		(-0.00)	(-0.64)		(-0.07)
Region		-0.099	-0.121		0.015
		(-0.51)	(-0.63)		(0.08)
HumCap		-0.007	0.097		-0.040
		(-0.02)	(0.33)		(-0.14)
Open		0.351	0.262		0.281
		(1.49)	(1.17)		(1.61)
PopSize		0.235	0.329		0.451
		(0.98)	(1.42)		(1.67)*
GPDLev		-0.080	-0.118		-0.013
		(-0.27)	(-0.42)		(-0.03)
OLS		-0.183	-0.210		-0.225
		(-0.88)	(-1.03)		(-0.89)
WorkPap		-0.310	-0.454		-0.950
		(-0.74)	(-1.19)		(-1.78)*
Growth&Aid		-0.299	-0.312		0.702
		(-0.50)	(-0.58)		(1.33)
Growth&Savs		0.076	-0.151		0.505
		(0.19)	(-0.41)		(1.20)
Y1970s		-0.316	-0.395		0.315
		(-0.82)	(-1.02)		(0.57)
Y1980s		0.443	-0.083		0.414
		(1.60)	(-0.26)		(1.39)
Y1990s		-0.045	-0.170		0.221
		(-0.18)	(-0.68)		(0.70)
Y2000s			-0.316		-0.841
			(-1.52)		(-1.33)
Female			0.159		-0.784
			(0.67)		(-2.44)**
Cato			-0.645		-3.091
			(-0.99)		(-3.42)***
JDS			0.829	0.795	1.091
			(2.03)**	(2.59)**	(1.97)*
JID			0.052		0.333
			(0.14)		(0.56)
EDCC			-1.617	-1.170	-4.484
			(-3.23)***	(-3.56)***	(-2.97)***
AER			0.212		2.690
			(0.39)		(1.38)
AE			-0.217		-2.502
			(-0.37)		(-1.42)

	(1) Baseline	(2) Expanded	(3) General	(4) Reduced	(5) With auth. FE
Danida			0.895	1.084	-3.205
			(1.84)*	(2.69)***	(-3.58)***
WorldBank			-0.360		-2.909
			(-0.82)		(-1.27)
Influence			-0.013		1.739
			(-0.05)		(3.28)***
Constant	0.008	0.012	0.002	-0.002	0.036
	(0.71)	(0.75)	(0.16)	(-0.18)	(1.54)
Joint test-age	1.961	1.193	2.160	1.881	4.545
	[0.145]	[0.307]	[0.119]	[0.157]	[0.012]
Joint test-tenure	1.364	1.246	2.166	1.797	19.611
	[0.259]	[0.291]	[0.119]	[0.170]	[0.000]
N	1290	1273	1273	1273	1273
Adjusted R2	0.056	0.208	0.241	0.219	0.451

Notes: The dependent variable is the partial correlation between aid and growth. Table reports results of estimating the publication selection bias model: $r_{ij} = \beta_0 + \beta_1 SE_{ij} + \delta_1 Age_{ij} \cdot SE_{ij} + \delta_2 Tenure_{ij} \cdot SE_{ij} + \delta_3 Age_{ij} \cdot Tenure_{ij} \cdot SE_{ij} + \sum \delta_k \boldsymbol{k}_{ij} \cdot SE_{ij} + v_{ij}$. All estimations use unrestricted weighted least squares with inverse variance weights. Sample size varies due to incomplete information on country composition in some studies. Figures in round brackets are *t*-statistics, using standard errors adjusted for clustering of estimates within studies. Figures in square brackets are *p*-values of the underlying joint tests. *, **, *** denote statistical significance at the 10%, 5%, and 1% levels, respectively

Table A15

Publication selection models: Replacing the average tenure with a dummy taking the value of 1 if all researchers are tenured

	(1) Baseline	(2) Expanded	(3) General	(4) Reduced	(5) With auth. FE
Standard error	0.752	0.979	1.145	1.492	2.775
	(2.72)***	(1.61)	(1.76)*	(5.28)***	(2.63)***
Post-PhD Age	-0.022	0.003	0.022	0.015	0.083
	(-0.71)	(0.18)	(1.12)	(0.76)	(2.06)**
Tenure	0.559	1.328	1.491	1.109	-0.979
	(1.14)	(2.42)**	(2.80)***	(2.89)***	(-0.82)
Post-PhD Age*Tenure	-0.038	-0.086	-0.100	-0.084	-0.062
	(-0.98)	(-2.38)**	(-2.87)***	(-2.69)***	(-0.97)
Panel		0.446	0.436		0.350
		(0.91)	(0.86)		(0.80)
NrCountries		0.002	0.002		-0.005
		(0.58)	(0.43)		(-0.82)
NrYears		-0.031	-0.011		-0.021
		(-1.52)	(-0.55)		(-1.04)
Asia		-0.373	-0.529	-0.471	0.053
		(-1.12)	(-1.61)	(-1.79)*	(0.08)
Latin		0.003	0.217		0.215
		(0.01)	(0.69)		(0.46)
SingleCo		-0.500	-0.608	-1.261	-0.505
		(-0.66)	(-0.73)	(-2.92)***	(-0.37)
SubSample		-0.403	-0.442		0.108
		(-1.78)*	(-1.89)*		(0.51)
LowIncome		0.383	0.354		-0.071
		(1.52)	(1.39)		(-0.25)
EDA		0.145	0.244		-0.398
		(0.64)	(1.11)		(-1.99)**
Outliers		-0.203	-0.243		-0.353
		(-1.10)	(-1.36)		(-1.72)*
Nonlinear		0.343	0.257		-0.174
		(1.70)*	(1.37)		(-1.02)
Aid*Policy		-0.589	-0.575	-0.514	-0.340
		(-2.34)**	(-2.36)**	(-2.39)**	(-1.70)*
Aid*Institut		-0.919	-0.617	-0.962	-0.670
		(-2.37)**	(-1.54)	(-2.61)**	(-1.27)
Policies		0.304	0.121		-0.020
		(0.92)	(0.43)		(-0.07)
Capital		0.170	0.060		0.174
		(0.62)	(0.23)		(0.56)
FDI		0.203	0.300		-0.734
		(0.64)	(0.92)		(-1.95)*
GapModel		0.331	0.304		-0.936
		(0.78)	(0.73)		(-1.10)
Theory		0.084	-0.017		0.634
		(0.28)	(-0.06)		(1.78)*
Average		0.004	-0.012	-0.041	-0.008
		(0.18)	(-0.45)	(-3.86)***	(-0.35)
LagUsed		0.206	0.308		0.798
		(0.63)	(0.92)		(1.57)

	(1) Baseline	(2) Expanded	(3) General	(4) Reduced	(5) With auth. FE
Inflation		-0.084	-0.264		0.056
		(-0.24)	(-0.79)		(0.15)
Instability		-0.658	-0.341	-0.486	0.177
		(-2.63)***	(-1.42)	(-2.32)**	(0.55)
Fiscal		-0.100	-0.094		0.366
		(-0.28)	(-0.28)		(1.19)
GovSize		0.828	1.045	1.005	0.618
		(3.56)***	(4.14)***	(3.73)***	(1.55)
FinDev		0.414	0.335		0.129
		(1.78)*	(1.32)		(0.61)
Ethno		0.074	-0.094		-0.023
		(0.28)	(-0.40)		(-0.09)
Region		-0.136	-0.179		-0.028
		(-0.71)	(-0.95)		(-0.15)
HumCap		-0.086	0.004		0.105
		(-0.32)	(0.01)		(0.41)
Open		0.388	0.343		0.272
		(1.72)*	(1.63)		(1.45)
PopSize		0.259	0.376	0.405	0.774
		(1.14)	(1.70)*	(1.95)*	(2.47)**
GPDLev		-0.051	-0.103		-0.096
		(-0.17)	(-0.36)		(-0.23)
OLS		-0.183	-0.181		-0.205
		(-0.90)	(-0.89)		(-0.81)
WorkPap		-0.418	-0.590		-0.578
		(-1.06)	(-1.60)		(-1.13)
Growth&Aid		-0.236	-0.230		0.167
		(-0.42)	(-0.46)		(0.49)
Growth&Savs		0.078	-0.134		0.552
		(0.19)	(-0.33)		(1.38)
Y1970s		-0.312	-0.361		0.284
		(-0.83)	(-0.95)		(0.51)
Y1980s		0.416	-0.075		0.465
		(1.62)	(-0.24)		(1.56)
Y1990s		-0.100	-0.158		0.203
		(-0.41)	(-0.64)		(0.68)
Y2000s			-0.198		-1.122
			(-0.98)		(-1.84)*
Female			0.343		-0.886
			(1.55)		(-2.47)**
Cato			-0.549		-3.820
			(-0.89)		(-5.11)***
JDS			0.781	0.599	-0.706
			(1.91)*	(2.23)**	(-1.46)
JID			0.153		0.212
			(0.40)		(0.41)
EDCC			-1.270	-1.159	-1.744
			(-2.82)***	(-4.97)***	(-1.18)
AER			0.294		5.639
			(0.61)		(4.86)***
AE			-0.189		2.534
			(-0.34)		(1.36)

	(1) Baseline	(2) Expanded	(3) General	(4) Reduced	(5) With auth. FE
Danida			1.139	1.193	-3.634
			(2.24)**	(3.01)***	(-3.73)***
WorldBank			-0.236		-8.537
			(-0.57)		(-3.99)***
Influence			0.089		1.110
			(0.32)		(2.11)**
Constant	0.010	0.013	0.003	-0.005	0.023
	(0.91)	(0.83)	(0.22)	(-0.44)	(0.95)
Joint test-age	3.142	3.117	4.120	4.368	2.245
	[0.046]	[0.048]	[0.018]	[0.015]	[0.110]
Joint test-tenure	0.649	3.083	4.346	4.386	13.520
	[0.524]	[0.049]	[0.015]	[0.014]	[0.000]
N	1290	1273	1273	1273	1273
Adjusted R2	0.045	0.211	0.245	0.219	0.453

Notes: The dependent variable is the partial correlation between aid and growth. Table reports results of estimating the publication selection bias model: $r_{ij} = \beta_0 + \beta_1 SE_{ij} + \delta_1 Age_{ij} \cdot SE_{ij} + \delta_2 Tenure_{ij} \cdot SE_{ij} + \delta_3 Age_{ij} \cdot Tenure_{ij} \cdot SE_{ij} + \sum \delta_k \boldsymbol{k}_{ij} \cdot SE_{ij} + v_{ij}$. All estimations use unrestricted weighted least squares with inverse variance weights. Sample size varies due to incomplete information on country composition in some studies. Figures in round brackets are *t*-statistics, using standard errors adjusted for clustering of estimates within studies. Figures in square brackets are *p*-values of the underlying joint tests. *, **, *** denote statistical significance at the 10%, 5%, and 1% levels, respectively

Conditional meta-averages

Table 2 in the text presents unconditional meta-averages, which confirm that development aid has a small positive but practically insignificant correlation with economic growth. Table A16 presents several conditional meta-averages. These are constructed using the expanded model, Table 5, Column (3). In Table A16, Column (1) lists the included moderators and the meta-averages are reported in Column (2). In all cases, similarly to the unconditional case, there is no evidence of a statistically significant correlation between aid and growth.

Table A16

Conditional meta-averages

Moderators included (1)	Conditional meta-average (2)
Baseline model: *Data*: Panel, including data from Asia and Latin America, data from all decades. *Specification*: conditioning on policies, capital, FDI, inflation, instability, fiscal, size of government, financial development, ethnic fractionalization, regional dummies, human capital, openness, population and per capita income. *Sample means of:* number of countries, no years in sample, and number of years of data averaging.	r = 0.027 [0.654] (-0.091; 0.144)
Same as baseline but with outliers removed	r = 0.014 [0.822] (-0.110; 0.138)
Same as baseline but data for single country	r = -0.086 [0.559] (-0.375; 0.203)
Same as baseline but allowing for non-linear aid effects	r = 0.043 [0.49] (-0.081; 0.167)
Same as baseline but allowing for interactions with policy	r = -0.022 [0.693] (-0.131; 0.087)
Same as baseline but allowing for interactions with institutions	r = -0.005 [0.941] (-0.129; 0.120)
Best case: baseline model, for low income countries only, using EDA data.	r = 0.094 [0.169] (-0.040; 0.228)

Notes: Figures in square brackets are *p*-values. Figures in round brackets are 95% confidence intervals.

Journal differences

If younger researchers are motivated to publish in order to secure tenure, then perhaps this goal is assisted by publishing in the best economics journals? To explore this dimension, we consider differences in published results between journals. We use the same classification of journals as Heckman and Moktan (2018). For this analysis, we look at the simple, unweighted average, of all results published in the various categories. Table A17, Column (1), reports the unweighted averages published across all publication outlets (all journals, working papers and book chapters). Column (2) reports the unweighted average partial correlation reported in the Top 5 economics journals.[32] Column (3) reports the same for but the Top 5 plus the non-top 5 general interest journals. Finally, in Column (4) we present average correlations for studies published in Field A and B journals. Cells for each row report first the simple, unweighted average partial correlation, followed by the average research inflation (in square brackets), and then the number of estimates.

Column (1) confirms the previous findings. Tenured researchers report smaller correlations and the least research inflation; research inflation is on average 29% among all tenured research teams compared to 128% among all non-tenured research teams. Studies by younger non-tenured researchers report much larger correlations than those by younger tenured researchers. The number of observations for top 5 journals is very small. They do show, however, that compared to the average partial correlation in top 5 journals (r = 0.07), studies where all authors are non-tenured are larger (r = 0.12), and those from older non-tenured are very large (r = 0.48). Research inflation is extreme for this group, where the average estimate is inflated by 1,268%!

[32] Recall that in our data, Top 5 means *American Economic Review* and *Journal of Political Economy*. Column (2) adds the *Review of Economics and Statistics, Economic Journal,* and the *European Economic Review*. In Column (3) we add *Journal of Economic Theory*, *Public Choice*, *World Development*, *Economic Development and Cultural Change*, and the *Journal of Development Economics*.

Table A17

Reported aid effectiveness by journal

	All journals (1)	Top 5 journals (2)	Top 5 & non-top 5 general interest journals (3)	Field A & B journals (4)
All authors	0.063	0.070	0.021	0.080
	[0.81]	[1.00]	[-0.395]	[1.310]
	1,290	30	171	152
All tenured	0.044	-	-0.282	0.045
	[0.29]		[-9.105]	[0.289]
	223		5	41
All non-tenured	0.079	0.115	0.142	0.107
	[1.279]	[2.292]	[3.088]	[2.083]
	452	16	57	53
Younger tenured	0.039	-	-0.418	0.052
	[0.120]		[-13.011]	[0.482]
	51		4	39
Younger non-tenured	0.084	-	0.125	0.405
	[1.414]		[2.604]	[10.627]
	269		49	11
Older tenured	0.038	-	-	-
	[0.097]			
	149			
Older non-tenured	0.064	0.476	0.159	0.018
	[0.850]	[12.679]	[3.559]	[-0.481]
	107	4	7	30

Notes: Column (1) presents the average correlations in all outlets. Column (2) presents average correlations reported in Top 5 economics journals. Column (3) in the top 5 plus the non-top 5 general interest economics journals. Column (4) is for field A and field B journals. Figure in square brackets is average research inflation. The third number in each block is the number of estimates within each subgroup.

Column (3) confirms the divergence in results between tenured and non-tenured researchers. Interestingly, younger tenured researchers report, on average, a large negative correlation (r = -0.42) that exaggerates how low the correlation really is. Conversely, young non-tenured researchers report larger positive correlations and inflate the research record by 260%. Older non-tenured researchers report even larger correlations. Column (3) shows that tenured researchers are more likely to publish adverse effects of aid on growth. Also, it is interesting that the top journals are more likely to publish adverse growth effects compared to the second tier journals, on average. Turning to second tier journals (Field A and B), we get a similar pattern. The one difference of note is that the older non-tenured researchers do not report inflated estimates in these journals.

These results are consistent with younger non-tenured researchers inflating aid effectiveness with the view of getting published. Publishing is of course a process of matching authors to journals. Table A17 merely reports differences between tenured and non-tenured as revealed in actual published studies. As Frey (2003) highlights, referees are very influential in driving what is ultimately published in journals. Nevertheless, the differences between tenured and non-tenured authors cannot be explained by referee pressures alone; the pattern is more consistent with researcher motivations.