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Benchmark study: Publication output in Development Studies Institutes 2013-2017



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The following document reports on a benchmark study conducted in 2018 by IOB, comparing the institute's research publication output and impact for the period between 2013 and 2017 to those of ten similar European institutes.

1. Objective of the benchmark study

The objective of the study is to establish a benchmark of publication output for researchers currently working in development studies institutes, and to compare IOB's publication output against this benchmark.

2. Methodological choices

2.1. Identification of sample

For the identification of the sample, the benchmark study carried out by IOB was able to profit from a benchmark study carried out in 2017 by the Institute of Social Studies (Erasmus University Rotterdam), one of the world's leading development studies institutes. The ISS validated a list of all staff members who contribute to the research programs of a selected number of development institutes, among which IOB.

For the selection of development institutes included in the study, the main condition for selection was that the institutes are European research institutes specialized in development studies, and that they host widely recognized postgraduate programmes focusing on development studies. This sample is broader than the sample used for the benchmark study we undertook in 2014.

The population of the sample is comprised of all 313 individual researchers who are currently employed by their respective institutes. Each institute was asked to present their list of staff members, with the exclusion of the following groups:

- PhD students;
- post-doc researchers;
- emeritus professors and other retired staff¹;
- affiliate staff not on the payroll;
- teaching fellows;

¹ In actual practice, retirement policies may differ quite substantially, to be sure. To the extent possible we looked up people's age, year of PhD and earliest publication reported in Google Scholar. The oldest staff member in the dataset was born in 1940 (or aged 77 in 2017). We took institutes' reporting on their contracted staff at face value.

Table 1.
Characteristics of sample of researchers

Institute	Number of researchers	% born in EU	% with EU PhD	% PhD in economics	% Female
Geneva	16	56%	63%	0%	44%
IDS-UK	69	79%	79%	31%	47%
IOB	13	92%	100%	54%	31%
LSE	31	41%	50%	37%	52%
CIDIN	7	100%	100%	14%	43%
SOAS (DDS)	22	75%	86%	40%	27%
GID (AMSTERDAM)	11	91%	100%	9%	73%
BIRMINGHAM	19	83%	89%	0%	47%
EAST ANGLIA (SID)	36	79%	94%	34%	42%
MANCHESTER (GDI)	41	70%	95%	36%	30%
ISS	47	78%	88%	36%	40%
Total	312				
Average	28	76%	85%	30%	42%

With a total of 313 researchers specialized in development studies, the average number of researchers per institute is 28, the median is 22. IDS-UK (69) and ISS (47) are the biggest institutes, together they “contribute” already more than one third of the number of academic staff members. IOB (13) belongs to the group of smallest institutes in the sample: Together with GID Amsterdam and CIDIN Nijmegen, their size is less than half of the average size of the Development Institutes in the sample.

Of all researchers in development studies, 42% are female. IOB scores below average. On average one third earned their PhD in economics, this ratio exceeds 50% for IOB. About 76% of researchers are born in the EU and 85% of them have a PhD from a European university. For IOB, these percentages are 92% and 100% respectively, which seems to be typical for the group of smallest development institutes but nevertheless quite exceptional in comparison to the total sample.

2.2. Period under study

Most data were retrieved during the month of March 2018.

The objective of the study is to compare the output and impact of *recent* publication output. The study conducted by IOB repeats the previous benchmark exercise (2014) in this respect.

A benchmark study that looks at the whole publication output of institutes' academic staff assesses the overall performance of the researchers' often extensive academic career, which is not necessarily a good indication of the *current* performance of the researchers working in development institutes. The IOB benchmarking study tries to overcome this problem by comparing the researchers' publication performances during the last five years.

Given the timing of the data-gathering, it was impossible to include 2018 data. The benchmarking study hence focuses on the researchers' activity during the 5-year period between 2013 and 2017.

2.3. Criteria of researchers' publication output and impact

As noted above, the first criterion for selection of relevant publications is that they were published in the period between 2013 and 2017.

A further selection criterion for this comparative analysis is the public availability of the relevant data. The main consequence of the latter criterion is that this benchmark study could not adopt the research valuation system that was introduced by CERES and recognized by EADI in 2005. The CERES/EADI research valuation system involves five graded categorizations of research output, including output in carriers of information that are not visible in Google Scholar. The calculations that determine the ranking of a given publication are also too complex to be adopted here, as they require information that is not publicly available. As a consequence, a drawback of this study is that the measures of publication output we are using are implicitly giving more weight to multi-authored articles. In contrast to the CERES/EADI-valuation exercise, no attempt is made to discriminate between articles and book publications, or between single-authored and multi-authored publications.

The benchmark study compares four parameters based on data retrieved from two programmes that calculate the output and impact of selected publications – namely Harzing's *Publish or Perish*, which is based on Google Scholar, and *Web of Science*.

Google Scholar is a very (and, we noticed, increasingly) inclusive academic search engine. The results presented include a large variety of academic output and, increasingly, output for a broader audience. Differences between articles and books, or between single-authored and multiple-authored publications, are not taken into account. The instrument is not free of error: promotion for other discussion papers may for instance wrongly be considered as a reference and hence counted as a citation, and self-citations are not excluded either. We have corrected for these elements to a certain degree by combining double listings of the same publication into 1. We also tried to filter out publications that Google Scholar accredited to the wrong researcher by checking the subject of the papers where possible.

Web of Science (formerly Web of Knowledge) is a more exclusive academic search engine than Google Scholar. In order to preserve certain scientific academic standards, it only features peer-reviewed articles from a limited range of journals.

Both *Publish & Perish* and *Web of Science* allow extracting the number of publications, number of citations and h-scores of individual researchers for a particular time-period. For each parameter, we calculated the average for each institute as well as the overall average for the 312 researchers. Further, we calculated, for each institute, the percentage of researchers in the top 50%, the top 30% and the top 10% of the sample.

2.4. Limitations of the comparative benchmarking analysis

Given that a limited number of parameters is included, the results of this study reveal only part of the academic performance of the individual researchers and the institutes of which they are part.

All institutes have their own history, which is function of their academic, political and development policy environment. Academic environments largely determine the difference in emphasis given to particular publications as compared to other kinds of research and academic output. Although it is unlikely that academia will ever reach a consensus on what is an exemplary academic performance, there is probably a consensus that “academic performance” is more comprehensive than producing the largest number of the most cited papers of which we find an electronic trace in either the Google Scholar or Web of Science datasets. This is especially important for development institutes, whose mission is often much broader than purely academic, and whose funding often also depends on activities which can only indirectly be recycled into scientific publication output. Further, a lot depends on the research time allotted to researchers. This study does not attempt to control for differences in time use between institutes.

We don’t even have the ambition to complete cover the dimension of “publication performance”. The following table gives an indication of this: it compares the total publication output in CERES/EADI A and B ranked papers with the WoS-journal output for ISS. The latter covers only 50% to 70% of the former (at ISS and IOB respectively). The difference between ISS and IOB also suggests it is difficult to extrapolate from (publicly available) knowledge about WoS-papers to all types of (A and B) papers.

Table 2.
Comparing papers in WoS-rated journals and total output in CERES/EADI A and B papers

	ISS		IOB	
CERES/EADI A (top 1/3)	222	41%	61	54%
CERES/EADI B (bottom 2/3)	314	59%	53	46%
Total	536	100%	114	100%
of which WoS-journal papers	257	48%	80	70%

° counting books as 3 papers

The results have to be interpreted with these caveats in mind.

3. Google Scholar 2009-2013 publications & citations

Table 3.
Number of publications in Google Scholar (2013-2017)

Institute	Average	>median	>30%	>10%
Cut-off		18	26	44
IUED Geneva	16,9	38%	25%	6%
IDS Sussex	23,1	62%	39%	7%
IOB Antwerp	36,2	92%	77%	23%
ISS The Hague	19,1	43%	19%	9%
LSE London	21,3	48%	29%	13%
CIDIN Nijmegen	17,7	57%	29%	0%
SOAS London	21,9	41%	23%	9%
IDS Amsterdam	38,2	73%	64%	18%
IDD Birmingham	16,8	47%	16%	5%
DID East Anglia	21,8	47%	22%	11%
GDI Manchester	16,7	27%	17%	7%
Total	21,5	49%	29%	9%

All researchers in development studies reported in the dataset published, on average, 21,5 paper output over the 5-year period 2013-17 (median=19). This average was lower for the period 2009-13 (18 publications on average, median=15). Averages between institutes vary quite substantially, though, between a fork of 16 and 38. IOB achieves excellently, with 36,2 publications on average. More than 90% of its staff publish more than the sector median number of papers, and 23% publish in the top 10% of papers reported in Google Scholar. In this respect, they outperform all other institutes.

Table 4.
Number of citations (2009-2013) in Google Scholar

Institute	Average	Gini	>median	>30%	>10%
Cut-off			88	178	431
IUED Geneva	57,7	0,56	19%	6%	0%
IDS Sussex	181,8	0,58	54%	35%	6%
IOB Antwerp	138,2	0,29	77%	38%	0%
ISS The Hague	178,9	0,72	40%	19%	9%
LSE London	460,1	0,77	61%	39%	19%
CIDIN Nijmegen	116,4	0,56	14%	14%	14%
SOAS London	131,7	0,59	41%	18%	9%
IDS Amsterdam	272,7	0,48	82%	45%	9%
IDD Birmingham	111,3	0,43	58%	21%	0%
DID East Anglia	234,9	0,65	53%	39%	17%
GDI Manchester	247,8	0,69	46%	37%	17%
Total	209,5	0,68	50%	30%	10%

Researchers were cited 209 times on average for the publications they realized in 2014-7, which is also a significant increase compared to the first benchmark exercise (149 times). The citations do show quite an uneven distribution however, as shown by the large difference between the mean and the median (88 citations). While IOB researchers perform among the best, with 77% of them being situated in the top 50% and still 38% among the top 30% of their sector, none of them belong to the top 10% category of researchers in development studies. In this respect, IOB's staff is performing relatively equal, compare to institutes which have to deal with much more inequality in performance between researchers. Indeed, while the sector average GINI coefficient is 0,68, IOB scores a sectoral minimum of 0,29 in this respect.

4. Web of Science 2009-2013 publications & citations

Table 5.
Number of publications (2013-2017) in Web of Science

Institute	Average	GINI	>median	>30%	>10%
Cut-off			5	7	14
IUED Geneva	2,7	0,42	6%	0%	0%
IDS Sussex	5,6	0,41	41%	22%	4%
IOB Antwerp	6,4	0,27	69%	31%	0%
ISS The Hague	6,2	0,52	47%	38%	15%
LSE London	6,4	0,43	55%	32%	6%
CIDIN Nijmegen	6,6	0,25	43%	29%	0%
SOAS London	5,6	0,40	45%	27%	0%
IDS Amsterdam	14,6	0,45	82%	64%	27%
IDD Birmingham	4,3	0,47	26%	16%	0%
DID East Anglia	9,6	0,49	53%	44%	22%
GDI Manchester	6,3	0,51	39%	32%	10%
Total	6,45	0,48	45%	30%	9%

On average, researchers in development studies publish 6,5 papers over a 5-year period in a Web of Science-rated journal (compared to 5 papers on average in 2013-7). IOB researchers achieve almost exactly this average. With 70% of all researchers performing higher than the median number of WoS-papers (at least 6 papers over a 5-year period), they are only outperformed, in this respect, by IDS-Amsterdam. While 30% of IOB's researchers perform in the top 30%, none of them situate themselves in the top 10% however. This again reflects the relative equality in performance among IOB researchers.

It can be noticed, here, that, at IOB, about 2/3rds of CERES/EADI AB-papers are published in WoS-journals (cf Table 2). In other words, it is difficult to make a direct link between the cut-offs specified in this table and the minimum number of CERES/EADI AB-papers that constitute basic or excellence criteria for IOB staff members. These criteria are currently set at 5 and 8 respectively for a five-year period.

The median is at 3 papers per 5-year period or 0,6 papers per year. IOB researchers perform above average, and 75% of IOB-researchers publish above the median, half of them can be situated in the top 30%, none of them in the top 10%.

Table 6.
Number of Citations (2013-2017) in Web of Science

Institute	Average	GINI	>median	>30%	>10%
Cut-off			14	31	80
IUED Geneva	15,3	0,77	25%	6%	6%
IDS Sussex	30,5	0,72	42%	26%	7%
IOB Antwerp	23,4	0,30	69%	23%	0%
ISS The Hague	30,5	0,74	47%	26%	2%
LSE London	57,8	0,68	74%	42%	13%
CIDIN Nijmegen	35,3	0,56	43%	14%	14%
SOAS London	21,5	0,72	36%	18%	5%
IDS Amsterdam	67,2	0,50	82%	64%	27%
IDD Birmingham	17,5	0,57	47%	26%	0%
DID East Anglia	71,5	0,73	58%	36%	17%
GDI Manchester	36,7	0,65	46%	39%	22%
Total	37,7	0,71	50%	30%	10%

On average, researchers in development studies harvested 38 citations with the WoS-papers published in 2013-7, which is a significant increase compared to the period 2009-13 (28 citations). Again, the median is much lower (14 citations), suggesting a very unequal pattern. IOB performs under this average, though 70% of its researchers are position in the top half of the sector with respect to this indicator. Again, there are no IOB-researchers in the top 10%, which also consistent with a record low GINI of 0,30 compared to the sector average of 0,71.

5. Summary & conclusion

- Over-all, we observe an increase in output over time for the field of development studies as a whole. It is difficult to tell whether this is due to a higher performance of the average researcher, to changes in the policies of both Google Scholar and WoS, or both. In a way this is also bad news for the definition of “benchmarks” in terms of WoS or PoP publications or citations: it implies that benchmarks are moving targets and would need constant readjustment and results definitely remain time-bound.
- In general, IOB performs quite good in the field of development studies, with 70-90% of its researchers performing in the top half of the sector, whatever the criterium taken. This result confirms the results of the previous benchmark study, even though, in the previous study, the average IOB-researcher performed also better than the average researcher of any other institute. This is not the case anymore.
- Unlike most other development institutes, there is a quite low inequality in publication performance between researchers at IOB. This may have to do with the institutional context, in part: this context partly assures a relative equality in status between ZAP members on one hand (unlike in other countries, all ZAP members can for instance supervise PhD-students) and on the other, it is impossible to make use of a wage policy to attract top notch researchers, as salaries are largely fixed institutionally. Anyhow, this relative equality doesn't keep us from being over-represented in the top-half of the sector and to come close to the sector average also in terms of high quality papers.
- IOB performs better in terms of output than in terms of impact. This is so both for WoS-papers and for PoP-papers. Whereas an average researcher at IOB publishes more than 150% of the sector average Google scholar publications and 100% of the sector average WoS-papers, the impact we realise with them is only 50%-60% of the sector averages respectively.