


5 January 2015



**Benchmark study:
Publication output in Development
Studies Institutes 2009-2013**



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The following document reports on a benchmark study conducted in 2014 by IOB, comparing the institute's research publication output and impact for the period between 2009 and 2013 to those of six similar European institutes.

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.

Methodological choices

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 September 2014 by the Institute of Social Studies (The Hague), 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. ISS further drew on a list established earlier by CERES for a benchmark study undertaken in 2012. In this benchmark study, we have added the Graduate Institute of International and Development Studies, Geneva, after validating the included staff members in a similar way – viz. after communication with the institute's director.

The population of the sample is comprised of all 166 individual researchers who are currently employed by their respective institutes. In contrast to the ISS study, this study does not make a distinction between research intensive and other staff differentiated according to staff research time. The reason for this is the lack of information to make this distinction across all institutes, which would potentially lead to a bias in comparative results. There is thus only one category of individual researchers included in the sample. The following groups were not included:

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

Table 1.
Characteristics of sample of researchers

Institute	Number of researchers	% born in EU	% with EU PhD	% PhD in economics	% Female
BIRMINGHAM	7	100%	100%	0%	43%
CIDIN	8	88%	100%	50%	13%
Geneva	22	73%	77%	32%	32%
IDS-NL	15	87%	93%	20%	53%
IDS-UK	58	86%	90%	28%	41%
IOB	12	92%	100%	67%	25%
ISS	44	75%	91%	39%	39%
Total	166				
Average	24	83%	90%	33%	38%

With a total of 166 researchers specialized in development studies, the average number of researchers per institute is 24, the median is 15. All but two institutes (IDS-UK and ISS) employ less than the average of 24 researchers. With 12 researchers as defined above, IOB's size is half the average size of the sample of European development institutes.

Of all researchers, a little more than 1/3rd are female, IOB scores below average. On average one third earned their PhD in economics, this ratio reaches 2/3 for IOB. About 90% of researchers have a PhD from a European university. This percentage is higher among the relatively smaller development institutes.

Period under study:

Most data was retrieved during the month of November 2014. The data for the Graduate Institute of Geneva was retrieved begin December 2014.

The objective of the study is to compare the output and impact of *recent* publication output. The study conducted by IOB departs from previous studies in that it only takes recent publications into consideration. 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 2014 data. The benchmarking study hence focusses on the researchers' activity during the 5-year period between 2009 and 2013.

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 2009 and 2013.

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 in 2005. The CERES 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-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*, based on Google Scholar, and *Web of Science*.

Google Scholar is a very inclusive academic search engine. The results presented include a large variety of academic output. 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. We have not corrected for these elements and assume that these factors affect the data of all the institutes in a similar way.

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. These factors explain the relatively lower figures of publication output and impact compared to Google Scholar.

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 166 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. As h-scores calculated on the publications 2009-2013 are quite low, it does not make much sense to analyse the distribution per decile, though, for the sake of completeness, we add the results of the exercise in annex.

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", it is clear that "academic performance" is more comprehensive than producing the largest number of the most cited papers.

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.

Google Scholar 2009-2013 publications & citations

Table 2.
Number of publications in Google Scholar (2009-2013)

	Average (s.d.)	% in top 50%	% in top 30%	% in top 10%
		>15 papers	>22 papers	>34 papers
BIRMINGHAM	11,9 (8,9)	14%	14%	0%
CIDIN	15,0 (9,0)	50%	12%	0%
Geneva	16,5 (11,2)	45%	23%	9%
IDS-NL	18,5 (14,5)	40%	27%	13%
IDS-UK	19,4 (13,7)	48%	31%	12%
IOB	22,4 (7,0)	92%	50%	0%
ISS	18,0 (13,5)	48%	32%	11%
Total	18,2 (12,7)			

Researchers in development studies achieved 18 publications on average, and a median of 15 publications during 2009-13. Averages between institutes vary quite substantially. IOB achieves the highest average. 92% of its researchers publish more than the median, half are situated in the top 30%, but none of them are present in the top 10% (this is also the case for other smaller institutes).

Table 3.
Number of citations (2009-2013) in Google Scholar

	Average (s.d.)	% in top 50%	% in top 30%	% in top 10%
		>69 citations	>151 citations	>352 citations
BIRMINGHAM	66,9 (64,7)	29%	14%	0%
CIDIN	150,1 (251,0)	50%	25%	12%
Geneva	80,6 (104,2)	32%	14%	5%
IDS-NL	127,1 (242,8)	47%	20%	7%
IDS-UK	211,5 (345,6)	59%	40%	19%
IOB	153,3 (96,2)	83%	50%	0%
ISS	119,7 (223,0)	43%	25%	5%
Total	148,9 (258,1)			

Researchers were cited 149 times on average for the publications they realized in 2009-13. Citations are more unevenly spread than publications, as can be derived from the difference between the average and the median citations (69 per researcher). IOB researchers perform above average and 83% of researchers perform in the top 50%, half in the top 30% (more than 151 citations), but none are present in the top 10% (more than 352 citations).

Web of Science 2009-2013 publications & citations

Table 4.
Number of publications (2009-2013) in Web of Science

	Average (s.d.)	% in top 50%	% in top 30%	% in top 10%
		>3 papers	>6 papers	>13 papers
BIRMINGHAM	4,0 (1,8)	57%	14%	0%
CIDIN	5,8 (4,7)	62%	38%	0%
Geneva	2,4 (2,8)	18%	5%	0%
IDS-NL	5,1 (7,5)	47%	13%	7%
IDS-UK	5,4 (5,7)	48%	26%	7%
IOB	6,5 (3,1)	75%	58%	0%
ISS	5,4 (5,6)	52%	36%	7%
Total	5,0 (5,3)			

On average, researchers in development studies publish 1 paper per year in a Web of Science-rated journal, 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 5.
Number of Citations (2009-2013) in Web of Science

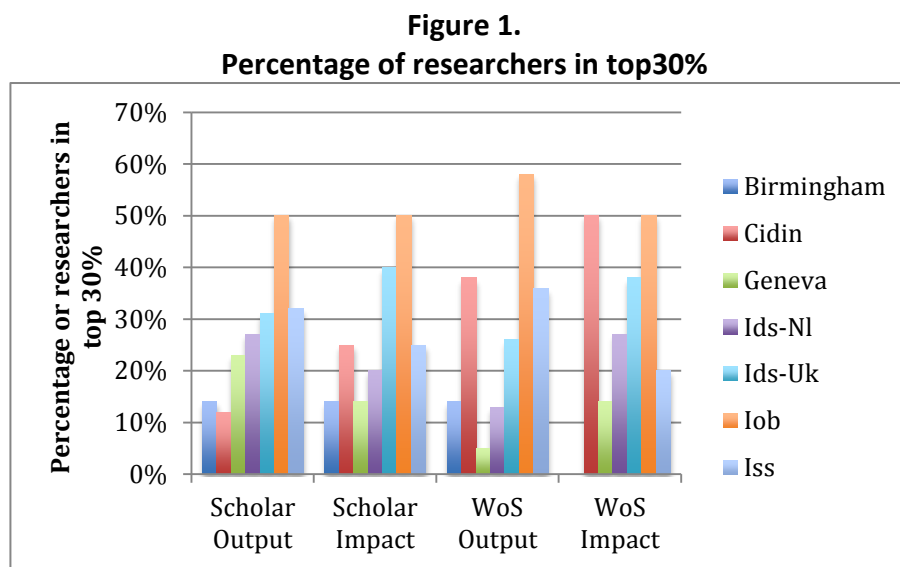
	Average (s.d.)	% in top 50%	% in top 30%	% in top 10%
		>8 citations	>21 citations	>48 citations
BIRMINGHAM	9,6 (7,2)	57%	0%	0%
CIDIN	44,8 (76,7)	63%	50%	25%
Geneva	7,1 (9,5)	27%	14%	0%
IDS-NL	27,1 (67,5)	40%	27%	7%
IDS-UK	37,8 (85,3)	57%	38%	12%
IOB	29,5 (22,9)	83%	50%	17%
ISS	25,2 (74,3)	41%	20%	9%
Total	27,9 (69,0)			

On average, researchers in development studies harvested 28 citations with the papers published in 2009-13. Again, the median is much lower (8 citations), suggesting a very unequal pattern. IOB performs slightly better than average. Again, three-quarters of IOB's researchers score above the median, half of them perform in the top 30% and 17% (i.e. two researchers) are present in the top 10% -which suggests a relatively higher impact than could be expected based on the number of publications.

Summary & conclusion

This benchmark study calculates a benchmark for publication output in a sample of seven Development Studies Institutes, among which IOB. It draws on the publicly available datasets of Google Scholar and Web of Science to calculate publication output and impact of the papers and books published during 2009-2013 for all academic staff holding a fixed position in these institutes.

A median researcher annually publishes 3 papers appearing in Google Scholar, and 0,6 papers in a WoS-rated journal. Top researchers (the top 10% of the sample) publish more than 34 and 13 papers respectively.



The publication performance of the different research institutes, as judged by the publication performance of their researchers, is summarized in figures 1. and A.1. (annex). In terms of the percentage of researchers publishing more than the median, IOB outperforms all other research institutes. IOB-researchers are also overrepresented in the top30% of their field. **At least half of all IOB-researchers belong to the top 30% of researchers in development studies. With respect to both publication output and publication impact as visible in Google Scholar and Web of Science, IOB is performing at least as good or better than all other development institutes included in the sample.**

To be sure, IOB-researchers are only present in the top10% of their field when we consider the impact indicator of WoS-papers. In other words, the publication pattern is also relatively equal within the group of IOB-researchers. This pattern reflects a number of policy choices, among which the option to spread available research time evenly over all researchers and “not to go the last mile” in hiring top researchers. Further, it is to be noted that almost all top10% performers are hosted by the largest Development Studies Institutes of the sample. Given that the relatively equal pattern of publication output is accompanied by a top performance of IOB-researchers as a group, these policy choices are understandable and arguably not in need of review.

Annex

H-index for Google Scholar publications (2009-2013)

	Average h-index (s.d.)	% in top 50%	% in top 30%	% in top 10%
		h-index >4	h-index > 6	h-index > 9
BIRMINGHAM	3.71 (2,0)	29%	14%	0%
CIDIN	4.62 (3,2)	38%	25%	12%
Geneva	3.95 (2,1)	45%	9%	0%
IDS-NL	4.53 (3,5)	40%	20%	7%
IDS-UK	6 (3,9)	53%	33%	14%
IOB	5.75 (1,9)	75%	33%	0%
ISS	4.32 (3,2)	43%	14%	7%
Total	4.97 (3,3)			

H-index for Web of Science publications (2009-2013)

	Average h-index (s.d.)	% in top 50%	% in top 30%	% in top 10%
		h-index > 1	h-index > 2	h-index > 4
BIRMINGHAM	1.57 (0,5)	57%	0%	0%
CIDIN	2.38 (1,7)	62%	50%	12%
Geneva	1.00 (1,1)	32%	14%	0%
IDS-NL	1.80 (2,1)	40%	27%	7%
IDS-UK	2.07 (2,1)	55%	31%	7%
IOB	2.67 (1,7)	75%	50%	17%
ISS	1.77 (2,4)	43%	30%	9%
Total	1.86 (2,0)			

Figure A.1.

Percentage of researchers above median publication performance

