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Publication Trends in Organization Studies in Italy: a Discussion About Higher Education Policies and Rankings

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Abstract. Knowledge production, or science results, are the outcome of several factors, such as research policies, governance, infrastructure, human resources, and cooperation agreements. This paper focuses on the evolution of a scholarly discipline in the Italian higher education context as seen through the lens of research activity output in terms of publications and citations, as assessed according to the recent reforms. The quantitative analysis is circumscribed to high quality journals, or "Classe A" journals, defined by ANVUR (the Italian Agency for the Evaluation of Universities and Research Institutes) as proxies of research excellence. The analyses of publication trends suggest that the reforms introduced in the Italian university system, which emphasize the significance of publications on impact factor journals, have modified the attitude of scholars. In the period taken into consideration, the evidence collected suggests that the increase in the quantity of research output is unquestionable. As far as the quality of research output is concerned, the debate is still open.

Keywords: bibliometric analysis, research evaluation model, journal rankings.

1 Introduction

This study deals with the evolution of a research field in an academic context, namely Organization Studies, which is investigated according to the perspective of the quality of research output. Publications in impact factor journals and their related citations are the main indicators considered in this respect [1], [2]. Despite the limits of these indicators for defining research quality [3]–[5], they are normally used for the determination of academic careers and for the allocation of research funds [6]. This is what has happened in Italy, for example, since the beginning of the millennium, when a series of regulations were introduced. The Evaluation of Research Quality (Valutazione della Qualità della Ricerca – VQR) poses a particular emphasis on bibliometric indicators

for designating the performance-based share of the Ordinary Financing Fund (Fondo di Finanziamento Ordinario - FFO) that supports the Italian University system. In addition, the National Scientific Qualification (Abilitazione Scientifica Nazionale – ASN) always regulates the recruitment of university professors on the basis of bibliometric indicators. ANVUR, the Italian Agency for the Evaluation of Universities and Research Institutes, oversees both the implementation of the Evaluation of Research Quality (VQR) of universities and of the National Scientific Qualification (ASN) of scholars. Therefore, our objective is to study publication and citation trends in a period characterized by profound reforms that sees the advent of the need to publish in high quality journals. Among ANVUR's tasks, there is also the compilation of the list of "Classe A" journals. Publications in the so-called "Classe A" journals, or top-ranking journals, are taken as a proxy of research excellence and, as such, are the object of our analysis.

Thus, the basic question concerns how to define an appropriate set of indicators that is able to account for the evolution of a specific research field such as Organization Studies [7], [8]. These indicators constitute a theoretical model aimed at identifying the directions and the nature of change in publications through time, induced by the implementation of the VQR and the ASN procedures. The proposed model represents a first attempt in this direction, with the aim to open a debate fostering its refinement and integration so that it can better assess the evolution of a specific research field.

The application of the theoretical model has provided a series of trends in the Organization Studies field based on the research quality identified by publications in "Classe A" journals. These trends suggest that the effects of policy reforms have been considerable in relation to the increase of this type of publications in the period under consideration (1991-2021). In spite of this, the research impact, of which the number of citations is a proxy, is more controversial, as the increase in the number of publications does not correspond to a proportional increase in the number of citations.

The Organization Studies research field relates to management and, more generally, to socio-economic sciences. Further development of this study will deal with the application of the proposed theoretical model to humanities and natural sciences since it is a starting point for building a more comprehensive model able to enlarge the analysis to further indicators.

A literature review about the ranking phenomenon and the characteristics of the research field is presented in section two. Then, section three introduces the methodology adopted and the research question. The analysis of publication and citation trends is described in section four, followed by discussion and conclusions.

2 Literature review

Why has publishing in high quality journals become so important to determine research fund allocations and the direction of scholars' careers? It can be considered a consequence of a competitive globalized world led by forces such as managerialism, professionalization, marketization, and accountability[6]. A "reputation race" is underway worldwide for improving the status of research institutions, for assessing their quality,

performance, and for gauging their national or global competitiveness based on bibliometric and other indicators and related rankings[9]. In this process of commodification of higher education institutions and scientific publications [10], universities and researchers are competing global players for attracting students and economic resources in one case and for publishing in high quality journals in the other case. Thus, what is controversial, such as quality and excellence in high education, is transformed into solid numbers, and facts emerge. This means that what conforms to rankings becomes the accepted norm influencing actors' behaviours persuasively rather than coercively [11].

This is the context where the Organization Studies research field is also situated and operates. System theory provides a possible interpretative framework of this phenomenon [12]. Specifically, research fields can be considered open systems and, as such, subject to the external environment represented by institutions and policies that regulate higher education. In other words, they are invited to adopt and manage norms, values, and beliefs of the environment for surviving. This adaptation is not only straightforward but can also be a tactic for circumventing ranking criteria by boycotting controls and supervisions or responding to them strategically [13]. Anyway, a resource dependency is created. Universities and scholars depend on the environment for accreditation and funding, respectively. Also, the rational choice theory justifies this organization and individual behaviour [14]. Actors make choices for achieving the greatest satisfaction or for optimizing the return of investment; as a result, competing for the ranking is considered rational [15]. The "reputational race", according to O'Meara [16], can also be interpreted according to the lens of neo-institutionalism[17]. Concepts like institutional isomorphism [18], institutional homogenization or institutional imitation [19] can be apt for describing this race. Consequently, traditional publication outlets have been visibly replaced by high-quality journals involving a re-direction of all research activities [20].

Now, the point is to identify criteria for establishing high-impact journals. They are essentially based on citation weighting schemes, and the Impact Factor bibliometric index is the most popular. As based on the yearly mean number of citations of articles published in the last two years in a given journal, its ranking becomes the proxy of the article's quality. However, the question is not only related to whether citations are a good indicator of research excellence but also to its impact on society at large. How to measure research outputs as public goods providing benefits to humankind is still an open debate [21]. For example, the question is whether the peer review evaluation solution of high-quality journals can achieve this aim. In this respect, Altmetrics or alternative metrics have emerged. These metrics consider mentions in news and social media, references in databases and repositories, downloads, etc. [22].

Finally, our question is whether and how the evolution of the Organization Studies scholarly discipline in terms of research output represented by publications in high-quality journals has been affected by the policy reforms of the beginning of the millennium and whether this evolution says something about the entire model of knowledge production. In other words, are we confronted with the neo-liberal model that aims to establish elite world-class universities (WCU) or with a the social-democratic model that aims to establish a world-class system (WCS) composed of a portfolio of diverse high performing higher education institutions [6]? The neo-liberal model aims to create

universities (WCU) able to compete globally but at the expense of the hierarchy of higher education institutions. The model in question favours the concentration of research excellence in a few universities that are able to compete in all disciplines while the remaining institutions would concentrate on teaching with only local cases where applied research is relevant [23]. The construction of a higher education system able to compete globally is the aim of the social-democratic model. This system is composed of a certain number of institutions with a global perspective excelling in specific research fields. In general, an organic relationship between research and teaching is pursued outlining a model in which research pre-eminence is spread geographically.

3 Research question and methodology

The area of concern of the present paper relates to the evolution of a scholarly discipline seen through the lens of research activity output. From the several items of scholarly production that exist, only articles published in high-quality journals ("Classe A" journals) are considered due to higher education policies implemented in Western countries at the beginning of the millennium. How to detect and interpret publication trends is the challenge, and the definition of a set of quantitative indicators is adopted in this respect[7], [8]. An indicator, based on observed facts, reveals relative positions (e.g., the number of citations per article). When fact observations take place at regular intervals, directions of change can be detected. Therefore, indicators are usually used for policy analysis, as they are able not only to identify trends and draw attention to specific issues but also to set policy priorities and monitor policy performance [24]. Indicators can also be regrouped into a composite indicator. This is the case when they are compiled into a single index. The GDP is a typical example in this respect and as such it measures multi-dimensional concepts [7]. Competitiveness, industrialization, sustainability etc. are other concepts represented by composite indicators. However, there are two schools of thought. One says that composite indicators represent effective solutions for conveying the image of a specific phenomenon. On the contrary, the other says that it is sufficient to create an appropriate set of indicators since composite indexes assign weights to variables in an arbitrary way (Sharpe, 2004). We follow Sharpe and, thus, our research question focuses on the definition of a proper set of indicators able to account for the evolution of a specific scholarly discipline, such as Organization Studies, considering publications in high-quality journals. This set of indicators can be conceived as a theoretical model that combines indicators based both on absolute values (number of publications, journals, faculty members, etc.) and relative values (publications per faculty member, publications per country of origin, citations per article, etc.) for providing a comprehensive view of the research output and then of the scholarly discipline [25].

One of the aims of the present paper is to raise interest in the topic and foster contributions that can ameliorate the capacity of the model to investigate not only scholarly disciplines in the range of Organization Studies, but also in other domains.

Indicators are built upon simple statistical tools, such as means, percentages, and other descriptive statistics. The elaboration of data has also been supported by an "R"

software package for bibliometric analysis (https://www.bibliometrix.org/) integrated by coding for figure elaboration. As this study is of a quantitative nature, it is transparent, reproducible and, therefore, appreciated for being rigorous in ranking scholars' and related institution publications [26], as well as mapping activities that distinguish a research field such as Organization Studies [27]. The Scopus and ANVUR data bases guarantee data accuracy as far as the publication attributions to the Organization Studies faculty members are concerned.

Figure 1 represents the theoretical model proposed to carry out the bibliometric analysis in question. First, faculty members of organization studies were determined (absolute value indicator) subdividing them into full professors, associate professors, adjunct professors, researchers, and the two new types of assistant professorships (t.d.a researcher; t.d.b researcher) based on the database of the Ministry of University and Research. Within the Italian university system, those who hold these roles are required to teach, carry out research activities and, as such, are subject to various forms of assessment, as in the case of career promotion or the evaluation of their department. Once the components of the Organization Studies were selected, the Scopus identification code was assigned to each of them for attributing solely related publications. This required a detailed and manual check of each Scopus identification code.

The Scopus database has been preferred as a reference point for this type of research due to the wide coverage of peer-reviewed journals [28]. Examining publications in "Class A" journals according to ANVUR, 201 scholars with 890 publications (absolute value indicator) were selected in the period under consideration (1991-2021). Of the 201 scholars, only 190 are present in the Scopus database with a proper ID number (in three cases we found authors with two IDs). Comparison between "Classe A" journals and those defined by the Chartered Association of Business Schools (ABS) in the Academic Journal Guide in 2018 (AJG 2018, charteredabs.org) (relative value indicator) contributes to assessing ANVUR publication standards and provides insights about the level of internationalization of "Classe A" journals. Besides, AJG journals represent a benchmark for the Organization Studies discipline, both from the citation and the research impact points of view. Matching the 802 class A journals with the 1582 AJG journals, 431 journals are present in both lists. Further details are provided in the following subsection before describing the analysis results of the 890 "Classe A" publications.

The theoretical model is completed by further indicators (relative value indicators) to analyse publication and citations trends per author and per authors' category, focusing in particular on the tails of the case distributions (see figure 1) [29].

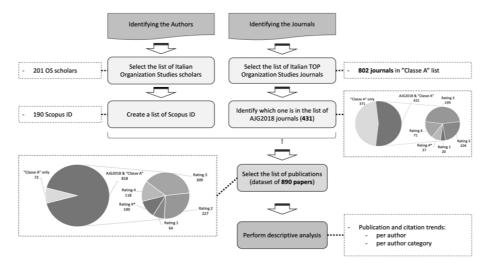


Fig. 1. Research protocol

3.1 The comparison between "Classe A" list and AJG2018 ranking

The analysis of research output in Organization Studies takes into consideration the Academic Journal Quality Guide (AJG) promoted by the Association of Business Schools (ABS). This guide "is a hybrid based partly upon peer review, partly upon statistical information relating to citation, and partly upon editorial judgements, following from the detailed evaluation of many hundreds of publications over a long period. It provides a guide to the range, subject matter and relative quality of journals in which business and management academics might publish the results of their research (Harvey et al., 2010. p. 1)". Therefore, the act of comparing "Classe A" publications with the ABS-AJG publications is considered a way to understand how the latter reflect on the former and how journals that refer to the business school environment at the global level are acknowledged by the Italian Organization Studies community. According to ABS-AJG, journals are grouped into 22 subject areas classified into five different ratings (1-2-3-4-4), where 4 is used for the few, highest ranking top journals), with the aim to check if and how "Classe A" journals are mentioned by the ABS-AJG list. In this respect, table 1 provides a snapshot in which the total number of journals is broken down into ranks and fields. Out of the 802 journals identified as "Classe A", 371 are not present in the ABS-AJG ranking, or, about 46% of the total. Fields such as finance, marketing, and, above all, economics, achieved the highest scores regarding presence in this ranking.

Table 1. Presence of "Classe A" journals in the ABS-AJG2018 ranking

Rating	1	2	3	4	4*	Total
Subject areas						
Journals not in AJG						371
Econ	1	21	46	17	6	91
Finance		6	18	5	3	32
Mkt	2	10	11	2	6	31
Sector	3	12	7	5		27
Ethics-Csr-Man	2	5	11	4	4	26
Account		1	15	2	4	22
Ops&Tech	4	7	7	2	1	21
Soc Sci		3	11	3	3	20
Info Man		5	11	1	2	19
Hrm&Emp	1	5	6	5		17
Reg. Studies, Planning & Environ-	1	3	10	2		16
ment						
Or&Mansci	1	4	7	1	2	15
Pub Sec	1	3	7	2	1	14
Psych (Wop-Ob)		2	3	6	1	12
Ent-Sbm	1	2	5	3		11
Org Stud		3	2	4	1	10
Bus Hist & Econ Hist		3	5	2		10
Innov	2	4	2	1	1	10
Ib&Area		1	6	1	1	9
Psych (General)		1	4	2		7
Strat		2	3		1	6
Mdev&Edu	1	1	2	1		5
Total	20	104	199	71	37	802

Table 2 shows to what extent the journals in the "Classe A" reflect those in ABS-AJG rankings. For example, only 3% of ABS-AJG class 1 journals is present in "Classe A", in comparison with 20% of class 2 journals, whereas class 4 and class 4* are represented respectively at 86% and 100%. Therefore, "Classe A" includes most prestigious journals and rules out less important ones to a large extent. However, this is not always the case. In fields such as *marketing*, *operations and technology management*, regional studies, planning and environment and strategy, 50%, or more than 50% of journals ranked class 1 or class 2, are present in the "Classe A" list. The opposite is true for the fields operation research and managerial science, social science, information management and psychology (general), where class 4 and 4* journals are not yet totally included in the Italian "Classe A" list. Since both lists are periodically updated, the level of alignment of "Classe A" list with respect to the ABS-AJG one may improve in the near future.

Table 2. Percentage of "Classe A" journals classified according to the ABS-AJG ranking

		•			•
R	ating 1	2	3	4	4*
Subject areas					
Econ	1%	18%	69%	100%	100%
Finance	0%	16%	62%	100%	100%
Sector	6%	32%	70%	100%	
Or&Mansci	5%	24%	32%	33%	100%
Mkt	7%	48%	92%	100%	100%
Soc Sci	0%	12%	41%	50%	100%
Ethics-Csr-Man	7%	19%	92%	100%	100%
Ops&Tech	10%	64%	78%	100%	100%
Info Man	0%	15%	65%	50%	100%
Account	0%	3%	71%	100%	100%
Regional Studies, Planning And Environm	nent 20%	30%	83%	100%	
Hrm&Emp	6%	23%	67%	100%	
Pub Sec	8%	21%	64%	100%	100%
Psych (Wop-Ob)	0%	10%	23%	100%	100%
Bus Hist & Econ Hist	0%	23%	100%	100%	
Innov	13%	29%	100%	100%	100%
Ent-Sbm	8%	22%	100%	100%	
Org Stud	0%	21%	50%	100%	100%
Psych (General)	0%	9%	33%	25%	0%
Ib&Area	0%	6%	86%	100%	100%
Strat	0%	50%	100%		100%
Mdev&Edu	4%	6%	67%	100%	
Total	3%	20%	64%	86%	100%

4 The descriptive analysis of publication trends in Organization Theory

The Scopus database provides a range of opportunities for investigating publication trends of the Italian Organization Studies research community. A time series related to "Classe A" publications offers a first hint about the development of research outputs.

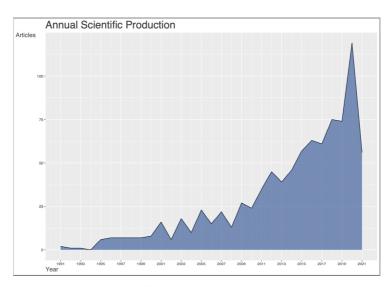


Fig. 2. Number of "Classe A" publications in Organization Studies per year since 1991

Figure 2 suggests that there has been a significant increase in the number of publications in high-impact journals in recent years. After a substantial flat curve that existed up to the end of the 90s, a zigzagging line marked the direction at the beginning of the new millennium. Zigzagging also continued during the last decade, however the number of publications per year more than doubled from 2015 to 2020, growing from 57 to 119. The fact that at the beginning of 2021, when the empirical investigation was concluded, 47 papers had already been recorded indicates that the publication trend is ongoing.

One of the objectives of the present paper is to study this trend considering the latest legislative reforms that emphasize the relevance of "Classe A" publications, both for researchers' careers and university funding. Nevertheless, publishing in "Classe A" journals is not considered sufficient for a comprehensive evaluation of the research output. The number of citations of these publications, for example, contributes to defining it as an indicator of research impact. Unlike observing publications in a specific time span whose trend is easily intelligible, assigning citations to a specific year is not so straightforward. In fact, journal articles, as any other research product, can be cited for a long period of time. To deal with this issue, three factors are taken into account. Firstly, the average of citations per article published in a specific year is considered. We can expect that early published papers have a lower average of citations per year, except for seminal articles, as it is a common practice to cite more recent publications. This practice demonstrates scholars' familiarity with up-to-date research products and hence the possibility to build up current knowledge. Secondly, the publication with the highest number of citations published in a specific year is observed. The aim of this indicator is to identify the so called "seminal works" that are often cited long after publication. Thirdly, we also decided to pinpoint publications with the lowest number of citations per year to figure out their level of impact in comparison with the other two indicators.

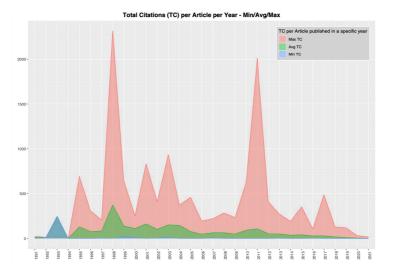


Fig. 3. Maximum of citation, average of citations, and minimum of citations per article published in a specific year

Figure 3 suggests that seminal works were published mainly in the second half of the 90s and during the first years of the new millennium, except for a 2011 publication that has already reached about 2,000 citations. It is likely that a 2017 publication will become a seminal one, as it has already achieved 500 citations. In relation to the average citations of publications, we can observe that the beginning of the millennium and the turn of the first decade are characterized by works with a significant impact. Without considering the past few years, which are not so relevant due to the time a publication takes to establish itself in the research scenario, we can predict that most of the publications of the last decade will not see an increase in the citation rate in the coming years.

The minimum of citations indicator is added in order to outline the profile of limited impact research since there were no publications without any citations only at the beginning of the millennium. It is noteworthy that from 1992-1994 the three citation indicators overlap, signalling a homogeneous level of quality in research production in Organization Studies.

To conclude, the comparison of the publication rate and the citation rate suggests that an increase in the number of publications in the last decade does not correspond to an increase in the number of citations, and we can also hypothesize that there possibly has been a decrease over the years.

5 Publication trends per scholar in Organization Theory

An analysis of the scholarly workforce is also needed to investigate publication trends. In other words, the number and the composition of faculty members who published in the period under examination provide a further building block about the characteristics of the research activity in the Organization Studies field.

Table 3 separates faculty members into full professors (Ordinario), associate professors (Associato), adjunct professors (Straordinario), assistant professors (Ricercatore) and the two new types of assistant professorships (Ricercatore t.d.a, Ricercatore t.d.b) that were introduced at the beginning of 2010-2020 decade.

Table 3. Faculty members affiliated with the Organization Studies discipline since 2000.

Position	2000	2005	2010	2015	2021
Full Professors (Ordinario)	5	11	20	29	63
Associate Professors (Associato)	17	28	28	67	84
Adjunct Professors (Straordinario)	1	6	1	0	5
Assistant Professors (Ricercatore)	18	25	72	32	10
Assistant Professors (Ricercatore t.d.a)				4	15
Assistant Professors (Ricercatore t.d.b)				9	24
Total	41	70	121	141	201

Data show a five-fold increase in the number of academics in the observed period. However, the number of publications increased more than proportionally. In 2000, a total of 41 scholars wrote 8 "Classe A" papers but in 2020 the numbers became 119 papers and 201scholars. This means that the ratio of publications for a single year goes from .19 to .58 per scholar, suggesting that a larger number of academics succeeded in achieving this result.

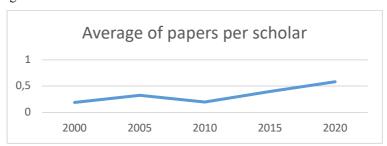


Fig. 4. Average number of publications of "Classe A" articles in Organization Studies per scholar and per year since 2000

The study of citations per scholar represents a further step in this discussion. Figure 5 is built on the basis of the total number of citations related to publications in the five years taken into examination (2000, 2005, 2010, 2015, 2020) and subdivided by the total number of scholars. The trend, overall, is on the rise, even though there are a couple of peaks in 2005 and in 2015, along with a decrease in citations per scholar, falling to 200 in 2020, which is not significant because of the time it takes to recognize the value of recent publications. Nevertheless, the magnitude of the increase of publications per scholar in the same period is more than proportional, suggesting that merely increasing quantity does not correspond to having a significant impact on research.

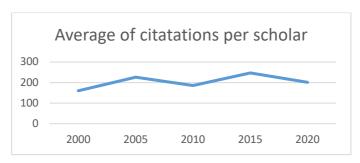


Fig. 5. Average of citations of "Classe A" articles per scholar in Organization Studies since 2000

A further element for investigating the Organization Studies research output is to circumscribe the analysis to the top 10 authors with the highest number of publications and the highest number of citations that represent 5% of the total academic workforce. From 1991 to 2020, 331 articles out of 834 publications are attributable to the top 10 authors. In other words, 191 scholars authored about 60% of the total number of publications and 10 authored the rest. In the same period, 41,175 was the total number of citations and 29,569 were the prerogative of the 10 authors with the highest number of citations. This means that only about 30% of citations refers to 191 scholars. The same analysis is carried out with reference to the time span from 1991 to 2015. Out of 442 publications from 1991 to 2015, 130 were authored by the top 7 authors (5% of 141 scholars in place in 2015) or about 29% of the total. Therefore, 134 scholars wrote about 61% of the publications in line with 2020 results, with a comparable concentration of authorship. As far as citations are concerned, in the same period, the top 7 scholars were cited 10,222 times out of 35,077 citations, which corresponds to about 29% of the total. In this case, the contrast with 2020 is significant. From 1991 to 2015, citations of the 134 Organization Studies scholars were about 71% of the total, in contrast with about 30% of citations referred to 191 scholars in 2020 (corresponding to about 60% of academic output), suggesting a shift from a substantial balance between publications and citations in 2015 to a concentration of citations in 2020.

What's the reason for this radical change between 2015 and 2020, as far as the distribution of citations is concerned? In recent years, two non-state universities (namely Bocconi University and LUISS "Guido Carli" University) recruited some internationally renowned academics who have dozens of publications in "Classe A" Journals that were cited thousands of times for competing in the higher education sector at the global level. In a way that diverges from the traditional academic approach, the research strategy followed by the two non-state universities has significantly impacted the research output indicators of Organization Studies.

In this regard, Figure 6 represents the distribution of published articles and related citations of the 34 most productive scholars of Organization Studies from 1991 to 2021. Even though the sample is more than three times larger than the one considered above, it is possible to see the tendency of both publications and citations that are concentrated around only a few scholars. Some of these were recruited from abroad, as indicated by the name "from abroad" in figure n. 6, which identifies scholars who have acquired Italian faculty membership in recent years, as opposed to "local" ones, who began their

career in Italy. These data lead us to reconsider the value of an indicator such as the average when the distribution is concentrated on just a few authors, as in the case of citations. To make this point clearer, of 201 scholars, 39 have no "Classe A" publications and 29 have less than 10 citations.

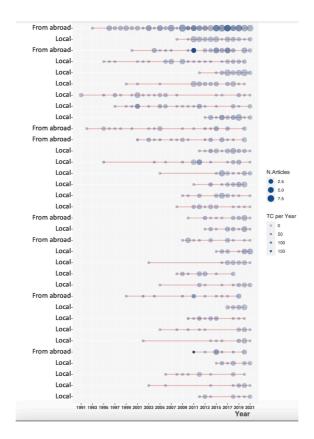


Fig. 6. The top 34 scholars with the highest combination of publications and citations in "Classe A" papers since 1991

The analysis then focuses on the distribution of publications and related citations according to scholars' categories as indicated in figure 7 and figure 8 respectively. They are boxplots and, precisely, box-and-whisker plots. The aim of these graphics is to emphasize quartiles or the subdivisions of observations into four parts. Specifically, it depicts the interquartile range between the 25th percentile and the 75th percentile (box), the quartile range between the minimum percentile, and the 25th percentile and the one between the 75th and the maximum percentile (whiskers). Within the interquartile range, the median subdivides the distribution into two equal parts and is indicated by a black line. The tails of the distribution are cut off to homogenize the distribution, nevertheless outliers (black spots outside of the minimum and the maximum of the distribution) are reported, with the aim of limiting the distribution impact of the few renewed

scholars recruited in the latest years. Nevertheless, the interquartile range (box) is wider in the case of full professors (ordinario) in comparison with associate professors (associato). The medians of the two distributions emphasize this aspect, as the associate professors one is significantly lower. In other words, most associate professors (associate) are concentrated in the first three quartiles due to the fact that the lower whisker (first quartile) is relatively short. In the case of full professors (ordinario) the lower whisker is longer, contributing to describing a more scattered distribution.

It is interesting to note the position of the assistant professor role (ricercatore), as the first quartile range (lower whisker) is, to a large extent, unified with the interquartile range. This means that a significant number of members of this category has no publications in the "Classe A" journals. On the contrary, the upper whisker is rather long, showing that relatively few scholars have a certain number of publications. Overall, assistant professors' (ricercatore) publications are characterized by a higher level of concentration in comparison with full and associate professors. Observations of the other two types of associate professorships (ricercatore t.d.a., ricercatore t.d.b) are, as far as magnitude is concerned, comparable, since both medians are similar. However, their distribution differs significantly. Specifically, in the latter (ricercatore t.d.b) there are no scholars with no publications in the "Classe A" journals except for an outlier and, as such, it is not very meaningful. Furthermore, the interquartile range area is relatively small suggesting that scholars have a similar number of publications. Finally, also the first quartile and particularly the fourth quartile (whiskers) are, in length terms, limited, confirming this tendency despite the presence of two outliers. The fact that the recent legislation requires scholars to publish in "Classe A" journals in order to gain entry into this rank contributes to this specific occurrence. In the case of the further category of assistant professorship (ricercatore t.d.a) this requirement is not present, and observations reflect this element since there are scholars with no publications and the interquartile range area is wider. The number of adjunct professors (straordinario) is reduced and so not very meaningful.

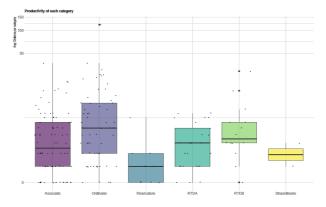


Fig. 7. Distribution of publications of "Classe A" articles in Organization Studies subdivided into scholars' ranks (Associato, Ordinario, Ricercatore, Ricercatore t.d.a, Ricercatore t.d.b, Straordinario) from 1991 to 2021.

In an analysis of citations, to a certain extent trends reflect publication patterns of associate (associato) and full (ordinario) professors. For example, medians are similar. However, the size of the interquartile range differs, indicating a larger number of scholars with a similar volume of citations in the case of associate professors (associato). This leaning is also reinforced by the range of the first quartile (whisker). No associate professors (associato) have no citations in "Classe A" journals except for a couple of outliers. This is not the case for full professorship (ordinario). The range of the fourth quartile is similar in both categories, suggesting a comparable scattering of scholars with the higher level of citations without considering outliers. What characterizes the assistant professor (ricercatore) category is the size of the first quartile, indicating that a significant number of authors have no or few citations. Moreover, the position of the interquartile range suggests that paper citations of the large majority of this scholar category are not so relevant. On the contrary, the range of the maximum quartiles pinpoints that assistant professors (ricercatore) have also achieved citation standards like full (ordinario) and associate (associato) professors. What is striking about the other two categories of assistant professorship (ricercatore t.d.a, ricercatore t.d.b) is the distribution similarity. The median is the same and the ranges of the fourth quartile (whisker) do not differ significantly, indicating that some scholars of these categories have already been fairly cited. Both interquartile ranges are limited, proving authors' aggregation with citations not so distant from full (ordinario) and associate (associato) professors. There are no scholars with no citations in both ranks as indicated by the range of the first quartile (whisker), and assistant professors (ricercatore t.d.b) have achieved a citation magnitude comparable with that of associate professors (associato). Even in the case of citations, adjunct professors are not very relevant.

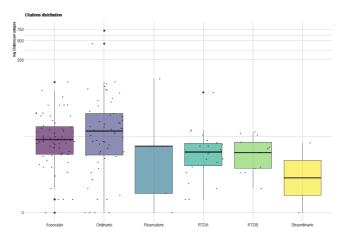


Fig. 8. Distribution of citations of "Classe A" articles in Organization Studies subdivided into scholars' ranks (Associato, Ordinario, Ricercatore, Ricercatore t.d.a, Ricercatore t.d.b, Straordinario) from 1991 to 2021

6 Discussion and conclusions

The evolution of a scholarly discipline is the object of the present research study. The terms of this evolution are interpreted according to the impact determined by policy reforms of the past two decades. These reforms have a specific imprinting as they attribute considerable prominence to scholarly production in high-quality journals. Can we say that reform objectives have been achieved and that research quality has improved in the meantime? We can witness a reorientation of research productions as journal articles are superseding other products like monographs, which are not taken into consideration. This indicates that peer-review processes are playing a more important role in defining publication standards and leaving the decision of what is worth publishing and what is not to research communities, rather than to publishers. This tendency is also affecting PhD dissertations, which are increasingly based on a collection of articles rather than on monographs. Furthermore, the discipline of Organization Studies proves to be competitive at a global level, as the comparison with the AJG publications suggests.

Research impact is another factor that defines the quality of research activity. In this case, trends are more ambiguous. The weight of citations is distorted by the publications of a few scholars who were cited thousands of times, undermining the explanatory power of an indicator, such as the mean. The construction of further data sets can be helpful in this respect, for example, by extending the analysis to citations from 1991 to 2005 and to 2010, in addition to 2015, to outline a more accurate citation trend. To rely on peer-review processes for selecting publications means setting aside the socio-economic impact of scholarly production. The theoretical model proposed falls short of shedding light on this aspect and the set of indicators should be enriched to provide a more comprehensive view of research quality. It is a work in progress and further factors can contribute to complete the model, such as indicators for detecting the level of co-authorship, international co-authorship, and the relevance of the box-in phenomenon [30].

In the mind of the legislator, there was the intent to promote a neo-liberal model of higher education. Can we say that it has been pursued? In other words, have world-class universities (WCU) emerged, weakening the Italian world-class system (WCS)? Bocconi University and LUISS "Guido Carli" University are examples of universities that play the WCU game. However, on the whole, their role is marginal, and most universities are better represented by the social-democratic model. Paradoxically, as suggested by the number of publications and related citations of assistant professors (t.d.a; t.d.b) and associate professors, policy reforms have led to a cohesion process of the university system, at least from the perspective of the Organization Studies discipline.

Turning to practical implications of the present work, publication trends provide a clear picture to young scholars. The prerequisite to publish in high-impact journals for one's academic career is not put into question. Top positions in the academic departments are advised to support this type of publication, yet must be aware of this work's limits as far as socio-economic impacts are concerned. Policy makers are provided with an articulated scenario where both the forces towards the establishment of a WCU and towards the consolidation of a WCS are present.

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