

Debate Article

**Multiple Indicators Hamdani Formula for HEC Journal
Recognition and Ranking**

Reply to debate article of the Editor KER, Vol. 25, No. 1

Atiq-ur-Rehman¹

Since last two years, Dr. Syed Nisar Hamdani along with a team of academicians is working on a new multiple indicators formula for recognition and ranking of academic journals by Higher Education Commission. This article comments on the debate article published in KER Vol. 25, No.1, 2016 and extends the debate about why the newly proposed formula is needed for recognition of economics or social science journals and how far it is different from the existing formula of journal recognition by Higher Education Commission of Pakistan.

KER Debate: *Kashmir Economic Review* [KER] invites papers, comments and suggestions on the proposed *Journal Ranking Criteria* for Pakistani journals in Economics/Social Sciences, Arts, Humanities, local languages and other subjects. The contributions of acceptable quality in the form of papers, reviews, brief notes and suggestions shall be published in the forthcoming volumes of KER. Whether or not the debate articles shall have a credit to author in recruitment or promotion etc. shall depend on the policy of respective employer.

– Editor

1. Background

If you try to find the HEC criteria for recognition of international social science journals, you will hardly reach any conclusion. The only thing at which you will find a consensus in various documents on HEC website is ‘Journals having ISI Impact Factor and Listed in Journal Citation Report are W category journals’. But when it comes to the journals listed in ISI master list and journals listed in various other indexing services, there is hardly any clarity.

- a. For sometimes back, HEC website was filled of various documents stating different and contradictory criteria for recognition of social science journals. Now most of this stuff has been removed from HEC website, but such notifications are available at the websites of various high reputed institutions stating quite conflicting criteria for recognition of social science journal.

¹ Assistant Professor, Department and Statistics, Pakistan Institute of Development Economics, QAU Campus Islamabad. E-mail: atiq@pide.org.pk, Phone: +92-51-9248060

- b. About the social science journals, there is only one notification dated December 7, 2011 on HEC website stating that JCR listed journals are W category. It also tells that journals in ISI master list are acceptable for PhD work, but don't tell anything about categorization of such journals¹
- c. An undated document of HEC available on IIU website states that journals in JCR are categorized as W-category and those in ISI Master list are X category journals². The document also tells that Ulrich listed journals are Y category journals. The same document is available at website of CIIT³ website
- d. A document issue by HEC available at AWKUM states that journals in JCR are categorized as W-category and those in ISI Master list are X category journals. This has no mention of Y category journal. This document was notified on 15th May, 2011
- e. There is a list of HEC recognized indexing agencies on the HEC website. What is the purpose and scope of this list? This mystery is again not simple to understand.

The only thing that can be concluded about international social science journals is that, the journals listed in JCR are the most respected journals. But why only JCR; there is no answer to this. In fact, there are many problems in adapting JCR as the only criterion for recognition of JCR.

2. Why Not 'JCR Only'?

The journal appearing in Journal Citation Report (JCR) are considered W category journal for both social sciences and natural sciences. For the natural sciences, most of the research has same validity throughout the globe. So any journal would be willing to publish a valid piece of research. But for the social sciences, a serious and genuine issue related to Pakistan might be quite irrelevant for the Canada. So a Canadian journal will have no interest in publishing that research. Therefore, the number of journals available for publication become very limited if the researcher wants to explore some local issue. Therefore, to earn a greater impact factor, the researcher will be bound to explore the issue which has little or no relevance for Pakistan.

¹http://www.hec.gov.pk/english/services/faculty/SSAH/Documents/Journals/Recognition%20of%20International%20Journals_2011.pdf

² http://www.iiu.edu.pk/wp-content/uploads/downloads/qec/research_journals/4_Recognition_of_International_Journals_by_Higher_Education_Commission.pdf

³ <http://library.comsats.edu.pk/Files/ListofHECJournalsSocialScience.pdf>

Suppose a journal has a very general scope and publishes Pakistani research as well. Even then, the western administration of the journal will see the research from their own lenses and will publish only if it fulfills their standards.

There are many other problems in adapting JCR as only criterion for recognition of journal. There Many academicians have shown serious concern on the criterion for recognition of international journals. Some of reasons for disagreement over 'JCR only' criterion are as follows:

- a. There is no impact factor social science journal in Pakistan; therefore, every good research paper from Pakistan would be published outside the country in search of impact factor. The local journals would have no chance to groom.
- b. Many (not all) of the social science journals are local in scope. They have no attraction in *Pakistan related research*.
- c. In search of impact factor publications, people have incentive in doing research related to the scope of target journal, which is likely to have very little relevance for Pakistan.
- d. The impact factor journals after subtracting journal journals with limited scope are very limited in number. Therefore, researchers find it very difficult to find suitable outlet for their research. For example, consider a research on *Cross-LoC trade*, which is serious and relevant issue for Pakistan. It would be hard to find suitable outlets for this research in the impact factor journals.
- e. Impact factor by construction is not a measure of quality; rather, it is a measure of exposure as it is based on citations. It's is true that several stringent measures are taken for a journal to be listed in JCR, yet, the impact factor does not include any measure of quality that can determine weight of paper.
- f. There are many high quality journals published by professional organizations of global repute which are not listed in JCR. For example, 'Journal of King Abdul Aziz University' is the top journal in Islamic Economics, but has no credit if 'JCR only' criterion is followed.
- g. In past, many fake journals have been successful in making their space in JCR. A famous example is that of 'African Journal of Business Management' which was de-listed from JCR. There are many other journals which are famous for fake publications and included in JCR e.g. La-Pensee, Wulfenia, JEMAA etc. Hindawi group is publishing 400 journals of which about 50 journals have ISI impact factor. Beal's list of predatory journals includes the Hindawi group among the groups publishing fake journals.
- h. It is easy for a fake journal to make its space among the top journal if single criterion. There are many fake journals which are presently in ISI Master List which would possibly become part of JCR in near future.

Therefore, many people have shown concerns in the current journal recognition policy. So what procedure should be adapted as an alternate for recognition/ranking of a journal?

3. The Existing Pakistani Research

If you go through the profiles of HEC approved supervisors in social sciences, you will find that 95% of the research is either published in local journals or the journals which are not listed in JCR. This is because for social sciences, it becomes very difficult to find a suitable journal for publication. For example, for Islamic Economics, there is only one relevant journal in JCR which is dedicated for Islamic Economics. If Islamic Economics related is appearing in any conventional economics journal, this means that the research fulfills the standards of conventional economics and may lose its validity as a piece of work in Islamic Economics. Similarly, there are only 5 JCR listed journals dedicated to Econometrics and only 5 journals dedicated to Monetary Economics.

4. Do the Thomson Reuters Guarantee the Quality?

No single indexing agency can guarantee the quality of all disciplines of knowledge. The Thomson Reuters scaling i.e. impact factor is based on citations. More citation means more impact factor. What they see is 'how many time the publication was cited'. The fake journal may increase their rating by encouraging in-journal citation and may get a good impact factor. For example, the journal 'African Journal of Business Management' succeeded to get an impact factor of 1.03 few years ago. This impact factor is rare in the social science journals. This journal is published weekly and one issue consists of not less than 20 papers. By encouraging self-citation, the journal achieved such a high impact factor. Now the Thomson Reuters has de-listed this journal because of excessive self-citation. But the clever publishers can encourage citation from any other of their chain of journals so that the overall rating of publisher keeps increasing and the Thomson Reuters will not be able to trace it.

The high frequency multidisciplinary journals like 'European Journal of Scientific Research', 'Middle East Journal of Scientific Research', 'Basic and Applied Research' etc. are still a part of ISI Master list and will get an impact factor after few years. This implies that ISI listing and impact factor do not guarantee a quality or standard. The impact factor only implies average citation which may be because of genuine reasons or may be because of publisher's encouragement and/or arrangement.

5. Alternate Ranking Agencies

There are many indexing agencies for the journals other than ISI but no one has such a deep focus on the quality. Most of ranking agencies rank the journals on the basis of citations instead of any quality measure. There is very little concern about the fake publications. Go to website of any fake journal, you will find Index Copernicus, EBSCO, ULRICH etc. among the indexing agencies. ISI is most vigilant about fake publications, however, despite its efforts, the fake journals are often successful in making their place in the ISI list.

In fact, whenever a single indicator is followed for ranking of journals, the fake journals would not find it very difficult to go through that single criterion. The ranking agencies are concerned with the citations instead of quality, and it is not very difficult for fake journals to get citations.

6. Dr. Hamdani's Formula

After several consultative meetings and engaging the academic community, Dr. Sed Nisar Hamdani (AJKU) came up with a proposal of ranking journals that is based on multiple indicators. These indicators include Publisher, Editor's profile, Indexing and Abstracting, Age /duration of Journal, Frequency, Mode of Publication, Editorial Board. Coverage or Scope, Frequency of publication, Publication fee etc.

The multiple indicators formula has several merits over the single indicator formula. Suppose a journal is getting high aggregate score in multiple indicators formula. This means that the journal is published by a very good publisher, has a very good editorial board structure, published at a regular frequency, indexed by a reasonable indexing agency etc. This is sufficient to insure that journal is of good quality. On the other hand, the single indicators based formula often de-recognize some very good journals and include man low quality journal. If a journal is published by Stanford University, it must get some credit even if it is not listed in JCR.

It would be extremely difficult for the fake journals to get a reasonable score on this multiple indicator score card. Suppose a journal wants to achieve 50% score, this means that the journal must be very good in at least half of the indicators.

Several consultative meetings were held at HEC under the patron ship of Dr. Nisar Hamdani. It was decided that initially the local journals would be ranked on this multiple indicators formula and later on the similar formula would be adapted for the international social science journal. The participants agreed on about 20+ indicators which could be used for ranking of journals. These indicators are given as follows: ¹

¹ The scoring formula for each indicator is included in the appendix.

1. Indexing/Abstracting
2. Scope of the Journal
3. Age /duration of Journal
4. Editorial Board [contains at least one active member;]***
5. Editor
6. Reviewers
7. Publisher*
8. Coverage or Scope
9. Mode of Publication
10. Collaboration/Partnership
11. Administrative foundations
12. Editorial quality
13. Citation Analysis
14. Paper submission and rejection rates
15. Paper review
16. Regularity of journal
17. Number of articles
18. Submission/Publication fee and fee return policy
19. Policy orientation and impact
20. Overall qualitative assessment

The scores provide natural ways of categorization of journals. The journals scoring higher than certain benchmark, say 80%, may be considered as highest 'A category', and the journals scoring higher than 60% marks may be taken as 'B Category'. There are no hard pre-decided boundaries for such categorization, however, the boundaries could be made by consultation.

Several people have tested the score card for some Pakistani journals and found that many of these indicators are not easily measurable. There must be regular and expert evaluation for these indicators. For example, editorial quality cannot be judged by any single person, however, a team of experts can assess it. Therefore, some indicators should be excluded from the above mentioned list or be placed in the list of indicators to be used in a later phase as the original article mentions about such phasing.

It is agreeable as proposed already that the new formula shall initially be adapted only for Pakistani journals and shall work parallel to existing categorization. After a thorough testing for certain period, the coverage of the journal criteria could be extended to international journals.

7. Debate on Hamdani Formula

Dr. Hamdani's multiple indicators formula was circulated among academic community and was thoroughly debated. Most of the people have

appreciated the idea, however, there were some critique as well. The main points raised on the newly proposed Dr. Hamdani's formula are as follows:

- a. HEC has no capacity to rank journals by any means.
- b. International journals have no incentive what so ever to register or seek approval from HEC, it will have again to rely on the secondary list.
- c. Then, depending on each case, HEC can eliminate a journal if not doing well (i.e. may be just making money!). This is precisely what the ranking agencies such as ISI do, then, why to assume a better result from HEC with relatively no knowledge, expertise of ranking? Thus, letting the journal rankings on HEC, would be a big disaster.
- d. There seems to be a misconception of the term impact factor! Impact factor is not the impact of a journal on life and society. The impact factor is a measure of the frequency with which the average article in journal has been cited for a particular time period (typically a year or 5 years). If you guys are proposing that a journal with impact on life and society to be included, then, one has to come-up with such an indicator first (i.e. the one which actually measure the impact on life and society) and then propose to substitute the impact factor by that indicator.
- e. Academic journal be ranked on the basis of multiple indicators and a cumulative score? If the idea of having multiple indicators is to find a better quality indicator, then, first we should do this exercise and show that actually multiple indicators is a better indicator to judge the quality of any journal. Or at least, we should cite the existing researches that this is true. Then, the next question would be why cumulative? What is the logic of each indicator having exactly the same weight in overall ranking? This will create a very biased indicator.
- f. Any academician in Pakistan has not yet attained the status even close to becoming a judge on the quality of research being conducted in world.
- g. When we try to make criteria in a rigid sense by assigning scores, there is absolutely no chance of consensus. Every person has his/her own judgment. A possible way to reduce disagreement is to make the criteria very simple. This is the major appeal of impact-factor criterion currently adopted by HEC.
- h. We need to free researchers from being hostage to W, X, Y, Z categories and give them some freedom to do research with the understanding that their hard work would be counted.

M reply to the observations raised by our colleagues were as follows:

- a. As per HEC ordinance 2002, HEC has mandate to develop guideline and facilitate implementation of system of evaluation of performance of faculty members and institutions and to provide guideline as regards minimum criteria and qualification for appointment, promotion, salary

structure. Therefore, if we are not imposing our ranking system internationally (which we cannot do in fact), HEC is authorized to develop criteria for what is relevant for promotions, appointments and research.

- b. International journals need not to get them recognized by HEC; rather, HEC needs to evaluate the journals on the standard it will define. It is not the journal to apply for recognition by HEC, it would be the HEC who will collect information and would rank the journal accordingly.
- c. ISI is eliminating the journal when she feels a journal is not doing well. Despite this many journal has been part of JCR. This will happen whenever there is only one indicator to measure the worth of a journal. If there are multiple indicators, no journal would be able to get a high score, unless it performs on multiple fronts. The quality journals would be automatically getting a good grade and the fake journals published by individuals don't having good academic repute would get low scores which they deserve.
- d. Impact on life is no doubt very difficult to measure, neither existing, not proposed criteria is able to measure it. However, (i) the proposed criteria could do much better in judgment of quality publication (ii) if we adapt criteria which allow the Pakistani journals to be included in the race, it will be more likely that research having some impact for Pakistan would also get recognized.
- e. The indicators in the proposed formulae include publisher, editorial board, ISI impact factors and many other. It would be very difficult for a fake journal to perform on all of these criteria and get a good aggregate score. That proves how the proposed criteria is better than existing
- f. I agree that any academician could not be a judge over the quality of publication, but the academic community as a whole could be a judge. The proposed criteria, if implemented by HEC, journals would not be judged on basis of analysis of a single person, rather, the journal would be evaluated on basis of criteria designed and endorsed by the academic community as whole.
- g. Consensus could be developed in the following way. The one, who disagree with the proposed criteria, should justify with solid reason and should give the alternate proposal. People are sharp in making comments but not so sharp in devising a workable solution. The workable solutions submitted by various persons could be evaluated by an authorized committee to come to a conclusion. In fact, there is no consensus on the simple criterion currently adapted by HEC. Therefore, the alternate solution could not be rejected on the basis that there is no consensus on it.

- h. If we want to free the researchers from the categorization like X, Y, Z, the cumulative score is very good idea. The proposed criteria will give non-zero score to every publication of any author. The appointments/promotions could be based on the total score of all of his/her publications. This will make him free of the need of categorization.

8. Need of Optimistic View on Journal Ranking Formula

In my view we are under-estimating the capabilities of the nation. The standard that HEC has adapted for a PhD degree, the complete set of these standards is not adapted by many of the advanced countries. Yet, the experience of evaluating PhD on those multiple criteria has been successful. Therefore, we should not hesitate in adapting an innovative measure for evaluating worth of a research.

We have to admit that every indexing has some degree of arbitrariness. For example, if we look at the Human Development Index, how could the weights assigned to its components be justified? Yet, HDI is very respectable measure of quality of life. In similar we would have to adapt the formula with some degree of arbitrariness. The example of HDI is worth citing because it was proposed by a Pakistani and got repute globally.

9. Final Words

It was noted by the academic community that there are several serious problems with HEC's 'JCR only' criterion for the recognition of international social science journals. The alternative journal ranking formula designed by Dr. Hamdani offers solution to many of the problems noted in the existing criterion and also offers a systematic way of ranking journals. It is requested to provide critical feedback on the formula. You can provide your feedback on the score card, and the suitable benchmark for categorization of journals. You can also suggest addition/subtraction of any indicator(s). However, it is requested that if you are highlighting a problem in the proposed formula, please also suggest what alternative s you have. Mentioning a problem without proposing any solution is a hurdle in the way of progress. Therefore, it is requested again to provide constructive critical comments with doable suggestions.

Appendix

Appendix A: Score Calculator under Hamdani Formula for Journal Ranking

S.No	Indicator	Sub-indicator	Tentative Score
1	Indexing/Abstracting		
		Journal Listed in List-A i.e. <i>highly rated agencies</i> **	10
		Journal Listed in List-B i.e. <i>moderately rated agencies</i> [to be prepared by HEC Committee in consultation with cross section academia]	7
		Renowned /approved National agencies	4
		Journal Listed in List-C i.e. low rated agencies	2
2	Age /duration of Journal		
		10 years and above	10
		7 – 10 years	7
		3 – 6 years	4
		2 – 5 years	2
		Starter	0
3	Editorial Board [contains at least one active member;]***		
		Nobel Laureate	10
		Professor from top 200 universities	8
		Professor emeritus, meritorious professor and HEC national distinguished professor	6
		Professor from HEC recognized top 10 universities in any ranking category	4
		Junior academicians having more than 5 HEC recognized publication	2
4	Editor		
		PhD/Postdoc from technologically/ academically advanced [TAA] countries	10
		PhD and Postdoc with either of the two from technologically/ academically advanced countries	8
		PhD and postdoc both from Non-TAA countries/ or national universities	6
		PhD only from national universities	4
		Non-PhD	2
5	Publisher*		
		Top 200 universities, UNO and its subsidiaries, Central Banks	10
		Top 500 Universities, International Professional Organizations	7
		HEC Recognized Publishing houses [list to be prepared]	4

	Universities/organizations having repute in specific discipline/subject.	4
	HEC Recognized Universities	2
6	Coverage or Scope	
	Publishes the Core subject only	8
	Publishes a branch of subject only	10
	Publishes subject but with Multi-disciplinarity	6
	Publishes subject along with less relevant papers	4
7	Mode of Publication	
	Print -plus- full papers Online with separate ISSN	10
	Print -plus- abstracts Online with separate ISSN	7
	Print only	4
	Online only but with ISSN	2
8	Administrative foundations # # #	
	Approval of the Journal from respective a legal authority [i.e. VC, Director, Registrar of Companies/Deputy Commissioner etc.].	5
	Approval of Editorial Board from the competent authority	2
	Approval of Director Finance/Treasure of University/DAI about provision of funds for the new journal uptil release of journal-grant from HEC	3
	Need/scope/remote region/new institution/etc.	2
9	Paper submission and rejection rates	
	Less than 15% papers are accepted	10
	16 to 30% papers are accepted	7
	31 to 50 % papers are accepted	4
	More than 50% ppaers are accepted	2
10	Paper review	
	All papers are reviewed by international reviewers	10
	Some papers are reviewed by international reviewers	6
	All papers are reviewed by international reviewers nationally	2
11	Regularity of journal	
	All volumes of the journal are published on time	10
	Most volumes of the journal are published on time	6
	Only some volumes of the journal are published on time	3
	No volume is published on time	0
12	Number of articles	
	Papers published in a volume are more than 15	0

	Papers published in a volume are 13 to 15	3
	Papers published in a volume are 9 to 12	6
	Papers published in a volume are 6 to 8	10
	Papers published in a volume are less than 5	3
13	Submission/Publication fee and fee return policy	
	The journal returns full submission fee if paper is not selected/Journal with no submission fee	10
	The journal returns part of submission fee if paper is not selected	7
	Journal charges low submission fee	4
	The journal charges high publication fee	0

Note:

1. *Score calculator of several other indicators proposed in the original article are skipped for brevity.*
2. *The complete system under the above proposed formula is applicable to sciences and is internationally compatible as well.*
3. *Further views are invited for publication as part of this **debate**.*