Comprehensive Academic Influence Research of University Professional Financial Journals- -
Take the Journal of Yunnan University of Finance and Economics as an Example

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Abstract
Based on the CNKI database,this paper makes a quantitative analysis of a total of 1783 published articles from 2010 to 2020 in《Journal of Yunnan University of Finance and Economic》.By using the bibliometric method,it analyzes the quantitative results from the direct perspective of h-index,g-index,g-index,influence factor and its correlation analysis,and from the micro perspective of paper classification,authors and publishing institutions.At the same time,the quantitative basis is used for the development of journals to objectively obtain the academic influence of journals.

Keywords: *Journal of Yunnan University of Finance and Economics; academic influence; bibliometric measurement*

1.INTRODUCTION

In 2006,《Journal of Yunnan University of Finance and Economics》is a first-level academic journal sponsored by Yunnan University of Finance and Economics,a key university in Yunnan Province.It belongs to the core academic journal of economy and management.Founded in 1985,the magazine is a bimonthly magazine.In the 2008 ranking of Renmin University of China,Yunnan University of Finance and Economics reprinted 15 articles,with a reprint rate of 13.64%,ranking 30th in more than 1,150 colleges and universities in China.Unfortunately,there are few literature studies on the academic influence of《Journal Yunnan University of Finance and Economic》.Only Zhang yunping in 2006 analyzed part of the literature and journal influence of Yunnan University of Finance and Trade based on the research activities organized by Yunnan Provincial Department of Education.The above relevant analysis has been 15 years ago,so,as a core Chinese economic journal,it is worth doing further research on the academic influence of《Journal of Yunnan University of Finance and Economics》.

2. DATA SOURCE AND ANALYSIS METHOD

There are generally two ways to measure and evaluate the influence of academic journals: one is to compare the academic influence of different academic journals in the same field and of the same type and level in the same period,and the second is to compare the study of various indicators of the same journal in different periods.The second research method is selected to use the latest version of AIE2.0 literature developed by SPSS and the academic drip team to analyze the data of the 2010-2020 paper of《Journal Yunnan University of Finance and Economics》, So as to directly observe the academic influence information of the journal.Using advanced search in the CNKI database,4445 search results by restricting the search journal names, and the articles from 2020 and 2020 yielded a total of 2200 search results.The above search results were screened,and after excluding non-academic documents such as interview dialogue,included information and congratulations information,a total of 1783 final research data were obtained,and then the current data of the report were calculated according to the relevant definitions of h-index,g-index and influence

factors,where the calculation formula of the influence factor was as follows:

$$IF(Y_n)=\frac{A(Y_{n-1}+Y_{n-2})}{B(Y_{n-1}+Y_{n-2})}$$, （Y_n For the statistical year)

A= Total number of papers cited in the first two years before the journal was tested

B= Total number of papers published in the two years before the test period of the journal

3. ACADEMIC INFLUENCE ANALYSIS

3.1 Direct influence analysis

3.1.1 Institutions were cited for overview analysis

According to statistics, 《Journal of Yunnan University of Finance and Economics》(later collectively referred to as the Journal),As a CSSCI source journal,contained 1,783 articles from 2010 to 2020, which was 178,the total citation of 15,020 times,the total citation of 14,546 times, 8.47 times, and 8.20 times.Journal Journal Journal Journal Journal Journal Journal journals.According to the top 20 journals,a total of 14 core journals,the average influence factor was 2.755,8 double core journals,and the average influence factor was 2.900,among which the journals of Shanxi University of Finance and Economics ranked the highest,the total frequency was 168 times,as the double core journals,and the journal influence factor of 4.921 ranked the highest among the 20 journals.The institution ranking [1] is shown in Figure 1.The top 20 are all domestic universities,including 6 double first-class schools,the average impact factor of journals (some social science edition) is 1.828 and 5211 schools.The total citation factor can objectively measure the degree of journal is used and valued,and the journal citation situation can show the role and status of the journal in the subject communication of 2.261.According to the above analysis,the journal influence factor and the top 20 core journals in 2010-2020 journals are far more than the average influence factor.

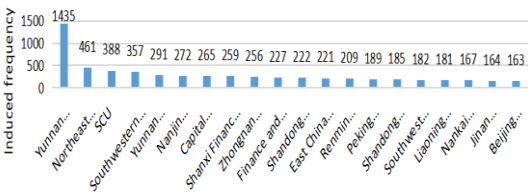

Figure 1 mechanism is cited for statistics

3.1.2 h-index, g-index and influence factors

American physicist Hirsh originally proposed the h-index for evaluating individual outcomes of scholars based on the SCI citation database,Braun further applied the h-index to the journal influence assessment,defining the h-index as a h-index if a journal has h articles in the journal published paper, the number of references is at least h,while meeting the natural number of h-index is the maximum, then h is the h-index of the journal[1]. The journal h-index is dominated by quality and quantity of journal papers determine,whereas the h-index can eliminate the influence results of a single or a small number of more frequently quoted articles compared with traditional index,and the American scholar Mille measured the h-index with a higher journal quality than the influence factor quality.

Although the h-index can partly attenuate the impact of self-introduction on journal evaluation,it also has poor sensitivity,requires large-scale data support in journal comparative research.In order to make up for the computational defects of the h-index on the high reference frequency literature,the Belgian statistician Egher introduced the g-index,breaking through the limit on the total number of literature, including the cumulative contributions of scholars into the research-index,and further introducing the low literature yield and high-frequency cited literature index.The g-index is defined as ordering all the papers in the number of quotations and numbered them from 1,then the serial number takes the square and accumulates the number of leads step by time;when the serial number square is equal to the accumulation[2].With the number of leads,the serial number is defined as the g-index.If the serial number square cannot be exactly equal to but less than the corresponding cumulative number of leads,the serial number closest to the cumulative number of leads is the g-index [5].Foreign scholars on the h-index and g-index comparative analysis,the results show that the h-index,g-index can reflect the evaluation indicators from different angles,g-index has higher sensitivity,can fully reflect the influence of high cited frequency of literature on the shadow power of journals [6],and the index order is more appropriate to the original data and academic intuitive evaluation.Therefore,the composite study of h-index and g-index is of great significance to improve the journal evaluation.The g-index was selected as the auxiliary index in this study.

The CNKI database was used to conduct statistical analysis of the h-index and g-index in each period between 2010 and 2020. As shown in Figure 2,by 2020 can be divided into three levels,the h-index above 30 is the first level,20-30 is the second level,and below 20 is the third level.According to the specific data analysis,the Journal was selected as a CSSCI source journal for the first time in 2012, and the average number of articles from 2010 to 2013 was about 362.The average h-index was at the first level was 34,the average h-index of 《Journal of Southwest University of Finance and Economics》was 30 in the

same period,indicating that the h-index of the Journal was at a high academic level.The average number of posts from 2014-2018 was 106,the average h-index at the second level was 24.2,122 posts from 2019-2020,and the average h-index was 11.

It can be seen from the h-index,according to the influence research analysis of a single journal of Journal was positively related to the h-index to a certain extent,the cumulative citation frequency is the main influencing factor of the h-index.Therefore,the cumulative number of citation in 2019-2020 was low and not included in the relevant analysis.At the same time,it can be seen that from Figure 2, g-index and h-index are basically the same,also three levels,all higher than 15 except 2019 and 2020, can effectively explain the distribution of a single paper citation frequency and high frequency citation literature is uniform,the difference between 2011 and 2012 h-index and g-index are as high than 10,can effectively explain that the high citation frequency g-index can significantly highlight the journal academic level.Although g-index and h-index can distinguish the strength of academic influence of journals to a certain extent,for a single journal, both-indexes mainly evaluate journal quality through high-frequency cited papers,and still cannot conduct accurate analysis in the quality of journal quality, so other journal evaluation indicators need to be introduced.

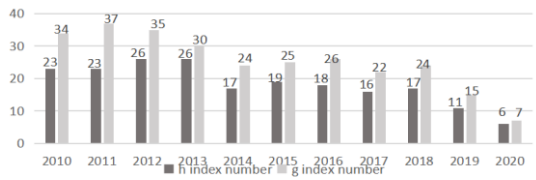

Figure 2 (2010-2020) h-index and g-index distribution diagram

In order to correct the evaluation bias of the general indicators to some extent,in 1972,Garfield proposed the journal impact factor indicators,which measured the journal quality by the journal paper average influence from the perspective of relative statistics,which can be divided into cumulative and general impact factors.Cumulative impact factors are accumulated by computational paper publication to several years later and are commonly used in multi-journal comparative studies.Generally influence factors, the influence factors are calculated as the cumulative influence factors within two years of publication of the paper,which has strong applicability in the annual influence evaluation of a single journal. Generally,the size of the influence factors is generally positively correlated with the academic influence of journals [7].Figure 3 shows the distribution of influence factors in the ten years of the Journal.It can be seen from the graph that the influence factors are in a continuous and slow rising trend, from 2014 to 2015,and the twists and turns rise reached the peak in 2020,indicating that the journal has gone through three stages of exploration,improvement and stable development in ten years.

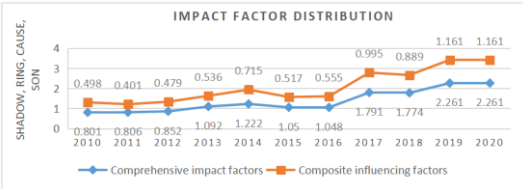

Figure 3 (2010-2020)Distribution map of influencing factors

In order to further analyze the academic influence of the Journal,dig the direction of improvement, use SPSS software to analyze the correlation of h-index,g-index and influence factors (see Table 1).According to the correlation analysis,the h-index,g-index,influence factor and other indicators all show a positive correlation,the three indicators are significantly correlated with each other,among which the amount of posts has no significant impact on each-index.

Considering the above analysis,the h-index and g-index ranking is basically consistent,but both and influence factors ranking difference,the main reasons can be divided into two points,first,the index is mainly different,h-index,g-index mainly consider high frequency cited papers, to some extent,more ignore the journal carrier content of influence factors,and the influence factors mainly reflect the average influence of journal papers.Secondly,the time span is different.The h-index and g-index have a long time span and annual accumulation,with a short time span of influence factors and strong timeliness [8].Therefore,it can be seen that it is difficult to accurately grasp the overall quality and change trend of journals by using the three journal evaluation indicators alone,and the combined use is conducive to a more comprehensive analysis of the academic level of journals,further promote the future development of journals [9].

Table 1 Correlation Index

	Number of posts	Total citation frequency	All articles are cited frequency	h index number	g index number	affect	P index number
Number of posts	1						
Total citation frequency		1	0.978	0.585	0.549	0.94	0.985
All articles are cited frequency		0.978	1	0.501	0.446	0.516	0.983
h index number		0.585	0.501	1	0.668	0.683	0.587
g index number		0.549	0.446	0.668	1	0.662	0.59
affect		0.94	0.516	0.683	0.662	1	0.977

3.2 Text analysis

3.2.1 Loage analysis

In 2010-2020, the Journal was quoted in 1088 core journals (as shown in Table 2),including 1075 domestic core articles,CSSCI930,CSCD145,SCI and EI are

relatively small,which shows that the Journal has a great influence in China.The overall downward trend of load is consistent with the trend of total citation and citation frequency (as shown in Table 3),rising from 2010 to 2012,and peaked in 2012. The citation rate in 2012 reached the lowest value in 2015,and negative correlation from 2015 to 2017,and the quality of journal papers is gradually improved.

Table2 Cited literature distribution

2010-2020

The literature type was cited	SCI	EI	CSSCI	CSCD
Number of cited literature	1	12	930	145

Table 3 Distribution of Air loads from 2010-2020

	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
Load volume	141	141	126	120	126	111	98	95	132	129	118
The total was primed	2737	2938	3328	1327	1017	870	960	994	552	155	
All of the articles were led	19.41	20.84	26.41	11.06	8.07	7.84	9.80	10.46	4.18	1.20	1.42

Since the total citation and citation frequency are cumulative,the stable improvement trend of journal quality and annual downloads can predict the future development of the journal ,the downloads in 2018 will show a significant upward trend from 2018 to 2020,and a 10 peak in 2020.Overall, the total citation and citation frequency from 2018-2020 will continue to the rising trend from 2015-2017,the journal quality will improve steadily after 2018.

3.2.2 Text Classification

China network included a total of 168 subject album,2010-2020 cumulative subject type is rich, ten years cumulative subject coverage rate of 47.6%,a total of the top 15 of the total volume accounted for 84.1% (as shown in Table4),subject frequency and subject volume is positively related,subject type focused on finance and economics,subject type is relatively single [10].

Table 4 Distribution of articles in the four disciplines

Subject name	Post volume (article)	Induced frequency	This magazine the proportion of (%)
Macroeconomic management development	355	3973	14.0
finance	334	3467	13.2
reform of the economic system	327	2736	13.0
Enterprise economy	214	2301	8.4
invest	158	1748	6.3
bond	124	1308	4.9
Finance and taxation	118	1109	4.7
trade economy	112	973	4.4
agricultural economy	89	990	3.5
industrial economy	79	710	3.1
Talent science and labor science	69	502	2.7
Economic theory and economic thought history	62	321	2.5
Market research and Information	48	366	1.9
mathematics	37	432	1.5

Table 5 The distribution contained in the Fund

Fund name	Number of posts	This magazine the proportion of (%)
The National Natural Science Fund	193	42.02
The Humanities and Social Sciences Research Project of the Ministry of Education	24	24.65
The China Postdoctoral Science Fund	18	3.07
Shandong Provincial Natural Science Foundation of China	10	2.3
Jiangsu Provincial Department of Humanities and Social Sciences Research Fund of Education	9	1.28
Hunan Provincial Philosophy and Social Science Foundation	9	1.14
New Talents Support Plan of the Ministry of Education	8	1.14
The Yunnan Provincial Natural Science Foundation of China	8	1.02
Zhejiang Provincial Natural Science Foundation of China	8	1.02
The Guangdong Provincial Natural Science Foundation of China	8	1.02
Henan Province Soft Science Research Plan	6	1.02
Scientific Research Fund of Hunan Provincial Education Commission	5	0.77
Jiangsu Province Social Development Science and Technology Plan	5	0.63

3.2.3 Comparative research with other financial journals

The cited data of institutions from 200-2020,selected the relevant data and selected the top ten financial schools from four indicators,such as influence factors,all cited,fund paper ratio and h-index (as shown in Figure 4,5).It can be seen from the picture,the Journal is at the middle level,and the citation rate is leading in the ranking of each-index, second only to the Journal of Zhongnan University of Economics and Law and the Journal of Central University of Economics and Economics.The h-index ranking far exceeds that of Northeast University of Finance and Economics and the Journal of Southwest University of Finance and Economics [13].But fund paper compared with influence factors ranking behind, combined with previous analysis,fund paper ratio is one of the important indicators of journal academic influence,and fund paper than to a certain extent positive correlation with influence factors, further validation improve fund post higher,low load related subject post contributes to the overall academic level.

Periodical index	TUFE	GZIFE	CUEB	UIBE	SUFE
Impact factors	1.306	1.414	0.919	1.357	2.008
Citation peritem	6.840	4.960	7.620	3.600	5.760
Fund issuance	4.431	4.190	4.060	4.111	3.989
H-index	4.248	3.892	3.970	3.912	4.220
Number of publications	4.489	4.290	4.190	4.533	4.220

Figure 4 Composite comparison figure of the ten multiple journals(1-5)

Periodical index	YNUFE	DUFU	ZUEL	SWUFE	SXUFE
Impact factors	1.161	0.535	1.609	1.827	2.069
Citation peritem	4.120	1.840	7.180	5.420	7.760
Fund issuance	4.564	3.932	4.407	4.543	4.635
H-index	3.912	4.007	4.511	4.663	4.575
Number of publications	4.860	4.317	4.511	5.050	5.106

Figure 5 Composite comparison figure of the ten multiple journals(6-10)

4. CONCLUSION

4.1 Build the academic impact evaluation system of the Academic Journal.

The Ministry of Education for the first time issued the administration method has not changed, article 2 clearly pointed out that "journal of higher learning is sponsored by institutions,give priority to to reflect the scientific research and teaching results of academic theory publication,is an important garden for academic exchanges at home and abroad" [12].It can be seen that academic newspaper is a professional academic product with a narrow audience and represents the scientific research level of the school to a certain professional extent.Therefore,the periodic research on the influence of academic newspaper is very great significance.There are two main evaluation systems of social science journals in China:the comprehensive evaluation index system represented by "core Journal of Peking University" and the evaluation index system of social science journals represented by CSSCI all adopt the evaluation method combining quantitative and qualitative.Combined with the analysis of the relevant indicators of the previous Journal.The establishment of a multi-level evaluation system is helpful to the balanced development of the journal quality in the multi-evaluation system.At the same time,it helps to continuously enhance its academic influence[14].However,the single use of traditional journal evaluation measurement method can only provide a certain dimension of reference significance to the overall academic impact level of journals,on the whole high cited paper author is low,if a single pursuit of high-index data,will cause the situation of limited source,contrary to the principle of journal development.

4.2 Pay great importance to discipline planning

From 2010-2020,it covers market economy,securities investment and economic management,but according to the specific analysis of journal articles, financial policy and transportation economy,as one of the important indicators to measure the academic quality of journals,so appropriately improve the quality of high fund paper ratio and low publications in journals is conducive to improve the academic level of journals [15].At present for comprehensive journals,but often macro index and other important factors such as parameters are low,and comprehensive journals to editing subject coverage,knowledge preface, editing requirements,the journal quality macro index in the current journal evaluation system, journal evaluation system of journal quality division further affects the author's submission orientation, but contribution orientation and eventually has a direct influence on journal influence level[16].

4.3 Based on the local economy, enhance the influence of government-led evaluation.

The current evaluation of Chinese academic journals can be roughly divided into three categories: university index evaluation system,government-led evaluation system,and industry personnel evaluation system.Among them,the General Administration of Press and Publication issued the Notice of the Comprehensive Evaluation Measures of the Publication Quality of Newspapers and Journal, which mainly evaluates them from four aspects of political quality,academic quality,publishing ability and construction conditions, and gives preferential policies to excellent journals in the allocation of publishing resources[17].At the same time, education minister Zhou Ji pointed out that "service, contribution for development" as the main task of university journal,therefore,focus on the local development planning and local economic construction,for journal economic journal positioning has important political and economic significance.

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