

JOURQUAL: A German Ranking of Business-Administration Journals Using Expert Opinions

1 The Methodology of JOURQUAL

1.1 Computing Journal Quality: The JOURQUAL Model

The underlying assumption of JOURQUAL is that a journal's scientific quality comprises two components: 1) the scientific requirements submitted articles have to fulfill as defined by reviewers and editors and 2) the scientific excellence of articles published in a given journal. Therefore, a weighted journal-quality index was developed. In both cases, in order to meet the topicality criterion, only responses on respondents' experiences of the last five years are considered. Formally, JOURQUAL is modeled as additive combination of review demands and article excellence (see Equation 1). Respondents evaluated both JOURQUAL dimensions on ten-point agreement scales where higher values represented a higher quality.

$$(1) \quad JQI_J = \frac{a \cdot \sum_{i=1}^n E_i \cdot WA + b \cdot \sum_{i=1}^n E_i \cdot WN}{\sum_{i=1}^n E_i}$$

with JQI_J = JOURQUAL index value for the journal J , scale from 1 to 10
 WA = scientific requirements (Reviewer/Editor), scale from 1 (very low) to 10 (very high)
 WN = scientific excellence (articles), scale from 1 (very low) to 10 (very high)
 a, b = weighing parameter, with $a + b = 1$
 n = number of respondents i
 E_i = weighing factor, representing the expert status of respondent i .

Generally, review demands and article excellence are weighed equally. However, to address the increasing stability of responses caused by a growing number of respondents, the parameter a is chosen, which depends on the number of persons x that have review

experience. The value varies between 0 and 0.5 (see Equation 2). The weighing parameter b is calculated according to the complementary factor $b = 1 - a$.

$$(2) \quad a = f(x), \text{ with } \left[\begin{array}{l} x = 0 \rightarrow a = 0 \\ x = 1 \rightarrow a = 0.1 \\ x = 2 \rightarrow a = 0.2 \\ 3 \leq x \leq 4 \rightarrow a = 0.3 \\ 5 \leq x \leq 9 \rightarrow a = 0.4 \\ x \geq 10 \rightarrow a = 0.5 \end{array} \right]$$

Because the evaluation of a journal's quality and its review process are relative variable, each respondent's evaluation will be influenced by his/her experience with the review processes of different journals. Several empirical studies show that authors who have published in A-journals tend to evaluate B- and C-journals more critical than other respondents (e.g., Heischmidt and Gorden 1993; Extejt and Smith 1990). Accordingly, individual evaluations are weighed with each respondent's expert status E . E is operationalized as a combination of three criteria: a) the number of journals a respondent has published in; b) the number of publications in 'top journals' and c) and a (German) respondent's experience with international journals. For the first two criteria, real values are transformed into scales ranging from 1 to 2. With regard to c), the value 2 is assigned to respondents that have published at least one article in an English-speaking journal; the value 1 is assigned to all other respondents¹. The three values (criteria) are multiplied with each other and placed on an expert-status scale ranging from 1 to 2.

In the JOURQUAL ranking only those journals that received a minimum of ten evaluations are assigned to a rank position. The JOURQUAL index values of the ranked journals are also converted into internationally common rating categories, ranging from A+ to E (see Table 1).

Table 1: Rating Categories

Rating Category	JOURQUAL Index Value (weighed)
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¹ Those journals are defined as 'top' journals that have an un-weighed JOURQUAL index value of 7 or higher.

A+	≥ 9
A	≥ 8
B	≥ 7
C	≥ 6
D	≥ 5
E	< 5

1.2 Data Collection

One goal of this study was to ensure a comprehensive journal basis, which involved a multi-step procedure of journal identification. In the first step, extant German and international journal evaluations as well as databases were screened and all journals and periodicals² copied to the JOURQUAL database. The authors assigned each journal to one or more research areas.

The data collection was supported by the Association of University Professors of Management (in Germany, Austria, and Switzerland). The Association of University Professors of Management (henceforth VHB) comprises of 16 scientific commissions (research areas). Thirteen commission chairmen agreed to support the study and to scrutinize the journals assigned to 'his/her' research area with regard to relevance and completeness. Twelve other experts examined the journal lists and could add to the list if a journal was not listed. Finally, the JOURQUAL database included 1,695 journals that were considered relevant for business-administration research. Journals in the database were evaluated through an online-survey in early 2003 among German professors of business-administration (all members of the VHB). E-mail messages were sent to respondents. To boost the response rate, VHB members received a reminder (e-mail) three weeks after the initial e-mail.

² Since it is often difficult to draw a line between journals and other publications, the authors decided to include journal-like publications. For example, the annually published *Advances in Consumer Research* have a ISSN number and include conference papers that have been accepted after going through a double-blind review process.

The questionnaire was structured as follows: respondents were given a list of general business-administration journals and asked to indicate which journals' articles they read and submitted articles to in the last five years. This question was aimed to reduce the number of journals each respondent has to evaluate and to reduce the likelihood of misjudgment due to lack of knowledge.

In a second step, the previously selected journals were evaluated in terms of article excellence and, where appropriate, scientific requirements. Also, respondents had to indicate how many articles they had submitted to journals and how many of those submitted have been accepted for publication. In the subsequent evaluation of the sub-disciplines the procedure was similar. The selected sub-disciplines reflected the different commissions within the VHB. Those sub-disciplines were complemented by the areas Services- and Retail Management and Electronic Commerce, which are relatively new research areas and so far not fully represented within the VHB. Finally, respondents had the opportunity to evaluate journals from neighboring disciplines.

1.3 Sample

More than 650 VHB members participated in the survey, but after editing only 523 were usable cases. With regard to the active members of the VHB, the response rate was almost 57% (complete questionnaires: 45.5%). On average, it took respondents 20 minutes to answer the questionnaire (Median of 17 minutes).

Respondents chose a total of 1.352 research areas. Among all research areas, Accounting was cited most often by respondents, followed by Organizational Behavior/Human Resource Management, Information Systems and Marketing (see *Table 2*).

Table 2: Research Areas

Rank	Research Area	Number of times cited	Percentage of respondents	Percentage of all
1	Rechnungswesen/ Controlling	158	24.3%	11.7%
2	Organisation/ Personal	154	23.7%	11.4%
3	Wirtschaftsinformatik/ Informationsmanagement	139	21.4%	10.3%
4	Marketing	124	19.1%	9.2%
5	Logistik/ Operations Research/ Produktion	115	17.7%	8.5%
6	Electronic Commerce	103	15.8%	7.6%
7	Finanzierung/ Bankbetriebslehre	100	15.4%	7.4%
8	Internationales Management	93	14.3%	6.9%
9	Technologie- und Innovationsmanagement	80	12.3%	5.9%
10	Dienstleistungsmanagement/ Handelsmanagement	64	9.8%	4.7%
11	Öffentliche BWL/ Not-for-Profit- Management	51	7.8%	3.8%
12	Betriebswirtschaftliche Steuerlehre	49	7.5%	3.6%
13	Wissenschaftstheorie	47	7.2%	3.5%
14	Umweltwirtschaft	29	4.5%	2.1%
15	Hochschulmanagement	28	4.3%	2.1%

2 Results of JOURQUAL

2.1 The Scientific Quality of Business-Administration Journals

Table 3 lists the 50 journals with the highest weighed scientific quality that are relevant for researchers in the field of business administration. Since a German sample was used, also the 20 German journals with the best evaluation are listed. Criterion for inclusion was that each journal was evaluated in terms of scientific quality by at least ten respondents. Journals from neighboring research areas (e.g., Economics, Psychology) were only considered in the ranking when at least three respondents had submitted an article within the last five years. Altogether, the ranking comprises 385 journals that are relevant for researchers in the field of business administration.

A comparison of the results weighed with expert status and the unweighed results shows that for some journals ranking positions vary considerably. For example, the weighed rank of

Mathematical Finance is ten positions worse than the unweighed rank (ranked 26 instead 16), while the weighed rank of *Organization and Administrative Science* is 26 positions better (ranked 48 instead 74). It is noteworthy that weighing has an almost consistently detrimental effect on the rank positions of German journals. Apparently, researchers publishing in a scope of top-tier international journals tend to evaluate the scientific quality of German journals less favorable than other researchers.

Table 3: List of Journals Ranked

The list contained 78 Journals that were evaluated.

Rank	Title	Scientific Quality weighed	Rating Category	Scientific Quality unweighed	Rank Scientific Quality unweighed	n = Sum of Evaluations
1	Administrative Science Quarterly	9.315	A+	9.23	14	164
2	Management Science MS	9.294	A+	9.19	15	220
3	Academy of Management Journal	9.154	A+	9.07	17	157
4	Strategic Management Journal	8.918	A	8.89	32	138
5	Journal of Economics and Management Strategy	8.845	A	8.65	44	22
6	Academy of Management Review	8.556	A	8.68	42	165
7	International Journal of the Economics of Business	8.235	A-B	8.08	100	13
8	International Journal of Industrial Organization	8.216	A-B	7.96	117	62
9	Journal of Industrial Economics	8.176	A-B	8.15	90	40
10	Journal of Management Inquiry	8.149	A-B	7.98	116	16
11	Journal of Management Studies	7.994	B	7.92	122	68
12	Journal of Business Venturing	7.961	B	8.06	104	33
13	Journal of Business	7.949	B	8.03	110	99
14	ZfB Schmalenbachs Zeitschrift für betriebswirtschaftliche Forschung [Ger]	7.767	B	7.90	125	435
15	British Journal of Management	7.757	B	7.79	140	37
16	Scandinavian Journal of Management	7.725	B	7.67	162	51
17	Schmalenbach Business Review [Ger]	7.677	B	7.80	138	261
18	Long Range Planning	7.619	B	7.67	161	177
19	Journal of Management	7.457	B	7.43	195	89
20	Journal of Business Research	7.451	B	7.51	186	64
21	Zeitschrift für Betriebswirtschaft ZfB [Ger]	7.366	B	7.53	181	465
22	Journal of Business Ethics	7.308	B	7.13	231	24
23	Sloan Management Review MIT	7.270	B	7.25	214	193
24	Die Betriebswirtschaft DBW [Ger]	7.269	B	7.35	202	421
25	International Studies of Management and Organization	7.265	B	7.20	219	29
26	Journal of Applied Management Studies	7.217	B	6.70	282	10

Rank	Title	Scientific Quality weighed	Rating Category	Scientific Quality unweighed	Rank Scientific Quality unweighed	n = Sum of Evaluations
27	Management International Review MIR	7.201	B	7.05	238	132
28	Journal of Economics and Business	7.113	B	6.81	271	16
29	Management Decision	7.111	B	6.84	270	14
30	International Journal of Business Economics	6.953	B-C	7	248	41
31	Academy of Management Executive	6.883	B-C	6.87	267	78
32	Business Strategy Review	6.720	B-C	6.72	278	18
33	California Management Review	6.687	B-C	6.72	277	183
34	Business Ethics	6.664	B-C	6.43	307	35
35	Harvard Business Review	6.600	B-C	6.46	302	336
36	Zeitschrift für Wirtschafts und Unternehmensethik [Ger]	6.581	B-C	6.98	251	30
37	Journal of Applied Business Research	6.549	B-C	5.80	362	10
38	Management Review	6.382	C	6.41	309	25
39	International Review of Strategic Management	6.370	C	6.23	323	21
40	Jahrbuch für Wirtschaftswissenschaften [Ger]	6.369	C	6.51	300	27
41	Journal of General Management	6.356	C	6.23	324	22
42	Journal of Business Strategies	6.259	C	6.45	304	11
43	International Journal of Management Reviews IJMR	6.247	C	6.32	318	17
44	Die Unternehmung [Ger]	6.186	C	6.22	327	260
45	Zeitschrift für Planung [Ger]	6.181	C	6.38	311	154
46	Journal of Business Strategy	6.149	C	6.13	338	28
47	M@n@gement online	6.089	C	5.93	355	22
48	European Management Journal	6.006	C	6.16	337	53
49	Corporate Governance An International Review	5.978	D	6.08	341	16
50	European Business Journal	5.854	D	5.86	360	22
51	Journal für Betriebswirtschaft JfB [Ger]	5.854	D	5.91	356	153
52	Betriebswirtschaftliche Forschung und Praxis BFuP [Ger]	5.726	D	6.02	344	337
53	CEMS Business Review online	5.254	D	5.09	393	15
54	Harvard Business Manager	5.188	D	5.20	390	246
55	IO Management	4.177	F	4.28	414	149
56	Wirtschaftswissenschaftliches Studium WiSt [Ger]	4.119	F	4.24	418	367
57	McKinsey Quarterly	4.109	F	4.26	417	193
58	Der Betriebswirt [Ger]	4.030	F	4.05	422	102
59	Das Wirtschaftsstudium WISU [Ger]	3.636	F	3.77	430	351
60	Betriebswirtschaftliche Blätter [Ger]	3.539	F	3.58	433	29
61	Gablers Magazin [Ger]	3.216	F	3.47	434	78
62	Kompetenz. Das Diebold Management Journal [Ger]	3.050	F	3.01	436	17
63	IM das österreichische Industriemagazin [Ger]	2.069	F	2.34	438	25
64	Journal of Managerial Issues	8.553		8.50		2
65	Business History Review	7.332		7.80		5
66	Administrative Management	7.300		7.13		8
67	Econova	7.000		7.00		2
68	International Journal of ValueBased Management	6.958		7.00		2

Rank	Title	Scientific Quality weighed	Rating Category	Scientific Quality unweighed	Rank Scientific Quality unweighed	n = Sum of Evaluations
69	Ivey Business Journal	6.919		6.60		5
	International Journal of Business Performance Management IJBPM	6.287		6.20		7
70	Strategy Leadership	6.025		6.00		7
71	Management Case Study Journal Online	6.000		6.00		1
	Review of Business and Economics Research	5.890		6.53		4
72	Australian Journal of Management	5.724		5.74		5
73	Management Research News	4.714		5.48		4
74	DM Review	3.359		3.33		3
75	European Business Forum	2.779		3.00		7

Note: "Ger" denotes a German journal

Table 4: JOURQUAL Ranking of Business-Administration Journals

Rank	Title	Scientific Quality weighed	Rating Category	Scientific Quality unweighed	Rank Scientific Quality unweighed	n = Sum of Evaluations
1	Journal of Marketing Research JMR	9.737	A+	9.680	2	75
2	Marketing Science	9.736	A+	9.684	1	57
3	Journal of Finance	9.621	A+	9.610	3	83
4	American Economic Review	9.612	A+	9.516	5	83
5	Journal of Marketing	9.539	A+	9.496	6	87
6	Journal of Financial Economics	9.535	A+	9.541	4	37
7	Journal of Consumer Research	9.393	A+	9.348	7	54
8	Administrative Science Quarterly	9.315	A+	9.231	9	164
9	Management Science MS	9.294	A+	9.194	10	220
10	Review of Financial Studies	9.264	A+	9.274	8	23
11	Academy of Management Journal	9.154	A+	9.067	11	157
12	Journal of Accounting Research	9.104	A+	9.005	15	38
13	Accounting Organizations and Society	9.100	A+	9.037	13	30
14	Research in Organizational Behavior	9.011	A+	8.929	19	14
15	Journal of Economic Behavior and Organization	8.993	A	9.065	12	19
16	Journal of Applied Psychology	8.965	A	8.869	24	55
17	Contemporary Accounting Research	8.937	A	8.840	25	20
18	Journal of the ACM JACM	8.919	A	8.714	27	14
19	Strategic Management Journal	8.918	A	8.886	21	138
20	Journal of Financial and Quantitative Analysis	8.886	A	8.943	18	42
21	Journal of the Academy of Marketing Science	8.886	A	8.870	23	41
22	Organization Science	8.886	A	8.875	22	63
23	International Journal of Research in Marketing	8.885	A	8.911	20	45
24	Games and Economic Behavior	8.877	A	9.006	14	18
25	Review of Accounting Studies	8.873	A	8.960	17	15
26	Mathematical Finance	8.862	A	9.000	16	13

Rank	Title	Scientific Quality weighed	Rating Category	Scientific Quality unweighed	Rank Scientific Quality unweighed	n = Sum of Evaluations
27	Journal of Economics and Management Strategy	8.845	A	8.650	30	22
28	Information Systems Research	8.828	A	8.647	32	17
29	Journal of Accounting and Economics	8.813	A	8.535	37	23
30	Operations Research	8.783	A	8.607	34	42
31	Journal of Law Economics and Organization	8.761	A	8.750	26	36
32	Accounting Review	8.672	A	8.575	36	44
33	European Economic Review	8.645	A	8.650	31	38
34	Journal of International Business Studies JIBS	8.624	A	8.515	39	29
35	Mathematical Programming	8.581	A	8.500	41	16
36	Academy of Management Review	8.556	A	8.685	28	165
37	Organizational Behavior and Human Decision Processes	8.546	A	8.600	35	18
38	Organization Studies	8.545	A	8.480	43	65
39	Transportation Science	8.523	A	8.506	40	16
40	Fuzzy Sets and Systems	8.511	A	8.486	42	14
41	Research in Sociology of Organizations	8.510	A	8.679	29	14
42	Economics Letters	8.457	A	8.532	38	22
43	Finance and Stochastics	8.442	A	8.615	33	13
44	Journal of Service Research	8.396	A	8.320	52	25
45	Journal of Retailing	8.393	A	8.416	45	50
46	Journal of Human Resources	8.390	A	8.071	76	14
47	Mathematics of Operations Research	8.372	A	8.353	48	17
48	Organization and Administrative Science	8.363	A	8.077	74	13
49	International Journal of Game Theory	8.354	A	8.427	44	15
50	MIS Quarterly	8.328	A	8.334	49	50
The 20 Best-ranked German Journals:³						
Rank	Title	Scientific Quality weighed	Rating Category	Scientific Quality unweighed	Rank Scientific Quality unweighed	n = Sum of Evaluations
65	Journal of Institutional and Theoretical Economics Zeitschrift für die gesamte Staatswissenschaft	8.205	A	8.205	58	38
66	FinanzArchiv	8.200	A	8.234	57	29
74	OR Spektrum (formerly OR Spektrum)	8.131	A	8.114	68	65
85	Steuer und Wirtschaft. Zeitschrift für die gesamten Steuerwissenschaften	7.999	B	8.050	80	43
99	German Economic Review	7.907	B	7.900	98	42
103	Mathematical Methods of Operations Research (formerly Zeitschrift für Operations Research ZOR)	7.887	B	7.989	87	33
108	Zeitschrift für Umweltpolitik und Umweltrecht	7.828	B	7.693	123	15
110	Managementforschung Jahrbuch	7.820	B	7.798	107	38

³ These are journals edited and published in Germany, Austria and Switzerland, irrespective of the language.

Rank	Title	Scientific Quality weighed	Rating Category	Scientific Quality unweighed	Rank Scientific Quality unweighed	n = Sum of Evaluations
116	ZfbF Schmalenbachs Zeitschrift für betriebswirtschaftliche Forschung	7.767	B	7.902	97	435
126	Wirtschaftsinformatik (formerly Angewandte Informatik)	7.704	B	7.946	91	73
130	Schmalenbach Business Review	7.677	B	7.797	108	261
141	Marketing. Zeitschrift für Forschung und Praxis ZFP	7.526	B	7.714	121	85
160	Zeitschrift für Betriebswirtschaft ZfB	7.366	B	7.532	143	465
170	Zeitschrift für angewandte Umweltforschung ZAU	7.277	B	7.200	176	21
173	Die Betriebswirtschaft DBW	7.269	B	7.346	160	421
182	Management International Review MIR	7.201	B	7.051	189	132
189	Zeitschrift für Arbeits- und Organisationspsychologie	7.108	B	7.049	190	37
191	Zeitschrift für Personalforschung ZfP	7.074	B	7.156	182	67
193	Kredit und Kapital	7.015	B	7.380	157	44
207	Internationales Steuerrecht	6.841	C	6.967	203	27

There are noticeable quality differences between refereed journals. For example, the *Journal of Consumer Marketing* has a mean 5.57, more than four points less than the *Journal of Marketing Research*. This result appears to be at odds with a notion commonly held in Germany that refereed journals are relatively similar in terms of quality. Another relevant aspect is the different evaluation of German and English-speaking (especially US) journals. In terms of scientific quality respondents give the best German journals a much lower rating than US or UK top journals. The highest ranked German journals, in which also ‘Betriebswirte’ publish, are in English (*Journal of Institutional and Theoretical Economics*, rank 65; *FinanzArchiv*, rank 66; *OR Spectrum*, rank 74). However, German journals in English do not necessarily are better ranked. For example, *Schmalenbachs Business Review*, the English edition of *Zeitschrift für betriebswirtschaftliche Forschung*, is ranked slightly worse (rank 130 vs. 116). Hence, the language is not decisive (ausschlaggebend) for a better ranking. The acceptance among an international audience and the opportunity to internationalize the editorial board appear more relevant.