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Convergence or divergence in finance journal ranking?

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Abstract

In this paper, we apply the Phillips and Sul (2007; 2009) methodology to investigate

the convergence pattern of finance journals across thirteen established academic

journal lists. The results reveal that the majority of sample journals do converge

across the academic lists. The estimated transition paths confirm the empirical

analysis, revealing a "focal" point for the research institutions to minimize the

discrepancies appeared by the journal lists proliferation.

JEL classifications: C23; A2; A11; I22

**Keywords**: Convergence; Finance journals; Club clustering; Transition paths

1

#### 1. Introduction

It is widely acknowledged by the scientific community that publishing a research paper in a highly ranked economic journal is of great importance to researchers in terms of hiring or being tenured and promoted by an academic department or research institute (Gibson et al., 2014; Kosteas, 2015). This happens since journal rankings constitute a focal point ("signal") for attracting young economists and retaining older ones in prestigious institutions (Kalaitzidakis et al., 2011).

Journal rankings are also appeared in other disciplines such as finance, business and econometrics (Chung and Cox 1990; Baltagi, 2007). As a result, there is a fast growing number of academic journal lists consisting of different types (i.e., citation based, expert based, hybrid) and rating categories (i.e., continuous or discrete score) as reported by Vogel et al., (2017).

A key question then arises by academicians in the sense of selecting the most efficient journal list to appropriate assess the research output. We attempt to exemplify this research question by investigating the existence of convergence patterns among the sample lists included in our empirical analysis and identify their transitions paths over the examined period (1999-2018). As a consequence, our study departs from the existing literature (see among others Zheng and Kaiser, 2011; Gibson et al., 2014; Kosteas, 2015) since we attempt to uncover common trends on eighteen field finance journals appeared in thirteen sample journal lists. In this way, we are able to draw some policy implications concerning the dissemination of research conducted by finance departments worldwide.

The main contribution of this study is that we examine for the first time, to the best of our knowledge, the convergence patterns among thirteen major scientific journal lists. Specifically, we study the convergence of journal rankings, which are

related to different top field journals from the finance discipline by employing the Phillips and Sul (2007, 2009) methodology. <sup>1</sup>

### 2. Data and statistics

We use a balanced panel data set of thirteen academic journal lists over a twenty year period yielding 260 observations. The variables used in the analysis refer to eighteen finance journal rankings appeared in all of the academic sample lists (see Appendix for details).<sup>2</sup> To account for different rating categories among the journal lists, we use a four rating scale (i.e., from 1 for the lowest quality ranking to 4 for the highest) applicable to each sample journal.

Table 1 presents the main descriptive statistics for the sample variables. We observe that three finance journals possess on average the highest journal ranking among the sample lists (e.g., Journal of Finance, Journal of Financial Economics, and Review of Financial Studies). This can be explained by the fact that these journals are ranked with the highest journal score awarded by the thirteen academic journal lists (Min = 4).<sup>3</sup> On the contrary, three journals such as the Journal of Financial Research, followed by the Journal of Derivatives and the European Financial Management have the lowest mean (i.e., approximately equal to 2).

<Table 1>

<sup>&</sup>lt;sup>1</sup> For an overview of the advantages of this methodology over other convergence approaches, see Apergis et al. (2013).

<sup>&</sup>lt;sup>2</sup> For our estimations, we used the STATA codes provided by Du (2017).

<sup>&</sup>lt;sup>3</sup> Therefore, these three journals are excluded from the econometric analysis.

#### 3. Results and discussion

Table 2 reports the empirical findings of the club clustering algorithm based on Phillips and Sul (2007) methodology. The results indicate a rejection of the null hypothesis of full panel convergence at the 5% level of significance in all but one (Journal of Risk and Uncertainty) of the fifteen journal cases since *t-stat* < -1.65 (see Panel A). Therefore the investigation of potential club clusters among these lists is required.

#### <Table 2 >

As it is evident from Table 2, in the majority of the cases, the club clustering algorithm identifies one convergence club (see Figure 2) among the lists included in the analysis since the null hypothesis of convergence cannot be rejected. In three cases there are two convergence clubs reported (Financial Management, Finance and Stochastics, and Journal of Financial Intermediation). Finally, the Journal of Empirical Finance is the only journal with three convergence clubs.

As a final step, we apply the club merging analysis along the lines of Phillips and Sul (2009). Based on our findings (see Panel B), we argue that the merging of clubs is not supported since the hypothesis of convergence (H<sub>0</sub>) is rejected in all but one (Journal of Empirical Finance) of the reported cases. Therefore, the initially formed clubs as described above are the appropriate ones. The transition paths of the estimated convergence clubs per journal (see Figure 1) corroborate the above results.

# <Figure 1&2>

To sum up, the majority of the lists converge for the following five journals: Financial Management, Journal of Financial Research, Journal of Empirical Finance, Journal of Corporate Finance and Journal of Financial Intermediation. Only few lists converge for five journals (Journal of Financial and Quantitative Analysis, Finance

and Stochastics, Journal of Future Markets, Journal of Derivatives and European Financial Management). On the other hand, there are no converging lists for the following three sample journals: Journal of Business, Finance and Accounting, Journal of Banking and Finance and Mathematical Finance.

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## **APPENDIX**

# A. Finance journals [abbreviation]

Journal of Risk and Uncertainty [jru]

Journal of Finance [jf]

Journal of Financial and Quantitative Analysis [jfqa]

Financial Management [fm]

Journal of Accounting, Auditing and Finance [jaaf]

Journal of Financial Research [jfr]

Journal of Futures Markets [jfm]

Journal of Financial Economics [jfe]

Journal of Business Finance and Accounting [jbfa]

Journal of Banking and Finance [jbf]

Review of Financial Studies [rfs]

Journal of Empirical Finance [jef]

Journal of Corporate Finance [jcf]

Finance and Stochastics [fs]

Mathematical Finance [mf]

Journal of Financial Intermediation [jfi]

Journal of Derivatives [jd]

European Financial Management [efm]

# B. Journal lists used in the analysis [list #]

CABS [1]

CNRS [2]

ABDC [3]

ESSEC [4]

FNEG [5]

EJL [6]

VHB [7]

DEN [8]

SJR [9]

HCERES [10]

UQ [11]

EJIS [12]

WIE [13]

 Table 1: Summary statistics

Variables	Observations	Mean	Standard deviation	Min	Max	
jru	260	2,9	0,9	1	4	
jf	260	4,0	0,0	4	4	
jfqa	260	3,8	0,4	3	4	
fm	260	3,0	0,8	1	4	
jaaf	260	2,3	0,8	1	3	
jfr	260	2,0	0,9	1	3	
jfm	260	2,5	0,9	1	4	
jfe	260	4,0	0,0	4	4	
jbfa	260	3,2	0,5	2	4	
jbf	260	3,4	0,5	3	4	
rfs	260	4,0	0,0	4	4	
jef	260	3,1	0,7	1	4	
jcf	260	3,3	0,7	2	4	
fs	260	3,1	0,7	2	4	
mf	260	3,1	0,7	2	4	
jfi	260	3,4	0,5	2	4	
jd	260	2,1	0,8	1	4	
efm	260	2,1	0,8	1	3	

 Table 2: Club convergence results

Journal	Panel A: Phillips and Sul (2007)			Panel B: Phillips and Sul (2009)			
	log t	t-stat	New club	Final club	log t	t-stat	
Journal of Risk and Uncertainty							
Full sample	-0.3316 (0.3189)	-1.0396					
Journal of Financial and Quantitative Analysis							
Full sample	-1.0175 (0.1340)	-7.5938**					
Club 1 [1,2,3,4,5,6,8,10,11,12,13]	-0.7894 (0.0143)	-55.2828**					
Club 2 [7,9]	-	-					
Financial Management							
Full sample	-0.6539 (0.2856)	-2.2898**					
Club 1 [7,8,10,13]	0.6107 (0.3514)	1.7377					
Club 2 [1,2,3,4,5,6,9,11,12]	-	-					
Journal of Accounting, Auditing and Finance		**					
Full sample	-0.8200 (0.0667)	-12.2937**				**	
Club 1 [1,3,4,6,11,12,13]	-0.7894 (0.0143)	-55.2828**	1+2	Club 1	-0.7894 (0.0143)	-55.2828**	
Club 2 [2,5,7,8]	-0.7894 (0.0143)	-55.2828**				**	
Club 3 [9,10]	-	-	2+3	Club 2	-0.8262 (0.0813)	-10.1568**	
Journal of Financial Research		**					
Full sample	-0.8724 (0.0531)	-16.4421**					
Club 1 [1,3,5,11,13]	-0.7894 (0.0143)	-55.2828**					
Club 2 [2,4,6,7,8,9,10,12]	-0.2416 (0.2458)	-0.9830					
Journal of Futures Markets							
Full sample	-0.9156 (0.0366)	-24.9857**					
Club 1 [1,3,4,6,11,12,13]	-0.7894 (0.0143)	-55.2828**					
Club 2 [2,5,7,8,9,10]	0.3291 (0.2432)	1.3535					
Journal of Business Finance and Accounting		ىلدىك.					
Full sample	-0.8750 (0.1545)	-5.6621**					
Club 1 [2,8,10,11]	-0.7894 (0.0143)	-55.2828**					
Club 2 [1,3,4,5,6,7,9,12,13]	-0.7973 (0.2753)	-2.8963**					
Journal of Banking and Finance		aca.					
Full sample	-0.7894 (0.0143)	-55.2828 <sup>**</sup>					

Club 1 [1,3,4,5,8,10,11]	-0.7894 (0.0143)	-55.2828**				
Club 2 [2,6,7,9,12,13]	-0.7894 (0.0143)	-55.2828**				
Journal of Empirical Finance						
Full sample	-1.1008 (0.2206)	-4.9899**				
Club 1 [5,6,8,10]	0.3639 (0.4714)	0.7720	1+2	Club 1	-0.0519 (0.4707)	-0.1102
Club 2 [1,3,4,7,11,12,13]	0.0957 (0.9364)	0.1022				
Club 3 [2,9]	-	-	3	Club 2	-	-
Journal of Corporate Finance						
Full sample	-1.2621 (0.0715)	-17.6582**				
Club 1 [1,2,3,4,5,8,10,11]	-0.0523 (0.2638)	-0.1983				
Club 2 [6,7,9,12,13]	-1.5769 (0.1254)	-12.5797**				
Finance and Stochastics						
Full sample	-0.7696 (0.1377)	-5.5877**				
Club 1 [4,5,8,10]	0.3639 (0.4714)	0.7720	1+2	Club 1	-0.4134 (0.1601)	-2.5825**
Club 2 [1,3,6,9,11,12,13]	-0.7894 (0.0143)	-55.2828**				
Club 3 [2,7]	-	-	2+3	Club 2	-1.0873 (0.1210)	-8.9826**
Mathematical Finance						
Full sample	-1.2056 (0.1176)	-10.2477**				
Club 1 [1,4,8,10,11]	-0.7894 (0.0143)	-55.2828**	1+2	Club 1	-0.9609 (0.1177)	-8.1658**
Club 2 [2,3,5,6,9,12,13]	-1.0991 (0.2153)	-5.1059**				
Non converging Group 3 [7]			2+3	Club 2	-1.5108 (0.2014)	-7.5017**
Journal of Financial Intermediation						
Full sample	-0.9516 (0.3699)	-2.5724**				
Club 1 [1,3,4,8,10,13]	-0.1331 (0.2506)	-0.5311				
Club 2 [2,5,6,7,9,11,12]	-	-				
Journal of Derivatives						
Full sample	-1.3496 (0.0783)	-17.2411**				
Club 1 [3,8,13]	2.1193 (0.8668)	2.4449				
Club 2 [1,2,4,5,6,7,9,10,11,12]	-1.4009 (0.2329)	-6.0162**				
European Financial Management						
Full sample	-1.0121 (0.1323)	-7.6516 <sup>**</sup>				
Club 1 [1,3,4,5,11,13]	-0.7894 (0.0143)	-55.2828**	1+2	Club 1	-0.7894 (0.0143)	-55.2828**

Club 2 [2,6,7,8,12] -0.7894 (0.0143) -55.2828\*\*

Club 3 [9,10] - 2+3 Club 2 -1.0848 (0.1804) -6.0129\*\*

Notes: The numbers in parentheses denote the standard errors. The term log t denotes the convergence coefficient, while t-stat is the convergence test statistic. The latter is

distributed as a simple one-sided *t*-test with a critical value of -1.65. \*\*denotes rejection of the null hypothesis (convergence) at 5% level of statistical significance. Convergence is implied when *t*-stat is equal to '-'.

**Figure 1:** Transition paths

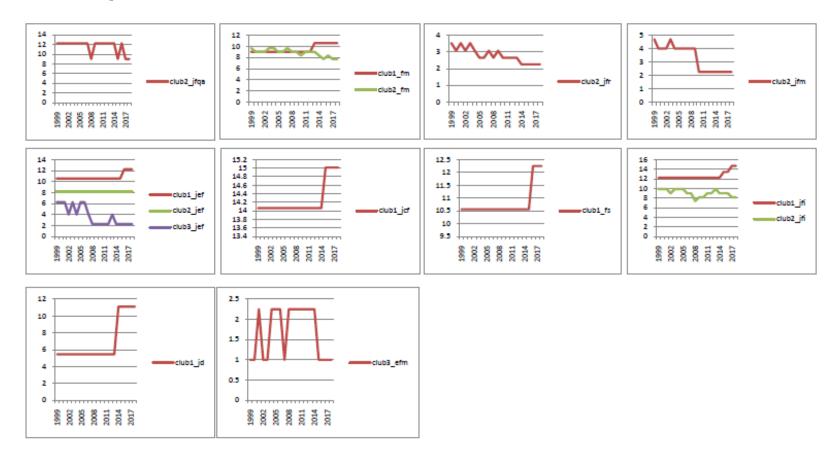
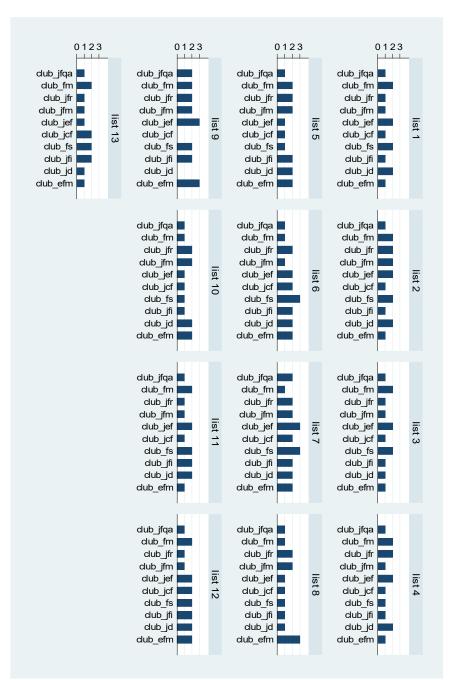


Figure 2: Distribution of clubs



Notes: Each graph illustrates the corresponding journal list. The horizontal axis depicts the clubs for each journal, while the vertical axis the number of the club

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