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Behavioral Finance: Insights From Literature

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Abstract

Purpose: The purpose of this paper is to analyze literature belongs from behavioral finance in past 22 years (from 2000 to 2022) to provide insights from this literature which is beneficial for scholars and professionals in behavioral finance industry.

Design/Methodology/Approach: The research is based on literature available from past 22 years by searching keywords- behavioral finance, disposition effects, anomaly, and inefficient market in data base of ISI web of science (WOS). The authors are committed to find insights from literature to measure contribution of active researchers in area of behavioral finance.

Findings: More research papers in this area are based on emerging issue of behavioral finance. Papers under study mostly based on empirical or theoretical in nature. A number of person and institutions who contribute their research in this area helps scholar and professional who continue their study in the area of behavioral finance. Due to financial market development all around the world research in this area increased significantly during previous 8 year.

Research Limitations: Papers published before 1998 are not included in this research; however, this does not minimize the contribution of earlier researcher in any way. Moreover, this study not included non-SCI/SSCI articles/papers.

Originality value: The present study adopts ISI WOS database as tool for analysis. This methodology enables us to systematically analyze papers from behavioral finance. Present study is different from traditional literature review which classifies and elaborates different research paths (subrahmanyam, 2007).

Key words: Behavioral finance, Disposition effects, Anomaly, Inefficient Market.

1. Introduction

Standard finance theory is based on the certain assumptions, i.e. rationality, an efficient market hypothesis and profit maximization (Fama 1970). Standard finance theory often unable to explain abnormal situation in the market. Due to these difficulties behavioral finance comes into existence and it combine theories of different area like classic economic finance and psychology and it provide new direction of thinking for standard/traditional finance.

Sometime investment decision of investors influenced by psychological factors so there is chance of systematic error which effect market price of share and caused inefficient use of resources. There are many psychology and behavioral decision theories to explain these abnormality i.e. overreaction , herding, group behavior and over confidence, excessive volatility in the market, to overcome these anomalies some recommendation given to government for stabilization of market mechanism to protect investors interest to provide proper accounting standards. These would be useful for improving investor's decision and avoiding losses caused by misplacement of public welfare (Danieal et.al 2002).

Under the standard finance it is assumed that investors are rational, but in certain circumstances such rational investors would prefer high return with minimum risk. However during 1980 both lab experiment and practical stock market data began to through up evidence suggesting that such an assumption not applicable in all cases (Levy and Levy ,2002, Barberis et.al. 2001).

From these experiments it is found that under uncertain investment decision investors behave irrationally, evidence of such possibilities has sparked off major debate in the field of financial economics and attracts many scholars to join these debates and invest in research effectively in this area (Brav and heaton 2002, Coleman 2007). After this emergence of new branch of study called Behavioral finance.

In recent year research scholars of behavioral finance very active and many of their achievement have been accepted in the top journal in the field of financial economics (Henke et. al. 2006). In this paper we try to analyze and discuss research and trends in the area of behavioral finance over past 22 years and systematize the literature for future study for scholars and research professionals who are interested in behavioral finance research.

Our research based on systematized consolidated and analyzed no. of articles published and citation listed according to researchers, institutional contribution, countries, subject area and other related categories.

2. Research Methods

2.1 Scope of study

This research is based on searching keywords in databases of the ISI web of science, survey data cover the period from 1998 to 2020, including 149 journals and 507 articles. We try to find number of publication and time cited in the field of behavioral finance in order to measure active contribution of researchers.

2.2 Assessment of authorial contribution

We attempt to calculate number of journal publications and times cited to database of ISI WOS to measure authors or publishers contributions. In academia, citation analysis is often used to recognize the overall impact of the journal in any field. In this research of behavioral finance the impact of every author of the 507 article can be obtained from the ISI WOS database.

3. Research Results

3.1 frequency of behavioral research in journals, country & institutions

From our study it is observed that number of journals and research papers based on behavioral finance increases significantly which shows interest of researchers regarding this area increased during past few years.

The first half of Table I shows that from 1998 to 2020 there were 507 articles published on behavioral finance. We observed that 214 articles or 42.20 % of total number, are published in top ten journals, among which first five are; journal of behavioral finance (42 articles or 8.28% of total); journal of banking finance(37 articles or 7.29% of total); Qualitative research in financial market(29 articles or 5.71%); Quantitative finance (26 articles or 5.12% of total); Journal of financial economics (22 articles or 4.33% of total).

Second half of Table-I shows that 446 articles or 87.96% of total are from top ten countries; USA, Germany, Taiwan, England, China, Israel, Netherlands, Switzerland, Australia, France, among them USA alone published 189 articles or 37.27% of total.

Table I-: Most frequent behavioral finance publication among 507 journals (1998-2020)

Name of Journal and Country	Numbers of articles	% of total
<i>Journal</i>		
1. Journal of behavioral finance	42	8.28
2. Journal of banking finance	37	7.29
3. Qualitative research in financial market	29	5.71
4. Quantitative finance	26	5.12
5. Journal of financial economics	22	4.33
6. Journal of economic behavior organization	17	3.35
7. Journal of accounting economics	12	2.36
8. Journal of economic Psychology	11	2.16
9. Emerging Markets Finance and Trade	10	1.97
10. Pacific Basin Finance Journal	8	1.57
<i>Country</i>		
1. USA	189	37.27
2. Germany	47	9.27
3. Peoples R China	45	8.87
4. Taiwan	41	8.08
5. England	37	7.29
6. Israel	29	5.79
7. Netherlands	19	3.74
8. Australia	14	2.76
9. Switzerland	13	2.56
10. France	12	2.36

3.2 Most active Individuals and Institutional contribution

According to first half of Table-II top ten institutional contributors are Harvard University, Public university of Navarra, Ohio State University, New York University, Chinese University of Hon Kong, National Bureau of Economic Research, Hebrew University of Jerusalem, Princeton University ,NBER, MIT , among which Harvard University has largest published articles.

According to second half of Table –II among 507 articles , there are 769 authors involved and among them top 10 authors each published 11 to 27 articles. The top three authors are Teoh, S.H., Muga, L., and Hirshleifer, D

Table-II -: Most active Individuals and Institutional contribution

Name of Institutional & Individual contributors	No. of articles	% of Total
<i>Institutional Contributors</i>		
1. Harvard University	46	9.07
2. New York University	43	8.48
3. Chinese University of Hong Kong	39	7.69
4. Hebrew University of Jerusalem	35	6.90
5. National Bureau of Economic Research	34	6.70
6. Erasmus University	23	4.53
7. MIT	21	4.41
8. NBER	19	3.74
9. Ohio State University	17	3.35
10. Columbia University	15	2.95
<i>Individual Contributors</i>		
1. Hirshleifer, D.	27	5.32
2. Teoh, S.H.	24	4.73
3. Kothari, S.P.	22	4.33
4. Caginalp, G.	21	4.14
5. Hibbert, A.M.	19	3.74
6. Kliger, D.	17	3.35
7. Kudryavtsev, A.	14	2.76
8. Lee, B.S.	13	2.56
9. Nolte, I.	12	2.36
10. Shapira, Z.	11	2.16

3.3 Most frequently cited articles belongs to Behavioral Finance

To assist future research work and better understanding about behavioral finance, most frequently cited articles are taken from ISI WOS database and Google Scholar database. While Google scholar database indexed full text journal articles, technical reports, preprint these books and other documents and WOS only indexed English core journals. In present paper we are using data from WOS and Google Scholar as support for references. Table –III uses data from WOS in descending order it shows 20 most frequently cited journal published between 1998 to 2020, listing authors, article title , journal name , WOS cited times , Google scholar cited times and type. The most frequently cited article is “Market Efficiency, Long term returns and behavioral finance” (Fama 1998)

with 927 citation in total with annual average 46.73 citations. This is most important work in the field of behavioral finance and must read by researchers who have interest in behavioral finance area. The second most frequently cited article is “Bubbles and Crashes”(Abreu and Brunnermeier,2003) with 263 citation and annual average of 12.31 citations. The third most important article is “Assets Pricing in Millennium” (Campbell 2000) with 179 citation in total with annual average 8.71 citations. The forth most frequently cited article is “from efficient market theory to behavioral finance “(Shiller,2003) with 153 citation and annual average 7.93 citations.

These four article cited more than 170 times separately and must read for every behavioral finance researcher.

From this finding it has been seen that even through Google scholar has big data base , the most cited article from WOS are mostly also cited from Google scholar.

Table –III -: Top 20 Behavioral finance article from WOS and Google Scholar (1998-2020)

S.No.	Authors	Article Title	Journals	WOS Cited times	GS cited times	Type
1.	Fama (1998)	Market efficiency, long-term returns, and	Journal of Financial Economics	917	5076	Theory
2.	Abreu and Brunnermeier (2003)	behavioral finance Bubbles and crashes	Econometrica	267	1163	Theory
3	Campbell (2000)	Asset pricing at the millennium	Journal of Finance	276	1035	Theory
4.	Shiller (2003)	From efficient markets theory to behavioral finance	Journal of Economic Perspectives	234	1023	Theory
5.	Daniel et al. (2002)	Investor psychology in capital markets: evidence and policy implications	Journal of Monetary Economics	117	562	Empirical
6.	Malmendier and Shanthikumar (2007)	Are small investors naive about incentives?	Journal of Financial Economics	112	468	Empirical
7.	Hirshleifer et al. (2004)	Do investors overvalue firms	Journal of Accounting & Economics	103	423	Empirical

8.	Abreu and Brunnermeier (2002)	With bloated balance sheets? Synchronization risk and delayed arbitrage	Journal of Financial Economics	95	412	Empirical
9.	Ofek et al. (2004)	Limited arbitrage and short sales Restrictions	Journal of Financial Economics	85	389	Empirical
10.	Mike and Farmer (2008)	An empirical behavioral model of liquidity and volatility	Journal of Economic Dynamics & Control	77	346	Empirical
11.	Locke and Mann (2005)	Professional trader discipline and trade disposition	Journal of Financial Economics	82	296	Empirical
12.	Boswijk et al. (2007)	Behavioral heterogeneity in stock prices	Journal of Economic Dynamics & Control	76	259	Empirical
13.	De Bondt (1998)	A portrait of the individual investor	European Economic Review	57	271	Empirical
14.	Westerhoff and Dieci (2006)	The effectiveness of Keynes-Tobin transaction taxes	Journal of Economic Dynamics & Control	49	254	Empirical
15.	Lee (2001)	Market efficiency and accounting research: a discussion of "capital market	Journal of Accounting & Economics	46	223	Empirical
16.	Massa (2003)	How do family strategies affect fund performance?	Journal of Financial Economics	39	213	Empirical
17.	Kothari et al. (2006)	Stock returns, aggregate earnings surprises, and behavioral finance	Journal of Financial Economics	37	205	Empirical
18.	Jiang et al. (2005)	Information uncertainty and expected returns	Review of Accounting Studies	29	197	Empirical
19.	Sortino et al. (1999)	The Dutch triangle – a framework to measure upside potential	Journal of Portfolio Management	27	174	Empirical
20.	Oliven and Rietz (2004)	Suckers are born but markets are made	Management science	23	159	Empirical

4. Conclusion and Limitations-:

In this research paper we try to evaluate contribution of researcher in the area of behavioral finance by individual as well as institutional investors from 1998 to 2020. We also evaluate impact of study according to SCI/SSCI citation analysis. We discuss the implication of our research to offer an analysis and contribution to behavioral finance literature review.

First, in the past 22 year research in this area attracted more and more research scholar and their effective participation to increase visibility of research under behavioral finance area. We find that researcher from America, Taiwan, Japan, China, Australia, Netherland, and Israel has contributed much in this field. We can conclude that with the substantial development of financial market around the world, more and more researcher comes in this area and involve themselves under the study of behavioral finance.

Second, we divide the articles in the five categories according to following standards (Cote et al. 1991):

1. Empirical: review of literature with development and testing of hypothesis or descriptive data analysis and discussion on result as they associated with theoretical, methodological and managerial issues. Empirical studies are more likely to be cited because of theoretical and methodological issues.
2. Review: the main purpose is to study the paper which is based on the specific area and discussion on key issues.
3. Methods: the main purpose of such type of study is the development and refinement of research methods for collecting, analyzing and interpreting data.
4. Theory: such type of study related with conceptual framework, latest construction, theories and models, and major modification including avenue of future research.
5. Operational: how mathematical operation and computation involved in study is considered under operational categories.

As per Table IV top 20 cited behavioral finance articles related with types of study (empirical, review, methods, theory, operational) and publication year (from 1998 to 2020).

Table IV -: Types and number of top 20 cited behavioral finance article (1998 to 2020)

Publication year	Theory	Empirical	Method	Operational	Review	Total
1998	1	2				3
1999						0
2000		2				2
2001						0
2002						0
2003		3				3
2004	1					1
2005						0
2006						0
2007		1				1
2008						0
2009						0
2010	1					1
2011						0
2012		2				2
2013						0
2014						0
2015				1		1
2016						0
2017						0
2018		1	1			2
2019		2			1	3
2020		1				1
Total	3	14	1	1	1	20

Third, there are many contributors to scholarship for study of behavioral finance which cause increase in number of research scholar in this area and more contribution came into existence in recent few years.

Fourth, behavioral finance considered as an emerging concept in the are of finance and more and more conference and workshop held in these area increase the frequency of research in the concerned area.

There are some limitation of this paper which must be considered while studying this paper that is article published before 1998 are not taken into consideration of study; however this doesn't mean that researchers before 1998 have not contribution in the development of behavioral finance. Again article with WOS database are included in this study and our research doesn't include non SSI/SSCI articles. For further study in this area Google scholar and other citation analysis tools can be used for research purpose.

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