Content analysis of *Financial Services Review*

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Abstract

We conduct a content analysis of all regular articles in Volumes 1–18 of *Financial Services Review* and report distribution of articles by keywords, JEL classification codes, topics, research approaches, datasets, statistical methods, and authors. We also report the most influential articles and authors based on Google Scholar citations. Comparing article topics to *Certified Financial Planner* (CFP®) Exam topics, we find a mismatch between distribution of article topics and the weights of the topics on CFP® Exam, with the majority of article topics being *investments*, while *estate planning* and *insurance* are under-represented relative to their topic weights on the CFP® Exam. © 2011 Academy of Financial Services. All rights reserved.

JEL classifications: C10; C61; D14; E21; G10

Keywords: Content analysis; Financial planning; Journal review; Citation index; Statistical methods

1. Introduction

Financial Services Review has been a leading research journal in the financial services field since 1991. There are 329 articles in Volumes 1–18 on a variety of topics. The primary purpose of this article is to provide insight into the patterns of research in the regular journal articles published in *Financial Services Review*. We focus on some important aspects of publications with which researchers, educators, students, and practitioners should be familiar, including overview of trends in research topics, methods, and datasets used in articles as well as identifying the most influential authors and publications. Geistfeld and Key (1986) describe this type of review of journal content as a form of content analysis that can help

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identify the focus of a journal and trends over time. Ji, Hanna, Lawrence, and Miller (2010) perform a content analysis of the first 20 volumes of the *Journal of Financial Counseling and Planning*, which is another research journal with a focus on personal finance, so we compare some of our results to their results. Our analyses demonstrate trends in topics, research methods, and influential authors in *Financial Services Review*.

The remainder of this article proceeds as follows. We describe criteria and procedures used in analyzing the articles. We then present results based on six major aspects of the articles: authors, classification of subjects, research approach (normative vs. positive vs. other), statistical methods, datasets for surveys, and citations.

2. Methodologies

2.1. Authors and trends in co-authorship

We count someone as being an author regardless of the order of authorship. We present tabulations of the most frequently published authors as well as trends in co-authorship of articles and also analyze the gender of authors.

2.2. Classification of articles

We classify article topics using three methods: keywords, Journal of Economic Literature (JEL) categories, and topics. Keywords and JEL classification codes are assigned to articles as a way of classifying content and facilitating searches and indexing. JEL categories are commonly required to be supplied by authors of articles in economics journals, and there are many detailed categories (American Economic Association, 2010). Because authors choose keywords and JEL categories, there is no guarantee of consistency in categorization. Ideally, keywords should provide succinct information regarding the main topic(s) of articles. Ji et al. (2010) state that properly assigned keywords can assist readers in understanding the content of an article. However, some previous content analysis articles note problems related to keywords that may prevent their use as effective research tools, including inconsistency and inappropriate keywords (James & Cude, 2009; Ji et al., 2010).

Articles before Volume 8 do not include keywords or JEL categories, and a few articles after Volume 8 do not include them either. For the articles missing JEL codes, we assign codes based on content to have a more comprehensive analysis of subject matter.

In addition to keyword analysis, we also attempt to more thoroughly classify the topics of articles based on content and main focus(es). We believe that our classifications provide a clearer picture of the major topics discussed in *Financial Services Review* articles, helping potential readers to efficiently find information they are searching for. Based on the topical classifications listed in Garman and Forgue (2003), we assign one or more of ten major topical categories in financial planning. These topics include savings, credit, insurance, investments, income tax planning, estate planning, retirement planning, financial education, general issues in financial planning, and other, a category for all other articles not assigned to the major categories. We also compare the topical classifications with the *Certified*

Financial Planner (CFP®) Board's exam topic coverage (Certified Financial Planner Board, 2006). The Academy of Financial Services which sponsors the *Financial Services Review* has long had a close relationship with the CFP® Board (e.g., Pahl, 1996). The CFP® board, a nonprofit organization granting the CFP® certification, sets educational and professional standards for financial planners to improve their knowledge, skills, as well as professional ethics and to assess whether they have ability to adequately and professionally perform financial planning practices. This comparison may provide insight into how the distribution of articles in *Financial Services Review* compares to the weights given to topics on the CFP® Board Exam.

2.3. Research approach: normative versus positive

Normative household finance research analyzes what decisions households should make, whereas positive research attempts to ascertain factors related to choices households make (Campbell, 2006; Yuh & Hanna, 2010). Positive analyses in household finance attempt to answer questions such as which households are likely to achieve retirement adequacy, whereas normative research might use theory to define best decisions, e.g., which savings and investment decisions will achieve an adequate retirement. We count an article as normative research if the objective is to derive optimal or efficient decisions for households or businesses. We count an article as positive if it attempts to describe, explain, or predict behavior.

2.4. Statistical method

James and Cude (2009) analyze quantitative research published in the *Journal of Consumer Affairs* using three categories: *descriptive analysis*, *regression or regression-like analysis*, and *other statistical analysis*. The category descriptive analysis includes basic statistics (e.g., t test, χ^2, etc.) quantitatively describing main features of datasets such as sample size, demographical characteristics, or information about subgroups. An article using any type of inferential statistics to test effects is counted as regression or regression-like analysis. This category includes ordinary least squares, Probit or Tobit model, logistic model, double-hurdle, Heckman, generalized least squares, linear discriminant analyses, stepwise logistic regression, and maximum likelihood analysis. Lastly, we classify all other quantitative articles using some statistical methods but not included in the first two categories as other statistical methods, analysis, including factor analysis, path analysis, ANOVA, MANOVA, and ANCOVA. James and Cude (2009) do not mention simulation approaches, but if an article uses a simulation based on some statistics (e.g., mean and variance of returns), we count it in the other quantitative statistical category.

2.5. Categorizations for datasets

To describe the characteristics of datasets used in empirical analyses of individual or household behavior, we categorize datasets as national datasets and non-national datasets. We count the number of articles using major U.S. datasets, including the Survey of

Table 1   Number of authors

Number of authors	Number of articles	%
1	84	25.5
2	153	46.5
3	80	24.3
4	10	3.0
5	1	0.3
6	1	0.3
Total	329	100.0

Analysis of all regular articles in Volumes 1–18.

Consumer Finances (SCF) (Bucks, Kennickell, Mach, & Moore, 2009; Hanna, Lindamood, & Huston, 2009), and the Health and Retirement Study (HRS) (Chatterjee & Huston, 2009).

2.6. Citations

Identification of the most cited authors and publications provides insight into which authors and publications have been most influential. Citation rates are obtained from Google Scholar (scholar.google.com) and are counted to assess the impact of published articles in *Financial Services Review*. Searches based on Google Scholar indicate the number of citations based on the wide range of publications, including conference papers, working papers, master's theses, and book chapters (Harzing, 2008). Google Scholar provides a convenient search environment for its users, because anyone with Internet connection is able to access to the citation rates.

3. Results

3.1. Authors

Only 26% of articles appearing in Volumes 1–18 of *Financial Services Review* have one author (Table 1). This is similar to the 23% rate for the *Journal of Financial Counseling and Planning* (Ji et al., 2010). For all articles in *Financial Services Review* through Volume 18, the median number of authors is two and the maximum number of authors is six. There are 681 authors listed (some multiple times) and of the author listings, 79% are male and 21% are female. Table 2 shows the authors with the most articles in Volumes 1–18. William Reichenstein is the most prolific author with 12 articles.

3.2. Classification of articles

3.2.1. Keywords

Keywords identify the main topics of an article. These classifications allow readers to search and access applicable articles through indexes. Keywords are also helpful in enabling readers to grasp the core concept of an article without reading the article in its entirety.

Table 2   Most frequently published authors

Rank	Author*	Number of articles
1	William Reichenstein	12
2	Stephen M. Horan	8
3	Robert Brooks	6
3	Dale L. Domian	6
3	Catherine P. Montalto	6
6	H. Kent Baker	5
6	Conrad S. Ciccotello	5
6	Vickie L. Hampton	5
6	Sherman D. Hanna	5
6	Karen E. Lahey	5
6	Moshe A. Milevsky	5
12	Grady Perdue	4
12	David M. Smith	4
12	John J. Spitzer	4

Analysis of all regular articles in Volumes 1–18.
* There are 24 authors who published three articles in *Financial Services Review* during 1991–2009.

Keywords are a particularly helpful tool facilitating efficient and relevant searches within databases, periodical indexes, and search engines.

Of the 329 articles we review, only 225 have keywords assigned. Articles before Volume 8 do not have keywords assigned and some articles after this are missing keywords. There are over 800 unique keywords used to describe the content in the 225 articles, covering Volumes 8–18 of *Financial Services Review*. *Asset allocation* is the most common keyword, listed in 24 articles (Table 3). *Retirement planning* is the second ranked keyword, listed in 19 articles and *retirement* is listed in 14 articles. The only other keyword that is listed in more than 10 articles is *portfolio choice*, listed in 12 articles.

What is striking about the keywords in *Financial Services Review* is the lack of consistency. For instance, *retirement* is used in some context of keywords 70 times, but the full keywords varied from *retirement planning* to *retirement accounts* to *retirement savings*. In some cases, an article is classified by the keyword *IRA* or *social security*, but *retirement* is not listed as a keyword. Another common discrepancy is the level of detail in each specific keyword. For example, in 15 articles covering financial planning, the keyword *financial planning* is listed eight times, while *personal financial planning* is listed seven times.

Table 3   Most common keywords

Rank	Keyword	Number	Percentage of articles
1	Asset allocation	24	10.7
2	Retirement planning	19	8.4
3	Retirement	14	6.2
4	Portfolio choice	12	5.3

Analysis of 225 regular articles in Volumes 1–18 with author-supplied keywords. All other keywords are listed in fewer than 10 articles.

3.2.2. JEL classification codes

As a second method of classifying articles, we count articles by JEL categories. Articles can have more than one JEL code. In our analysis of JEL codes, there are 751 JEL codes assigned to 329 articles. Most of these are assigned by authors, but for articles without author-supplied codes, we assign one or more codes based on the content of the article. Of the assigned codes at most general level, Category G (Financial Economics) is assigned to the most articles (76%), and Category D (Microeconomics) is the second ranked JEL code (42%) (Table 4, Part A). Category J (Labor and Demographic Economics) is assigned to 14% of the articles.

In terms of specific categories, G11 (Portfolio Choice; Investment Decisions) is the most common two digit JEL code, with 42% of the 329 articles (Table 4, Part B). The second most common category is D14 (Personal Finance) with 21% of the articles. G23 (Pension Funds; Other Private Financial Institutions) is used for 14% of the articles, G12 (Asset Pricing; Trading volume; Bond Interest Rates) is used for 11% and J26 (Retirement; Retirement Policies) is used for 10% of the articles.

3.2.3. Topical classifications

In Table 5 we present the distribution of categories based on 10 topical classifications, which provides some insight into the relative importance of topics in articles in *Financial Services Review*. Based on our classifications of all 329 articles, *Investments* is the most frequently researched topic in Volumes 1–18 of *Financial Services Review*, with 176 articles (54% of all articles). *Retirement* is the second most common topic, with 75 articles (23%), and *general financial planning* is the third most common topic, with 48 articles (15%). There are 71 articles handling multiple subjects with different combinations of topics. For example, to ascertain the optimal choice between a traditional IRA and a Roth IRA, Horan and Zaman (2009) discuss both retirement planning and income tax aspects of retirement by investigating factors affecting a decision making process. Using data from a survey of the members of a United Kingdom defined contribution pension plan, Byrne (2007) examines the attitudes and knowledge of employees, focusing on both retirement plans and investment decisions.

As shown in the last column of Table 5, we find that there is an imbalance between our topical classifications and the topic list of the CFP® Board examinations, as the proportion of each classification does not match the weighting of topics on the exams. Investment planning accounts for 19% of the points on the CFP® exam but 54% of all articles are related to investments. In addition, insurance planning is 22% and estate planning is 15% of the points, but only eight articles, or 2% of all articles, are related directly to insurance planning, and only 10 articles, or 3% of all articles, are related to estate planning.

3.3. Research approach

We find that normative research is the most common approach, as we identify 195 articles (59%) having an objective of deriving optimal or efficient decisions for households or businesses (Table 6). An example of a normative article is Ho, Milevsky, and Robinson (1994), which presents mathematical derivations of efficient asset allocations for withdrawals during retirement. Grable and Lytton (1999) discuss development of a risk assessment

Table 4   Most common JEL codes

Part A: Top category JEL general categories

General category	Number of articles	Percentage of articles
A: General Economics and Teaching	16	4.9
C: Mathematical and Quantitative Methods	15	4.6
D: Microeconomics	138	41.9
E: Macroeconomics and Monetary Economics	14	4.3
G: Financial Economics	250	76.0
H: Public Economics	19	5.8
I: Health, Education, and Welfare	12	3.6
J: Labor and Demographic Economics	47	14.3

We assigned one or more JEL classification codes for articles with no author-supplied JEL classification codes. The following categories each accounted for less than 1% of total articles: B: History of Economic Thought, Methodology, and Heterodox Approaches, F: International Economics, K: Law and Economics, L: Industrial Organization, M: Business Administration and Business Economics; Marketing; Accounting, N: Economic History, O: Economic Development, Technological Change, and Growth, P: Economic Systems, Q: Agricultural and Natural Resource Economics; Environmental and Ecological Economics, R: Urban, Rural, and Regional Economics, Z: Other Special Topics.

Table 4   Most common JEL codes (Continued)

Part B: Top ranked JEL two digit codes

Rank	JEL two digit codes	Number of times listed	Percentage of articles
1	G11: Portfolio Choice; Investment Decisions	138	41.9
2	D14: Personal Finance	70	21.3
3	G23: Pension Funds; Other Private Financial Institutions	46	14.0
4	G12: Asset Pricing; Trading volume; Bond Interest Rates	35	10.6
5	J26: Retirement; Retirement Policies	33	10.0
6	D81: Criteria for Decision-Making under Risk and Uncertainty	25	7.6
7	G14: Information and Market Efficiency; Event Studies	22	6.7
8	G20: Financial Institutions and Services (General)	22	6.7
9	D12: Consumer Economics: Empirical Analysis	21	6.4
10	G29: Financial Institutions and Services (Other)	20	6.1

Each of the remaining two digit JEL classification codes are listed in fewer than 20 articles.

Some authors listed one digit or three digit JEL classification codes. For our tabulation, we count a one digit JEL classification code as the next two digit code, for example, J2 counts as J20, and we count a three digit JEL code as the rounded number, for example, J200 counts as J20.

Analysis of all regular articles in Volumes 1–18.

Column for percentage of all articles adds to more than 100% because some articles are assigned multiple JEL codes.

instrument, and even though the article is not mathematical, it clearly has an objective of developing a useful and valid instrument.

We identify 112 articles (34%) as having a positive research approach, in that the main objective is to describe, explain, or predict behavior. An example of a positive article is

Table 5   Topical classifications

Topic	Number	Percent of all topical classifications	Percent of all articles	Percent distribution of points on CFP® examination
Investments	176	42.8	53.5	19.0
Retirement planning	75	18.2	22.8	19.0
Financial planning	48	11.7	14.6	11.0
Income tax planning	19	4.6	5.8	14.0
Education	24	5.8	7.3	*n/a*
Savings	26	6.3	7.9	*n/a*
Credit	19	4.6	5.8	*n/a*
Estate planning	10	2.4	3.0	15.0
Insurance	8	1.9	2.4	22.0
Other	6	1.5	1.8	*n/a*
Total	411	100.0	124.9	100.0

Analysis of all regular articles in Volumes 1–18, with our assignment of one or more topics to each article.

Column for percentage of all articles adds to more than 100% because some articles were assigned multiple topics.

The difference between the topical classifications and all articles is because of some articles with multiple subjects. Unlike our classifications, education, savings, credits, and other category are included in financial planning part of the CFP® examination. The percentage of points on insurance planning part consists of insurance planning and risk management (14%) and employee benefits (8%).

Bajtelsmit, Bernasek, and Jianakoplos (1999), which analyzes gender difference in defined contribution pension plan allocations with statistical analyses of the Survey of Consumer Finances dataset.

We categorize the articles that are neither normative nor positive as *other*, and 22 articles (7%) are in that category (Table 6). An example of an article in the *other* category is DeVaney and Lytton (1995), which consists of a literature review of research and guidelines related to household insolvency.

3.4. Statistical method

Of the 329 articles, 256 (78%) use quantitative statistical methods and 73 (22%) use some other method (Table 7, Part A). Some of these articles analyze surveys of households or individuals, but others have statistical analyses of financial data. The quantitative statistical methods are divided into three categories: *descriptive analysis, regression or regression-type analysis*, or *other statistical analysis*. As Table 7, Part B shows, of the articles using

Table 6   Research approach methods used

Approach	Number	Percentage
Normative	195	59.3
Positive	112	34.0
Other	22	6.7
Total	329	100.0

Analysis of all regular articles in Volumes 1–18.

Table 7   Quantitative statistical methods and other methods

Part A: All articles

Research method	Number	Percentage
Quantitative statistical method	256	77.8
Other methods	73	22.2
Total (N)	329	100.0

Part B: Articles using quantitative statistical methods

Primary quantitative statistical analysis	Number	Percentage
Descriptive analysis	88	34.4
Regression and regression-type analysis	108	42.2
Other statistical analysis	60	23.4
Total using quantitative statistical methods (N)	256	100.0

Analysis of all regular articles in Volumes 1–18.

quantitative statistical methods, 34% have descriptive analyses such as percentage, χ^2 or mean comparisons, but do not use a method in one of the other categories. For example, Byrne (2007) reports percentages of respondents who answer the questions regarding investment choice, retirement saving, and investment knowledge and provides χ^2 statistics.

Of the articles using quantitative statistical analyses, 42% have regression-type analyses such as ordinary least squares (OLS) or logistic regression as the primary focus (Table 7, part B). As an example, Yuh, Hanna, and Montalto (1998) conduct multivariate OLS regression analyses to estimate the effect of each independent variable on the ratio of projected wealth to needs at retirement while controlling for the effects of all other independent variables. Chen and Volpe (1998) analyze personal financial literacy among college students. Students with scores equal to or below the median are classified as students with relatively less knowledge. Students with scores higher than the sample median are classified as those with relatively more knowledge. This dichotomous variable is then used in the logistic regression as the dependent variable.

Over 23% of articles using quantitative statistical analyses have other types of statistical analysis such as simulation or factor analysis (Table 7, part B). For instance, Cooley, Hubbard, and Walz (2003) use Monte Carlo simulation and an overlapping periods methodology to analyze retirement portfolio success rates. They compare and contrast the

Table 8   Survey datasets used in articles

Dataset	Number	Percentage
U.S. Survey of Consumer Finances (SCF)	21	32.3
U.S. Health and Retirement Study (HRS)	9	13.8
U.S. Survey of Currency and Transaction Account Usage	2	3.1
U.S. Retirement Confidence Survey	1	1.5
U.S. National Longitudinal Surveys (NLS)	1	1.5
Australian datasets (various)	6	9.2
Other datasets	25	38.5
Total number of survey datasets of individuals or households	65	100.0

Table 9   Most cited articles based on Google Scholar

Rank	Year	Title	Authors	Number of citations
1	1999	Gender differences in defined contribution pension decisions	V. L. Bajtelsmit, A. Bernasek, and N. A. Jianakoplos	93
2	1998	An analysis of personal financial literacy among college students	H. Chen and R. P. Volpe	90
3	1996	The effects of mutual fund managers' characteristics on their portfolio performance, risk and fees	J. H. Golec	85
4	1998	Mutual fund shareholders: characteristics, investor knowledge, and sources of information	G. J. Alexander and P. J. Nigro	81
5	1996	Risk aversion measures: Comparing attitudes and asset allocation	D. K. Schooley, and D. Drecnik Worden	70
6	2004	An empirical investigation of personal financial risk tolerance	T. A. Hallahan, R.W. Faff, and M. D. McKenzie	61
7	1999	Financial risk tolerance revisited: The development of a risk assessment instrument	J. Grable and R. H. Lytton,	55
8	2000	Risk tolerance and asset allocation for investors nearing retirement	G. Hariharan, K. S. Chapman, and D. L. Domian	47
9	2002	Psychological biases of investors	H. K. Baker and J. R. Nofsinger	40
10	1994	Asset allocation, life expectancy and shortfall	K. Ho, M. A. Milevsky, and C. Robinson	35
10	1995	Household insolvency: A review of household dept repayment, delinquency, and bankruptcy	S. DeVaney and R. H. Lytton	35
Median number of citations for all articles in Volumes 1–18				4.0
Mean number of citations for all articles in Volumes 1–18				7.9
Total number of citations for all articles in Volumes 1–18				2,561

Analysis of all regular articles in Volumes 1–18, Google Scholar search conducted August, 2010. Mean and median numbers of citations are for all 329 regular articles.

implications of these two procedures for sustainable withdrawal rates from a retirement portfolio. Neukam and Hershey (2003) examine individuals' retirement savings practices with a principal components analysis, followed by varimax rotation.

3.5. Survey datasets

Of the 329 articles in Volumes 1–18 of the *Financial Services Review,* 65 use surveys of individuals or households (Table 8). Of these articles, the most frequently used survey
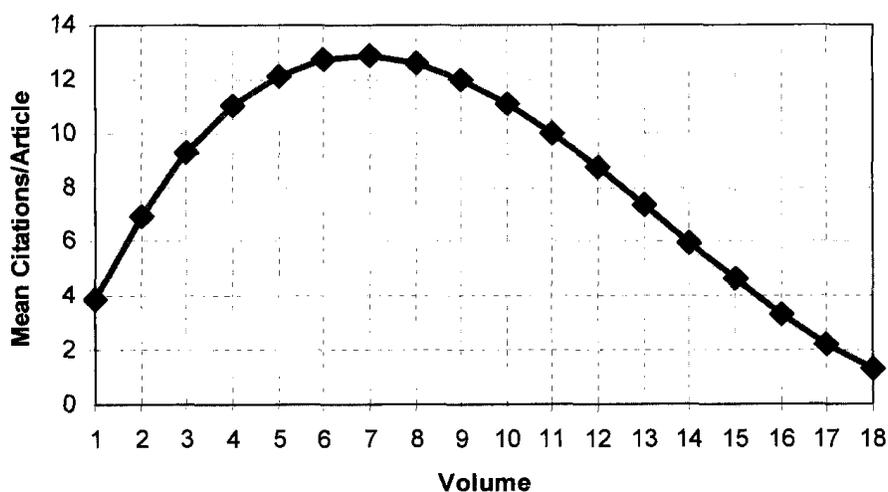
Fig. 1. Trend in number of Google Scholar citations per article. Calculated by authors from analysis of Volumes 1–18 and Google Scholar searches for all articles. Smoothed by regression: Number of citations $= -0.546 + 4.263$ volume -0.419 volume^2 $+0.010$ volume^3.

dataset is the Survey of Consumer Finances (SCF), with 21 articles, representing 32% of all of the articles using survey datasets. The Health and Retirement Survey (Chatterjee & Huston, 2009) is used in nine articles, and three other U.S. public datasets are used. Six surveys from Australia and 25 other surveys are used in articles, including surveys of students and surveys of investors.

3.6. Citations

For articles published in Volumes 1–18 of *Financial Services Review*, the total number of Google Scholar citations as of August 2010 is 2,561 (Table 9). The median number of citations is four, and the mean number of citations is 7.9. In a few cases the Google Scholar citation count is ambiguous. For instance, the title of the journal article by Dus, Maurer, and Mitchell (2005) has a Google Scholar citation count of 51, but the listing is for an NBER working paper version of the research, not the *Financial Services Review* version, which has only two citations. Fig. 1 shows the smoothed trend of citations per article, which shows the highest rate in Volume 7, which has a mean of over 12 citations per article. It is understandable that the number of citations increases after Volume 1, as the Internet did not become popular until after Volume 5 had been published, so some citations of articles in the first five volumes might not be indexed by Google Scholar. It is also reasonable that citations are lower for more recent volumes, as given the timing of research and publications, it may take years before an article is cited.

Based on our topical classification, nine of the 11 most cited articles are related to investing (Table 9), including five related to risk tolerance measures or gender differences on asset allocation. This is consistent with our finding with regard to the dominant research topic used in Volumes 1–18 of *Financial Services Review*. The most cited article, "Gender differences in defined contribution pension decisions," is cited in a variety of economics and

Table 10   Most cited authors of articles in *Financial Services Review*

Rank	Author	Number of citations
1	Haiyang Chen	143
1	Ronald P. Volpe	143
3	Catherine P. Montalto	118
4	Sherman D. Hanna	108
5	Ruth H. Lytton	106
6	Vickie Bajtelsmit	97
7	Alexander Bernasek	96
7	Nancy A. Jianakoplos	96
9	Dale L. Domian	92
10	William Reichenstein	86
11	Joseph H. Golec	85
12	Gordon J. Alexander	81
12	Peter J. Nigro	81
14	Debra D. Worden	75
15	John E. Grable	72
16	Diane K. Schooley	70
17	Robert W. Faff	65
18	H. Kent Baker	64
19	Michael D. McKenzie	61
19	Moshe A. Milevsky	61
19	Terrence A. Hallahan	61
22	Yoonkyung Yuh	58
23	Jonathan J. Fox	56
24	Sharon A. DeVaney	50
25	Harahan, Govind	49

Analysis of all regular articles in Volumes 1–18, Google Scholar search conducted August, 2010.

finance journals. The second most cited article, "An analysis of personal financial literacy among college students," is cited in education, consumer sciences, and policy journals, as well as finance journals.

Table 10 shows the 25 most highly cited authors, adding citations for each article an author has written for *Financial Services Review*. Chen and Volpe collaborate on three articles that have been cited frequently, including the second most cited article (Table 9), and therefore tie for the most cited author. Montalto collaborates with several different authors, and is the third most cited author. Hanna and Lytton each also collaborate with several different authors and are ranked fourth and fifth. Bajtelsmit collaborates with Bernasek and Jianakoplos on the most cited article (Table 9) and also is the co-author of a recent article and is ranked sixth.

4. Conclusions and implications

4.1. The niche for Financial Services Review

In terms of business journals, it is clear that *Financial Services Review* is unique in providing an outlet for academic research related to all of the major aspects of financial

planning. It is interesting, however, to compare *Financial Services Review* to another journal that publishes academic research related to many aspects of financial planning, though also research related to financial counseling, the *Journal of Financial Counseling and Planning*. Both journals have similar authorship patterns, for example, 23% single authorship for *Journal of Financial Counseling and Planning* (Ji et al., 2010) compared with 26% for *Financial Services Review*. However, the journals are very different in terms of the proportions of articles with a normative focus, as only 13% of articles in *Journal of Financial Counseling and Planning* are normative (Ji et al., 2010) compared with 59% for *Financial Services Review*. This reflects the preponderance of authors from business schools for *Financial Services Reviews*, which is also related to the low proportion of female authors in *Financial Services Review* (21%), compared with 60% of *Journal of Financial Counseling and Planning* authors being female.

Both journals have a high proportion of articles using quantitative statistical analyses (77% for *Financial Services Review*, 79% for *Journal of Financial Counseling and Planning*) but unlike the 23% of such articles in *Financial Services Review* using other methods such as simulation, only 10% of *Journal of Financial Counseling and Planning* articles with quantitative statistical approaches use other types of statistical analyses such as simulation (Ji et al., 2010). The difference in part reflects the lower use of simulation methods in *Journal of Financial Counseling and Planning*.

Only 20% of articles in *Financial Services Review* are based on surveys of individuals or households, compared to 76% of articles in *Journal of Financial Counseling and Planning* (Ji et al., 2010). Many articles in *Financial Services Review* have some statistical analysis of financial data rather than of survey data. In its first 20 years of *Journal of Financial Counseling and Planning* there are 66 articles using U.S. SCF datasets (Ji et al., 2010), while in the first 18 years of *Financial Services Review* there are 21 articles using SCF datasets. *Journal of Financial Counseling and Planning* has published 17 articles with a qualitative approach (Ji et al., 2010), but *Financial Services Review* has no articles using a qualitative approach.

4.2. Classification of articles

While keywords and JEL classification codes are important in facilitating searches and classifying content, the inconsistent manner in which they are applied is troubling. When assigning keywords, authors should first consider the CFP® Board topics and assign keywords based on those topics. This will provide some consistency across the articles and can be a standard practice moving forward. There also should be more consistency and specificity in assigning JEL classification codes. For instance, JEL classification D14 is assigned to some articles in each of the 10 topics we use to classify articles. Aligning these topics with JEL classification codes would provide an additional level of consistency.

4.3. Mismatch between distribution of topics and weighting of CFP® exam topics

The mismatch between the weight given to topics on the CFP® Exam and the distribution of topics in *Financial Services Review* articles may be the result of the interests of the faculty

and practitioners who have attended the Academy of Financial Services (AFS) conferences over the years. Until 2008, AFS annual conferences were in conjunction with the Financial Management Association conferences, leading to the preponderance of investment topics in articles submitted to and published in *Financial Services Review*. It is possible that faculty who conduct research in topics such as insurance and estate planning are more interested in submissions to specialized journals such as the *Journal of Risk and Insurance* and the *Real Property, Trust and Estate Law Journal* rather than a general journal such as *Financial Services Review*. However, to the extent that AFS would like its journal to be of greater value to the financial services industry, efforts to increase submissions for under-represented topics may be appropriate, for instance, by offering awards for best articles covering these topics.

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