

# THE VOLATILITY SCORE: A NEW MEASURE OF THE ISSUE-TO-ISSUE STABILITY OF A MAGAZINE'S AUDIENCE

**Roger Baron, DRAFTFCB**  
**Caryn Klein & Lori Jacobs, Time, Inc.**

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## INTRODUCTION

Historically, magazine circulation along with average-issue-audience have been used as the currency for the planning and buying of print advertising. And while circulation has acted as a “surrogate” for audience, we now have MRI's Issue Specific measurement that can be integrated into pre-existing systems and possibly introduce a change in the way magazines are planned and bought.

Magazine readership has traditionally been expressed as the average-issue-audience (AIA), but the issue-to-issue variation around this average is different for each magazine – some magazines are relatively stable, others highly volatile. The Issue Specific study provides an adjustment factor that reflects the percent difference between the audience to a given issue of a magazine versus the average (AIA).

While this is useful historical information, we believe that a more forward-looking metric would allow planners to better estimate the audience to future issues of a magazine. The purpose of this paper is to present a new metric, the Volatility Score (VS), that quantifies the issue-to-issue variability of a magazine's audience, and in turn identify factors that explain the differences in volatility from one magazine to another.

The VS will tell planners the margin of error that can be expected in the readership of a single issue versus the reported AIA. It would help them more accurately predict future readership than is possible today with average-issue-audience, and would become another normative characteristic of a magazine to be considered in the planning and buying process.

Since the VS is calculated from the Issue Specific study, we believe it will be a more intuitive and useful number than the little understood and statistically derived 2-sigma tolerance.

Specifically we intend to use the Volatility Score to:

- Provide new learning about magazine readership.
- Identify the differences in volatility by magazine genre and individual titles
- Identify metrics that are significantly associated with volatility
- Provide implications for media planners

## A REVIEW OF MRI'S ISSUE SPECIFIC STUDY

MRI's Issue Specific Study provides audience data for individual issues of a magazine. The Issue Specific Index has been fielded continuously from week to week since May 31, 2006. The result is more than 3 years of data that can be used for analysis.

Methodology:

- Independent sample every week through SSI Survey Sampling and E-rewards
- Conducted over the internet with approximately 5,000 completed interviews each week
- Measures 200+ titles from current wave of MRI's National Study
- Uses a 6 month screen via logo selection (20 logos/page) – same as national study
- Respondents select which title(s) they have read or looked into in last 6 months
- Clicking on magazine logo leads to multi-cover display to select which issues read
- Where read (usually) and how obtained (most often) measures are collected
- Top-line demographics such as age, gender and income are captured

For illustration purposes, we've highlighted a selection of issues of People magazine. Over a five week period you see issue-to-issue variability with two out of five reporting less than average audience, and three out of five higher than average audience. In papers presented at the 2007 Symposium in Vienna, "Issue Specific Audience: Perspectives on Application", and a companion paper, "Measuring Issue Specific Audiences," both Klein and Baim identified patterns in cover topics and celebrities as a result of this reported variability. In this case, we see that Brad and Angelina continue to be strong; reaching 54 million or 24% more readers than the average issue.



Baim and Klein also identified benefits that agencies and publishers would get if they used issue specific audience data.

- Increased accountability, transparency, and the ability to more effectively meet campaign objectives.
- More timely delivery of audience data allowing magazines to compete more effectively with other media.
- Potential to shift the conversation from rate base to audience based planning.
- Ability to more precisely calculate magazines' contribution to advertising ROI. Publishers and agencies can now gain additional insight on individual print campaigns the same way marketers have evaluated campaigns for other media such as television and online.

The paper also concluded that MRI's Issue Specific data was not intended to replace its National survey, but rather to capture issue-by-issue variability within the context of this pre-existing currency. Preliminary analysis suggested that the data may not predict exact audience levels, but it may be indicative of the direction of the average-issue-audience.

While Issue Specific ratings have been in the U.S. marketplace for over three years, debate continues regarding their utility and accuracy. Planners acknowledge the timeliness and specificity of this data, but the question still remains whether users can incorporate it into their business plans. An objective of this paper is to provide confidence in MRI's Issue Specific estimates.

**THE VOLATILITY SCORE (VS) CALCULATION**

As background, some magazines are fairly stable issue-to-issue, while others are much more volatile. The Volatility Score is the standard deviation of the MRI Issue Specific Index. Standard deviation is the commonly accepted measure of volatility; in finance, investors use it to show how widely a stock's daily price fluctuates from the average.

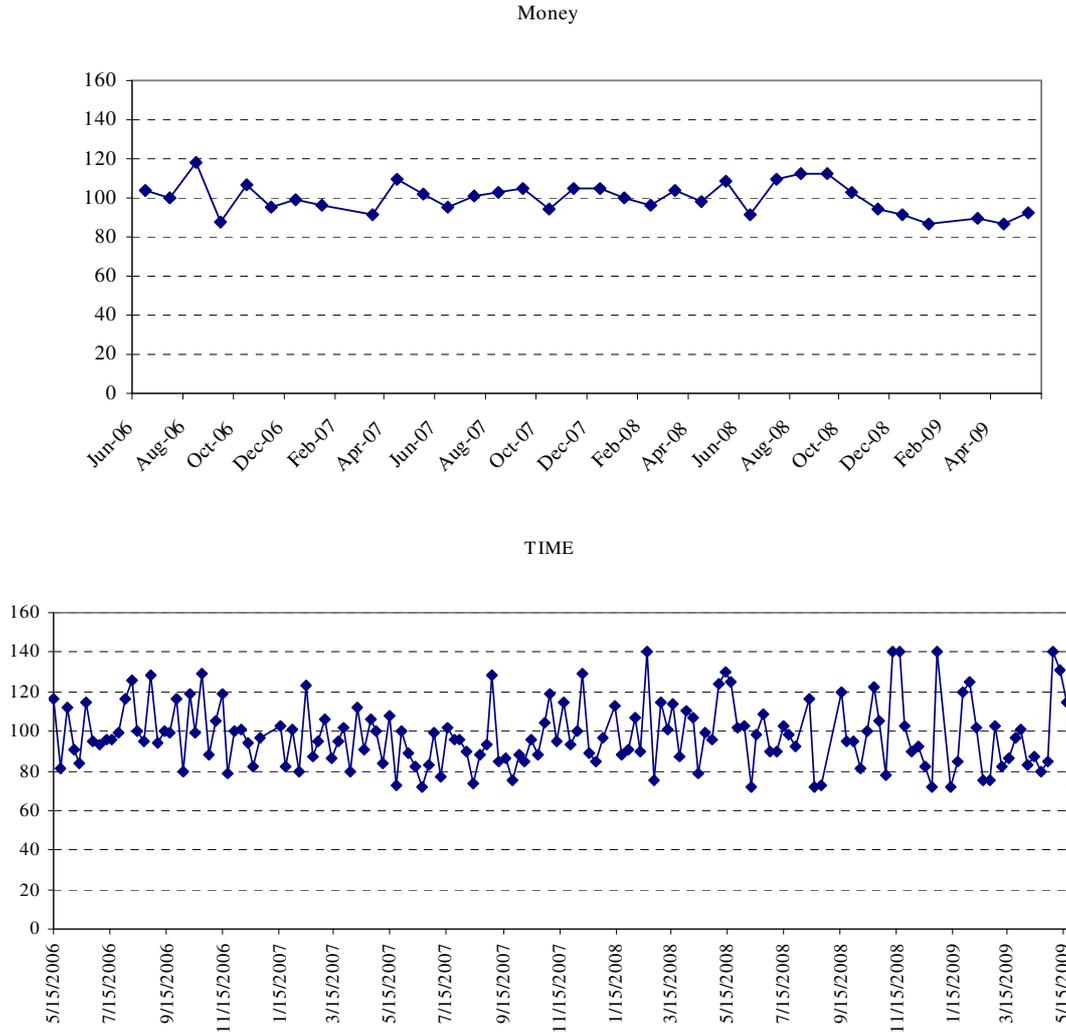
Using the reported Issue Specific indices for all Money magazine issues between June 2006 and February 2009, we calculate +/- 7.71; a fairly stable range. This means that for approximately two-thirds (68.2%) of the issues, the audience to Money was within plus or minus 7.71% of the reported average-issue-audience. For 95% of the issues, the audience was within plus or minus twice that, or +/- 15.4% of the reported AIA.

The VS was calculated using the STDEV function in the Microsoft Excel spreadsheet.

<b>Publication</b>	<b>Issue</b>	<b>Adult Index</b>
Money	6/1/2006	104
Money	7/1/2006	100
Money	8/1/2006	118
Money	9/1/2006	88
Money	10/1/2006	107
Money	11/1/2006	95
Money	12/1/2006	99
Money	1/1/2007	96
Money	2/1/2007	101
Money	3/1/2007	91
Money	4/1/2007	110
Money	5/1/2007	102
Money	6/1/2007	95
Money	7/1/2007	101
Money	8/1/2007	103
Money	9/1/2007	105
Money	10/1/2007	94
Money	11/1/2007	105
Money	12/1/2007	105
Money	1/1/2008	100
Money	2/1/2008	96
Money	3/1/2008	104
Money	4/1/2008	98
Money	5/1/2008	109
Money	6/1/2008	91
Money	7/1/2008	110
Money	8/1/2008	112
Money	9/1/2008	112
Money	10/1/2008	103
Money	11/1/2008	94
Money	12/1/2008	91
Money	1/1/2009	87
Money	2/1/2009	89
<b>Standard Deviation</b>		<b>7.71</b>

### **VOLATILITY VARIANCE WITHIN A GENRE**

Below further illustrates how volatility can vary by title and within a magazine genre. Money is fairly stable with a SD of +/- 7.71% while TIME is very volatile (SD = +/- 16.22%).



Within the Business Category, the Volatility Score ranges from +/-7.47 to +/-17.72 with the average at +/-13.83.

<b>Business Editorial Category</b>	<b>Volatility</b>
Kiplinger's Personal Finance	7.47
<b>Money</b>	<b>7.71</b>
Smart Money	10.79
Wired	11.08
Forbes	14.40
Economist	15.16
U.S. News & World Report	15.26
Inc.	15.89
Business Week	15.97
Entrepreneur	15.97
Newsweek	16.09
<b>Time</b>	<b>16.22</b>
Fortune	17.72
<b>Business Average</b>	<b>13.83</b>

## VOLATILITY VARIANCE ACROSS GENRES

While the Volatility Score varies by title within a genre, we also know that it varies across genres. Special Interest magazines like Epicurean, Tech/Science, and Health all have low volatility. Magazines such as Multi-cultural Hispanic, Bridal, Teens and Business are more volatile.

<b>Genre</b>	<b># Magazines</b>	<b>Mean Volatility</b>
Epicurean	5	8.99
Tech/Science	4	9.46
Health	9	9.92
Technology	3	10.28
Women's Lifestyle	3	10.48
General	9	10.86
Women's Service	7	10.91
Automotive	12	11.28
Multi-cultural AA	4	11.36
Men's	10	11.42
Parenthood	7	11.54
Tech/Video Games	2	11.65
Shelter/Regional	5	11.74
Women's Fashion	9	11.88
Hobbies	4	11.94
Sports	24	11.98
Travel	4	12.09
Celebrity/Entertainment	15	12.48
Shelter	16	12.86
Boating/Aircraft	4	12.99
Business	13	13.83
Teen	3	14.33
Bridal	3	14.73
Multi-cultural-Hispanic	1	17.61
<b>Grand Total</b>	<b>176</b>	<b>11.85</b>

\*See Appendix for genre definitions

## EXPLAINING DIFFERENCES IN VOLATILITY FROM MAGAZINE TO MAGAZINE

People seeing these results naturally begin to speculate what is behind them; they look for explanations regarding why magazines in the same genre, that seem similar, have such different issue-to-issue volatility. Speculations range from publication frequency to the circulation mix to specific cover treatments - like the presence of cover personalities or numbers on the cover, such as, "5 Easy Summer Meals."

A correlation analysis gave us the answer.

## METHODOLOGY

Our working database consists of 176 magazines in MRI's Issue Specific study from May, 2006 to April, 2009. In addition to the Volatility Score, we looked at many factors from a variety of sources that might plausibly be associated with volatility.

- **Magazine frequency** (number of issues published per year)
- **Audit Bureau of Circulation (ABC) estimates:**
  - Total Paid & Verified Circulation – average for 3 years (2006, 2007 and 2008)
  - % Single copy sales
- **Hall's Reports**
  - Advertising to Editorial ratio (% advertising)
- **AIA and qualitative data from MRI Doublebase 2008:**
  - Total readers (000)
  - Median Age
  - Median and Average # of issues read out of 4
  - Percent Primary audience
  - Median and Avg reading time in minutes
  - Median and Avg quality rating
  - Average Page Exposures
  - % women
  - Readers per copy
  - Percent read in home
  - Median and Average # of reading days
  - Percent take any of 9 actions
  - Median and Average Interest in Advertising
  - 2-Sigma Tolerance

- **Manual observations of all 176 titles (from Time Inc. summer interns):** For each magazine we calculated the percent of issues with these three cover characteristics:
  - Unnamed (Generic) person on the cover: The person is presented as a generic representation of a subject, such as a person exercising, rather than the individual. The dominant person pictured here is a generic, unnamed “unhappy” child who is featured for the topic of vaccinations.



- Named person on the cover: If the headline or dominant image is a picture (celebrity), drawing, cartoon, or spelled out name of a known person or personality in the public eye. The celebrities pictured here have cover stories written about them.



- Number on the cover: If there is reference to a number of reader service tips, such as “38 Foolproof Delicious Recipes” or “Top 10 ways to...”, or “The 5 Best/Worst...”



To identify those variables most closely associated with the Volatility Score we ran a Pearson product-moment correlation analysis.

**PRIMARY FINDING: VOLATILITY IS INVERSELY CORRELATED WITH READER QUALITY**

The correlation analysis showed a consistent inverse correlation between MRI's reader quality measures and volatility. So, the more a magazine was read in the home, the less volatile ( $R=-.362$ ,  $P=.000$ ). The more days that a magazine is read, the less volatile ( $R=-.327$ ,  $P=.000$ ). The more issues read out of four, the less volatile. The more time spent reading, the less volatile. And so on. In short, magazines with less volatility have a higher quality readership experience. This relationship is significant at or beyond the 95% confidence level

**Qualitative Measures from MRI Doublebase 2008**

<b>Variables</b>	<b>Pearson Corr with Volatility</b>	<b>2-tailed P&lt;.05 N=176</b>
% Read in home	-0.362	0.000
Median reading days	-0.327	0.000
Average reading days	-0.323	0.000
Average issues read out of four	-0.312	0.000
Median issues read out of four	-0.310	0.000
Median reading time	-0.277	0.000
Average reading time	-0.266	0.000
3-year average circulation	-0.253	0.001
Average magazine quality rating	-0.213	0.005
Median magazine quality rating	-0.208	0.006
Median age	-0.207	0.006
Any of 9 actions taken	-0.181	0.016
Ad page exposure (APX)	-0.170	0.024
Number on cover ("5 Best Ways to...")	-0.164	0.030
Total readers	-0.161	0.033
% Primary readers	-0.140	0.063
Average interest in advertising	-0.132	0.081
Median interest in advertising	-0.123	0.104
Celebrity on the cover	0.106	0.161
Percent single copy sales	0.078	0.303
Readers-per-copy	0.072	0.344
Percent women	0.012	0.872
Unnamed person on the cover	0.129	0.088
Advertising percent of pages	0.189	0.047
Publication frequency (issues/year)	0.193	0.010

**Other characteristics**

Although not significant at the 95% level, percent primary readers and Interest in Advertising were directionally similar – the higher the score, the less volatile.

**Demographics:**

There is no relationship with gender; however, magazines read by older people are less volatile than those read by younger generations.

**Ad/Edit ratio**

Magazines with a higher percentage of advertising versus editorial pages are more volatile

**Publication frequency:**

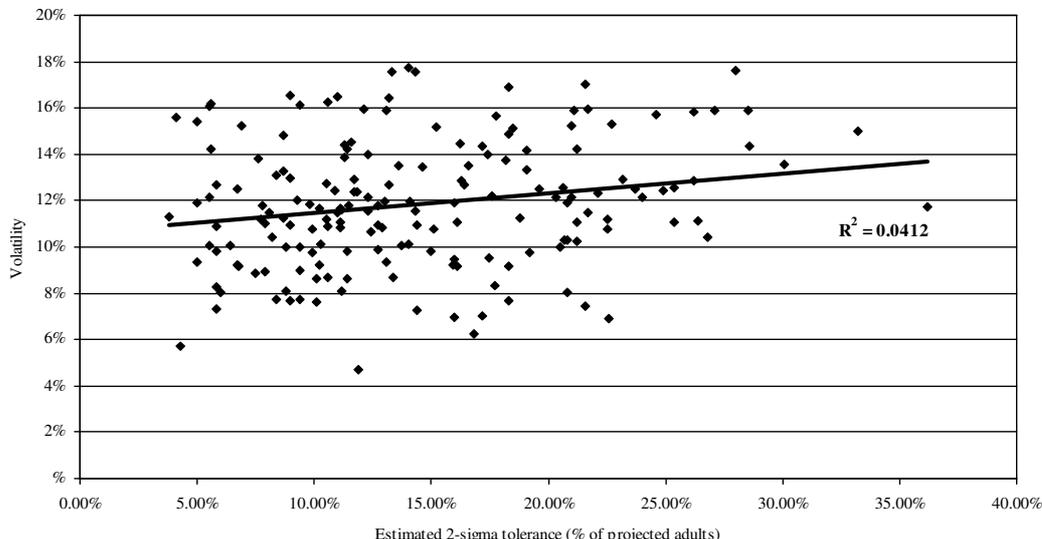
Publication frequency is directly correlated with volatility. Weeklies are more volatile than monthlies. This finding was also recognized in the Caryn Klein, Julian Baim paper presented in Vienna.

**Single copy sales:**

There is no significant relationship between single copy sales and volatility.

**2-sigma tolerance:**

Our initial hypothesis was that this new “Volatility Score” would highly correlate with MRI’s 2-sigma tolerance. But after a full analysis of all measured magazines, there is essentially no relationship between the 2-sigma statistical tolerance and Volatility. They measure different realities.



**Cover Treatment:**

One surprising finding is that the presence or absence of a celebrity or another named person on the cover is not significantly related to volatility. The finding is counter-intuitive, though it can be rationalized. Magazines such as People, Entertainment Weekly, and the other personality magazines always have a named person on the cover. Readers of those magazines want to keep up with celebrities in general, and the findings suggest that it doesn’t matter much from week to week what celebrity is on the cover. The lack of a significant correlation between volatility and single copy sales is consistent with this finding. With the exception of a few special issues (i.e., SI swimsuit, Michael Jackson, Diana), an advertiser is not going to get extra readership of an issue just because a specific person is going to be on the cover.

Magazines with a number on the cover, such as “39 Foolproof Delicious Recipes”, are less volatile than magazines without numbers.

**Intervariable Correlation:**

Since there is high intervariable correlation, we used stepwise regression to identify the key variables. After six steps, the analysis stopped with four variables that accounted for 27% of the variance in volatility (adjusted r-squared = .253). The standard error of the estimate was 2.37 index points. All were significant beyond the 95% level. The variables were of roughly equal importance, with the exception that “number on the cover” had less influence.

	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
(Constant)	32.321	2.657		12.166	.000
Median_age	-.089	.024	-.244	-3.653	.000
Avg_issues	-3.666	.807	-.304	-4.540	.000
Avg_rdg_days	-2.972	.667	-.312	-4.457	.000
Cvr_number	-1.325	.631	-.147	-2.099	.037

a. Dependent Variable: Adult\_Volatility

### **IMPLICATIONS FOR PLANNERS**

The Volatility Score (VS) gives planners for the first time a practical measure of the range in audience size and CPM to be expected for a future issue of a magazine or within a magazine genre. The VS can become another characteristic of a magazine to be considered in the planning and buying process. We believe it's a more intuitive and useful number than the little understood 2-sigma tolerance currently available in every MRI AIA study release.

Since reader quality and volatility are based on independent samples and different research methodologies, the significant negative correlation between the two supports the validity of the Issue Specific metric. The statistically significant negative correlation allows planners to use volatility as a single metric surrogate for the many reader quality measures – the less volatile a magazine, the higher the reader quality.

The Volatility Score can be used as a tie-breaker between magazines with comparable average-issue-audience CPM's. The more stable magazine is preferable because a planner can be more certain of the audience to the issues that carry the campaign.

The Volatility Score can be used to adjust a magazine's CPM. The planner would multiply a magazine's average-issue-audience by the positive and negative Volatility Score. As a hypothetical example, a magazine with 3.5 million average issue readers and a page cost of \$100,000 would have a CPM of \$28.57. If this magazine had a 9.0 Volatility Score, a future issue has a 34% chance of delivering as much as 9% lower audience. So, the audience could be 3.185 million ( $3.5 * .91$ ) which would raise the CPM to \$31.40. Conversely, it could be as much as 9% higher, lowering the CPM to \$26.21.

### **FOR THE FUTURE**

Since the present Volatility Scores are based on three years of observations, over 8,000 separate insertions, it is doubtful that additional data will significantly change the direction of the Volatility Scores or our conclusions. Updates may be desirable several years from now to reflect new publications and changes in those that are currently measured.

It is our hope that this new metric will become an additional consideration in magazine planning, allowing planners to better estimate the audience of future insertions, while at the same time, giving them a simplified measure of readership quality.

### **REFERENCES**

Baim, Julian, Martin Frankel, Michal Galin, Joseph Agresti and Kerry Zarnitz. "Measuring Issue Specific Audiences." Paper presented at the Worldwide Readership Research Symposium. Vienna, Austria: 2007

Frankel, Martin, Julian Baim, Michal Galin, Joseph Agresti. "Issue Specific Estimation – Mathematical and Statistical Issues, Procedures and Models." Paper presented at the Worldwide Readership Research Symposium. Vienna, Austria: 2007

Klein, Caryn, Lori Jacobs, Alan Rovitzky, Michal Galin, Julian Baim, Martin Frankel. "Issue Specific Audience: Perspectives on Application." Paper presented at the Worldwide Readership Research Symposium. Vienna, Austria: 2007

**APPENDIX: MAGAZINE VOLATILITY SCORE(VS) BY EDITORIAL CATEGORY (GENRE)**

<u>Editorial Category</u>	<u>Magazine</u>	<u>Volatility Score</u>
Automotive	Automobile	6.93
Automotive	Car Craft	8.67
Automotive	Hot Rod	9.98
Automotive	Motorcyclist	10.65
Automotive	Four Wheeler	11.21
Automotive	Road & Track	11.52
Automotive	Street Rodder	12.15
Automotive	Truckin'	12.42
Automotive	Super Chevy	12.55
Automotive	Car And Driver	12.70
Automotive	Motor Trend	13.00
Automotive	AutoWeek	13.53
<b>Automotive Average</b>		<b>11.28</b>

<u>Editorial Category</u>	<u>Magazine</u>	<u>Volatility Score</u>
Boating/Aircraft	Boating	10.39
Boating/Aircraft	Flying	11.73
Boating/Aircraft	Motor Boating	14.22
Boating/Aircraft	Yachting	15.64
<b>Boating/Aircraft Average</b>		<b>12.99</b>

Bridal	Brides	11.53
Bridal	Bridal Guide	15.09
Bridal	Modern Bride	17.57
<b>Bridal Average</b>		<b>14.73</b>

<u>Editorial Category</u>	<u>Magazine</u>	<u>Volatility Score</u>
Business	Kiplinger's Personal Finance	7.47
Business	Money	7.71
Business	Smart Money	10.79
Business	Wired	11.08
Business	Forbes	14.40
Business	The Economist	15.16
Business	U.S. News & World Report	15.26
Business	Inc.	15.89
Business	Business Week	15.97
Business	Entrepreneur	15.97
Business	Newsweek	16.09
Business	Time	16.22
Business	Fortune	17.72
<b>Business Average</b>		<b>13.83</b>

<u>Editorial Category</u>	<u>Magazine</u>	<u>Volatility Score</u>
Celebrity/Entertainment	TV Guide	8.04
Celebrity/Entertainment	Soap Opera Digest	8.06
Celebrity/Entertainment	Soap Opera Weekly	10.29
Celebrity/Entertainment	Country Weekly	11.07
Celebrity/Entertainment	Vibe	11.79
Celebrity/Entertainment	Entertainment Weekly	12.02
Celebrity/Entertainment	Spin	12.35
Celebrity/Entertainment	National Enquirer	12.51
Celebrity/Entertainment	Star	13.28
Celebrity/Entertainment	In Touch Weekly	13.87
Celebrity/Entertainment	Vanity Fair	13.99
Celebrity/Entertainment	Us Weekly	14.23
Celebrity/Entertainment	Rolling Stone	14.80
Celebrity/Entertainment	Blender	15.28
Celebrity/Entertainment	People	15.59
<b>Celebrity/Entertain Avg</b>		<b>12.48</b>

<u>Editorial Category</u>	<u>Magazine</u>	<u>Volatility Score</u>
Epicurean	Food & Wine	8.11
Epicurean	Gourmet	8.96
Epicurean	Cooking Light	9.16
Epicurean	Bon Appetit	9.23
Epicurean	Cooking Pleasures	9.48
<b>Epicurean Average</b>		<b>8.99</b>

<u>Editorial Category</u>	<u>Magazine</u>	<u>Volatility Score</u>
General	AARP The Magazine	5.72
General	Reader's Digest	7.31
General	American Legion	9.15
General	Sierra	11.25
General	National Geographic	11.30
General	Smithsonian	11.87
General	Town & Country	12.57
General	The New Yorker	12.68
General	Saturday Evening Post	15.90
<b>General Average</b>		<b>10.86</b>

<u>Editorial Category</u>	<u>Magazine</u>	<u>Volatility Score</u>
Health	Arthritis Today	6.94
Health	Psychology Today	7.01
Health	Weight Watchers	7.26
Health	Self	9.87
Health	Prevention	10.03
Health	Shape	11.67
Health	Health	11.97
Health	Diabetes Forecast	12.12
Health	Fitness	12.40
	<b>Health Average</b>	<b>9.92</b>

<u>Editorial Category</u>	<u>Magazine</u>	<u>Volatility Score</u>
Hobbies	Popular Photography	9.22
Hobbies	American Woodworker	10.08
Hobbies	American Photo	13.58
Hobbies	Workbench	14.86
	<b>Hobbies Average</b>	<b>11.94</b>

<u>Editorial Category</u>	<u>Magazine</u>	<u>Volatility Score</u>
Men's	Playboy	4.73
Men's	Maxim	7.73
Men's	Cigar Aficionado	10.11
Men's	Penthouse	10.30
Men's	Men's Health	10.98
Men's	GQ (Gentleman's Qtrly)	11.26
Men's	Esquire	12.20
Men's	Muscle & Fitness	14.52
Men's	Men's Fitness	15.89
Men's	Men's Journal	16.45
	<b>Men's Average</b>	<b>11.42</b>

<u>Editorial Category</u>	<u>Magazine</u>	<u>Volatility Score</u>
Multi-cultural AA	Ebony	8.29
Multi-cultural AA	Jet	9.22
Multi-cultural AA	Essence	11.69
Multi-cultural AA	Black Enterprise	16.24
	<b>Multi-cultural AA Average</b>	<b>11.36</b>

Multi-cultural Hispanic	Latina	17.61
	<b>Multi-cultural Average</b>	<b>17.61</b>
	<b>Hispanic</b>	

<u>Editorial Category</u>	<u>Magazine</u>	<u>Volatility Score</u>
Parenthood	Parenting	7.61
Parenthood	American Baby	10.76
Parenthood	Baby talk	11.22
Parenthood	Parents	11.51
Parenthood	Working Mother	12.85
Parenthood	Fit Pregnancy	13.31
Parenthood	FamilyFun	13.54
<b>Parenthood Average</b>		<b>11.54</b>

<u>Editorial Category</u>	<u>Magazine</u>	<u>Volatility Score</u>
Shelter	Home	7.69
Shelter	Family Handyman	8.33
Shelter	Gardening How-To	9.81
Shelter	This Old House	10.94
Shelter	House Beautiful	11.80
Shelter	Country Living	11.91
Shelter	Traditional Home	11.93
Shelter	Southern Accents	12.12
Shelter	Architectural Digest	12.40
Shelter	Handy	13.73
Shelter	Coastal Living	14.21
Shelter	Elle Decor	15.23
Shelter	Metropolitan Home	15.70
Shelter	Veranda	15.85
Shelter	Garden Design	16.54
Shelter	Country Home	17.58
<b>Shelter Average</b>		<b>12.86</b>

<u>Editorial Category</u>	<u>Magazine</u>	<u>Volatility Score</u>
Shelter/Regional	Sunset	8.08
Shelter/Regional	Midwest Living	9.51
Shelter/Regional	Southern Living	10.01
Shelter/Regional	Texas Monthly	14.19
Shelter/Regional	New York Magazine	16.92
<b>Shelter/Regional Average</b>		<b>11.74</b>

<u>Editorial Category</u>	<u>Magazine</u>	<u>Volatility Score</u>
Sports	American Rifleman	6.24
Sports	In-Fisherman	8.64
Sports	Golf Digest	8.67
Sports	Golf Magazine	9.83
Sports	Field & Stream	10.10
Sports	American Hunter	10.23
Sports	North American Fisherman	10.75
Sports	Guns & Ammo	11.05
Sports	Salt Water Sportsman	11.13
Sports	Sporting News	11.58
Sports	North American Hunter	11.92
Sports	Cycle World	11.94
Sports	PGA Tour Partners	12.52
Sports	Runner's World	12.70
Sports	National GeoAdventure	12.87
Sports	Ski	12.89
Sports	ESPN The Magazine	12.90
Sports	Outdoor Life	13.09
Sports	Tennis	13.45
Sports	Skiing	14.34
Sports	Outside	14.48
Sports	Bicycling	14.98
Sports	Sports Illustrated	15.41
Sports	Dirt Rider	15.88
<b>Sports Average</b>		<b>11.98</b>

<u>Editorial Category</u>	<u>Magazine</u>	<u>Volatility Score</u>
Tech/Science	Popular Mechanics	8.64
Tech/Science	Scientific American	8.94
Tech/Science	Popular Science	9.35
Tech/Science	Discover	10.92
<b>Tech/Science Average</b>		<b>9.46</b>

Tech/Video Games	PC Gamer	10.86
Tech/Video Games	Official Xbox Magazine	12.43
<b>Tech/Video Games Average</b>		<b>11.65</b>

Technology	PC World	9.78
Technology	Computer Shopper	9.98
Technology	Macworld	11.10
<b>Technology Average</b>		<b>10.28</b>

<u>Editorial Category</u>	<u>Magazine</u>	<u>Volatility Score</u>
Teen	CosmoGirl	12.50
Teen	Teen Vogue	13.98
Teen	Seventeen	16.50
<b>Teen Average</b>		<b>14.33</b>

<u>Editorial Category</u>	<u>Magazine</u>	<u>Volatility Score</u>
Travel	Travel & Leisure	10.90
Travel	National Geographic Traveler	10.97
Travel	Arthur Frommer's Budget Travel	12.14
Travel	Conde Nast Traveler	14.35
<b>Travel Average</b>		<b>12.09</b>

<u>Editorial Category</u>	<u>Magazine</u>	<u>Volatility Score</u>
Women's Fashion	Marie Claire	9.18
Women's Fashion	Glamour	9.77
Women's Fashion	Cosmopolitan	9.85
Women's Fashion	Allure	10.83
Women's Fashion	In Style	11.21
Women's Fashion	Elle	11.47
Women's Fashion	Lucky	11.49
Women's Fashion	Vogue	16.14
Women's Fashion	W	17.00
<b>Women's Fashion Avg</b>		<b>11.88</b>

<u>Editorial Category</u>	<u>Magazine</u>	<u>Volatility Score</u>
Women's Lifestyle	Martha Stewart Living	8.87
Women's Lifestyle	Real Simple	10.40
Women's Lifestyle	O, The Oprah Magazine	12.17
<b>Women's Lifestyle Avg</b>		<b>10.48</b>

<u>Editorial Category</u>	<u>Magazine</u>	<u>Volatility Score</u>
Women's Service	Redbook	7.65
Women's Service	Better Homes & Gardens	9.33
Women's Service	Good Housekeeping	10.04
Women's Service	Family Circle	11.03
Women's Service	Ladies' Home Journal	11.77
Women's Service	Woman's World	12.74
Women's Service	Woman's Day	13.82
<b>Women's Service Avg</b>		<b>10.91</b>

