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Do Media Consumers Really Dislike Advertising? An Empirical Assessment of a Popular Assumption in Economic Theory[¶]

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Abstract: This paper uses data on the population of German magazines for the period 1973 to 2004 to show that, contrary to conventional wisdom, there is little evidence for magazine readers disliking advertising. Many magazines in fact have readers who appreciate advertising. The degree of appreciation increases in reader age and decreases with income as well as with education.
JEL-classification: C23, L11
Keywords: two–sided markets, advertising, Mean Group Estimation, media markets, nuisance

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1 Introduction

The economics of two–sided markets have recently caught the attention of many economists. Such markets have the property that there are two distinct types of users, each of which wishes to interact on a common platform.

A prototypical example for a two–sided market is the media industry, as first explicitly noticed by Sonnac (2000). Media content producers need to attract two types of consumers: advertisers (who value the medium more the more consumers it reaches) and consumers (who have a (dis–) taste for advertising).

This interdependency creates network effects whose consequences for pricing, efficiency and information supply is in the focus of a rapidly growing body of theoretical papers. Most contributions, for example Anderson (2005); Anderson and Coate (2000); Ambrus and Reisinger (2005); Choi (2003); Crampes et al. (2004); Gabszewics et al. (2004); Kind et al. (2003); Kohlschein (2004); Kremhelmer and Zenger (2004); Peitz and Valetti (2004); Nilssen and Sørgard (2003) and Reisinger (2004) — assume that consumers dislike advertising. Exceptions are Häckner and Nyberg (2000), who assume that readers like advertising in a print media context, and Sonnac (2000), who considers feedbacks from advertising to circulation under the two alternative assumptions of consumer advertising aversion and advertising appreciation.

The present paper econometrically tests the extent to which magazine readers like or dislike advertising. It uses quarterly data on the population of magazines in

the world's second largest print media market in the world (FIPP 2004), Germany, observed between I/1973 and IV/2004.

The main result of this paper is that there is little evidence for readers disliking advertising. On the contrary, a large fraction of magazines has readers who appreciate advertising. Linking the magazine–specific estimates for the extent to which readers (dis–) like advertising shows that readers' attitude towards advertising is the more positive the (i) older consumers are, (ii) the lower their educational level is and (iii) the lower their income is. My analysis does not find a significant relationship between advertising appreciation and the degree of magazine specialization.

2 Empirical approach

2.1 Magazine–specific estimation

My empirical approach is fully flexible with respect to magazine–specific effects of advertising on circulation but completely ignorant with respect to consumer heterogeneity. I adopt a log–linear model for magazine circulation, q_{jt}. Determinants of demand are cover prices, p_{jt},[1] the number of content pages, c_{jt}, and the number of of advertising pages, a_{jt}.

[1]In Germany, subscription prices are very similar to newsstands prices as discussed in Kaiser (2007). I deflate cover prices by the German consumer price index.

My estimation equation of interest is:

$$ln(q_{jt}) = \alpha_j ln(p_{jt}) + \beta_j ln(c_{jt}) + \gamma_j ln(a_{jt}) + \mu_j + \eta_{jt}, \quad (1)$$

where the parameter of interest is γ, the "nuisance" or "utility cost" parameter as it is referred to in the theoretical literature. The subscripts denote magazine j observed at time t, parameter μ_j denotes a time–invariant magazine–specific effect which absorbs all time–invariant magazine "fixed effects" such as magazine periodicity or magazine ownership[2] and η_{jt} is an idiosyncratic error term.

Note that the parameters of interest in Equation (1) are magazine–specific. The long time–series dimension of my data allows me to identify the model parameters without imposing any homogeneity restrictions. The mean of the parameter estimates is the Mean Group Estimate (Pesaran and Smith, 1995). For example, $\alpha_{MGE} = 1/N \sum_{i=1}^{N} \alpha_i$ with a corresponding variance of $1/(N(N-1)) \sum_{i=1}^{N} (\alpha_i - \alpha_{MGE})^2$, where N denotes the number of magazines under consideration.

2.2 Data properties

All explanatory variables in Equation (1) are endogenous and need to be instrumented. My choice of instruments follows Kaiser and Wright (2006) who also estimate the demand for magazines using a subset of magazines considered in

[2]To the extent that the share of different types of content does not vary much across time within magazines, as it is the case for example for women's magazines (Kaiser 2007), the fixed effect also captures magazine content.

the present paper. Their main assumption regarding parameter identification is that (unobserved) cost factors are common across magazines published by a magazine's own publisher and that other (demand–side) shocks are not correlated with these factors, an approach introduced by Hausman (1997). Appendix A details my instrument choice.

For an instrument to be valid it needs to be (i) highly correlated with the endogenous variable and (ii) uncorrelated with the error terms in the equation of interest. The first property is, magazine–by–magazine, checked by running auxiliary regressions of the endogenous variables on the instruments (and the two exogenous variables in the equation, the constant term and a linear time trend). The results show that the instruments are both separately and jointly highly significant for all magazines. The second property is, again magazine–by–magazine, tested by Sargan tests for orthogonality. Orthogonality cannot be rejected for all but one magazine.

Many of the time series of the magazines in my data have unit roots, even if it is accounted for linear time trends. Since my time series under consideration also exhibit substantial seasonality, I estimate Equation (1) in annual differences (i.e. fourth differences in my quarterly data). Differentiation removes the magazine–specific fixed effect, μ_i.

My estimation approach is GMM.

3 Data

I use publicly available data on magazine circulation, cover prices, content pages and advertising pages from URL http://medialine.focus.de. The data spans the period I/1973 to IV/2004, or 128 quarters (periods). This data has been originally collected by "Informationsgemeinschaft zur Feststellung der Verbreitung von Werbeträgern e.V.", the German equivalent to the US Audit Bureau of Circulation.

I discard all magazines that have less than 50 observations in order to enhance the feasibility of the magazine–specific estimates. That leaves me with 105 magazines and 9,052 observations.

4 Results

4.1 Aggregated results

Table 1 displays Mean Group Estimates for the equation of interest, i.e. the mean of 105 magazine–specific coefficient estimates and their corresponding standard errors.

The coefficient on advertising pages is positive and statistically weakly significant. This suggests that assuming consumers dislike advertising may not be an appropriate assumption, at least not in an aggregated context. Kaiser and Wright (2006) as well as Bogart (1989) and Rosse (1980), the latter two for US

newspapers, also find positive effects of advertising on circulation.

Content pages also have a positive effect on magazine demand, the coefficient is, however, imprecisely estimated.

In addition to the overall aggregate results, Table 1 displays Mean Group Estimates for the four largest magazine groups, "Business and politics", "Motor vehicles", "TV" and "Women's yellows". Consumers of "Business and politics" magazines as well as "Women's yellow" magazines appear to appreciate advertising while consumers of magazines from the other two magazine groups are advertising neutral.

4.2 Magazine–specific results

Results summary

Even though the results shown in Table 1 emerge from magazine–specific estimation, they still are aggregates and may therefore not be representative for very magazines. Appendix B hence displays the estimation results for each individual magazine.

Table 2 provides a summary of these magazine–specific results. It shows that 63 percent of all magazine have a positive coefficient on advertising, which means that their readers tend to have a taste for advertising. For 26 percent of the magazines, advertising has a positive and statistically significant effect on magazine demand.

While there is, albeit statistically weak, evidence for readers actually appreciating advertising and much evidence for advertising neutrality, there is little evidence for readers' distaste for advertising: for merely ten percent of all magazine the nuisance parameter is negative and statistically significant.

Magazine groups

To analyze whether or not there are difference in nuisance parameters across magazine segments, I regress the magazine–specific coefficients displayed in Appendix B against dummy variables for all magazine groups that consist of more than three magazines. The estimation results suggest that readers of "PC" magazines, "Adult" magazines and "Parenting" magazines dislike advertising most, a result that also is statistically significant. Readers of "Business and politics", "TV", "Motor vehicle", "Sports", "Women's yellows", "Fitness" and "Popular science" magazines appreciate advertising most, a result that again is statistically significant. For those segments advertising may be informative rather than persuasive.

Reader characteristics

In order to investigate what reader characteristics are related to readers' (dis–) taste for advertising, I regressed the magazine–specific estimates for the nuisance parameter on the share of readers in (i) six different age groups, (ii) six different education groups and (iii) six different income groups. The data used for this analysis refer to 2004 and come from Jahreszeitenverlag (2004). They do only contain information on 83 out of my total of 105 magazines.

The corresponding estimation results suggest that (i) readers below 50 years of age tend to dislike advertising while while readers above that age either appreciate advertising or are advertising neutral, (ii) readers with completed vocational training and at least high school degree dislike advertising while less educated readers tend to have a taste for advertising and (iii) readers with a household income below 1,500 Euro appreciate advertising, readers with an income between 1,500 Euro and 2,500 Euro are advertising neutral and readers with an income higher than that dislike advertising.

Magazine contents

The concentration of magazine content may be related to the magnitude of the nuisance parameter. For example, readers of a highly specialized magazine — say, "Motor vehicle" magazines — may appreciate advertising since it is likely to be informative and very close to the magazine contents. In order to analyze this relationship, I merged the magazine–specific nuisance parameter estimates with data on the share of contents in 21 different content categories that relate to 2004. This data is taken from AGMA (2004) and measured content for example information as the share of fashion pages in the total number of pages.

I construct two types of concentration measures: (i) the Hirshman–Herfindahl index of content concentration and (ii) the share of the single most important content, the joint share of the two most important contents and the joint share of three most important contents in the total number of pages. None of these concentration measures turned out to have a statistically significant effect on the

magnitude of the nuisance parameter.

5 Conclusion

The body of theoretical literature on the economics of two–sided markets is sizeable and steadily growing. A large fraction of that literature considers media markets since they constitute a prototypical example of a two–sided market and assumes that media consumers dislike advertising.

I empirically test this assertion on German consumer magazine data. The main result of my paper is that there is little evidence for magazine readers disliking advertising. On the contrary, 63 percent of all magazines have an audience that appreciates advertising, for 26 that relationship is also statistically significant. By contrast, only 36 percent of the magazines have readers who dislike advertising, an effect that is statistically significant for a mere ten percent of all magazines.

Relating the magazine–specific nuisance parameters to the characteristics of magazine readers shows that (i) advertising distaste decreases in consumer age, (ii) higher education goes along with a stronger distaste for advertising and (iii) higher household income correlates positively with advertising distaste. There is no statistically significant relationship between the degree of magazine specialization and advertising distaste.

Table 1: Mean Group Estimation results for Equation (1)

	Coeff.	**Std. Err.**	**Coeff.**	**Std. Err.**
	All magazines			
ln(cover price)	-0.935***	0.102		
ln(advertising pages)	0.069	0.093		
ln(advertising pages)	0.081*	0.044		
	Business & politics		**Motor vehicles**	
ln(cover price)	-1.059**	0.373	-0.678***	0.170
ln(advertising pages)	-0.500	0.429	-0.203	0.299
ln(advertising pages)	0.318*	0.181	0.084	0.134
	TV		**Women's yellow**	
ln(cover price)	-1.469**	0.536	-0.571**	0.160
ln(advertising pages)	0.124	0.328	-0.032	0.208
ln(advertising pages)	0.222	0.147	0.149**	0.067

Table 1 displays Mean Group Estimation results of ln(circulation) on ln(cover prices), ln(number of content pages) and ln(advertising pages). The coefficients are to be interpreted as elasticities. Estimation is in annual differences. The Mean Group Estimate is the mean of the magazine–specific coefficients. The magazine–specific estimations were performed by GMM. The specifications also include a constant term and a linear time trend. The number of observations (number of magazines) is 9,052 (105) for "all" magazines. All magazine are observed for at least 50 periods. The asteriks *** and * denote statistical significance at the 1 and 10 percent level respectively.

Table 2: Share of magazines with positive, negative or insignificant coefficients on price, advertising pages and content pages (in percent)

	Price	**Content pages**	**Advertising pages**
Positive	1.9	56.1	63.6
Pos. & stat. sign.	0.9	16.8	26.2
Insignificant	66.4	77.6	63.6
Neg. & stat. sign.	32.7	5.6	10.3
Negative	98.1	43.9	36.4

Table 2 displays the share of magazines for which the coefficients on price, advertising pages and content pages is positive, both positive and statistically significant, statistically insignificant, negative as well as both statistically significant and negative.

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Appendix A: identification strategy

The endogenous variables in my model are: cover price, number of content pages and number of advertising pages.

My main assumption regarding the identification of the two demand equations is, like in Kaiser and Wright (2006), that (unobserved) cost factors are common across magazines published by a magazine's own publisher and that other (demand–side) shocks are not correlated with these factors, an approach used by Hausman (1997). This for example implies that cover prices of a publisher's magazines in other segments of the magazine market are assumed to be driven by common underlying costs associated with a publisher's production, distribution and marketing of its magazines to readers. These costs also determine the cover price of a particular magazine, but are assumed to be uncorrelated with the error terms in the product demand equations which is why the average cover price of a publisher's *other* magazines can for example be used as an instrument for cover prices.

I follow the same identification strategy for the number of advertising pages and the number of content pages: common (unobserved) demand factors affect publishers, and these factors are uncorrelated with the magazine's marginal cost shocks. Due to for example better management, some publishers at certain times may be better than others at attracting successful editors, across their whole range of magazines. Successful editors produce popular content that attracts a larger number of readers. Alternatively, a particular publisher may have access to a wider distribution channel than other publishers, resulting in higher demand for all magazines.

Estimation is in annual differences and so are, in general, my instruments. It turned out, however, that many instruments also have explanatory power in predicting the endogenous variable without negatively affecting the orthogonality conditions. In some specifications I therefore use both the differenced instruments and their levels.

As additional instruments I use the ratio of the own price instrument to the mean of the price instruments of the other magazines in the own segment (and likewise for advertising and content pages). These variables measure relative price, content page and advertising levels within segments. It is only used for segments with at least two magazines.

To instrument cover prices I use the following cost–side variables: the pulp and paper price index, the number of titles produced by the own publisher and the number of segments the own publisher is active in. The latter variables are returns to scope cost–side variables.

The magazine–specific list of instruments is very large which is why it is downloadable from URL http://www.ulrichkaiser.com/papers/adlover.html.

Appendix B: magazine–specific estimates

	ln(price)			ln(cont. pages)			ln(adpages)		
	Coeff.	*p*–val.	**Std.err.**	**Coeff.**	*p*–val.	**Std.err.**	**Coeff.**	*p*–val.	**Std.err.**
Women's fashion magazine									
Elle	-0.87	0.68	2.10	-0.95	0.58	1.72	0.50	0.62	1.00
Women's lifestyle magazines									
Cosmopolitan	-0.96	0.01	0.38	0.53	0.00	0.11	0.01	0.94	0.17
Frau im Leben	-0.37	0.72	1.01	0.11	0.59	0.21	-0.46	0.12	0.30
Maxi	-0.04	0.83	0.16	0.17	0.65	0.37	-0.47	0.40	0.55
Petra	-0.08	0.75	0.25	-0.14	0.51	0.22	0.12	0.59	0.23
Women's classical magazines									
Brigitte	-0.14	0.49	0.21	-0.06	0.42	0.08	0.08	0.55	0.13
Freundin	-0.44	0.84	2.23	0.74	0.56	1.28	2.35	0.39	2.73
Für Sie	-2.77	0.60	5.21	-0.95	0.63	1.96	2.03	0.60	3.80
JournalfürdieFrau	-0.15	0.66	0.35	0.09	0.31	0.09	-0.11	0.31	0.10
Women's counseling magazines									
Bella	-1.53	0.41	1.87	0.40	0.09	0.24	0.06	0.95	0.94
Bild der Frau	-0.07	0.94	0.93	-0.26	0.25	0.22	-0.39	0.25	0.34
Tina	-1.57	0.00	0.48	0.01	0.83	0.06	-0.17	0.60	0.32
Interior design magazines									
Das Haus	-0.06	0.69	0.16	0.07	0.10	0.04	0.21	0.07	0.11
Schöner Wohnen	-0.64	0.19	0.49	0.19	0.09	0.11	0.03	0.60	0.06
Wohnidee	-0.72	0.06	0.38	-0.13	0.51	0.20	0.19	0.54	0.31
Zuhause wohnen	-0.13	0.77	0.42	-0.08	0.38	0.09	-0.24	0.38	0.27
Do–it–yourself–magazines									
Selber Machen	-2.32	0.24	1.97	0.36	0.35	0.39	1.73	0.25	1.49
Selbst ist der Mann	-0.34	0.63	0.70	0.17	0.06	0.09	0.23	0.84	1.16
Gardening magazines									
Flora	-0.93	0.07	0.51	-0.04	0.59	0.08	0.22	0.61	0.44
Mein schöner Garten	-0.55	0.63	1.14	-0.22	0.10	0.13	0.41	0.09	0.24
Food magazines									
Essen & Trinken	-0.32	0.76	1.06	0.02	0.87	0.12	0.05	0.80	0.20
Kochen & Genießen	-0.20	0.95	3.41	0.04	0.88	0.23	-1.16	0.47	1.59
Meine Familie & Ich	-0.01	0.97	0.32	0.08	0.41	0.10	0.02	0.85	0.10
Rezepte mit Pfiff	-2.85	0.01	0.99	-0.65	0.01	0.24	3.20	0.00	1.05
Schöner Essen	-0.96	0.32	0.95	-0.50	0.33	0.50	-1.06	0.13	0.70
Women's fitness magazine									
Vital	-0.08	0.81	0.34	0.09	0.36	0.09	0.34	0.10	0.20
Handicraft magazines									
Burda Mode+Magazin	-0.21	0.87	1.27	-0.11	0.54	0.17	-0.04	0.86	0.24
Neue Mode	-0.70	0.09	0.41	0.10	0.31	0.09	-0.17	0.46	0.23
Parenting magazines									
Eltern	-0.29	0.88	1.84	-0.90	0.10	0.54	1.18	0.11	0.72
Leben & erziehen	-0.73	0.77	2.50	-0.23	0.30	0.22	-0.14	0.81	0.58
Spielen und Lernen	-0.37	0.71	1.00	0.03	0.56	0.05	0.20	0.72	0.56
Travel magazines									
Geo Saison	-0.41	0.52	0.63	-0.05	0.74	0.16	-0.23	0.55	0.39
Merian	-0.06	0.94	0.78	-0.21	0.48	0.29	1.00	0.07	0.54
Business and politics magazines									
Börse Online	-3.23	0.11	2.00	1.29	0.00	0.44	-1.62	0.21	1.27
Capital	-0.31	0.26	0.27	-0.12	0.44	0.16	0.20	0.26	0.18
DMEuro	-1.61	0.07	0.87	0.31	0.25	0.27	-0.37	0.48	0.52
Der Spiegel	-0.28	0.62	0.56	-0.02	0.87	0.13	-0.08	0.70	0.20
Der Spiegel	-4.07	0.79	15.03	1.72	0.78	6.22	-4.72	0.79	17.36
Guter Rat!	-0.11	0.68	0.27	0.30	0.01	0.12	1.07	0.00	0.17
Impulse	-0.89	0.01	0.32	-0.18	0.00	0.05	0.13	0.43	0.16
Manager Magazin	-0.71	0.09	0.41	-0.50	0.05	0.25	0.70	0.06	0.36
Quick	-0.28	0.53	0.44	0.28	0.07	0.15	-0.43	0.04	0.21
Stern	-0.14	0.66	0.32	-0.02	0.85	0.08	-0.08	0.22	0.07
Weltbild	-0.74	0.08	0.41	0.58	0.10	0.34	-0.63	0.21	0.50
Wirtschaftswoche	-0.33	0.48	0.46	0.17	0.11	0.10	-0.17	0.15	0.11
Popular science magazines									
Bild der Wissenschaft	-0.09	0.27	0.08	0.03	0.35	0.03	-0.02	0.64	0.04
Geo	-1.50	0.16	1.06	-0.11	0.18	0.08	0.23	0.33	0.24
Kosmos	0.00	1.00	0.61	0.02	0.89	0.14	0.46	0.19	0.34
P.M.Magazin	-2.09	0.01	0.77	0.37	0.05	0.19	-0.44	0.14	0.30
PC magazine									
Chip	-0.13	0.91	1.12	-0.66	0.03	0.30	0.44	0.16	0.31
Motor vehicle magazines									
Auto Bild	-0.35	0.23	0.29	0.37	0.08	0.20	-0.76	0.14	0.50
Auto Motor und Sport	-0.12	0.71	0.31	-0.29	0.35	0.30	0.06	0.75	0.18
Auto Zeitung	-0.11	0.67	0.26	0.20	0.28	0.18	-0.62	0.01	0.24
Gute Fahrt	-1.18	0.08	0.66	0.19	0.44	0.24	1.16	0.00	0.34
Motorrad	-1.54	0.01	0.62	-0.87	0.34	0.91	-0.36	0.43	0.45
Motorrad	-1.71	0.05	0.88	-0.13	0.70	0.34	-0.03	0.81	0.11
Motorrad Reisen & Sport	-0.29	0.67	0.67	0.26	0.42	0.32	-0.50	0.23	0.41
PS-DasSport-Motorrad Magazin	-0.52	0.20	0.40	0.08	0.68	0.21	0.28	0.57	0.48
Rallye Racing	-0.78	0.09	0.46	0.01	0.97	0.17	-0.45	0.13	0.29
Sport Auto	-0.27	0.65	0.58	0.93	0.10	0.56	-1.12	0.21	0.89
mot Autos Test Technik	-0.59	0.10	0.35	0.18	0.04	0.09	0.11	0.57	0.19
Sports magazines									
Sport Bild	-0.86	0.45	1.12	0.23	0.52	0.36	-0.31	0.38	0.35
Surf	-1.30	0.10	0.79	-0.08	0.78	0.29	0.05	0.80	0.20
Tennis Magazin	-2.36	0.00	0.81	0.30	0.24	0.25	0.52	0.13	0.35

	ln(price)			ln(cont. pages)			ln(adpages)		
	Coeff.	***p*–val.**	**Std.err.**	**Coeff.**	***p*–val.**	**Std.err.**	**Coeff.**	***p*–val.**	**Std.err.**
Bild am Sonntag									
Bild am Sonntag	-0.41	0.67	0.95	-0.30	0.09	0.18	-0.36	0.18	0.27
Men's entertainment magazine									
Max	-1.59	0.01	0.57	0.37	0.00	0.12	0.49	0.01	0.19
Music magazines									
Bravo	-0.28	0.86	1.64	0.09	0.58	0.16	-1.16	0.28	1.06
Musikexpress	-0.20	0.48	0.28	-0.49	0.07	0.27	0.86	0.00	0.27
Pop Rocky	-1.24	0.00	0.30	-0.25	0.06	0.13	0.29	0.05	0.14
Popcorn	-1.06	0.35	1.14	0.72	0.00	0.21	2.36	0.41	2.84
Girl's magazines									
Bravo Girl	-1.03	0.44	1.31	0.18	0.01	0.06	0.24	0.11	0.15
Mädchen	-0.70	0.82	3.09	-0.37	0.48	0.52	-1.17	0.49	1.68
TV magazines									
Auf einen Blick	-0.17	0.85	0.88	0.32	0.11	0.20	1.47	0.22	1.18
Bildwoche	-2.20	0.03	1.01	1.20	0.01	0.46	1.88	0.13	1.24
Die Zwei	-1.83	0.00	0.59	0.37	0.07	0.21	0.19	0.79	0.69
Fernsehwoche	-1.90	0.00	0.53	0.28	0.02	0.12	0.03	0.84	0.17
Funk Uhr	-1.47	0.00	0.46	0.02	0.88	0.12	-1.30	0.00	0.44
Gong	-0.48	0.71	1.28	0.31	0.32	0.30	-0.86	0.12	0.54
Hörzu	-5.74	0.29	5.43	-0.63	0.54	1.02	-0.49	0.83	2.33
SuperTV	-0.34	0.08	0.19	0.16	0.00	0.04	0.52	0.07	0.28
TV Hören und Sehen	-0.36	0.80	1.41	0.36	0.36	0.40	-0.85	0.40	1.00
TV Spielfilm	-0.19	0.61	0.37	-0.17	0.19	0.13	0.65	0.05	0.33
Yellow magazines									
Bunte	-1.00	0.09	0.59	-0.13	0.41	0.16	-0.40	0.35	0.43
Women's yellow magazines									
7 Tage	-1.62	0.49	2.32	0.63	0.09	0.36	1.46	0.08	0.83
Das Goldene Blatt	-0.48	0.33	0.48	0.34	0.02	0.14	0.62	0.21	0.49
Das Neue	-1.01	0.35	1.07	-0.11	0.37	0.12	-1.23	0.16	0.87
Das Neue Blatt	-0.48	0.36	0.52	0.27	0.01	0.10	0.49	0.07	0.27
Die Aktuelle	-1.24	0.00	0.40	0.21	0.01	0.08	0.20	0.45	0.26
Echo der Frau	-0.53	0.46	0.72	0.08	0.36	0.08	-0.34	0.31	0.33
Frau aktuell	0.10	0.83	0.46	0.11	0.20	0.08	0.15	0.59	0.27
Frau im Spiegel	-0.26	0.27	0.23	0.22	0.39	0.26	0.06	0.86	0.32
Frau mit Herz	-0.50	0.75	1.59	-0.42	0.66	0.95	-1.10	0.57	1.92
Heim und Welt	-1.12	0.04	0.54	0.26	0.56	0.44	0.60	0.42	0.74
Neue Post	-0.53	0.03	0.23	0.08	0.40	0.09	-0.17	0.00	0.05
Neue Revue	-0.33	0.11	0.21	0.14	0.05	0.07	-0.71	0.02	0.29
Neue Welt	0.58	0.10	0.35	0.13	0.03	0.06	-0.46	0.06	0.23
Adult magazines									
Dasn eue Wochenend	-3.65	0.09	2.11	-0.84	0.02	0.35	-1.67	0.16	1.16
Playboy	-1.87	0.19	1.41	-0.64	0.24	0.54	2.28	0.10	1.38
Praline	-2.16	0.09	1.26	0.17	0.50	0.25	0.46	0.66	1.03
Riddle magazines									
Extra Rätsel	-1.65	0.00	0.34	0.45	0.35	0.47	-0.18	0.97	5.08
Freizeit Revue	-0.04	0.90	0.34	0.13	0.02	0.05	0.26	0.09	0.16
Glücks Revue	-0.55	0.05	0.28	0.40	0.00	0.13	0.73	0.04	0.35
Glücks Rätsel	-2.01	0.00	0.57	-0.24	0.08	0.13	-0.62	0.58	1.12
Pet magazine									
Ein Herz für Tiere	-5.33	0.25	4.58	1.43	0.51	2.15	0.69	0.58	1.24
Photo magazines									
ColorFoto	-1.84	0.00	0.44	0.41	0.22	0.33	0.28	0.42	0.35
fotoMAGAZIN	-0.59	0.63	1.22	0.06	0.81	0.26	0.24	0.78	0.85
Cineastic magazine									
Cinema	-0.37	0.67	0.87	0.76	0.27	0.68	0.64	0.18	0.48