

Competition in Print Newspaper Advertising and Retrospective Study on Stuff/Fairfax's Exits in Free Suburban Newspapers

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- 1 Introduction
- 2 Analysis on Advertising Rates
- 3 Divestiture and Retrospective Analysis

The New Zealand Print Newspaper Industry

The majority of newspapers in New Zealand are:

- Paid dailies: *Dominion Post*, *NZ Herald*
- Paid weekenders: *Herald on Sunday*, *Sunday Star Times*
- Free weeklies: *Eastern Bays Courier* etc.

The majority of which are owned by NZME and Fairfax/Stuff

Independent publishers include: Allied Press (which has recently purchased Star Media, another independent publisher), and a few smaller ones

NZME-Fairfax/Stuff time line

May 2016: NZME and Fairfax applied for permission to merge

May 2017: Commerce Commission published its final determination, declining the application. It mentioned the lessening of competition among free weekly titles

Dec 2017: High Court upheld decision

April/May 2018: Stuff closed 15 free weekly titles; sold 2 others

Sept 2018: Court of Appeal upheld decision

Research Questions

Price is one aspect of competition. We exploit the variation in advertising rate and local ownership to explore competition:

- between overlapping free weeklies
- between an overlapping free weekly and paid daily: is there a marginal advertiser?

Customer **substitution pattern** is another aspect of competition. Presence of substitution helps define the **relevant market** among heterogeneous products

Product exits provide a good opportunity to observe substitution patterns (especially when advertising rates change at less-than-annual frequency)

Summary of Results

For full-page advertisements in free weekly newspapers:

- Overlap with a rival free weekly is associated with significantly** lower advertising rates
- Overlap with a paid daily owned by the same owner is associated with significantly* higher advertising rates per reader

Our preliminary retrospective study results suggest that some advertisers who used to patronize Stuff's closing titles have switched to NZME's surviving titles

The Literature

Most research into the economics of newspaper focuses on: selling price to the public (including price discrimination in subscription), advertising rates, and content. It is a “textbook” two-sided market. Fan (2013) endogenizes all three choice variables

Because the weekly suburban newspapers are distributed freely, we assume that consumers are passive. This makes the analysis of advertising rates easier

Newspaper market in New Zealand:

- Gibbons (2014) examines content differences between publishers
- Molineaux (1995) examines concentration of newspaper ownership

FTC Hearing on Merger Retrospectives

12 April 2019:

<https://www.ftc.gov/news-events/events-calendar/ftc-hearing-14-merger-retrospectives>

Sessions:

- 1 What have we learned from existing merger retrospectives?
- 2 How can merger retrospectives be used to improve prospective merger analysis?
- 3 Should the findings from merger retrospectives influence horizontal merger policy and, if so, how?
- 4 What should the FTC's retrospective program be over the next decade?

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Data sources

From 2017/2018 advertising rate cards:

- Display advertising: full tabloid page
- Display advertising: half tabloid page
- Display advertising: quarter tabloid page
- Classified advertising: column-liner

Rate cards differ in format and specification. We take great care to arrive at comparable rates

Circulation numbers come from Audit Bureau of Circulation (<http://www.abc.org.nz/>)

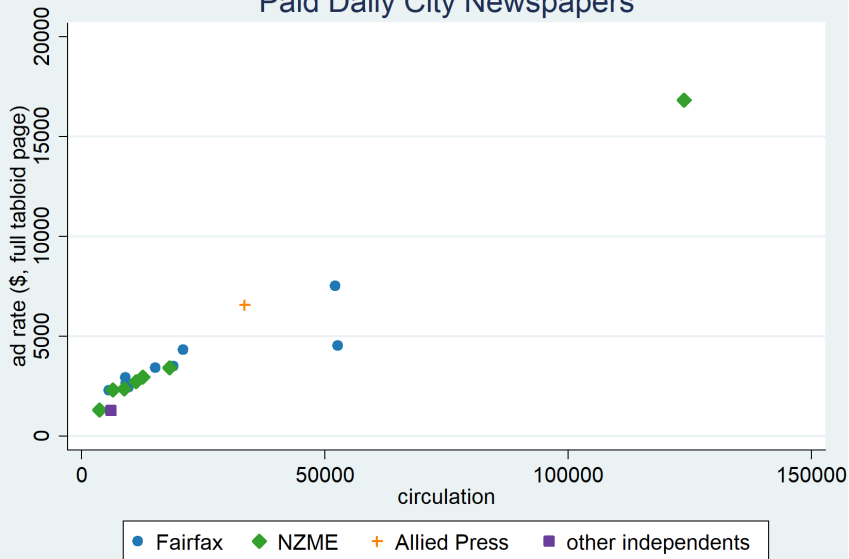
Titles in our dataset

Publisher	Paid	Free	<i>Total</i>
Fairfax	9	52	61
NZME	7	21	28
Allied Press	1	11	12
Star Media	0	7	7
Wellington Suburban Newspapers (WSN)	0	3	3
Wairarapa Times-Age	1	1	2
Times Media	0	2	2
<i>Total</i>	18	97	115

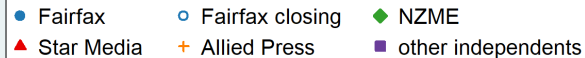
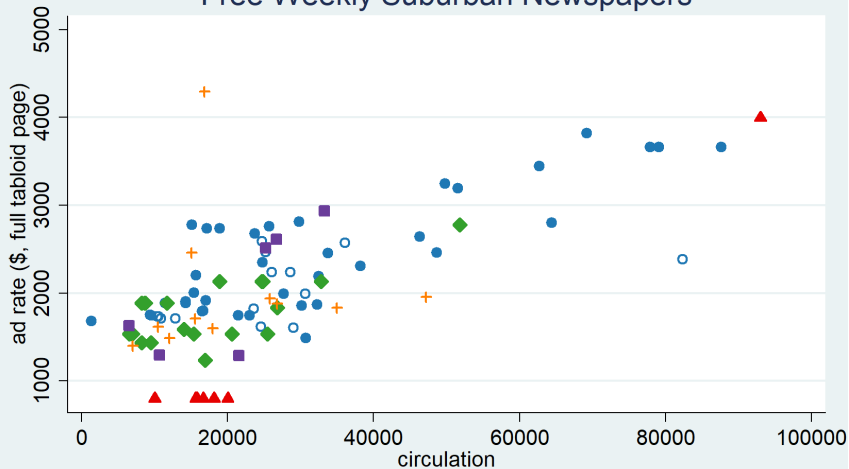
Overlap indicator variables:

with rival paid daily	1	1	1	1	0	0	0	0
with own paid daily	1	1	0	0	1	1	0	0
with rival free weekly	1	0	1	0	1	0	1	0
<i>title count</i>	12	5	25	11	18	18	0	4

Paid Daily City Newspapers

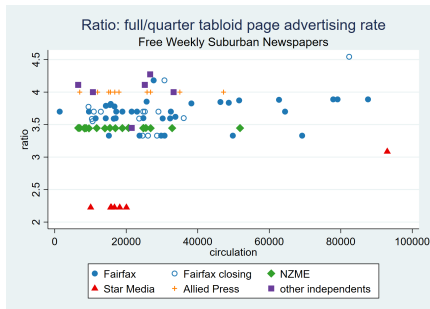
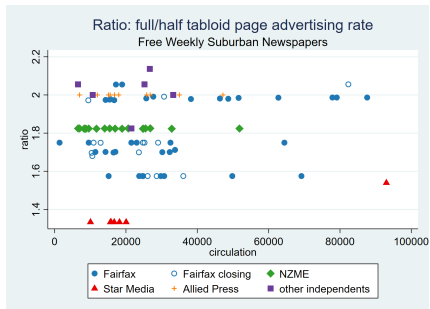


Free Weekly Suburban Newspapers



Full vs. half vs. quarter page rates

- All have strong linear relationship with circulation
- Ad rates are not perfectly proportional to size. Most titles offer a slight size discount:



<i>dependent variable:</i>	Ad. rate (full tabloid page)			Ad. rate (full tabloid page) per circulation		
	(1)	(2)	(3)	(4)	(5)	(6)
Circulation	0.0267*** (0.00291)	0.0267*** (0.00286)	0.0261*** (0.00298)			
Overlap indicator variables:						
With own paid daily	107.1 (136.9)	136.9 (135.2)	129.5 (141.0)	0.0217 (0.0141)	0.0244* (0.0140)	0.0279* (0.0144)
With rival paid daily	-71.92 (136.0)	4.221 (138.4)	17.35 (140.2)	0.00247 (0.0141)	0.00935 (0.0144)	0.00860 (0.0145)
With rival free weekly		-236.9** (113.8)			-0.0214* (0.0119)	
With rival free weekly (by Fairfax)			-302.0** (134.9)			-0.0115 (0.0138)
With rival free weekly (by NZME)			-126.1 (174.0)			-0.0277 (0.0180)
With rival free weekly (by Ind.)			-206.3 (176.0)			-0.0366** (0.0180)
constant	1355.5*** (173.3)	1437.2*** (174.6)	1450.9*** (180.9)	0.0901*** (0.0153)	0.0973*** (0.0157)	0.0955*** (0.0159)
R^2	0.489	0.513	0.519	0.0339	0.0680	0.0897
N	93	93	93	93	93	93

* $p < 0.1$, ** $p < 0.05$, *** $p < 0.01$

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Fairfax/Stuff Divestiture

Feb 2018: Fairfax renamed Stuff; announced intention to sell or close 28 free community titles

May 2018: Stuff sold *Kaikoura Star* (to Greymouth Evening Star Co.) and *Clutha Leader* (to Allied Press). It failed to find buyers for 15 other titles, which closed in April or May

Only 3 of the 15 closing titles were local monopolies. Thus we can keep track of any changes in the surviving titles or affected advertisers

Stuff title	Market	Surviving free titles?
<i>Waiheke Marketplace</i>	Waiheke	—
<i>North Waikato News</i>	Huntly	—
<i>Rotorua Review</i>	Rotorua	<i>Rotorua Weekender</i>
<i>Ruapehu Press</i>	Taumarunui	—
<i>Napier Mail</i>	Napier	<i>Napier Courier</i>
<i>Hastings Mail</i>	Hastings	<i>Hastings Leader</i>
<i>The Tribune</i>	Palm. North	<i>Manawatu Guardian</i>
<i>Wairarapa News</i>	Masterton	<i>Wairarapa Midweek</i>
<i>Christchurch Mail</i>	Chch city	<i>4 suburban titles</i>
<i>Selwyn & Ashburton Outlook</i>	Geraldine	<i>Selwyn Times; The Courier</i>
<i>South Canterbury Herald</i>	Timaru	<i>The Courier</i>
<i>Waitaki Herald</i>	Oamaru	<i>Oamaru Mail</i>
<i>Invercargill Eye</i>	Invercargill	<i>Southland Express</i>
<i>The Mirror</i>	Queenstown	<i>Mountain Scene; The News</i>
<i>NewsLink</i>	Gore	<i>The Ensign</i>

NZME

Wairarapa Times-Age

Star Media

Allied Press

Difference-in-differences Set-Up

Time frame: Nov 2017 to Dec 2018 (inclusive), about 6 months pre-exit and 6 months post-exit

We can only use publishers with:

- sufficient “control” (unaffected) titles in the same period
- all historic issues available online as images

We use 4 NZAE treatment titles, 4 control titles (*Whangamata Coastal News*, *Hamilton News*, *Katikati Advertiser*, *Wanganui Midweek*)

Variables of interest:

- Total number of pages (per issue)
- Number of news stories (per issue)

Ideally, we want accurate measures of “ad space” and “newshole”

Difference-in-difference regression analysis

<i>dependent variable:</i>	Total number of pages	Number of news stories
$\mathbb{1}\{\text{Treatment}\}$	-9.398*** (0.786)	-3.013*** (0.636)
$\mathbb{1}\{\text{Post}\}$	0.0691 (0.776)	0.0318 (0.628)
$\mathbb{1}\{\text{Treatment}\} \times \mathbb{1}\{\text{Post}\}$	2.717** (1.103)	0.394 (0.893)
constant	30.96*** (0.551)	15.14*** (0.446)
R^2	0.329	0.0811
N	459	459

* $p < 0.1$, ** $p < 0.05$, *** $p < 0.01$

Interpretation of Preliminary Results

There is a statistically significant increase in total number of pages (ad space + newshole) among surviving NZME titles that experienced a Stuff title exit

However, they do not show any significant changes in the number of news stories (proxy for newshole)

Thus, we can tentatively conclude that **ad space** increases among surviving NZME titles

Hypothesis: Some advertisers who used to patronize the Stuff title have now switched to the surviving NZME title. This suggests that the two titles were in the **same market** for some advertisers

We can check this by creating a dataset of ads, with advertiser identity, ad size, etc.