

The Newspaper Swap Event in 2017

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1 Introduction

Despite the extensive attention given to daily newspapers due to their comprehensive coverage of national and international news, there exists a significant research gap when it comes to community newspapers in Canada. There is a severe lack of academic papers discussing community newspapers in Canada. However, these local publications hold a critical role in delivering information that is regionally relevant, serving as essential channels for local government activities, advertisements, and fundraising for local projects or elections. Moreover, they possess substantial cultural value as a cherished element of Canadian society. Further, community newspapers face challenges from online news platforms with declining profitability, which has led to closures of many newspapers. A noteworthy example is that Postmedia and Toronto Star swapped dozens of community newspapers in 2014, with most of the swapped paper were shut down as a cost-cutting strategy, leading to reduction of around 244 jobs.

The newspaper industry holds a rich heritage and has historically appealed to older generations who exhibit a lesser inclination towards seeking news online. Additionally, community newspapers play a vital role in areas where internet accessibility is limited, ensuring that residents have access to news sources beyond the online realm. Therefore, it is crucial to acquire a comprehensive understanding of the newspaper swap events that occurred in 2017, as they have led to the significant closure of newspapers, some of which have a rich history spanning several decades. The closures of newspapers in these affected markets not only result in a reduction of local news coverage but are also accompanied by an effort by Postmedia and Toronto Star to avoid direct product competition. This avoidance is achieved through the swapping of newspapers in several markets where both companies operate, ultimately leading to an increased concentration of each company's presence within the affected markets. Consequently, this consolidation raises pertinent questions regarding the impact on circulation and advertising rates in these markets. It is particularly important to investigate whether newspapers owned by these two companies have seen an increase in advertising rates as a result of their increased market power, and whether the consolidation has had negative effects on newspapers operated by smaller companies in the affected markets.

To address these questions, we collected newspaper circulation data from News Media Canada and advertising rate data from Adoreach in Ontario, covering the period from 2013 to 2019. The News Media Canada dataset includes information on circulation areas, operating companies, circulations, and distribution days of each newspaper. We merged this data with the advertising rate data based on newspaper names. Using the circulation area of each newspaper, we determined representative latitude

and longitude coordinates corresponding to their locations. Subsequently, we identified the census subdivisions that encompassed these points and defined the census subdivision in which a newspaper circulates as its market. By analyzing this dataset, we were able to determine the census subdivisions affected by the newspaper swap in 2017 and identify the newspapers operating within those markets. We consider the census subdivision an appropriate market definition for community newspapers, as community newspapers primarily provide news relevant to the local municipality, including government initiatives, fundraising events, and political activities. The term "census subdivision" is synonymous with "municipality" and accurately reflects the scope of coverage provided by these newspapers.

Empirical result: To be done later

Specific Contribution: Motivation was mentioned earlier, more specific contribution to be done after the refinement of empirical result.

2 Data and Summary Statistics

Our study focuses on the newspaper editions. For instance, if a newspaper circulates twice a week, such as on Tuesday and Thursday, it is considered as two separate newspaper editions, each with circulation on its respective day. This definition aligns with the practices of auditing firms that conduct separate circulation audits for each edition. Additionally, treating each edition of a newspaper as a separate entity enhances comparability in terms of weekly circulations. It also accounts for the possibility that each edition may have distinct content and framework. The dataset used in this study covers the period from 2013 to 2019 and includes a total of 595 newspaper editions. Out of these, 372 newspaper editions could be matched to obtain an appropriate advertising rate. The data used in this study is subject to an imbalance resulting from various factors, including the closure and opening of newspaper editions, as well as the decisions of certain newspapers not to subscribe to the membership of News Media Canada during specific years, leading to their exclusion from the dataset. Despite the dataset is not complete, we leverage the richness and comprehensiveness of this dataset to gain valuable insights into the event.

During the event, a total of 39 community newspapers were swapped. Out of these, 33 newspapers were subsequently closed immediately after the swap, resulting in only 6 newspapers continuing their operations under new ownership. To identify the swapped newspapers, we observed their titles from public media sources. We then determined the census subdivisions in which these newspapers were operating. It is worth noting that some newspapers may operate in multiple census subdivisions, and we considered all of those census subdivisions as affected in our analysis.

In total, we found that 36 census subdivisions were affected by the swap events. Additionally, our dataset identified 221 census subdivisions as circulation areas for some newspapers. Among the 39 swapped newspapers, we were able to identify 30 of them in our dataset. Furthermore, our dataset suggests that there are an additional 34 newspapers (excluding the swapped ones) operating under the affected census subdivisions.

Consistent with the industrial report from News Media Canada, our data suggests that the ownership of the newspapers is concentrated among large corporations. Among the 372 newspaper editions in our dataset, 223 of them are owned by either Metroland or Postmedia, which are the two largest

firms in the community newspaper industry.

Regarding the events that occurred, a total of 70 newspaper editions were affected in some way (either swapped or operated under the market affected by the swap). Out of these 70 newspaper editions, 56 of them belong to either Postmedia or Metroland, further emphasizing the dominance of these large corporations in the affected market.

The majority of newspaper editions are available free of charge, although some require payment. Moreover, our dataset includes newspaper editions that have both paid and free circulation. We classify a newspaper edition as "free" if it exclusively had free circulation from 2013 to 2019, "paid" if it solely had paid circulation during that period, and "both paid and free" if it had at least one year with positive free circulation and at least one year with paid circulation. In our analysis, we identified 157 newspaper editions classified as "free," 74 editions classified as "paid," and 140 editions with nonzero paid or free circulation for at least one year.

Figure 1 presents the mean total circulation, which combines the free circulation and paid circulation for each newspaper edition, across different groups over the years. Notably, newspaper editions owned by either Postmedia or Metroland exhibit a consistently higher average circulation compared to other ownership groups. The figure indicates an overall declining trend in mean circulation over the years. However, the mean circulation of newspaper editions in the affected census subdivisions experienced a significant increase after 2017, suggesting a possible reduction in competition within those areas. It is important to acknowledge the potential presence of survival bias, wherein Postmedia and Metroland may have closed newspapers with lower circulations, resulting in an increased mean circulation for the affected census subdivisions.

Figure 2 displays the mean national line rate for each line of advertisement across different groups over the years. As expected, newspaper editions owned by Postmedia or Metroland, which also exhibit higher average circulations, demonstrate a consistently higher rate compared to other newspapers. Notably, the mean rate of newspaper editions owned by Postmedia or Metroland operating in the affected census subdivisions experienced a significant jump after the event in 2017. Although there appears to be an increasing trend in the rate across time for all newspaper editions, this pronounced jump suggests a potential possibility of reduction in competition within those specific areas.

Figure 3 depicts the number of newspaper editions across each year. It is crucial to interpret this figure with caution due to potential data incompleteness. The presence of a newspaper edition in the dataset does not necessarily indicate its closure at a later date. Nevertheless, the data consistently suggests a decline in the number of newspapers over time, aligning with industry discussions on this matter. Irrespective of ownership groups, a declining trend is observed in the number of newspaper editions. The most substantial drop occurs in 2017, and this decline continues from 2018 to 2019.

2.1 Investigation of Survival Bias (Updated: June 18, 2023)

Since the dataset includes all newspaper editions for each year, and calculates the mean circulation and advertising rates annually for each group, it's plausible that the observed surge in mean circulation and rates in the affected markets is attributable to the predominance of Postmedia and Metroland. These media conglomerates, owning most of the newspaper editions, may have closed numerous underperforming editions, pushing up the mean statistics in the affected market.

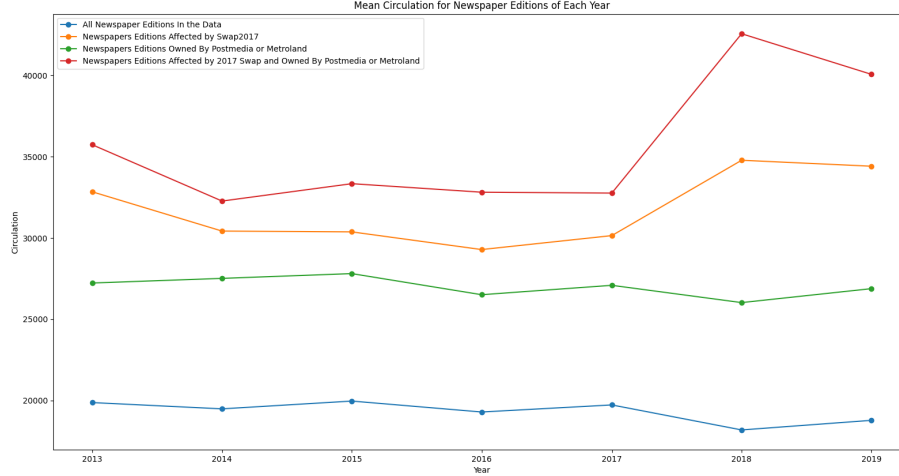


Figure 1: Mean Weekly Circulations Across Year

Closure of poorly performing newspapers leaves only those with high circulation and advertising rates, thereby driving up the mean values in the affected markets. To further analyze this, we have refined the dataset to include only those newspaper editions that were operational before and after the swap events. We plotted the circulation and advertising rates for various groups.

From Figures 4 and 5, it appears that the increase in the mean rates in these affected markets could be attributed to survival bias. When we examine newspaper editions that were operational before 2017 and survived post-swap, we do not observe a significant rise in circulation and rates for editions owned by Postmedia and Metroland in the affected markets. On the contrary, the circulation and advertising rates for these editions are showing a slight decline post-event.

It appears that newspaper editions in the affected markets, not owned by Postmedia and Metroland, have managed to increase their rates and circulation following the event. This suggests a potential ability to fill the vacancy created in the lower-rate range by the closure of underperforming editions owned by Postmedia and Metroland. It should be noted that there are only 3 to 5 newspaper editions, representing a total of just 28 observations, were operational both before and after the event, and are managed by companies other than Postmedia and Metroland. The sample size for this specific subgroup is relatively small.

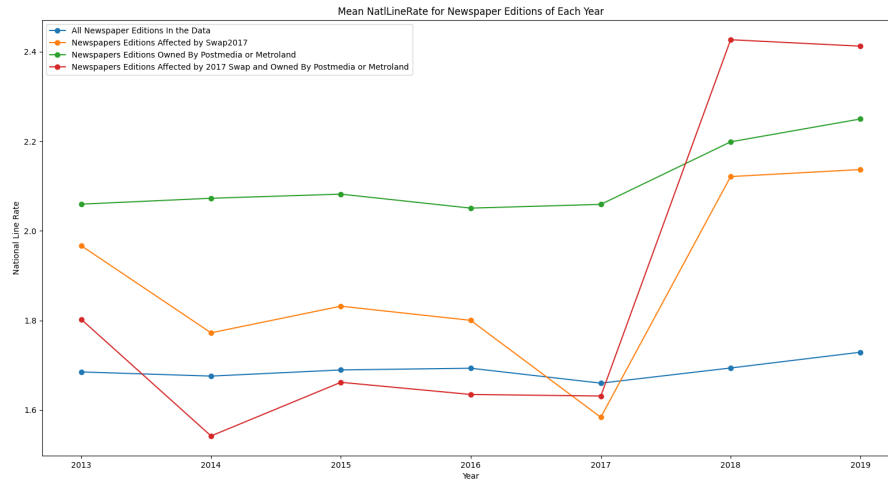


Figure 2: Mean NatlLine Rate Across Year

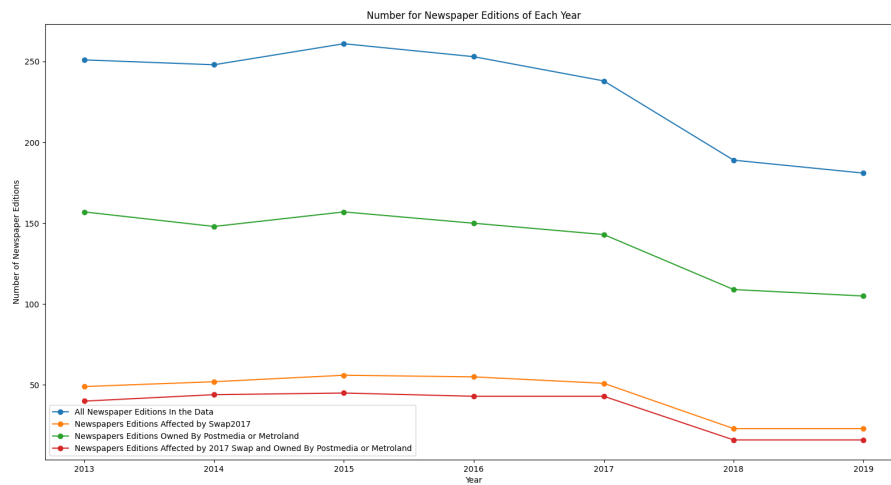


Figure 3: Number of Newspaper Editions Across Year

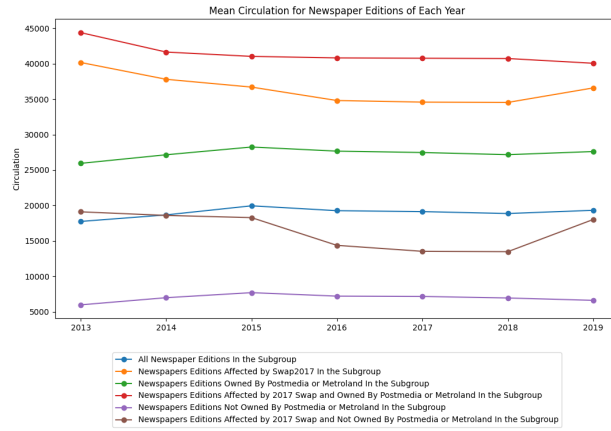


Figure 4: Mean Circulations Across Year For the Newspaper Editions for the Subgroup of Newspapers That Are Operational Both Before and After the Event

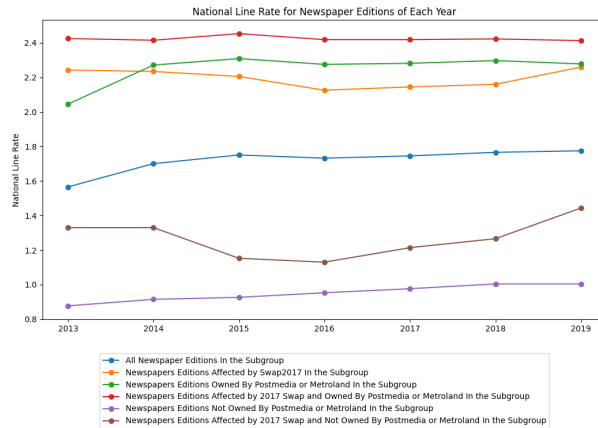


Figure 5: Mean NatlLine Rate Across Year For the Newspaper Editions That Are Operational Both Before and After the Event