

# The Print Newspaper in the Information Age

## An Analysis of Trends and Perspectives

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As the end of the first decade of the twenty-first century sees yet another drop in print newspaper paid circulation and a sharp increase in newspaper operations closures in North America, perceptions of newspapers as a troubled or even agonizing medium continue to arise from the industry, audiences, and media writers alike. There's a perception of the decline in newspaper circulation as a global phenomenon, affecting the newspaper industries of countries all over the world in a similar way, and hard economic times and the increasing popularity of the Internet are often pointed out as main causes. But these conclusions may be too casual. A comparative statistical analysis of economic, technological and media trends for several countries in a representative period of the past decade is presented to show how the industry has actually been performing in the context of different national realities and to provide a context in which several of those perceived behaviours and causal relationships can be tested and analyzed in a scientific way.

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In the period between 2000 and 2009, the Internet shifted from being an “emerging communications technology” to become a mature and widespread mass medium. According to the Internet World Stats website, the growth in the global Internet user base was in the order of 399.3 per cent in the above mentioned period, with the number of users surpassing 1.8 billion by the end of 2009. Accordingly, the perception of the Internet as a medium among people of most countries appears to be one of commanding sustainable rise in comprehensiveness and ubiquity. However, the same cannot be said of the print newspaper. A sense of loss and replacement seems to be associated with this familiar medium as more and more of its original functions and appeal appear to be better delivered by information found online. These two perceptions seem to point to a causal relationship: as the Internet advances, newspapers are replaced by the new medium, losing ground and user base. As reports show a dramatic spike in the number of newspaper operations shutdowns in the early months of 2009 (Yelvington, n.d.), another apparently obvious conclusion can be drawn: the global recession experienced in that period is a main cause of that phenomenon. There is no dispute that the traditional newspaper industry is on the decline in North America – all the numbers of circulation and financial performance seem to support that. But apart from pedestrian perceptions, how much of the print newspaper decline as a mass media is really on a global scale and due to it being replaced by the Internet as the main news outlet and made worse by economic downturns? This study aims to examine these assumed causal relationships.

## Literature Review

### Media and Audiences

*Media effects.* An understanding of the relationship between the mass media and their audiences has been sought by many researchers during most of the 20th century. Mass communication literature has been showing a persistent conflict about how powerful media are in control of culture.

*Uses and gratifications.* The “uses and gratifications theory” is an example of an approach to mass communication that falls under the limited-effects paradigm. This influential tradition in media research in its current form is credited to Elihu Katz, Jay G. Blumler and Michael Gurevitch. The uses and

gratifications theory supports that, rather than being passively affected by media messages, individuals forming the media audiences actively choose and utilize media contents to satisfy their social and psychological needs and obtain personal gratification. The approach, therefore, assumes the audiences to be active, discriminating, and goal-directed, and that the uses made of media messages by the audiences act as intervening variables in the process of effect. Kline, Miller & Morrisson (1974) argue that gratifications sought from the media serve as a deterrent of media content effects. Johnstone (1974) writes that “media can have little or no impact on persons who have no use for them, (...) media fare is selected rather than imposed, (...) particular media offerings are chosen because they are meaningful to the people who choose them”(p. 35).

Brown, Cramond & Wilde (1974) researched the replacement of existing media consumption habits in children by the introduction of television. Initially, they recognize a phenomenon of piecemeal functional displacement based on functional similarities between different media, with a new medium “taking over the job of catering to the needs it is best suited for, pushing to the sidelines those media and activities that previously served them” (p. 95). Later in the research, they argue that television, due to its wide range of content, is a multifunctional medium for the average child. When multifunctionality prevails, the impact is less likely to be restricted to the absorption of a new set of media, but rather to trigger off a complex chain reaction of functional reallocation they called “functional reorganization”, with people restructuring their functional orientations to the media.

### **Newspaper and Mass Media Evolution**

*Broadcasting and the shift to a visual culture.* The early 1920s saw the newspaper industry peak with a household penetration (average daily circulation measured as a percent of households) of 130% (Meyer, 2004) and started to show a steady decline ever since. Another landmark decline in circulation is experienced in the early 1950s when household penetration first went under 100% (Wolff, 2007). It’s probably no coincidence that newspaper performance suffers immediately following the emergence of Radio and TV in the beginning of those two decades. Stephens (2007) writes that “Radio gave newsmonsters back their voices, television restores their faces. Indeed, the television newscast seems to resemble that most ancient of methods of communicating news: a person telling other people what has happened.” (p. 276). Both Radio and TV as mass media brought with them certain inherent biases and new “languages” to be mastered by the audience. However, visual media are nearer to narrative and depend much more upon the episodic (Carpenter, 2007). The audiences of TV are rendered more passive and less interested in subtleties and abstractions. Carey & Kreiling (1974) support that there’s a basic cultural disposition to seek symbolic experience that is “once immediately pleasing and conceptually plausible” (p. 242).

Postman & Paglia (2007) support that literacy poses a challenge for readers, making them dwell in a realm that is “unnaturally silent” and leading to a less physically active life and less developed senses. They point to the fact that people born in a world within a more visual culture (mostly after the advent of television – baby boomers) have a “multilayered, multitrack ability to deal with the world” (p. 287) not present in previous generations.

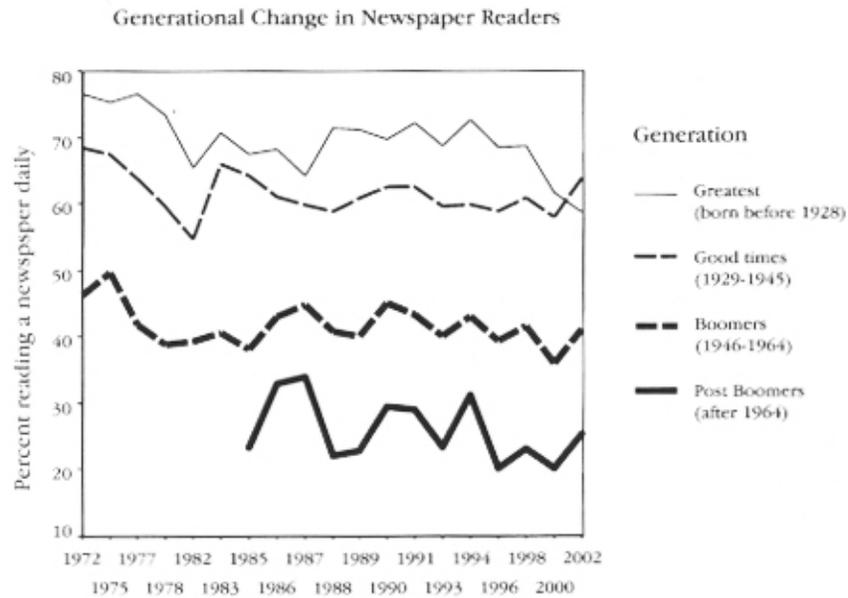


Figure 1. Generational change in newspaper readers – reproduced from Meyer (2004)

*Ownership and business models.* Until the mid-1950s, small family-owned dailies were the norm in the American newspaper industry. These private owners tended to view their papers as local institutions and value a high quality of editorial output (Neiva, 2007). Driven by a sense of social responsibility, private owners of small monopoly newspapers tended to manage their businesses to maximize their influence and central role in the functioning of their communities rather than to increase their fortunes aiming at near-term profitability (Meyer 2004). Most of those private owners settled for reasonable profits in return for the ego boost that went with putting out a quality newspaper and were prepared to accept a weak quarter and a downturn in revenues (Nichols, 2007). This panorama started to change in the period following the end of World War II.

An important development in corporate America in general – not just among media companies - has been the gradual dispersion of ownership from family and friends of the founders to institutional investors. “In 1950, less than 10% of corporate equities in the USA were owned by institutions such as pension funds and mutual funds. “By the turn of the century, institutions controlled about 60%” of those (Meyer, 2004, p. 13).

*A current panorama.* The shift from individual and family ownership to public ownership increased the demand for higher short-term profits. Stockholders and stock analysts with no knowledge or commitment to journalism keep demanding newspaper margins equal than those generated in less turbulent times. (Hickey, 2007). Shareholders demand profit margins that are generally twice the average for other industries, and greet any softness on the bottom line with demands for draconian cuts (Nichols, 2007). Meyer (2004) calls that “Wall Street’s myopic preoccupation with quarter-to-quarter changes” and notes that all the money invested into the industry, either by acquiring the competition or spending in buildings and presses has been cost-justified on the basis of that fat profit margin.

Clamping down on operating costs and budgets can fatten the bottom line and make the company a more attractive takeover target (Hickey, 2007). There’s pressure to create “softer” stories to increase ratings, and trim costs in detriment of news processing. Wilkinson (2009) summarizes by writing that “for debt-ridden companies, there is little long-term thinking; it’s all harvesting”.

## Industry Perspectives in the Information Age

*A survey of current problems.* Statistics pointing to the steady decline in newspaper readership and general circulation in North America in recent years, combined with news of more and more newspaper operations being shut down, don't indicate a good future for the industry, with many even envisioning its complete demise in just a few years ahead. According to Epstein (2007), 80 per cent of Americans once read newspapers, while now less than 50 per cent do. In the 1990's alone, daily readership fell from 52.6 to 37.5 per cent, and from 1999 to 2004, according to the Newspaper Association of America, general circulation dropped by 1.3 million. Dumpala (2009) writes that 105 newspapers were closed in the United States in the first semester of 2009, with a loss of 10,000 jobs. Print ad sales fell 30 per cent in the first quarter of that same year and 23 of the top 25 newspapers reported circulation declines between 7 and 20 per cent. Meyer (2004) notes that newspaper advertising as a share of the GDP fell from 0.7 to 0.5 per cent in the past half-century. Some authors, however, have a less apocalyptic perspective of this phenomenon.

Akin (2009b) shows that there were still more than 1,400 dailies in the United States and 98 dailies in Canada at the end of 2008, "most of which are believed to be profitable, despite the recession". Wilkinson (2009) calls the death of the newspaper "one of the great exaggerations of today's economic downturn". He explains that what's currently happening is that newspaper companies in certain countries like the United States, Canada, United Kingdom and Australia have certain business models and circumstances that make them more vulnerable during a recession time, while newspapers in other countries are not so dramatically affected by it. He differentiates between "less affected" and "more affected" operations based on their business models using the criteria shown on Fig. 2.

Even within the United States, however, a different scenario emerges outside of the big cities. This view is shared by Meyer (2004), when he writes that community newspapers are doing better than metropolitan ones. Plothow (2007) points to how, in spite of how large papers still account for the majority of the national circulation, 96 per cent of all titles published in the country have circulations under 50,000. Owned by smaller companies, small-town newspapers are staffed by younger people who are less burdened by traditional business practices, making them more agile and willing to try new possibilities. Profit margins for community newspapers remain high despite of the recession.

<b>Less affected</b>	<b>More affected</b>
Subscription-based	Single copy-based
Paid newspapers	Free newspapers
Distribution in a tight geography	Distribution in a broad geography
Less than 60 percent of revenue comes from advertising	More than 60 percent of revenue comes from advertising
Low reliance on classifieds in the advertising mix	High reliance on classifieds in the advertising mix
Low debt	High debt
Non-union	Union
Capital expenditures not tied up in print operations	Capital expenditures tied up in print operations
Low penetration of broadband internet	High penetration of broadband internet

Figure 2. More and less affected newspaper business models - from Wilkinson (2009)

*The online news front.* Despite the fact that newspaper readership has been declining since the 1920's, total newspaper circulation in the United States didn't start to decline until 1990, leading to some casual conclusions that the Internet is the problem (Nichols, 2007). It is true that the Internet multiplied the number of available sources of information and provided a convenient and up-to-the-moment access to news, but it's important to examine how exactly the emergence of this new offering is a bad thing for newspaper operations.

Barabási (2004) conducted a research to test the idea that the Internet, because of its instantaneous availability and virtually non-existing costs of publishing and content censorship, embodies a democratic and egalitarian forum where everybody finally gets the same chance – as opposed to the traditional mass media system – to be heard and noticed. The results of that research showed that not to be true. Making information available doesn't guarantee that it will be actually viewed by anybody. He concluded that the topology of the World Wide Web determines that only a small fraction of the billions of documents available online ends up generating significant traffic to actually create an audience. The architecture of the World Wide Web is instead dominated by highly connected nodes he called “hubs”, which are locations or nodes formed in information networks that are extremely visible and referenced by other locations. He elaborates by saying that the domination of the web traffic by hubs is “the strongest argument against the utopian vision of an egalitarian cyberspace” (p.58).

Many authors argue that newspapers, because of their established tradition and credibility as generators of news, are in the best position to dominate the Internet news game by establishing their online versions as the most trusted nodes of news traffic in the web.

Meyer (2004) writes that “newspapers, because of their editorial content and not in spite of it, are positioned to yield more information than any of the substitutes” (p.61), and that an internet-based medium can't easily duplicate their influence. Newspaper analyst Donna Logan (as quoted in Boswell, 2009) describes newspapers as “the foundation of the entire media game”, leading the news agenda and paving the way for other sources. She points that TV, radio and the Internet news are very dependent on newspapers specialized staff, databases, and large newsrooms. Similarly, Nichols (2007) writes that the Internet has yet to emerge as a distinct journalistic force or speak with the same authority of traditional daily newspapers. These “continue to establish the parameters for what gets covered and how”, and that “neither broadcast nor digital media have developed the reporting infrastructure or the level of credibility that newspapers enjoy” (p.177). According to Boswell (2009), The Canadian Newspaper Association says newspapers have managed to maintain a solid presence in their communities in a rapidly shifting media landscape due to their influence in public affairs and trust among citizens.

The online version of the local newspaper is the local news site in most North American cities (LaPointe, 2009). Communities tend, in the long run, to support a single marketplace, to converge on a spot where buyers and sellers are more likely to find each other (Meyer, 2004). Former magazine publisher Mitch Joel (as quoted in Boswell, 2009) mentions that 40 per cent of all Internet traffic goes to newspaper websites. Akin (2009b) examines the dominance of web news by online versions of traditional newspapers in Canada. He points that Canadian newspapers have been successful online precisely because their offline popularity and credibility. Madigan (2007) notes the unchecked, unprofessional, passionate and factless nature of online content. With many questionable news sources on the Internet, a major daily stands out as a trustable one.

Online news is actually complementing the paper instead of replacing it, and can be an opportunity to flourish instead of a threat to survival for newspaper companies (LaPointe, 2009). Readership of the print version of newspapers in Canada remained steady from 2007 to 2008, with over 14 million people (73 percent of the adult population) saying they read a newspaper at least once a week. When you aggregate the print format with the web, newspapers are actually reaching more people than ever before (Akin, 2009b). Making newspaper online versions profitable, however, has proven to be a challenging step.

*How print still appeal.* The nature of the audiences has been changed with new communications technologies, and what is currently seen is an overload in their ability to receive and consider so many messages (Meyer, 2004). Shafer (2007) writes that, even as “the complete gestalt of local, state, national

and international news plus sports, comics, classified, opinion and hints on fashion, home, entertainment, and food” (p.130) offered by a print newspaper remains attractive, many buyers are taking advantage of the web capabilities of “unbundling” the news they want from the news they don’t want.

Significant differences in the quality of the experience provided by the print and online news have also been examined. Meyer (2004) defends that the “catalog function” has been one of newspapers’ strengths in competing with television, that turning the pages to find specific product information, a reader makes the newspaper a good information retrieval machine because you can interact with it. The Internet was able to combine the added appeal of images with this ability to get detailed information. However, outgoing Librarian and Archivist of Canada, Ian Wilson (as quoted in Boswell, 2009) defends that “seeing the information in the disjointed, layered fields of the computer screen too often leads to a “fragmented” world view that the newspaper experience – paper in hand, to be leafed through – surpasses every time”.

### Research Question

Out of the many topics examined in the literature review, four stood out as requiring further examination and were chosen to be addressed and discussed on this document: (1) different countries with different business and media cultures and different levels of government involvement and regulation in the media industry are experiencing different rates of paid newspaper circulation decline; (2) paid newspaper circulation decline is higher in the United States than in Canada; (3) paid newspaper circulation decline is higher in countries with high Internet penetration; and (4) recent acceleration in paid newspaper circulation decline can be attributed to the current economic downturn. All of these topics seem to have in common the fact that they propose the existence of a trend in the context of another. They can also provide a starting point for further discussion around the future of newspapers and the whole mass media scene, especially in North America. For the purpose of providing a methodological framework of this study, the above mentioned four topics are presented as hypothesis to be tested by this research as a means to address our research question “How does print newspaper paid circulation relate to national economic performance and Internet penetration in North America, when compared with that of other countries?”.

### Methodology and Approach

#### Process of Analysis

The period chosen for the data collection (2000-2008) represents almost a full decade, and is representative for including two periods of global economic downturn (2001-2002, precipitated by the events of 9/11, and the beginning of current one, the financial crisis initiated in 2007) and intervening periods of economic upturn, providing context to test the fourth hypothesis (circulation decline vs. economic downturns). Data for 2009 was not yet available as this study was being developed.

Performance indicators of each local national economy were examined to address that fourth hypothesis, but at a local level. The most recognized local stock market indexes were assumed to be benchmark figures that reflect the volume of economic activity and overall economic health of each of the analyzed countries. The end-of-the-year figure is used to represent the performance of the whole year. Periods of local economic downturn and upturn will potentially provide a context for the analysis of the behaviour of newspaper circulation trends.

Internet penetration, defined in this case as the percentage of Internet users in relation to the total population of a country, is an important trend that will help evaluate the third hypothesis (circulation decline vs. Internet advance). Variation in Internet penetration alone may show the pace of adoption of the technology, but can’t inform on media replacement until examined in the context of the variation in newspaper circulation in the same periods.

Finally, total paid newspaper daily circulation numbers were chosen to reflect the newspaper industry's performance for each country. As much as profit and revenue numbers would provide a more accurate picture of this performance, these numbers are not readily available, especially for privately-owned businesses. For the purpose of this study, it was assumed that newspapers will print no more and no less than the demand they encounter for their product and that the print newspaper is their main revenue-generating product. As the study tries to isolate print from other types of revenue the newspaper companies and divisions might be generating, the intention is to validate circulation numbers as a reliable indicator of the financial performance of a newspaper in its "traditional" print form.

### **Justification of Sample**

In total, six countries were selected for analysis, as a means to reflect both the different local cultural habits of media use and the different business models adopted by the local newspaper industries. In that way, the first proposed hypothesis is addressed. Canada and the United States were chosen for local relevance, compatibility with literature examined, and for their similarities (or differences) being the subject of the second of the hypotheses proposed. Even though The Netherlands trail Iceland, Norway and Sweden and is only the fourth country in the world with the highest Internet penetration rate, it was chosen to represent the European scene for being the leader among countries with population above 15 million, a number judged to be a minimum to be truly representative. Japan was chosen to represent the Asian scene for being the country with the five most circulated newspapers in the world. Brazil and India were chosen to represent emerging countries - with one having the highest and the other the lowest rate of Internet penetration of that block - in an attempt to introduce enough contrast to shed light on the third hypothesis. The chosen number of countries (six) also allows for three one-on-one comparisons, with the criteria for the pairing up being a higher similarity or contrast between the two national realities.

### **Findings**

**G**raphs comparing paid newspaper circulation variation to each of the other two trends in each country are shown for a better visualization of how they might relate to each other in each national context, with the raw data and percent variation for these trends provided on Tables 1, 2 and 3. It's important to emphasize that the graphs show exclusively percent variation and not absolute numbers, with any points plotted above the central zero percent line representing an increase in relation to the previous year and points below that line representing a decrease. Furthermore, a causal relationship between paid circulation and economic performance would be defined by a suggested link in their numbers (one increasing as the other also increases), while a causal relationship between paid circulation and economic performance would be defined by an inverse correlation.

### **Statistical Analysis Overview**

As expected, as a reflection of the globalized character of modern international economy, the economic performance of each of the six countries, despite certain local peculiarities, display an overall similar behaviour during the studied period. The two downturn-upturn cycles included in the period are clearly defined in each national reality. Similarly, Internet penetration rates have been going up in all six countries on almost every year of the examined period. This becomes an excellent shared reference, a backdrop against which local differences in circulation trends become more noticeable. Each trend comparison (paid circulation vs. economic performance and paid circulation vs. Internet penetration) will be discussed for each country individually and on a one-on-one basis, with the purpose of facilitating the quantitative approach in detecting contrasts and similarities.

### **Individual country review**

Canada. Paid circulation in Canada keeps decreasing with different rates during the whole period, with a single exception in 2001 when it showed a marginal (0.3%) increase. Although it shows a consistent downward trend, variation in paid circulation shows no direct relation to the country's economic performance (Fig. 4). Paid circulation at times follow the economy, goes in the opposite direction, or remain unaltered in the presence of strong change in economic indicators. A possible relation can only be observed in the significant year of 2008, when both numbers clearly decreased more than in previous years.

Internet penetration rate increase peaked in 2002 (as in most countries examined) at +36 percent with only a slight impact in paid circulation decrease, and has been constantly increasing since then in more moderate rates that somehow could be matched with the decrease rates in circulation, except in 2008, when circulation dropped dramatically (-8 percent) in relation to a steady and moderate increase in Internet penetration of only +3.5 percent (Fig. 5).

United States. Not surprisingly, the behaviour of economic indicators in the United States are, in overview, similar to that in Canada, a reflection of strong trade relations between the two countries. The US displays, however, a higher volatility and suffers more yearly losses than Canada. The variation in paid circulation in the US in the period is also steadily on a moderate decline, but appears to suffer a slightly more direct effect from the economic cycles, as increases and decreases in the trends tend to match up a little bit more (though not maintaining a proportional correspondence) than in Canada (Fig. 6).

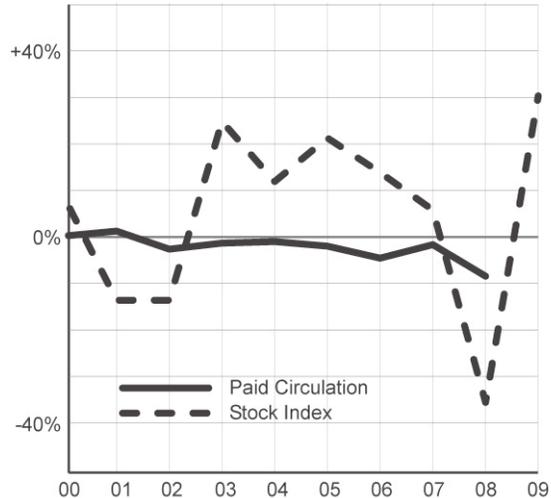


Figure 4. Paid Circulation x Economic Performance in Canada 2000-2009 (percent variation)

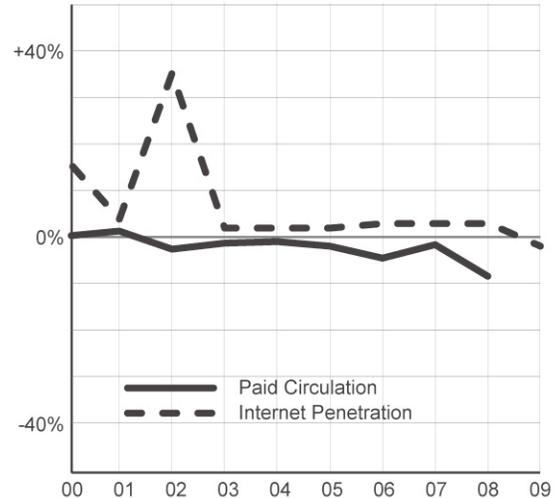


Figure 5. Paid Circulation x Internet Penetration in Canada 2000-2009 (percent variation)

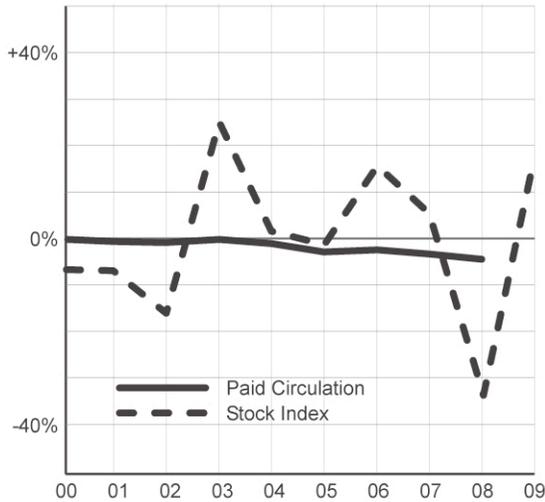


Figure 6. Paid Circulation x Economic Performance in the United States 2000-2009 (percent variation)

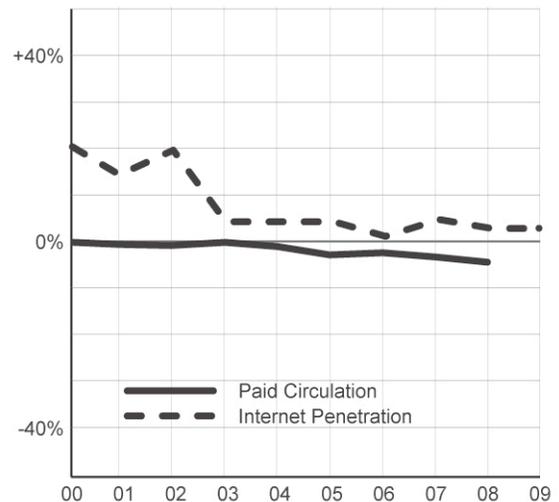


Figure 7. Paid Circulation x Internet Penetration in the United States 2000-2009 (percent variation)

Like in Canada, the consistent increase in Internet penetration rates in the United States is matched by that consistent decline in circulation. On a more year-by-year focus, that behaviour also appear to inversely match that of decrease rates in circulation in most years examined, but with the actual percent variation being different (Fig. 7). The exception here seems to be 2008, with a lower increase in Internet penetration (+3 percent compared to +4 percent in the previous year) seeing a higher decrease in circulation (-4 percent compared to -3 percent in 2007).

*The Netherlands.* Of all the countries examined, the Netherlands are the most affected by periods of economic downturn, with their economic indicators showing the biggest losses in both 2002 and 2008. Paid circulation shows a fairly constant decline during the whole period examined, but with decrease rates actually becoming smaller since 2005. The dramatic swings in the economic health do not reflect in the slight variations in the circulation rates at all, and even show an inverse relation at times, like in 2008, with the circulation decrease rate actually easing (-2.1 percent in relation to -2.9 in the previous year) in the presence of a dramatic (-52 percent) economic loss (Fig. 8).

Internet penetration spiked both in 2002 and 2005 with no considerable effect in the circulation rates (Fig. 9), even though, like in the Canada and United States cases, the overall correspondence between declining circulation and Internet advance is clear during the whole nine-year period. Since 2005, as further increases in the country’s already high penetration rates (in the +70 percent levels) become more difficult, they show much lower increases and even a decrease (as shown in the -1 percent decrease in 2009), while the decrease in paid circulation, as mentioned before, has been easing. This could point to an isolated causal relationship in the absence of other factors.

*Japan.* Japan also displays more dramatic changes in its economic indicators than North American countries, both on downturns and upturns (Fig. 10). Japan entered the 2000’s in the aftermath of its “lost decade” and didn’t really have a period of economic growth before the 2001-2002 downturn.

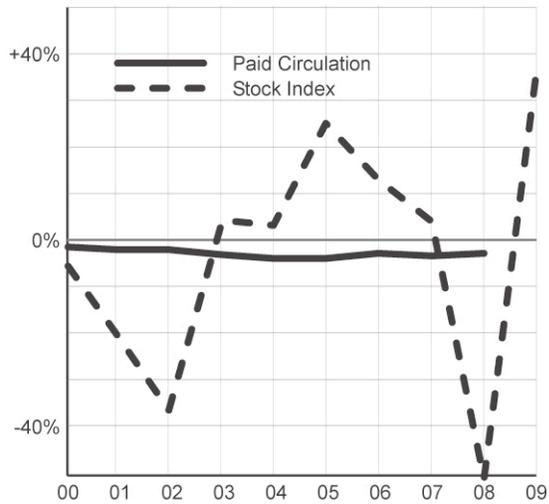


Figure 8. Paid Circulation x Economic Performance in the Netherlands 2000-2009 (percent variation)

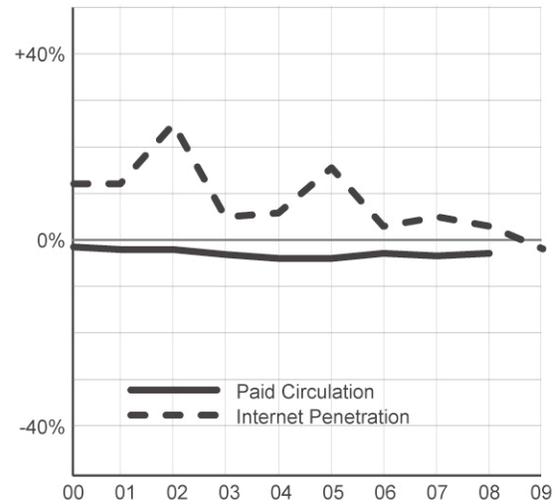


Figure 9. Paid Circulation x Internet Penetration in the Netherlands 2000-2009 (percent variation)

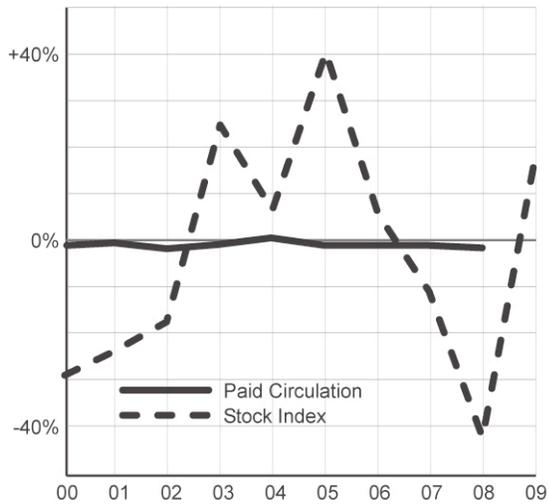


Figure 10. Paid Circulation x Economic Performance in Japan 2000-2009 (percent variation)

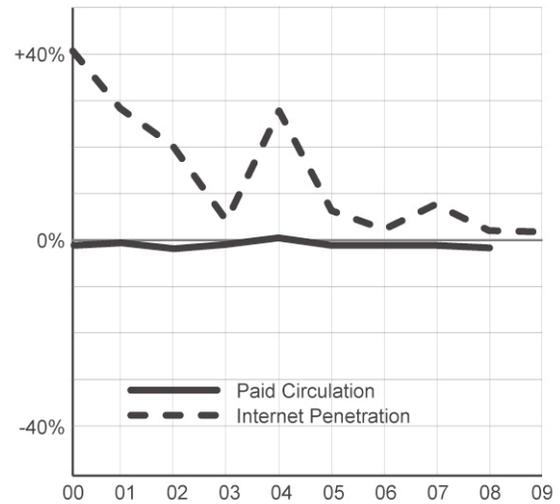


Figure 11. Paid Circulation x Internet Penetration in Japan 2000-2009 (percent variation)

Due to a strong newspaper culture, paid circulation decrease in Japan in the studied period is slow (with variations mostly under -1 percent/year) and interrupted by an isolated period of marginal increase in 2004. No parallels between economic activity and the behaviour of paid circulation can be drawn from a comparative analysis, with their variations sometimes compensating and at times reinforcing each other.

As for Internet penetration, Japan does show the inverse relationship seen in the other developed countries, but not as sharply defined (Fig. 11). As this rate remains increasing very random, paid circulation sometimes responds inversely (as it increases as Internet penetration increase eases from +28 to +7 percent in 2003) or directly (as it also increases as Internet penetration spikes in 2004). This added to the

small variations in the almost flat circulation decline curve don't allow for clear interpretations of yearly correspondence in this case.

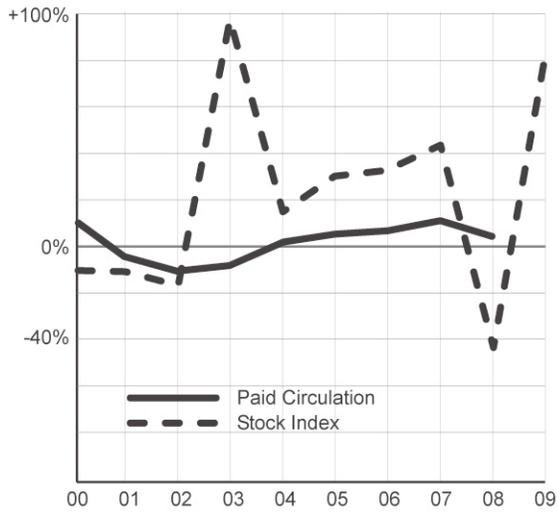


Figure 12. Paid Circulation x Economic Performance in Brazil 2000-2009 (percent variation)

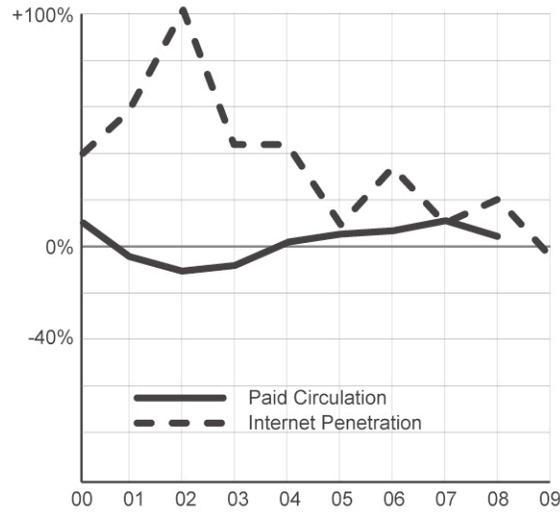


Figure 13. Paid Circulation x Internet Penetration in Brazil 2000-2009 (percent variation)

*Brazil.* Emerging countries show spikes in economic growth during upturns of much higher magnitude than developed countries. Between 2002 and 2007, Brazil's stock market performance has been formidable, including a staggering spike of more than 97 percent in 2003 (Fig. 12). When paid circulation is contrasted with the economic trend, a clear correspondence is found, with the variation in circulation following the variation of the stock index in every year of the period except 2004, when a deceleration in the economic growth (but still representing a positive variation) saw the beginning of an upward trend in circulation. This upward trend is maintained even through the significant year of 2008 (-41 percent economic retraction) with the positive variation easing from +11.8 percent but to a still healthy +5 percent.

Internet penetration also appears to have an impact on circulation in an inverse manner during the whole decade in a year-by-year focus, the only exception being 2005, when a strong deceleration in Internet penetration variation (+10 percent in relation to +44 percent in the previous year) saw circulation increase going up from 0.8 percent to a strong +4 percent (Fig. 13). But in an overall focus, as Internet penetration remains climbing, the shift from decrease to increase in circulation that starts in 2004 is a contradiction to the previous correspondence.

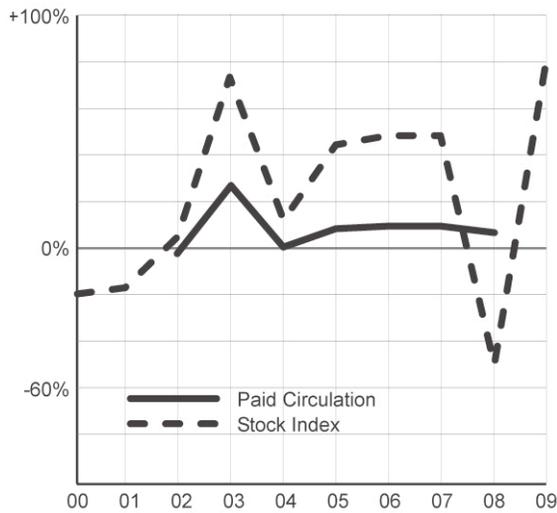


Figure 14. Paid Circulation x Economic Performance in India 2000-2009 (percent variation)

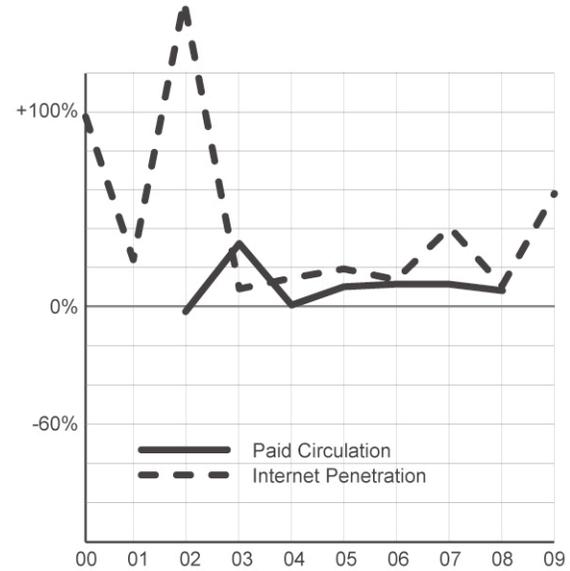


Figure 15. Paid Circulation x Internet Penetration in India 2000-2009 (percent variation)

*India.* India's economic performance during the period is much like Brazil's, with a less strong 2003 compensated by a stronger 2005. Also much like in Brazil's case, the correspondence between the behaviour of circulation variation and that of the economy is clearly defined for every year in the examined period (Fig. 14). There is also an upward trend in circulation that starts with a spike in 2003 at +26 percent and remains up even during the 2008 economic crisis.

The interpretation of the Internet penetration numbers in India requires a relative perspective. Internet penetration rate in India is so low (staying below 3 percent of the population for over much of the period) that a high year-to-year variation may not represent a meaningful increase in the user base, even with the high population numbers considered. Having said that, an inverse relationship between Internet penetration and circulation variations can also be detected in most years, with an exception being detected only in 2005 (Fig. 15).

## Discussion

The first important observation from the data analysis is that the consistent decline in paid circulation seen in the whole examined period by the four developed countries is not shared by the developing countries. Both Brazil and India saw that trend shift to a circulation increase starting in 2004 that remains positive even as their economies decline considerably in the 2008-2009 economic crises. In the comparative analysis, causal relationships between paid circulation and local economic performance also could only be reasonably established for the two developing countries (Brazil and India) but not for the other four.

A similar picture emerges from the comparative analysis of paid circulation and Internet penetration: only in Brazil and India paid circulation shows a significant response to variation in Internet penetration in an inverse way, being reasonably random in the other four countries.

In that way, our first hypothesis, projecting different realities for the newspaper industries in different countries, is judged to be confirmed. Furthermore, the only mechanism of differentiation that could be found was the overall level of economic wealth of the examined countries. Massive cultural differences between the United States and Japan, for example, are not reflected in the similar behaviour of their newspaper industries performance. However, countries with emerging economies, but in context less

wealthy than rich and developed countries like the United States, Canada, the Netherlands and Japan, seem to be experiencing a recent increase in paid circulation of newspaper compared to a continuous decline of those four.

The second hypothesis, suggesting a smaller decline in paid circulation in Canada than in the United States is refuted by the analysis. The paid circulation curve in Canada shows actually a more severe downward variation than in the United States in almost every year of the period, being almost twice as high in 2008. When the analysis was turned to newspaper penetration (circulation per population), for a relative perspective, it was found that this trend also favored the United States in every year of the examined period and the gap has been consistently expanding.

The third hypothesis, proposing a relationship between paid circulation and national economic performance is confirmed in certain countries and refuted in others for the examined period. This relationship is detected in developing countries with emerging economies and not in rich developed countries, suggesting a possible relationship between purchasing power (more affected in poorer countries) and media consumption. It is concluded that this relationship is present in a local level in specific macroeconomic conditions, not being, therefore, a global phenomenon.

Finally, as a causal relationship between paid circulation and Internet penetration variation was found only in developing countries, the fourth hypothesis is judged to be confirmed in a similar way to that of third one: at a local level and related to absolute Internet penetration numbers under 40 percent, as in the case of Brazil and India. At some point above that, the penetration rate appears to reach a critical value that affects circulation in a lesser way.

### **Conclusion**

**C**omparative statistical analysis of variation trends involving economic performance and technological adoption in different national contexts has shown the newspaper industries behaving in a quite local manner, with their evolution during the 2000-2008 period clearly following national patterns of response (or lack thereof) to each other as opposed to the globalized behaviour seen in the world economy today. Furthermore, these local rather than global trajectories appear not to be linked to shared cultural or geographic factors, but to very specific macroeconomic indicators that differentiates them and allows their grouping in certain “blocks” of countries as “developed”, “developing” (or emerging) countries and “underdeveloped” countries.

As for the growth of the Internet as a factor influencing the demand for newspapers, in developed countries - despite a general connection during the whole decade, with the continuous increase in Internet penetration seeing a continuous decrease in circulation - year-to-year variation correspondence between these two indicators is far too random to suggest a causal relationship. Developing countries, on the other hand, despite also been experiencing a rise in Internet adoption throughout the whole decade, have been seeing their newspaper circulations shift from decrease to sustained increase during the period. But in a very interesting way, even in the presence of this apparent contradiction, year-to-year variations match considerably, suggesting a causal relationship in which the pace of variation in paid circulation do respond to the pace of the adoption of the new technology. That suggests that an immediately noticeable impact of Internet adoption on newspaper circulation exist while the absolute numbers are still relatively low, and diminish as they reach higher levels.

Increasingly streamlined newspaper companies have been finding out that, even though that might be a smaller niche, it's one they will continue to dominate. With that niche secure, they have been finding out that their expertise in news generation is a backbone that puts them in the best position to dominate the Internet news market. Barabási (2004) shows how the Internet is a less “democratic” and “equalitarian” medium than most people believe, and traffic will ultimately concentrate around brands with credibility and tradition in news content. As the business models for online media mature from their current insipient state and Internet news profits start to live up to their estimated potential, a likely scenario for the future is Internet news becoming the main product of profitable news operations and providing economic viability to a “print version” of those news to meet the demand from that smaller

ing economic viability to a “print version” of those news to meet the demand from that smaller niche.

As a niche and not the primary source of revenue for news companies, the print version won’t need to make any concessions and will be able to focus on hard news and serious political reporting and editorials without worrying about the bottom line or ratings. This situation in which a less sought-after product is however the most respected and influential one is already experienced by the industry, but in this scenario, its function will be to lend credibility and status to the whole media brand as it continues to produce “softer” products to cater to larger audiences in other platforms. The news industry will see a two-tier audience of news conforming to the Lazarfeld & Katz’s “two-step flow hypothesis”: one formed by highly educated or influential people that can be classified as opinion leaders served by print newspapers and the general public and their more mundane expectations served by less “challenging” media.

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Table 1

Statistical analysis of economic and media indicators in Canada and the United States

	Canada			United States		
	Local financial indicator (S&P/TSX Index)	Internet penetration (users per 100 inhabitants)	Paid daily newspaper circula- tion (thousands)	Local financial indicator (DJIA Index)	Internet penetration (users per 100 inhabitants)	Paid daily newspaper circula- tion (thousands)
2000	8,933 (+5.32%)	42.27 (+16.68%)	5,167 (0.00%)	10,787 (-6.17%)	43.08 (+20.16%)	55,945 (-0.06%)
2001	7,688 (-13.94%)	45.17 (+6.86%)	5,185 (+0.34%)	10,021 (-7.10%)	49.08 (+13.92%)	55,578 (-0.65%)
2002	6,614 (-13.97%)	61.59 (+36.36%)	5,005 (-3.47%)	8,341 (-16.76%)	58.79 (+19.78%)	55,186 (-0.70%)
2003	8,220 (+24.28%)	63.98 (+3.88%)	4,930 (-1.49%)	10,453 (+25.32%)	61.70 (+4.94%)	55,185 (0.00%)
2004	9,246 (+12.48%)	65.96 (+3.09%)	4,911 (-0.38%)	10,783 (+3.16%)	64.76 (+4.95%)	54,626 (-1.01%)
2005	11,272 (+21.91%)	67.92 (+2.97%)	4,799 (-2.28%)	10,717 (-0.61%)	67.97 (+4.95%)	53,345 (-2.34%)
2006	12,908 (+14.51%)	70.36 (+3.59%)	4,573 (-4.70%)	12,463 (+16.29%)	68.93 (+1.41%)	52,329 (-1.90%)
2007	13,833 (+7.17%)	72.85 (+3.53%)	4,675 (-2.23%)	13,264 (+6.43%)	71.83 (+4.20%)	50,742 (-3.03%)
2008	8,987 (-35.03%)	75.43 (+3.54%)	4,295 (-8.12%)	8,776 (-33.84%)	74.00 (+3.02%)	48,598 (-4.22%)
2009	11,746 (+30.70%)	74.90* (-0.70%)	N/A	10,428 (+18.82%)	76.30* (+3.10%)	N/A

Table 2

Statistical analysis of economic and media indicators in the Netherlands and Japan

	Netherlands			Japan		
	Local financial indicator (AEX Index)	Internet penetration (users per 100 inhabitants)	Paid daily newspaper circula- tion (thousands)	Local financial indicator (NIKKEI 225 Index)	Internet penetration (users per 100 inhabitants)	Paid daily newspaper circula- tion (thousands)
2000	637.60 (-5.03%)	43.98 (+12.25%)	4,443 (-0.87%)	13,785 (-27.19%)	29.99 (+40.20%)	71,896 (-0.44%)
2001	506.78 (-20.51%)	49.37 (+12.25%)	4,375 (-1.53%)	10,542 (-23.52%)	38.53 (+28.47%)	71,694 (-0.28%)
2002	322.73 (-36.31%)	61.29 (+24.14%)	4,311 (-1.46%)	8,578 (-18.63%)	46.59 (+20.91%)	70,815 (-1.22%)
2003	337.65 (+4.62%)	64.35 (+4.99%)	4,204 (-2.48%)	10,676 (+24.45%)	48.44 (+3.97%)	70,339 (-0.67%)
2004	348.08 (+3.08%)	68.52 (+6.48%)	4,061 (-3.40%)	11,448 (+7.23%)	62.39 (+28.79%)	70,364 (+0.03%)
2005	436.78 (+25.48%)	79.10 (+15.44%)	3,912 (-3.67%)	16,111 (+40.73%)	66.92 (+7.26%)	69,680 (-0.97%)
2006	495.34 (+13.40%)	80.99 (+2.38%)	3,831 (-2.07%)	17,225 (+6.91%)	68.69 (+2.64%)	69,100 (-0.83%)
2007	515.77 (+4.12%)	84.38 (+4.18%)	3,719 (-2.92%)	15,307 (-11.13%)	74.30 (+8.16%)	68,437 (-0.95%)
2008	245.94 (-52.31%)	86.55 (+2.57)	3,638 (-2.17%)	8,859 (-42.12%)	75.40 (+1.48%)	67,206 (-1.79%)
2009	335.33 (+36.34%)	85.60* (-1.09%)	N/A	10,546 (+19.04%)	75.50* (+1.32%)	N/A

Table 3

Statistical analysis of economic and media indicators in Brazil and India

	Brazil			India		
	Local financial indicator (IBOVESPA Index)	Internet penetration (users per 100 inhabitants)	Paid daily newspaper circula- tion (thousands)	Local financial indicator (BSE/Sensex Index)	Internet penetration (users per 100 inhabitants)	Paid daily newspaper circula- tion (thousands)
2000	15,259 (-10.72%)	2.87 (+40.68%)	7,883 (+10.05%)	3,972 (-20.63%)	0.53 (+96.29%)	N/A
2001	13,578 (-11.01%)	4.53 (+57.83%)	7,670 (-2.70%)	3,262 (-17.87%)	0.66 (+24.52%)	59,129
2002	11,268 (-17.01%)	9.15 (+101.98%)	6,972 (-9.10%)	3,377 (+3.52%)	1.54 (+133.13%)	57,844 (-2.17%)
2003	22,236 (+97.33%)	13.21 (+44.37%)	6,470 (-7.20%)	5,838 (+72.87%)	1.69 (+9.74%)	72,939 (+26.09%)
2004	26,196 (+17.80%)	19.07 (+44.36%)	6,522 (+0.80%)	6,602 (+13.08%)	1.98 (+17.15%)	73,537 (+0.81%)
2005	33,456 (+27.71%)	21.02 (+10.22%)	6,789 (+4.09%)	9,397 (+42.33%)	2.39 (+20.70%)	78,689 (+7.00%)
2006	44,474 (+32.93%)	28.18 (+34.06%)	7,230 (+6.49%)	13,786 (+46.70%)	2.81 (+17.57%)	88,863 (+12.92%)
2007	63,868 (+43.60%)	30.88 (+9.58%)	8,083 (+11.79%)	20,286 (+47.14%)	3.95 (+40.56%)	98,837 (+11.22%)
2008	37,550 (-41.20%)	37.52 (+21.50%)	8,487 (+4.99%)	9,647 (-52.44%)	4.38 (+10.88%)	107,000 (+8.25%)
2009	68,588 (+82.65%)	36.20* (-3.72%)	N/A	17,464 (+81.03%)	7.00* (+59.8%)	N/A

Table 4

*Statistical analysis of demographic and media indicators in Canada and the United States*

	Canada			United States		
	Population (thousands)	Paid daily newspaper circulation (thousands)	Paid daily newspaper circulation (per 100 inhabitants)	Population (thousands)	Paid daily newspaper circulation (thousands)	Paid daily newspaper circulation (per 100 inhabitants)
2000	30,689	5,167	16.83	282,171	55,945	19.82
2001	31,021	5,185	16.71	285,081	55,578	19.49
2002	31,373	5,005	15.95	287,803	55,186	19.17
2003	31,676	4,930	15.56	290,326	55,185	19.00
2004	32,359	4,911	15.17	293,045	54,626	18.64
2005	32,723	4,799	14.66	295,753	53,345	18.03
2006	33,115	4,573	13.79	298,593	52,329	17.52
2007	33,506	4,675	13.95	301,579	50,742	16.82
2008	33,894	4,295	12.67	304,374	48,598	15.96