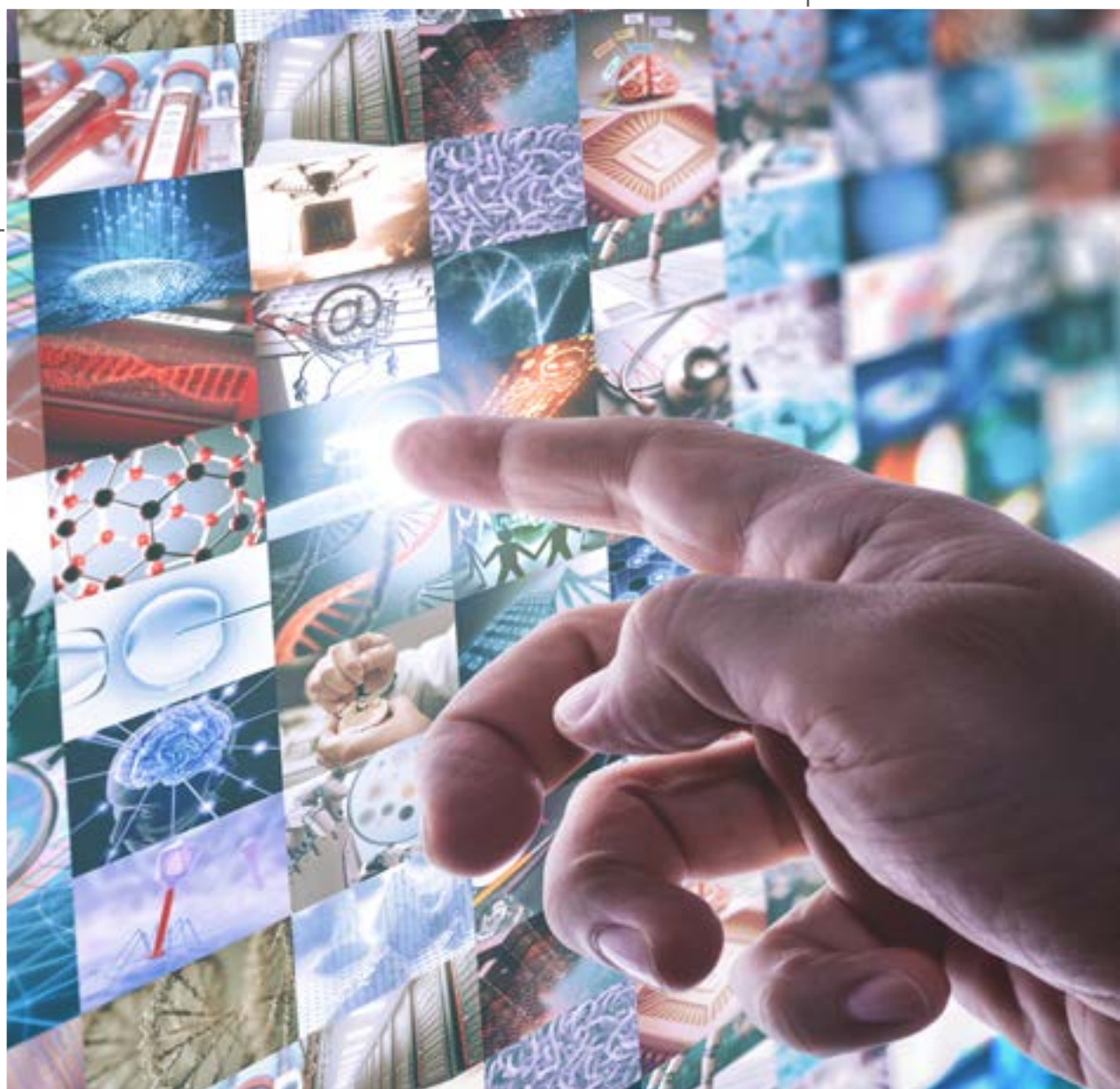


MEDIA AND INTERNET CONCENTRATION IN CANADA, 1984-2017

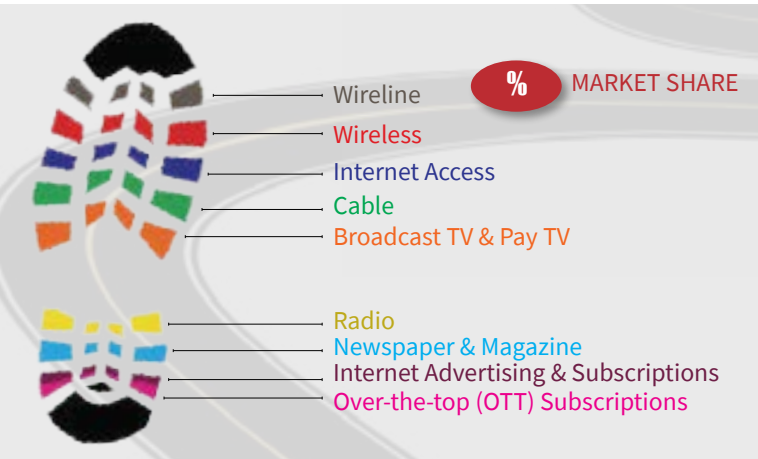
REPORT

DECEMBER 2018 (UPDATED JANUARY 2019)

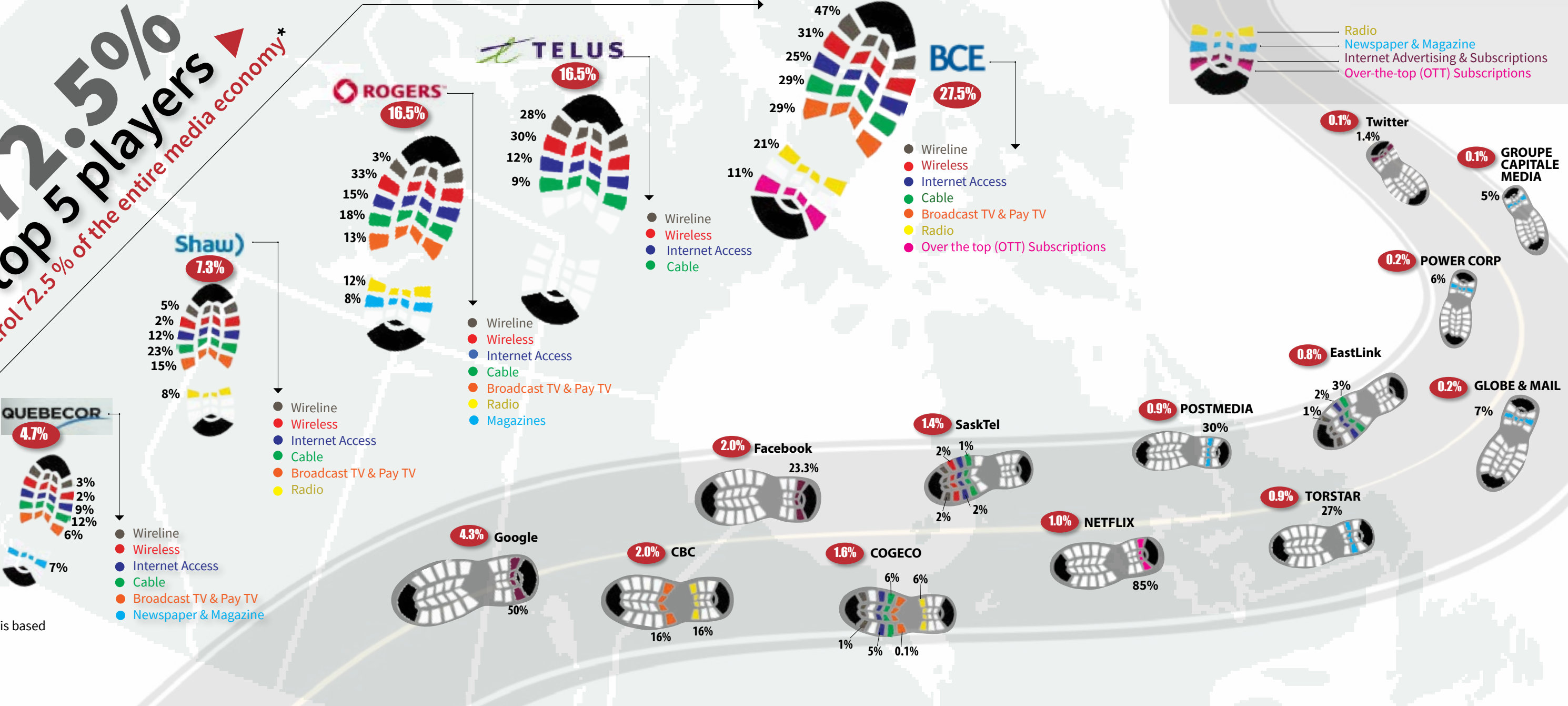
Canadian Media Concentration Research Project
www.cmcrp.org



Canada's Top Media, Internet & Telecom Companies by Market Share (2017)



72.5%
top 5 players
control 72.5% of the entire media economy*



*market share is based on revenue

CONTENT OWNERSHIP:

BELL Broadcast TV & Pay TV CTV (22 stations, 2 affiliates) CTV Two (7 stations, 2 regional cable channels) Animal Planet Bell TV on Demand BNB Bloomberg Bravo! CablePulse 24 (CP24) Câblevision du Nord de Québec inc., Val d'Or Canal D Canal Vie CINÉPOP Comedy Gold News Channel Discovery Channel	Discovery World HD E! (formerly Star! TV) ESPN Classic MTS Video on Demand MTV2 MTV (Canada) Space The Comedy Network The Movie Network The Sports Network (TSN) Z (formerly Ztélé) Leaf TV NBA TV Radio 109 stations in eight provinces, including Virgin Radio,	TSN Radio, Énergie and Rouge FM brands OTT Subscription CraveTV ROGERS Broadcast TV & Pay TV City (6 stations, 1 regional cable channel, 3 affiliates) OMNI (5 stations) FX (formerly FX Canada) FX (Canada) G4 (Canada)Outdoor Life Network (OLN) Rogers on Demand Sportsnet 360 (formerly The Score)	Sportsnet (formerly Rogers Sportsnet) & Hockey Night in Canada Sportsnet One Sportsnet PPV Sportsnet World Viceland Radio 55 stations in five provinces, including Sportsnet brandÉnergie and Rouge FM brands Newspapers & Magazines Maclean's Chatelaine Hello! Canada Key Publishers Co. Ltd.	SHAW Broadcast TV & Pay TV Global (15 stations, 3 affiliates) ABC Spark ACTION BBC Canada BC News 1 Cartoon Network CMT Cooking Channel Cosmopolitan TV Crime + Investigation DejaView D.I.X. Network D'TOUR (TVtropolis) EuroWorld SPORT Food Network Canada	Fyi (Twist TV) H2 (The Cave, Men TV) HGTV Canada History Television La Chaîne Disney Lifetime (Showcase Diva) Movie Time (Lonestar) National Geographic Channel Nickelodeon OWN: The Oprah Winfrey Network Series+ Showcase Slice Telebimbi Teleninos (All Spanish Children's television) Teletoon/Teletoon	TreeHouse TV Univision Canada W Network YTV Shaw on Demand Radio 39 stations in British Columbia, Alberta, Manitoba and Ontario, including Global News Radio brand QUEBECOR Broadcast TV & Pay TV TVA (6 stations, 4 affiliates) Évasion TV5 - Unis Zeste (formerly Cuisine)	addikTV (formerly Mystère) Canal Indigo Casa - (formerly Les idées de ma maison) Illico sur demande Le Canal Nouvelles (LCN) Moi&cie (formerly Mlle) Prise 2 (formerly Nostalgie) TVA Sports YOOPA (formerly TVA Junior) Newspapers & Magazines 7 jours Canadian Gardening	Canadian Living Clin d'oeil Coup de pouce Échos vedettes Elle Canada (51%) Elle Québec (51%) Good Times (50%) Le Guide de l'auto La Semaine Star inc. Star Système Style at Home TV Hebdo Quebecor Media Book Group Groupe Librex POSTMEDIA National Post	Calgary Herald Cornwall Standard Freeholder Edmonton Journal London Free Press Montreal Gazette Ottawa Citizen Regina Leader-Post The StarPhoenix The Vancouver Sun Windsor Star Calgary Sun Edmonton Sun Ottawa Sun Toronto Sun Winnipeg Sun TORSTAR Toronto Star	The Hamilton Spectator Niagara Falls Review Peterborough Examiner St. Catharines Standard Waterloo Region Record Welland Tribune Grand River Valley Record "StarMetro Toronto StarMetro Calgary StarMetro Edmonton StarMetro Vancouver StarMetro Halifax Winnipeg Sun GLOBE & MAIL Globe & Mail	POWERCORP La Press GROUPE CAPITALES MÉDIAS Le Nouvelliste, Trois-Rivières La Tribune, Sherbrooke La Voix de l'Est, Granby Le Soleil, Québec Le Quotidien, Chicoutimi Le Droit, Ottawa/Gatineau
--	--	--	--	---	--	---	--	--	---	--	--

The [Canadian Media Concentration Research](#) project is directed by Professor Dwayne Winseck, School of Journalism and Communication, Carleton University. The project is funded by the Social Sciences and Humanities Research Council and aims to develop a comprehensive, systematic and long-term analysis of the media, internet and telecom industries in Canada to better inform public and policy-related discussions about these issues.

Professor Winseck can be reached at either dwayne.winseck@carleton.ca or 613 769-7587 (mobile).

Open Access to CMCR Project Data

CMCR Project data can be freely downloaded and used under Creative Commons licensing arrangements for non-commercial purposes with proper attribution and in accordance with the ShareAlike principles set out in the International License 4.0. Explicit, written permission is required for any other use that does not follow these principles. Our data sets are available for download [here](#). They are also available through the Dataverse, a publicly-accessible repository of scholarly works created and maintained by a consortium of Canadian universities. All works and datasets deposited in Dataverse are given a permanent DOI, so as to not be lost when a website becomes no longer available—a form of “dead media”.

Acknowledgements

Special thanks to Ben Klass, a Ph.D. student at the School of Journalism and Communication, Carleton University, Lianrui Jia, a Ph.D student in the York Ryerson Joint Graduate Program in Communication and Culture and Han Xiaofei, also in the Ph.D. program at the School of Journalism and Communication, Carleton University. They helped enormously with the data collection and preparation of this report. Ben wrote key aspects of the wireless section. Sabrina Wilkinson, a graduate of the School of Journalism and Communication at Carleton University and currently doing her doctoral studies at Goldsmiths University in the United Kingdom, also offered valuable contributions to the sections on the news media. Agnes Malkinson, another Ph.D. student in the Media and Communication program at Carleton University, is responsible for the look and feel of the reports, and keeps the project’s database in good working order.

Recommended Citation

Winseck, D. (2018, December 11). Media and Internet Concentration in Canada Report 1984 – 2017. Canadian Media Concentration Research Project (CMCRP). [doi:10.22215/cmcrp/2018.2](https://doi.org/10.22215/cmcrp/2018.2).

Executive Summary

This report examines the state of competition in the mobile wireless market, internet access, broadcast, pay and streaming TV services, internet advertising, advertising across all media, newspapers, browsers, online news sources, search, social media, operating systems, etc. in Canada over the period from 1984 until 2017. We call the sum-total of these media “the network media economy”. We then use two common metrics—Concentration Ratios and the Herfindahl-Hirschman Index (HHI)—to determine whether these markets—individually and collectively—are competitive or concentrated.

This year’s report adds a whole new section on advertising spending across all media in Canada, i.e. TV, radio, online, newspapers, magazines and out-of-doors. In addition, and for the second year now, this report delves deeper into the state of competition in local and regional mobile wireless, retail internet access and “cable TV” services. We examine the state of mobile wireless competition where the big three national carriers—Rogers, Bell and Telus—now face strong regional rivals in most provinces across the country from, for example, Videotron (Quebec and Ottawa), Freedom Mobile (Ontario, Alberta, BC), Eastlink (Atlantic provinces) and SaskTel (Saskatchewan).

We show that competition has improved considerably in Quebec, for example, where Videotron has carved out a 13% market share for itself in the mobile wireless market (and about 15% based on subscribers). Since being acquired by Shaw, Freedom Mobile has also expanded its subscriber base from 940,000 in 2016 to 1.1 million last year earlier, while its revenue jumped from \$490 million to \$605 million over the same period. Its share of the national wireless market also jumped from 2.1% to 2.4%, while in Ontario, Alberta and BC where it operates, it has carved out an estimated market share of between 5% and 6%. Nonetheless, however, the big three national carriers’ market share actually increased in 2017, mostly due to Bell’s acquisition of MTS.

Concentration levels are even higher in local retail internet access and cable TV markets, where the legacy cable companies and telecoms operators generally account for 87% and nearly 100% of the market, respectively. In short, there are strong reasons for concern in all these markets. Now is not the time to let up on policy measures that have begun to bear at least some fruit, and perhaps good reason to double-down on them—whether the CRTC will do that, however, is increasingly looking doubtful and mixed messages are coming from other quarters such as the Competition Bureau and Innovation, Science and Economic Development.

We also identify features of the network media economy that set Canada apart from other countries. In this regard, two things stand out: the sky-high levels of diagonal integration and the extremely high levels of vertical integration that exist in this country.

Diagonal integration is where mobile wireless, wireline internet access and cable TV service are owned by one and the same player. In most countries, there are stand-alone mobile network operators (MNOs) such as T-Mobile or Sprint in the US, 3 in the UK and Vodafone whereas in Canada the last stand-alone mobile operator (Wind Mobile) was acquired in 2016 by Shaw.

Vertical integration is where communications companies own media content companies. Current levels of vertical integration are exceptionally high in Canada by both historical standards and international standards. Indeed, the scale of vertical integration doubled between 2008 and 2013 and by 2017, four vertically-integrated communications conglomerates in Canada had come to account for 56% of the \$81.2 billion network media economy: Bell, Rogers, Shaw (Corus) and Quebecor.

As a result, Canada stands alone in the developed world on account of the fact that all of the main TV services in the country, except for the CBC and Netflix, are owned by telecoms operators. In the US, by contrast, while there are also four vertically-integrated behemoths—AT&T, Comcast, Charter (Liberty) and Cox—they accounted for just a third of that country’s mammoth \$1,405 billion (CDN) network media economy in 2017 (adjusted to take account of AT&T’s take-over of Time Warner earlier this year). In the US, like most other countries as well, most broadcast and pay TV services are not owned by telecoms operators—a fact that has extremely important implications, as this report shows.

In sum, high-levels of vertical and diagonal integration are distinguishing features of the network media economy in Canada and they need to be recognized and dealt with accordingly. Indeed, the principle of “common carriage” (popularly known as “net neutrality”) is built for conditions like these—albeit not contingent upon them. As this report suggests, this unique combination of conditions helps explain why internet access, mobile wireless and cable TV services prices are so expensive, data caps low, unlimited options rare and expensive, and the variety of stand-alone internet streaming TV services on offer in Canada so limited.

After declining between 1984-2010, the level of concentration across the network media economy has once again risen over the past decade. This initially took place in fits and starts but there has been a steady rise in concentration across the network media economy as a whole in the past three years. It is also crucial, however, to stress that the dynamics that we observe in this report also differ across time, place and media.

Concentration levels have fallen, for example, in cable TV (when measured locally, but not nationally), internet access (at both the local and national level), wireline telecommunications, broadcast TV and the “total TV marketplace” (the latter, largely because of the growth of internet streaming TV services, especially Netflix) and internet news sources. That said, however, the declines in cable TV and internet access are from very high levels of concentration and they continue to be extremely concentrated despite the modest changes that have taken place.

Concentration levels have risen in mobile wireless services, except in Quebec. This is the most competitive wireless market in the country, and it shows in terms of more affordable rates for several tiers of services not just from Videotron but each of the national carriers competing with it in the province, and higher monthly data allowances. They have also risen in pay and specialty TV services, thereby reversing recent trends, as well as in internet advertising, search, mobile and desktop operating systems, mobile and desktop browsers. This suggests that, far from being immune to consolidation, “core elements of the internet” are highly susceptible to such pressures.

The following figure provides a high-level snapshot of where things stood in 2017 for each media covered in this report on the basis of their respective HHI scores (a measure defined in the report).

Concentration Rankings on the basis of HHI Scores, 2017

Low Concentration	Moderate Concentration	High Concentration
Internet News 262	All TV 1576	Broadcast TV 2584
Magazines 290	Cable/DTH/IPTV (National) 1935	Mobile Wireless 2857
Radio 1020	Newspapers 1876	Wireline 2976
Internet Access (National) 1237	Pay & Specialty TV 1968	Internet Advertising 3149
		Desktop Web Browser 3427
		Desktop OS 3452
		Internet Access (Local)* 4000
		Cable/DTH/IPTV (Local) 5200
		Mobile Web Browser 4177
		Mobile OS 4834
		Social Network Sites 6439
		Search 8408

Like the first report in this series, this report focuses foursquare on Google and Facebook's growing dominance of the \$6.8 billion internet advertising market in Canada. The shift to the "mobile internet" has seen both of them consolidate their grip on internet advertising and attempts to resurrect the "walled garden" vision of the Internet as, for example, Google expands from search into a suite of cloud-based applications (e.g. Google Docs, Calendar, Sheets), the Chrome browser, Android operating system, undersea cables, and data centres around the world. For its part, Facebook's acquisitions of Instagram and WhatsApp in 2012 and 2014, respectively, and similar, albeit less extensive investments in its own data centres and a few underseas fibre optic cables. The sprawling expansion of the internet giants adds up to the two companies—and others, such as Amazon, Apple and Microsoft—building what is tantamount to their own private internets that bring huge volumes of internet traffic as close to the doorsteps, desktops and devices of their users as possible. These activities have huge implications for the very character of the internet as we know it.

Many observers denounce Google and Facebook on the grounds that they are pillaging the revenue that traditional, advertising-based media industries need to support the production of entertainment, journalism and Canadian culture. Our last report, however, cast doubt on these claims, and this one does too by raising and exploring the following points:

1. The \$6.8 billion online advertising market that Google and Facebook dominate is just one part of \$13.6 billion spent on advertising across all commercial media, including television, radio, newspapers, magazines, outdoor advertising, etc. and smaller part yet of the larger \$81.2 billion network media economy in Canada. In sum, while Google and Facebook dominate internet advertising, their dominance does not extend either to the rest of the advertising market and certainly not to the \$81.2 billion media economy in Canada as a whole.
2. While the perception that Google and Facebook are "vampire squids" is not without merit, the more intractable but seldom recognized problem is that total ad spending in Canada appears to be declining on a per capita basis and relative to the national economy. That Google and Facebook are carving out an enormous role for themselves in a shrinking advertising market no doubt puts a sharp edge on the conflict between them and the Canadian firms at the top of the list of biggest commercial media operators in Canada, i.e. Bell, Shaw, Rogers, Postmedia, Torstar, Quebecor, the CBC, etc. The latter, in turn, are intensifying their own efforts to harvest personal data on a vastly greater scale than ever before and clamoring for weaker privacy rules at the same time in the hope that victories on both fronts will enable them to compete with the global internet giants more effectively—a surefire recipe for a race to the bottom between domestic media companies and the global internet giants.
3. Once we look past the advertising-based sectors of the media economy to include those that rely on subscriber fees—the "pay-per media", as we call them—a dramatically different picture than the one usually told emerges. In this alternative and critical account, the biggest players in the network media economy are not Google and Facebook that depend almost entirely on advertising but Bell, Rogers, Telus, Shaw (Corus) and Quebecor which get the lion's share of their revenue from sub-

subscriber fees and connecting people to the internet, mobile phones as well as media content, services and apps of all kinds. In fact, the “big five” Canadian players are far larger than Google and Facebook, based on the latter’s revenues from Canada. In fact, Bell’s revenues, for example, were seven and fifteen times those of Google and Facebook, and twenty-six times those of Netflix, while Google, Facebook and Netflix ranked as the 6th, 7th and 11th biggest media firms in Canada in 2017 based on their estimated revenues within the country.

Additional headlines of this report include:

- the top five companies—Bell, Telus, Rogers, Shaw and Quebecor—accounted for 72.5% of the \$81.2 billion network media economy last year, up from 72.1% the year before;
- Bell is the biggest player in Canada by far—nearly twice the size of its closest rivals, Telus and Rogers—and it single-handedly accounted for 28% of all revenue last year—up by one percent from a year earlier;
- TELUS emerged as the second largest communications and media company in Canada for the first time last year;
- mobile wireless is very highly concentrated with Rogers, Telus and Bell accounting for 92.3% of the sector’s revenue in 2017—up slightly from the year before and reflecting Bell’s acquisition of MTS;
- new entrants Shaw (Freedom) and Videotron’s share of the market ticked upwards to 4.7% in 2017—up from 4.1% the year before;
- the least concentrated mobile wireless market in Canada is in Quebec, where Videotron had 13% market share by revenue and 15% based on subscribers at the end of 2017—which is up by a 1.3% on the basis of revenue and steady based on subscriber share;
- incumbent telephone and cable companies accounted for 87% of the residential retail internet access market in 2017 (i.e. Bell, Rogers, Shaw, Telus, Videotron, Cogeco, Eastlink and SaskTel).
- the quick pace of IPTV growth over the past half-decade means that the “cable monopoly” is long gone. A tight duopoly persists, however, and local markets are extremely concentrated by the standards of the HHI;
- the number of Canadian households with a cable TV subscription fell to 76.1% last year, down from 85.6% at its high point six years ago, but those losses have been largely offset by price increases for cable TV and broadband internet access that have outpaced the consumer price index by large margins;
- combined, Bell and Shaw (Corus) accounted for nearly half of the entire television universe (e.g. television distribution and services) by revenue and possessed a total of 130 television stations and services between themselves in 2017;

- there was a steep rise in TV concentration between 2010 and 2014 but the spin-off of some pay TV services by Bell and Shaw (Corus) and the rise of Netflix and other OTT services has helped turn the tide. The “big 5” TV operators’ took 82% of all TV revenue (including internet streaming) last year—down from 86.3% in 2014 and with a very big change insofar that Netflix has replaced Quebecor as the 5th largest TV operator in the country;
- Netflix’s had estimated revenue of \$820.6 million in Canada last year—up sharply from \$635 million the year before;
- smaller TV operators such as DHX, Stingray, Blue Ant, Channel Zero, APN, V Interactions and CHEK have benefitted from some new openings as well as the divestiture of TV services by bigger players like Bell and Shaw (Corus) However, their combined market share in 2017 was far less than Astral Media’s share alone on the eve of its take-over by Bell in 2013 (7.6%);
- Canadians get their news from a wide plurality of internet news sources, both old (CBC, Postmedia, Toronto Star, CTV) and new (Huffington Post, BuzzFeed), as well as domestic and foreign (BBC, Yahoo!-ABC, Guardian, New York Times);
- The scale of vertical integration amongst the “big 4” vertically-integrated giants in Canada more than doubled from 2010 to 2013. In 2017, Bell, Rogers, Shaw (Corus) and Quebecor accounted for 56.7% of the \$81.2 billion industry—in the US, in contrast, after the AT&T take-over of Time Warner earlier this year, four vertically integrated companies’ accounted for a third of that country’s \$1,405 billion (CDN) network media economy;
- diagonal integration is where mobile wireless, wireline, ISPs and BDUs are owned by one and the same player, and is extensive in Canada as well, whereas in many countries there are stand-alone mobile network operators (MNOs), such as T-Mobile or Sprint in the US, or 3 in the UK, and Vodafone in many countries. The last stand-alone mobile wireless company in Canada—Wind Mobile—was acquired by Shaw in 2016;
- vertical and diagonal integration tend to dampen competition between different ‘modes of communication’, raise prices, limit the size of monthly data caps, promote the use of zero-rating schemes that challenge the precepts of net neutrality (i.e. common carriage), etc. The use of data caps and zero-rating turns carriers into editors, or gatekeepers, and tilts the ‘model’ of the evermore internet- and mobile wireless-centric media universe towards a logic of integration, control and “walled gardens” vs “the open internet”;
- in recent years, the CRTC had rediscovered media concentration and taken steps to do something about it in a series of landmark rulings: e.g. its Mobile TV, Talk TV, regulated wholesale mobile wireless and wireline decisions, and the “zero-rating” decision in 2016 that girded the already strong “Net Neutrality” framework in Canada. Common carriage (or “net neutrality”) is crucial in a context where high levels of vertical integration obtain, although it does not turn on the point. The key question today is about the direction of the Commission under its current chair, Ian Scott, but already evidence is mounting that the Commission will take a far less assertive stance under its new chair than it did under the last one. ■

Contents

Introduction	1
Studying Concentration in the Age of the Internet and “Big Data”: Four Schools of Thought	2
Why Media Concentration Matters, or Who Cares?	9
Methodology: How Do We Know if Media Concentration is Intensifying or Declining?	11
The Historical Record and Renewed Interest in Media Concentration in the 21st Century	15
Three Phases of Telecom, Internet and Media Consolidation	18
Consolidation and the Rise of Vertically-Integrated Telecoms and TV Compa- nies at the Centre of the Canadian Media Universe, circa 2010–Present	22
Vertical Integration in Canada and the United States Compared	26
A Closer Look	31
Competition and Concentration Trends with Specific Media Industries	31
Network Media	32
Mobile Wireless	33
Internet Access	41
Cable, Satellite and IPTV	44
The Content Media Industries	49
Television	49
Divestitures, Spin-Offs and Closures	53
Radio	57
Newspapers	57
Magazines	60
Core Elements of the Internet	61
Internet News	62
Internet Advertising: The case for why Google and Facebook dominate online advertising in Canada	65
Search	67
Social Networking Sites	69
Advertising Across All Media: Do Google and Facebook Really Dominate the World?	70
The Network Media Industries as a Whole	78
Concluding Thoughts	84

Figures & Tables

Figure 1: Mergers and Acquisitions in Telecoms & Media, 1985–2017 (Mill\$)	20
Figure 2: Vertical Integration and the Network Media Ecology, 2010	22
Figure 3: Vertical Integration and the Network Media Ecology, 2017	23
Figure 4: Connectivity vs Content within Canada's Vertically-Integrated Telecoms and Media Companies, 2017 (Ratio by Revenue)	24
Figure 5: Top Telecom-Internet and Media Companies in the US, 2017 (Market Share)	26
Figure 6: Vertical Integration and Cross-Media Ownership -- Canada in a Global Context, 2004 - 2013	29
Figure 7: The Price of Communication Services and Devices vs the Consumer Price Index, 2002-2017	46
Figure 8 CR Scores for Television, 1984-2017	50
Figure 9: HHI Scores for Television, 1984—2017	51
Figure 10: Internet Advertising Outstrips TV Advertising by a Widening Margin, 2004-2017	65
Figure 11: Hitting a Ceiling? Per Capita Advertising Spending for “All Media”, Television and the Internet, 2004-2017 (Real \$)	73
Figure 12: Advertising Spending as a Percentage of Canadian Gross Domestic Income, 2004-2017	74
Figure 13: CR, 1, 4 and 10 Scores for the Network Media Economy, 1984-2017	78
Figure 14: Leading Telecom-Internet and Media Companies in Canada, 2017	79
Figure 15: HHI Scores for the Network Media Economy, 1984-2017	81
Figure 16: Concentration Rankings on the basis of HHI Scores, 2017	83
Table 1: CR and HHI Scores for the Network Infrastructure Industries, 1984 – 2017	32
Table 3, below, illustrates the steady demise of monopoly cable TV and the rise of duopolistic competition between cable companies and telephone companies since 1996.	47
Table 3: The Decline of Monopoly Cable TV: Cable Companies vs Telephone Companies, 1996—2017	47
Table 4: Internet News Sources, 2016-2017	63
Table 5: Internet Advertising: Revenue (Millions\$), Market Shares and Concentration Scores, 2014-2017	66
Table 6: CR4 and HHI Scores for the Search Engine Market, 2009-2017	68
Table 7: Total Advertising Revenue Across All Media, Market Shares and Concentration Scores, 2017	71

Introduction

This is the second of two annual reports that review current developments and long-term trends in the telecoms, internet and media industries in Canada. Building on the [first report](#) in this series that examined the general economic conditions and trends within these industries, this second report zeroes in on another simple but profoundly important question:

have telecom, internet and media markets become more or less concentrated over time and how do we know one way or another?

This question is surprisingly difficult to answer because the issue is highly politicized and good data is hard to come by. As [Philip Savage](#) observed nearly a decade ago, debates about media concentration in Canada “largely occur in a vacuum, lacking evidence to ground arguments or potential policy creation either way”. That still holds true and, in the meantime, the landscape has become incredibly more complex and more difficult to map.

To help address these problems, this report analyzes concentration trends across the largest sectors of the telecoms, internet and media industries in Canada between 1984 and 2017: wireline and mobile wireless, internet access, television distribution (cable, satellite & IPTV), specialty and pay TV, internet streaming TV, broadcast TV, radio, newspapers, magazines, advertising across all media, including internet advertising, search engines, social media, internet news sources, desktop and mobile browsers, and desktop and smart phone operating systems—the core elements of what we refer to as “the network media economy”.

Each of these media sectors is examined on its own, and then they are grouped together into three more general categories: network media industries; media content; and internet media. At the end, they are all grouped together to give us a view of the whole telecoms, internet and media landscape. Two common tools are then used to assess the trends one way or another: concentration ratios (CR) and the Herfindahl-Hirschman Index (HHI).

This research is conducted independently thanks to funding from SSHRC. As part of our mission of contributing to public knowledge and discussion of these issues we make all the data workbooks behind our reports available [here](#) and, for the first time this year, through the [Scholars Portal Dataverse](#)—a project spearheaded by a consortium of university libraries that aims to give scholarly research and writing a reliable home. For a PDF version of our report, click [here](#) (earlier versions can be found [here](#)). Anyone can freely use these reports and data sets for non-commercial and educational purposes based on the Creative Commons license.

Studying Concentration in the Age of the Internet and “Big Data”: Four Schools of Thought

School 1: Gales of Creative Destruction and Free Market Fantasies

As our first report in this year’s series showed, the total size of the network media economy has more than quadrupled in size from \$19.4 billion in 1984 to \$81.2 billion last year. During this period, new segments have been added to our model of the media economy: mobile wireless, internet access, internet advertising as well as pay and internet streaming TV services, for example.

Currently, [four hundred hours](#) of video are uploaded to YouTube every minute; there were about 6.6 million Netflix subscribers in Canada last year (~47% of households); roughly 22 million Canadians had a [Facebook account](#) and many rely on it to [get and share “the news”](#); expert blogs abound and whistle-blowers can and do sometimes set the news and political agenda; millions of websites are a click away; [780 TV services](#) were authorized for service in 2016 and there were 1112 radio stations and [88 paid](#)

[daily newspapers](#),¹ and nearly [three-quarters](#) of Canadians have a smartphone. In sum, it would seem that access to a world of ideas (encompassing the best and the worst humanity has to offer) is just “a click away”. Indeed, Canadians use all kinds of media, information and communications technologies extensively: how can media and internet concentration possibly be a problem in this context of abundance?

In light of these realities, the first, and probably the most prominent, school of thought argues that if there was ever a golden media age, this is it ([Thierer & Skorup, 2014](#)). MIT Professor [Ben Compaine](#) (2005) offers a terse one-word retort to anyone who thinks otherwise: Internet. Media consultant [Ken Goldstein](#) argues that the pressing issue today is media fragmentation, *not* concentration (see [here](#) and [here](#)). It’s time for media companies to bulk up to compete, he thinks.

Large media conglomerates such as [BCE](#) hold similar views. As Bell states in a recent policy intervention, critics allege that media concentration is high, but the evidence “regardless of the metric employed—proves otherwise” ([Bell, para 46](#)). And so, too, do think tanks like the [Montreal Economic Institute](#), [Fraser Institute](#), [MacDonald Laurier Institute](#) and [C.D. Howe Institute](#) flood the marketplace of ideas with reports and policy briefs that, in essence, tell us that studying media concentration in the 21st Century is for dinosaurs.

From this perspective, we are witnessing a battle of “the Stacks”, wherein vertical integration between telecoms companies and TV service providers is an integral and essential part of *dynamic* competition. It is not only to be expected but welcomed because consumers like bundled services, while companies compete intensely not just on individual services but the whole bundle, argue those who hold this point of view. Seen from this angle, any attempt to shackle telecoms and media companies with ownership restrictions will put them at more of a disadvantage as they increasingly compete with global digital media behemoths like Google, Amazon, Apple, Netflix, Facebook, and so on ([Public Policy Forum, 2017](#); [Skorup & Thierer, 2012](#)).

Bell underscores the point in its 2015 [Annual Report](#): “digital advertising revenues . . . [were] lower . . . due to [the] continued shift of advertising dollars to global players like Google and Facebook” (p. 68). In this view, competition is now occurring across the entire digital media and services ecosystem and this is not time constrain ownership consolidation or structural integration across industry lines ([Eisenach, 2016](#)).

As proponents of this view see things, in the “digital ecosystem” there are telecoms operators on one side and “the Stack”^[1], on the other, ruled by Google, Amazon, Facebook, Apple and Microsoft (GAFAM). Cast in this light, each set of players has moved up and down the stack and are diversifying their operations by moving into wholly new areas like data centres today and the Internet of Things tomorrow. Their activities now

1 [Newspaper Canada redefined](#) daily newspapers in 2014 as those that are published a minimum of four times a week and free daily papers such as the Metro papers available in large Canadian cities versus the traditional definition of every day of the week, except in some cases Sunday, as has long been the standard in the industry. The number reported here is for paid dailies that publish at least four times a week. In 2016, the newly renamed News Media Canada stopped publishing circulation figures altogether because its members could no longer agree on what should count toward them and what should not.

include not only popular search engines, social media sites, streaming TV, film and music services, online retail options, and software but a hierarchically organized stack that also includes, for instance, operating systems (e.g. Android, iOS), data centres (Amazon Web Service, with Microsoft's Azure, Apple's own data centres, Google Cloud), and even the fibre optic cables—overland and underseas—that carry much of the world's internet traffic. In some ways, Netflix exemplifies the sea changes taking place given that it [depends heavily](#) on all of these sub-components of the world's data infrastructure to meet its gargantuan-scale needs for data transmission and storage to bring its services as close to its subscribers' doorstep, desktop and the more than 800 devices they use to access its "TV" service. Amidst this "battle of the stacks", many in this first school believe that focusing on "telecoms" and "media" is akin to seeing the future through the rearview mirror. We disagree but also fully accept that there is much work to be done in capturing and comprehending the radical transformations that are now taking place.

[Think tank scholars](#) and corporate consultants such as Jeffrey Eisenach who tout these ideas together with a radical brand of free market fundamentalism are also being regularly flown into Canada for industry conferences and as hired experts at CRTC hearings (see [here](#)). While such ideas were once the preserve of right wing, fringe institutes in the US they were swept into power during the 2016 presidential election as Eisenach and a few others were brought in as telecoms policy advisors to the Trump Administration. And those ideas are also being woven into the circuit of respectable views in this country for the reasons just observed (also see [here](#)). Such views have even made odd-bed-fellows with a kind of resurgent [cultural nationalism](#) in Canada among many people and interest groups in the "creative industries" who fear—not without cause—the internet hyper-giant juggernaut.

The lobbying agenda around these issues been intense in recent years and is especially so at present given that all of the major pieces of legislation underlying this domain are now up for review and likely renewal, for example: the *Telecommunications Act*, the *Broadcasting Act*, the *Radiocommunications Act*, the *Copyright Act* and the *Personal Information Protection and Electronic Documents Act*. Now at the end of their useful lifespan of twenty- to twenty-five years, each of these acts will likely be replaced within the next few years by a new generation of laws that will set the legal foundations for the next quarter-of-a-century or so, i.e. to 2050 or so. Not surprisingly, there is a battle royale of ideas, evidence, lobbying and brute political and economic power now waging over what this future should look like.

The [C.D. Howe Institute](#), for instance, and not surprisingly given the roster of telecom industry representatives in its ranks, is urging the Government to unshackle the telecoms-internet and media operators so that they are better able to compete amongst themselves and with the global internet giants. Whatever dominance they might already have, or gain in the near future, will be transitory, they say, channeling the ideas of Joseph Schumpeter ([1943](#)). Old laws need to be dismantled and new ones fit for new times adopted, they and kindred spirits urge. The C.D. Howe Institute is also of the view that whatever regulatory oversight remains should be informed by the general principles of competition law, while the CRTC's sails need to be trimmed—a view the conveniently

washes away any of the distinct characteristics of communication and the central role it and the media generally play in people's lives and a democratic society, over and above their economic significance.

A recent [MacDonald Laurier Institute report](#) by former CRTC Vice Chair Len Katz and Institute senior fellow Sean Speer also exemplifies this stance. The consequences of not sweeping away the regulatory legacy of the past could jeopardize the incumbents' attempts to invest in our future, they argue, and whatever gains consumers might achieve in doing so will be lost down the road as the next generation of broadband capabilities and a new era of television and entertainment are sacrificed on the altar of short-term pandering and populist politics (see e.g. [the Fraser Institute](#), [Montreal Economic Institute](#), [C.D. Howe Institute](#), [MacDonald Laurier Institute](#)).

Seen from another angle, however, these reports' intransigent rhetoric of futility, perversity and jeopardy sounds a lot like the "rhetoric of reaction . . . in which conservative public figures, thinkers, and polemicists have been arguing against progressive agendas and reforms for two hundred years" ([Hirschmann](#)). Rather than contributing to a genuine discourse about the relationship between markets, business and economics, their real goal seems to be aimed toward disarming governments from doing what they are supposed to do: govern in the public interest.

School 2: Media Ownership and Media Bias, By the Numbers

A second school of thought quantitatively analyzes reams of media content to see how changes in media ownership might affect content, particularly in relation to the issue of bias. This body of research is often driven more by the ideological predilections of its practitioners, however, with those on the left typically finding that ownership consolidation reinforces a conservative bias in the media while those on right find that consolidation empowers media conglomerates to achieve laudable economic and democratic goals. The best of this kind of research tends to find that the evidence on the matter is "mixed and inconclusive"—a result that has stayed remarkably consistent for decades ([here](#) and [here](#)).

To my mind, however, reducing the questions to whether concentration plays to good or ill "effects" on media content is like trying to draw a camel through the eye of a needle. Even the most judicious of such research proceeds as if change in *content* is the only concern worth reflecting on or, as [Todd Gitlin](#) put it in a classic essay on media effects research decades ago, perhaps "no effect" might be better seen as preserving the status quo? If so, that fact that there is no change in media content attributable to changes in media ownership might be a problem in its own right because it signals that the status quo is preserved regardless of who is in charge.

School #3: Radical Criticisms of Media Concentration and the Threat to Democracy

A third school of thought emerges out of the work of critics who see media, internet, wealth, and corporate concentration as being corrosive forces in society and a threat to

democracy. [Robert McChesney \(2014\)](#) is one of the best known voices from this point of view. He does not deny that the digital revolution is changing the world, but instead emphasizes an often over-looked fact: just like the commercial mass media of the past 150 years, the core elements of the internet are also prone to concentration. In his classic book *The Media Monopoly*, [Ben Bagdikian](#) also argued that the number of media firms in the US that account for most of the revenue across the American media landscape plunged from fifty to just five between the 1980s and the early 21st Century. Canadian critics also decry what they see as similar trends, and the debasement of journalism and the political and public culture of the country that has ensued as a result ([here](#) and [here](#)).

Most critics also see the internet as draining money away from the media and entertainment industries—newspaper advertising especially—and into the coffers of Google, Facebook, Amazon, and so on. [McChesney](#), however, does not lament the loss of advertising-sponsored journalism but stresses the fact that the diversion of ad dollars away from journalism to the internet giants exposes a fundamental truth about the news: it is a public good, and most people don't want to pay full freight. Consequently, the number of daily newspapers and full-time journalists has plunged and under-employed journalists are flocking to public relations in droves. Similar trends apply to Canada, but have lagged behind the US by a couple of years (see the [last report](#) on this point). Now is the time to recognize this forthrightly, [McChesney](#) and others like [Victor Pickard](#) argue, and turn to what the United States did in very generous amounts throughout the first century-and-a-half of its existence, and that European countries and, to a lesser extent, Canada, continue to do: subsidize the news as the public good it is—on normative and economic grounds (see [John & Silberstein Loeb, 2015](#); [Picard & Pickard, 2017](#)).

Other critics of the US internet giants, such as Joseph Taplin's [Move Fast and Break Things](#) and the Public Policy Forum's [Shattered Mirror report](#), converge with their leftist critics on this point. Indeed, a renaissance of the anti-monopoly tradition is arising from multiple directions that cuts across left-right political lines with Amazon, Facebook, Google, and so forth, in its sights. A diverse range of concerns underpins this revival, including critiques of the blackbox nature of internet giants' platforms and businesses ([Pasquale](#)); the possibility that lush profits in one market (e.g. Amazon's cloud services division) are being used to cross-subsidize razor thin margins (or none at all) in other markets to crush competitors and deter new ones from emerging ([Khan](#); [Srnicek](#)); the use of price discrimination to discriminate between those who will be served and those who won't—all in ways that are unfair, opaque and segment people into those who are valued and those who are not; a desire to rein in the unlimited harvesting of personal and public data that currently underpins the commercial business model of online content, apps and services in order to better protect people's privacy and reputation as well as socio-cultural norms like trust that underpin not just commerce but human relationships, society, democracy and civilization as a whole ([Pasquale](#); [Zuboff](#)); concerns that "fake news" is not a random fluke but an expected byproduct of the internet giants' business model and their dominant stature in the market and society in which they get to set "take it or leave it" terms of service ([Tufekci](#)); the crisis of journalism and the media, culture and entertainment industries ([McChesney](#); [Taplin](#)) and so on (also see [The](#)

[Economist](#), [The Economist](#), [Vox](#), [Bloomberg](#), [Fortune](#) and [Wired](#)). Indeed, while it would have seemed crazy just three years ago to talk about, for example, Facebook or Google destroying democracy, today such talk is commonplace—for better or worse.

School #4: Digital Dominance—Consolidation and Cross-Cutting Dynamics in the Digital, Internet-centric Media Industries

A fourth school—and one that I largely align with—agrees with the first school that the shift from the industrial media of the 19th and 20th centuries to the digital, internet-centric media of the 21st Century entails enormous changes. However, rather than seeing this as reason to put away our tools because the problems of yesterday are no longer problems today, this fourth school of thought sees the ongoing shift now taking place as having unleashed a “battle over the institutional ecology of the digital environment” ([Benkler, 2006](#), ch. 11), with the broad contours of what is to come up for grabs. This perspective is also informed by the idea that the history of human communication is one of recurring ‘monopolies of knowledge’ ([Innis, 1951](#)) and oscillations between consolidation and competition ([John, 2010](#); [Babe, 1990](#)). Seen from this angle, it would be hubristic—or naïve—to think that our times will be any different ([Noam, 2016](#), [Moore & Tambini, 2018](#); [Hindman, 2018](#); [Wu, 2010](#); [Crawford, 2012](#)).

From this perspective, the core elements of the networked digital media may actually be *more* prone to concentration than in the past because digitization magnifies economies of scale and network effects greatly in many areas: mobile wireless (Rogers, BCE, Telus), search engines (Google, Bing, Yahoo!, DuckDuckGo), Internet access (ISPs), music and book retailing (Apple and Amazon), social media (Facebook), browsers, operating systems, and access devices (Apple, Google, Nokia, Samsung). At the same time, however, digitization greatly reduces barriers to entry in other areas, allowing many small players to flourish. As a result, a two-tiered digital media system appears to be emerging, with a few gigantic “integrator firms” at the centre and many small niche players revolving around them ([Noam, 2016](#); [Hindman, 2018](#)).

Reflecting on the results of a thirty-country study, [Noam \(2016\)](#) observes that concentration levels for mobile wireless and other “network media” are “astonishingly high” and that while the data for content media is mixed, the trend is an upward direction (see especially chapter 38, pp. 1307-1316). Understanding where Canada fits within this context—that is, does it rank high, low or in between by international standards on the issue of media concentration for any single industry and then across the network media economy as a whole—is the key purpose of this report.

This approach also shares some similarities with the critical school in its insistence that core elements of the network media economy and internet are no less prone to concentration than previous media. However, it does not see concentration as inevitable nor does it denounce the role of markets, in toto. In fact, it takes clashes between the “tech titans” and “telecom behemoths” as critically important for two reasons: first, they are examples of how different factions of business battle one another not just within markets but also for access to capital investment, influence over policy, and for wealth and

prestige as well as political and cultural clout. The attention paid to *dynamic* competition by the “fourth school” also sets it apart from “third school” critics who tend to see markets in more monolithic terms. In this sense, it is closer to the Schumpeterian views of the market fundamentalists in the first school, while also retaining a more appreciative role regarding the complexity of markets and the contingency of outcomes that are often painted as all-but-inevitable in retrospect by celebrants and critics of markets and capitalism alike (“history is written by the winners...”).

It also sees cross-cutting forces at work that vary by media, time and place. Consequently, much more attention is given to empirical evidence and the details of media companies and markets in comparison to what we usually find in critical approaches or those who think that things are just fine.

The “fourth school” also rejects the insinuation that the alternative to the Schumpeterian *dynamic* “clash of titans” view is a *static* and anachronistic view of competitive markets. Unlike the market fundamentalists, it sees these clashes as constitutive of modern capitalism and the idea that we should accept this phenomenon as inevitable and consequently beyond investigation is a fantasy. Lastly, it rejects Schumpeter and the market fundamentalists’ disdain for people’s knowledge, the public’s interests, and democracy. Indeed, the extent to which neo-Schumpeterians skirt his elitism and disdain for democracy while invoking the supposed pleasures and benefits of “creative destruction” is astonishing given that the issues here are not just about any old set of markets, technology and policy but communications, a subject in which questions about human rights and democracy should be and are central not peripheral.

The approach taken here, in contrast, sees the market as a means to an end and markets as being constituted by rules and laws forged in the hurly burly of political processes carried out in public and against the backdrop of complex societies. Those rules and laws will vary by time, place and media, moreover, but the key point for here is that, in a democracy, the first rule of governments is not to shield themselves, technology and/or markets from the public and people’s interests but to expose themselves to such interests. In other words, these discussions are inseparable from concerns with human well-being and democracy. Given this, the so-called “fourth school” strives to take a large and complex view of all such matters, while insisting on the need to keep a sharp eye on both the details and the broad sweep of the nascent “digital media age”. (see [Schumpeter, 1943/2010](#); [Held, 1987](#); [Keane, 2009](#); [Habermas, 1985](#); [Habermas, 1996](#)).

Why Media Concentration Matters, or Who Cares?

The more that core elements of the networked media economy are concentrated, the easier it is for dominant players to use the control and influence over the various layers and elements of “the stack” to blunt the sharp edges of competition (see [here](#), [here](#), [here](#), [here](#) and [here](#)). Large companies straddling the cross-roads of society’s communications also make juicy targets for those who would enroll them in efforts to curb piracy, suppress “fake news”, filter and block adult content, serve the machinery of law enforcement and national security, and to promote cultural policy aims (see [here](#), [here](#), [here](#), [here](#), [here](#) and [here](#)). To take one notable example, the extent to which governments and copyright interests leverage Google to disable links to materials that are claimed to infringe copyright, take-down offensive content, and to disclose users’ information has soared in the last half-decade is an excellent example of this, as the company’s annual [Transparency Report](#) reveals.

To put it simply, the more concentrated the digital media giants are, the greater their capacity for mischief and to impose standards on the communications environment without consulting people or securing their consent—the prerequisites for legitimacy in a democracy. Some concrete examples along these lines include the ability to:

1. set coercive and exploitative privacy policy norms governing the collection, retention and disclosure of personal information to commercial and government third parties. One such example is Bell’s Relevant Ads Program, which the company withdrew after a finding by the Office of the Privacy Commissioner (OPC) that the company’s ability to “track every website its customers visit, every app they use, every TV show they watch and every call they make using Bell’s network”, combined with other “account and demographic information—such as age range, gender, average revenue per user, preferred language and postal code” was excessive, “highly sensitive” and done without proper informed consent (OPC, 2015). The Facebook/Cambridge Analytica data breach case that is currently being investigated by national parliaments around the world, including the Parliament of Canada, is another such example (ETHI, 2018; CBC, 2018). The German competition authority has also explicitly made the link between Facebook’s dominant market power and abusive terms of service that allow the social network giant “to limitlessly amass every kind of data” generated by its users (cited in [Stucke, 2018](#), p. 286).
2. set the terms for owning, controlling, syndicating and selling advertising around user created content (Google, Facebook, Twitter) ([van Couvering, 2011](#); [Fuchs, 2011](#)).
3. set the terms for the distribution of income to news organizations, journalists, musicians, authors and other kinds of media workers (Google, Apple, Amazon).

4. turn market power into gate-keeping power and moral authority by regulating which content and apps gain access to their operating systems and online retail spaces and which do not. Apple's rules restricting adult content availability on iTunes and to remove a fund-raising app for Wikileaks on the AppStore illustrate examples of this. Verizon-owned Tumblr's decision to no longer host erotic and adult content posted by its user community as this report was being written so as to avoid repeating its recent experience of being banned from the ever-so important AppStore after illegal content was found on the site is just the most recent example of how "platform power" easily lends itself to moral regulation (see, for example, [Feld, 2018](#)).
5. use their gate-keeping power to enroll subscribers, audiences and media technologies in the pursuit of cultural policy goals by, for example, applying a levy on telecoms and internet access providers to support Cancon and other cultural policy goals, or using deep packet inspection techniques to discover and prioritize Canadian content while discouraging access to foreign or "pirated" media content ([Geist, 2015](#); [Taylor, 2015](#)).
6. discourage the use of virtual private networks and anonymizing techniques to reinforce the sanctity of national media content rights markets and the role of advertising in them ([Ellis, 2016](#)).
7. use the media outlets they own in one area to promote their interests in another, as former Vice President Media at Bell, Kevin Crull, did several times before being ousted for meddling in CTV's new coverage (see [Telus intervention](#) in Bell Astral, 2.0 pages 4-6 and [here](#), [here](#), [here](#) and [here](#)).

Good analysis adjusts to new realities, but it also does not dismiss long-standing concerns. This is the approach that we strive to follow. For example, consider the fact that in the 2011 Canadian federal election every newspaper (except the *Toronto Star*) that [editorially endorsed a candidate](#) for Prime Minister touted Harper for the job. Indeed, 95% of editorial opinion at the time expressed support for Harper—roughly three times his standing in opinion polls at the time and the results of the prior election.

In the 2015 election, seventeen dailies representing 71% of the editorial opinion lined up behind the ruling Conservatives.² The owners of the Postmedia Group, most notably, directed the ten dailies that comprise its national chain of papers, and the six major *Sun* dailies in London, Toronto, Ottawa, Winnipeg, Calgary and Edmonton that it acquired in 2015, to publish an editorial endorsement of Steven Harper for Prime Minister (55% of expressed editorial opinion). The action ran roughshod over the long-standing convention in journalism circles whereby local editors write their own editorial endorsements, and this raised the hackles of some of the chain's [journalists and editors](#) but with no discernible effect.

² In the 2015 federal election, only twenty-three of the eighty-five paid dailies then operating published an editorial to endorse one party or another.

The ‘editorial endorsement from Toronto headquarters’ also broke Postmedia’s pledge to the Competition Bureau to keep the editorial lines of the *Sun* papers it had just acquired separate from those it already owned. This too, however was met with impunity. The [Globe and Mail](#) took the odd position of endorsing the Conservatives but not Harper. Ultimately, the upshot of all this is that the editorial support for the Conservatives in the Canadian press in 2015 was roughly two-and-a-half times their low 30 percent standing in the polls and final voting tally.

There were, however, more cracks in the wall of editorial opinion in the federal election that year than the one in 2011. For example, Torstar’s [Toronto Star](#), [Hamilton Spectator](#) and the [Guelph Mercury](#) (21% of expressed editorial opinion) both endorsed the Liberals, as did [La Presse](#) (Power Corp) (8% of expressed editorial opinion) and the [Charlottetown Guardian](#) (Transcontinental) (1% of expressed editorial opinion). [Le Devoir](#) cast its lot with the Bloc Québécois (representing 2% of expressed editorial opinion) (see [here](#) for a fuller treatment of this issue). No major daily endorsed the NDP.

As this discussion suggests, ultimately, talk about media concentration is a proxy for larger conversations about the shape of the mediated technological environments through which we communicate, know and express ourselves in the world, consumer choice, freedom of the press, citizens’ communication rights and democracy. Of course, such discussions must adapt to new realities, but the advent of digital media does not render them irrelevant one bit. In fact, given the extent to which economy and society are underpinned by information and communication infrastructures, and our lives deeply immersed in such environments and a source of data to be harvested for commercial purposes, thinking long and hard about these issues may be more relevant and important than ever ([Baker, 2007](#); [Noam, 2009](#); Peters, 1999).

Methodology: How Do We Know if Media Concentration is Intensifying or Declining?

Measuring media concentration begins by setting out the media industries to be studied, as done at the outset of this post. Revenue data for each of these sectors, and for each of the firms within them with over a one percent market share, is then collected and analyzed. This [handy dandy list of sources](#) and others listed [here](#) were used.

Each media sector is analyzed on its own and then grouped into three categories, before scaffolding upwards to get a birds-eye view of the whole network media ecology: (1)

network media; (2) content media; (3) online media. Results are analyzed from 1984 to 2017, with an eye to capturing changes over time. Lastly, two common tools—Concentration Ratios (CR) and the Herfindahl-Hirschman Index (HHI)—are used to depict concentration levels and trends within each sector and across the network media ecology as a whole.

The CR method adds the shares of each firm in a market and makes judgments based on widely accepted standards, with four firms (CR4) having more than 50 percent market share and 8 firms (CR8) more than 75 percent considered to be indicators of media concentration (see [Albarran](#), p. 48). The [Competition Bureau](#) uses a more relaxed standard, with a CR4 of 65% or more *possibly* leading to a deal being reviewed to see if it “would likely . . . lessen competition substantially” (p. 19, fn 31).

The HHI method squares the market share of each firm in a given market and then totals them up to arrive at a measure of concentration. If there are 100 firms, each with 1% market share, then markets are thought to be highly competitive (shown by an HHI score of 100), whereas a monopoly prevails when one firm has 100% market share (with an HHI score of 10,000). The US [Department of Justice](#) embraced a revised set of HHI guidelines in 2010 for categorizing the intensity of concentration. The new thresholds are:

HHI < 1500	Unconcentrated
HHI > 1500 but < 2,500	Moderately Concentrated
HHI > 2,500	Highly Concentrated

At first blush, these higher thresholds seem to dilute the earlier standards that had been set back in 1992. While this may be true, the new guidelines can also be seen as being even more sensitive to reality and tougher than the ones they supersede.

This is because they give more emphasis to the *degree of change* in market power when ownership changes take place. For instance, “mergers resulting in highly concentrated markets that involve an increase in the HHI of more than 200 points *will be presumed to be likely to enhance market power*”, observes the DOJ (*emphasis added*, p. 19).

Second, markets are defined more precisely based on geography and the details of the good or service at hand versus loose amalgamations of things based on superficial similarities. This is critical. It distinguishes those who would define the media universe so broadly as to put photocopiers and chip makers alongside ISPs, newspapers, film and TV and call the whole thing “the media” (e.g. Skorup & Theirer; Compaine).

In contrast, the scaffolding approach that we use analyzes each sector before moving to higher levels of generality until reaching a birds-eye perspective on the network media as a whole. It is important to note that this method allows us not only to draw general conclusions from the birds-eye perspective, but also to analyze developments at a much more precise level, i.e. media by media. Approaching the subject from multiple vantage points allows us to undertake integrated empirical analysis based on observations of dynamics at all levels, something that is simply not possible (and certainly would not be credible) without precise and meticulous attention to specific detail.

Third, the new guidelines turn a circumspect eye on claims that enhanced market power will be good for consumers and citizens because they will benefit from the increased efficiencies that result. What is good for companies is not necessarily good for the country (see [Stucke & Grunes, 2012](#); [Mazzucato, 2014](#)).

Lastly, the DOJ's new guidelines are emphatic that decisions turn on "what will likely happen . . . and that certainty about anticompetitive effect is seldom possible and not required for a merger to be illegal" (p. 1). In practice this means the goal is to nip potential problems in the bud before they happen. It also means that experience, the best available evidence, contemporary and historical analogies as well as reasonable economic theories form the basis of judgment, not deference to impossible (and implacable) demands for infallible proof (p. 1).

These assumptions overturn three decades of Chicago School economic orthodoxy and its grip on thinking about market concentration (see [Stucke & Grunes, 2012](#); [Stucke & Grunes, 2016](#); [Stucke, 2018](#); [Posner, 2011](#)). The focus is no longer just on horizontal integration within a market but also in terms of vertical and diagonal integration across markets. The emerging view also goes beyond assessing matters mainly in terms of potential consumer harms and benefits (e.g. how do we deal, for example, with "free" services like those on offer from Google or Facebook? How do mergers affect relationships among competitors or complementary goods and services?). Freed from a half-century long orthodoxy, and subordination of policy and politics to conservative economists, think tanks and judges, the guidelines in the US that were adopted during the Obama Administration set a tough hurdle for those with the urge to merge. It is just this kind of thinking that [killed the bid](#) by AT&T—the second largest mobile wireless company in the US—to acquire T-Mobile, the fourth largest, in 2011, for instance (also [Stucke & Grunes, 2012](#)). It is uncertain where things currently stand under the Trump Administration, with mixed messages coming from, on the one hand, the Department of Justice's opposition to AT&T's bid to acquire Time Warner versus, on the other, the weak case the Department mounted in its opposition and the Court's blessing of the deal earlier this year ([United States District Court, DC Circuit, 2018](#)).

For years, however, the toughening stance on concentration issues in the US and EU had passed Canadian regulators by but that has changed over the past half-decade or so—although it is once again an open question of whether the CRTC will revert to its old ways under its current chair, for reasons discussed in the pages ahead. A decade ago, the CRTC's tepid stance on issues of these issues was exemplified by the Commission's 2008 [Diversity of Voices](#) policy. The policy established static and weak standards for reviewing mergers that have no sense of trends over time or capacity to analyze the drift of events across the media. Not surprisingly, the Diversity of Voices policy has done nothing to stop consolidation within broadcasting let alone between broadcasting and the telecoms and internet industries, as the evidence below demonstrates.

In contrast to the CRTC, the [Competition Bureau](#) at least draws selectively from the US HHI guidelines. While it does not use the HHI thresholds, it does focus on "the relative change in concentration before and after a merger" (p. 19, fn 31).

The CRTC began to tiptoe in a different direction in 2012, and several decisions since suggest that it has rediscovered market power and the will to do something about it:

- the [Mobile TV decision](#) in which it shored up common carriage (network neutrality) principles by preventing mobile wireless carriers from unjustly discriminating against television programs and other types of communications delivered over the internet in favour of their own services. In doing so it effectively banned the nascent practice of [zero-rating](#) whereby some content service chosen by the carriers do not count towards your data caps, while similar types of services do. The decision is crucial because it reaffirms the principle that telecoms service and internet access providers are carriers not editors, a distinction that was upheld when the [Federal Court of Appeal rejected](#) an appeal of the Mobile TV decision by Bell;
- the [Talk TV decision](#) requiring the adoption of skinny basic cable TV packages and the unbundling of TV channels so that they are offered fully on an ala carte base by 2016;
- the [mandated wholesale wireless framework](#) designed to enhance competition in mobile wireless services by regulating wholesale roaming rates and other factors which affect the viability of would-be rivals such as Videotron and Wind (now Freedom Mobile after a 2016 takeover by Shaw);
- the [mandated wholesale wireline decision](#) that extends regulated wholesale access to the incumbent telecom and cable companies' fibre-to-the-premise networks to help encourage competition in the retail broadband internet market while ensuring that rivals such as TekSavvy, Distributel, Primus and others can still compete as technology shifts from copper and coaxial-based networks to fibre-based facilities – all of which the incumbent telecoms and cable companies have fought tooth-and-nail at each step of the way but with Cabinet ultimately [denying Bell's appeal](#) on the matter in May 2016.

Several key principles underpin these decisions. One is the CRTC's recognition, at least under its previous chair and, to some degree, that the "incumbent carriers continu[e] to dominate the retail Internet access services market" ([CRTC, 2015-326, para 125](#)). The wholesale mobile wireless decision arrived at the same conclusion with respect to the wireless market ([CRTC, 2015-177, paras 35, 72-74, 86-88](#)). Moreover, there is "limited rivalrous behaviour" between the incumbents, the Commission observed with respect to fibre-based broadband access networks ([CRTC, 2015-326, para 123](#)). The Commission was especially blunt when it stated that whatever "competition that does exist today is largely, if not entirely, a result of regulatory intervention" ([CRTC, 2015-326, para 123](#)). The Competition Bureau has also kept such concerns alive by opening up a wide-ranging examination of the [state of broadband competition](#) in Canada earlier this year and which is expected to report back in 2019, although other decisions, as we will see below, have sent mixed messages.

The upshot of this run of events is two-fold: first, concerns for the harmful potential of market concentration and market power are not just conjecture but have been found to be factually based and significant by administrative tribunals such as the CRTC, the

Competition Bureau and the courts. Second, in the face of such realities, policy-makers and regulators—again, at least under the direction of previous chair at the CRTC and at the Competition Bureau and ISED—have stiffened their collective spines and acted in a manner that marks a break from the “regulatory hesitation” that has defined so much of the regulatory culture in Canada in the past ([Berkman, 2010, p. 163](#)).

This is critically important because history and international experience teaches that in the face of intransigent and self-serving opposition from incumbents, only governments and regulators with a stiff spine and strong political can succeed in fostering more competition and improved developments in the communications and media fields (see, for example, [Noam, 2013](#); [Mazzucato, 2014](#); [OECD, 2013, p. 23](#); [Ofcom, 2012, pp. 67-68](#); [Ofcom, 2012](#); [Stucke & Grunes, 2012](#); [Stucke & Grunes, 2016](#); [Stucke, 2018](#); [US, DoJ, 2011](#); [Berkman, 2010, pp. 162-168](#)).

The Historical Record and Renewed Interest in Media Concentration in the 21st Century

While this regulatory about face may be new, a keen interest in media concentration is not. As a matter of fact, there has long been an abiding interest in the subject in Canada and the world over since the late-19th and early-20th centuries, even if it such interest ebbs and wanes over time.

In 1910, for example, early concerns with the ill effects of market concentration were registered when the Board of Railway Commissioners (BRC)—the distant cousin of today’s CRTC—broke up a three-way alliance between the countries’ two biggest telegraph companies—the Canadian Pacific Telegraph Company and the Great Northwestern Telegraph Company (the latter a division of the New York-based goliath, Western Union)—and the US-based Associated Press news wire service. Why?

It did this for much the same reasons that the CRTC gave in justification of the Mobile TV decision discussed a moment ago. That is, because carriers should not be editors who use their control over the wires (or spectrum) to decide who gets to speak to whom on what terms.

In this historical case, and in the face of much corporate bluster, the regulator was emphatic that while allowing the dominant telegraph companies to give away the AP news service for free to the leading newspaper in one city after another across the country

might be a good way for the companies to attract subscribers to their vastly more lucrative telegraph business it would effectively “put out of business every news-gathering agency that dared to enter the field of competition with them” (1910, p. 275).

In a conscious effort to use telecommunications regulation (operating under the auspices of railway legislation at the time) to foster competing news agencies and newspapers, Canada’s first regulator, the BRC, forced Western Union and CP Telegraphs to unbundle the AP news wire service from their telegraph service. It was a huge victory for the Winnipeg-based Western Associated Press—the appellant in that case—and other ‘new entrants’ into the newspaper business as well. It was also the decisive moment when the principle of common carriage was firmly entrenched in Canadian communications policy and regulation ([Babe, 1990](#)).

In short, the BRC acted to constrain corporate behavior out of the conviction that concentration within the telegraph industry as well as vertical integration between telegraphs and news services would run counter to society’s broader interest in competitive access to communications and a plurality of voices in the press.

Throughout the 20th century, similar questions arose and were dealt with as the situation demanded. One guiding rule of thumb of communications policy, however, was that of the “[separations principle](#)”, whereby telecoms carriers—usually two of them (e.g. telegraph vs telcos in the early 1880s, the TransCanada Telephone System (TCTS) and CNCP for three-quarters of the 20th century, the telcos vs cablecos ever since, and the telcos’ consortium Stentor versus Rogers/Cantel in the early days of mobile wireless from 1985 until the mid-1990s) competed to carry messages from all types of users, and for all types of purposes—business, personal, governmental and broadcasting—but were prevented by law from directly creating, owning or controlling the messages that flowed across the transmission paths they owned and controlled.

A general concern also hung in the air in government, business, broadcasting and reformist circles that those who made communications equipment, or operated transmission networks, should not operate broadcast stations, make movies or publish newspapers, books, software, etc. That this was so could be seen, for example, when the original equipment manufacturing consortia behind the British Broadcasting Company in the UK and the National Broadcasting Company/Radio Corporation of America in the US, respectively, were ousted from the field in the 1920s during the remaking of these entities into the stand-alone broadcasters that they eventually became. Nor should telephone companies such as AT&T play an active role in the film industry, as was the case when, after having wired movie theatres across the US and the Hollywood production studios for sound, circa 1927, AT&T took on a larger role by financing and vetting films during the 1930s (see [Briggs, 1995](#); [Barnouw, 1966](#); [Danelian, 1939](#)).

The consolidation of broadcasting under the CBC in the 1930s brought private broadcasters into the core of the Canadian ‘broadcasting system’ from the get-go. The creation of the CBC also wiped out important local, foreign and educational voices, and even a small theatrical radio club in Winnipeg who were taking live theatre from the

stage to the airwaves. In each case, it was the structure and organization of the communication/media system, and who owned what and in what proportions, that decided who got to talk to whom on what terms.

The separation of transmission and carriage from message creation and control was another principle that was worked out in a myriad of different ways. Aside from high-profile efforts to keep the telegraph companies out of the news business, and telephone companies out of broadcasting and the movie business, most of the time such issues were considered tedious, boring, and tucked away in obscurity in parliamentary papers, legislation and corporate charters.

Bell's charter, for instance, prohibited it from entering into 'content and information publishing services', from radio to cable TV and 'electronic publishing', until the early 1980s, when more and more exceptions to the general rule were adopted. The same was true for other telcos, private and public, across the country, even though Manitoba and Saskatchewan began to lay fibre rings in a handful of provincial cities and to offer modest cable TV services in the 1970s ([Babe, 1990](#); [Winseck, 1998](#)).

Media concentration issues came to a head again in the 1970s and early 1980s when three major inquiries were held: (1) the Special Senate Committee on Mass Media, [The Uncertain Mirror](#) (2 vols.)(Canada, 1970); (2) the [Royal Commission on Corporate Concentration](#) (1978); and (3) the [Royal Commission on Newspapers](#) (Canada, 1981). While these proceedings did not amount to much in the way of concrete reform, they left a valuable historical and public record.

Things lay dormant for more than two decades before springing to life again after a wave of consolidation in the late-1990s and at the turn-of-the-21st century thrust concerns with media concentration back into the spotlight. Three inquiries between 2003 and 2008 were held as a result: (1) the Standing Committee on Canadian Heritage, [Our Cultural Sovereignty](#) (2003); (2) the Standing Senate Committee on Transport and Communications, [Final Report on the Canadian News Media](#) (2006); (3) the CRTC's [Diversity of Voices](#) report in 2008.

Things have not let up since. Indeed, they have been on a high boil in recent years, with a non-stop series of reviews at the CRTC that will go a long way to shaping the emergent network media economy for decades, including, for instance: (1) Bell's [take-over of Astral Media](#), (2) the regulated wholesale access decisions affecting both the [mobile wireless](#) and [wireline](#) telecoms markets, respectively, (3) the [Mobile TV decision](#) and (4) a series of recent cases that have tested the extent to which vertically-integrated telecom-media giants like Bell, Rogers, Shaw and Videotron can leverage their control over networks to influence the content made available over those networks (for example, [Videotron's Music Unlimited](#) case or the [Rogers GamePlus](#) and [Hybrid Video-on-Demand](#) decisions). Another landmark decision by the regulator in 2017 to effectively ban mobile carriers and other ISPs from "[zero-rating](#)" specific content or applications in a bid to distinguish their services from those of rivals is another key example on this score.³

3 Zero-rating, or "[differential pricing practices](#)" as it is more formally known—in essence, is when a mobile

Three Phases of Telecom, Internet and Media Consolidation

All of this is taking place, as was noted in the [last report](#), within an ever more internet- and mobile-centric media economy that has grown immensely from \$19.4 billion in 1984 to \$81.2 billion last year. The media economy is also becoming less-and-less reliant on advertising and more on the “pay-per” model of communications and media where subscriber fees, not advertising, are the main source of revenue.

The early years of that period (the decade between 1984 and 1996), were characterized by the emergence of new players across the media landscape and the growth of broadcast as well as pay and subscription television channels. In terms of ownership, existing players and a few newcomers, such as Allarcom and Netstar, cultivated the field.

During this period, television and radio broadcasters were often owned by companies whose interests lay in other, unallied areas, such as real estate, as with the BC TV and radio group Okanagan Skeena, or Molson’s Brewery, one of the founders of Netstar early in that entity’s history. These companies share of the market grew steadily until they were taken over by the larger players of their time. Overall, though, the general direction of events was towards more players and more diversity in television ownership.

When consolidation did take place in the 1980s and 1990s it was mostly among individual players in single media markets, i.e. through *horizontal integration*. Conrad Black’s take-over of Southam newspapers in 1996 symbolized the times, as did the amalgamation of local and regional television ownership groups in the late 1990s to create several national commercial television networks under common ownership: CTV, Global, TVA, CHUM, TQS.

While weighty in their own right, these amalgamations did *not* have a big impact *across* the media. The CBC remained prominent, but public television was being eclipsed by commercial television as the CBC’s share of all resources in the television ‘system’ slid from 45 percent in 1984 to a little over a third of that amount today (16%).

Media conglomerates and vertical integration were not unknown (Maclean-Hunter was a good example), but they were not the norm. Bell was a diversified communications

operator or ISP does not count specific content, applications or services toward subscribers’ data allowances while counting everything else towards those caps. While such practices offer the lure of “free stuff” as a way of marketing them to consumers, they have the fundamental effect of transformation carriers into publishers and/or editors who pick and choose what people get for “free” and what they don’t, undermining common carriage (or “net neutrality” as it is more popularly known). Instead of such marketing gimmicks, the Commission concluded that the drawbacks of such an approach outweighed any potential benefits they might have, and that rather than using zero-rating to competitively differentiate themselves, ISPs and mobile operators should use, for example, price, speed, quality of service standards, customer service and many other tools instead to achieve the same ends ([CRTC, TRP 2017-104](#); [CRTC, TD 2017-105](#)).

colossus, to be sure, but it was not in the media business proper, and, in fact, was *prevented* by its charter and by law from being so.

In contrast to broadcasting and most other content media industries, concentration levels remained sky high in wireline telecoms, while new mobile wireless telecoms services were developed by two sets of competing firms: between 1983-1984, Rogers-Cantel was licensed by the Department of Communication to offer national wireless service, while 11 incumbent telephone companies (e.g. Bell Canada, Telus, MTS, Sastel) received licenses to provide competing services in their respective operating territories ([Klass, 2015](#), pp. 58-61).

Gradual policy reforms characterized the 1980s and early 1990s, before a more concerted shift took place. Long distance competition was introduced in 1992, while two new national competitors in wireless followed in 1995 (Clearnet and Microcell), and then local telephone competition was encouraged in 1997. The Chretien Liberals also gave the green light for the telephone and cable companies to compete in one another's turf in 1996. Concentration rates fell across the board, except in cable television distribution.

In general, telecoms competition moved slowly from the ends of the network into services and then deeper into the network infrastructure, as it had done in one country after another around the world, aided and abetted by strong government interventions that used interconnection and network unbundling rules, access to spectrum, wholesale pricing regulation, and market liberalization to actively spur on competition. Competition gained traction in the 1990s as a result but the trend was thrown into reverse by the dot.com crash in late-2000.

Whereas gradual change defined the 1980s and early-1990s, things shifted abruptly by the mid-1990s and carried on into the 21st century when three waves of consolidation swept across the telecom, internet and media industries. A flurry of highlights will help to illustrate the trends:

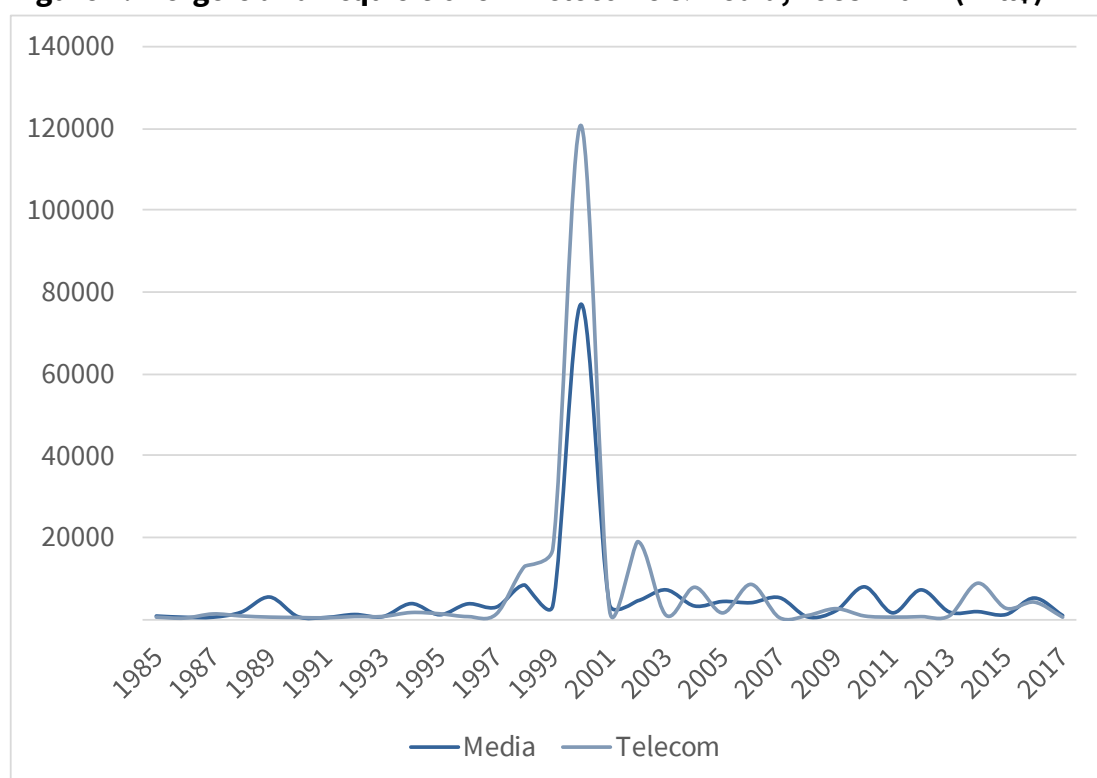
Wave 1: 1994 to 2000: This wave began with Rogers' acquisition of Maclean-Hunter in 1994, and peaked from 1998 to 2001, during which time: (1) BCE acquired CTV and the *Globe & Mail* (\$2.3b); (2) Quebecor took over Videotron, TVA and the *Sun* newspaper chain (\$ 7.4b) (1997-2000); (3) Canwest buys Global TV (\$800m) and Hollinger newspapers, including *National Post* (\$3.2b); (4) BC Tel, AGT, and Edmonton Tel amalgamated at this time, giving rise to Telus, which then [acquired Clearnet](#) for \$6.6B, the largest acquisition in Canadian telecommunications history at the time (2000).

Wave 2: 2004-2007: Rogers [acquires Microcell](#) (\$1.4B) (2004). Bell Globemedia re-branded CTVglobemedia; BCE exits media business (2006). CTVglobemedia acquires CHUM (Much Music, City TV channels and A-Channel). CRTC requires CTVglobemedia to sell City TV stations – acquired by Rogers (2007). Astral Media buys Standard Broadcasting. Quebecor acquires Osprey Media (mid-size newspaper chain)(2006). Canwest, with Goldman Sachs, buys Alliance Atlantis (2007) (Showcase, HGTV, BBC Canada and the biggest film distributor in Canada).

Wave 3: 2010 – 2017: Canwest goes bankrupt (2009–2010), its newspapers acquired by Postmedia and TV assets by Shaw. BCE reacquires CTV (2011) and bids for Astral Media in 2012, but fails to gain CRTC approval, before succeeding to do so in 2013 albeit conditional upon the divestiture of several TV services—[Teletoon](#) (TELETOON Retro, TELETOON Retro, TELETOON / TELETOON and the Cartoon Network), Historia and Séries+ to Corus (Shaw), the Family Channel, Disney Jr. and Disney XD to DHX media, and MusiquePlus and MusiMax to [V Media](#)—as well as ten radio stations to [Newcap](#) (5), [Pattison](#) (3) and [Corus \(Shaw\)](#) (2)—as the Competition Bureau and CRTC required; Telus [acquires Public Mobile](#) (2013); Rogers [acquires Mobilicity](#) (\$465M) (2015); Postmedia acquires [Quebecor’s English-language papers](#) (e.g. including the six Sun dailies, 27 small dailies and 140 community weeklies) (2015) (also see [Competition Bureau](#) approval), [Shaw acquires Wind](#) (early 2016); [Bell acquired MTS](#) for \$3.9 billion in 2017; and a deal between [Torstar and Postmedia](#) in November 2017 to swap forty-one community and free metro newspapers in their respective territories, after which 37 of those newspapers were closed—subsequently sparking the [Competition Bureau](#) to investigate the deal for potential anti-competitive collusion.

The waves of capital investment that drove consolidation across the telecom, media and Internet industries during these different phases is illustrated in Figure 1 below.

Figure 1: Mergers and Acquisitions in Telecoms & Media, 1985–2017 (Mill\$)



Source: Thomson Reuters. Dataset on file with author.⁴

Mergers and acquisitions rose between 1994–1996 and spiked to unprecedented levels by 2000 but then collapsed when the dot.com bubble burst. Consequently, the processes of consolidation ebbed and waned over the next decade as companies that imploded

⁴ Telecoms includes wireless, wireline and internet access; media includes broadcasting distribution, TV, radio, newspapers and magazines.

were acquired by well-established players, especially in the telecommunications arena, while those that survived really did add new competitors and vitality into the mix. After 2010, however, the processes of consolidation within most sectors and across the network media economy have steadily crept upwards according to both the standards of the CR4 and HHI measures. Once again, though, the big lesson that emerges out of this complicated story is that trends in the network media economy swivel in synch with those taking place in the economy at large—a point that is too often ignored in favour of a fixation on technology-based explanations and unrealistic assessments about the role of competitive markets in the economy.

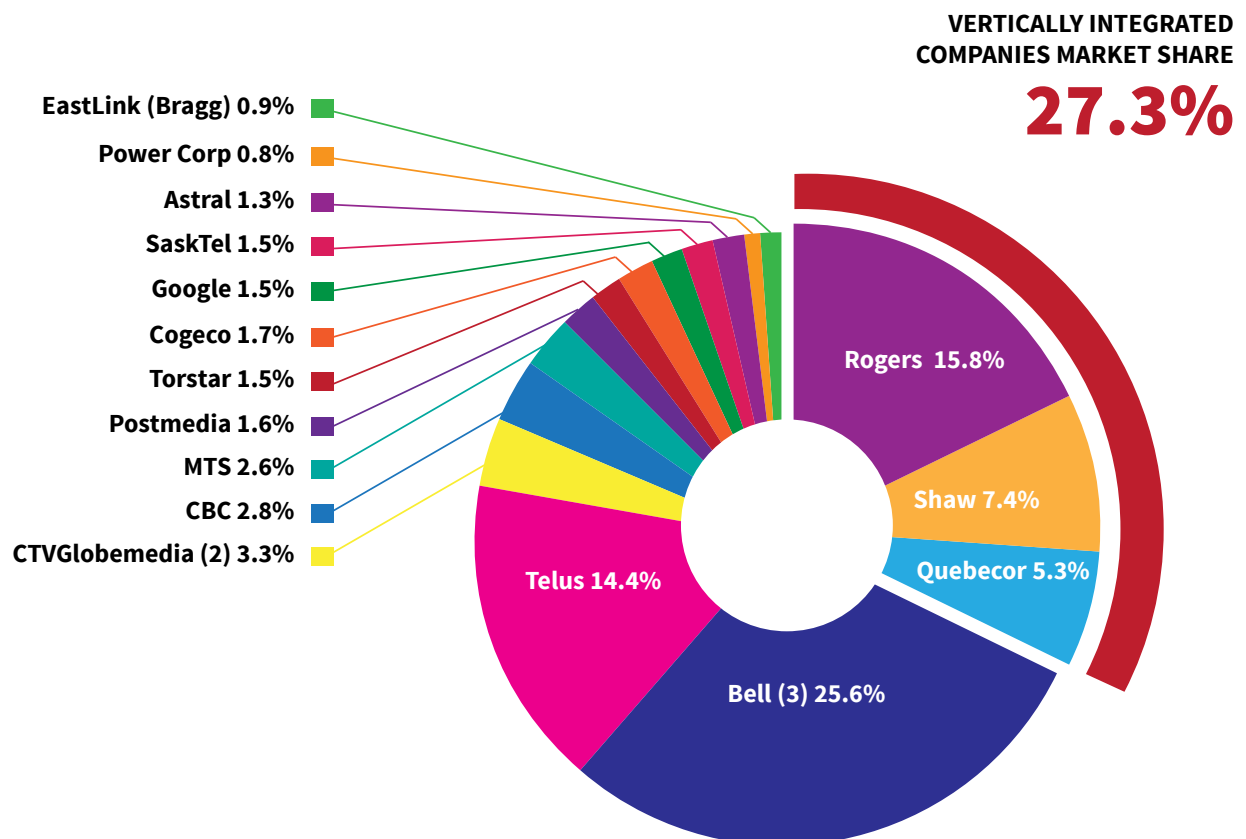
Consolidation in the telecoms industry had been modest in the latter half of the first decade of the 21st Century but rose significantly after Telus bought Public Mobile and Bell acquired the remaining stake in Bell Aliant that it did not already own in 2013 and 2014, respectively, while Rogers acquired (and then dismantled) Mobilicity in 2015. The Competition Bureau's [approval](#) of Bell's take-over of MTS last year girded the trend and raised questions about the Bureau's resolve on such matters, given that its own analysis showed that oligopolistic behaviour by the big three national carriers—Bell, Rogers and Telus—is hobbling the availability of high quality, affordable mobile wireless services, especially in areas where there is no strong independent rival. Despite its own clearly presented conclusions, however, the Competition Bureau gave the green light to Bell's takeover of MTS, thereby adding Manitoba to the list of provinces and regions without a strong independent operator (see our [report](#) opposing the deal).

Consolidation has also surged over the last decade on the media side of things, as Figure 1 above illustrated. Shaw's takeover of Global TV in 2010, with its suite of thirty specialty and pay TV channels and nine television stations, from Canwest (2010), kicked off the trend. Bell's re-purchase of CTV (2011), acquisition of a joint-ownership stake (37.5%) with Rogers (37.5%) and Kilmor Sports (25%) in [Maple Leaf Sports and Entertainment](#) in 2012, and take-over of Astral a year later all fueled the trend (see the TV Services Ownership sheet in the [CMCRP Workbook](#); BCE, [Annual Report](#), p. 31). The latter set of deals turned Bell into the biggest TV and radio broadcaster in the country, with a suite of thirty broadcast TV stations, thirty-nine pay and specialty TV channels, the Crave streaming TV service, and 105 radio stations in fifty-four cities nationwide.

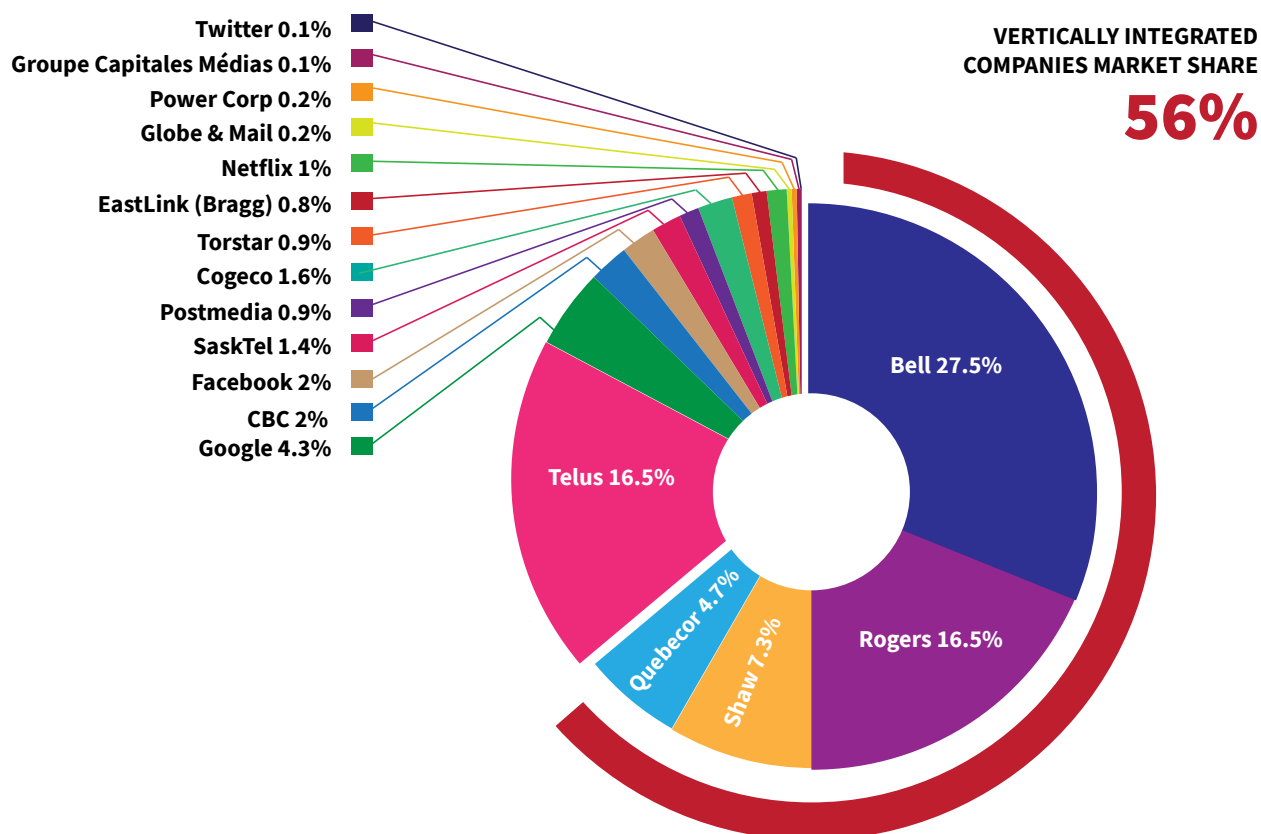
Consolidation and the Rise of Vertically-Integrated Telecoms and TV Companies at the Centre of the Canadian Media Universe, circa 2010–Present

Consolidation across the network media economy has also yielded a specific type of media firm that now sits at the apex of the network media universe in Canada: the vertically-integrated telecoms, internet and media conglomerate. Vertical integration has soared, and is now exceptionally high relative to the past and to conditions in the United States and internationally. Figures 2 and 3, below, illustrate the steep increase in vertical integration that occurred between 2008 and 2017, while Figure 5 (further down) offers a comparison with the state of affairs in the United States.

Figure 2: Vertical Integration and the Network Media Ecology, 2010



Sources: see the “Top 20 w Telecoms” sheet in the [CMCRP Workbook](#).

Figure 3: Vertical Integration and the Network Media Ecology, 2017

Sources: see the “Top 20 w Telecoms” sheet in the [CMCRP Workbook](#).

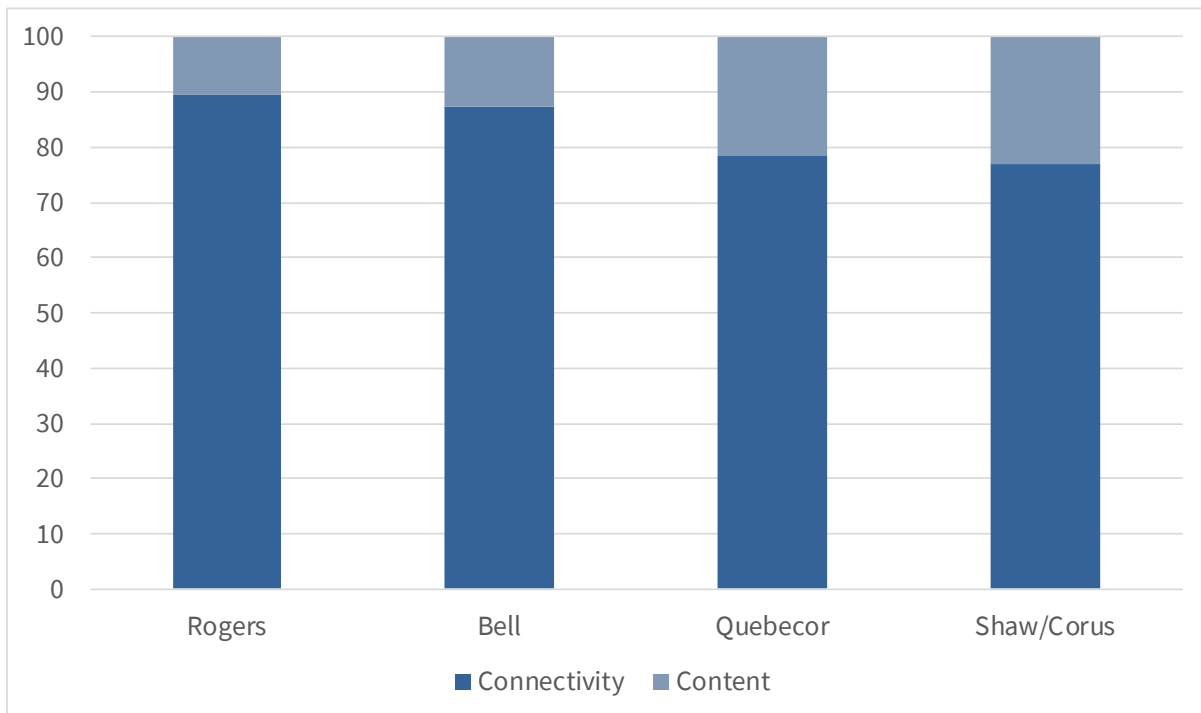
As Figures 2 and 3 illustrate, in the span of a few years, the vertically-integrated companies’ share of the network media economy in Canada more than doubled. By 2017, four such conglomerates accounted for 56% of all revenue across the network media economy: Bell (CTV), Rogers (CityTV), Shaw (Global) and Quebecor (TVA), as Figure 3 shows—a figure that was slightly higher than the preceding year.

These developments are important for several reasons. First, they distinguish the past from the present. Whereas such firms were the exception in the past, today the top four vertically-integrated telecoms, internet and media giants occupy centre stage (one might also include Telus on account of its fast-growing role in television distribution, but it does not actually own any content-based). Zero in on just telecoms and broadcasting, and the ‘big 5’ accounted for 84% of all revenue in last year—up substantially year-over-year and from 2010 when the “big 5” accounted for just over two-thirds of all revenues across the network media economy.

Second, these five companies’ collective control over communications infrastructure is the fulcrum of their business and the pivot around which the rest of the media economy swivels. Their stakes in content media, while extensive, are modest by comparison to their network operations. For Quebecor, Shaw, Bell and Rogers, 77-90% percent of their revenues flows from the bandwidth and connectivity side of their business rather than from content creation and exhibition. This basically welds the subordination of content

to connectivity into the very heart of the media system in Canada. Telus, in contrast, is not in the content business at all beyond acquiring distribution rights for its Optik IPTV, Pik TV and mobile TV services, and therefore it is *not* a vertically-integrated company. Figure 4 below illustrates the point.

Figure 4: Connectivity vs Content within Canada’s Vertically-Integrated Telecoms and Media Companies, 2017 (Ratio by Revenue)



Sources: see the “Top 20 w Telecoms” sheet in the [CMCRP Workbook](#).

Another way to put this is that content media have largely become ornaments on the national carriers’ corporate edifice. They are strategically important, but their real purpose seems to be to drive the take-up of the companies’ more lucrative wireless, broadband, and cable, satellite and IPTV services. The fact that Bell owns roughly half of the services on its [Mobile TV](#) roster, for example, illustrates the point: e.g. CTV, CTV News Channel, CTV Two, BNN, Comedy Network, Comedy Time, MTV, NBA TV, NFL Network, E!, RDS, RDS2 and TSN, TSN2, etc.

The CRTC has already examined some of the results of this kind of consolidation on the carriers’ behaviour. For instance, in the [Mobile TV case](#) the Commission determined that Bell was using its control over the means of delivering television programming to confer an undue preference on its services at the expense of subscribers, rivals and independent sources of content available over the internet. Bell appealed the ruling to the [Federal Court of Appeal](#), but [its appeal was rejected in mid-2016](#).

Other cases similar to Mobile TV, however, have emerged one after another in a never ending game of regulatory whack-a-mole: see, for example, the complaint initiated by [J. F. Mezei](#) and the [Public Interest Advocacy Centre](#) against [Videotron’s Music Unlimited](#),

which was later rolled into the regulator’s review of “[differential pricing practices](#)” (the zero-rating proceeding), or the Commission’s [Hybrid Video-on-Demand decision](#), or Bell’s appeal of the [wholesale vertical integration code](#), to name just a few. The thread connecting all of these cases is the extent to which media content is being tied to carriage in ways that raise fundamental questions about the future of common carriage (“network neutrality”) and the open internet, and the role that concentrated network ownership plays in these developments.

Two landmark rulings in 2017 under then-chair Jean-Pierre Blais dealt with these issues in a way that constituted very significant wins for common carriage (“net neutrality”), competition and cultural policy. In the first of these rulings, the CRTC found that Videotron’s [Unlimited Music](#) program ran afoul of Canada’s telecoms law by giving undue preference to subscribers of the company’s highest tier data plans over the rest of its customers and to the select music services included in its offering such as Apple Music, Google Play, Spotify versus those that are available over the internet and public airwaves but left out Videotron’s Unlimited Music offering, e.g. the CBC and commercial radio stations.

The CRTC also combined the lessons of that ruling with its 2015 [Mobile TV](#) decision and interim events to develop a [general framework](#) that effectively bans wireless operators and ISPs from singling out content-based services and apps for special treatment such as zero-rating, whether on the basis of commercial agreements or otherwise. The framework also banishes **pay-to-play** schemes like those in the US where certain content providers or in-house affiliates like AT&T’s DirecTV “sponsors data” so that the internet traffic generated by the use of the service does not count against AT&T subscribers’ monthly data allotments.

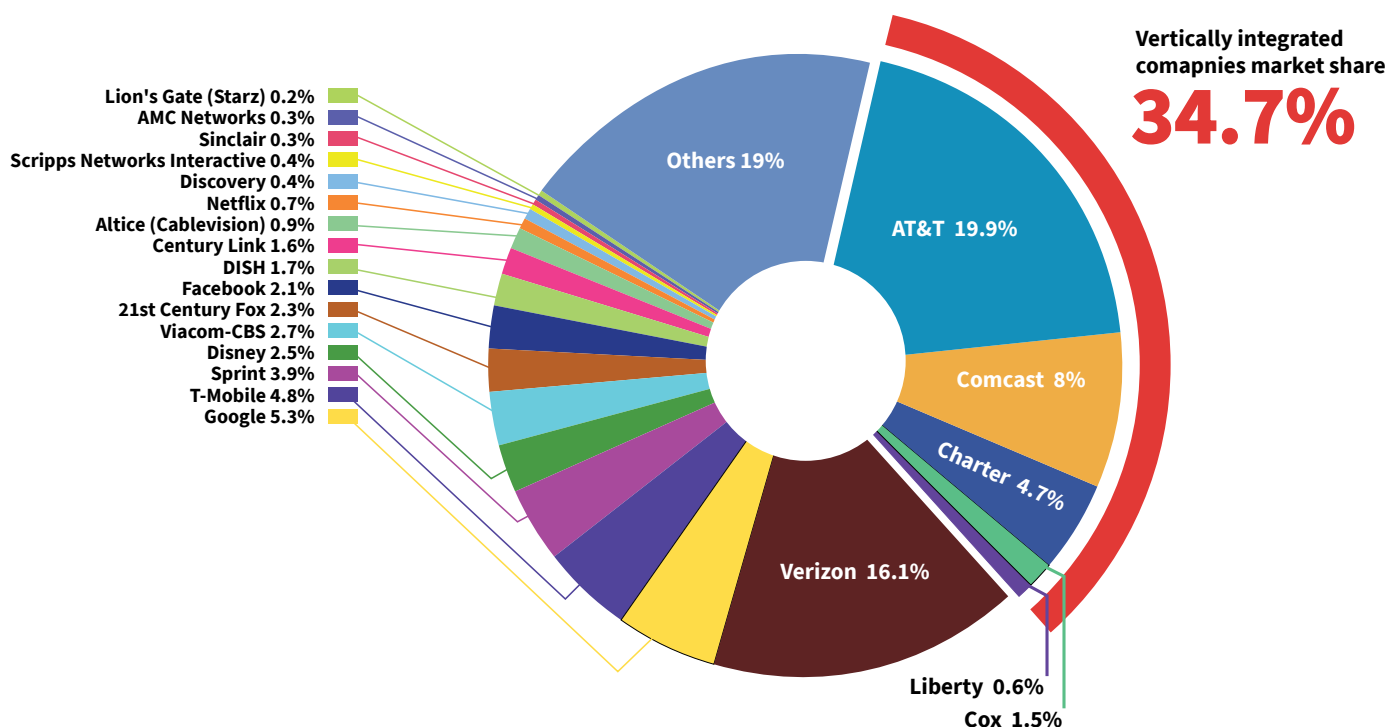
Basically, with these rulings, the CRTC determined that mobile wireless companies and internet access providers should only provide the gateway to the internet rather than playing the role of editors and publishers who pick and choose which services, content and applications is put before people’s eyes.

These rulings are clear victories for common carriage in Canada. They are clear that the long-standing telecoms policy principle of common carriage still applies to internet access and mobile phones. The rulings also clarify the idea that, when offering access to the internet, carriers are not publishers or broadcasters. Consequently, the basic idea is that when it comes to the selection and use of content, apps and services over the internet and via mobile phones, citizens-consumers-subscribers are in charge rather than the carriers. Seen in this light, the rulings are victories for the open internet and the idea that it is people’s expressive and communication rights that come first in a democracy rather than those who own and control the networks upon which day-to-day life, society and economic activity depend.

Vertical Integration in Canada and the United States Compared

The cases discussed above address a unique feature of the media in this country: the extremely high levels of vertical integration that exists between telecoms companies and media services, especially television services. Indeed, the levels of vertical integration that now prevail in Canada are not just high by our own historical standards, but also relative to those in the United States and internationally. High levels of concentration, exacerbated by the extreme scale of vertical integration, have been significant enabling factors to the parade of harmful business practices described above. Figure 5 below illustrates the situation as it exists at present in the United States.

Figure 5: Top Telecom-Internet and Media Companies in the US, 2017 (Market Share)



Sources: see the “Top US Telecom + Mediacos” sheet in the [CMCRP Workbook](#).

Seen together, Figure 3 above and Figure 5 depict the stark contrast between the magnitude of vertical integration in Canada and the US. In each country, there are four vertically-integrated companies that stand apart from the rest of the field: i.e. Bell, Rogers, Shaw and Quebecor in Canada and AT&T, Comcast, Charter (Liberty) and Cox in the US. The comparison, however, stops there because while in Canada the “big four” control well

over half of all revenue across the network media economy (57%), in the US the “big four” account for just more than a third of the massive \$1,405 billion (CDN) American network media economy.

AT&T’s acquisition of Time Warner in 2018 has, however, changed the picture dramatically. As a result of this mega-deal, AT&T has become a gigantic vertically-integrated conglomerate with \$168 billion in revenue last year from within the US alone and operations that span mobile wireless services, broadband internet, cable and pay TV (e.g. TNT, Cartoon Network, CNN, the CNN and HBO), streaming TV and film services (e.g. HBO, “iStreamPlanet” and Boomerang), and Warner Bros. films (see the “Top US Telecom + Mediacos” sheet in the [CMCRP Workbook](#)). As a result, the “new AT&T” single-handedly accounts for roughly a fifth of the enormous US media economy—two-and-a-half times the size of its nearest vertically-integrated rival, Comcast and four times the size of the third ranked media conglomerate, Charter (Liberty).

Prior to AT&T’s take-over of Time Warner and the formation of Charter Communications in 2016 (see below), there was only one other company that stood in a comparable position to these two vertically-integrated giants within the US: Comcast. While a massive media conglomerate by any standard, Comcast is far smaller than AT&T, with revenue of \$67 billion and a market share of 8%. This is because, unlike AT&T, Comcast is not a player in the mobile wireless market, other than a tiny mobile virtual network operation that has hardly got off the ground.

The other large vertically-integrated communications and media conglomerate in the US is Charter Communications (Liberty) with revenue of \$44.6 billion and just over 5% share of the network media economy in 2017. Like Shaw and Corus in Canada, Charter and Liberty are separate legal entities, but they are commonly owned. Charter was created when Liberty Media’s controlling stakeholder, John Malone, spearheaded the acquisitions of Time Warner Cable and BrightHouse Cable in 2015 and then merged the two entities into the new Charter Communications a year later. The result was the fourth largest cable TV operator in the US, on the one side, and Liberty Media’s ownership of SiriusXM and the pay TV operator Starz (e.g. Animal Planet, Discovery, Encore, Black, Starz, Movieplex, etc.), on the other. While Starz was sold in late 2016 to [Lionsgate](#), an independent film studio, Malone’s controlling ownership stakes in Charter and SiriusXM through Liberty Media means that the label of vertical integration still fits.

This complex set of transactions and overlapping ownership interests bears on the question of vertical integration in two important ways. For one, the FCC conditioned its approval of the transactions that led to the creation of Charter on the new firm’s acceptance of a seven year ban on the use of data caps as well as strict curbs on zero-rating, usage-based pricing and other methods that could constrain the advent of the Internet and online video distribution (OVD) as viable rivals to the traditional “cable TV model” and, thus, to Charters’ third-ranked place within that market ([FCC, 2016, paras 74-87](#)). In short, the FCC was hyper-alert to concerns with vertical integration, and as a result of these concerns imposed stern measures to curb the threats it posed, not just to the prices that consumers would pay, but to the rise of whole new technologies, business models and markets.

Second, while there was no talk of Starz content being offered as part of stand-alone internet streaming services early on in this new union, this changed later that year when the pay TV division was being cut loose from Charter. Just prior to its sale to Lionsgate in December 2016, Starz launched its own stand-alone internet streaming TV service and mobile app—services that Lionsgate has made central to its efforts to become a full-fledged pay TV operator. In other words, no longer tied and subordinate to its cable master, Starz had the incentive to deliver its TV and film content to as many audiences over as many distribution platforms as possible. That is exactly what it has done ever since. It is for this reason that we can say that the potential success of internet streaming TV improves when the integration of TV services into cable operators and telecoms carriers is reduced.

Cox is the only other vertically-integrated company in the US but is much smaller than the three other such firms just discussed. It is the sixth largest cable TV operator and owns a relatively small number of broadcast TV and radio stations. With total revenue of \$12.7 billion in 2017, it had a 1.5% share of the network media economy in the US. Taken all together, the four vertically-integrated operators account for 35% of the network media economy in the US. Compared to 56% in Canada. This significant disparity helps explain why Canadian TV fares so poorly, on its own terms and relative to the rest of the comparable world.

Of course, some might wonder where Verizon's 2016 "blockbuster" take-over of Yahoo! fits into this discussion about vertical integration? The short answer is, it doesn't, at least not in a sufficiently significant way to merit status as a 'vertically integrated' company. To understand why, consider, for example, that [Yahoo!'s](#) worldwide revenue in 2015 on the eve of its take-over was \$5.2 billion, whereas [Verizon's](#) revenue, which derives almost entirely from the US, was \$122.3 billion in 2017. In other words, Verizon's revenues were twenty-five times that of Yahoo!. To put this another way, Yahoo! represents only 4% of Verizon's total revenue—a significantly smaller proportion of its earnings compared to other companies in which vertical integration plays a substantially larger role.

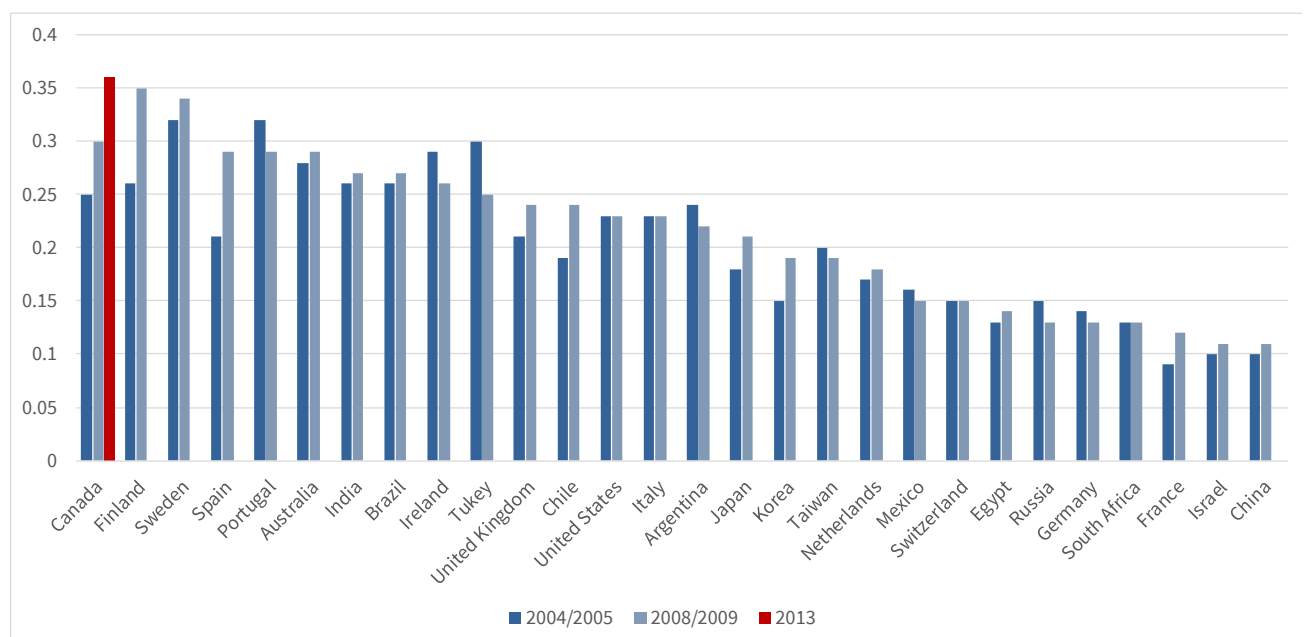
What's more, unlike the content operations of the other vertically-integrated conglomerates discussed above, Yahoo! is an aggregator of online content—mainly news—a qualitative difference that sets it apart from its potential counterparts. Companies like AT&T and Comcast have predominantly integrated into the production and distribution of audiovisual content—i.e. television programming—which not only represent a much larger undertaking, but are of a distinctly different kind than Yahoo!. Given these observations about the limited scale and scope of the Verizon-Yahoo! relationship, we take the view that Verizon's ownership of Yahoo! is not sufficiently comparable to the operations of either the media conglomerates in Canada or to those of AT&T, Comcast, Charter and Cox in the US, companies whose holdings reach vertically up and down the stack *and* diagonally across the TV, radio and production domains, to consider Verizon a vertically integrated media company.⁵

⁵ Also consider, for example, that Yahoo!'s revenues account for just 4% of Verizon's total revenue, whereas broadcasting and other content operations account for 10-25% of the Canadian vertically integrated-giants, with Rogers (10.3%) at the low end of the scale and Shaw (23.1%) at the high end (see Figure 4 above).

Several conclusions follow from these observations. First, the current iteration of vertical integration in the US is a more recent but far less extensive phenomenon than it is in Canada. Second, current trends must be understood against the collapse of the dot.com bubble at the turn-of-the-21st Century when several giant telecoms-internet-media conglomerates forged at the height of the dot.com euphoria floundered badly and were, consequently, dismantled and sold-off piecemeal (e.g. AOL Time Warner, Bell Media, CBS-Viacom, News Corp, Vivendi) or put into bankruptcy (e.g. AT&T, Adelphia, Canwest, etc). ([Picard, 2011](#); [Jin, 2013](#); [Skorup & Thierer, 2012](#); [Thierer & Eskelen, 2008](#); [Waterman & Choi, 2010](#)). The dominant trend thereafter, as [Dal Yong Jin](#) observed, was toward vertical *dis-integration* and *de-convergence*. In Canada, Bell Canada Enterprises sold down its stakes in CTV and the *Globe and Mail* in 2006, while Canwest collapsed into bankruptcy in the last two years of the decade.

The trend toward vertical *dis-integration*, however, once again changed course in Canada when Shaw bought the TV assets of the bankrupt Canwest Global in 2010 (while Postmedia bought the companies' newspapers) and Bell re-acquired CTV in 2011, respectively. Vertical integration was then locked into place as the centerpiece of the network media economy in Canada thereafter by both the industry and the CRTC. As a result, Canada has ranked at the extremely high end of the vertical integration scale relative to other comparable countries ever since. Indeed, Although now quite dated, Figure 6 below uses the most recent data available from the twenty-eight countries covered by the International Media Concentration Research Project (2009) and for Canada for the years covered by that project and 2013 to illuminate the extent of vertical integration in Canada relative to international standards.

Figure 6: Vertical Integration and Cross-Media Ownership -- Canada in a Global Context, 2004 - 2013



Sources: see the “CrossOwnership Canada vs World” sheet in the [CMCRP Workbook](#) and [International Media Concentration Research Project](#).


While there have undoubtedly been changes in many of the countries shown in Figure 6, there have been none other than those just described in the US that this author is aware of that would dramatically change the story it tells. Moreover, consider the fact that the direction of change for most countries—in line with Jin’s “deconvergence” thesis—is down, not up. That said, new data is needed to say anything more definitive and efforts are afoot in a major new global project to just that.

But returning to the US, the contrast between Canada and our southern neighbor was particularly stark until about two years ago, because vertical-integration between American telecoms operators and media content companies was extremely rare. Before the recent developments discussed above, the only exception was Comcast’s acquisition of NBCUniversal in 2011. This situation has changed significantly since 2016, however, first with the creation of Charter (Liberty) (also described above) and again earlier this year when AT&T consummated its blockbuster deal with Time Warner. Even taking account of these changes, however, vertical integration in the US continues to be substantially less than in Canada.

Consequently, in both countries, there are four vertically-integrated communications-centric conglomerates that tower over the rest of the terrain. In Canada, it is Bell, Rogers, Shaw and Quebecor, while AT&T, Comcast, Charter (Liberty) and Cox stand in a similar position in the US. To put this another way, the US is increasingly moving closer to the position that Canada is already in.

Some structural similarities appear to be taking shape between these entities as well. The “new” AT&T, for example, most closely resembles Bell’s organizational structure and stature in Canada. The latter’s operations span many of the same industries (except film) but has a far bigger market share (28%) of the much smaller Canadian market versus AT&T’s control of a fifth of the US market. Comcast’s structure and stature is also similar to that of its Canadian counterparts like Rogers, Quebecor and Videotron—each of which traces its legacy to the history of cable TV in Canada and the US, respectively.

Lastly, TELUS and Verizon seem most alike insofar that neither is vertically-integrated because both have eschewed such a strategy and the need to bulk up on “content” largely on the grounds that telecoms operators know precious little about making TV and movies or understanding audiences and culture. Besides, in an era when bandwidth is king, not content, they appear to see little need to own extensive catalogues of media content of their own. The similarities, however, stop there, because, to repeat for emphasis, the big four vertically-integrated conglomerates in Canada account for well over half of the \$81.2 billion network media economy (56%), while in the US, the “big four” American firms control about a third of the massive \$1,405 billion (CDN) network media economy. ■



A Closer Look Competition and Concentration Trends with Specific Media Industries

The following sections focus on developments sector-by-sector, and within the three main categories we use to group each of the sectors covered by the CMCR project:

- network media (wireline & wireless, ISPs and cable, satellite, IPTV);
- ‘content’ (TV, newspapers, magazines and radio);
- ‘online media’ (search, social media, online news sources, desktop and mobile browsers as well as desktop and smart phone operating systems).

At the end, these categories are combined again one last time to complete the analysis and gain a bird’s eye view of the network media economy as whole.

Network Media

The network media category consists of the communications infrastructure and carrier segments of the network media economy: i.e. wireline telecommunications, mobile wireless, internet access and cable, satellite and IPTV. The first thing that stands out about all sectors of the network media industries is that they are all highly concentrated or at the high-end of the moderately concentrated scale. Table 1 below illustrates the point. This has long been the case, although with some important exceptions, past and present, as discussed below.

Table 1: CR and HHI Scores for the Network Infrastructure Industries, 1984 – 2017

CR4		1984	1988	1992	1996	2000	2004	2008	2010	2011	2012	2013	2014	2015	2016	2017
Wireline		92	89	88	82	92	81	92	87	88	87	87	85	76	78	82
Wireless			100	100	100	96	98	98	97	96	95	94	94	95	94	94.6
Internet Access					58	39	51	51	58	59	59	61	62	61	60	63
Cable, Sat & IPTV		41	54	69	85	75	87	83	84	84	82	81	81	80	79	81

HHI		1984	1988	1992	1996	2000	2004	2008	2010	2011	2012	2013	2014	2015	2016	2017
Wireline		5027	4417	4177	3352	4117	2919	3833	3404	3447	3361	3270	3092	2575	2701	2976
Wireless		5501	6165	7968	4995	2637	3081	3151.3	3056.9	3006.2	2886.5	2816.8	2849.2	2899.6	2858.1	2853
Internet Access (Local)						3340.2	4137.1	4550.4	4587.6	4610.2	4549.4	4461.5	4295.6	4139.8	4073.1	3999.7
Cable, Sat & IPTV (Local)					10000	7481	7145	6612	6341	6073	5857	5697	5395	5412	5310	5200

Sources: see the “CR & HHI” sheet in the [CMCRP Workbook](#) + individual sheets for each sector.

CR4 and HHI measures for wireline telecoms—which basically consists of “plain old telephone service” (POTS)—scores fell in the late-1990s as the first seeds of competition took root. This was sped along by the introduction of long distance competition in 1992 and local telephone competition five years after that. Concentration in this sector fell greatly between 2000 and 2004 as a result.

However, the collapse of the dot.com bubble wiped out many of the new rivals and the trend reversed course until 2008 or so ([CRTC, 2002, p. 21](#)). For the next several years there was a minor increase in competition while concentration levels fell steadily from 92% in 2008 to their lowest ever in the period we have examined, with the CR4 at 76% in 2015 and the HHI just above the “highly concentrated” threshold. This was mostly due to [MTS’s sale of Allstream](#) to the US backbone network operator, Zayo, while small up-ticks in the market shares of Telus, Videotron and Eastlink also played a part. That trend, however, has since reversed in the last two years, with both the CR4 and HHI measures climbing as a result, mostly due to BCE’s acquisition of MTS in 2017.

Mobile Wireless

In recent years, a number of studies have argued “that there is not a competition problem in mobile wireless services in Canada” (see [here](#), [here](#), [here](#)).^[1] They also claim that, relative to international standards, concentration levels in mobile wireless services in Canada are at the low end of the range, and have fallen in recent years. The Canadian market is actually competitive and becoming more so, they claim. However, evidence from the last decade of developments in the mobile wireless market paint a very different picture.

In 2008, the Conservative government began to use spectrum policy and a series of [new rules](#) to more aggressively encourage new entrants to enter the market. Following the 2008 auction of “advanced wireless services” (AWS) spectrum, in which Industry Canada reserved spectrum exclusively for new firms, four “new entrants” joined the field: Wind, Videotron (Quebecor), Public Mobile and Mobilicity. Eastlink, a subsidiary of diversified conglomerate Bragg, won spectrum in the 2008 auction, technically making it a fifth “new entrant,” but for reasons unknown it waited until 2013 to launch service in its home territories in the Maritimes and later in a handful of northern Ontario towns.

As a result of these efforts, levels of concentration in the mobile wireless section did decrease modestly for several years, but they always remained well within the highly concentrated zone and have actually begun to creep upwards in the last three years. In 2017, the market share of the top three mobile network operators – i.e. Rogers, Telus and Bell – increased slightly from 92.2 to 92.3% of the market. While still very high, this does represent a decrease from the 96% share they collectively enjoyed when Harper’s Conservative government began its crusade to introduce a fourth wireless competitor in all areas of the country. Indeed, three of the new entrant mobile network operators—Freedom Mobile (previously Wind), Vidéotron, and Eastlink—have carved out a measure of success for themselves during this period as the pro-competitive policy measures put into place by the previous government gained traction.

In what follows, we present an analysis of recent developments in the mobile wireless market, to better understand these high-level trends.

Following the 2008 AWS auction, the initial years were rocky for most of the new entrants. A challenge to Wind's ownership was mounted by the CRTC in 2008/9 upon petition by Shaw and Telus; the Commission determined that Wind did not meet the foreign ownership criteria, creating uncertainty for the company's future ([Klass, 2015](#), pp. 74-76). The CRTC's decision was overturned by the Conservative Cabinet in 2009, with the net effect being a major delay for the young wireless competitor. While this decision was also challenged, the issue became moot with a change to the legislated foreign ownership restrictions in 2012, which amounted to another prong in the Conservatives' campaign to increase the competitiveness of telecoms markets across the land. Ironically, Wind was abandoned by its foreign backers before being acquired by western cableco Shaw in 2016, and rebranded to 'Freedom Mobile'. By the end of 2017, it had amassed a total of nearly 1.15 million subscribers (Shaw, [2017 Annual Report](#), p. 7), which we estimate to represent 5% of market share (by subscribers) in Freedom's operating territory of BC, Alberta, and Ontario at that time (see CRTC, CMR 2018, Table 6.6) (add the following link over "[CMR 2018](#)")..

Videotron also surpassed the million-subscriber mark in 2017, ending the year with 1.02 million subscribers. It offers service only in Quebec and the National Capital Region. Videotron struck network sharing agreements with Rogers in Québec, and in 2014 it purchased licenses for the desirable 700MHz spectrum in BC, Alberta, and Ontario, fueling speculation that the company was preparing for a national expansion. That speculation was put to rest, however, when Videotron sold those [spectrum licences](#) to Freedom Mobile in June of 2017. Despite having shied away from national competition, Videotron's market share within its home province of Québec and the National Capital Region continues to rise, reaching 15% of the total mobile subscriber base in its operating areas in 2017, representing an estimated 13.1% of market share by revenue. This suggests that it has found a viable place in the wireless business, and that it has gained subscribers while offering lower rates than its established competitors.

Eastlink launched its own mobile wireless service in the Maritime Provinces in 2013, and subsequently in the summer of 2016 it began to offer service in a handful of cities and towns in Northern Ontario—specifically, Sudbury, Timmins, and parts of the surrounding areas. However, beyond noting its presence in these areas, not much else can be reliably said about its operations because, as a privately held subsidiary of the conglomerate Bragg, Eastlink does not release public information regarding its telecommunications or broadcasting operations. A recent [transfer of spectrum from Eastlink to Bell in the North Bay, Ontario area](#) does, however, suggest that Eastlink's plans for expansion in Ontario may be limited.

Other new entrants did not fare as well. Public Mobile failed in 2013, for instance, and was acquired by Telus. Similarly, Mobilicity was acquired by Rogers in 2015 following nearly two years spent under creditor protection. Over the second half of 2016, Rogers shuttered the Mobilicity brand while moving Mobilicity's customers over to its Chatr flanker brand.

In March 2017, Bell announced that it had completed its takeover of Manitoba provincial incumbent MTS, which at the end of 2016 had approximately 490,000 mobile subscribers and nearly \$350 million in mobile revenue. This merger, which [the CMCRP opposed in a report submitted to the Competition Bureau](#), was approved by the Bureau notwithstanding its [staff's own findings](#) that the merger “would eliminate the spur to competition provided by MTS as a strong regional competitor [and] that MTS’ presence is the likely reason for the lower prices in Manitoba.”

Even though the Bureau determined “that the elimination of MTS would likely cause prices in Manitoba to rise toward levels observed in regions without a strong regional competitor”, it nevertheless blessed the deal. As conditions of approval, the Bureau required that the merged Bell-MTS divest customers and retail locations to Telus, and customers, retail locations, and spectrum to Xplornet, which is expected to begin offering service in late 2018. While the introduction of Xplornet—which until now has only operated in the fixed wireless broadband sector—may go some way to mitigate the loss of MTS as a strong regional competitor to the national carriers, it is too early to tell whether Xplornet will be able to effectively constrain the national carriers’ collective power to raise prices in the Manitoban mobile wireless market.

Taking these developments into account, at the end of 2017 the combined national marketshare of the remaining new entrants inched upward to just less than 5% (not including Eastlink or Tbaytel, for which statistics are unavailable). Include SaskTel in the group and, combined, the new entrants and smaller regional incumbent accounted for nearly 7% of wireless revenues, down from 8% in 2016 according to the CMCR Project’s data (see “Wireless” sheet in the [CMCRP Workbook](#)). According to the CRTC, the new entrants’ total market share declined from 9.3% to 8.2% based on revenue and from 11.1% to 9.9% based on subscribers (see CRTC, CMR 2018, [Figure 6.2](#) and [Figure 6.9](#)). Although new entrants have grown in absolute terms (for both revenue and subscribers), the relative decrease in marketshare of non-national mobile wireless competitors that took place this year can be explained by Bell’s acquisition of MTS, which more than offsets the growth experienced by independent competitors elsewhere in Canada.

While the data reflect the success of Freedom and Vidéotron, there is one detail that should not be glossed over: both are now part of large, vertically-integrated communications conglomerates. As such, it may no longer be entirely accurate to consider them “new entrants”, at least not in the same sense as the built-from-the-bottom-up companies that got their start almost ten years ago.

Indeed, zoom out from a single focus on the wireless market, and we see that all wireless carriers in Canada are now part of *vertically* and *diagonally integrated* communications and media companies. Diagonal integration refers to a situation in which firms operate across distinct spheres of related markets (i.e. wireline and wireless broadband); thus, such companies operate according to a different incentive structure than stand-alone entities. This has important implications for understanding how firms offer services; for instance, [as we have documented elsewhere](#), stand-alone mobile providers tend to offer far more generous data buckets than mobile providers that are connected

to wireline network operators. Underscoring the importance of accounting for the diagonally-integrated nature of Canada's mobile firms, we observe that in 2017 Freedom Mobile ceased offering the unlimited plans available prior to its acquisition by Shaw. Similarly, BCE discontinued MTS's unlimited offerings just more than a year after the takeover was completed. In short, expectations of extensive disruptive behaviour from Freedom and Vidéotron should be tempered by the fact that they both now operate as part of larger firms—in both cases regional cable companies—with often competing interests *across* the network media economy.

Some industry observers have taken the fact that the remaining entrants are now affiliated with vertically-integrated regional cable companies as an opportunity to call for the government to end its policy of supporting the new entrants (see [here](#)). These voices argue that companies like Videotron and Shaw are not in need of “public subsidies” such as spectrum set-asides. Our analysis of the data, including market performance as well as continuing actions of government, suggests otherwise. The entrants' spectrum holdings are still dwarfed by that of the incumbents; and so too is Freedom and Videotron's marketshare. Until the entrants are able to provision networks that can truly compete against the incumbent carriers, their disciplinary effect on the incumbent oligopoly is likely to remain marginal.

Removing measures designed to promote competition in this sector would be premature to say the least—as it stands, the entrants' ability to effectively compete is conditional upon continued access to mandated roaming service, which enables the entrants to offer comparable coverage to the national carriers. Were the government to reverse its supportive policy now, it would be tantamount to delivering the keys to the kingdom back into the hands of Bell, Rogers, and Telus at a crucial moment in the development of sustainable competition in the Canadian wireless market.

While the incumbents' market share dropped noticeably between 2008 and 2013, it has held steady over the course of the past four years. Rogers (32.3%), Telus (29.4%) and Bell (30.6%) accounted for 92.3% of the market by revenue at the end of 2017 (a slight increase from last year), or 91% when measured by the number of subscribers (see the “Wireless” sheet in the [CMCRP Workbook](#) and [CWTA](#) subscriber figures).

In 2017, the HHI score for mobile wireless, at 2857, was virtually unchanged from where it stood last year (2858 at the end of 2016). To be certain, this reflects an improvement over the 3000+ scores seen pre-AWS auction, but it is still far above the 2500 threshold that marks a highly concentrated market (see “Wireless” sheet in the [CMCRP Workbook](#)). The fact that concentration levels have remained steadily in the “highly concentrated” range highlights the persistence of the incumbent firms' collective market power, a fact recognized by both the CRTC and the Competition Bureau, as we discuss further below.

Moreover, national measures of concentration understate conditions in specific provinces, regions and cities, but also overstate conditions in others. While official statistics at the province level remain unavailable due to the unprecedented delay of the CRTC's

yearly monitoring report, we estimate that the least concentrated market in Canada remains Quebec, where Videotron's subscriber share grew to 15% in 2017, and 13.1% based on revenue, according to the CMCR Project's estimates and figures reported by Videotron (see the "Wireless" sheet in the [CMCRP Workbook](#); Quebecor, [MDA 2017](#), p. 12).

Since the end of 2017, new entrants such as Freedom Mobile and Videotron have on several occasions offered promotions that feature significant improvements in price and data offerings than have been made available in the past. Videotron's service pricing in Quebec, for example, appears to be reaching levels comparable to those found in Saskatchewan and Manitoba (pre-BCE-MTS merger), both provinces in which a strong fourth competitor has successfully imposed pricing discipline on the national carriers. Furthermore, in Quebec, the national carriers, mainly through 'flanker brands' such as Virgin, Koodo, and Fido, have responded by matching Videotron's pricing. Elsewhere, the national carriers' competitive response to Freedom appears to be more muted, taking the shape of targeted temporary promotions against a backdrop in which prevailing price levels are maintained the rest of the time. These examples suggest that competition from the fourth carrier may be beginning to have its desired effect, although the small market share thus far obtained by Freedom and Videotron suggests that caution remains warranted regarding future developments.

Curiously, the CRTC's province-level data on market share excludes Freedom and Eastlink, and are therefore of little utility in assessing the impact of those companies on provincial concentration levels. In the absence of such data, making concrete claims about trends at the province level is difficult, if not impossible. That being said, we estimate that overall market share remained similar to the previous years, save for in Manitoba.

For 2017, in Quebec the top two wireless companies had a combined subscriber market share of 57.4%—down 2% from 2015— and the lowest in the country by a large margin. The CRTC reports figures in the 77-79% range in Alberta, Ontario and British Columbia, consistent with figures from the past several years, but again, not including info on Freedom. The figure is higher yet in Saskatchewan (81%), and same goes for the following, although Eastlink is not measured: New Brunswick (81%), Nova Scotia (88%), PEI (87%), Newfoundland and Labrador (92.3%). The Far North remained largely unchanged at 96% ([CRTC, 2018](#)). In Manitoba, the purchase of MTS by BCE resulted in a situation whereby the national carriers collectively controlled the entire market in 2017, with Bell catapulting to lead position thanks to the merger. Xplornet's entry in the end of 2018 is expected to have an impact, although the potential extent of its effects on the competitive scene in Manitoba remain speculative.

It is worth repeating that these figures do not reflect the impact of Freedom or Eastlink, which for unknown reasons has been excluded from the CRTC's public data on province-level subscriber marketshare (CRTC [CMR 2018](#)). Importantly, this makes it impossible to determine the precise magnitude of the impact Freedom Mobile has had in each of Alberta, Ontario, and British Columbia (on an individual basis), and what effect

Eastlink has had in the Atlantic provinces and Northwestern Ontario. Given the heavy emphasis that government policy and bodies such as the CRTC and ISED have placed on promoting entry by a fourth carrier in all regions of the country, it comes as a surprise that detailed data on the performance of two of the three remaining competitors is not made available at the provincial or regional level.

While the figures for national concentration levels have painted a relatively consistent story over the previous several years, province-level statistics tend to vary more. Overall trends tend to indicate competition between two dominant firms, varying by province, with rivalry from a weaker third and sometimes fourth carrier filling out the market. Although official CRTC data on this measure remain inexplicably under wraps, there is little reason to doubt that this trend continues. Where the dominant firms are national carriers (i.e. Rogers, Bell, and/or Telus), prices tend to be higher and data allotments lower than in provinces where the dominant carrier is provincial. An example of this can be found by examining the mobile wireless market in Saskatchewan. Although Sasktel was the most dominant wireless provider by provincial market share at the end of 2017, the competitive situation in the prairies evinces lower prices and a greater degree of choice amongst service offerings than found elsewhere in Canada, not just from the ILECs but from the competing national carriers as well.

For instance, Sasktel offers mobile plans that include unlimited voice calling and unlimited mobile broadband usage on its province-wide network (MTS did the same before its takeover), whereas ‘unlimited data’ cannot be found elsewhere in Canada. Additionally, the national carriers have responded by offering Saskatchewan customers plans that feature much larger data buckets than those available at similar price points in other provinces (i.e. deep discounts), as [Peter Nowak](#) recently observed. Although CR4 scores are broadly similar across provinces, and HHI scores all fall within the “highly concentrated” range, competitive dynamics nevertheless differ from place to place, and understanding the facts behind the figures often benefits from this kind of analysis.

These differences will likely be coming to an end for Manitobans, however, as Bell completed its takeover of MTS in early 2017. Although Bell committed not to raise wireless prices in Manitoba for 12 months following the merger, prices predictably increased immediately after the promissory period expired, and, to add insult to injury, Bell has ended MTS’s practice of offering unlimited mobile data to its subscribers. So, although competition from new entrants appears to be slowly taking root in some parts of the country, its progressive effects should not be overstated, and in some parts of the country, efforts to increase or maintain competitiveness for the benefit of Canadian citizens and consumers have faced substantial setbacks.

The limits to competition are also illustrated by the fact that two of the new entrants have failed: Public Mobile and Mobilicity. Public Mobile was acquired by [Telus in 2013](#) and shut-down the next year. Mobilicity was taken over by Rogers in 2015 and then dismantled in a [complex series](#) of spectrum exchanges, whereby its spectrum has passed through the hands of Wind, Shaw, MTS, ultimately landing mostly in the hands of Bell, with some 20 MHz in the Winnipeg and Brandon areas being divested to Xplornet to kick-start its operations there.

The demise of Public Mobile and Mobilicity have largely redounded to the benefit of Telus and Rogers, who successfully stamped out the two new would-be rivals. Although Videotron and Freedom have together seen their share of the national mobile wireless market rise in recent years, the gains they have made in the past few years are still far off the high-water mark of the late 1990s when two new rivals, Clearnet and Microcell, garnered 13% of the national market between themselves before being taken over by Telus and Rogers in 2000 and 2004, respectively. Plus ça change, plus c'est la même chose, as [Daniel Paré](#) has observed.

The stubborn resilience of the national incumbents, and the steep uphill slog facing entrants to the wireless market, have not escaped the notice of federal policymakers and regulators. Beyond efforts by ISED/Industry Canada to use spectrum licencing to induce new entry into the market, there has been growing recognition that a firm, active hand is required from the government to ensure that wireless markets are delivering the goods to the population, regardless of where people live or how much they earn. Most notably, this recognition has led the CRTC to establish a framework to regulate the wholesale roaming rates national carriers charge to smaller competitors, lower-cost data-only plans, continued use of spectrum set-asides, and ongoing concern for the status of MVNO markets.

The CRTC was forthright in the 2015 *Regulatory Framework for Wholesale Mobile Wireless Services* [decision](#) in summing up what all this means for today:

- there has been very little change in retail market shares (either by revenue or by number of subscribers) in Canada in the past five years, despite entry into the market by several wireless carriers (para 35);
- the barriers to entry into the retail market are very high and the likelihood of new entry in the short to medium term is low (para 72);
- Rogers, Bell and Telus collectively possess market power in the national market for GSM-based wholesale roaming (para 74);
- Bell, Rogers and Telus “collectively possess market power in the national market for GSM-based wholesale MVNO access” (para 88); and
- “there is no rivalrous behaviour between the national wireless carriers in the provision of GSM-based wholesale MVNO access at a national level” (para 86).

The CRTC’s *Wireless Framework* decision highlights another interesting characteristic of the Canadian wireless market: the total lack of mobile virtual network operators, or MVNOs. As demonstrated by the CMCR Project’s 2014 report, [Mobile Wireless in Canada: Recognizing the Problems and Approaching Solutions](#), MVNOs play an important role in wireless markets around the world, both from an economic and from a policy perspective. Recognizing this, many regulators have taken steps to foster open access to wireless networks in order to spur competition from MVNOs.

In its 2015 decision, the CRTC determined that the national facilities-based wireless carriers had market power over third-party access to their networks, and had denied service to would-be competitors. While it took steps to encourage the entry of MVNOs, it stopped short of mandating access to the national carriers' networks. In the absence of such a mandate, however, it is unlikely that third party service providers will emerge to provide market discipline similar to the way companies like Teksavvy, Distributel, and Primus have done under the mandated access regime that applies to Canada's wired broadband networks.

Several challenges have been mounted to the CRTC's decision not to mandate MVNO access to the national carriers' networks. In August 2015, the Canadian Network Operators' Consortium, a trade group representing wholesale ISPs, filed an application requesting that the CRTC review and vary its decision, and require national carriers to allow independent MVNO access to their networks. The CRTC subsequently [denied](#) that application, although the issue has not been put to rest. In early 2015, Ice Wireless, a small mobile provider serving Northern areas of Canada, began to use its wholesale roaming agreement with Rogers to operate an MVNO called Sugar Mobile throughout Canada. [The issue came to the CRTC](#) when Rogers requested to terminate its agreement with Ice. Similar to the case with CNOC, the [CRTC spurned](#) Ice's efforts to enter the national market in March 2017 (also see [here](#)).

Despite these setbacks, as new entrants have failed or been consolidated, consumers and competitors continue to look toward MVNOs as a viable and attractive alternative to the status quo. Indeed, in June of 2017, ISED Minister [Navdeep Bains](#) ordered the CRTC to review its decision not to mandate MVNO access to the incumbents' networks for Wi-Fi based service providers like Ice's Sugar Mobile brand. Again, however, the CRTC declined to mandate access for MVNOs such as Sugar Mobile. Instead, it has taken the tack that the incumbents should be required to offer more affordable data-only services to low-income Canadians. This targeted form of retail price regulation veers away from the CRTC's approach under Blais, where the regulator showed signs that it was willing to tackle big structural issues in order to improve the overall conditions of a competitive environment. Instead, it appears that the CRTC may now be leaning toward an approach in which behavioral regulation of national incumbents appears is favoured under the leadership of Ian Scott. While the CRTC has yet to issue a decision in its "lower cost data only plans" proceeding, a review process of its stance towards MVNOs has been expedited and is expected to commence in early 2019. One thing that remains clear is that many find the status quo in wireless competition untenable, and new policy approaches must be (and do continue to be) explored in order to attain affordable universal service for 21st century communications media.

In sum, no matter how one looks at it, by city, region, province, or country, or by revenue, subscribers, or spectrum held and used, mobile wireless services are highly concentrated. While the prevailing CR and HHI levels in Canada are not especially high by international standards, the more pressing point is that concentration levels in mobile wireless markets around the world are, with few exceptions, "astonishingly high" (see [Noam, 2016](#), p. 25 and especially chapter 38, pp. 1307-1316). Given this, the real question is

what, if anything, will be done about this state of affairs? The CRTC's recent actions over the past half-decade have begun to address that question, although the approach so far has been decidedly incremental in nature.

Internet Access

As the telecoms and Internet boom gathered steam in the late 1990s new players emerged and became significant competitors. Indeed, by 1996, the incumbent telephone and cable companies' share of the internet access market was minimal while four relative newcomers accounted for over a third of the market: AOL (12.1%), Istar, (7.2%), Hook-Up (6.3%) and Internet Direct (6.2%). As a general observation, incumbents were slow to arrive and, in the meantime, new players stepped into the breach to develop internet access in Canada.

The early 'competitive ISP era' continued up to the turn-of-the-century but subsided thereafter on account of, first, the collapse of the dot.com bubble, when many of the early ISPs went out of business and/or were absorbed by larger players, and second, the switch-over from dial-up to high speed internet access. By 2000, the big four's (Bell, Shaw, Rogers & Telus) share of the internet access market had risen greatly but it was still a very modest 39% compared to where things have gone since. Nonetheless, at the time, internet access was still one of the most competitive sectors of the network media economy.

At the national level, the industry has steadily consolidated around the incumbent telephone and cable companies ever since. By 2004, the top four firms accounted for roughly half of all revenues. That figure rose steadily over the next decade, to the point where the top four firms have accounted for around 60% of the national market. In 2017, the top five companies—Bell Rogers, Shaw, Telus and Videotron—accounted for 72.4% of all revenues nation-wide, by our measure. The national HHI score for internet access also doubled from its low of 535 in 2000 to a figure twice that amount in 2010. It has steadily risen since to reach 1,237 last year—still a low figure by the standards of the HHI, but that is only when we consider things from the view of the country as a whole. Once we change optics, however, and look at things from the local level, the picture changes dramatically.

Examining things at the national level, as we have done for years, is helpful insofar that it allows us to see changes over time and to make international comparisons. However, looking at things from the vantage point of the national level washes out what retail internet access services look like on the ground in cities across the country. The effect of a national focus, basically, is to greatly exaggerate the extent of competition and choice because it assumes—wrongly—that Telus, for example, competes not only against Shaw in British Columbia and Alberta (for the most part) but with Bell, Rogers, Videotron, Eastlink, and so on across the country. In reality, however, this is not the case.⁶

⁶ Constructive criticisms from Catherine Middleton and Bram Abramson have also helped spur this change and our efforts to develop a better way to get a more precise, and therefore accurate, portrait of where things stand.

...consumers and competitors continue to look toward MVNOs as a viable and attractive alternative to the status quo.

Last year we decided to take a closer look at conditions on the ground. Table 2 below does so by showing the share of incumbent cable and telephone companies' as well as independent ISPs' share of the retail internet access market, respectively, in order to get a more precise proxy for competition at the local level. As it shows, just under 88% of the *residential retail* internet access market was accounted for by the incumbent telephone and cable companies last year based on revenue. Based on subscribers, the figure was 87%.⁷ Based on these measures, the retail internet access market is extremely concentrated, with an HHI score of 4000. This is far above the threshold for highly concentrated markets and significantly above the levels found for mobile wireless services, for example.

Table 2: Residential Internet Access Services by Type of ISP: Market Share, CR4 and HHI Scores based on Revenue, 2000–2017

	2000	2004	2008	2010	2011	2012	2013	2014	2015	2016	2017
Telco	35	41	39	36	36	35	36	37	38	39	38.6
CableCo	34	48	55	57	57	57	56	53	51	49	48
SubTotal	69	90	94	93	93	92	92	90	89	88	86.6
Indy ISP	31	10	6	7	7	7	8	10	11	12	13.4
Total	100	100	100	100	100	100	100	100	100	100	100
HHI	3340	4137	4550	4588	4610	4549	4462	4296	4140	4073	3973.5

Source: see the “ISP” sheet in the [CMCRP Workbook](#) and CRTC (2017) [Communication Monitoring Report](#) (Table 5.3.2 Residential Internet access service revenues by type of service provider).

Table 2 also shows that the incumbent cable and telephone company operators have dominated the retail internet access market for years, albeit with some significant changes over time. Take, for instance, the outset of the period covered in the early 2000s and during the heady days of the dot.com boom when independent ISPs accounted for

⁷ These estimates usually rely on the CRTC's Communications Monitoring Report but its unusual delay this year means that we have had to build estimates on top of their estimates by assuming previous year-over-year growth rates. These figures will be revised once the Commission publishes its report.

nearly a third of the market by revenue, and the HHI score was at its lowest point in the time span addressed here.

For most of the next decade, however, the fortunes of independent ISPs waned, while their market share plummeted from nearly a third based on revenue (37% based on subscribers) in 2000 to just above 6% in 2008 (or 8% by subscribers). The incumbents consolidated their gains as a result, with the lion's share of those gains going to the cable operators. However, once again, things have shifted in the past half-decade as the cable companies' share of the retail internet access market has slid due to mounting rivalry from the telephone companies as they roll out fibre-to-the-doorstep and on account of continued gains by the indy ISPs.

Throughout this period, the number of independent ISPs across the country has stayed steady over time at around 500. Over the last decade, independent ISPs' market share based on revenue has more than doubled from 5.8% to 12.4% last year, while their share of subscribers rose from 7.8 to 13.4%. The two biggest indy ISPs based on subscribers—TekSavvy (300,000 at year end 2017) and XplorNet (350,000)—combined accounted for estimated 3.6% of revenues last year—a slight increase over the previous year (see “ISP” sheet in the [CMCRP Workbook](#)).

While the independent ISPs' share of the retail internet access market has crawled upwards over time, the scale of concentration at the local level remains stubbornly high. Broaden the measure to include both wholesale and retail internet access markets, and the incumbent telephone and cable companies account for over four-fifths of the market by revenue: e.g. Bell (24.8%), Rogers (14.6%), Shaw (12.2%), Telus (11.4%), Videotron (9.4%), Cogeco (5.0%), Eastlink (2.5%) and SaskTel (1.8%).

In short, when assessed at the local level, rather than on the basis of national HHI scores, the incumbent telephone and cable companies' dominance of retail internet access markets is clear. A similar effect emerges by examining their share of the combined retail and wholesale internet access markets. All-in-all, the national HHI figure implies a highly competitive market, while a closer inspection of local markets reveals quite the opposite, with internet access in cities across Canada generally being highly concentrated, with some exceptions in wealthy and densely populated urban areas.

Such observations underpinned a [CRTC decision](#) in early 2015, which found that the indy ISPs will still need regulated wholesale access to the incumbents' *local* Fibre-to-the-Premise networks if they are not to be left to wither on the vine as broadband internet access migrates from copper and coaxial cables to fibre-to-the-doorstep. The Commission's decision did not mince words in this respect:

- “incumbent carriers continu[e] to dominate the retail Internet access services market” (para 125);
- “there is limited rivalrous behaviour to constrain upstream market power” (para 122);

- wireless Internet access is **not** an acceptable substitute for wireline facilities because of significant disparities in terms of price, speed, capacity and quality (para 126);
- whatever “competition that does exist today is . . . a result of regulatory intervention” (para 126).

This was much the same reasoning that underpinned the Commission’s wholesale mobile wireless decision earlier that year. In both cases, having found that concentration was not a matter of conjecture but of fact, the regulator decided to act, in the case just discussed to help ensure that whatever minimal competition that does exist today is not washed away tomorrow by the transition to fibre-based internet access. While Bell petitioned that decision, its appeal was ultimately [rejected by the Liberal Government](#) in May 2016.

Cable, Satellite and IPTV

There is no doubt that competition between cable companies and the telcos has intensified. Prior to the advent of IPTV services in 2004, consolidation in the BDU market at the national level had been rising for two decades, with a brief interruption after satellite TV services were introduced in the late 1990s. The introduction of satellite TV started to chip away at local cable monopolies across the country and, nationally, the BDU market began to show the impact. The top four BDUs’ share of the market fell to 75% in 2000 from 85% four years earlier and the HHI had fallen to 1729, down from 2314 in 1996. Thereafter, however, concentration levels at the national level began to soar again. By 2004, the top four BDUs—Shaw, Rogers, Bell and Videotron—share of the market had reached an all-time high of 87%.

We can also zoom in to get a closer look at how things appear on the ground by using the cable and telephone companies’ broadcasting distribution undertakings, respectively, as a more precise proxy for competition at the local level (similar to what we just did with respect to internet access). When we do this, until 1996 and the introduction of Bell’s direct-to-home satellite TV service, cable TV was a monopoly. By 2000, however, Bell had gained a 7.2% market share and the HHI began to fall from its outer limits (10,000) to 8,664. That is still an *extremely* high number, but focusing on this way of seeing things helps us to better see the monopoly on cable TV services being slowly chipped away and replaced by, for all intents and purposes, a duopoly. In other words, the long-run account of cable TV is the replacement of monopoly by duopoly at the local level, with intensifying competition between the cable companies and the telephone companies, first with the introduction of satellite TV in the late 1990s and, since then, the advent of the telephone companies’ internet protocol TV services (IPTV).

The development of the telephone companies’ IPTV services since the mid-2000s put the brakes on the upward drift of concentration that had been visible over the prior decade at the national level. More importantly, monopoly cable services at the local level increasingly had to face competition from the telephone companies’ IPTV services,

although it was not until after 2010 that this force began to really gather steam. MTS and SaskTel were the first to roll out IPTV services in 2004, followed by Telus in 2007/2008. Bell was particularly slow on the uptake, but finally followed suit in 2009/2010 when it first began to introduce IPTV services in the Atlantic provinces through its affiliate Bell Aliant and finally into its heartland operating territories in Quebec and Ontario in 2010/2011.

As the telephone companies' IPTV services have gained traction, the HHI score for this sector has dropped significantly, both at the national level and the local level. In 2004, the national HHI was 2206, but by last year it had dropped to 1935—a sizable drop, to be sure, but still within the moderately concentrated part of the scale. It also worth noting that it appears that the decline in concentration levels may have hit bottom because both the HHI and CR4 scores have steadily crept upwards in the last three years.

The more pressing point, however, is that such national measures greatly exaggerate the extent of competition because, like retail internet access services, cable TV markets are local and regional, not national. When we consider things from this vantage point, it is clear that while concentration levels in the cable TV market have steadily drifted downward, they are still sky high. In 2004, the HHI for BDU services was 7,156—nearly three times the threshold used to designate a market to be “highly concentrated”. By last year, the HHI had fallen considerably to 5,200 and traditional cable companies' market share had been cut down to 60% while the telephone companies' share had swelled to 40%.

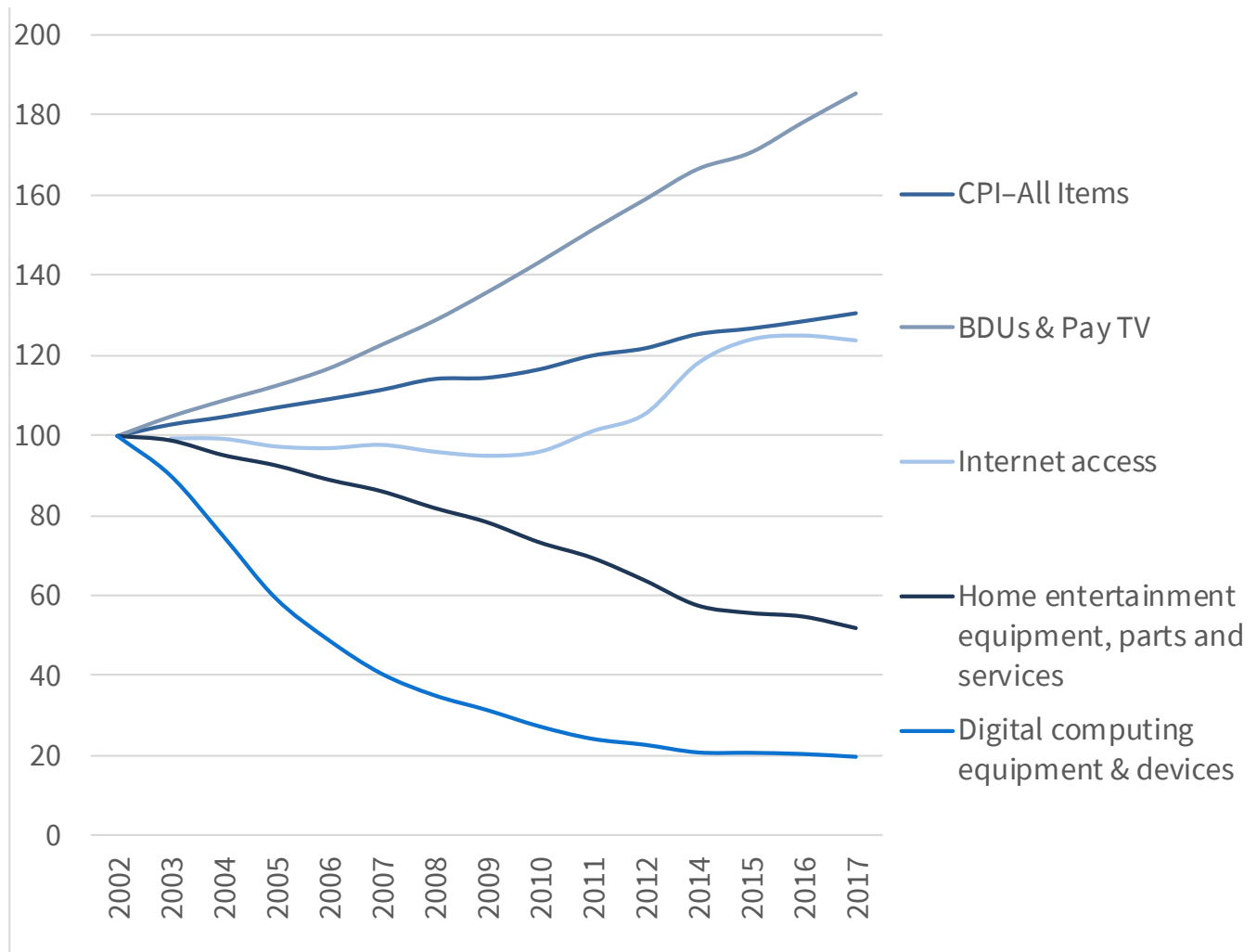
Of course, this is a significant change, and one can understand why cable companies have grouched about the increasingly intense competition that they have had to meet, while Bell, Telus, MTS and SaskTel have been able to—correctly—trumpet their successes in an ever more contentious market. These divergent perceptions on both side of the industry come back together, however, around the looming threat of “cord cutting”. As a matter of fact, the number of households that subscribe to a BDU service (i.e. cable, satellite or IPTV) did slide from its high point of 85.6% in 2011 to 76.1% last year.

Thus, the idea of “cord cutting” is real, but its scale and has been lower and slower than many seem to believe while much of the loss to cable and direct-to-home satellite TV providers has redounded to the benefit of Telus, Sasktel, MTS and Bell's IPTV services. Indeed, this is a key element in the growing duopolistic competition that does exist and ought to be given greater pride of place in accounts of these developments rather than lost amidst so much hand-wringing about cord-cutting that takes place in public and policy discussions about these matters. It is also essential to bear in mind that revenue for the sector grew by leaps and bounds over the first dozen years of the 21st Century but that pace slowed after 2013 and has fallen slightly in each of the past three years, as our [previous report](#) addresses in some detail.

Lastly, it also essential to note that the cable operators and telephone companies have been working hard to offset whatever losses they do experience with quickly rising rate

hikes on *both* BDU and broadband internet services. We showed this in the last report, but it is worth repeating here that prices for both communications services—and which many people see as essential to their lives—are rising much faster than the consumer price index. Figure 7 shows the point. Indeed, as it shows, it is exactly at the point that cable subscriber numbers begin to fall that broadband internet prices take a sharp turn upwards.

Figure 7: The Price of Communication Services and Devices vs the Consumer Price Index, 2002-2017



Source: [Statistics Canada. Table 326-0020 - Consumer Price Index, annual \(2002=100\)](#)

At the end of the day, two things are true that sometimes seem impossible to hold together at the same time: first, there is more competition taking place within the cable TV market but, second, this market is still a very tight duopoly, and at the very high end of the scale in terms of concentration. Indeed, concentration is even higher in this domain than what one finds in the retail internet access and mobile wireless markets. This is why policy measures aimed at reining in prices, unbundling bloated cable packages for consumers, *and* encouraging wholesale access to broadband internet infrastructure (i.e. fibre-to-the-home) as a potential alternative that new BDUs like VMedia can develop on to increase the scale and intensity of competition in this market have been forthcoming.

In short, such steps have understood that this market is *extremely* concentrated and taken very measured steps in response (see the “CableSatIPTV” and IPTV sheets in the [CMCRP Workbook](#)).

As noted in the [last report](#), by the end of 2017, 19% of Canadian households got their television service from the local telephone company’s IPTV service: Bell, Telus and Sasktel. These companies’ Internet Protocol TV (IPTV) services have grown swiftly and by last year they had 2,634,418 subscribers and revenues of \$2.2 billion. By the end of 2017, their IPTV services had garnered just over a quarter of the TV distribution market by revenue (25.4%) and roughly the same based on subscribers (24.6%). Add Bell’s satellite TV into the picture, and the number rises to 40%. Again, the message is clear: the quick pace of IPTV growth over the past half-decade has intensified competition between the telephone and cable companies’ TV distribution services, and there is no doubt that the cable companies are feeling the pressure. Nonetheless, this market is still a duopoly and very highly concentrated, with an HHI of 5,200. This is more than twice the threshold for a highly concentrated industry by this standard, and the biggest players, as indicated in Figure 7 above, continue to reveal their dominant market power by pushing price increases that are well-above the CPI with very little competitive discipline seemingly coming from “the market”.

Table 3, below, illustrates the steady demise of monopoly cable TV and the rise of duopolistic competition between cable companies and telephone companies since 1996.⁸

Table 3: The Decline of Monopoly Cable TV: Cable Companies vs Telephone Companies, 1996–2017

	1996	2000	2004	2008	2010	2011	2012	2013	2014	2015	2016	2017
Cable	100	85	83	78	76	73	71	69	64	64	62	60
Telcos (IPTV + DTH) %	0	15	17	22	24	27	29	31	36	36	38	40
Total Cable, DTH + IPTV	10000	7481	7145	6612	6341	6073	5857	5697	5395	5412	5310	5200

Source: See the “CableSatIPTV” and “IPTV” sheets in the [CMCRP Workbook](#).

Using the cable company and telephone company’s respective shares of the BDU market as a proxy for local competition, Table 3 illustrates the long-term decline of the cable monopoly over the last twenty years. It also shows that, by 2017, the market had been split between two groups of companies, with the cable companies garnering three-fifths of the market while the telephone companies take up the rest. Lift our head above local

⁸ Crucially, this was the year when the Chretien Liberal Government’s new [Convergence Policy](#) document lifted the restrictions that had previously prevented both sets of companies from competing with one another on their “home turf” and, crucially, that had kept telephone companies like Bell from owning and controlling broadcasting and other types of content. In other words, it was the moment when vertical integration between telecommunications and TV was given the green light.

conditions again, however, to scan the national horizon, and the “big four” vertically-integrated BDUs control over four-fifths of the market: Bell (29.2%), Shaw (22.5%), Rogers (17.6%), and Quebecor (11.8%). Add the next four largest players—i.e. Telus (9%), Cogeco (5.8%), Eastlink (3.3%) and SaskTel (1.1%)—and almost all the market is accounted for.

And one final word on this to bring these specific developments into the context of the bigger trends across the network media economy that we have reviewed thus far. When we do this the thing that stands out is that concentration levels across all three of the main “network media industries”—i.e. mobile wireless, retail internet access and cable TV—are remarkably high. They have also risen sharply across the telecom and broadcasting landscape over the past half-decade as well. Whereas the “big five”—Bell, Rogers, Telus, Shaw and Quebecor—accounted for two-thirds of all telecoms and broadcasting revenue in 2010, that figure had grown to 84% by the end of last year—a strong continuation of the upward trends that has defined much of the last decade. In sum, competition is growing in television distribution, but within the context of greater concentration across the network media as well as the vertically-integrated telecommunications and broadcasting sectors. ■



The Content Media Industries

Television

From the late 1980s until 1996, concentration in broadcast television stayed relatively flat, a mature sector split between the groups that shared ownership of the private conventional TV networks—CTV, Global and TVA, respectively—on the one side, and Canada's public service broadcaster, the CBC, on the other. The advent of specialty and pay TV channels added a great deal of diversity to the television landscape, although such services still played a minor role at the time. However, the emergence of pay TV marked the beginning of a fundamental shift from an environment of relative scarcity to one of relative abundance and from a model of TV subsidized by either advertising and the public purse to one where subscriber fees would play a bigger and bigger role.

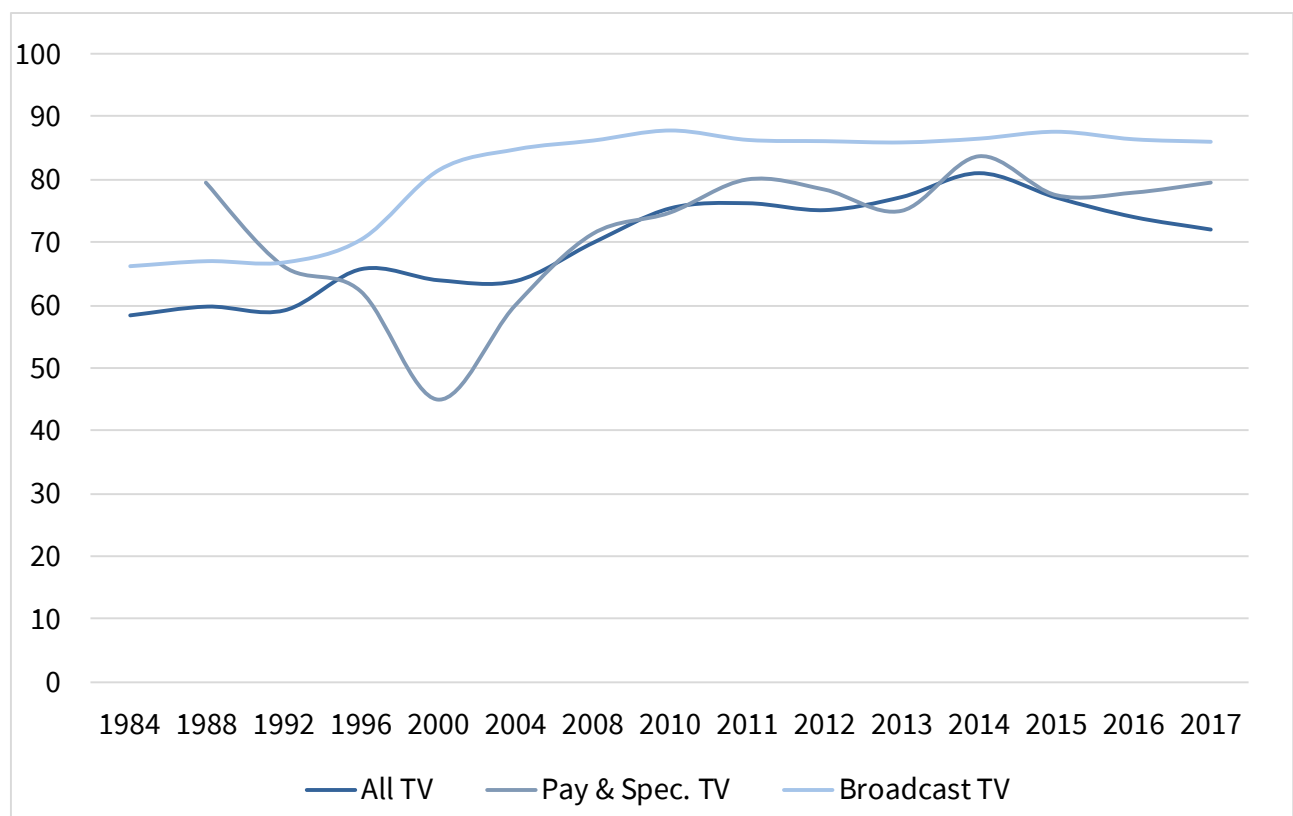
Ownership stability in conventional broadcasting TV and increased diversity in TV overall because of the addition of pay and specialty TV services, however, shifted abruptly in the late 1990s and early 2000s. This occurred in two stages. The first was in the late 1990s as a wave of consolidation unified the ownership groups behind the CTV (i.e. Baton, circa 1997), Global (Canwest, 1998) and TVA (Quebecor, 1997) networks, respectively. A few years later, and just after the turn-of-the-century, a similar process of consolidation swept the specialty and pay TV sector as mergers *within* the sector took

place, for example, between Alliance and Atlantis, *and* as conventional broadcasters expanded into this new domain by taking acquiring existing pay and specialty services (a form of *diagonal integration*). For example, Quebecor acquired Videotron in 1997 and gained a strong toe-hold in French-language specialty and pay TV services as a result. Canwest's acquisition of Western International Communication a year later did the same for it in English-language services. CTV's acquisition of the largest pay TV player at the time, Netstar, in 2000, before it was acquired by Bell Canada Enterprises later that year, cemented the trend.

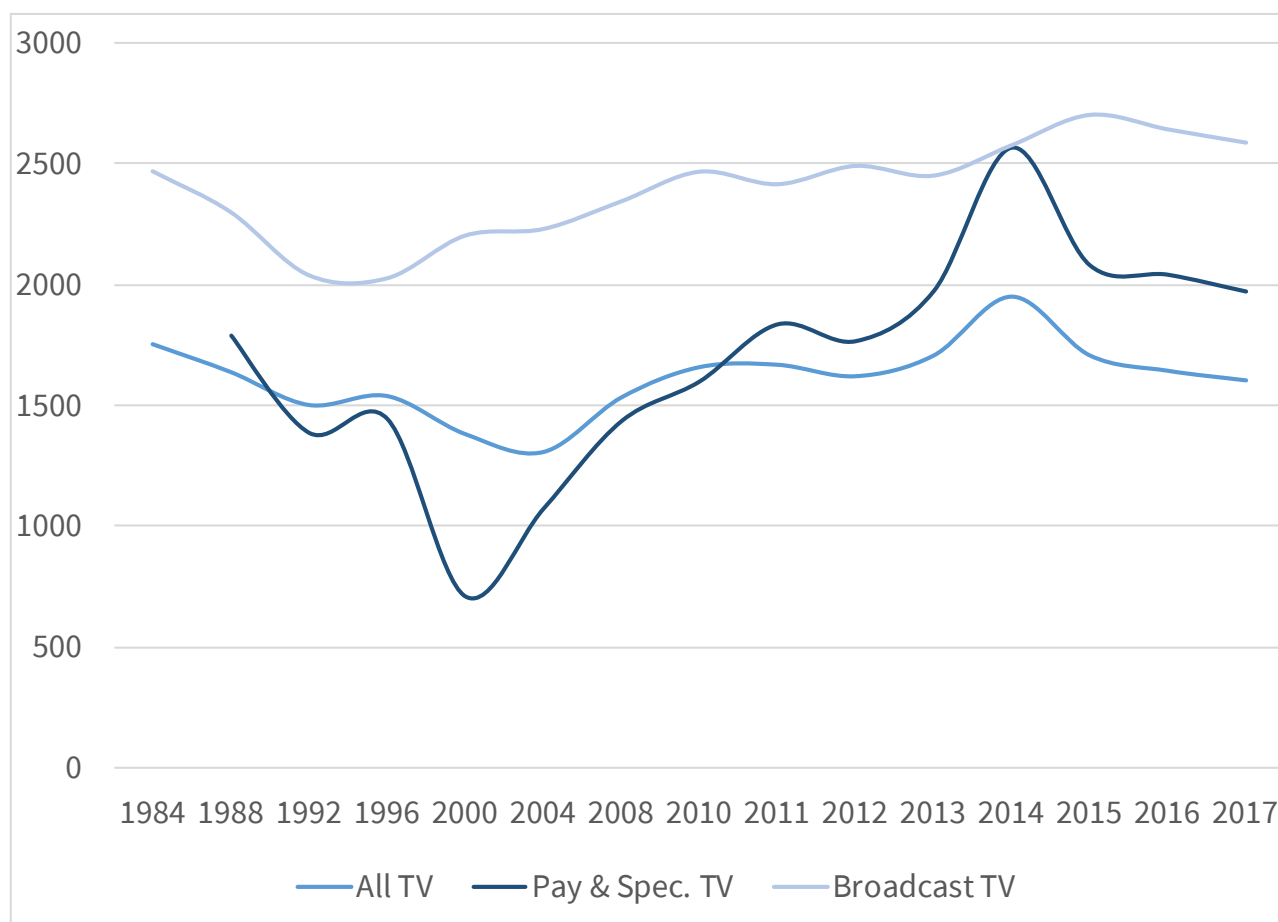
The results of this phase of consolidation with the TV industry is clearly illustrated in Figure 8 below. The trend continued thereafter with relatively new services steadily absorbed into well-established and much larger groups whose roots were in over-the-air broadcasting but which were now aggressively carving out ever larger positions for themselves in the expanding TV marketplace of the 2000s. While the trends were steady for much of the decade, the upswing in consolidation was especially sharp after Canwest acquired Alliance Atlantis in 2007—a move bankrolled by New York investment bank Goldman Sachs but which, ironically, marked the beginning of the end for Canwest as the rosy projections underpinning the deal came crashing down soon after once they collided with Great Financial Crisis of 2008 as well as the erosion of advertising brought about by the double-knuckled blow of that event *and* the steady, rapid shift of more and more advertising to the internet (see [CRTC, 2007](#) and CanWest, [Appendix 1A Supplementary Brief](#)).

Figure 8, below, shows the trend for each of the content media industries on the basis of CR scores while Figure 9 after it does the same in terms of the HHI.

Figure 8 CR Scores for Television, 1984-2017



Sources: see the “CR & HHI” as well as individual sector sheets in the [CMCRP Workbook](#).

Figure 9: HHI Scores for Television, 1984–2017

Sources: see the “CR & HHI” as well as individual sector sheets in the [CMCRP Workbook](#).

By 2006/7, the “big four” TV operators at the time—CTV Globemedia, CBC, Canwest, and Astral, in that order—accounted for about two-thirds of the TV services revenue. Each of these entities had expanded horizontally and diagonally within TV market but *none* were yet part of vertically-integrated behemoths that wait just around the corner. That would change only a few years later. Simultaneously, a handful of mid-range players such as Alliance Atlantis and CHUM had also carved out a fairly big place for themselves (circa 2000-2006), before being absorbed by the industry’s largest players. Within a few years, consolidation *within* the TV industry, especially Canwest’s acquisition of Alliance Atlantics, led to a situation where, by 2008, the “big four” accounted for 70% of revenue.

Fast forward to 2014, however, and the situation had been dramatically transformed. By this time, the four largest TV groups—CTV, Global, CBC and City TV—had been absorbed into a major telecoms carrier—except the CBC, of course—and, combined, they controlled just over four-fifths of *all* TV revenues. Add Quebecor’s TVA and pay TV services into the mix, and the number was 86%. In short, since the turn-of-the-21st Century, the sheer number of services increased greatly, but so too had the processes of consolidation, thereby ensuring that more and more of these services had fallen into fewer and fewer corporate hands.

The upsurge in concentration levels in the television market between 2008 and 2014 was mainly due to four transactions, the combined upshot of these transactions was two-fold. First, consolidation within and between the broadcast and pay sectors of the TV industry had come to define the industry (i.e. horizontal and diagonal integration, respectively). Second, from 2010 on, consolidation between telecoms operators and TV services (vertical integration) now governed how TV within Canada would evolve during what is, perhaps, the most significant era of transformation to sweep this pivotal form of media and culture since the multi-channel universe had started to take shape three-and-a-half decades earlier.

The first major transaction to redefine the landscape was [Shaw's take-over](#) of Canwest's TV holdings in 2010. The second was Bell's [buy-back of CTV](#) a year later. Given CTV's status as the largest television company in the country, the deal caused concentration levels to soar. The third moment occurred when Bell and Rogers each took a 37.5% stake in Maple Leaf Sports Entertainment (i.e. NBA TV, Leaf TV and Gol TV) in 2012 (with Toronto Construction magnate Lawrence Tanenbaum's Kilmer Sports holding the rest) ([CRTC, 2012](#); Bell [2013 Annual Report](#), p. 133).

The fourth step took place with Bell's take-over of Astral Media in 2013 after the [CRTC reversed course](#) from a year earlier when it had curtly dismissed the deal. The increase in concentration was significant, even though Bell was required by the Competition Bureau and the CRTC to divest itself of eleven TV services: [Teletoon](#) (TELETOON Retro/TÉLÉTOON Rétro, TELETOON / TÉLÉTOON, Cartoon Network), Historia and Séries+ to Corus (Shaw), the Family Channel, Disney Jr. and Disney XD to children's television programmer, DHX media, and MusiquePlus and MusiMax to V Media.

The CTV, MLSE and Astral transactions marked Bell's return to the field of television after having abandoned its earlier ill-fated convergence fling involving the ownership of CTV and *The Globe and Mail* (circa 2000-2006) (a phase in its history that has been curiously missing from Bell's annual reports since it returned to the scene in 2011). These transactions put Bell at the top of the league.

Concentration levels remain very high in broadcast television as well as pay and specialty services. In broadcast TV, the "big five"—CBC (41.1%), Bell (24.8%), Shaw (Corus) (12.7%), Quebecor (TVA) (7.3%) and Rogers (6.9%)—had a combined market share of 93.7%. The HHI is at the very high end of the scale: 2639—higher than it has ever been except for the year before when it was ever so slightly higher. The trend of the last decade has generally been small fluctuations at the high end of the scale on both of these measures

Specialty and pay services have been the jewel in the TV crown. As each of the four major transactions briefly introduced above took hold, the CR4 and HHI standards shot upwards from the "moderately concentrated" zone into the "highly concentrated" zone. Concentration reached its highpoint in 2014 when Bell (41%), Corus (Shaw) (26.4%), Rogers (12.2%), the CBC (4.1%) and Quebecor (3.9%)—collectively accounted for 87.6% of specialty and pay TV revenue—up substantially from the 79.5% share held by the five

biggest pay TV ownership groups in 2010. With an HHI score of 2565, pay and specialty TV services had crossed the threshold into the highly concentrated zone. Bell and Shaw also broke ahead of the rest of the field at this time to stand in a league of their own with 130 TV services and two-thirds of the pay and specialty TV market based on revenue between them.

Trends have run in the opposite direction since then, however. Last year, the pay and specialty TV market had a CR4 of 77.3 and the HHI had fallen considerably to 1970.4—a figure that is solidly in the “moderately concentrated” zone. Bell and Corus (Shaw) have also seen a significant drop in their market shares. Bell’s share of pay and specialty TV services fell from 41% in 2014 to 34.5% last year, while for Corus (Shaw), its marketshare fell from 26.4% to 19.7%—a very substantial decline. Rogers’ marketshare, in contrast, has shot up considerably from 13.7% three years ago to 19% last year. This increase is due entirely to Roger’s acquisition of the NHL broadcasting rights (at the expense of the CBC, where they had been held forever in the past. Consequently, Rogers Sports Net revenue soared from \$360 million in 2015, to \$534 million in 2016 and, finally, to \$573 million last year ([CRTC, 2018](#)).

The upshot of these small declines at Bell and Corus (Shaw) and parallel leap in revenue at Rogers is that three companies now share centre stage in the pay TV market—a “tri-opoly”, if you will. The three companies combined control nearly three-quarters of the pay TV market. Meanwhile, Quebecor and the CBC’s places within the pay TV market have stayed relatively steady at 3-4% of the market each.

Bell, Shaw, Rogers, Quebecor and the CBC constitute the “big 5” in the Canadian TV industry. Altogether, the top five players possessed 201 of the 780 TV services licensed to operate in Canada last year: Bell (70 conventional, specialty and pay TV channels), Shaw (59), CBC (32), Rogers (22) and Quebecor (18). They also accounted for 77% of total TV revenues (including internet streaming services)—a big number indeed but down appreciably from 2014 when it was 86.4%. The HHI score has followed suit, dropping from a level that was firmly in the “moderately concentrated” zone in 2014 (1950.6) to a level last year that comes very close to the boundaries of a diverse and competitive market as defined by the HHI’s thresholds (1576.6). For a depiction of who owns what, see the CMCR Project’s graphic, [Canada’s Top Media, Internet and Telecoms Companies by Market Share](#)

In short, after concentration across the total TV market had been pushed to new extremes during the half-decade long bout of consolidation between 2010 and 2014, the tide seems to have turned in the past two years. Why? There are two main reasons: first, the divestiture and closure of several services by the major players over the past three years or so and, second, the rapid growth of internet streaming TV.

Divestitures, Spin-Offs and Closures

The recent *decrease* in concentration in the pay and specialty TV service and the “total TV universe” is the result of several pay and specialty services being spun off or closed



by Bell and Shaw. This process started in 2014 and has redounded to the benefit of smaller players such as [DHX](#)—the Halifax-based broadcaster and noteworthy creator of children’s television programming (*Caillou*, *Inspector Gadget*, *Degrassi: Next Class* and *Teletubbies*). In 2014, it acquired several children and family-oriented TV services that Bell had been required to sell as a condition of its merger with Astral, including the popular Disney XD and the English and French-language versions of Disney Junior as well as the Family Channel ([CRTC, 2014](#)). As a result, DHX’s share of the TV landscape has grown from basically zero before 2013 to over 2.3% last year. As part of the same process, Bell also sold MuchVibe, MuchLoud, MuchRetro and Juicebox to another independent TV operator, Stingray in 2014 (see [here](#)).

Bell and Rogers also shut down their jointly-owned [Viewers’ Choice](#) and GoTV in 2014 and 2015, respectively. Rogers and Shaw did the same with respect to their jointly-owned internet streaming TV service, shomi, in November 2016, while Quebecor shut down Argent a year before that. Corus turned out the lights at the Cartoon Network in 2015 and Movie Central last year. In the following year Shaw spun-off Global TV network and several specialty and pay TV services to Corus Entertainment, a legally separate entity but one which is also under the common controlling ownership of the Shaw family. The complex transfer of ownership was mainly about hiving off the TV group to a separate entity to help finance Shaw’s take-over of Wind Mobile and focus the Shaw company on connectivity and carriage rather than content ([CRTC, 2016](#)).



Less than two years later, however, the Shaw family has made rumblings about selling-off Corus altogether to focus on where the company makes its bread-and-butter—i.e. internet access and mobile wireless. However, its options have been hemmed in by regulators who are not disposed to allowing Corus Entertainment to be sold to an existing player like Bell or Rogers on account of the extensive consolidation that currently exists and which has only very recently shown signs of becoming more pluralistic and diverse, much to the company’s consternation ([Dobby, 2018](#)).

There should be no mistake, however, about Corus’s profitability. In fact, it is wildly so, with operating profits in the 34-35% range for the last three years on revenues of \$1.7 billion last year—more than three times the average rate of profit for industry in Canada (Corus, [Annual Re-](#)

[port 2017](#), p. 25; [Statistics Canada, 2016](#)).

The problem, from a strictly financial point of view, however, is that even these lush profits don’t quite hold up to the *even more lucrative profits* at Shaw, where its “pure play” focus on internet access and mobile wireless service is delivering profits in the 40-45% range on revenues that are closing in on the \$5 billion mark (Shaw, [Annual Report 2017](#), p. 6). While that may be a problem for Shaw, investors and the banks behind both companies, it is not a sign that TV is in trouble, indeed, far from it. Thus, when Corus executives and some financial analysts fulminate against “old rules” and stodgy regulators holding the line on increased consolidation, we must bear in mind that they are looking at things from the point of view of bankers rather than communications and cultural policy.

These fundamentally important, but all-too-often ignored realities aside, a key point that arises from the spate of divestitures, acquisitions and closures in the last few years is that a number of new players have emerged in addition to the above-mentioned DHX and Stingray, including, for example: V Interactions, APTN, Pe-morex (the Weather Network), Radio Nord, Fairchild (Chinavision), Blue Ant, CHCH, CHEK, Channel Zero, etc. In this sense, there are new voices and sources of news and entertainment available to Canadians. However, while there is no doubt that these new voices are important sources of diversity and consumer choice, their impact has been modest, and their future is uncertain—especially those that rely on advertising as their main base of revenue, for all the reasons set out in the first report in this series and explored in further detail below. Collectively, these new players account for roughly five percent of total TV revenue, which is lower than that of Astral Media—the last large independent broad-

caster at the time—when it was taken-over by BCE in 2013. In short, we must observe new voices in the media landscape but also avoid overstating their significance.

Of course, the biggest factor changing the TV landscape is the rapid rise of internet streaming TV services like Netflix, Crave and Amazon Prime. This adds a significant new sector to the “total TV” universe which has simultaneously *added* to the overall size of the TV marketplace in terms of revenue and diversity. Indeed, the rapid growth of Netflix in Canada has served to drive down concentration levels while adding a significant new player to the TV landscape.

Last year, Netflix had an estimated 6.9 million subscribers in Canada at the end of the year, just under half of all Canadian households. It also had estimated revenues of \$820.6 million in this country, which meant that, in less than a decade, Netflix had garnered a 10.2% share of the \$8.1 billion TV services industry. Already by 2015, just five years after its Canadian debut, Netflix had become the fifth largest TV service in Canada—just ahead of Quebecor. It is now rapidly closing in on the fourth largest TV company, Rogers.

The upshot of these changes suggests that while the first decade-and-a-half of the 21st Century was one of consolidation across a fast expanding TV marketplace, today the main characteristics appear to be that growth of the “total TV universe”—a construct that includes broadcasting TV, pay and specialty TV, and internet streaming TV services—seems to be slowing while the range of players and choices has also begun to slowly expand. This can also be seen in the fact that Bell’s share of the TV marketplace has been cut down to size somewhat from its peak of nearly a third of the market in 2014 to 28.4% in 2017. This is still leaps-and-bounds higher than the CBC (15.5%), Corus (Shaw) (14.9%), Rogers (12.8%), Netflix (10.2%) or Quebecor (5.5%), but the gap between Bell and the rest of the field has diminished (see the “CR & HHI” sheet and specific sheets for each segment of the TV marketplace and the Television Services Ownership sheet in the [CMCRP workbook](#) for the data and sources behind this discussion.

As the grip of the top five players loosens—from 86.3% in 2014 to 81.8% last year—diversity is increasing. The HHI has also fallen from moderate levels of concentration for the “total TV universe” in 2014, when the HHI was 1950, to 1577 last year—slightly above the diverse and pluralistic cut-off threshold of this particular method, but a substantial improvement all the same.

The irony, however, is that, rather than this drift of events serving as cause for celebration, the main industry ownership groups and the clientelist interests that hover around them tend to see these developments as calamitous and, consequently, plead with the CRTC and policy-makers to shore up the status quo. A different view, however, might argue that the above analysis suggests that building a cultural policy and TV industry around a few giant vertically-integrated companies has been a failure even on its own terms, with Bell, Shaw (Corus) and Rogers quick to shutter the doors and dispose of services when challenges to their bottom lines mount—despite making profits that are the envy of almost any other industry.

As Brad Danks, one of the founders of the niche TV service, OutTV, has consistently argued, making vertical integrating telecoms-centric giants the arbiters of what succeeds and does not in Canada is bad policy and has probably done far more to harm than help the development of the TV industry in Canada. It is also failing on its own terms, given the spate of closures, spin-offs and divestitures outlined above. As he also points, it is easier for niche TV services such as OutTV to break into foreign markets like New Zealand, Australia, South Africa and Argentina than for small, niche broadcasters to succeed in Canada. Whether that is true just for OutTV, which Danks helps to lead, or across the board, isn't known, but it's an important set of claims to think long and hard about (see [here](#), [here](#) and [here](#)). Unfortunately, in two major policy developments this year—the cable TV [license renewal ruling](#) and its [Harnessing Change: the Future of Programming Distribution in Canada](#) report—the CRTC appears to be turning exactly in the opposite direction, governing the future of TV in Canada by the lights in the rearview mirror.

Radio

Radio is amongst the most diverse media sectors. The shuffling of several radio stations between Shaw (Corus) and Cogeco in 2011 helped bring about a long-term decline in concentration. The presence of several mid-size radio station groups has also added to the relatively high diversity of radio station ownership: e.g. NewCap, Pattison, Rawlco, Maritime Broadcast, Golden West, etc.

The downward drift of recent years, however, was reversed in 2013 when Bell acquired Astral Media, then Canada's largest radio broadcaster. The deal catapulted Bell into the being the biggest radio broadcaster in the country by adding 77 radio stations to the existing ones it already had. This gave Bell 107 radio stations in 55 cities. Bell's 20.6% market share in 2017 was down by one percent from the preceding year but is still substantially larger than the CBC's share (15.8%) and far greater than that of closest commercial peer, Rogers (12.2%).

Bell's acquisition of Astral in 2013 led to a significant increase in CR4 and HHI scores, and reversed the downward trend of the previous half decade. Even with this significant uptick, however, the radio sector was only modestly concentrated by CR4 standards in 2017, with a score of 57.4%. It is firmly within the competitive zone by the lights of the HHI, with a score of 1019 in 2017—a level that has stayed fairly stable for the past few years.

Bell's divestiture of ten radio stations in medium to large size cities across the country at the end of 2013 and into 2014 helped offset the effects of consolidation. The effect of this sell-off has also been to strengthen some of the mid-size radio station ownership groups that acquired them: [Newcap](#), [Pattison](#) and [Corus \(Shaw\)](#) (see the "Radio" sheet in the [CMCRP Workbook](#)).

Newspapers

Concentration in the newspaper industry rose steadily from 1984 until 2000, with a few breaks along the way, and then fell significantly for the next ten years before rising again. In 1984, the biggest four groups accounted for 64% of the industry's revenues, a number that rose slowly but steadily over the intervening years to roughly two-thirds of the market in 1996 and then more sharply upwards until 2011. By 2011, the four largest newspaper ownership groups accounted for 81.6% of the market: Postmedia (23.7%), Torstar (22.7%), Quebecor (23.7%) and Power Corp / Gesca Media (11.5%) (see the "Newspaper" sheet in the [CMCRP Workbook](#)).

Thereafter, however, as the economic crisis gripping the newspaper industry deepened—for reasons explained in the first report in this year's series—some of the press groups that were in trouble, notably Postmedia, Power Corp (Gesca), Quebecor and Transcontinental, began hiving off and selling some of their local and regional newspapers. A pattern whereby daily and community newspapers were being swapped amongst press groups across the country so as to create, in effect, contiguous regional clusters of newspapers in one area after another has also defined the last three years of developments in the newspaper industry

In British Columbia, for example, the two largest chains in the province, Black Press (no relation to Conrad Black) and Glacier Media have bought, sold or swapped at least thirty-three community newspapers since 2010. Two-dozen of those papers were subsequently shuttered, as [Marc Edge](#) (2018) observes, "to create more lucrative local monopolies".

To take another example, Postmedia bought [Quebecor's English-language papers](#), including the six Sun dailies, twenty-seven small dailies and one hundred and forty community weeklies in 2015 (see [Competition Bureau](#) approval). That same year, Gesca—the newspaper division of the Quebec-based industrial and financial conglomerate, Power Corp—sold five French-language newspapers to Groupe Capitales Médias (GCM): *Le Soleil of Quebec*, *The Daily Saguenay*, *Le Nouvelliste of Trois-Rivières*, *La Tribune de Sherbrooke* and *La Voix de l'Est Granby*. The newly formed GCM also acquired the independent *Le Droit* newspaper in Ottawa in 2015. The result is a significant new Quebec-based, newspaper chain with estimated revenue of \$118 million last year, and 4.5% of the average weekly circulation across the country.

In the Atlantic Provinces, the long-established Halifax Chronicle Herald group re-fashioned itself as the Saltwire Network after buying twenty-seven Atlantic region community papers from Quebec-based Transcontinental in April 2017 ([Saltwire, 2017](#)). Transcontinental sold-off the rest of its community newspapers in Quebec and Ontario at the end of the year to a new publishing group, ICI Media ([Transcontinental, 2017](#); [Canada Press, 2017](#)).

This pattern of newspapers swaps, spin-offs and sales was punctuated in November 2017 when Torstar and Postmedia announced a [major deal](#) to swap forty-one newspapers, most of them community papers, thirty-seven of which were immediately shut down and 290 workers laid off. The companies' newspaper swap also effectively divided the province of Ontario into two zones of mutual exclusivity, or local monopolies. While the Competition Bureau had sat idly by on each of the previous occasions, this time it swung into action to investigate potential collusion and anti-competitive behaviour ([Competition Bureau, 2018](#); [Jackson, 2018](#)).

Whether the Competition Bureau's inquiry will amount to much, it is still too early to tell. In each of the cases just reviewed, however, the clear pattern that emerges is whatever rivalry between newspaper ownership groups that may have literally been just down the road in the next town or community was eliminated by these newspaper swaps and closures. As a result, several regional press monopolies have been consolidated across the country, each with a de-facto monopoly in their territory (e.g. Black Press and Glacier media in British Columbia, Torstar and Postmedia's community papers in Ontario, ICI and Groupe Capitales Médias in Quebec and Saltwire in the Atlantic Provinces). Others have abandoned the field altogether (e.g. Transcontinental), while others yet have become paler versions of their former selves, i.e. Quebecor and Power Corp, although Quebecor still owns the *Journal de Montréal* and *Journal de Québec* and Power Corp retains ownership of *La Presse*—all three of which are influential outlets in Quebec politics.

Of course, several new internet news sources have also emerged like iPolitics (although it, too, was acquired in 2018 by Torstar), the *National Observer*, *Canadaland*, *Huffington Post*, the *Tyee*, *Buzzfeed*, *Vice*, *AllNovaScotia*, *Policy Options*, etc. As we will see momentarily, however, none of them show up in the top 60 online news sources largely because they serve small and highly specialized audiences (also see below).

To be sure, following all these twists and turns in the ownership and structure of the newspaper market is not easy. What can be said with confidence, however, is that while concentration levels fell significantly for the first part of this decade, they have once again begun to rise as old players disappear and new ones with a more regional profile solidify their place within the industry. Indeed, between 2010, the CR4 fell from 82.5% to 67.2% in 2016, with concomitant declines in the HHI, and Postmedia's grip seemingly in fast retreat as it slipped from having nearly a quarter of the national marketshare in 2010 to less than a fifth of it four years later.

However, that downward trend came abruptly to a halt in 2017 in light of the flurry of transactions outlined above. And with this sharp u-turn, and reconstitution of the newspaper industry along more regional lines, the CR4 rose to 72% and the HHI jumped from 1580 the year before to 1875 last year—still at the lower end of 'moderately concentrated' range of the HHI standards but a sizeable increase all the same. By 2017, Postmedia alone had just under thirty percent of the Canadian newspaper market, although its position is akin to being king in a crumbling castle.

The fundamental reorganization of the newspaper industry just outlined has proceeded over the years with hardly any intervention from the Competition Bureau worth noting—until last year, and we wait to see where that will lead (see [Edge, 2016](#) and [Edge 2018](#), for the best accounts of these processes and the issues they raise). In the meantime, what we do know is that the industry remains in distress, with no clear relief on the horizon. That said, the Federal Government has just injected \$600 million in subsidies to be spent over the next five years to shore up journalism in Canada. Part of that is in the form of tax rebates to readers on the cost of subscriptions. Another part will be to offset the cost of news production. The new measures will also call for the existing laws that govern charitable giving to be revamped so as to entice philanthropists to support non-profit journalism—meeting the call of [Professor Robert Picard](#) at Oxford University’s Reuters Institute for such measures. Again, whether this will staunch the bleeding, it, too, is too early to tell, and the devil will be in the details, as the saying goes ([Government of Canada, 2018](#), pp. 181-183).

However, the key aspects of the journalism rescue package announced in the 2018 Federal budget appear to be a well-thought out effort that doesn’t merely throw money at the well-established players that have brought much of the problems ailing the news business upon themselves but realistically responds to a basic reality of journalism and the news: they are public goods and because the general public has never paid the full freight for general news services, journalism has always been subsidized, either by advertising, wealthy benefactors and/or governments (see the first report in this series for elaboration on this point). With the advertising subsidy melting away for reasons also discussed in the first report and in further detail below, the new subsidies announced in the 2018 Federal Budget address such realities head-on. Whether they will work, however, is another question. The idea that such measures are at odds with the history of the liberal free press, however, is flat out wrong (on this point, see, for example, [John & Silberstein, 2015](#); [McChesney & Nichols, 2010](#)).

Magazines

Of all media sectors, magazines are the least concentrated. Concentration levels fell by nearly half on the basis of CR scores between the early 1990s and 2017, and more than seven-fold ten by the lights of the HHI criteria since 1988 (see the “Magazine” sheet in the [CMCRP Workbook](#)). The CR4 last year was 31, and the HHI at the extremely low level of 289. That said, however, even the best available data for this sector is terrible and needs to be treated with caution. ■



Core Elements of the Internet

The internet has long been held up as an antidote to ownership concentration in the “old media”. Yet, as the earlier discussion of internet access showed, there is little reason to believe that core elements of the Internet are immune to such forces. In fact, there may even be good reasons to think that the opposite is the case. Indeed, that seems more likely to be the case with each passing day given the current furore over Facebook, Google and other giant platforms’ consolidation of market power with seeming impunity, and how this market power coupled with weak data protection and privacy laws, at least in North America, have legitimated a business model based, essentially, on the unlimited harvesting of personal data. While this approach has been given a free pass in the past, it is increasingly being seen to be fundamentally at odds with people’s dignity, trust in the internet and democracy, and ripe for a new “law of the internet” as a result.

The discussion below examines the evidence in relation to several core elements of the internet ecology: internet advertising, search engines, browsers, operating systems and online news sites. It starts with a critical area that is remarkably *unconcentrated* and which appears to have become more and more diverse over time: internet news sources. It also adds a fundamentally new section this year that builds on the internet advertising section to ask whether the advertising market as a whole across *all* media is also dominated by the internet giants?

Internet News

As previous versions of this report have indicated, internet news sites have always been an exception to the high levels of concentration found elsewhere across the media landscape in Canada.

The diversity of online news services fell between 2003 and 2008 as the amount of time people spent on the top 10 online news sites nearly doubled from 20 to 38 percent of the total time people spent online. Moreover, it was also the case, that most of the increase in time that people spent visiting online news sources went to sources that were extensions of well-known media outlets: CBC/Radio Canada, Quebecor, CTV, the *Globe & Mail*, *Toronto Star*, Post Media and Power Corp from Canada or to foreign news sources such as CNN, the BBC, Reuters, MSN, Google and Yahoo!! ([Zamaria & Fletcher, 2008, p. 176](#)). While there was a “pooling of attention” on the top 10 or so news sites, it was also the case that concentration levels were always at the lower end of the scale and that they drifted further downward until 2011, the last point for which data was available from this early effort to map the audience’s attention to internet news sources (see the “Online News” sheet in the [CMCRP Workbook](#)).

For the last three years, I have obtained a new dataset from Comscore that brings us up-to-date. While the new dataset and the old study from Zamaria and Fletcher use very different measures and are, thus, not directly comparable, the downward drift in concentration levels seen in the past has continued apace. Internet news sources continue to be, in fact, amongst the most diverse of all the sectors reviewed in this report, except magazines. Table 4 below illustrates the point for 2016 and 2017.

Table 4: Internet News Sources, 2016-2017

	2016		2017	
	Avg Monthly Unique Visitors (updated end of year)	Market Share	Avg Monthly Unique Visitors (updated end of year)	Market Share
CBC- Radio Canada	16400	7	18221	7
Huffington Post	10017	4	15459	6
Pelmorex (We- ather Network)	14917	7	13450	5
Postmedia	12933	6	13450	5
Torstar	10193	4	11714	5
CTV	9719	4	10353	4
CNN	8071	4	8287	3
Globe and Mail	6230	3	6815	3
Buzzfeed	7870	3	6759	3
Quebecor/Canoe	7270	3	6735	3
Daily Mail	6499	3	6038	2
Weather Company	4687	2	5740	2
BBC	5612	2	5482	2
Rogers	3696	2	5318	2
NBC	5136	2	5204	2
MSN News	4621	2	5184	2
New York Times	4342	2	4865	2
USA Today	4448	2	4797	2
The Guardian	4739	2	4548	2
LaPresse	3636	2	3972	2
AccuWeather Sites	3300	1	3884	2
Washington Post	1442	0	3367	1
CBS	3346	2	3254	1
Newsweek Media			2,828	1
Telegraph	2774	1	2,774	1
Fox News	1724	0	2734	1
Time	2854	1	2651	1
Total Avg Monthly Viewers	189595		259772	
CR4		24		23
HHI		333		262

Source: ComScore Long Term Trend, September 2012 -- September 2017, Total Canada, News and Information Category. See the "Internet News Sources" sheet in the [Excel Workbook](#))

As Table 4 shows, Canadians get their news from a wide range of sources on the internet. The CBC continues to be at the top of the heap, as it has been for years. Other familiar media enterprises from Canada also loom large: e.g. Postmedia, Torstar, CTV, Quebecor, the *Globe and Mail*, Quebecor, etc. It is also clear that some online news aggregators and sources of journalism have climbed up the ranks as well (e.g. Huffington Post, Yahoo!!-ABC News and BuzzFeed). There's also a several quality US and UK news sources near the top of the list as well (e.g. CNN, BBC, NBC, MSN News, *New York Times*, *the Guardian*, etc.). The Weather Channel also stands out as one of the most important sources of information for Canadians.

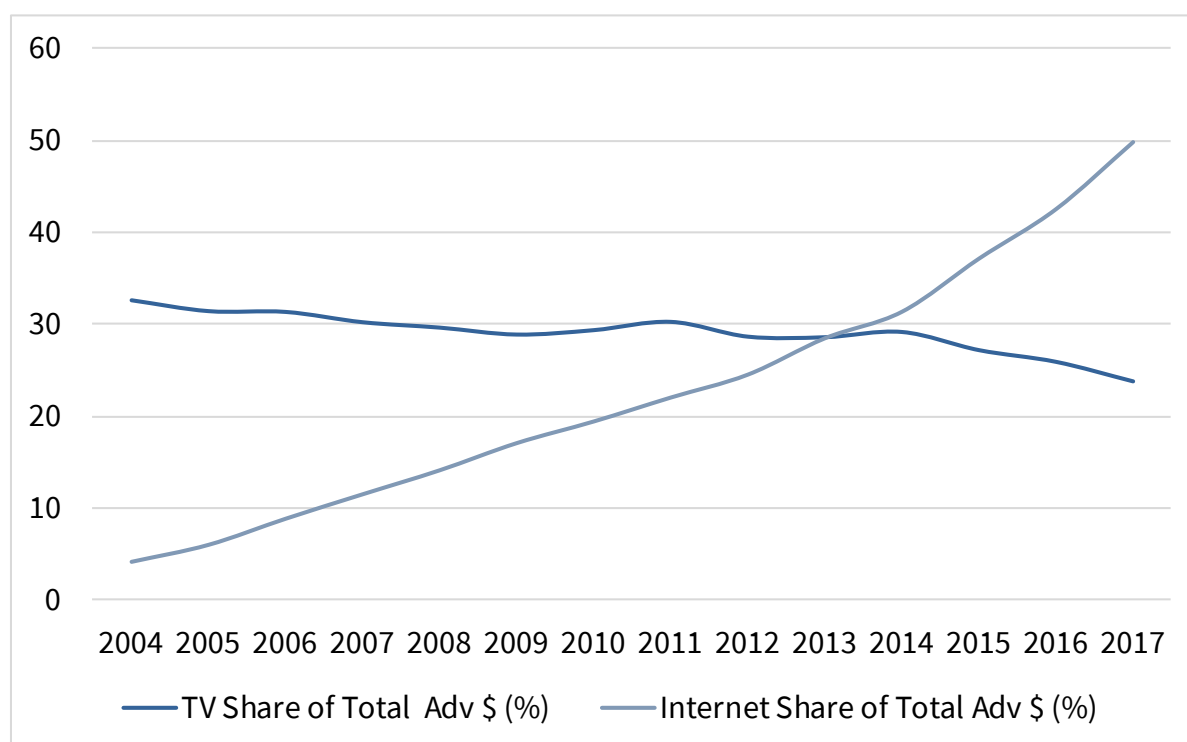
We spent considerable time in the last [report](#) discussing the significance of the changes taking place with respect to internet news sources so we will only briefly recap those points here (see pp. 65-67). For one, while the range of internet news sources used by Canadians consists of a diverse mixture of new and old, and local, national and international sources, new Canadian online news ventures such as iPolitics, the *National Observer*, Canadaland, etc. have yet to register significantly in the public mind except for the occasional intervention when they really do lead the charge and set the agenda by breaking stories that others have neglected (e.g. the Jian Ghomeshi story and the Snowden disclosures, among many others). In fact, none of these sites crack the ranks of the top 60 internet news sources that people in Canada go to for news. This implies that they account for under one percent of internet news traffic and, therefore, that they speak mainly to small and specialized audiences.

While undoubtedly important, the significance of these “ventures continues to be vastly outstripped by established news organizations like the CBC, Postmedia, Torstar, CTV, Quebecor, Global TV, the *Globe and Mail*, the BBC, the *New York Times*, CNN, *The Washington Post*, the *Guardian* and an assortment of “internet native services” like BuzzFeed, MSN News, etc. Such traditional news organizations are still the most important sources of journalism in the network media economy. They also continue to originate far more stories that the rest of the media pick up, and for these reasons, the problems besetting the press pose significant problems for the media, citizens and audiences generally. Whether future developments in internet news will prove to be a boon for journalism and its role in society and democracy, it is still probably too early to tell.

Internet Advertising: The case for why Google and Facebook dominate on-line advertising in Canada

Internet advertising revenue has soared from \$141 million in 2000 to \$6.8 billion last year. In fact, by 2013 the internet had already surpassed TV as the largest advertising sector and the gap between them continues to widen. By 2017, internet advertising made up half of all advertising spending across all media. Figure 10 below illustrates the point.

Figure 10: Internet Advertising Outstrips TV Advertising by a Widening Margin, 2004-2017



Sources: IAB Canada 2017 Actual + 2018 (plus various years); CRTC, Statistical and Financial Summaries; See the “Ad\$ All Media” sheet in the [CMCRP Workbook](#).

Internet advertising is also extremely concentrated and has become more so over time, not less. According to the Internet Advertising Bureau’s (IAB) estimate, the top tens firms’ share of internet and mobile advertising revenue rose from 77% in 2009 to 86% in 2015, after which it stopped reporting this measure.⁹ Our estimate of the top ten companies’ share of internet advertising is a little lower, but the conclusion is the same: the

⁹ The IAB dropped its tally of the top 10 companies’ share of internet advertising after its 2015 report in favour of reporting on the top 5 and 20, respectively, companies’ share. The most recent IAB report, however, shows that the increased revenue went entirely to the top 5.

internet advertising market in Canada is concentrating and becoming more consolidated with the passage of time. The top 10 companies' share of online advertising revenue in Canada grew from 80% in 2015 to 85% last year, according to our estimate. To help illustrate the point, table 5 below highlights the revenue and marketshare of the eighteen biggest internet advertising revenue recipients in Canada for the years between 2015 and 2017.

Table 5: Internet Advertising: Revenue (Millions\$), Market Shares and Concentration Scores, 2015-2017

	2015		2016		2017	
	\$ Millions	Market Share	\$ Millions	Market Share	\$ Millions	Market Share
Google	2387	52	2819	51	3437.8	50.8
Facebook	552	12	847	15	1593.3	23.5
Torstar	126	3	133	2	131.4	1.9
Bell	111	2	119	2	111.6	1.6
Postmedia	98	2	94	2	105.5	1.6
Twitter	92	2	94	2	94.9	1.4
Pelmorex	57	1	70	1	77.8	1.1
Rogers	91	2	84	2	73.8	1.1
Yellow Pages	60	1	74	1	72.7	1.1
Shaw	76	2	68	1	67.3	1.0
Quebecor	48	1	47	0	46.3	0.7
Transcontinental	41	0	47	0	42.3	0.6
CBC	25	0	30	0	36.6	0.5
Globe & Mail	22	0	20	0	20.9	0.3
Power Corp	18	0	16	0	17	0.3
Groupe Capitales Médias	14	0	13	0	13.3	0.2
Glacier	12	0	11	0	12.6	0.2
FP CDN Newspapers	8	0	7	0	8.1	0.1
Total \$ (Mills)	4604		5484		6771	
Google + Facebook Share		64		68.7		74.3
CR4		69		73.2		77.9
CR10		79		82.1		85.2
HHI		2865		2966.2		3148.5

Sources: [lab.Canada 2017 Actual + 2018](#) (plus various years). Company Annual Reports and “Internet Other” sheet in the [CMCRP Workbook](#) for more details on the methods used to arrive at these figures.

As Table 5 illustrates, Google and Facebook clearly stand in a league of their own in terms of internet advertising revenue and market share. Together, they controlled an estimated three-quarters of the \$6.8 billion internet advertising market in Canada in 2017—up greatly from two-thirds a year earlier. Their embrace of the mobile internet has helped to consolidate and tighten their grip on the online advertising market and almost all of the growth in internet advertising has redounded to the two internet behemoths in the past few years.

Search

Google's dominance of internet advertising flows from its control of the search engine market. The company has also, however, expanded into all manner of activities in recent years, including operating systems, browsers, mobile handsets, artificial intelligence, cloud storage (data centres) and the ownership of fibre optic cables that string together cities and countries around the world. Indeed, the company is one of the world's biggest carriers of international internet traffic (see [Stevenson, 2017, p. 147](#)). As a result, Google is diversifying its sources of income but, that said, it still derives 85% of its revenue from its iconic search engine, Youtube and advertising revenue (Alphabet, [Annual Report, 2017](#), p. 28). While it only seems right to keep our focus on this central reality, it is essential to not become too fixated on it at the risk of losing sight of where things are going versus where they have just been.

The early years of the commercial internet in the 1990s and early 2000s saw an eclectic variety of search engines: AlltheWeb, AltaVista, Excite, Go, Infoseek, Lycos, WebCrawler, OpenText, Yahoo!, etc. Most went bankrupt or were swallowed up by others along the way, although some still linger on. After this early commercial phase, however, things changed as eclectic experimentation working cheek-by-jowl with well-financed efforts gave way to the emergence of winner-take-all conditions (see [van Couvering, 2011](#); [Hindman, 2018](#); [Noam, 2016](#)).

Concentration levels in the search engine market in Canada have been sky-high since 2004. CR4 scores in the uppers 90s has been the norm for more than a decade, and HHI scores have been nearly off-the-charts in the 4000-7000 range (remembering that 10,000 represents a total monopoly). In sum, this is a core element of the internet that is far from being immune to processes of consolidation. Indeed, internet search is amongst the most concentrated of all the different segments of the network media ecology—by far.

Google's dominance rose sharply from the mid-2000s until the end of the decade and into the next, where its marketshare typically hovered in the high 80% to low 90%

range. As of 2017, the Google still thoroughly dominated search in Canada with a 91.5% marketshare. Microsoft (5.6%), Yahoo!! (2%), DuckDuckGo (.6%) and Baidu trailed far behind. CR4 and HHI scores were thus, unsurprisingly, sky-high at 99.7% and 8408, respectively. Table 6 illustrates the current situation and developments since 2009.

Table 6: CR4 and HHI Scores for the Search Engine Market, 2009-2017

	2009	2010	2011	2012	2013	2014	2015	2016	2017
Google	92.7	93	91.5	90.9	88.4	87.5	90.6	91.4	91.5
Bing (Microsoft)	3.7	3.7	5.4	5.5	6.2	5.9	5.2	5.2	5.6
Yahoo!	2.9	2.7	2.6	2.7	3.6	5.9	3.6	2.9	2
DuckDuckGo					0	0.1	0.3	0.3	0.6
Baidu	0	0	0	0	0.1	0.1	0.1	0.1	0.1
AOL	0	0	0	0	0	0	0	0.1	0.0
Ask Jeeves	0.4	0.4	0.4	0.4	0.3	0.3	0.1	0	0.0
Webcrawler	0.1	0.1	0	0.1	0.6	0.1	0	0	0
CR4	99.4	99.4	99.4	99.1	98.2	99.4	99.7	99.8	99.7
HHI	8617.7	8664.6	8400.7	8295.3	7862.5	7717.3	8239.4	8382.5	8408

Source: Source: StatCounter. Global Stats (Various Years). <http://gs.statcounter.com/search-engine-market-share/all/canada/>. Each year is based on December sample.

Social Networking Sites

Social networking sites like Facebook display a similar but not quite as pronounced trend, but here too things remain in flux. Does Facebook dominate social network sites? Absolutely, and that dominance has expanded into adjacent and complementary services (i.e. WhatsApp) and been consolidated over the past decade.

Since 2012, Facebook has grown from 17 million users and a estimated revenue of \$169 million to just under 22 million users last year with an estimated revenue of \$1,593.3 million. As part and parcel of this massive growth, Facebook's estimated average revenue per user (ARPU) in Canada has soared from \$16.03 five years ago to \$137.90 in 2017. Facebook's first decade was driven by its growth and development in the US and countries like Canada. While Facebook has continued to grow by leaps and bounds for over a decade, in Canada, the US and Europe growth appears to have stalled and, in some countries, it has declined slightly. While Facebook use has become saturated in several

countries around the world, four underlying forces have continued to expand its dominion:

- “blockbuster” killing acquisitions: Messenger (2011), Instagram (2012) and WhatsApp (2014).
- expanding into “developing markets” where populations are big but ARPU a fraction of what it is in Canada, the US and Europe: Asia-Pacific, Latin America, the Arab World, Africa.
- expanding ARPU for “developed markets”; in Canada, for instance, ARPU has soared from \$16.03 five years ago to \$137.90 in 2017.
- weak privacy and weak-to-non-existent “data harvesting” laws have begot business models predicated on the unlimited collection of people’s data and the threat of a new kind of civilization: “[surveillance capitalism](#)”, as Shoshana Zuboff calls it.

Facebook (including Instagram (1%)) continues to dominate social media in Canada, with 80% of the unique visitors using such sites visiting Facebook—six times that of Pinterest (12.6%) and those that fall in line thereafter: Twitter (3.6%), Reddit (1.4%), Youtube (.9%), Tumbler (.7%), stumbleUpon (.4%) and LinkedIn (.2%). With a CR4 of 97.7% and an HHI of 6439, social media sites are highly concentrated. Like search, the CR4 has been in the high-80% to high 90% range since, based on [StatCounter](#) figures, 2011.

With respect to other core elements of the internet ecology, current concentration levels can be best described as sky-high. Take **desktop web browsers** in Canada, for example. The top four companies—Google Chrome (49.3%), Apple’s Safari (28.8%), Microsoft’s Explorer (7.2%), Firefox (6.4%), Edge (4%), Opera (.7%), UC Browser (.5)—have a combined market share of 91.7 percent and an HHI of 3371 ([StatCounter](#)). To be sure, competition between Google and Microsoft has seen the two swap places in terms of the number one and two browsers over the past five years, but other than that competition has been anemic and concentration levels have been consistently at the very high end of the scale.

Similar characteristics hold for **mobile browsers**, albeit with a different rank ordering of the players. Just two companies account for over 90.4% of the market—Google’s Android or Chrome browser was at 43.9% last year and Apple’s Safari at 46.5%—while Opera, with a .6% marketshare, UC Browser (1.3%), and Microsoft Explorer with .1%, lagged very far behind. The upshot is extremely high levels of concentration on the basis of both the CR4 (97.7%) and HHI (4177) scores ([StatCounter](#)). While concentration levels have always been solidly in the highly concentrated zone, they did fall significantly between 2013 and 2015 in the face of the rapid growth and adoption of Google’s Android operating system, and less so, the Opera operating system. That trend, however, appeared transitory as Google sealed its dominant stake in mobile browsers in 2016.

Similar patterns prevail once again in terms of desktop and smartphone **operating systems**. When it comes to desktop operating systems, CR4 = 97.9 of the installed base

(Microsoft Windows, 41.9%; Apple OS X, 35.9%, Google Android/Chrome, 20.1% and Linux at .8%) ([StatCounter](#)). Consequently, the HHI is at the extreme end of the scale at 3452. The extent of Microsoft's control of installed operating systems has stayed remarkably constant over the years and has actually trended upwards in recent years.

For smartphone operating systems, the top four players accounted for 98.5% of the market: Google's Android OS (49.3%), Apple's iOS (49%), Microsoft (.2%). Java (.6%), Samsung (.1), and RIM (1.1%) accounted for the rest. Again, the significant growth and adoption of the Google Android operating system for mobile phones stands out, and in fact it replaced Apple at the top of the rankings in 2015 and consolidated that position in 2016, but then slid back in the past year. The HHI score was 4834 in 2017 ([StatCounter](#)). For all intents and purposes, however, Google and Apple possess a duopoly when it comes to mobile operating systems. Again, the upward trend in recent years with the rise of the "mobile internet" is significant, and it is consistent with trends in other areas reviewed, all of which suggests that the forces of consolidation do not abate with the advent of new media technologies but congeal—albeit with a few notable exceptions, like internet news sources, as discussed earlier.

Advertising Across All Media: Do Google and Facebook Really Dominate the World?

The fact that Google and Facebook thoroughly dominate the \$6.8 billion online advertising market in Canada is beyond dispute. That their grip on the internet advertising market is consolidating is also clear. Indeed, their dominance of internet advertising means that they loom large relative to the \$13.6 billion spent last year in Canada on advertising across *all* media (e.g. TV, newspapers, online advertising, radio, magazines and billboards). Table 7 below helps to illustrate the point.

Table 7: Total Advertising Revenue Across All Media, Market Shares and Concentration Scores, 2017

	\$ Millions	Market Share
Google	3437.8	25.3
Bell	1618.5	11.9
Facebook	1593.3	11.7
Shaw	823.3	6.1
Rogers	749.9	5.5
Postmedia	479.0	3.5
Torstar	401.8	3.0
Quebecor	350.1	2.6
CBC	300.6	2.2
Transcontinental	223.0	1.6
Cogeco	158.7	1.2
Globe & Mail	111.6	0.8
Newcap	104.7	0.8
Twitter	94.9	0.7
Pelmorex	77.8	0.6
Yellow Pages	72.7	0.5
Total \$ (Mills)		13577.1
Google + Facebook Share		37.1
CR4		55.0
CR10		73.5
HHI		1027.4

Sources: TVB/Think TV, Net Advertising Volume; Company Annual Reports; lab.canada 2016 Actual + 2017 Estimated Internet Ad Revenue. <http://iabcanada.com/annual-internet-advertising-revenue-reports/>, p. 8; lab.canada 2015 Actual + 2016 Estimated Internet Ad Revenue. <http://iabcanada.com/annual-internet-advertising-revenue-reports/>, p. 8; CRTC for Broadcast, pay and specialty television and Radio. See the “Ad\$ All Media” sheet in the [CMCRP Workbook](#)).

Table 7 clearly conveys a number of fascinating points. For one, Google stands in a league of its own, sucking up nearly a quarter of all advertising revenue and on account of it being roughly twice the size of the next two biggest players, Bell and Facebook. Combined, these three players—Google, Bell and Facebook—form something of a loose advertising oligopoly, with just under half of all revenue going into their coffers.

They also tower over a second tier of ten well-known media companies, respectively: i.e. Shaw, Rogers, Postmedia, Torstar, Quebecor, Transcontinental, Cogeco, the *Globe and Mail* and Newcap Radio. The gap between the two sets of companies—that is, “the

The fact that Google and Facebook have assumed the large proportions they have within a shrinking advertising market has put them on a direct collision course with the biggest media companies in Canada.

big 3” and the second tier companies with annual revenue between \$100 million and \$1 billion in 2017—is also illustrated by the fact that Google had an estimated revenue in Canada last year that was more than ten times the CBC’s total advertising revenue across all media, while Facebook took in more than *ten times* the advertising revenue in Canada of the *Globe and Mail*. In fact, Facebook’s estimated advertising revenue in Canada last year was more than that of all daily newspapers put together. One last example: Google’s online advertising revenue alone was more than all of the money spent on TV advertising last year, i.e. \$3,438 million vs \$3078 (see the “Ad\$ All Media” sheet in the [CMCRP Workbook](#)).

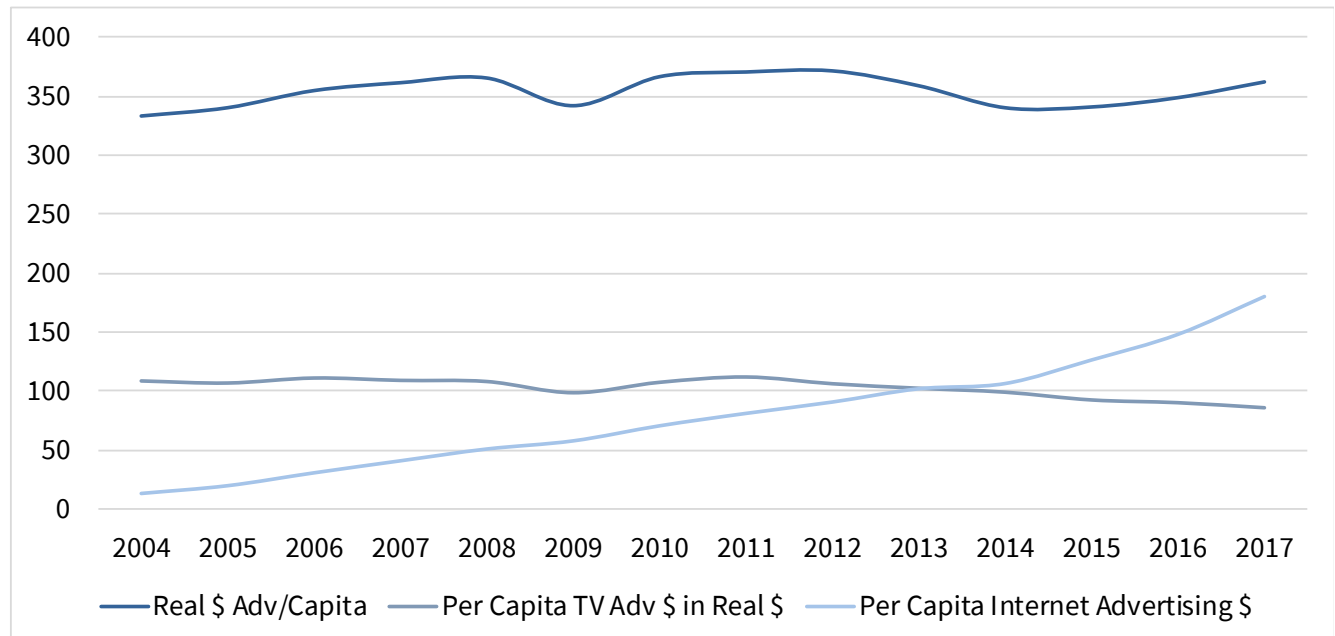
A closer look, however, reveals that the story does not run all to one side. Indeed, the fact that Bell is the second biggest recipient of advertising spending in Canada is one observation that cuts across the grain. Because it is the one with the most to lose, we can expect to hear loudly from it about threat that the internet hypergiants pose. While not nearly as imposing, it is also true that Canada’s other leading commercial media companies also cut substantial figures in their own right. Furthermore, while Google and Facebook account for more than a third of all advertising money spent in Canada this is *a far cry* from the three-quarters of the online advertising market they hold and which they do undeniably dominate. In other words, whilst undoubtedly powerful within the context of the overall advertising market in Canada, there are significant differences in the degree of Google and Facebook’s clout in these two different contexts that must be kept in mind.

Perhaps surprisingly, one key feature that stands out from Table 6 is that the advertising market as a whole is actually *not* concentrated. Indeed, with a CR4 of 55, it just falls into the concentrated zone by that measure’s lights. By the HHI, the message is unequivocal: the advertising market is not a concentrated market. This is further illustrated by the fact that the combined market share of the sixteen companies shown is 78%—a large number, to be sure, but not remotely close to that of the online advertising market or, in fact, nearly all of the markets examined in this report. In short, the total advertising market in Canada is amongst the most diverse and competitive markets we have covered, and is similar to, for example, internet news, radio and magazines, all of which are at the low end of the scale and highly diverse and competitive by the standards of the HHI. On this basis, Google and Facebook do have significant market power but they do *not* dominate the entire advertising market in Canada.

Issues come to a head nonetheless because Facebook and Google’s growing clout is occurring exactly at the moment in time when advertising spending overall appears to be stalled and even *declining* when measured on a per capita basis, in inflation-adjust-

ed dollars, and relative to the size of the media economy and gross domestic income. Figure 11 below repeats some of the evidence from the first report in order to illustrate the point anew.

Figure 11: Hitting a Ceiling? Per Capita Advertising Spending for “All Media”, Television and the Internet, 2004-2017 (Real \$)



Sources: CRTC, Statistical and Financial Summaries; lab.canada 2016 Actual + 2017 Estimated Internet Ad Revenue; ThinkTV (previously TVB) Net Advertising Volume, various years. See the “Ad\$ All Media” sheet in the [CMCRP Workbook](#). Population and income figures from Statistics Canada and “current dollars” converted to “real dollars” using the Bank of Canada’s “Inflation Calculator”.

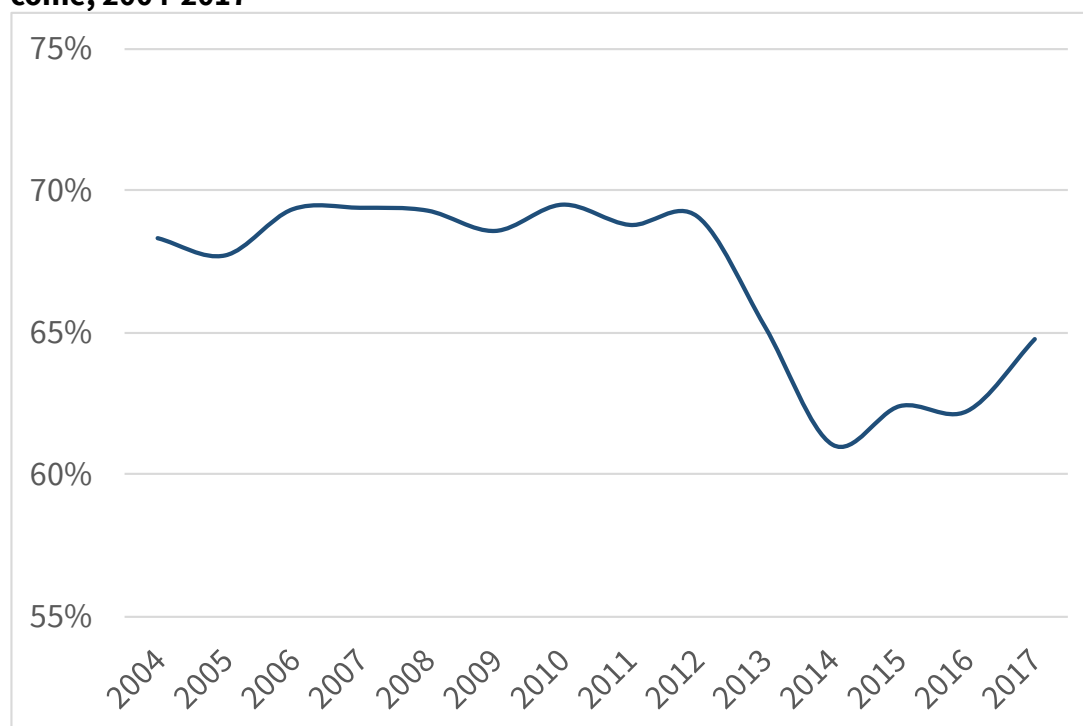
The fact that Google and Facebook have assumed the large proportions they have within a shrinking advertising market has put them on a direct collision course with the biggest media companies in Canada—another point that Table 6 helps to make explicit. This adds important context to lurid claims that the internet giants are little more than “vampire squids” of Silicon Valley sucking the lifeblood out of the Canadian media, as the Public Policy Forum colourfully referred to them in its [Shattered Mirror](#) report last year. It is not just a generalized threat that they supposedly pose to the economic well-being of journalism, Canadian content, and so on, but to specific entities active in this domain.

The assumption behind such portraits also assumes that if only Google and Facebook can be cut down to size, advertisers will come rushing back to the older media firms that have been engaged in a losing battle the new breed of digital media giants. Yet, the role of public policy is not to protect the private business interests of the industry players listed in Table 6 above. It is also doubtful that this course of action would be successful even if it was pursued. This is because the faltering state of advertising that we have been emphasizing would work against such an outcome and also because Google and Facebook enjoy massive economies of scale that traditional media will find extremely difficult, if not impossible, to match ([Hindman, 2018](#); [Noam, 2016](#)).

As a result of the hyper-efficient digital infrastructure available to do the same job—i.e. reach audiences both at scale and with precision in cost effective ways—advertisers are taking advantage of these “efficiency benefits” by sending their ad dollars to the most effective in the business: Google and Facebook. It could also be the case that it is just such “efficiencies” that are putting all the downward pressure on advertising spending to begin with. However, other factors are also likely at play, including the possibility that the increased concentration trends observed in several media sectors—and most of all in the biggest “network media industry” sectors—are also present across the wider economy. Given that one reason advertising is used is to distinguish companies from one another in a competitive market, waning levels of competition across the economy could be putting a damper on advertising spending.¹⁰ To repeat a familiar point from these pages, there is also the fact that advertising spending rises and falls in synch with the state of the general economy. True to form, just as the economy has stumbled along since the “global financial crisis” circa 2007-2008, so, too, has advertising spending in Canada been weak (see [Picard](#), [Garnham](#), [Miege](#), [Vogel](#)).

As the last report showed, advertising spending as a percentage of gross domestic income has fallen significantly in recent years, seen in Figure 12 below.

Figure 12: Advertising Spending as a Percentage of Canadian Gross Domestic Income, 2004-2017



Source: see the “Ad\$ All Media” sheet in the [CMCRP Workbook](#).

Another crucial dynamic hangs in the balance in relation to these cross-cutting and complex processes. As rivalry intensifies for shrinking advertising dollars, Canadian communication and media companies have been pushing hard for new rules-of-the-road, not

¹⁰ I would like to thank a former Ph.D. student at the School of Journalism and Communication, whose dissertation on finance, monetary policy and communication I supervised, and a first-rate economist, Marc-Andre Pigeon, for bringing this possibility to my attention.

just in relation to the issue that is the central focus in this report—concentration—but also in relation to personal data protection and privacy rights. Shaw (Corus) has been a particularly vocal advocate in the call to regulators to give media companies more leeway to collect much more data—and more granular data—from audiences and subscribers so that they can better “know the audience” and, consequently, compete with the digital behemoths like Google, Facebook and, of particular interest in this context, Netflix.

Shaw (Corus), however, is not alone on this front. In fact, all of the TV groups in Canada and their vertically-integrated masters point to falling advertising revenue and intensifying rivalry with Netflix, Google and Facebook to push the CRTC to relax the privacy rules under which they operate, or at least to charitably interpret those rules so that they can harvest massive amounts of sensitive and personal data from people’s cable TV boxes, internet connections and mobile devices. Doing so, they say, will allow them to engage in more finely-tuned and extensive targeted, behavioural advertising, all the better to compete with the “harvest-it-all” business models of the vampire squids from Silicon Valley. To this end, a group of the vast majority of Canadian carriers and broadcasting companies have formed the [Set-Top-Box Industry Working Group](#) under the auspices of the CRTC.¹¹

The Commission seems inclined to go along with these arrangements for several reasons. First, and most importantly, is the idea that while the kinds of personal data being sought may be extremely granular, intimate and sensitive at the point of collection, advocates of this approach claim that the anonymization of that data, and the stripping out of location details after the first three digits of people’s postal code before the data is sent to Numeris, will render such privacy and data protection concerns moot but also sufficient to ensure that the companies are in compliance with the privacy and data protections given to Canadians under *PIPEDA*.¹²

While this may be an arguable position, it does not obviate the fact that fine-grained and potentially intimate data is being amassed at the point of collection from cable TV boxes and devices connected to the internet in the first place. Nor do the steps being proposed allay concerns that the companies who *are already* collecting reams of such highly personal data about people’s internet use, websites browsed, devices used to connect to the internet, location, and other metadata, will not use the resulting treasure trove of data they amass to pursue their own objectives. Even if we were to concede that the plans were appropriate to begin with, the assumption that everything will go “according to plan” seems like wishful thinking.

It also collides with recent experience where the [Office of the Privacy Commissioner](#) (OPC) turned back a similar initiative—Bell’s Relevant Ad Program—in 2015. According to the OPC in that instance,

11 The group consists of Shaw (Corus), Bell, Rogers, Quebecor, Sasktel, Telus, TekSavvy, the CBC, Blue Ant Media, Cogeco, Eastlink, Pelmorex, the Canadian Cable Systems Association and Independent Broadcasters Group. While this gives the appearance that the effort levels the playing field, the obvious exclusion of Netflix, for example, gives the lie to that and, thus, smacks of protectionism—if in fact, the group and its goals were desirable to begin with it, which is a questionable proposition to say the least.

12 Numeris is the audience measurement service the companies and CRTC are working with on this project.

“... BCE’s Relevant Advertising Program’ is able to track every website its customers visit, every app they use, every TV show they watch and every call they make using Bell’s network. When that information is combined with account and demographic information—such as age range, gender, average revenue per user, preferred language and postal code – which the company has long collected, the end result is a rich multi-dimensional profile that most people are likely to consider highly sensitive”.

Bell withdrew its Relevant Advertising Program in response to the OPC’s findings in 2015. However, instead of closing up the program for good, it appears that core elements of the program have been resurrected under the auspices of the CRTC’s Set-Top Box Industry Working Group. Unlike Bell’s go-it-alone approach three years ago, however, the new version intends to create a common pool of subscriber data out of audience measurement practices that will then be shared *within* the industry under the guise of “increasing the discoverability” of Canadian content in a fast changing television landscape where American internet giants like Google, Amazon, Facebook, Apple and Microsoft (GAFAM) are cast as posed to take-over the world and an ever rising stake of people’s attention and, thereby, the culture of the nation.

That the *Broadcasting Act* contains no specific mention of people’s privacy rights and personal data protection in light of these realities is a major oversight. Considering the wide reaching possibilities being enabled and pursued with respect to data collection in the broadcasting and telecommunications industries, this oversight should be rectified in any new legislation that emerges from the various reviews that are currently under way (although PIPEDA still applies).

Ultimately, however, the problem is that, instead of reining in Google and Facebook by subjecting them to something like the more stringent personal data and privacy protection rules of the European Union’s [General Data Protection Rules](#) that went into effect in early 2018, Canada’s telecoms, internet and media players are, essentially, proposing a race-to-the-bottom under the guise of leveling the playing field between themselves and the weak standards that govern how the internet hypergiants operate. In so doing, they are trying to compete on terrain that is not of their own making in order to generalize a business model based on harvesting people’s data without meaningful limits and according to the perverse logic of “surveillance capitalism” that is arguably at the root of this thicket of problems to begin with. In other words, the cure being promoted by Canada’s communication and media groups—ostensibly aimed at leveling the playing field and under the protective umbrella of the CRTC—could be worse than the disease it seeks to cure, because it basically proposes a digital free-for-all that not only lets the internet giants and their unlimited surveillance and data harvesting model off the hook but opens up a new path for Canadian companies to follow the same uncharted and dangerous path.

Rather than pursuing a race-to-the-bottom with the likes of Google and Facebook, however, a better approach would be to make the EU General Data Protection Regulation’s values, requirements and conditions—such as algorithmic transparency, privacy by design, depersonalized data, and data portability—applicable across all layers of the

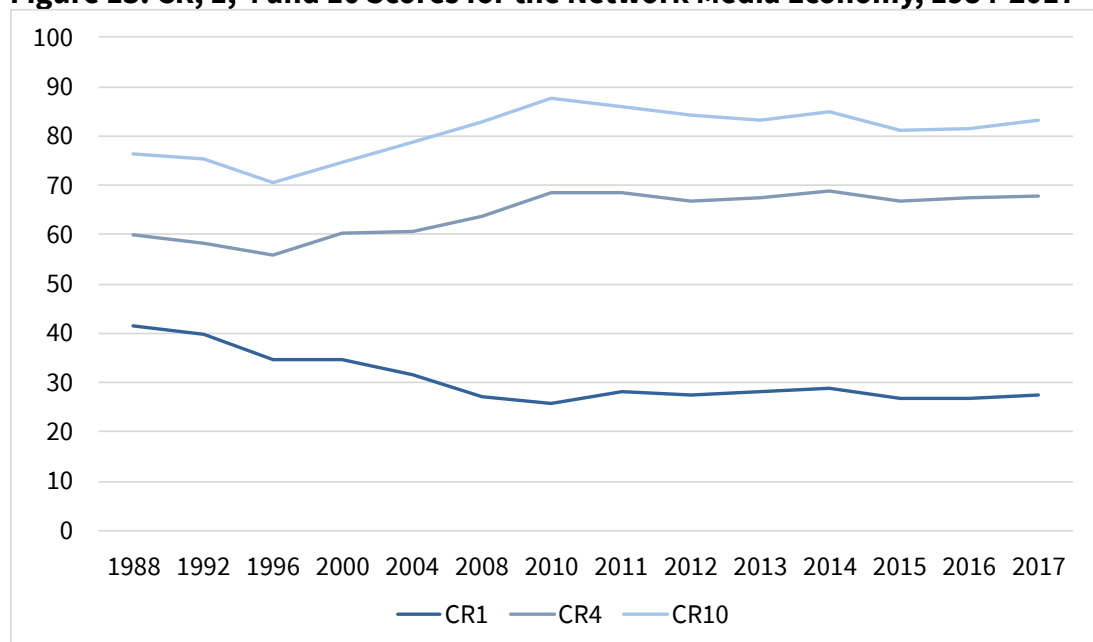
internet-centric communications, media and internet apps and services ecology. GDPR style regulations would enhance protection and control of personal information and align Canada with its EU trading partners. Such enhanced powers would also include greater enforcement powers and Administrative Monetary Penalties for the OPC. A national data strategy harmonized across the layers of the internet-centric media ecology would enhance the use of data by Canadians for Canadians, too, rather than allow such data to be controlled by a handful of vertically integrated providers and dominant internet platforms that are able to exploit unlimited data harvesting and their data holdings to fortify their existing positions of power/dominance.

Such actions would also help to restore and cultivate trust in the emerging communications infrastructure across its full range and which is absolutely central to people's personal life, society and the economy. Such aims are consistent with suggestions made by the Report of the Standing Committee on Access to Information, Privacy and Ethics (ETHI) [Democracy Under Threat: Risks and Solutions in the Era of Disinformation and Data-opolies](#) and Privacy Commissioner [Daniel Therrien's Reply](#) to that committee. ■

The Network Media Industries as a Whole

The following paragraphs draw this report to a close by combining all the bits and pieces into a bird's eye view of long-term trends across the network media economy. Figures 13 and 14, below, start the process by showing the trends across the network media economy over time on the basis of CR1, CR4 and CR10 scores, followed afterwards by a depiction of the trends based on the HHI.

Figure 13: CR, 1, 4 and 10 Scores for the Network Media Economy, 1984-2017



Sources: see the “CR & HHI” sheet in the [CMCRP Workbook](#).

Looking across the entirety of the network media economy, several distinct points emerge: The biggest company's share of revenues across the media three decades ago was 47%; in 2017, it was much less, but still a very large 28%, and within a vastly larger media universe. That company in 1984 was BCE; it still is today, and it is far larger than the second and third-ranked firms, Rogers and Shaw. Moreover, BCE's share of the total network media economy has stayed relatively constant over the past half-decade. At present, Bell (27.5%), Rogers (16.5%), Telus (16.5%) and Shaw (7.3%) make up the “big four” media giants in Canada. Together, they accounted for 68% of the whole network media economy in 2017—an appreciable rise from the preceding year. The

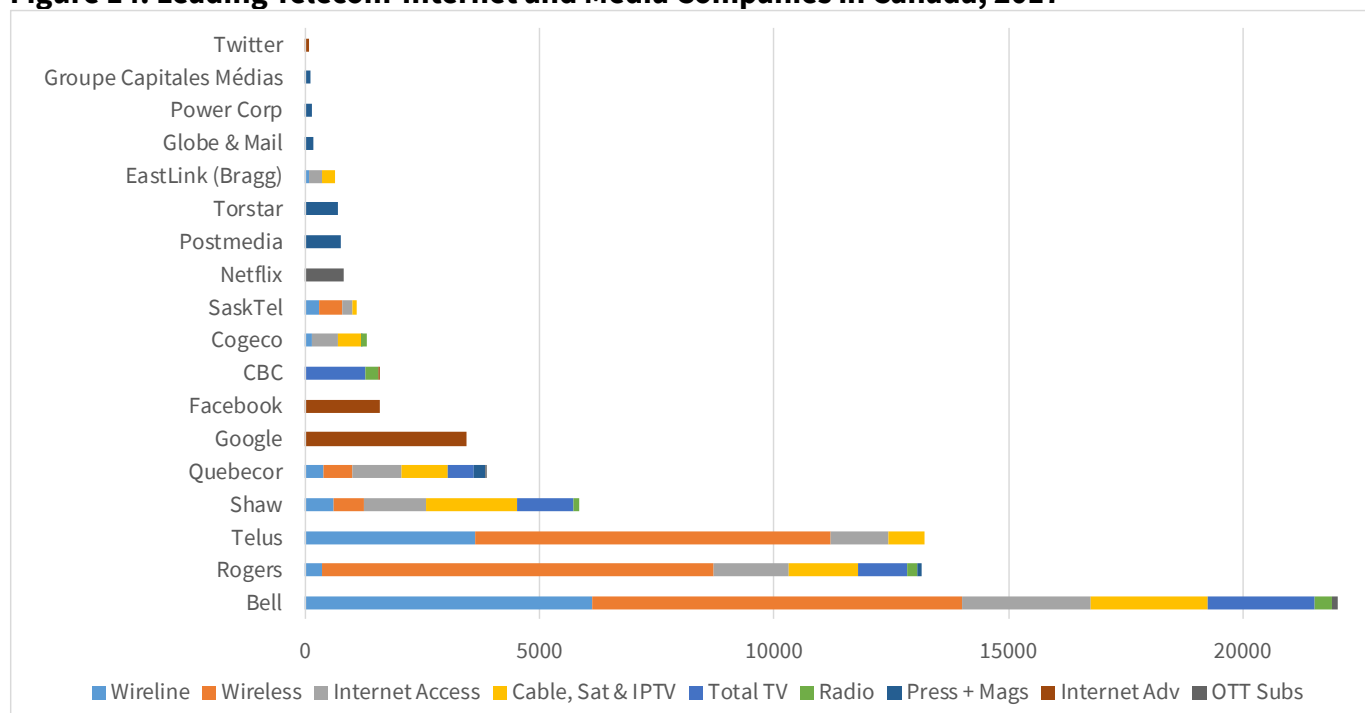
most significant and far-reaching change in the past decade, however, is the role that four giant *vertically-integrated* telecoms-internet and media conglomerates have come to play at the centre of the network media economy in Canada: Bell, Rogers, Shaw and Quebecor. They accounted for 56% of total revenues last year. Add Telus to the fold and the market share of the top five Canadian telecom, internet and media companies swells to 72.5%—again, an appreciable increase over the year before.

The largest ten firms accounted for 83.5% of all revenues in 2017—a figure that has stayed fairly stable in recent years despite modest ups-and-downs from year-to-year. By contrast, however, the figure hovered in the low- to mid-70% range in the 1990s, and today remains modestly higher than levels in the early 1980s.

All-in-all, after taking account of the top four or five firms, there is a distant second tier of a dozen or so specialized telecoms, internet and media companies: Google, Facebook, the CBC, Cogeco, Sasktel, Netflix, Postmedia, Torstar, Eastlink, the *Globe and Mail*, Power Corporation and a relative newcomer, Groupe Capitales Médias—in that order. Members of this group of second tier players do not spread their operations across many segments of the media but tend to stick to one or a small range of media. Their activities also tend to be quite regional in nature. Combine these companies with the tier one firms, and a dozen-and-a-half or so companies account for 88% of all revenues in the network media economy.

Figure 14 below shows their respective rank and composition based on their revenues in Canada.

Figure 14: Leading Telecom-Internet and Media Companies in Canada, 2017



Sources: see the “Top 20 w Telecoms” sheet in the [CMCRP Workbook](#).

A notable change in the past few years is the fast rise of internet companies up the ranks of the leading media, internet and telecoms companies in Canada. Google's fast ascent through the ranks to 6th place by 2013 and remaining there ever since stands out in this regard. It is now second only to the tier one players—e.g. Bell, Rogers, Telus, Shaw and Quebecor—but with a greater share of the media economy than traditional mainstays on the media landscape in Canada such as the CBC, the *Globe and Mail*, Torstar and so on.

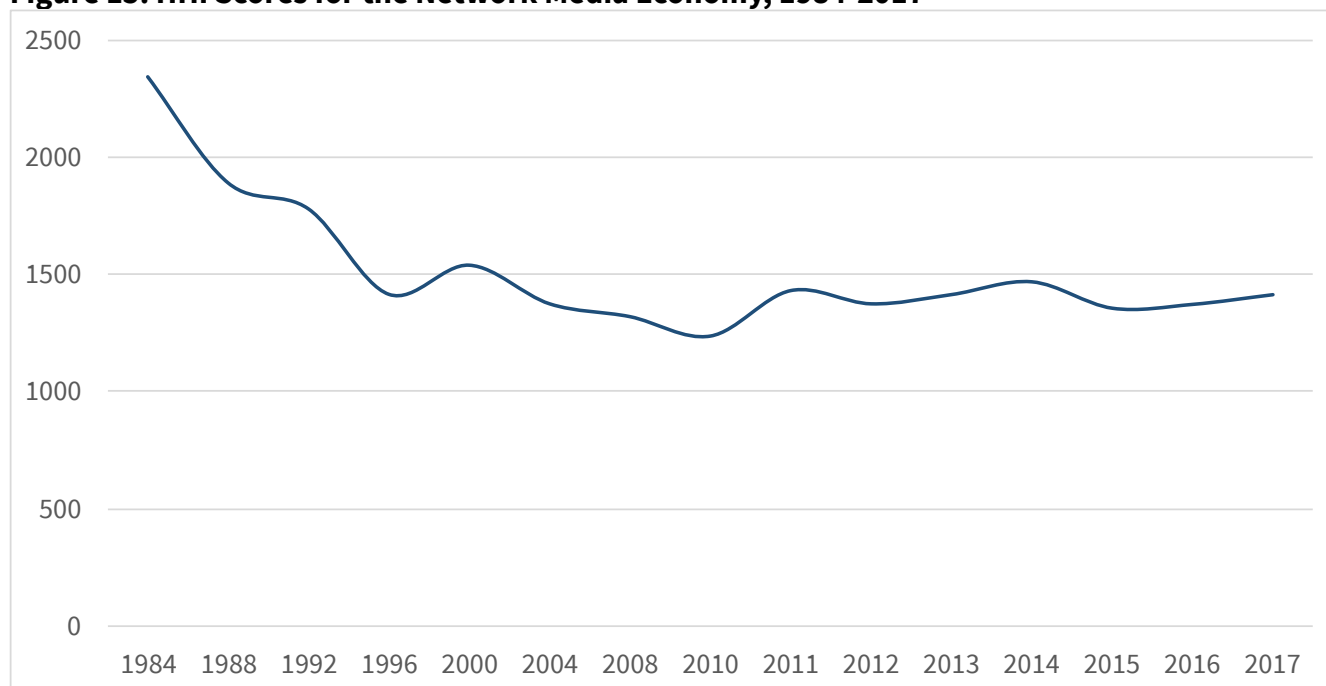
Facebook and Netflix also cut significant figures in their respective areas but are still mid-sized players within the overall network media economy. Netflix's estimated revenues in Canada of \$820.6 million represented 10.2% of total TV revenues in 2017, a substantial amount that places it ahead of Quebecor's TVA and its specialty and pay TV services. It also has a more significant presence than all the main independent TV groups combined, i.e. V Interactions, DHX, APN, Pelmorex/the Weather Channel, Radio Nord, Blue Ant, Stingray and Fairchild. That said, however, while Netflix now looms large within the TV market in Canada it still only has a 1% share of the total network media economy. In other words, based on revenue within Canada, Bell is twenty-seven times the size of Netflix.

For its part, Facebook's estimated Canadian revenues of \$1,593.3 million now account for nearly a quarter of internet advertising revenues in Canada (24%) and 12% of all advertising revenue. Again, Facebook, as we have seen, cuts a large figure in some areas of the media economy in Canada, and the fact that new media, journalists, and even the Government of Canada now incur considerable expense in designing their communications for the Facebook platform, gives the platform considerable clout on the communications and media landscape that go beyond what can be measured in dollars and cents. Still, however, it is important to keep in mind that its share of the \$82.3 billion network media economy remains modest at 1.9%. Nonetheless, it is essential to focus on areas where Facebook is having a palpable impact. In particular, this means newspapers, which now see themselves in an existential battle with the digital media giants for advertising revenue. They are right to be worried because, as indicated earlier, Facebook's estimated advertising revenue in Canada was more than that of the entire newspaper industry combined in 2017. The same point applies with respect to television where Google's revenue from online advertising now supersedes that of the entire TV industry.

Perhaps the most important point in this discussion, however, is to remember that advertising is *not* the economic engine of the network media economy. Indeed, within the overall network media economy, just one in five dollars is from advertising; the rest is from subscriber fees. In other words, the fulcrum the media economy is “pay-per-media”, not advertising-based media. One would be hard-pressed to know this elementary point given the tenor of most criticisms hurled against the internet hypergiants. We should also note that some important gains have been made with respect to growing diversity within some key sectors of the network media economy, especially in the TV industry, and that there is considerable diversity on offer in several others, notably in online news, the overall advertising market, magazines and radio. In these sectors there is no concentration problem.

That said, the evidence in this domain is never to one side. In this regard, one of the key findings of this report is that while concentration levels steadily fell for the first quarter-of-a-century covered by our research, that trend has reversed in the last decade in relation to the whole network media economy. Figure 15 below illustrates the point based on the run of HHI scores since 1984.

Figure 15: HHI Scores for the Network Media Economy, 1984-2017



Sources: see the “CR & HHI” sheet in the [CMCRP Workbook](#).

As with the CR scores shown earlier, Figure 15 also shows a ‘u-shape’ pattern. *If* we take HHI scores for the ‘total media universe’ as the beginning and endpoint of our analysis, this is our conclusion: concentration levels have fallen substantially across the media economy over the past thirty-odd years. Furthermore, they are much lower than they were at the turn-of-the-21st century and a far from cry from what they were in 1984. This is exactly why observers such as [Ben Compaine](#), [Ken Goldstein](#), [Brent Skorup](#) and [Adam Theiner](#), and [Jeff Eisenach](#) argue that continued concern with media and internet concentration is wrong and misguided. For them, it’s all a great big “digital media ecosystem” now, and within that context, it’s a battle of all against all, with no meaningful lines between any of the various bits and pieces that make up the “digital ecosystem”, or the players that are at war with one another for their survival, and for consumers’ attention and affections.

That conclusion, however, is deeply problematic for several reasons. First, the long-term decline in concentration that it implies has, as was just observed, been thrown into reverse since 2010, with a significant rise in the years thereafter, especially in the last three years. The HHI for the network media economy as a whole in 2017 stood at 1411 whereas it had been 1,370 the year before and 1,234 in 2010—its lowest point since the beginning our our coverage.

While the decline since 1984 brought the overall HHI firmly into the competitive zone of that measure's standards, the reversal in the last eight years has brought levels ever closer to the moderately concentrated zone for the network media economy as a whole. This represents a very significant change. Moreover, there has been a sizeable uptick in the past three years in the HHI scores, with a handful of entrenched media conglomerates well-known to Canadians still very much at the top of the heap and eking out modest gains in the market power with each passing year: Bell, Rogers, Telus, Shaw and Quebecor.

Therefore, yes, Google, Facebook and Netflix are encroaching on their turf, but insofar that we take the market and competition as our guide, the global internet giants' presence has not dislodged the "big five" Canadian firms from their perch, but rather have added to the size and complexity of the media economy. There is certainly no "crisis" facing the big vertically-integrated giants in Canada, although one might be hard pressed to know this given the Cassandra calls about falling skies that abound in industry rhetoric and journalistic coverage that too often happily relays such messages of anxiety to policy-makers and the public.

Examples aplenty of such rhetoric have been shown throughout this year's two reports. In particular, Shaw (Corus) and the Set-top Industry Working Group have used such imagery to push for a more permissive approach to harvesting of people's transactional data under the guise that such measures are needed to better know the audience and stave off the threats posed by foreign internet giants. Yet, such rhetoric can be seen for what it is when compared to the reality that Corus' profits are still in the lush 30-35% range and an even more lucrative 40-45% at its sister company Shaw. The basic points for here is that there is no calamity demanding that open season be declared on the collection of Canadians' personal data to stave off the looming threat of the "vampire squids" from Silicon Valley. Even if there was, handing over control of personal data and privacy for economic gains is a trade-off to be avoided rather than embraced under any circumstance.

While it is essential to take the "bird's eye" view of the network media economy, this cannot be the beginning and end of the story. This is because those who argue that things are just fine from the general point of view obscure the fine details of what is happening when we look at things on a sector-by-sector basis and then build up to a mid-range, category level analysis from there of the network media, content media and online media, respectively. We use this "scaffolding method" precisely to pick up on the dynamics within each media sector and at each level of our analysis.

Figure 16 below gives a snapshot of the network media in 2017 by listing the sectors where concentration was low, those that were moderately concentrated, and those that were highly concentrated by HHI standards.

Figure 16: Concentration Rankings on the basis of HHI Scores, 2017

Low Concentration	Moderate Concentration	High Concentration
Internet News 262	All TV 1576	Broadcast TV 2584
Magazines 290	Cable/DTH/IPTV (National) 1935	Mobile Wireless 2857
Radio 1020	Newspapers 1876	Wireline 2976
Internet Access (National) 1237	Pay & Specialty TV 1968	Internet Advertising 3149
		Desktop Web Browser 3427
		Desktop OS 3452
		Internet Access (Local)* 4000
		Cable/DTH/IPTV (Local) 5200
		Mobile Web Browser 4177
		Mobile OS 4834
		Social Network Sites 6439

■



Concluding Thoughts

Several things stand out from this exercise. First, we are nowhere near a time when studies of telecoms, internet and media concentration are passé. Indeed, theoretically- and historically- informed, and empirically-driven, research is badly needed because there is such a dearth of quality data and independent research available. And as some media and certain established players do struggle for their lives, research is being weaponized in the battles over the future of the media like never before. The stakes are huge, and things are up for grabs in a way that is very unusual. Within this contested context, it is essential to try as best we can to marshal good evidence and good stories, lest we be left ill-equipped to withstand those who mobilize knowledge and publicity in the service of their own commercial interests but not necessarily those of the many publics that make up Canadian society and who should be the primary beneficiaries of the changes afoot.

The concerns addressed in this report do not belong to a distant past rendered obsolete by new technological and economic realities. They are intimately intertwined with the events of the day. The trends observed are similar to those seen in the US and many other countries around the world (see [Noam, 2016](#)). However, they are also distinct and unique, for all of the reasons that this and our preceding report have tried to make clear, and which we summarize below.

Concentration levels fell sharply in the 1980s and part way through the 1990s, but the tide was reversed in the second half of the 90s. Of course, details differ from one medium to the next, and from country to country, but the general trend in Canada, like the US, showed a steep upward rise in the late 1990s that peaked by 2000, followed by fairly constant levels at this high point for the decade that followed—and a step change upward again since 2010.

The last five- to eight-years have once again seen an uptick in concentration for most of the “network media industries”. Even here, though, a close examination reveals some competitive dynamics in the mobile wireless, retail internet access and “cable TV” sectors that have begun to press more urgently in recent years, even if they are not fully showing up in the numbers. New entrants in mobile wireless have carved out some important gains that need to be built upon rather than left to wilt, as was the case in the past. This means ensuring that the ladder is not pulled up immediately after those who have secured a modicum of success have climbed past it. In this regard, Videotron’s Videotron has certainly made impressive gains in Quebec, and the results show in terms of its own market share, more affordable rates for several tiers of services not just from Videotron but from each of the national carriers competing with it in the province, and higher monthly data allowances.

Shaw’s Freedom Mobile also aims to build upon the tentative success that its predecessor, Wind, had eked out against an unstable policy backdrop and obstacles placed in its path by the big three national carriers at each step of the way. As our analysis shows, there is indeed “no magic number” for how many wireless providers there should be. That said, however, where a strong independent rival to the national carriers exists, whether that’s in Thunder Bay, Saskatchewan, the Atlantic provinces or the areas covered by Videotron and Freedom, several common features emerge: more affordable prices, a wider range of service plans, bigger data allowances, and so forth.

Similar patterns can be seen with respect to retail internet access services. The numbers alone tell something of a bleak story, with HHI scores that have remained stubbornly very high over much of the last decade. But again, look close and a history emerges showing that things weren’t always thus, and that even within the last decade the indie ISPs that did so much to develop internet access in Canada in the first place have slowly expanded their clout. They have effectively doubled their share of revenue and subscribers in the retail internet access market—albeit from a low base. That measures are being put into place to ensure they have regulated wholesale access to the internet infrastructure of the 21st Century—fibre-to-the-doorstep—bodes well. The devil, as always, however, will be in the details, and those details will be hammered out in the protracted meetings that are now ongoing deep within the CRTC’s esoteric regulatory machinery. And the outcome of all that, in turn, will depend on a key question, namely whether the newly installed head of the Commission will continue to have the fortitude to finish what his predecessor began, and will the government-of-the-day have the political spine to back up these rules against inevitable pushback from incumbents?

And so too with cable TV are there some openings as well that are worth summarizing. The advent of the telephone companies’ IPTV services has driven down the very high levels of concentration that have long beset that industry but local markets are still a duopoly and highly concentrated. In these areas, a lesson emerges: the network media industries and many core elements of the internet, including broadband access, internet advertising, search, browsers, operating systems and social network sites, are not the harbingers of a communications cornucopia where concerns with concentration vanish but some of the most concentrated segments of the media, full stop. Indeed, as [Noam \(2016\)](#) has stated, concentration levels in these sectors are “astonishingly high”. This is certainly true of Canada. These realities gird the towering role that internet media giants

like Google, Facebook and Netflix now play in Canada, and such realities need to be redressed.

Of course, these trends are not all to one side and the case is especially more varied in the content media industries. As we have seen, internet news sources frequented by Canadians are defined by “astonishingly high” levels of diversity based on a fairly wide diversity of “new” and “established” news organizations, and domestic and foreign ones as well. Magazines and radio are also at the desirable end of the diversity spectrum as well—although in some ways that is a measure of a big problem too, as magazine staples are busted up and sold off as publishers scramble to deal with the crisis besetting the industry. Some new players such as TekSavvy (internet access), Blue Ant (TV) and iPolitics (online news) have added diversity to the landscape as well, but their impact has been modest and, for some, their future remains uncertain. Indeed, iPolitics was taken over by Torstar in 2018 and serves as a case in point.

Another significant development stands out in this year’s version of our report: even in the heartland of television, the half decade long bout in which consolidation levels spiked is abating and the tide slowly changing course. While broadcast TV concentration remains untouched at very high levels, when it comes to pay and specialty TV, internet streaming TV, and the overall TV universe, the market is expanding, becoming more diverse, and far more complex. Since the high tide of consolidation between 2010 and 2014, concentration levels have come down as Bell, Shaw, Rogers and Quebecor have each spun off significant TV services while shuttering others. This has reduced each of their market shares, respectively, while redounding to the benefit of relative newcomers such as DHX, Stingray and Blue Ant. Internet streaming TV services are also becoming more and more prevalent, with Netflix, of course, being the clear winner by far, and in about half of Canadian households at the end of 2017. Beyond Netflix, though, Bell’s CraveTV, Quebecor’s illico, Amazon Prime and others also expanding significantly.

The idea that concentration levels in telecoms, internet and media are high is not the product of mere speculation or allegations but is supported by established legal facts. The CRTC had rediscovered media concentration in the past few years under its previous chair, and taken some bold steps by the standards of the past to do something about it in a series of landmark rulings that were reviewed earlier in this report: i.e. the Mobile TV, Talk TV and the regulated wholesale mobile wireless and wireline decisions, amongst others. On each occasion, the Commission’s message was clear: “Incumbent carriers continu[e] to dominate the retail Internet access services market”. There has been little change in such realities over time. The Competition Bureau has established the same points with respect to mobile wireless markets but then on crucial moments, like BCE’s acquisition of MTS in 2017, walked away from its own findings by doing what it so typically does: giving a green light to most mergers and acquisitions put before it. New technologies, whether 4G LTE mobile wireless services, the up-and-coming 5G wireless standard, or the fibre broadband internet access networks that are being brought to Canadians’ doorsteps do not obviate these concerns one iota but demand a firm hand at the tiller to ensure that the same kinds of problems that exist today do not become those of tomorrow. Equivocating regulators will just not cut it, although recent trends under the current Chair of the CRTC are not promising in this regard.

As this report has shown, however, it is not just high levels of concentration that are at issue but the specific form it has taken in Canada. Indeed, Canada is not unique because of high levels of media concentration. Indeed, it is important to be emphatic on this point: Canada *does not* have the highest level of media concentration in the world (or even amongst just “developed capitalist economies”, as is commonly asserted). Where Canada stands out relative to the rest of the world is in terms of its extremely high levels of *diagonal* integration between different “network media” (e.g. mobile wireless, internet access, BDUs) (essentially, telecoms operators), and *vertical* integration between telecoms operators and commercial TV services (other media content).¹³ We have dealt with this point at length in several other reports in the past year, so will only highlight a few of the key ideas here (see [here](#), [here](#), [here](#) and [here](#)).

In terms of diagonal integration, all the main distribution networks (mobile wireless, wireline, ISPs and BDUs) are typically owned by one and the same player in Canada, whereas in many countries there are stand-alone mobile network operators (MNOs). Canada is unique, for example, in the extent to which mobile wireless and wireline infrastructures are integrated into single companies, with the last stand-alone MNO—Wind Mobile—acquired by Shaw in 2016. In the US, T-Mobile and Sprint are stand-alone MNOs. Stand-alone mobile providers are common in other countries as well: Vodafone is a good proxy for this given the many places it operates in, although it also operates wireline networks in a few countries as well (e.g. New Zealand). High levels of diagonal integration matter for at least three reasons.

First, diagonally integrated companies often manage demand, rivalry and prices across each of their “platforms” with one eye cocked on their stand-alone MNO rivals and the other fixed on ensuring that whatever one branch of the firm does it does not cannibalize the revenue of another. Some say this is natural, and that may be the case. However, the problem is that it undercuts the competitive thrust of market-based competition and regulators should deal with that “natural” inclination accordingly. Doing so, however, too often seems to be a bridge-too-far, and anything but “natural”, in the Canadian context. Second, diagonal integration matters because when different companies own competing networks in separate markets, concentration levels are usually lower. Third, the presence of a stand-alone MNO affects the services on offer in terms of affordability, data allowances, availability, and so forth.

As the consultancy Rewheel shows, for example, stand-alone maverick mobile operators (e.g. Free in France, Hutchison 3 in the UK, or T-Mobile in the US) “sell 8 times more 4G gigabyte volume allowance than the EU28 operators that belong to groups that also

¹³ Discussions of these points tend to distinguish between “horizontal” and “vertical” integration. I follow Gillian Doyle (2013) to add a third type: “diagonal” integration. In this conceptualization, horizontal integration refers to ownership transactions *within* a single market; diagonal integration refers to transactions *across* markets at similar levels of the “value chain”, for example, between a company operating as a BDU and a competing or complementary distribution network like an ISP or mobile wireless network. Shaw’s take-over of Wind Mobile in 2016 is an example of this. Vertical integration occurs when a company takes over another firm that is upstream or downstream in the production chain, and is usually of two types: the first is where those who own the distribution network own TV and other content services delivered over them, while a second type involves, for example, integration between those who produce TV and film content and those who package and distribute it. Disney is an example of this, given that it owns one of the main Hollywood film studios and the ABC TV network as well as many specialty and pay TV services.

have fixed-line broadband interests”.¹⁴ In other words, diagonal integration serves to blunt the sharp edge of competition by restricting data allowances which, in turn, limits the impact of mobile wireless services on fixed, wireline services. A similar logic also checks the impact of the internet on the cable television distribution model, which both the large incumbent network operators and cultural nationalist policy groups seek to leverage as a means of maintaining a broadcasting distribution undertaking- (BDU-) centric model of the media universe, as we noted in another [research report](#) last year.

Vertical integration in Canada is also extremely high by historical standards, and has soared since 2008. It is also high in comparison to US standards as well, as we have seen, although events in the US have moved strongly in the direction of the Canadian situation over the last two years with the consolidation of Time Warner Cable, Brighthouse Cable and Liberty Media in 2016, and AT&T’s take over Time Warner earlier this year. Nonetheless, Canada is unique in the world given the extent to which all the major commercial TV services are all owned by telecoms operators. Structure matters a lot, and in Canada the vertically integrated *and* concentrated structure of telecoms, internet and media markets stifles competition, creativity, culture and innovation. Look across the border and around the world where the structural integration of telecoms and TV is rare rather than common like it is in Canada, for example, and cable companies and TV services are competing more aggressively, creatively and independently with one another.

The result is entities that don’t simultaneously own broadband infrastructure have launched far more stand-alone internet streaming TV services for a longer period of time than anything seen in this country. This can be seen in the US, for example, over the past four years or so with Time Warner’s HBO Go, CBS All Access, Starz’ internet and mobile TV app and Disney’s plans for several new streaming TV services. This is all over and above Netflix and Amazon Prime, for example, as well as Sportsnet Now and streaming services from NBA, MLB, and so on. The only major entity to *not* offer its own such services is Comcast NBCUniversal,¹⁵ and this is, not coincidentally, likely due to the fact that, until recently, it was the only vertically-integrated conglomerate in the US. Structure matters, and in this case it bears repeating that vertical and diagonal integration—coupled with high levels of concentration—biases the media system towards closure and control. This is the exact opposite of what is needed in an ever more internet and mobile wireless media system, where competition, creativity, culture and innovation are the values to be realized.

While Canadian regulators have countenanced these developments in the past, they have begun to reject the North American “free market model” orthodoxy that brought about these conditions to begin with. As the Trump Presidency resets the regulatory clock in the US, those who have helped set that agenda, such as Jeffrey Eisenach, have been brought into Canada by the incumbent telcos to push the same agenda of dismantling of communications specific regulation and policy in favour of general competition law here—many times (see [here](#), [here](#) and [here](#), for example). Indeed, the incumbents have fought the current drift of events within this country tooth-and-nail.

14 Rewheel (2016). The state of 4G pricing – 1st half 2016 DFMonitor 5th Release. <http://dfmonitor.eu/>

15 Comcast does, however, share a joint interest in Hulu with Time Warner, Disney and News Corp.

The lobbying front has also been in full swing for close to three years in support of the companies' stance on these matters and against any more attempts "to achieve greater competition", with the [C.D. Howe Institute](#) calling on the new government to change course to bring it into line with the incumbents' view of the world. The government shouldn't be "picking winners", they dismissively and misleadingly bellow. The *Globe and Mail* has published the Institute's call in its op-ed pages, just as the [National Post](#) has done for similar reports produced by the Macdonald Laurier Institute. In fact, the marketplace of ideas has been flooded with reports by the incumbents' hired guns and industry-friendly think tanks like [the Fraser Institute](#), the [Montreal Economic Institute](#) or the [MacDonald Laurier Institute](#).

Meanwhile, independent research and researchers get short shrift, and their work is held to wholly different standards than the "rip-and-write" approach that too often governs journalists on the telecom, internet and media beat who cover every think tank report, company press release and quarterly conference call. The public debate is skewed as a result. This is not a conspiracy to suppress any particular scholar's work, but a function of the well-known role played by routine institutional sources (see [here](#) and [here](#)). Journalists can and must do better to amplify and explain all the voices that attend to these issues, and not just those of the powerful commercial interests who stand to benefit from the policy issues in play. This is essential so that we can discuss and have the debate about these issues that we need and deserve.

The current legislative reviews of the *Broadcasting Act* and *Telecommunications Act* are fraught with peril given this context. Social connections and the revolving door between governments and industry, and especially the telecoms and media industries, have been a mainstay of the political economy of communications in Canada and have not served us well. Whether the Trudeau government can avoid being captured by similar forces amidst the scramble now underway to shape the future of communications legislation in this country, only time will tell.

In short, high levels of telecoms, internet and media concentration are reality. What is to be done, if anything, about this state of affairs is a political question. On that, we need to take bold steps to help bring about the kind of communications environment we want.

While so far it has been rather tepid in the moves it has made in this domain, the Liberal Government should double-down on its efforts to promote more competitive markets but, in contrast to its predecessor, it ought to do so in ways that reflect more ambition and a broader conception of the role of the internet, media and telecoms in Canadian society, business, politics, culture and everyday life. To succeed at this, however, the Liberal Government will have to resist the special pleading coming from many corners of the industry and reinvigorated cultural policy nationalists who wish to tie the evermore internet- and mobile wireless-centric media ecology to their anachronistic views of communication and culture.

To close, it is important to keep in mind that we are living in what historians call a "constitutive moment" when decisions taken now will influence the course of events and the shape of the media environment we inhabit for years, even decades, to come. Once such decisions are made, the structures of the new medium of human communication that we are still struggling to come to grips with now – the internet- and mobile-centric media ecology—will become

part of the woodwork, and stay that way for a long time to come. We hope that this report and the others in this series will contribute to better decisions, made on the basis of evidence, and a broad view of the importance of communications to all members of society. ■



www.cmcrp.org