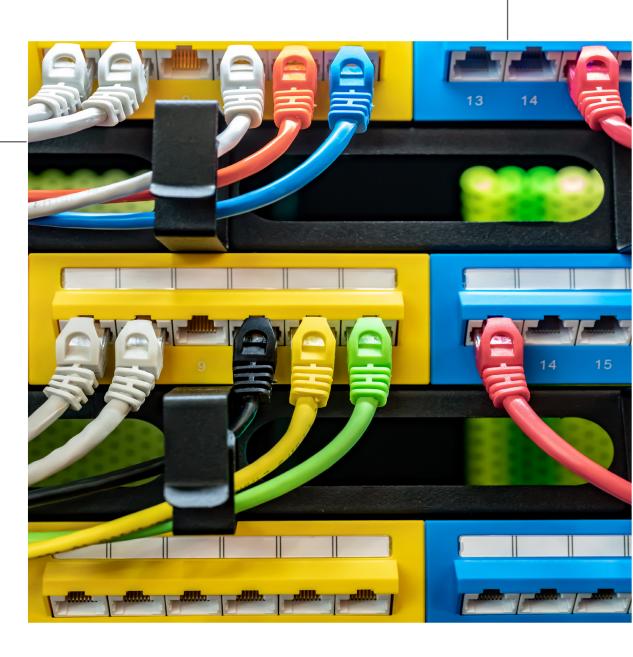
MEDIA AND INTERNET CONCENTRATION IN CANADA, 1984-2018

REPORT

DECEMBER 2019



Canadian Media Concentration Research Project www.cmcrp.org



The <u>Canadian Media Concentration Research</u> project is directed by Professor Dwayne Winseck, School of Journalism and Communication, Carleton University. The project was funded by the Social Sciences and Humanities Research Council between 2012 and 2018, after which the Faculty of Public Affairs at Carleton University generously stepped in to provide bridge funding for the next two years of the project. The overall objective of the CMCR Project is to develop a comprehensive, systematic and long-term analysis of the telecoms, internet and media industries in Canada to better inform public and policy-related discussions about these issues.

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Executive Summary

Every year the Canadian Media Concentration Research Project puts out two reports on the state of the telecoms, internet, and media industries in Canada. This is the second installment in this year's series. Whereas the <u>first report</u> in this series examines the growth, development and upheaval that are transforming the media industries in Canada, this report takes a step further by asking a deceptively simple but profoundly important question: <u>have these industries—individually and collectively—become more or less concentrated over time?</u>

The report does so by examining the state of competition and concentration in the mobile wireless and wireline telecoms market, broadband internet access, cable, satellite & IPTV services, broadcast television and radio, specialty and pay television services, online video subscription and download services, newspapers, magazines, internet advertising, search engines, social media as well as mobile and desktop operating systems and browsers. This year's report also adds significantly to our efforts last year to examine the dynamics of advertising spending across all media in Canada, i.e. TV, radio, online, newspapers, magazines and out-of-doors. As we noted in our first report, we have also significantly expanded our coverage by taking some preliminary steps to capture a broader range of audiovisual media services that are delivered over the internet, including:

- 1. Music downloads and streaming music subscriptions;
- 2. Online gaming, gaming applications, game downloads or in-game purchases
- 3. App stores, in particular Google Play and Apple Appstore.

Collectively, we call these latter sectors the digital audiovisual media services, or digital AVMS for short, a category that also includes internet advertising as well as online video subscription and download services such as Netflix, Crave, SportsNet Now, Apple iTunes and Amazon Video. We treat the digital AVMS sectors as being distinct from more established content media that do not depend on internet aggregation and distribution as a core part of their business models and activities, e.g. broadcast TV, specialty and pay TV, radio; music, newspapers and magazines.

We call the sum-total of all these media "the network media economy". We analyse each sector on a stand-alone basis, and then scaffold up from by grouping related, comparable industry sectors into three more general categories: the "telecoms and internet infrastructure media", the digital and non-digital AVMS and finally, "core internet applications and sectors". Finally, we draw all of the sectors together into a birds-eye view of the network media economy as a whole. We call this the "scaffolding method". At each step of the way, we use two common metrics—Concentration Ratios and the Herfindahl-Hirschman Index (HHI)—to determine whether these markets—individually and collectively—are competitive or concentrated, while paying keen attention to trends over time and in international comparison where possible.

In addition to adding new and emerging sectors to our analysis, and further developing the new line of analysis with respect to advertising that we have pursued over the last two years, this report delves deeper into the state of competition in local and regional mobile wireless, retail internet access and "cable TV" services, as opposed to a purely national level of analysis. To do so, 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 15.5% based on subscribers). Since being acquired by Shaw, Freedom Mobile has also expanded its subscriber base from 940,000 in 2016 to 1.5 million last year earlier, while its revenue nearly doubled to \$951 million over the same period. Its share of the national wireless market also jumped from 2.3% in 2017 to 3.4% last year (based on revenue), while in Ontario, Alberta and BC where it operates, it has carved out an estimated market share of 6.4%--up from 5% the year before. That said, the big three national mobile network operators—Rogers, Bell and TELUS—have a market share that continues to hover around 91.3% based on revenue—a slight decrease from 92.3% the previous year—or 91% based on subscribers (CWTA, 2019).

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, has been rather doubtful in recent years and mixed messages are coming from other quarters such as the Competition Bureau and Innovation, Science and Economic Development.

This report also identifies 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 throughout Europe and many other areas of the world where it operates 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 2018, four vertically-integrated communications conglomerates in Canada had come to account for 56.5% of the \$86.2 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 foreign-owned online video-on-demand services (OVODs) such as Netflix, Amazon Video and Apple, are owned by telecoms operators. In the US, by contrast, while there are also four vertically-integrated behemoths—i.e. AT&T (Time Warner), Comcast (NBC-Universal), Charter (Liberty) and Cox—they accounted for just a third of that country's mammoth \$1,087.6 billion (CDN) network media economy in 2018. 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 important implications in terms of why they have proven to be more resilient and commercially successful than their Canadian counterparts, as this report and our previous report show.

In sum, high-levels of vertical and diagonal integration are distinguishing features of the network media economy in Canada. This needs 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, truly unlimited options rare and expensive, and the variety of stand-alone internet streaming TV services on offer in Canada so limited. It also helps to explain why both broadcast and pay TV services have been so hesitant with respect to the pursuit of new lines of revenue, such as retransmission fees for broadcast TV services and online advertising as well as distribution deals with global internet-based video-on-demand services

After declining between 1984-2010, the level of concentration across the network media economy reversed course and rose significantly for the next few years as a result of several significant acquisitions that radically increased consolidation and vertical integration within Canada, e.g. Bell's acquisition of CTV and Astral in 2011 and 2013, respectively, and Shaw's acquisition of Global TV and a slew of pay TV services along with it in 2010, amongst other transactions examined in the pages ahead. In the last five years, however, the explosive growth of online video, music and gaming services and app stores and online advertising—i.e. the digital AVMS sectors—has seen Google, Amazon, Facebook, Apple and Microsoft (the so-called GAFAM group of internet giants) as well as Netflix move more deeply into Canada than ever before. As a result, communication and media companies in Canada are facing intensifying competition with these global internet giants, and concentration levels have begun to drift downwards as a result. Together, the GAFAM group of internet giants and Netflix now account for an estimated one-quarter of the \$32.3 billion in revenue across all AVMS sectors.

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 significantly, for example, in cable TV (when measured locally, but only slightly when assessed nationally), while internet access has seen some decline at the local level but a slight uptick at the national level). 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 occurred.

Concentration levels have stayed stubbornly steady in mobile wireless services at the national level for several years, except in Quebec. This is the most competitive wireless market in the country, and it shows in terms of much 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.

After declining for years, concentration levels for wireline telecoms have risen in the past few years, largely due to three things: Bell's take-over of MTS in 2017; this sector is in decline and, thus, no longer attractive to new entrants; and the incumbent telecoms and cable companies have taken advantage of 4-play bundled services (e.g. mobile phones, internet access, home phone and IPTV service) to retain subscribers and consolidate their stakes within their respective regions of operation.

With respect to television, concentration levels for broadcast TV has continuously hovered around the threshold between moderately concentrated and highly concentrated markets. When it comes to pay and specialty TV, online video services, and the overall TV universe, however, the market is expanding, becoming more diverse, and far more complex. Online video services have become more diverse over time, as Bell's Crave, Rogers SportsNet Now and Quebecor's illico, as well as Apple and Amazon, carve out a bigger place for themselves at the expense of Netflix's early near monopoly on such services, although, on a stand-alone basis, the online video market remains highly concentrated, with Netflix far and away the largest operator. Open the lens wider, though, the "total TV marketplace" (i.e. the sum of the broadcast tv, pay tv and online video segments) has become considerably more diverse in the last five years, coincident with the rapid rise of online video services and the entry of new actors into the field, notably Netflix, Amazon and Apple to compete with Canadian owned services.

New sections in this report also show that the online games, game downloads and in-game purchases sector have grown swiftly to become a \$1.33 billion industry by last year. It is also characterized by a fairly diverse range of companies and business models (i.e. subscriptions to gaming platforms; subscriptions to particular games; revenues from direct-purchase game downloads and in-game purchases). While there is a core group of global companies active in each of these sub-areas of the digital games industries, such as Microsoft, Sony, Nintendo, Activision, Blizzard, Electronic Arts, Valve and the Chinese internet giant, Tencent, together these companies account for just under an estimated three-quarters of the online gaming industry, while Apple's iOS app store and Google Play had a combined estimated revenue from their app stores of \$360.6 million in 2018, or roughly 27% of online gaming, gaming applications, game downloads, and in-game purchases revenue. If we treat Apple's iOS app store as a market in itself, three global players stand out—i.e. Tencent, Machine Zone and Activision Blizzard—but their estimated revenue and market share does not change the fact that a fairly diverse range of game publishers organized around a variety of different business models defines Apple's app store marketplace.

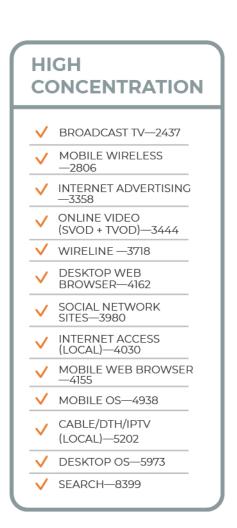
Internet news sources also show considerable diversity and this has increased over time, while newspapers are consolidating on a regional basis but still only display moderate levels of concentration nationally. Strikingly, most core areas of the internet have sky-high levels of concentration, and persistently so: internet advertising, search, mobile and desktop operating systems as well as mobile and desktop browsers. Thus, far from the early enthusiasm that the internet would be wide open and diverse, "core elements of the internet" are susceptible to the pressures of consolidation for reasons discussed in this report.

The following figure provides a snapshot of where things stood in 2018 for each media covered in this report on the basis of their respective HHI scores (a measure defined in the report).

Table 1: Concentration Rankings on the basis of HHI Scores, 2018







Like the first report in this series, this report focuses foursquare on Google and Facebook's growing dominance of the \$7.6 billion internet advertising market in Canada. The shift to the "mobile internet" has seen both companies 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 cloudbased applications (e.g. Google Docs, Calendar, Sheets), the Chrome browser, Android operating system, undersea cables, and data centres around the world. Critically, perhaps the most important linchpin in Google's vertically-integrated control of the internet stack is the fact that it also owns its own digital advertising exchange and controls the currency upon which advertising buyers and sellers conduct their transactions on its exchange: the data about the audiences and individuals who are being bought and sold as part of the online advertising economy. 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, are also helping to fortify its grip over online advertising. 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 in order to bring huge volumes of internet traffic as close to the doorsteps, desktops and devices of their users as possible but at the expense of replacing the common, open protocols that have, for decades, defined the internet with their own proprietary technical protocols. These activities have enormous 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. While this is not without some kernel of truth, our last report cast doubt on these claims, and this one will too by raising and exploring the following points:

- 1. The \$7.6 billion online advertising market that Google and Facebook dominate is just one part of \$14.1 billion spent on advertising across all commercial media, including television, radio, newspapers, magazines, outdoor advertising, etc. and a smaller part yet of the larger \$86.2 billion network media economy. In sum, while Google and Facebook dominate internet advertising, their dominance of the rest of the advertising market, while significant, is much less, and certainly does not extend to the \$86.2 billion media economy in Canada as a whole.
- 2. While the perception that Google and Facebook are "vampire squids" is not entirely without merit, the more intractable but seldom recognized problem is that total ad spending in Canada has been declining on a per capita basis and relative to the national economy for about a decade. That Google and Facebook are carving out an enormous role for themselves in a shrinking advertising market has put 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 sure-fire recipe for a race to the bottom between domestic media companies and the global internet companies with respect to data and privacy protection.
- 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 GAFAM and Netflix but Bell, Rogers, Telus, Shaw (Corus) and Quebecor which get the lion's share of their revenue from 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 massively larger than Google and Facebook, in particular, and the other members of GAFAM and Netflix, based on the latter's revenues from Canada. In fact, Bell's revenues alone, for example, were three times those of Google, Amazon, Facebook, Apple, Microsoft, Netflix and Twitter, combined.

The near unshakeable impression otherwise in so many quarters—industry, policy circles, academia, journalists, etc.—is not innocent. Instead, the "myth of GAFAM" is doing incredible rhetorical work to backstop the dominance of a handful of incumbent communications and media companies in Canada, and advance a kind of policy and regulatory wish-list that may serve them well, but not Canadians more generally, or the development of an open, diverse and democratic communications, internet and media set up in this country. Ironically, the myth of GAFAM is also clouding the discussion of the robust approaches to digital platform regulation that are needed to effectively and urgently deal with the realities of digital dominance, weak privacy and data protection laws that gird that dominance, and the real threats that the internet giants' efforts to remake the internet in their image and around a set of technical protocols and business models that they alone control. Combined, such wilful ignorance threatens to fatally undermine a once-in-a-lifetime opportunity to harness the potential of the internet and, indeed, the entirety of our communications and media system to people's needs, ends and desires and the task of reimagining and fortifying democracy for the 21st Century amidst these troubled and turbulent times. This report offers a half-dozen principles for digital platform regulation, most of which draw on the history and principles of telecoms regulation versus the tendency in many quarters to reach for media policy and content regulation as the preferred approach to "internet regulation":

- 1. the principle of **vertical separation** in relation to Google's ownership of its search engine and people's data from its own digital advertising exchange, or with respect to other digital platforms such as Amazon and Apple;
- 2. the principle of **diagonal structural separation** that would prevent, for example, Facebook from sharing people's data across Instagram, WhatsApp and Facebook, along the lines being pursued by the German Federal Cartel Office;
- 3. the principles **network interconnection**, **interoperability and data portability** to counter the "platformization" of the internet, whereby a relatively few global internet giants are, essentially, substituting their own proprietary technical standards for the open and common technical codes that have underpinned the internet for decades;
- 4. **strong data and privacy protection rules** that use the European Union's General Data Protection Regulations as a floor for what should be done;
- 5. the selective application of the European Union's Audiovisual Media Services Directive (2016) to online video-on-demand services such as Netflix, Amazon, Apple and others that have carved out a large place for themselves with respect to AVMS;
- 6. the adoption of the principle that "functionally equivalent rules" should be applied to functionally equivalent activities, much along the lines that revisions to the Canada Elections Act in 2018 did with respect to election-related advertising and political campaigns.

Additional headlines of this report include:

- the top five Canadian companies—Bell, Telus, Rogers, Shaw and Quebecor—accounted for 73.4% of the \$86.2 billion network media economy last year, up from 71.4% the year before;
- A half-dozen global internet giants have carved out a very sizeable spot for themselves within Canada over the last five years on account of the extremely rapid growth of online video, gaming and music subscription and download services and app stores as well as online advertising: i.e. Google (\$4.1 billion in revenue and 4.9% market share), Facebook (\$2.1 billion in revenue and 2.4% market share), Netflix (\$1000.8 million in revenue and 1.2% market share), Apple (\$422.3 million in revenue and .5% market share), Amazon (\$181 million in revenue and .2% market share) and Twitter (\$117.5 million in revenue and .1% market share). Combined, these firms' total revenue from their operations in Canada last year netted \$7.9 billion, for a 9.3% share of the all revenue across the network media economy.
- Google and Facebook are now the fifth and seventh largest entities operating in media economy in Canada.
- That said, Bell is the biggest player in Canada by far, with total revenues in Canada nearly three times the combined revenue of the "big six" US-based internet giants. Bell single-handedly accounted for nearly 28% of all revenue last year—up slightly from a year earlier;
- Mobile wireless is very highly concentrated with Rogers, Telus and Bell accounting for 91.3% of the sector's revenue in 2018—down a percentage point from the year before.
- New entrants Shaw (Freedom), Videotron and Eastlink's share of the market rose to 6.4% in 2018—up significantly from 4.7% the year before.
- The least concentrated mobile wireless market in Canada is in Quebec, where Videotron had 13% market share by revenue and 15.5% based on subscribers at the end of 2018—a small increase over the previous year.
- Incumbent telephone and cable companies accounted for 87.5% of the residential retail internet access market in 2018 (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 75.7% last year, down from 85.6% at its high point seven years ago; those losses, however, have been largely recouped 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 (46%) 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 2018.
- 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, Amazon Video, Apple and a few other online video services has helped turn the tide. The "big 5" TV operators' took 78.8% of all TV revenue

(including internet streaming) last year—down from 82% in 2012 and with a big change insofar that Netflix has replaced Quebecor as the 5th largest TV operator in the country for the last three years and now has similar revenue to the fourth largest television service operator in Canada, Rogers.

- Netflix's had estimated revenue of \$1,000.8 million in Canada and a 11.4% stake of all television services revenues in Canada last year—up sharply from \$820.6 million in revenue and a 9.7% market share the year before. On a stand-alonie basis, the online video market is highly concentrated, but the trend is downward over time.
- 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 2018 of 3.5% was less than half of Astral Media's share alone on the eve of its take-over by Bell in 2013 (7.4%).
- Canadians get their news from a wide plurality of internet news sources, both old (CBC, Postmedia, CTV, Toronto Star) and new (Huffington Post), as well as domestic and foreign (CNN, CBS, BBC, NBC, 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 2018, Bell, Rogers, Shaw (Corus) and Quebecor accounted for 56.5% of the \$86.2 billion industry—in the US, in contrast, after the AT&T take-over of Time Warner, four vertically-integrated companies' accounted for a third of that country's \$1,087.6 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, 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 other countries around the world where it operates. 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 and promote the use of zero-rating schemes that challenge the precepts of net neutrality (i.e. common carriage). The use of data caps and zero-rating not only dampens internet use but turns carriers into editors, or gatekeepers, thereby 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".
- For a half-decade between 2012 and 2017, 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. This recent period of commitment to such principles, however, appears to have weakened. The current chair of the CRTC has acknowledged that vertical integration is high in Canada but appears to think that this state of affairs is common (see here). It is not.

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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 <u>first report</u> 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 McMaster University professor Philip Savage observed 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 twenty of the largest sectors of the telecoms, internet and media industries in Canada between 1984 and 2018, as depicted in Figure 1 below. The totality of these sectors comprise what we call the network media economy.

Figure 1: The Network Media Economy in Canada--What the CMCR Project Covers







Each of these media sectors is examined on its own, and then we group related, comparable industry sectors into three more general categories: the "telecoms and internet infrastructure media", the "digital and non-digital AVMS" and finally, "core internet applications and sectors". Ultimately, all twenty sectors are combined together to get a bird's-eye view of the network media economy, taking care to explain how the sectors interact with one another and fit together to form the network media economy as a whole. Two common tools are then used to assess the direction of trends one way or another within each sector individually, then for each of the three more general categories and, ultimately, across the entire network media economy: concentration ratios (CR) and the Herfindahl-Hirschman Index (HHI).

We call this the scaffolding approach and its main purpose is to clearly and precisely define the media so that readers know what is included in our analysis and what is not. The objective is also to give both a detailed, micro-level analysis of individual communication and media sectors as well as a macro-level view of the whole, and to see how the former relate to one another and fit into the bigger picture. Lastly, the goal is to ensure that apples-to-apples comparisons are being made with other studies, both within Canada and internationally.

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 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 <u>here</u> (earlier versions can be found <u>here</u>). 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 \$86.2 billion last year. During this period, new segments have been added to our model of the media economy: mobile wireless, internet access, internet advertising, specialty and pay TV as well as online video, music and gaming services and app stores, for example.

Currently, <u>five hundred hours</u> of video are uploaded to YouTube every minute; there were about 7.7 million Netflix subscribers in Canada at the end of 2018 (~54% of households); roughly 21.2 million Canadians had a Facebook account and many rely on it to <u>get and share "the news"</u>; expert blogs abound and whistle-blowers can and do sometimes set the news and political agenda; millions of websites are a click away; <u>762 TV services</u> were authorized for service in 2018 and there were 1042 radio stations and <u>88 paid daily newspapers</u>; and roughly 70% of Canadians have a smartphone.

In sum, it would seem that access to a world of communication and 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 (<u>Thierer & Skorup, 2014</u>). MIT Professor <u>Ben Compaine</u> (2005) offers a terse one-word retort to anyone who thinks otherwise: Internet. Media consultant <u>Ken Goldstein</u> argues that, today, media fragmentation, *not* concentration, is the most pressing issue (see <u>here</u> and <u>here</u>). It's time for media companies to bulk up to compete with the big global players, he thinks. Similarly, <u>Chris Dornan</u> and the Public Policy Forum (PPF), the latter in its <u>Shattered Mirror</u> (2017) report, also are emphatic that media ownership concentration is no longer a concern given that the range of information sources and how people communicate with one another have "exploded on the internet".

Large media conglomerates such as <u>BCE</u> hold similar views. As Bell states in a recent policy intervention, while critics allege that media concentration is high, the evidence "regardless of the

metric employed—proves otherwise" (<u>Bell, para 46</u>). So, too, do think tanks like the <u>Montreal Economic Institute</u>, <u>Fraser Institute</u>, <u>MacDonald Laurier Institute</u> and <u>C.D. Howe Institute</u> 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. As the PPF's <u>Edward Greenspon</u> put it, media concentration is just not "the existential risk to media that it was for a number of years".

From this perspective, we are witnessing a battle of "the Stacks", wherein vertical integration between telecoms operators and TV service providers is an integral part of *dynamic* competition. From this perspective, vertical integration 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. Seen from this angle, any attempt to shackle telecoms and media companies with ownership restrictions created in the 20th Century 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).¹

As proponents of this view see things, in the "digital ecosystem", there are telecoms operators on one side of "the Stack" versus Google, Amazon, Facebook, Apple and Microsoft (GAFAM), on the other, with their own forms of integration and operating rules. 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 and online advertising exchanges today and the Internet of Things tomorrow. The activities of the GAFAM group of internet giants and Netflix now include not only popular search engines, social media sites, streaming TV, film, gaming and music services, online retail options, and software but a hierarchically organized stack based on the ownership and control of, for instance, operating systems (e.g. Android, iOS), data centres (Amazon Web Service, with Microsoft's Azure, Apple's own data centres, Google Cloud), online advertising exchanges, and the fibre optic cables—overland and underseas that carry much of the world's internet traffic on what are, essentially, privately owned and operated internets rather than the open, public internet. 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.

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 free press 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 (see here and here).

Bell underscores the point in its 2015 <u>Annual Report</u>: "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 the time constrain ownership consolidation or structural integration across industry lines (<u>Eisenach</u>, 2016).

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 <u>Todd Gitlin</u> 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, the 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 (see 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, while reprising what the United States did in very generous amounts throughout the first century-and-a-half of its existence to illustrate their point, 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; Pickard, 2019).

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 (Tufecki); the crisis of journalism and the media, culture and entertainment industries (McChesney; Taplin) and so on (also see <u>The Economist</u>, <u>The Economist</u>, <u>Vox</u>, <u>Bloomberg</u>, <u>Fortune</u> and <u>Wired</u>). Indeed, while it would have seemed crazy just three years ago to talk about, for example, Facebook or Google destroying democracy and the need to break-up these digital behemoths, today such talk is commonplace—for better or worse.

School #4: Digital Dominance—Consolidation and Cross-Cutting Dynamics in the Digital, Internetcentric 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 still 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, <u>Noam (2016)</u> 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, the distinctive features of different media sectors that continue to distinguish them from one another, as well as 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. In this regard, our approach is deeply informed by the Cultural Industries School that has been spear-headed by Bernard Miege and colleagues in France for several decades (see here and here and here and Mastrini), but which also has important adherents in Canada (Tremblay; George), South America (Becerra and Mastrini), Europe and other parts of the world (Hesmondhalgh).

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 publics' 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. Nor is it, as has been the case in recent years with respect to internet governance, for governments to increasingly delegate public regulatory functions to private actors (see, for example, Belli & Zingales, 2017; Kaye, 2019) In other words, these discussions are inseparable from abiding concerns with human well-being, the rule of law 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 and to shape the overall communications ecology (see <u>here</u>, <u>here</u>, <u>and here</u>). 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, for example, <u>here</u>, <u>here</u>, <u>here</u>, <u>here</u>, <u>here</u> and <u>here</u>).

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 the Facebook/Cambridge Analytica data breach case that is currently being investigated by national parliaments around the world, including the Parliament of Canada (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 are illustrative examples of this point. So, too, is the decision by Verizon-owned Tumblr to no longer host erotic content posted by its user community 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 mobile wireless operators 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 (<u>Geist</u>, 2015; <u>Taylor</u>, 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 <u>Telus intervention</u> in Bell Astral, 2.0 pages 4-6 and <u>here</u>, <u>here</u>, <u>here</u> and <u>here</u>).

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 2015 federal election in Canada, seventeen dailies representing 71% of the editorial opinion expressed in that election 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, as well as 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.

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 <u>Globe and Mail</u> 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 in 2015 than in the previous 2011 election. 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) as well as the <u>Charlottetown Guardian</u> (Transcontinental) (1% of expressed editorial opinion). <u>Le Devoir</u> 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 great extent to which economy and society are underpinned by information and communication infrastructures, and our lives deeply immersed in such environments, thinking long and hard about these issues may be more relevant and important than ever (Baker, 2007; Noam, 2009; Peters, 1999).

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.

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 and the last reports. Revenue data for each of the sectors we cover, 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 as data sources.

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: the "telecoms and internet infrastructure media", the "digital and non-digital AVMS" and finally, "core internet applications and sectors". Results are analyzed from 1984 to 2018, with an eye to capturing changes over time and crossmedia differences. Lastly, two common tools—Concentration Ratios (CR) and the Herfindhahl-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; Doyle. 2013; Noam, 2016). The Competition Bureau, however, 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 is a more fine tuned method that captures subtler changes and differences in media markets. It 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 <u>Department of Justice</u> 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 relative to the ones they replaced 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 <u>Stucke & Grunes, 2012</u>; <u>Mazzucato, 2014</u>).

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 and the role of regulators (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 2011 bid by AT&T—the second largest mobile wireless company in the US—to acquire T-Mobile, the fourth largest, for instance (also Stucke & Grunes, 2012).

The Trump Administration, however, has sent mixed messages on the issue of communication and media consolidation. On the one hand, the Department of Justice opposed AT&T's bid to acquire Time Warner but, on the other hand, mounted a very weak case in its opposition to that transaction. The Courts blessed the deal last year (<u>United States District Court, DC Circuit, 2018</u>). The outcome of T-Mobile's current bid to acquire Sprint—the third and fourth largest mobile wireless operators in the US, respectively—will say much about whether US regulators will maintain the tougher stance against consolidation in the wireless industry taken during the second Obama Administration or return to the

hands-off approach that can already be seen in the Trump Administration's FCC decision to bless the deal while taking a more lax stance to such issues in general by, for example, expunging much of the data from its flagship publication, *The Communications Marketplace Report* (2018), needed to do the kind of research being pursued in this report.

While the toughening stance on concentration issues in the US and EU had passed Canadian regulators by for years, that seemed to be changing for the better earlier in the past decade. Before that change in direction, however, the CRTC's tepid stance on concentration 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. The vertical integration code applied to large BDUs in control of "most have" programming services is also seen as a weak reed in terms of protecting smaller BDUs and programming services.

In contrast to the CRTC, the <u>Competition Bureau</u> 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 toughen its stance toward consolidation in 2012, with several decisions thereafter suggesting that it had rediscovered market power and the will to do something about it. These included the Mobile TV decision in 2015, the zero-rating decision a year later, the Talk TV decisions, the mandated wholesale wireless framework, and the mandated wholesale wireline decision. Several key principles underpin these rulings. One is the CRTC's recognition, that the "incumbent carriers continu[e] to dominate the retail internet access services market" (CRTC, 2015-326, para 125). The wholesale mobile wireless ruling arrived at the same conclusion with respect to the wireless market (CRTC, 2015-177, paras 35, 72-74, 86-88). The Commission also observed that there is "limited rivalrous behaviour" between the incumbent telecoms operators and cable companies in relation 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 upshot of this run of events is three-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, these steps in the right direction have been 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 will 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).

Third, however, it is not clear whether the changes undertaken in Canada embody a genuine break from the institutionalized "regulatory hesitation" that has defined so much of the policy and regulatory culture in Canada in the past (Berkman, 2010, p. 163) or a mere interruption with regulators already reverting to course after changes in leadership. Recent rulings by the CRTC with respect to affordable mobile wireless services and the Competition Bureau's recent report, Delivering Choice: A Study of Broadband Competition in Canada's Broadband Industry, are two of several examples that give serious pause for concern.

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" (Board of Railway Commissioners, 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 and charge a separate price for each of its two parts: one for transmission over the wires, the other reflecting the price of the AP news 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 a kind of virtual 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, however, 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 in the last decade, either, 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 in 2013;
- 2. two regulated wholesale access rulings in 2015 affecting both the mobile wireless and wireline telecoms markets, respectively;
- 3. the Mobile TV decision in 2015 and a series of other cases in the same year that 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).
- 4. the Commission's 2017 ruling 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 was another landmark decision in this regard.3

Zero-rating, or "differential pricing practices" as it is more formally known—in essence, is when a mobile 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 transforming carriers into publishers/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 CRTC 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, quality of service standards, speed, customer service and other tools instead to achieve the same ends (CRTC, TRP 2017-104; CRTC, TD 2017-105).

Three Phases of Telecom, Internet and Media Consolidation

All of this is taking place, as was noted in the <u>last report</u>, within an ever more internet and mobile-centric media economy that has grown immensely from \$19.4 billion in 1984 to \$86.2 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 and direct payments, not advertising, are the main source of revenue.

The early years of the period covered in this report (i.e. the decade between 1984 and 1996), were characterized by the emergence of fundamentally 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—a pioneer in pay TV services in Canada—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 (14%).

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 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:

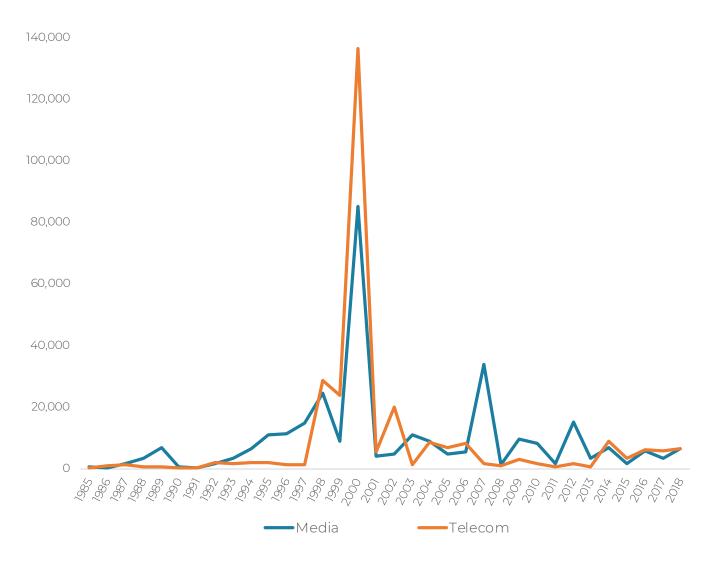
Wave 1: 1994 to 2000: This wave began with Rogers' acquisition of Maclean-Hunter in 1994, and peaked at the height of the dot.com boom from 1998 to 2001, during which time: (1) BCE acquired CTV and the Globe & Mail (\$2.3b); (2) Quebecor took over Videotron, TVA and the Sun newspaper chain (\$7.4b) (1997-2000); (3) Canwest buys Global TV (\$800m) and Hollinger newspapers papers, 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 <u>Competition Bureau</u> approval)(early 2016); <u>Bell acquired</u> 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 shut down—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 2 below.

Figure 2: Mergers and Acquisitions in Telecoms & Media, 1985-2018 (Mill\$)



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

Figure 2 is important insofar that it shows that the processes of mergers and acquisitions, and thus consolidation, come in fits and starts rather than being continuous processes. Thus, as it shows, mergers and acquisitions rose between 1994-1996 and spiked to unprecedented levels by 2000 but then collapsed as the dot.com bubble burst—a process that both reflected and embodied the political and regulatory climate of the time and the greatly expanded role of finance capital investment in the economy in general and in the telecoms, internet and media sectors that those changes actually encouraged. The processes of consolidation ebbed and waned over the next decade as companies that imploded 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 media sectors and across the network media economy steadily crept upwards, as Figure 2 above illustrates. Once again, though, the lesson that emerges from the twists and turns of this complicated

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

... oligopolistic behaviour by the the big three national carriers—Bell, Rogers and Telus—is hobbling the availability of high quality, affordable mobile wireless services...

story is that trends in the network media economy swivel in lock-step with those taking place in the economy at large—a point too often ignored in favour of a fixation on technology-based explanations and unrealistic assessments about the role of "the market" in the economy.

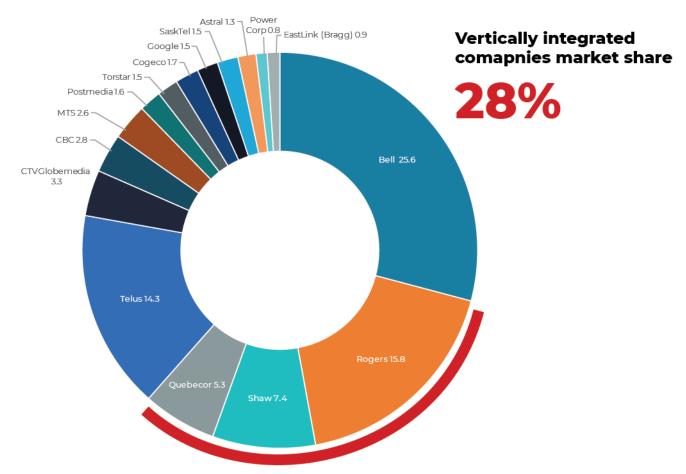
Consolidation in the telecoms industry had been modest in the latter half of the first decade of the 21st Century but rose significantly after Telus bought Public Mobile and Bell acquired the remaining stake in Bell Aliant that it did not already own in 2013 and 2014, respectively, while Rogers acquired (and then dismantled) Mobilicity in 2015. The Competition Bureau's <u>approval</u> of Bell's take-over of MTS in 2017 girded the trend and raised questions about the Bureau's resolve on such matters, given that its own staff 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 regarding the likely drawbacks that would follow from the deal, 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 <u>report</u> opposing the deal).

Consolidation has also surged over the last decade on the media side of things, as Figure 2 above also illustrates. 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 Kilmer 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

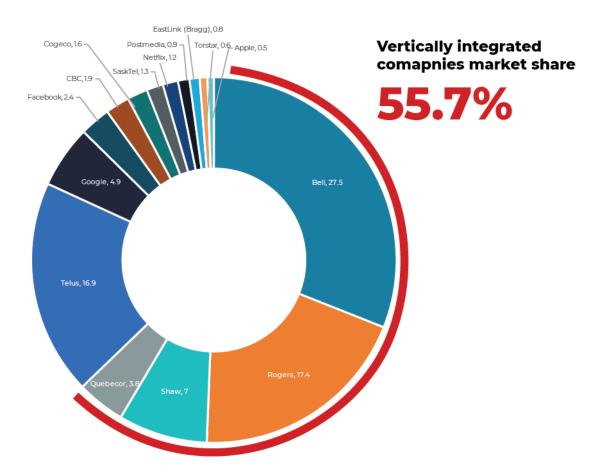
Consolidation across the network media economy has also yielded a specific type of media firm that now sits at the apex of the network media universe in Canada: the vertically-integrated telecoms, internet and media conglomerate. Vertical integration has soared, and is now exceptionally high relative to the past and to conditions in the United States and internationally. Figures 3 and 4, below, illustrate the steep increase in vertical integration that occurred between 2008 and 2018, with most of that change taking place between 2010 and 2013, while Figure 6 (further down) offers a comparison with the state of affairs in the United States.

Figure 3: Vertical Integration and the Network Media Ecology, 2010



Sources: see the "Top 20 w Telecoms" sheet in the CMCRP Workbook.

Figure 4: Vertical Integration and the Network Media Ecology, 2018



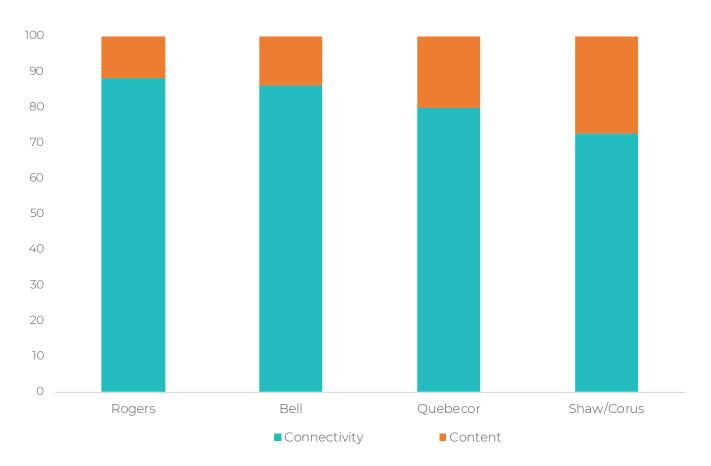
Sources: see the "Top 20 w Telecoms" sheet in the CMCRP Workbook.

As Figures 3 and 4 illustrate, in the span of a few years, the vertically-integrated companies' share of the network media economy in Canada more than doubled. By 2018, four such conglomerates accounted for 56.5% of all revenue across the network media economy: Bell (CTV), Rogers (CityTV), Shaw (Global) and Quebecor (TVA), as Figure 4 shows—a figure that was a percentage point 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 before 2010, the top four vertically-integrated telecoms, internet and media giants occupy centre stage today (one might also include Telus on account of its fast-growing role in television distribution, but it does not actually own any content-based audiovisual media services). Zero in on just telecoms and broadcasting, and the "big 5" accounted for 86.1% 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 revenue in these sectors.

Second, these five companies' collective control over communications infrastructure is the fulcrum of their business and the pivot around which the rest of their own operations and the media economy swivels. Their stakes in audiovisual media services, while extensive, are modest by comparison to their network operations. For Quebecor, Shaw, Bell and Rogers, 73-88% percent of their revenues flows from the bandwidth and connectivity side of their business rather than from content creation and distribution. This basically welds the subordination of audiovisual media services to connectivity into the 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. Therefore, it is *not* a vertically-integrated company. Figure 5 below illustrates the point.

Figure 5: Connectivity vs Content within Canada's Vertically-Integrated Telecoms and Media **Companies, 2018 (Ratio by Revenue)**



Sources: see the "Top 20 w Telecoms" sheet in the CMCRP Workbook.

Another way to put this is that audiovisual media in Canada 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' vastly 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 <u>J. F. Mezei</u> and the <u>Public Interest</u> 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-<u>Demand decision</u>, or Bell's appeal of the <u>wholesale vertical integration code</u>, 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 subscribers 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 contentbased 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.

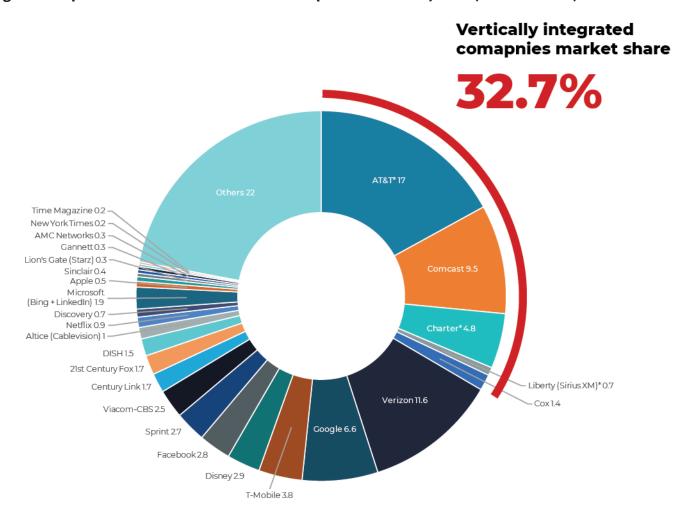
Basically, with these rulings, the CRTC determined that mobile wireless companies and internet access providers should only provide the gateway to the internet rather than playing the role of editors and publishers who pick and choose which services, content and applications is put before people's eyes.

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, it is citizens-consumers-subscribers that 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 communications and media framework in Canada: the extremely high levels of vertical integration that exists between telecoms companies and audiovisual media 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 6 below illustrates the situation as it exists at present in the United States.

Figure 6: Top Telecom-Internet and Media Companies in the US, 2018 (Market Share)



Sources: see the "Top US Telecom + Mediacos" sheet in the <u>CMCRP Workbook</u>.

Seen together, Figure 4 and Figure 6 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 (56.5%), in the US the "big four" vertically-integrated communications and media conglomerates account for a third of the massive \$1,087.6 billion (CDN) American network media economy.

AT&T's acquisition of Time Warner in 2018, however, changed the picture dramatically. As a result of this mega-deal, AT&T has become a gigantic vertically-integrated conglomerate with \$144.2 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 last year, 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 \$81.1 billion and a market share of 9.5%. 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 \$40.9 billion and 4.8% share of the network media economy in 2018. 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 in 2016 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 standalone 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 2018, 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 56.5% 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.5

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 backdrop of the turn-of-the-21st Century when several giant telecomsinternet-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, however, as <u>Dal Yong Jin</u> 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 policy-driven 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.

Of course, some might wonder where Verizon's 2016 "blockbuster" take-over of Yahoo! and Tumblr 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. Yahoo! and Tumblr represent 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! and Tumblr are aggregators of online content, a qualitative difference that sets it apart from its potential counterparts. Companies like AT&T and Comcast, in contrast, have predominantly integrated into the production and distribution of audiovisual content, i.e. television programming and film distribution.

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:

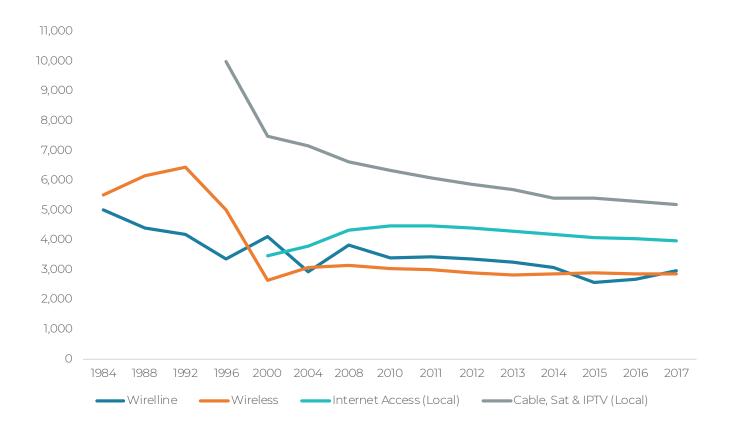
- the telecoms and internet infrastructure media (mobile wireless and wireline telecoms, internet access as well as cable, satellite & IPTV);
- the digital and non-digital AVMS (broadcast television, specialty and pay television services, online video, music and gaming subscription and download services; app stores, radio; newspapers; magazines; internet advertising);
- core internet applications and sectors (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.

Telecoms and Internet Infrastructure Media

The telecoms and internet infrastructure media category consists of the communications infrastructure and carrier segments of the network media economy. The first things that stand out about all sectors of the network media industries from the vantage point of this report is that they are all highly concentrated or at the high-end of the moderately concentrated scale. Figure 7 below illustrates the point on the basis of HHI scores. This has long been the case, although with some important exceptions, past and present, as discussed below.

Figure 7: HHI Scores for the Network Infrastructure Industries, 1984 – 2018



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

upticks in the market shares of Telus, Videotron and Eastlink also played a part. That trend, however, has since reversed in the last three years, with both the CR4 and HHI measures climbing considerably as a result, mostly due to BCE's acquisition of MTS in 2017. By 2018, the wireline telecoms market was firmly in the highly concentrated zone, with a CR4 of 89.5 and an HHI of 3718.

Mobile Wireless

"There is no competition problem in mobile wireless services in Canada" is a commonly heard refrain in policy debates, most often emanating from the largest participants in the market themselves. It is also frequently heard 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, according to this line of argument. Claims that there is nothing but sunny skies on the mobile horizon do not, unfortunately, match up with the facts. Indeed, evidence from the last decade of developments in the mobile wireless market paint a very different picture.

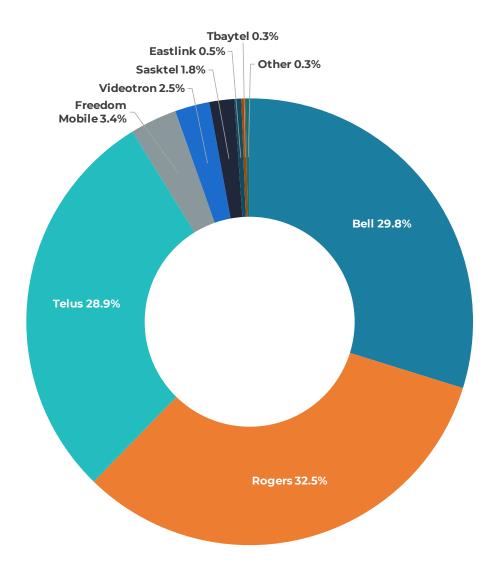
In 2008, the federal government began to use spectrum policy and a series of <u>new rules</u> to aggressively encourage new entrants to enter the market in pursuit of "<u>more choice, lower prices, and better service</u>" for Canadians. Following the 2008 auction of "advanced wireless services" (AWS) 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, but did not launch service in its home territories in the Atlantic provinces (and in a handful of northern Ontario towns) until 2013.

Since that time, concentration levels in the mobile wireless sector have decreased slightly. In 2018, for instance, the national market share of the top three mobile network operators—Rogers (32.5%), Telus (28.9%), and Bell (29.8%)—slid slightly from 92.4 to 91.3% of the market, when measured by revenue (see figure 8 below), and sits at 90.2% by subscribers. Similarly, the HHI score fell from 3151.3 in 2008 to 2806.4 in 2018 (as shown in figure 9). This is an improvement to be sure, but the fact is, the national mobile wireless market in Canada remains well within the highly concentrated zone on both measures (see the "Wireless" sheet in the CMCRP Workbook and CWTA subscriber figures).

the national mobile wireless market in Canada remains well within the highly concentrated zone

⁶ See, for instance, further comments of Rogers Communications to Telecom Notice of Consultation CRTC 2019-57, "Review of mobile wireless services".

Figure 8: Canada mobile wireless market shares by revenue, 2018



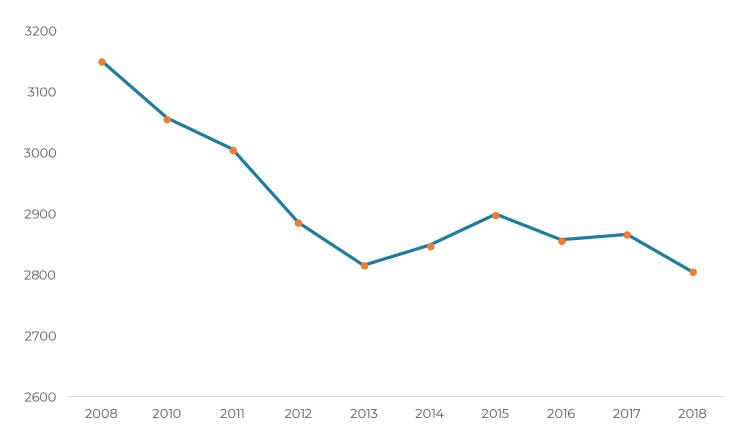
Source: CMCRP Workbook, Wireless sheets

While still very high, current concentration levels do represent a decrease from the 96% share the national carriers collectively enjoyed when Harper's Conservative government began its efforts to introduce a fourth wireless competitor in all areas of the country. Indeed, we can see that procompetitive policy measures have taken hold, given that three of the new entrant mobile network operators—Freedom Mobile (previously Wind), Vidéotron, and Eastlink—have succeeded in carving out a place for themselves within their respective regions during this period.

By the end of 2018, the combined national market share of Freedom Mobile, Videotron, and Eastlink had increased from 4.7% to 6.4% (by revenue). Include SaskTel and Thaytel in the group and, combined, regional competitors accounted for 8.5% of national wireless revenues. Other new entrants have not fared as well. Public Mobile failed in 2013, and was subsequently 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 flanker brand Chatr.

This figure includes, for the first time, Eastlink, which is estimated to have a 0.5% share of the national market (by revenue).

Figure 9: Canada mobile wireless market concentration, HHI, 2008-2018



Source: CMCRP Workbook, Wireless sheets

8

While it's welcome news that the remaining entrants have made inroads into the marketplace, it would be an exaggeration to say that their gains to date have cut deeply into the national carriers' dominance.

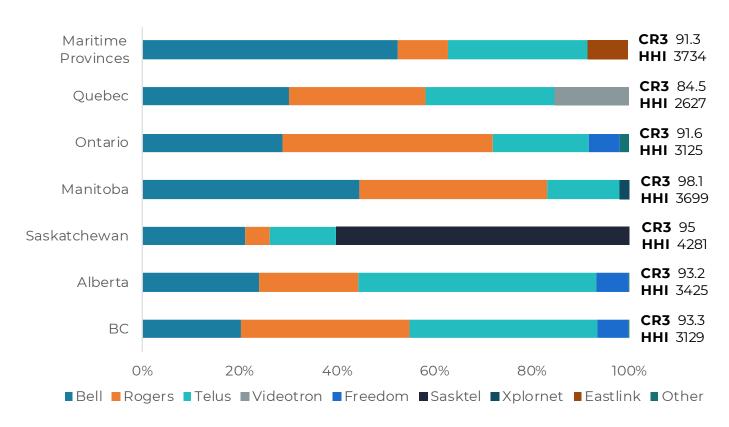
While the figures for national concentration levels have painted a relatively consistent story over the past several years, province-level statistics tend to vary more. Overall trends tend to indicate competition between two dominant firms, varying by province, with rivalry from a weaker third and sometimes fourth carrier (usually in urban areas) filling out the market. Figure 10 presents market share by subscribers at the province level, illustrating these trends.

For 2018, in Quebec the top 3 wireless companies had a combined subscriber market share of 84.5%, or 87.1% by revenue. The national carriers accounted for 93.6% of the market by subscribers in Alberta, Ontario and British Columbia (collectively), with Shaw's Freedom brand making up the vast majority of the remaining 6.4%, or 95.4% vs 4.6% respectively by revenue.8 In Saskatchewan, incumbent regional firm Sasktel slid somewhat in market share by subscribers, to 53%, and in revenue share to 50.8%, with the national carriers making up the rest. Because Eastlink does not report subscriber numbers, it is impossible to present changes for this year without CRTC data, although it is certain that the top three firms retain a commanding lead in the provinces where Eastlink has entered (Nova Scotia, New Brunswick, P.E.I, and Newfoundland and Labrador). In Manitoba, the purchase of MTS by BCE resulted in a situation whereby the national carriers collectively controlled the entire market in 2017 and throughout most of the next year, with Bell catapulting to lead position thanks to the merger. Xplornet's entry at the end of 2018 will likely reduce that number below 100%, but its position is expected to remain marginal for the foreseeable future

Tbaytel, which does not release subscriber figures, is estimated to make up for a fraction of a percent of subscribers in Ontario.

Although CR3 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.

Figure 10: Province mobile wireless market shares, by subscriber, 2018



Source: CMCRP data, <u>CRTC Communications Monitoring Report</u>

According to our estimates, the least concentrated provincial market in Canada remains Quebec. Videotron, which offers service in Quebec and the National Capital Region, ended 2018 with just over 1.1 million subscribers. Videotron's market share within its home province of Québec and the National Capital Region continues to rise, reaching 15.5% of the total mobile subscriber base in its operating areas at the end of 2018, up from 15% a year earlier. By revenue, we estimate that it captured 12.9% of the Quebec wireless market by the end of 2018.

Videotron has clearly found a viable place in the wireless business, steadily gaining subscribers while offering lower rates than found elsewhere in the country—a trend that has forced a response from established competitors. The national carriers, mainly through 'flanker brands' such as Virgin (Bell), Koodo (Telus), and Fido (Rogers), have responded to competitive pressure by matching Videotron's pricing. Indeed, while flanker brand pricing has increased in recent years in Manitoba and Saskatchewan, in Quebec flanker pricing is now lower than anywhere else in the country. Videotron has also introduced its own flanker brand, "Fizz Mobile", which may signal mounting competitive pressure if its offerings prove attractive to consumers.

Outside of Quebec, in contrast, the national carriers' competitive response to Freedom and the other regional providers has been more muted, although periodic "flash sales" and the roll-out of 'unlimited' plans by the national carriers has been explained by some analysts as a response to Freedom's "Big Gig" plans. Each of these examples suggests that competition from the fourth carrier has ramped up in many areas of the country, but remains more limited in intensity in some places than others.

The numbers bear these observations out: by the end of 2018, Shaw's mobile brand had attracted nearly 1.5 million subscribers in Freedom's operating territory of BC, Alberta, and Ontario, which we estimate to represent 6.4% of market share by subscribers, up from 5% a year earlier, and 4.6% of market share by revenue. (see CRTC, CMR 2018, Table 6.6).

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. We estimate Eastlink's total mobile revenues to have reached \$140.1 million at the end of 2018. However, beyond noting this top-line figure, and Eastlink's more recent expansion outside of the Atlantic and Maritime provinces, not much else can be reliably said about its operations. As a privately held subsidiary of the conglomerate Bragg, Eastlink does not release public information regarding its telecommunications or broadcasting operations. The CRTC does not publish data with respect to the company's mobile wireless, BDU and broadband internet access services, either.

An October 2018 <u>transfer of spectrum from Eastlink to Bell in the North Bay, Ontario area</u> does, however, suggest that Eastlink's plans for expansion in Ontario may be limited, and a <u>report filed by the Competition Bureau to the CRTC</u> in 2019 noted that Eastlink's impact remains limited—although not insignificant—with a market share in Timmins that remains below 5%.

Bell completed its takeover of Manitoba provincial incumbent MTS in 2017. At the end of MTS's final year of operations in 2016, it had approximately 490,000 mobile subscribers and \$350 million in mobile revenue. This merger, which the CMCRP opposed in <u>a report</u> submitted to the Competition Bureau, was approved by the Bureau notwithstanding its <u>staff's own findings</u> 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 approved the deal on condition that the merged Bell-MTS divest customers and retail locations to Telus, and customers, retail locations, and spectrum to Xplornet, which would begin to offer mobile service for the first time. Finally, the consent agreement required that the new entrant be granted access to the Bell-MTS network on a wholesale basis in order to ensure it would be able to offer adequate coverage to attract a customer base.

Xplornet began to offer service in late 2018, making it Canada's newest "new entrant" mobile provider. While the entrance 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 remains too early to tell whether this optimistic scenario will come to pass. Such an assessment is made harder by a total lack of disclosure by Xplornet about its operations in the province. Early signs, however, are not promising: the national carriers' pricing in Manitoba—including their main and flanker brands—has converged with pricing found in other provinces (except for Quebec). This development also bolsters the Competition Bureau's worries that Manitoban wireless consumers stand to lose out unless Xplornet can make significant inroads in the future.

As the new entrants make gains in their respective territories, it would be wise to recall that Clearnet and Microcell, two erstwhile "new entrants" from the 1990's, reached a high-water mark of 13% of the national market between themselves before being taken over by Telus and Rogers in 2000 and 2004, respectively. Although competition appears to be taking hold in some parts of the country, however unevenly, our findings show that we are still far from declaring "mission accomplished" in the wireless sector, and care must still be taken to protect and promote the competitive process.

And while the data reflect the slow but steady growth of the new entrants, it's also important to note that all the wireless carriers currently operating in Canada are part of diagonally integrated communications conglomerates.9 Such companies operate according to a different incentive structure than standalone entities. This has significant implications for understanding how firms offer services; 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, since independent providers do not have to worry about cannibalizing customers who may take advantage of larger mobile data buckets to "cut the cord" on their wireline broadband services, as one example.

In light of this situation, expectations of extensive disruptive behaviour from the new entrants should be tempered by the fact that they both now operate as part of larger firms whose actions in one sector can be limited by their competing interests across the network media economy.

Some industry observers have taken the fact that the remaining entrants are now affiliated with large communication conglomerates as an opportunity to call for the government to end its policy of supporting the new competitors (see <u>here</u>). These voices argue that sizeable companies like Videotron and Shaw are not in need of public subsidies such as spectrum set-asides.

Our analysis of this market suggests otherwise. Not only have *all* companies in the wireless sector been beneficiaries, at one time or the other, of such public benefits, but the entrants' spectrum holdings continue to be dwarfed by that of the incumbents; and so too is their network coverage and market share. Until the entrants are able to provision networks that can truly compete against the incumbent carriers (no small feat, given that the incumbents benefit from a 30+ year head start), their disciplinary effect on the existing oligopoly is likely to remain subdued.

This goal will not be achieved if measures designed to promote competition in this sector are removed. Competition in this market depends not only on substantial private investment, but relies on crucial ongoing public policy efforts designed to induce and sustain such competition. The entrants' ability to effectively compete requires continued access to adequate spectrum and mandated roaming service, which are necessary to enable them to offer comparable coverage and network quality to the national carriers.

Without the continuation, and potentially the expansion, of policy and regulatory measures aimed at promoting sustainable competition, it is unlikely that the burgeoning improvements that are developing will last. 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 ongoing regulatory and policy involvement, rather than ad hoc or one-off initiatives, is essential 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.

Diagonal integration refers to a situation in which firms operate across distinct spheres of related markets (e.g. wireline and wireless broadband).

The CRTC was forthright in the 2015 *Regulatory Framework for Wholesale Mobile Wireless*Services decision in summing up the facts about Canada's mobile markets, an analysis which remains relevant 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, <u>Mobile Wireless in Canada: Recognizing the Problems and Approaching Solutions</u>, 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 *Mobile Wireless Framework* decision, the CRTC determined that the national facilities-based wireless carriers had market power over third-party access to their networks, and that they had consistently denied service to would-be competitors. While the regulator took steps to encourage the

...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 remain highly concentrated.

entry of MVNOs, it stopped short of mandating access to the national carriers' networks. In the absence of such a mandate, however, the national carriers have continued to refuse MVNOs access to their networks. By now it is clear to close observers of this market that, without a mandate from the regulator requiring carriers to provide access, third party service providers will not emerge organically through "market forces" to provide innovative alternatives and pricing discipline to the incumbents, similar to how companies like Teksavvy, Distributel, and Primus have done based on the mandated access regime that applies to Canada's wired broadband networks.

Over the course of recent years, several challenges have been mounted to the CRTC's refusal to mandate MVNO access to the national carriers' networks, although in each case the regulator has hesitated to take appropriate action. In August 2015, the Canadian Network Operators' Consortium, a trade group representing wholesale ISPs, asked the CRTC to review and vary its decision, but the CRTC denied that application. 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, offering lower prices than those already available using a blend of mobile and Wi-Fi based service access. Similar to the earlier case with CNOC, the <u>CRTC spurned</u> Ice's efforts to enter the national market in March 2017 (also see here).

Despite these setbacks, as new entrants have floundered, been consolidated, or otherwise failed to meet expectations, 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 demurred. Instead, it has prodded the incumbents into offering more affordable data-only services to low-income Canadians using the threat of regulation. This approach veers away from the CRTC's approach under the previous chair, J.P. 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—a band-aid remedy, in other words--is favoured under the leadership of Ian Scott.

Whether this is indeed the case will likely become known in the next year. The CRTC has presently commenced a review of mobile wireless services which is expected to provide a definitive answer regarding the status of MVNOs in Canada by mid 2020. Numerous participants to the proceeding have emerged to challenge the status quo—some of a familiar type, such as potential MVNO start-up "dot mobile" aimed at providing service to mobile consumers, and others more unexpected, such as associations of railway and electrical interests fed up with having to deal with an oligopoly of mobile providers unwilling to or incapable of serving their particular needs. One thing that remains clear while awaiting a decision on the issue is that, in the meantime, 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 remain 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 actions earlier in this decade had begun to address that question, even if only in a decidedly incremental way, but in the past few years even those tepid steps seem far bolder than what is now on offer.

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, before rising once again since 2015, with the top four ISPs controlling just over two-thirds of the market by revenue last year. In 2018, the top five companies—Bell Rogers, Shaw, Telus and Videotron—accounted for just over three-quarters of all revenues nation-wide, by our measure. The national HHI score for internet access has also steadily climbed from its low of 535 in 2000 to a figure twice that amount in 2010. It was 1,361 last year—still a low figure by HHI standards, but only when we consider things from the view of the country as a whole rather than at the local level. Once we change the optics in this respect, 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 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.¹⁰

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%. 11 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.

¹⁰ Constructive criticisms from Catherine Middleton and Bram Abramson have 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.

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

Table 2: Residential Internet Access Services by Type of ISP: Market Share and HHI Scores based on Revenue, 2000—2018

	2000	2004	2008	2010	2011	2012	2013	2014	2015	2016	2017	2018
Telco	39.70	44.00	41.00	38.30	37.60	37.40	37.70	38.10	38.20	38.40	38.60	38.80
CableCo	23.50	39.90	51.10	54.50	54.80	54.00	52.70	51.20	49.80	49.00	48.00	47.91
SubTotal	63.20	84.00	92.00	92.80	92.40	91.40	90.50	89.30	88.00	87.40	86.60	86.71
Indy ISP	36.80	16.00	8.00	7.20	7.60	8.60	9.50	10.70	12.00	12.60	13.40	13.47
Total	100	100	100	100	100	100	100	100	100	100	100	100.00
нні	3481.4	3790	4348	4487	4472	4386	4295	4186	4081	4036	3973.5	3982.30

Source: see the "ISP" sheet in the <u>CMCRP Workbook</u> and CRTC (2017) <u>Communication Monitoring Report</u> (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 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 6.3% to 12.5% last year, while their share of subscribers rose from 8% to 13.5%. The two biggest indy ISPs based on subscribers—TekSavvy (323,000 at year end 2018) and XplorNet (360,000)—combined accounted for estimated 3.6% of revenues last year—unchanged from 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 (82.7%) of the market by revenue: e.g. Bell (25.3%), Rogers (17.8%), Shaw (12.1%), Telus (11.6%), Videotron (9.1%), Cogeco (5.0%), Eastlink (2.6%) 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 <u>CRTC decision</u> 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 1864—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 five 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 more fine-grained 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 7,145—nearly three times the threshold used to designate a market to be "highly concentrated". By last year, the HHI had fallen considerably to 5,202 and traditional cable companies' market share had been cut down to 60% while the telephone companies' share had swelled to 40%.

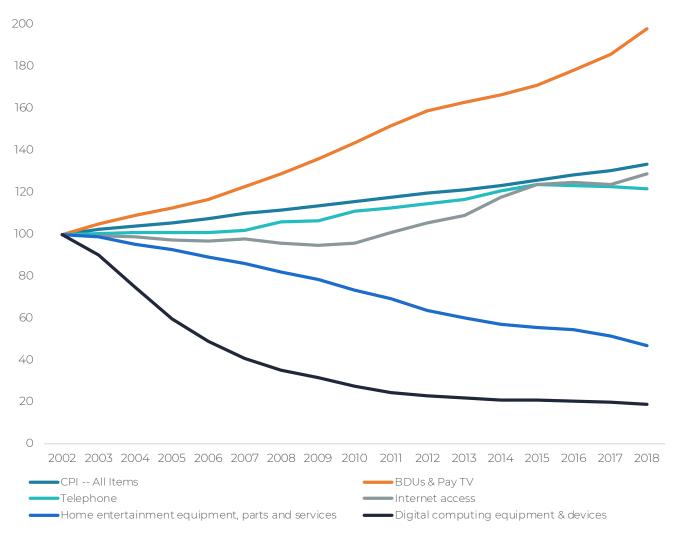
Of course, this is a significant change, and one can understand why cable companies have groused about the increasingly intense competition that they have had to meet, while Bell, Telus, MTS and SaskTel have been able to—correctly—trumpet their successes in an ever more contentious market. These divergent perceptions on both sides 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 75.7% last year.

Thus, the idea of "cord cutting" is real, but its scale and magnitude 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 should 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 both 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 throughout 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 <u>previous report</u> 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 steep 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 11 illustrates 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 11: The Price of Communication Services and Devices vs the Consumer Price Index, 2002-2018



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 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 and are justified.

In short, such steps reflect the fact that this market is *extremely* concentrated and regulators have taken very measured steps in response (see the "CableSatIPTV" and IPTV sheets in the <u>CMCRP Workbook</u>).

As noted in the last report, by the end of 2018, one-in-five 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 2,820,244 subscribers and revenues of \$2.2 billion. By the end of 2018, their IPTV services had garnered just over a quarter of the TV distribution market by revenue (26.2%) and roughly the same based on subscribers (26.1%). 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 last 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 5,202. This is more than twice the threshold for a highly concentrated industry by this standard, and the biggest players continue to reveal their dominant market power by pushing price increases that are well-above the CPI, as indicated in Figure 11 above, 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 1996.¹²

Table 3: The Decline of Monopoly Cable TV: Cable Companies vs Telephone Companies, 1996—2018

	CABLE (Market share)	TELCOS (IPTV + DTH) (Market share)	TOTAL CABLE, DTH + IPTV (HHI)		
1996	100	_	10,000		
2000	85.2	14.8	7481.2		
2004	82.8	17.2	7145.4		
2008	72.1	21.9	6612.4		
2010	75	25	6340.9		
2011	71.9	28.1	6072.7		
2012	68.8	31.2	5857		
2013	67.5	32.5	5697		
2014	64.7	35.3	5395		
2015	64.9	35.1	5411.6		
2016	63.1	36.9	5309.9		
2017	60.9	39.1	5199.7		
2018	60.1	39.9	5202.4		

Source: See the "CableSatIPTV" and "IPTV" sheets in the CMCRP Workbook).

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.

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 2018, 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 conditions again, however, to scan the national horizon, and the "big four" vertically-integrated BDUs control four-fifths of the market: Bell (28.7%), Shaw (22%), Rogers (17.1%), and Quebecor (11.8%). Add the next four largest players—i.e. Telus (10.1%), Cogeco (5.7%), Eastlink (3.2%) and SaskTel (1.1%)—and the rest of 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 "telecom and internet access services"—i.e. mobile wireless, wireline telecoms, retail internet access and cable TV—are remarkably high. Not only are they high within each of these sectors respectively but when tallied up across each of the sectors in the telecoms and internet access services category, the big five actors—Bell, Rogers, Telus, Shaw and Quebecor—have increased their combined market share of these fast growing set of sectors over time. Indeed, in 2008, the big five accounted for 86.5% of the \$41 billion in combined revenue across these sectors, while that number had swollen to 90.8% of the \$60.3 billion in revenue last year.

They big five's share of the telecom and broadcasting landscape over the past half-decade has also grown. Thus, whereas they accounted for about two-thirds of all telecoms and broadcasting revenue in 2010, that figure had grown to 86.2% by the end of last year. In sum, while there is no doubt that competition is growing in television distribution, this is occurring within a context of steadily increasing consolidation across the communications sectors.

by the end of 2018, one-in-five Canadian households got their television service from the local telephone company's IPTV service

The Digital and Non-Digital Audiovisual Media Services Industries: New Actors & New Dynamics Chip Away at Industry Consolidation

The remainder of this report looks at the following digital and non-digital audiovisual media services (AVMS) sectors:

- broadcast TV;
- pay and specialty TV;
- online video subscriber and download services such as Netflix, Crave, Amazon Video and Illico;
- radio;
- online music subscription and download services such as Apple iTunes and Spotify;
- online gaming, gaming applications, game downloads or in-game purchases;
- app stores (e.g. Google Play and Apple Appstore);
- internet advertising;
- advertising across all media;
- newspapers;
- magazines;
- online news.

Our first report in this series highlighted four key themes that should shape our understanding of the evolution and upheaval that has been taking place in the AVMS sectors.

All AVMS sectors have grown considerably over the long run, but four such sectors that rely primarily on advertising have been in increasingly dire straits over the past decade: broadcast TV, radio, newspapers and magazines.

Simultaneously, however, subscription-based and download video and music services, as well as online games, apps, downloads and app stores (i.e. the digital audiovisual media services) are rapidly becoming the engines of growth across the AVMS sectors. The combined revenue of the digital AVMS sectors soared five-fold from \$763.3 million to \$4 billion between 2012 and last year.

These developments not only point to the rise of a fast growing set of relatively new digital media that are moving to the centre of the media universe but also the fact that subscriber fees and direct payments have become the drivers of the media economy, whilst advertising revenue is actually declining on a per capita basis in inflation-adjusted real dollar terms and relative to the size of both the media economy and the economy as a whole. Nonetheless, online advertising is still growing fast, hitting \$7.6 billion last year.

Include the online advertising sector, and total revenue for the digital AVMS industries last year hit \$11.6 billion; it now constitutes roughly 14% of all revenue across the network media economy—double what it was just a few years earlier in 2014—and will likely overtake the rest of its non-digital counterparts in terms of revenue within the next eighteen months or so.

Combined, these four trends embody the ongoing fundamental transformation of the network media economy in a few short years away from well-established media in which advertising support loomed large to a broader and more complex array of digital online video, music and gaming services as well as app stores where subscriber fees and direct payments rule. The digital media industries have not only added substantially to the overall size and complexity of the network media environment, they have also brought significant global actors such as Google, Amazon, Facebook, Apple, Netflix and Microsoft deeper into the media landscape in Canada (and other countries around the world) than ever before. This undoubtedly means that communications and media companies in Canada face intensifying competition with these global internet giants in AVMS services as a result. However, what remains to be seen is whether these trends and dynamics have led to even more consolidation or to greater competition and pluralistic diversity, both within specific media sectors and across the network media economy as a whole? Addressing that question is the task of the remaining sections of this report.

Broadcast Television and Radio and Specialty and Pay Television Services

From the late 1980s until 1996, concentration in broadcast television stayed relatively flat, reflecting 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 during this period added much diversity to the television landscape, although such services still played a minor role at the time. Nonetheless, the emergence of pay TV services marked the beginning of a fundamental shift from an environment of relative scarcity to one of relative abundance and from a model of TV primarily subsidized by either advertising and the public purse to one where subscriber fees have come to play a bigger and bigger role.

The 1980s and early 1990s were defined by ownership stability in conventional broadcasting TV and increased diversity in TV overall because of the addition of pay and specialty TV services. This changed abruptly, however, in the late 1990s and early 2000s, in two stages. The first stage occurred in the late 1990s as a wave of consolidation unified the broadcast 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 between, for example, Alliance and Atlantis. Conventional broadcast television ownership groups also expanded into this then-new domain by 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 Englishlanguage services. CTV's 2000 acquisition of the largest pay TV player at the time, Netstar, before it was acquired by Bell Canada Enterprises later that year, cemented the trend.

The trend continued thereafter with relatively new pay and specialty television services steadily absorbed into well-established and larger groups whose roots were in over-the-air broadcasting but which aggressively carved out ever larger positions for themselves in the expanding TV marketplace of the 2000s. While these trends were steady throughout 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 once they collided with financial crisis of 2008 the collapse of advertising revenue 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).

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 would change a few years later. Simultaneously, a handful of mid-range players such as Alliance Atlantis, Astral and CHUM had also carved out a sizeable place for themselves in the TV industry (circa 2000-2006), before eventually being absorbed by the industry's largest players. Consolidation within the TV industry during the next few years, however, especially Canwest's acquisition of Alliance Atlantis, led to a situation where, by 2008, the "big four" accounted for 70% of revenue.

Similar processes also played out with respect to radio. There has long been some cross-media ownership between broadcast television and radio, as exemplified best, perhaps, by the CBC and Rogers Communications long-standing place in both fields and, for Rogers, cable television and magazine publishing as well. Nonetheless, the integration of the radio industry into other media sectors was not the norm until late-1990s and 2000s. As in broadcast TV, consolidation within the radio sector defined the late 1980s and 1990s while at the turn-of-the-century and during the following decade, Canada's major radio broadcasters were integrated into major communications and media conglomerates whose operations span the media landscape in this country: Bell, Shaw (Corus) and Cogeco. As of 2018, the big five radio groups in Canada accounted for close to two-thirds of the sector's \$1.8 billion in revenue: Bell (20.2% market share), CBC (17.8%), Rogers (12.3%), Shaw (Corus) (6.3%) and Cogeco (5.4%). All of these groups, except the CBC, of course, were part of vertically-integrated communications and media conglomerates.

Despite these processes of consolidation and cross-media integration, the radio broadcasting sector has been amongst the most diverse sectors covered by the CMCR project throughout the three-and-ahalf decades that we address. While there was a slight uptick in concentration in the first few years of the 21st Century, the trend thereafter was towards more diversity. However, that trend was reversed in 2013 when Bell acquired Astral Media, which was Canada's largest radio broadcaster at the time. The deal immediately 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 20.2% market share in 2018 marked the third year in a row in which its market share had drifted slowly downwards, but it is still substantially larger than the CBC's share (17.8%) and massively larger than that of closest commercial peer, Rogers (12.3%).

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 continued to be only modestly concentrated by CR4 standards in 2018, with a score of 58.8%. It is firmly within the competitive zone by the lights of the HHI, with a score of 1033 in 2018—a level that has stayed fairly stable for the past few years.

Indeed, the radio sector is amongst the most diverse media sectors in Canada. The shuffling of several radio stations between Shaw (Corus) and Cogeco in 2011 helped bring about a long-term decline in concentration by lessening the former's stakes in Ontario and Quebec and elevating those of Cogeco, one of Canada's mid-size communications and media companies. Bell's divestiture of ten radio stations in medium to large size cities across the country at the end of 2013 and into 2014, as required by the CRTC and Competition Bureau as a condition of their approval for Bell's acquisition of Astral, also helped offset the effects of consolidation. The effect of this sell-off has also be to strengthen some of the mid-size radio station ownership groups that acquired them: Newcap, Pattison and Corus (Shaw). Indeed, the presence of several mid-size radio station ownership groups in several regions across the country also adds to the fairly high level of diversity for broadcast radio station ownership: e.g. NewCap, Patttison, Rawlco, Maritime Broadcast, Golden West, etc.¹³

Returning to the discussion of television reveals similar patterns of horizontal and diagonal integration playing out within and between the broadcast television as well as specialty and pay television service groups but with the addition of a powerful new force during the last decade: vertical integration. Indeed, between 2010 and 2014, the television landscape in Canada was dramatically remade through a policyand industry-driven process of vertical integration. By this time, the three of the four largest TV groups—CTV, Global, CBC and City TV—had all been absorbed into a major telecoms carrier—except the CBC, of course. Combined, they controlled just over three quarters of *all* TV revenues last year. Add Quebecor's TVA and pay TV services into the mix, and the number rises to 78%. In short, since the turn-of-the-21st Century, the sheer number of services increased greatly, but so too had the processes of consolidation, with more and more of these services falling 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 which 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) has governed how TV would evolve during what has been, perhaps, the most significant era of transformation to sweep this pivotal form of media and culture since the multi-channel universe started to take shape three-and-a-half decades earlier.

The first major transaction to redefine the landscape was <u>Shaw's take-over</u> of Canwest's TV holdings in 2010. The second was Bell's <u>buy-back of CTV</u> 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 GolTV) in 2012 (with Toronto Construction magnate Lawrence Tanenbaum's Kilmer Sports holding the rest) (<u>CRTC</u>, 2012; Bell 2013 Annual Report, p. 133). The fourth step took place with Bell's take-over of Astral Media in 2013 after the <u>CRTC reversed course</u> from a year earlier when it had curtly <u>dismissed the deal</u>. 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: <u>Teletoon</u> (TELETOON Retro/TÉLÉTOON Rétro, TELETOON / TÉLÉTOON, Cartoon Network), <u>Historia and Séries+</u> 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.

NewCap was acquired by Stingray in 2019. The changes in ownership, revenue and market shares discussed in these paragraphs is underpinned by data collected in the "Radio" sheet in the <u>CMCRP Workbook</u>.

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.

As a result of the consolidation of broadcast television described above, concentration levels hit their high point a decade ago when the top four players accounted for 87.8% of revenue in the sector. They have fluctuated slightly ever since, but last year the CR4 fell to 83.2%, seemingly on account of a decline in revenue for Bell's CTV. Otherwise, the four major broadcast TV groups' share of revenue in 2018 was: the CBC (40.6%), Bell (22.8%), Shaw (Corus) (12.4%) and Quebecor (TVA) (7.5%). Bring in Rogers (7.4%) market share), the fifth largest broadcast TV group, and the "big five" had a combined market share of 90.7%. The HHI also remains at the very high end of the moderately concentrated scale: 2437—a modest decline over the previous four years when this measure was running at an all-time high.

In terms of pay and specialty TV services, the results differ slightly depending on the metric used. Based on the CR4 method, concentration reached an all-time last year when Bell (35.8%), Corus (Shaw) (20.3%), Rogers (19.4%) and Quebecor (5.1%)—collectively accounted for 80.3% of specialty and pay TV revenue. This is a considerable increase over the 71.3% share held by the four biggest pay TV ownership groups in 2010. Add the next biggest actor into the mix, the CBC, and the top 5 specialty and pay television service operators had a collective market share of 84.2% last year. The HHI score of 2109 for pay and specialty TV services last year also remains at the upper reaches of the moderately concentrated zone by this measure and far off what it had been before the major bout of consolidation early in the decade.

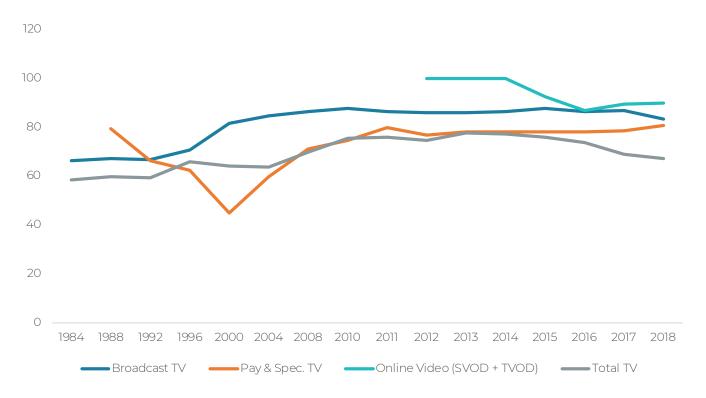
One other thing that stands out as a consequence of the major transactions briefly introduced above is the extent to which Bell, Shaw and Rogers have broken ahead of the rest of the field. These firms now stand alone in a league of their own with 154 TV services between them, three-quarters of the pay and specialty TV market based on revenue and over half all television revenues (52.7%). Bell has maintained roughly a third of the pay and specialty television market since acquiring Astral in 2013, while Corus (Shaw) has seen its market share drop from a high of 27% in the 2011-2013 period to a 20.3% market share last year. Rogers' market share has shot up from 14.4% three years ago to 19.4% last year. This increase is due entirely to its 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 \$574.6 million last year (CRTC, 2018).

The CBC and Quebecor are the other two most significant players in the specialty and pay TV sector market. Combined, Bell, Shaw, Rogers, Quebecor and the CBC constitute the "big 5" in the Canadian TV industry. Together they held 204 of the 762 TV services licensed to operate in the country last year: Bell (69 conventional, specialty and pay TV channels), Corus (Shaw) (61), CBC (32), Rogers (24) and Quebecor (18). They also accounted for 72.5% of total TV revenues (including online video services).

That said, concentration levels for the "total television market" (an amalgamation of broadcast TV, pay and specialty TV and online video services) have fallen significantly from a level that was firmly in the "moderately concentrated" zone in 2014 (1713) to a level in the last two years that has dipped below the HHI's thresholds for a diverse and competitive market. Indeed, by last year, the HHI for the total television industry was 1438.8, a very significant improvement on the past and a seeming reversal of the long-term trend toward ever higher levels of consolidation.

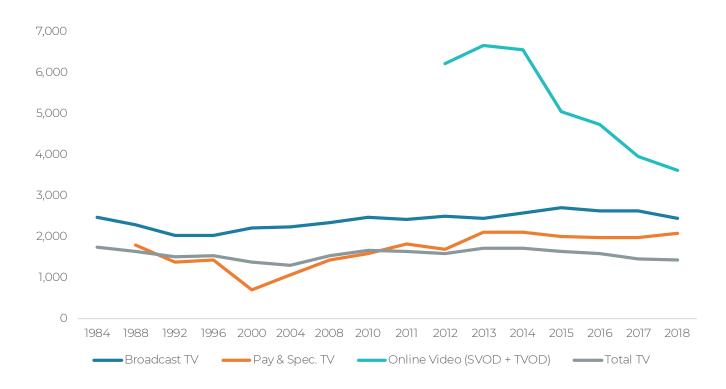
Figure 12, below, summarizes the trend for each of the broadcast, pay and specialty TV, online video services and the "total television market" on the basis of CR scores while Figure 13 after it does the same in terms of the HHI.

Figure 12: CR Scores for Television, 1984-2018



Sources: see the "CR & HHI" as well as individual sector sheets in the CMCRP Workbook.

Figure 13: HHI Scores for Television, 1984—2018



Sources: see the "CR & HHI" as well as individual sector sheets in the <u>CMCRP Workbook</u>.

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 opposite direction for the past several 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 a handful 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 familyoriented 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 pay and specialty TV landscape grew from basically zero before 2013 to just under 2% for several years. However, its revenues have been declining since 2016, and its share of the pay and specialty TV services market had fallen to 1.3% last year on revenue of \$55.4 million. Bell also sold MuchVibe, MuchLoud, MuchRetro and Juicebox to another independent TV operator, Stingray in 2014, as part of the same process (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 closed Movie Central in 2016 as part of an agreement with Bell. The programming distribution rights of the latter were then wrapped into TMN and HBO/Crave and sold in varying combinations and bundles by Bell, with Bell have exclusive rights to HBO in Canada until 2025 (Corus, Annual Report 2017, fn 27). In the following year Shaw spun-off the Global TV network and several specialty and pay TV services to Corus Entertainment, a legally separate entity but one which remains 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).

For the last two years, however, the Shaw family and Corus President and CEO Doug Murphy have made rumblings about selling-off Corus altogether to focus on where the company makes its bread-andbutter—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 prevails and which has only very recently shown signs of becoming more pluralistic and diverse, much to the company's consternation (Dobby, 2018). Murphy's push to have foreign ownership restrictions loosened as well to allow a foreign owners to acquire Corus' extensive stable of pay and specialty services has also fallen on deaf ears so far (Pinto, 2019; Murphy, 2019).

There should be no mistake, however, about Corus's profitability. In fact, it is wildly successful, with operating profits in the 34-36% range for the last four years on revenues of \$1.65 billion last year—more than three times the average rate of profit for industry in Canada (Corus, Annual Report 2018, p. 20; Corus, Annual Report 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 surpassed \$5 billion in 2018 (Shaw, Annual Report 2018, p. 8). While that may be a problem for Shaw, investors and the banks behind both companies, it is not a sign that its TV division 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 and foreign ownership, 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-mention DHX and Stingray, including, for example: V Interactions, APTN, Pemorex (the Weather Network), Radio Nord, Fairchild (Chinavision), Blue Ant, CHCH, CHEK, Channel Zero, OUTtv, 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 broadcaster 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.

Online Subscription and Download Video Services

In order to complete the picture of the "Total TV Universe" we now turn to an analysis of online video subscription and download services. However, as we noted in our first report, the analysis that follows must be seen as tentative given the dearth of reliable publicly available information on the subject, not just from most of the providers (e.g. Netflix, Amazon Video, Apple, Bell's Crave or Rogers' SN Now, etc.) but also the CRTC, whose data on this topic is circumspect, for reasons we discussed in the last report.

The rapid rise of online video subscription and download services is dramatically changing the TV landscape. Indeed, total Canadian revenue for online video services in 2018 was ~\$1,748.5 million—a nearly nine-fold increase from 2012. Such services have added significantly to the overall size of the TV marketplace in terms of revenue and driven down concentration levels. They have has also added major new international actors to the audiovisual media landscape, most notably Netflix, Apple and Amazon Video.

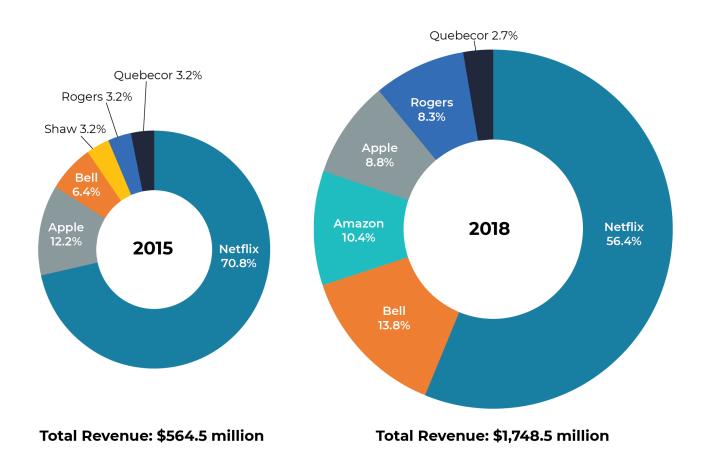
Last year, Netflix had an estimated 7.7 million subscribers in Canada at the end of the year—roughly 54% of all households. It also had estimated revenues of \$1,000.8 million in this country, which meant that, in less than a decade, Netflix had garnered a 11.4% share of the \$8.75 billion TV services industry. Thus, by last year, Netflix had emerged as the fifth largest TV service in Canada, with revenues and a market share more than twice that of Quebecor and only slightly less than Rogers.

Several others have also carved out a significant place for themselves in the last few years as well. Bell's Crave, for example, had an estimated 2.3 million subscribers at the end of 2018 and estimated revenues of \$244 million for the year (BCE, <u>Annual Report 2018</u>, p. 44). For their part, Amazon and Apple had estimated online video service revenue in Canada last year of \$181 million and \$153.5 million, respectively. In 2018, there were two other significant Canadian actors in the online video services market: Quebecor's illico, with 420,800 subscribers and revenues of \$47 million (Quebecor, MDA 2018, p. 12) and Rogers SportsNet Now with an estimated subscriber base of 486,474 and revenues of \$145.9 million.

Online video, when viewed as a stand-alone market, is also highly concentrated, with an HHI of 3433.6 last year--well into the highly concentrated zone—and a CR4 to match, with the top four players accounting for 89.1% of the \$1,748.5 million sector in 2018: Netflix, 56.4%; Bell, 13.8%, Amazon, 10.2% and Apple at 8.7%. While concentration levels are still at the extremely high end of the scale, they have also fallen over the last several years, as new services such as Amazon Video, Bell's Crave and Rogers SportsNet Now carve out a place for themselves, while others continue to increase their revenue within a growing market but which have also seen their market shares dip, as has been the case, for example, with respect to Apple's iTunes and Quebecor's illico.

Figure 14 below illustrates the changed environment from 2015 to 2018.

Figure 14: Online Video Distributors, 2015 vs 2018 (Market Share based on \$)



Source: see the "Top 20 with Telecoms" sheet in the CMCRP Workbook.

The enormous growth in online video services has also caused total revenue across the total television landscape to swell from \$7.6 billion to \$8.75 billion as well. It has also been a major contributor to an explosion of television and film production in BC, Ontario and Quebec, with production investment reaching record highs for the last several years in a row (as discussed in further detail in the first report).

In terms of concentration and diversity levels across the television landscape, the upshot of these changes is two-fold: first, growth of the "total TV universe" continues, albeit at a slower pace, while the range of actors and choices in the market is also expanding and concentration levels slowly declining as a result. In terms of the latter point, as Netflix, Apple and Amazon expand their presence in Canada, Canada's largest players such as Bell are seeing their share of the TV marketplace cut down to size, however, not nearly as significantly as many seem to suggest. For example, Bell's share of all revenues across the television landscape appears to have peaked at about 28.7% in 2014 whereas it had fallen to 27.3% last year, albeit in a bigger market. Rogers' market share actually grew from 10.1% to 11.7%, while Quebecor's has stayed about the same (5.4%), over the same period. Corus (Shaw) and the CBC,

however, have seen their place in the total television universe diminish significantly, with Corus' share falling from 20% to 14% between 2014 and last year, while the CBC's fell from 18.5% to 14.4%.¹⁴

As the grip of the top five players loosens—from 82.5% in 2014 to 78.5% last year—diversity is, in fact, increasing. The HHI has also fallen from moderate levels of concentration for the "total TV universe" in 2014, when the HHI was 1713, to 1438 last year. Indeed, for the last two years the HHI score for the total television universe has actually fallen below that measure's threshold for identifying a diverse and pluralistic market.

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 turn back the tide and gird 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 out, 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 OUTty, 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 and here). Unfortunately, in two major policy decisions over the past two years—the cable TV <u>license renewal ruling</u> 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.

Searching for Goliath: Complexity, Diversity and Consolidation in the Digital Audiovisual Media Services Industries

The following pages aim to get a fuller sense of conditions across the digital AVMS sectors and a better measure of just where the global digital platforms fit within both these sectors and the overall network media economy as they become increasingly involved in the aggregation and distribution of media and cultural content (Nieborg & Poell, 2018). To do so, and as indicated in the first of our reports this year, we take some preliminary steps to capture a wider range of audiovisual media services delivered over the internet beyond online video subscription and download services by including:

- online gaming, gaming applications, game downloads or in-game purchases;
- app stores, in particular Google Play and Apple's App Store;
- music downloads and streaming music subscriptions. 15

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.

To arrive at our estimates, we draw on our own calculations for the online video subscription and download service, as 15 discussed above, as well as custom tabulations from Statistics Canada's Canadian Internet Use Survey and Digital Economy Survey for the online music, video games, apps and in-store purchases, Apple and Google's annual reports as well as the Interactive Advertising Bureau's annual reports on online advertising.

At this point in time, we feel that we have sufficient data to address developments and the structure of the industries for the first two sectors on this list, while the third related to online music subscription and download services will have to wait pending further research. Thus, the following pages cover, first, the online gaming, gaming applications, game downloads, and in-game purchases, followed by a discussion of two of the most prominent app stores—Google Play and the Apple App Store. We also cover these sectors at this point because they are closely allied with what are often referred as the "screen media" industries. Thus, bringing them together in this way is consistent with our scaffolding approach where we examine specific sectors on their own terms before grouping them together into larger categories of similar media types. In this case, we group these sectors together under the label of the digital AVMS sectors. Analyzing these sectors is also critically important because doing so helps to shed light on debates between those who have long held up the internet as an antidote to ownership concentration in the "old media" versus those who claim, in fact, that core elements of the Internet possess very powerful dynamics that are driving an intense process of consolidation across the internet and around the world.

After examining the online gaming and app store sectors, we turn our attention to online advertising and several core elements of the internet ecology—search engines, social media services, browsers and operating systems. In particular, we focus on the two undisputed goliaths in in online advertising—i.e. Google and Facebook—to chart and understand the forces that are driving their consolidating grip over online advertising. We then build on the internet advertising section to ask whether the advertising market as a whole across all media is also dominated by the internet giants? The section wraps up by analyzing conditions with respect to newspapers, magazines and online news before turning to the conclusion of this report.

Online Gaming, Gaming Applications, Game Downloads, and In-game Purchases, App Stores and Internet Advertising

The online gaming, gaming applications, game downloads, and in-game purchases sector has grown rapidly in recent years as part of the burgeoning growth of the digital AVMS sectors. In 2018, the online gaming, gaming applications, game downloads, and in-game purchases sector was worth \$1.33 billion, 4.75 times its revenue of \$280 million in 2011 and nearly two times its revenue of \$738.2 million just five years ago in 2014. According to a recent Nordicity study conducted on behalf of the Entertainment Software Association of Canada (ESA), there were 596 video game companies in Canada in 2017, growing to 692 in 2019. The vast majority of these firms are what Nordicity calls, based on employment, small (213) or micro (377) size firms, and a smaller set of very large (37), large (30) and medium (35) sized firms. While Nordicity does not offer firm-level revenue figures (our top-line revenue figures above are based on Statistics Canada data), it is clear that this market sector is populated by a wide range of firms that operate according to a complex and diverse set of business models.

Excluding revenues from Apple and Google's online app stores (which we discuss in greater detail below), revenues from online gaming, gaming applications, game downloads, and in-game purchases totaled \$968.5 million in 2018. While we are still only in the preliminary stages of calculating firm- and service-specific revenues for this portion of the sector, we have determined that these revenues derive from a broad array of companies that pursue various lines of business. Although far too numerous to list exhaustively, examples include revenues from subscriptions to gaming platforms such as Microsoft's Xbox Live, Sony's Playstation Plus, and Nintendo Switch Online; subscriptions to particular games or libraries of games such as Activision Blizzard's World of Warcraft, Microsoft's Xbox Game Pass service, and Electronic Arts' EA Access service; revenues from direct-purchase game downloads provided by software publishers such as Microsoft (e.g. Halo), Activision Blizzard (e.g. the Call of Duty, Destiny, Diablo, and Overwatch franchises), Electronic Arts (e.g. NFL, NBA, NHL, FIFA, and Star Wars franchises) and Valve (Steam library);

and in-game purchases from both direct-purchase as well as "freemium games" (e.g. Valve's DOTA, Riot's League of Legends, Epic Games/Tencent's Fortnite; Activision Blizzard's Hearthstone).

With revenues of \$968.5 million in 2018, the kinds of subscription and direct purchase-based games just discussed make up the lion's share—i.e just under three-quarters—of the \$1,329.1 million online gaming, gaming applications, game downloads, and in-game purchases sector of the network media economy. That being said, a growing proportion of revenue is being captured by app stores, specifically Google's Play Store and Apple's App Store. Google's Play store, for example, earned an estimated \$161 million from its Canadian operations in 2018, up substantially from \$50.8 million in 2014 and representing astonishing growth from its revenue of \$7.7 million in 2011. Revenues for Apple's iOS app store rose from an estimated \$53 million in 2011, to \$101.5 million in 2014 and \$199.6 million in 2018. Together, Apple and Google's app stores accounted for \$360.6 million in 2018, or 27% of online gaming, gaming applications, game downloads, and in-game purchases revenue, up from 21.6% in 2011. In other words, while their influence is growing, the do not dominate the online gaming sector.

Thanks to data collected by App Studies Initiative researchers at the University of Toronto's App Imperialism research project (Young, Nieborg, & Joseph, 2019), we can also look at a more detailed breakdown of individual firms' Canadian gaming revenues derived from within the Apple iOS app store. These data reveal that the fifty largest firms by app store revenue reflect an international mix of large and small firms, as is the case in the broader sector discussed here. The greatest representation is from firms based in the United States and China, as well as a handful of other countries such as Singapore, Japan, Australia, South Korea, Russia, Turkey, Ukraine, Finland, Malta, Canada, Dubai, Poland, and Cyprus. These data, collected for the years 2015-2017, show a significant variance in individual firms' revenues (and their corresponding rankings) from year to year, which probably reflects the "hit-driven" character of cultural products such as video games as well as movies, music and books; in other words, firms operating in these sectors appear to be heavily dependent on the popularity of their products, which can often be ephemeral or fleeting, and change dramatically from one year to the next.

In 2017, however, the top three firms (Tencent, \$31.6 million; Machine Zone Inc, \$21 million; and Activision Blizzard, \$20.6 million) held a clear leading position in terms of Canadian revenues derived from Apple's iOS app store, a spot they each occupied the year prior as well. The Chinese internet giant and game maker Tencent had the biggest share of the Apple iOS App Store market at 19%, while Machine Zone and Activision Blizzard's market shares were 12.7% and 12.5%, respectively. The nearest firms, including familiar names such as Niantic (producer of Pokemon Go, \$9.3 million), Electronic Arts (\$6.4 million), and Nintendo (\$4.3 million), earned substantial (but significantly smaller) revenues, with 20 of the top 50 earning less than \$1 million per year. All told, if we were to treat Apple's iOS app store as a market in itself, it would have a CR3 of 44%, a CR4 of 50%, and low-concentration HHI score of 817.1.

While these figures cannot reliably be generalized beyond Apple's iOS app store due to the complex and diverse characteristics of Canada's online gaming, gaming applications, game downloads, and in-game purchases sector, they are nevertheless informative, and serve as the first step, or jumping-off point, from which we expect to conduct more expansive and detailed analysis to be presented in future reports.

Internet Advertising: The case for why Google and Facebook dominate online advertising in Canada

The internet has long been held up as an antidote to ownership concentration in the "old media". In some respects, the results of our analysis of the positive impact that the growth of the online video sector has had in terms of driving greater diversity in the television market, and the diverse character of the online

gaming sector, support this view. However, there are also good reasons to think that the opposite might, in fact, be the case. Thus, as we saw a few pages ago, the online video services sector, when taken on a stand-alone basis, is highly concentrated, although levels have come down over the past few years. The same is true for internet access when measured on the local level, even if concentration levels have been steadily drifting downwards over the past decade. Perhaps the strongest support for the view that the internet is, far from being wide open and free, extremely concentrated and becoming more so with every passing day is the online advertising market. The following pages review the evidence on this point.

Internet advertising revenue has soared from \$141 million in 2000 to \$7.6 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 relentlessly. By 2018, internet advertising accounted for 54% of all advertising spending across all media. Figure 15 below illustrates the point.

TV Share of Total Adv \$ (%) Internet Share of Total Adv \$ (%)

Figure 15: Internet Advertising Outstrips TV Advertising by a Widening Margin, 2004-2018

Sources: See the "Ad\$ All Media" sheet in the CMCRP Workbook).

Internet advertising is also extremely concentrated and has steadily become more so over time, not less. As Table 4 below illustrates, Google and Facebook clearly stand in a league of their own in terms of internet advertising revenue and market share. Together, they controlled just under four-fifths (78.2%) of the \$7.6 billion internet advertising market in Canada in 2018—up considerably from just over three-quarters of the market a year earlier and very significantly from the roughly two-thirds share of online advertising revenue that they held in 2014 and 2015, respectively. Indeed, the digital duopoly's increased market shared in 2018 reflects the fact that the they alone swallowed almost *all* of the year-over-year growth, i.e. 97.5% of the \$821 million in growth between 2017 and 2018 was absorbed by Google and Facebook.

Table 4: Internet Advertising: Revenue (Millions\$), Market Shares and Concentration Scores, 2016-2018

		2016	:	2017	2018		
	\$ Millions	Market Share	\$ Millions	Market Share	\$ Millions	Market Share	
Google	2819.1	51.4	3437.8	50.8	3869.7	51	
Facebook	1128.9	20.6	1702.1	25.1	2071	27.3	
Bell	118.5	2.2	111.6	1.6	146.9	1.9	
Torstar	133.1	2.4	128.5	1.9	120	1.6	
Twitter	104.5	1.9	108.1	1.6	117.5	1.5	
Postmedia	93.8	1.7	105.5	1.6	116.4	1.5	
Pelmorex	70	1.3	77.8	1.1	86.4	1.1	
Rogers	84.4	1.5	73.8	1.1	76.5	1	
Shaw	68.4	1.2	62.8	0.9	65.4	0.7	
Quebecor	47.2	0.9	52.6	0.8	53.9	0.7	
Yellow Pages	73.5	1.3	72.7	1.1	50.8	0.7	
CBC	30.3	0.6	36.6	0.5	42	0.6	
Globe & Mail	18.1	0.3	27.8	0.4	27.6	0.4	
Power Corp	14.8	0.3	22.7	0.3	22.5	0.3	
Groupe Capitales Médias	11.6	0.2	13.9	0.2	18.3	0.2	
Glacier	26.8	0.5	26.5	0.4	16.2	0.2	
FP CDN Newspapers	7.2	0.1	8.5	0.1	8.8	0.1	
Transcontinental	10.9	0.2	5.9	0.1	7.6	0.1	
Total \$ (Mills)	5484		6771		7592		
Google + Facebook		72	5139.9	75.9	5940.7	78.3	
Share			3133.5		3370.7		
CR4		76.6		79.4		81.8	
CR10		85.6		86.9		88.4	
HHI		3092.4		3227		3357.6	

Sources: "Internet Ad\$ + Other" sheet in the <u>CMCRP Workbook</u> for more details on the methods used to arrive at these figures.

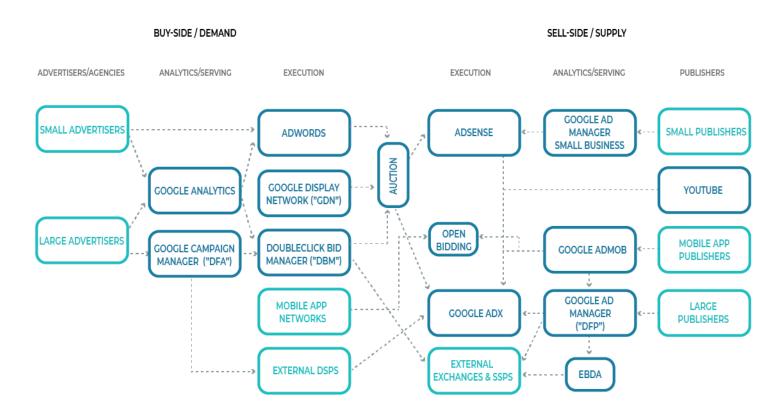
As Table 4 also shows, the top four and top ten companies' share of internet advertising has also increased over time. The top 4 companies' combined share of online advertising, for example, has risen to nearly 82% from 77% in 2016, while the top ten companies' collective share of online advertising revenue has grown from 85.6% in 2016 to 88.4% last year. That said, the declining share of nearly all of the other players beyond Google and Facebook makes it crystal clear that all of the consolidation is taking place at the very top of the ranks. In other words, the digital duopoly has hardened over time rather than softened.¹⁶

Google and Facebook's embrace of the mobile internet has helped to consolidate and tighten their grip on the online advertising market, with almost all of the growth in internet advertising, as just observed, redounding to the two internet behemoths in the past few years. As noted in our first report, the digital duopolies growing consolidation of online advertising is being driven by the relentless push to expand the scale and scope of their activities through a steady stream of acquisitions. Facebook has

moved aggressively into messaging services (WhatsApp), new social media sites (Instagram), marketing campaigns, political campaign management, virtual reality, news delivery and more as well. Google, in particular, has also pursued a strategy of extensive vertical-integration that has given it a presence from the top to the bottom of the internet stack, reaching from its iconic search engine to ownership of its own digital ad exchange, a sprawling system of overland and submarine fibre cables (it's one of the biggest internet traffic carriers in the world), data centres, mobile operating systems (Android), software and document storage, maps, urban development projects (Toronto); news delivery, artificial intelligence, autonomous vehicles, and more.

Of particular importance in this regard is Google's strategy of vertically-integrating its search and online advertising operations with ownership and control over its own, proprietary digital advertising exchange system, as depicted in Figure 16 below.

Figure 16: Google's Vertically-Integrated Ad-Tech Stack



Source: Ari Paparo (2018). Used with permission.

Google is not alone in the pursuit of this strategy of harnessing ownership and control of its own digital advertising exchange, but it is the most advanced and others are playing catch up as they try to emulate its ways. For example, AT&T (Xandr), Microsoft, Amazon and Verizon (Oath) are all pursuing similar strategies in the United States and internationally. In Canada, an industry group consisting of the vast majority of the Canadian carriers and broadcasting companies have formed a Set-Top-Box Industry Working Group under the auspices of the CRTC with the aim of, amongst other things, creating a collectively-held pool of audience data that would be used by the industry as the basis for advertising and other purposes (see further below).

Google's strategy, and the others modeled on it, are so important because it embodies the integration of key aspects of the advertising market itself directly into the company. In this approach, Google also controls the currency upon which its digital advertising exchange operates: i.e. user/audience data. In turn, its own proprietary "measurement and rating systems" governs knowledge of the audience and, consequently, the terms of trade on these digital ad exchanges. Furthermore, Google along with AT&T's Xandr, Verizon's Oath, Microsoft and Amazon are, in essence, establishing rival proprietary ad tech protocol standards as a means of trying to lock in advertising clients on both the "buy" and "sell" side into their rival systems. These rival, proprietary protocols, in turn, are supplanting the common, open protocols that have, for decades, defined the Internet (Nieborg & Poell, 2018)

Ultimately, however, nobody except Google and Facebook are satisfied with what many in the industry and beyond refer to derisively as the "dirty web" based on fraud, deception and caveat emptor all the way through. Indeed, these arrangements were the target in the United Kingdom of the Information Commissioners Office's scathing report, *Update Report into Ad Tech and Real Time Ad Bidding*, ¹⁷ which concluded that the entire digital advertising system is based on fraud and not compliant with the EU's General Data Protection Rules. The ICO gave the ad-tech industry, including Google and Facebook, six months to clean up the mess, after which it will decide how—not if—to regulate the online advertising industry. Several scholars have drawn out the implications even further, suggesign that, in essence, the global internet giants in tandem with other actors in "online advertising" have essentially rewired the internet for surveillance and hyper-targeted messaging. Furthermore, while this was originally done for commercial purposes, those capabilities have been hijacked for disinformation and misinformation operations that now threaten democracy itself (Ghosh & Scott, 2018a and 2018b; Tenove, Tworek & McKelvey, 2018; UK ICO, 2019).

In terms of regulation, this vertical integration between, in the case of Google, search, online advertising and its proprietary digital advertising exchange is a prime candidate for regulatory intervention. The purpose of such intervention would be to institute the principle of vertical separation (Wu, 2010) for reasons of both controlling market dominance but also the integrity of advertising markets, to achieve greater regulatory scrutiny of the internet giant's black box infrastructures and to promote stronger data and privacy protection standards. Such measures would also be in keeping with the European Union's trilogy of market dominance cases against Google in the last two years (e.g. the online search and shopping services in 2017 (€2.3 billion fine), the Android mobile operating system case in 2018 (€4.34 billion fine) and this year's ruling with respect to Google's dominance of the online advertising market. It would also line up with the German Federal Cartel Office's decision earlier this year that prevents Facebook from sharing its users' data across the companies' Facebook, WhatsApp and Instragram services (see Bundeskartellamt, Press release and Bundeskartellamt, Background Information).¹⁸ These are all reference points that both Canadian regulators might follow and also touchstones that could inform policy advocates recommendations with respect to communications, media and digital platform regulation but which have thus far been a blind-spot for such interests, probably because they don't fit with the narrow cultural nationalist lens and industry protectionist stance most such groups seem to inhabit and for which vilification of the internet giant alone seems to be of interest.

Incidentally, the ICO is run by a Canadian, Elizabeth Denham, who cut her teeth in an earlier stint at the Office of the Privacy Commissioner (OPC) in Canada and who has advocated strongly for improved privacy and data protection rules in Canada and stronger enforcement powers for the OPC—pleas that have thus far fallen on deaf ears.

This decision, however, is currently on hold pending Facebook's successful appeal to have the case reviewed by the German High Court (Reuters).

Search

Google's dominance of internet advertising flows from its control not just over its own digital advertising exchange but of the search engine market. While the company has diversified its operations extensively in recent years, it still derives 85% of its revenue from its iconic search engine, Youtube and advertising revenue (Alphabet, Annual Report, 2018, p. 27).

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 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 upper 90 percent range has been the norm for more than a decade, and HHI scores have been nearly off-the-charts in the 7000-8,500 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 2018, Google still thoroughly dominated search in Canada with a 91.5% marketshare—unchanged from the year before. Microsoft (5.1%), Yahoo!! (2.5%), DuckDuckGo (.5%), Yandex (.2) and Baidu (.1) trailed far behind. CR4 and HHI scores were thus, unsurprisingly, sky-high at 99.6% and 8399, respectively. Table 5 illustrates the current situation and developments since 2009.

Table 5: CR4 and HHI Scores for the Search Engine Market, 2009-2018

	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018
Google	92.7	93	91.5	90.9	88.4	87.5	90.6	91.4	91.5	91.5
Bing (Microsoft)	3.7	3.7	5.4	5.5	6.2	5.9	5.2	5.2	5.6	5.1
Yahoo!	2.9	2.7	2.6	2.7	3.6	5.9	3.6	2.9	2	2.5
DuckDuckGo					0	0.1	0.3	0.3	0.6	0.5
Yandex RU										0.2
Baidu	0	0	0	0	0.1	0.1	0.1	0.1	0.1	0.1
AOL	0	0	Ο	0	0	0	0	0.1	0.01	
Ask Jeeves	0.4	0.4	0.4	0.4	0.3	0.3	0.1	0	0.01	
Webcrawler	0.1	0.1	Ο	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	99.6
нні	8618	8665	8401	8295	7863	7717	8239	8383	8408	8399

Source: StatCounter. Global Stats (Various Years). 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 Instagram) and been consolidated over the past decade.

Since 2012, Facebook has grown from 17 million users and a estimated revenue of \$169 million to roughly 21 million users last year with an estimated revenue of \$2.1 billion. As part and parcel of this massive growth, Facebook's estimated average revenue per user (ARPU) in Canada has soared from \$9 in 2012 when it first went public to \$77.72 last year. 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. Indeed, Facebook use has become saturated in several countries around the world, but four underlying forces continue to drive its expansion:

- "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;
- expanding ARPU for "developed markets"; in Canada, for instance, ARPU has soared from \$9 five years ago to \$77 last year;
- 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 (1.8%)) continues to dominate social media in Canada, as Table 6 below illustrates, with 57.2% of the unique visitors using such sites visiting Facebook—double that of Pinterest (12.6%) and those that fall in line thereafter: Twitter (7.2%), Youtube (2.1%), Tumbler 1.8%), Reddit (1.5%), StumbleUpon (.5%) and LinkedIn (.4%). With a CR4 of 95.6% and an HHI of 3980, social media sites are highly concentrated and have stayed remarkably so for a long time. That said, however, Facebook's combined market share has declined significantly over the past three years, falling from 80% of unique monthly visitors visiting the site to just 57.2% last year, while other sites have gained considerable ground, notably Pinterest, Twitter and, to a lesser extent, Youtube. Once again, this is another core element of the internet where concentration trends line up with the view that far from being wide open and a diverse place that would undermine conditions seen with respect to well-established media, the internet is actually characterized by strong drivers of consolidation in many of its core features.

Facebook use has become saturated in several countries around the world

Table 6: Social Media Sites, 2011 - 2018

	2011	2012	2013	2014	2015	2016	2017	2018
Facebook	41.6	49.9	55.2	65.4	79.9	74	74.7	55.4
Instagram						0.1	0.8	1.8
Pinterest		10.2	16.9	13.7	10	14.4	15.1	29.1
Twitter	5.6	8.2	8.7	5.2	3.8	5.1	4.8	7.2
YouTube	4.8	2.2	2.2	0.5	0.1	0.2	0.6	2.1
Tumblr			2.3	7.2	2.1	2.5	1.4	1.8
Reddit	6	6.1	5.9	3.9	2.4	2.3	1.5	1.5
StumbleUpon	39.7	18.6	8.4	3.7	1.4	1.1	0.7	0.5
LinkedIn	0.3	0.2	0.2	0.1	0.1	0.2	0.2	0.4
Google+	0			0.2	0.1	0.1	0.1	0.1
Fark	0.2	0.2	0.1	0.1	0	0.1	0.1	0.1
VKontakte				0	0	0	Ο	0
CR4	92.9	86.9	86.7	91.5	96.1	96.1	96.9	95.6
нні	3396.8	3049	3524	4572.9	6510	5723	5835	3980

Source: StatCounter. <u>Global Stats</u> (Various Years).

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 (61.8%), Apple's Safari (8.9%), Microsoft's Explorer (10.2%) and Firefox (10.4%)—had a combined market share last year of 91.3 percent and an HHI score of 4162 (StatCounter). To be sure, competition between Google, Microsoft and Apple has seen the three digital giants swap places in terms of the number one, two and three browsers over the past six years or so, but other than that competition has consistently been at the very low end of the scale by the sights of the CR4 and HHI measures.

Similar characteristics hold for **mobile browsers**, albeit with a different rank ordering of the players. Just two companies account for 89.6% of the market—Apple's Safari was at 51.4% last year, followed by Google's Android or Chrome browser at 38.2%—while Samsung, with a 6.7% marketshare, the UC Browser (1.6%), and Opera with .5%, lagged very far behind. The upshot is persistent and extremely high levels of concentration on the basis of both the CR4 (98%) and HHI (4155) 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, Opera's operating system.

Similar patterns prevail once again in terms of desktop and smartphone **operating systems**. When it comes to desktop operating systems, the CR4 comes in at 97.4% for the installed base (Microsoft Windows, 74.5%; Apple OS X, 20.4%, Google Android/Chrome, 1.4% and Linux at 1.3%) (StatCounter). Consequently, the HHI is at the extreme end of the scale at 5973. The extent of Microsoft's control of installed operating systems has stayed remarkably constant in the mid 70-85% range over the years albeit with some downward drift in recent years.

For **smartphone operating systems**, the top four players accounted for 99% of the market, with Apple's iOS (54.5%) and Google's Android OS (44.4%) accounting for almost all of the market and with Blackberry/RIM (.5%), Samsung (.2%) and Microsoft (.1%) having insignificant share amongst themselves. Again, the significant growth and adoption of the Google Android operating system for mobile phones stands out, and briefly replaced Apple at the top of the rankings in 2017 before sliding downwards in the last two years. The HHI score was 4938 in 2018 (StatCounter). For all intents and purposes, however, Apple and Google 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 digital media technologies but congeal—albeit with a few exceptions, like online gaming, as seen above, and internet news sources, as discussed momentarily.

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

The fact that Google and Facebook thoroughly dominate the \$7.6 billion online advertising market in Canada is beyond dispute. That their grip on the internet advertising market continues to consolidate is also clear. Their dominance of internet advertising means that they loom large relative to the \$14.1 billion spent last year in Canada on advertising across all media (e.g. TV, newspapers, online advertising, radio, magazines and billboards), but do they dominate this area too?

Table 7 below conveys a number of fascinating points that help to address that question. For one, it clearly shows that Google stands in a league of its own, sucking up more than a quarter of all advertising revenue in Canada. Together, Google and Facebook raked in more than two-fifths (42.2%) of all advertising spending last year, a figure that was up substantially over the previous year. Google is also, more or less, twice the size of the next two biggest actors in the advertising market, Facebook and Bell, respectively. Combined, these three players—Google, Facebook and Bell—form something of an advertising oligopoly, with over half (53.2%) of all revenue across all media going into their coffers.

> the internet is actually characterized by strong drivers of consolidation in many of its core features

Table 7: Total Advertising Revenue Across All Media, Market Shares and Concentration Scores, 2018

	\$ Millions (2017)	Market Share (2017)	\$ Millions (2018)	Market Share (2018)
Google	3437.8	25.6	3869.7	27.5
Facebook	1702.1	12.7	2071	14.7
Bell	1631.3	12.2	1549.5	11
Shaw	823.7	6.1	777	5.5
Rogers	746.8	5.6	745.4	5.3
Quebecor	441.3	3.3	415.5	3
Postmedia	545.8	4.1	409.8	2.9
Torstar	448.2	3.3	405.8	2.9
СВС	318.3	2.4	248.8	1.8
Newcap	177.4	1.3	176.8	1.3
Twitter	108.1	0.8	117.5	0.8
Cogeco	110.5	0.8	103.3	0.7
Glacier/Continental (8)	105	0.8	90	0.6
Pelmorex	77.8	0.6	86.4	0.6
Power Corp	92	0.7	85.6	0.6
Globe & Mail	112.8	0.7	77.3	0.5
Groupe Capitales Médias	70.6	0.5	76.2	0.5
Yellow Pages	72.7	0.5	50.8	0.4
Transcontinental	158.8	1.2		
Total \$ (Mills)		13404.5		14065.5
Facebook + Google Share		38.3		42.2
CR4		56.6		58.7
CR10		76.6		75.9
нні		1086.8		1187

Sources: See the "All Media Ad\$ Market Share" sheet in the CMCRP Workbook).

Table 7 also shows that Google, Facebook and Bell tower over a second tier of well-known media companies, respectively: i.e. Shaw, Rogers, Quebecor, Postmedia, Torstar, the CBC, Newcap, Twitter, Cogeco and Glacier. The sizeable gap between the "big 3" and the second tier companies with annual advertising revenue between \$100 million and \$800 million in 2018 is also illustrated by the fact that Google had estimated advertising revenue in Canada last year that were equal to the rest of the companies on the list other than Facebook and Bell. Its revenues were also nearly ten times that of Torstar and the CBC's total advertising revenue, respectively. While not quite in the same league as Google, for its part, Facebook's revenue in Canada was nearly three times that of all daily newspapers put together and roughly twenty-seven times the Globe and Mail's advertising revenue last year. One last example to illustrate the magnitude of the digital duopolies' influence with respect to total advertising spending in Canada: Google's online advertising revenue alone last year was more than all of the money spent on TV and daily newspaper combined, i.e. \$3,869.7 million versus \$3,091.9 million (television) and \$697 million (daily newspapers).19

The consolidation of advertising revenue can also be seen from the fact that while Bell is the third biggest recipient of advertising spending in Canada, it lost advertising revenue year-over-year. This experience

19

is general. Indeed, while Canada's major commercial media companies all cut substantial figures amidst the rankings shown in Table 7, all of them lost advertising revenue year-over-year, except Pelmorex and Groupe Capitales Médias. The lessons in this respect seem obvious: Google and Facebook's dominance of online advertising is stealing away advertising revenue of nearly all of the other actors in the Canadian media system. It is this reality that is driving the tendency in many quarters to condemn the "vampire squids" from Silicon Valley.

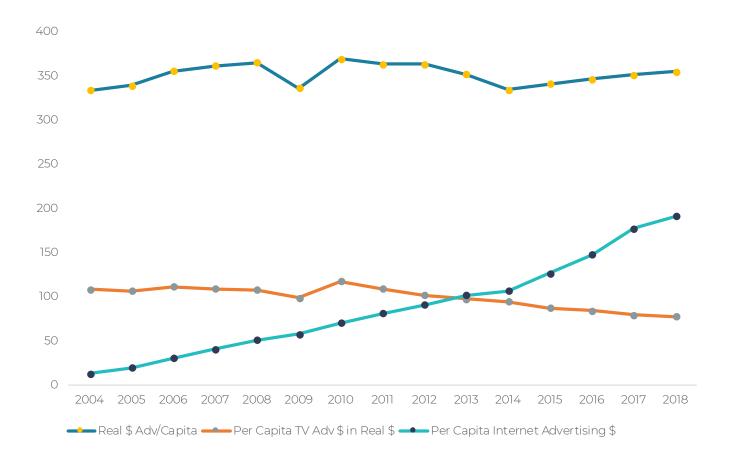
That said, is there anything that tempers these observations? In fact, three considerations cut across the grain. First, while Google and Facebook now account for more than two-fifths of all advertising money spent in Canada, this is *a far cry* from the online advertising market where they account for double that amount. In other words, whilst the digital giants are undoubtedly powerful within the context of the overall advertising market in Canada, there are significant differences in the degree of their clout in these two different contexts that must be kept in mind.

Perhaps surprisingly, one key feature that stands out from Table 7 is that the advertising market as a whole is only moderately concentrated by the standards of the CR4 and not concentrated at all by the more sensitive standards of the HHI. Indeed, with an HHI score of 1187, it is very comfortably in the unconcentrated zone of the HHI scale. This is further illustrated by the fact that the combined market share of the eighteen companies shown is 80.6%—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, online gaming, 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 have significant market power but they do *not* dominate the entire advertising market in Canada.

That said, however, the issues are coming to a head nonetheless because Facebook and Google's growing clout is occurring exactly at the moment when, as noted in our first report, advertising spending appears to have stalled and even *declined* over the last decade when measured on a per capita basis, in inflation-adjusted dollars, and relative to the size of the media economy and gross domestic income. Figure 17 below repeats some of the evidence from the first report in order to illustrate the point anew.

Google and Facebook have significant market power but they do not dominate the entire advertising market in Canada

Figure 17: Hitting a Ceiling? Per Capita Advertising Spending for "All Media", Television and the Internet, 2004-2018 (Real \$)



Sources: See the "Ad\$ All Media" sheet in the <u>CMCRP Workbook</u>).

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 7 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 recent *Shattered Mirror* report.

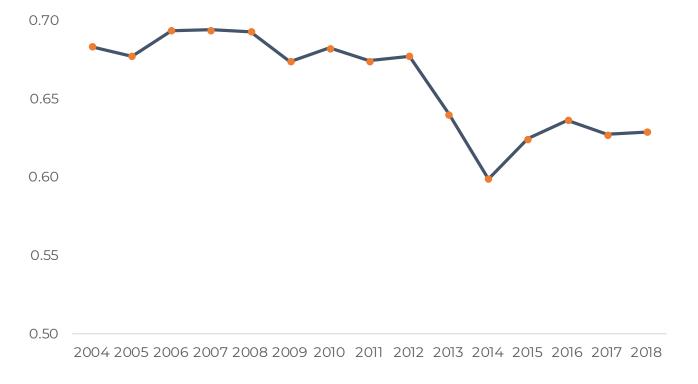
The assumption behind such portraits also assumes that if only Google and Facebook can be cut down to size, advertisers will come rushing back to the older media firms that have been engaged in a losing battle with the new breed of digital media giants. Yet, the role of public policy is not to protect the private business interests of the industry players listed in Table 7 above. Even if that course of action was pursued, it is doubtful that it would succeed at achieving its goal of redirecting advertising revenue from the digital duopoly back into the coffers of Canadian media companies. Indeed, using public policy to try and claw back advertising revenue now ending up in the coffers of Google and Facebook would leave the three major things responsible for their dominance untouched: first, it would do nothing to alter the faltering state of advertising that we have emphasized; second, they enjoy massive economies of scale that traditional media will find extremely difficult, if not impossible, to match (Hindman, 2018; Noam, 2016); and third, such measures do nothing to reign in the relentless data harvesting practices and complicit lax data and privacy protection regulations that fuel the digital giants' business models.

As a result of the hyper-efficient digital infrastructure that they make available to do the 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 some of 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 are also present across the wider economy. Given that one reason why 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.²⁰ 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 financial crisis, circa 2007-2008, so, too, has advertising spending in Canada been weak (see, for example, Picard, Garnham, Miege, Vogel).

Indeed, as the last report showed, advertising spending as a percentage of gross domestic income has fallen significantly in recent years, seen in Figure 18 below.

Figure 18: Advertising Spending as a Percentage of Canadian Gross Domestic Income, 2004-2018



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 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—than they currently do so that they can better "know the audience" and, consequently, at least in its view, compete more effectively 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 Google

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.

and Facebook with respect to advertising but more broadly with Netflix, Amazon and Apple across the digital audiovisual media sectors 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.²¹

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 because such practices will ensure that the companies are in compliance with the privacy and data protections given to Canadians under *PIPEDA*.²²

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 <u>Office of the Privacy Commissioner</u> (OPC) turned back a similar initiative—Bell's Relevant Ad Program—in 2015. According to the OPC in that instance,

... 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 its core elements have been resurrected under the auspices of the CRTC's Set-Top Box Industry Working Group. However, rather than Bell's go-it-alone approach of three years ago, the new version intends to create a common pool of subscriber data out of audience measurement practices that will be shared within the industry under the guise of "increasing the discoverability" of Canadian content. In the context of the fast changing television landscape where American internet giants like Google, Amazon, Facebook, Apple and Microsoft (GAFAM) are cast as poised to take-over the world and an ever rising stake of people's attention and, thereby, the culture of the nation, the mission of the Set-Top Box Industry Working Group is cast as staving off an existential crisis of the nation.

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.

²² Numeris is the audience measurement service the companies and CRTC are working with on this project.

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.

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) <u>Democracy Under Threat: Risks and Solutions in the Era of Disinformation and Data-opolies</u> and Privacy Commissioner <u>Daniel Therrien's Reply</u> to that committee.

Newspapers and Magazines

This section of the sector-by-sector analysis of concentration trends turns to two other media that have depended primarily on advertising revenue for the last century: newspapers and magazines. As we saw in the last report, as with broadcast television, these two media sectors are also in crisis, with their revenues falling fast and a myriad of other tell-tale signs of crisis.

Attention in this section will be focused on the state of the newspaper industry but before turning to that a few brief sentences on the magazine sector. Of all media sectors covered by the CMCR Project, magazines are the least concentrated. Concentration levels fell by nearly half on the basis of CR scores between the early 1990s and 2018, and more than seven-fold ten by the lights of the HHI criteria since 1988. The CR4 last year was 31, and the HHI at the extremely low level of 300. That said, however, even the best available data for this sector is terrible and needs to be treated with caution.²³

Turning to the newspaper sector, prior to the economic woes that began to beset the industry a decade ago, concentration levels had risen steadily from 1984 until 2000, with a few breaks along the way. 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%).²⁴

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 [and regional] 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 Quebecbased 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 was the creation of a significant new Quebec-based, newspaper chain with estimated revenue of \$118 million in 2017, and 4.5% of the average weekly circulation across the country. However, even new ownership has not staved off the troubles at the press group. Revenues declined last year to an estimated \$103 million and the new owners have pressed by the Quebec and Federal government for policy measures to brighten its future.

In the Atlantic Provinces, the long-established Halifax Chronicle Herald group refashioned itself as the Saltwire Network after buying twenty-seven Atlantic region community papers from Quebecbased Transcontinental in April 2017 (Canadian Press, 2017). Transcontinental sold-off the rest of its community newspapers in Quebec and Ontario in a series of transactions over the next year to several new publishing groups, namely ICI Media, Groupe Lexis Media and Michael Raffoul (Transcontinental, 2017; Transcontinental, 2018; 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, Groupe Capitales Médias, Group Lexis Media and Raffoul Media in parts of Quebec and eastern Ontario, 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 risen slightly in the past few years 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 67.5% in 2018, with concomitant declines in the HHI. While Postmedia's grip seemed to be 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, it has reconsolidated its place after acquiring the Sun newspaper chain in 2015 and via the newspaper swap with Torstar just described. By 2018, its a share of the muchdiminished newspaper market had risen to 30%.

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 injected \$600 million in subsidies 2018 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 <u>Professor Robert Picard</u> 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).

With the advertising subsidy melting away for reasons also discussed in the first report, 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, for reasons discussed in our first report and by many communication and media historians (see, for example, <u>John & Silberstein</u>, 2015; <u>McChesney & Nichols</u>, 2010; <u>Pickard</u>, 2019).

several regional press monopolies have been consolidated across the country, each with a de-facto monopoly in their territory

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, and especially in terms of online audiovisual media.

During the first decade of the 21st Century, the diversity of online news services initially fell as the amount of time people spent on the top 10 online news sites jumped from 20 to 38 percent of the total time people spent at online news sources. Moreover, most of the increase in time that people spent visiting online news sources went to sources that were extensions of well-known news media outlets such as the CBC/Radio Canada, Quebecor, CTV, the *Globe & Mail*, *Toronto Star*, Post Media and Power Corp from Canada or foreign 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, concentration levels remained low.

For the last four years, I have obtained a new dataset from Comscore to replace the one from Zamaria and Fletcher, who stopped collecting such data in 2011. The two sources use different measures and are, thus, not directly comparable, but taken together, both sources show that the downward drift in concentration levels with respect to online news sources that people turn to has contined. Internet news sources continue to be, in fact, amongst the most diverse of all the sectors reviewed in this report, except magazines. Table 8 below illustrates the point for 2017 and 2018.

Table 8: Internet News Sources, 2017-2018

	Avg Monthly Unique Visitors (updated end of year) 2017	Market Share 2017	Avg Monthly Unique Visitors (updated end of year) 2018	Market Share 2018
CBC- Radio Canada	18221	7	20223.14	5.91
Pelmorex (Weather	13450	5.2	14578.37	4.26
Postmedia	13450	5.2	13784.68	4.03
Huffington Post	15459	6	13492.01	3.95
CTV	10353	4	12351.39	3.61
Torstar	11714	4.5	10671.35	3.12
CNN	8287	3.2	9716.09	2.84
MSN News (include MSN	5184	2	8742.27	2.19
Money)	310-1	۷	07-72,27	2.15
Globe and Mail	6815	2.6	7114.89	2.1
Quebecor/Canoe	6735	2.6	6927.46	2.0
Weather Company	5740	2.2	6827.69	2.00
BBC	5482	2.1	6580.08	1.92
NBC	5204	2	6536.42	1.91
CNET Daily Mail	6038	2.3	6780.07 5582.58	1.74 1.63
USA Today	4797	1.8	5580.94	1.63
The Guardian	4548	1.8	5088.70	1.49
Business Insider			5001.79	1.46
New York Times	4865	1.9	4863.94	1.42
AccuWeather Sites	3884	1.5	4214.54	1.23
LaPresse	3972	1.5	3836.29	1.12
Fox News	2734	1.1	3409.47	1.00
Vox Media (The Verge)			3361.26	0.98
Washington Post	3367	1.3	3351.08	0.98
Rogers (Macleans + CityTV)	5318	2	3339.03	0.98
Ind. & Evening Standard	3813	1.5	3142.52	0.92
NY Post	2041	0.8	3040.11	0.89
CBS	3254	1.3	2832.97	0.83
Time	2651	1	2522.84	0.74
Hearst	2163	0.8	2441.93	0.71
Sun Online	1,790	0.7	2395.00	0.70
Groupe Figaro CCM	-,			
Benchmark			2371.93	0.69
Bloomberg			2333.85	0.68
Telegraph	2,774	1.1	2246.67	0.66
Tronc	1799	0.7	2140.44	0.63
Environment Canada	1864	0.7	2087.02	0.61
Reuters			1821.66	0.53
Atlantic Media	2035	0.8	1751.44	0.51
Glacier Media Group	1814	0.7	1580.18	0.46
Newsweek Media	2,828	1.1	1465.05	0.43
Saltwire			1059.68	0.31
National Geographic	1533	0.6	1050.68	0.31
NY Daily News	1223	0.5		0.00
IFL Science	1077	0.4	983.81	0.29
Total Avg Monthly Viewers		259772.0		341989.6
CR4		23.4		18.2
нні		261.9		169.0

Note: Only Internet news sources with more than .5 of online news traffic are included in this table.

Source: ComScore (2019) Media Trends—News and Information Categories, 12 Month average. See the "Internet News Sources" sheet in the CMCRP Workbook.

As Table 8 shows, Canadians get their news from a wide range of sources on the internet. The CBC continues to be at the top of the list as a general news source, and well ahead of second-ranked Postmedia (excluding Pelmorex for the moment, since it's not a general news source). Other familiar media enterprises from Canada also loom large: e.g. Postmedia, CTV, Torstar, the Globe and Mail, Quebecor, La Presse, and so forth. It is also clear that some online news aggregators and sources of journalism have climbed up the ranks as well (e.g. Huffington Post, MSNNews, CNet, Vox Media). There's also a several quality US and UK news sources near the top of the list as well (e.g. CNN, the BBC, NBC, The Guardian, The New York Times, etc.). The fact that three weather reporting services—the Weather Network, the Weather Company and Accuweather—also stands out in terms of their prominence as a consistent source that people turn to for weather-related information.

We spent considerable time in the 2016 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, it is critically important to point out that no new Canadian online news ventures such as iPolitics, the National Observer, AllNovaScotia, The Tyee, 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 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 online news sources that originate online 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. 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. Indeed, the "crisis of journalism" is incredibly important because it is precisely the traditional news media that continue to be the engines of original journalism that sets the agenda for the rest of the media. Online news source have not come anywhere close to picking up the slack and it is increasingly doubtful that they ever will. This is not to say that they are unimportant but rather to acknowledge the limits to what they have and are likely to accomplish, while focusing attention on the need for measures to shore up the faltering news system that remains indispensable to democracy.

The Network Media Industries as a Whole

The following paragraphs draw this report to a close by combining all of the moving and mutating bits and pieces into a bird's eye view of long-term trends across the network media economy. To be sure, one of the most notable developments over the past decade or so is the fast rise of internet companies up the ranks of the leading telecoms, internet and media companies in Canada. This year we have taken a broader, even if preliminary, view of the online video, music, gaming and app stores that comprise the digital audiovisual media services (AVMS) landscape in order to develop an even fuller and more detailed portrait of these developments than we have been able to capture in the past.

In doing so, we have charted the explosive growth of the digital audiovisual media sectors in the last five years, with revenue soaring from \$1.4 billion in 2014 to nearly \$4 billion last year. Add in internet advertising, and the digital AVMS sectors constituted a \$11.6 billion centrepiece of the network media economy in 2018, collectively accounting for 14% of all revenue—double what it was in 2014. Of course, it is precisely such developments that have propelled major global actors like Google, Amazon, Facebook, Apple and Microsoft (the so-called GAFAM group of internet giants) as well as Netflix and Twitter more deeply into the media landscape in Canada than ever before.

There is no denying that all of these developments are significant. As we have seen, in some sectors, notably online advertising, the internet giants' dominance is near iron-clad, and Google and Facebook's grip is becoming even tighter with each passing year. Open the lens a little bit further, and it is also clear that the digital duopoly have acquired a steadily rising share of all advertising revenue in Canada. Indeed, by 2018, the two companies controlled 42% of the \$14.1 billion spent on advertising across all media. This is indeed significant, and it is growing. That said, however, the two commonly used measures of concentration point in opposite directions: by the CR4 measure, concentration levels are moderately high and should be of concern; switch the metric to the sensitive HHI method, however, and the results indicate a competitive and quite diverse advertising market.

It is essential, however, to remember that advertising is *not* the economic engine of the network media economy. Indeed, the fulcrum of the media economy is "pay-per media", not advertising-based media, although one would be hard-pressed to know this elementary point given the tenor of most criticisms hurled against the internet hypergiants.

Once we open the lens wider to reflect this elementary fact and examine all of the audiovisual media services—that is, the content media sectors—it is clear that the rapid growth of the digital AVMS sectors over the last half-decade has radically changed this part of the landscape as well. In fact, in 2018, the global internet giants had a combined total of \$7.9 billion in revenue from the AVMS sectors examined in this report. Table 9 below distills their respective revenues from the digital AVMS sectors examined in this report.

the fulcrum of the media economy is "pay-per media"

Table 9: Total Revenues of Main Foreign Digital AVMS Companies in Canada, 2018 (millions\$)

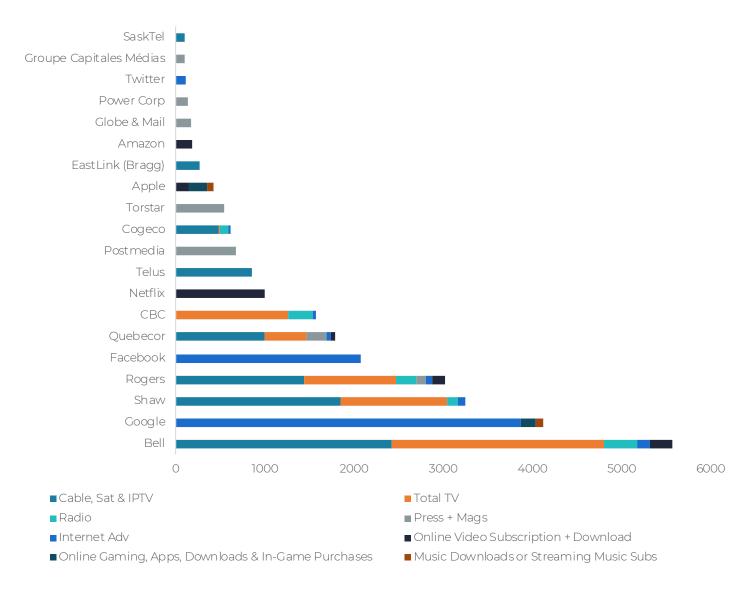
	Internet Adv	Online Video Subscription + Download	Online Gaming, Apps, Downloads & In-Game Purchases	Music Downloads or Streaming Music Subs	Total
Google	3869.7		161	83	4113.7
Facebook	2071				2071.0
Netflix		1000.8			1000.8
Apple		153.6	199.6	69.1	422.3
Amazon		181			181.0
Twitter	117.5				117.5
Total \$					7906.3

Source: see the "Top 20 w Telecoms" sheet in the CMCRP Workbook.

Cutting into the data from just the perspective of the content media industries without the much larger telecoms, internet and broadcasting distribution infrastructure industries brings into sharp relief the significant scale that the digital giants have amassed within Canada in a relatively short period of time. Indeed, the leading global internet players garnered a quarter of the \$32.3 billion in revenue across the AVMS sectors combined last year. ²⁵ Obviously, communication and media companies in Canada are facing growing competition on account of these developments. Figure 19 below depicts the rank ordering and relative scale of the leading players in the AVMS sectors in Canada in 2018.

This includes: broadcast TV, pay & specialty TV, online video, music and gaming services, app stores, internet advertising, newspapers and magazines.

Figure 19: Leading Companies in the Audiovisual Media Sectors in Canada, 2018



Source: see the "Top 20 w Telecoms" sheet in the CMCRP Workbook.

As this report shows, the growth of online video services has led the way in terms of the quick paced developments taking place in the AVMS sectors more broadly, and this has had four major effects: first, it has greatly expanded the size and number of actors in the television marketplace, including in terms of investment in television and film production in Canada, which has been at record highs for several years. Second, it has brought new levels of diversity and choice while driving down the high levels of concentration that had spiked earlier in the decade after a major bout of horizontal, diagonal and vertical integration swept across the communications and media industries in Canada. Third, it has rekindled concerns about US dominance of audiovisual media in Canada, given that, combined, Netflix, Amazon and Apple accounted for three quarters of the estimated \$1.8 billion online video sector in 2018 while Bell, Rogers and Quebecor accounted for the rest. However, put this into the context of all television services, and the US online video giants' market shares are much less daunting at 11.4%, 1.7% and 1.3%, respectively—or less than 15% of the total when combined altogether.

Lastly, the online video sector itself, as we also have shown, is also highly concentrated in its own right. Those levels of fallen in recent years with the advent of new actors on the scene, but still remain well above the highly concentrated thresholds of both the CR and HHI measures. Indeed, as we have shown, far from being immune to high levels of concentration, the internet is, in fact, characterized by astonishingly high and stubborn levels of concentration.

This is the case not just in online video services and online advertising but also internet access at the local level, search engines, social media sites, browsers and operating systems. Thus far, in fact, there are only two exceptions to this general tendency amongst the range of online media that we have examined: online news as well as online gaming, gaming apps, game downloads and in-game purchases. In short, early claims that the internet would be the antidote to media consolidation are wide of the mark and, indeed, key sectors of the internet itself are now being defined by just such processes.

Once we look beyond the AVMS sectors, however, to include the whole of the network media economy, the picture changes yet again in several ways. Figure 20, below, starts the process by showing the trends across the network media economy over time on the basis of CR1, CR4 and CR10 scores.

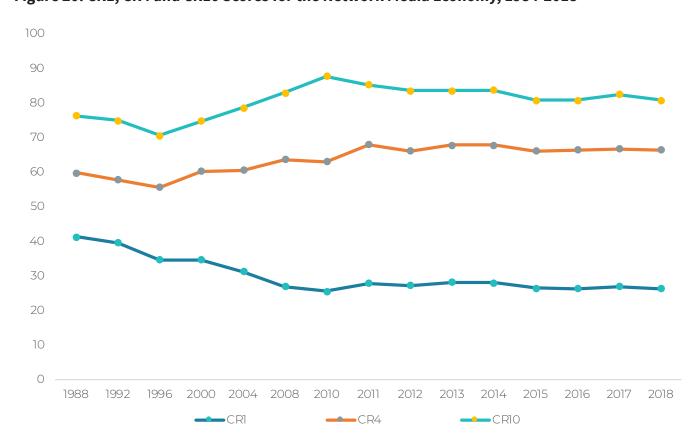


Figure 20: CR1, CR4 and CR10 Scores for the Network Media Economy, 1984-2018

Sources: see the "CR & HHI" sheet in the CMCRP Workbook.

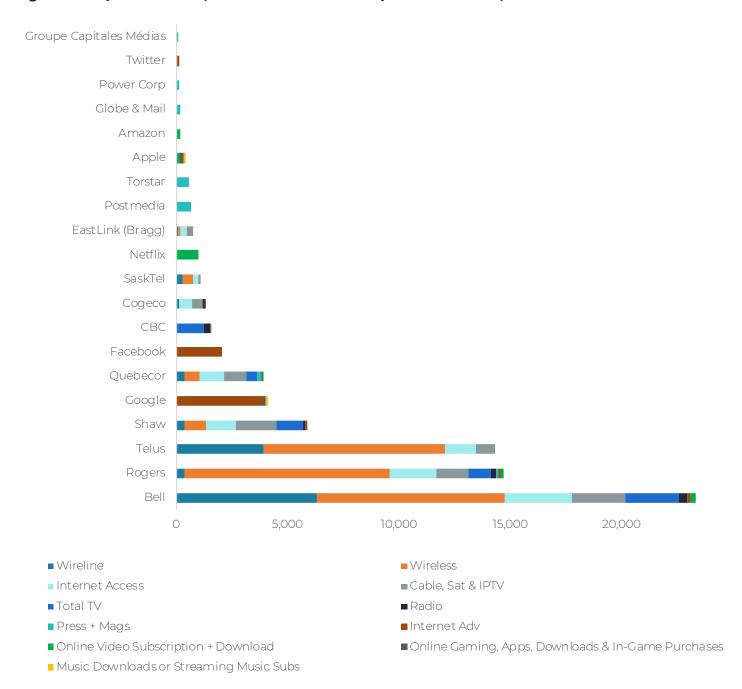
Looking across the entirety of the network media economy, several distinct points emerge: The biggest company's share of revenues across the media three decades ago was 47%; in 2018, it was much less, but still a very large 27.5%, and within a vastly larger media universe. In 1984, that company was BCE; it still is today, and it is much, much 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 (17.4%), Telus (16.9%) and Shaw (7%) make up the "big four" communication and media giants in Canada. Together, they accounted for 68.7% of the whole network media economy in 2018—a pattern that has stayed remarkably stable despite the upheavals taking place in certain sectors, as described above. In terms of the structure of the industry as a whole, the most striking change in the past decade is the consolidation of the role that the big four *vertically-integrated* telecoms-internet and media conglomerates—Bell, Rogers, Shaw and Quebecor--have come to play at the apex of the network media economy in Canada. Thus, to help put the scale of US-based internet giants' influence in perspective, and their 9.2% share of all revenue, it is useful to shine a bright light on the fact that, altogether, Bell, Rogers, Shaw and Quebecor accounted for 56.5% of total revenues last

year. Add Telus to the fold and the market share of the top five Canadian companies swells to 73.4%—an appreciable rise over the year before—and a vastly bigger indicator of these companies' clout relative to that of the major global internet companies within the Canadian context.

Figure 21 below shows the respective rank and composition of the top 20 telecoms, internet and media companies based on their revenues in Canada.

Figure 21: Top 20 Telecoms, Internet and Media Companies in Canada, 2018



Sources: see the "Top 20 w Telecoms" sheet in the CMCRP Workbook.

Putting aside the nationalistic framing of such issues, focusing on the largest ten firms reveals a mixture of Canadian and US-based firms at the top of the list. The inclusion of non-Canadian firms on the list is a significant change in itself. Overall, the top ten firms accounted for 85.4% of all revenues in 2018—a figure that has increased over the past five years, largely as a reflection of the rapid ascent of Google and Facebook up the ranks of the leading companies operating in Canada, combined with the tightening hold of the large Canadian players in their main lines of business. As of last year, Google and Facebook ranked as the fifth and seventh largest firms operating in the media economy in Canada.

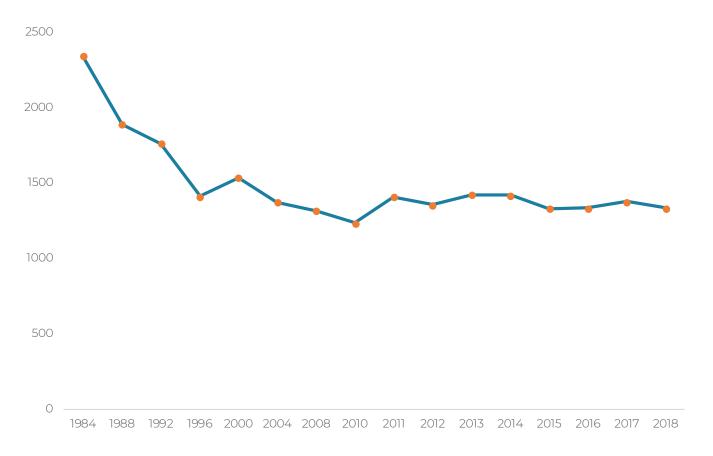
That the largest ten firms now account for 85.4% of all revenue takes on added significance in relation to arguments about whether or not the rise of the internet would render concerns with media concentration obsolete. The answer in this context is a resounding "no". In fact, the share held by the top ten firms today is higher than it has ever been over the three-and-a-half decades covered by our research (except for one year, 2010). Indeed, in the 1980s and 1990s, in contrast, the figure for the top ten firms' share of the media economy as a whole hovered in the seventy-percent range, and only crossed into the eightypercent range in the last decade. The top twenty companies depicted in Figure 21 above accounted for 90% of the \$86.2 billion network media economy in Canada in 2018. Of course there are hundreds or thousands of other entities that exist across Canada but, by and large, they fill in the nooks and crannies not occupied by the top 20 entities on the list.

Today, three firms in Canada stand in a league of their own: Bell, Rogers, and TELUS. They have unmatched national reach across the communications, internet and media landscape, and revenues that are multiple times greater than their second-tier peers, again as Figure 21 above shows. They stand far apart from a distant second tier of a dozen, more specialized telecoms, internet and media companies, with revenues in the \$400 million to \$6 billion range, including: Shaw, Google, Quebecor, Facebook, the CBC, Cogeco, Sasktel, Netflix, Eastlink, Postmedia, Torstar and Apple, in that order. Lastly, rounding out the landscape is a third tier of firms with revenues in the \$100-\$200 million range that tend to be more specialized, or whose media interests are peripheral to their core business interests, such as Amazon, the Globe and Mail, Power Corporation, Twitter and the relative newcomer Groupe Capitales Médias—in that order. In addition to being more specialized, the activities of this latter group tend to be quite regional in nature.

That said, the evidence in this domain is never to one side. In this regard, while examining the scale of the top four and top ten companies over time shows that concentration trends for the network media economy as a whole have risen. The HHI measure, however, reveals a somewhat different run of events that can be summarized as follows: concentration levels across the whole of the network media economy have fallen greatly over the past thirty-four years. Indeed, they are lower now than they were at the turn-of-the-21st century and a far cry from what they were in 1984. This no doubt reflects the fact that the media economy has grown massively larger and much more complex over time, while bringing new actors on to the scene.

Rather than a simple story of progress over time, however, the trend is not a steady one. From 2010 through to 2014, for example, the general downward drift of concentration levels that had held sway for a quarter-of-a-century reversed and rose substantially over the course of the next five years. This registered the significant bout of consolidation across the media landscape, as discussed above. Indeed, the upward thrust of concentration levels at this time is visible in the results of the HHI score over time, as depicted in Figure 22 below. Starting in 2014, however, the HHI score picks up the advent of new players on the scene, and once again begins to drift downwards.

Figure 22: HHI Scores for the Network Media Economy, 1984-2018



Sources: see the "CR & HHI" sheet in the CMCRP Workbook.

For some observers, the steep drop in HHI scores over time proves the point that concerns with media and internet concentration are misguided. For them, markets are becoming more diverse and competitive all the time, and the HHI scores reported above seem to prove it. Moreover, 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 media sectors that make up the "digital ecosystem", or the various players that are at war with one another for their survival, and for consumers' attention, affection, and, most importantly, their almighty dollars.

That conclusion, however, is problematic for several reasons. First, it fails to pick up on the significant reversals along the way, in particular, the sizeable uptick in the HHI scores earlier this decade as a handful of communication and media conglomerates in Canada pursued a strategy of consolidation in a bid to lock in their place at the apex of the network media economy: Bell, Rogers, Telus, Shaw and Quebecor. Second, while it is essential to take the "bird's eye" view of the network media economy as a whole, 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 telecoms and internet access sectors, the audiovisual media sectors and core elements of the internet, respectively. Once we do this and use the "scaffolding method", it is possible to pick up on both the specific dynamics within each media sector and at each level of our analysis as well as across the network media economy as a whole, as the analysis in this report has done.

Table 10 below provides a snapshot of the network media in 2018 by listing the sectors where concentration was low, those that were moderately concentrated, and those that were highly concentrated by HHI standards.

Table 10: Concentration Rankings on the basis of HHI Scores, 2018







Concluding Thoughts & Commentary

Several things stand out from our two-part series of reports this year. First, we are nowhere near being at 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 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 after 2010. Yet, that developments in this domain are dynamic rather than static is indicated by the fact that concentration levels have once again fallen in the past five years, largely since 2014 and due specifically to the rapid rise of several fast emerging digital AVMS sectors online video, music, gaming subscription and download services and app stores—and the range of new actors that have ushered in these new services, especially Google, Apple, Facebook, Amazon and Netflix.

The last five- to eight-years have also seen a gentle decline in concentration levels across most of the telecoms and internet access sectors. New entrants in mobile wireless have carved out some important gains that need to be built upon rather than left to wilt, as has been 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, Quebecor'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 National Capital region, and higher monthly data allowances. So, too, has Shaw's Freedom Mobile carved out an important spot for itself in BC, Alberta and Ontario in terms of revenues and market share, and with more affordable rates that have also forced the big three national carriers to modify their own pricing practices in response.

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 closely and a history emerges showing that things weren't always thus, and that even within the last decade the indy ISPs that did so much to develop internet access in Canada in the first place are slowly but surely once again expanding 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, will be in the details, and those details continue to be hammered out in the Federal Court of Appeals after the incumbents challenged the CRTC's already protracted proceeding on this matter.

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 remain highly concentrated. In these areas, a lesson emerges: the telecoms and internet access industries as well as many core elements of the internet, including broadband access, online video, internet advertising, search, browsers, operating systems and social network sites, are not the harbingers of a communications cornucopia where concerns with concentration vanish. Instead, they constitute 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 (on which more in a moment in terms of potential regulatory responses).

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 stables 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)²⁶ 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.

We also showed that the online games, game downloads and in-game purchases sector have grown swiftly to become a \$1.33 billion industry by last year, one which is characterized by a fairly diverse range of companies and business models (i.e. subscriptions to gaming platforms; subscriptions to particular games; revenues from direct-purchase game downloads and in-game purchases). There is a core group of global companies that is active in each of these sub-areas of the digital games industries, such as Microsoft, Sony, Nintendo, Activision Blizzard, Electronic Arts, Valve and, moving swiftly up the ranks, the Chinese internet giant, Tencent. Together, these companies account for just under an estimated three-

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quarters of the online gaming industry, while Apple's iOS app store and Google Play had a combined estimated revenue from their app stores of \$360.6 million in 2018, or roughly 27% of online gaming, gaming applications, game downloads, and in-game purchases revenue. In other words, they do not dominate this sector.

Lastly, if we treat Apple's iOS app store as a market in itself, we can see that three big global players have emerged that are a cut-above others in this domain: e.g. Tencent, with revenue of \$31.6 million and a 19% market share, Machine Zone, with revenue of \$21 million and a 12.7% market share, and Activision Blizzard, with revenue of \$20.6 million and a 12.5% market share. With a CR3 of 44%, a CR4 of 50%, and an HHI score of 817.1—all of which point to low levels of concentration—Apple's iOS app store features a fairly diverse and competitive range of game publishers organized around a variety of quite different business models and also characterized by the similar logic of "blockbusters" and flops that drive both the industry and the companies fate from year-to-year in other cultural industries such as film, books and music.

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, online video services, 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. Online video services are becoming more and more prevalent as well, with Netflix, of course, being the clear winner by far, and in well-over half of Canadian households at the end of 2018. Beyond Netflix, though, Amazon Video, Apple's iTunes, Bell's Crave, Quebecor's illico and Rogers' SportsNet Now are also expanding significantly.

The idea that concentration levels in many sectors of the 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 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 take-over 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 also 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. It 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, however, is in terms of its sky-high levels of diagonal integration that now prevails between different mobile wireless, broadband internet access and broadcast distribution networks (essentially, telecoms operators), and between broadcast and pay television services, as well as *vertical* integration between telecoms operators and commercial TV services (other media content).²⁷ We have dealt with this point at length in several other reports in the past two years, so will only highlight a few of the key ideas here (see here, 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 also common in other countries: Vodafone is a good proxy for this given the many countries that it operates in, although it also operates wireline networks in several 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 have fixed-line broadband interests". 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 in 2017.

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 in the direction of the Canadian situation over the last three years with the consolidation of Time Warner Cable, Brighthouse Cable and Liberty Media in 2016, and AT&T's take over Time Warner in 2018. 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

Discussions of these points tend to distinguish between "horizontal" and "vertical" integration. However, this report follows 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.

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

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 streaming services from NBA, MLB, and so on. The only major entity to *not* offer its own such services is Comcast NBCUniversal, ²⁹ and this is, not coincidentally, likely due to the fact that, until recently, it was the only vertically-integrated conglomerate in the US.

Independent television services, in short, have a lot more incentive to offer their services on a standalone basis over the internet and by way of the growing ranks of global online video aggregation and distribution services like Amazon Video and Apple iTunes. Indeed, we have seen this in Canada with some of the smaller independent pay TV services, notably OUTtv, which has turned to such means to access international markets in South America, and South Africa, New Zealand and Australia, amongst other places. Indeed, in this sense, international and "direct-to-subscriber" services delivered over the digital platforms offer a strong alternative to dominant cable distributors in Canada that largely dictate the terms of carriage for independent audiovisual media services, and in so doing, often foreclose potential new lines of revenue such as online distribution and online advertising, as we noted in our first report. They do so in order to preserve the investments they have sunk into their cable distribution networks for as long as possible.

Ultimately, 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.

Structure matters with respect to the global internet giants as well. Indeed, a similar logic to those just described with respect to the vertical integration between telecoms and television also girds the digital platforms as well. Google's dominance of online advertising, for example, has given it the ability to set the terms of online advertising by, in particular, vertically extending its reach to the outright ownership and control of its own digital advertising exchange and the currency upon which buyers and sellers trade on that exchange: audience data. This is but one dimension of a larger process that some refer to as the "platformization" of the internet which is now in full swing. A cornerstone of that process is the global internet giants substituting their own proprietary technical protocols and standards for the open and common code upon which the internet has operated for several decades (Nieborg & Poell, 2018; Flew, 2019; Helmond, 2015). Moreover, having built their own data centres and fibre optic cable systems that span continents and the globe, they are also, essentially, running their own parallel private internets to carry the massive volumes of traffic generated by their own services (Winseck, 2017).

Just as structural solutions can be used to deal with the endemic problems of concentration in telecoms markets, so too might they be used with respect to digital platform regulation. Indeed, the earlier discussion implied a half-dozen regulatory responses that could be used to act as a strong countervailing force in relation to Google and Facebook's ever tightening grip on online advertising, and as the basis of digital platform regulation more generally

First, Google could be forced to vertically separate its ownership of its search engine and people's data from its digital advertising exchange. This would go a long way to constraining Google's ability to use its dominant market power in search to control the digital advertising market. It would also pry open the black box algorithms and machinery inside Google's digital advertising exchange that are currently opaque to advertisers, people and regulators, and riddled with fraudulent practices while skirting established legal norms for data and privacy protection in the EU, as the United Kingdom's Office of the Information Commissioner found.

Second, the German Federal Cartel Office is also pursuing a kind of diagonal structural separation that would prevent Facebook from sharing people's data across Instagram, WhatsApp and Facebook. Both of these first two measures aim to loosen the digital duopolies' ability to leverage people's and third-party data to buttress their market power. In that regard, they also imply a potential to bolster people's rights with respect to data portability. In total, both of these structural separation measures entail substantial regulatory constraints on the digital duopoly and could set a template for digital platform regulation generally.

Third, the "platformization" of the internet, whereby proprietary technical codes are being substituted by the global internet giants for the open and common technical protocols of the internet, amongst other things, and used to influence third parties and everyone else who uses these platform, raise issues that have some semblance to protracted and hotly contested issues of network interconnection and interoperability that have defined telecoms regulation for over a century, but especially in relation to efforts to foster greater competition. A regulatory focus on technical code, interconnection and interoperability would also go a long way to constraining the global internet giants' growing clout.

The fourth response is to adopt more stringent data and privacy protection rules, with the European Union's General Data Protection Regulations serving as a touchstone, or a floor, for what such measures would look like.

Fifth, the European Union's Audiovisual Media Services Directive (2016) also provides a valuable touchstone for discussions of Canadian policy for the AVMS sectors that respond to the significant place that Netflix, Amazon and Apple have carved out for themselves in this domain. The EU's AVMS Directive clearly treats online VOD services similarly to how it treats VOD services delivered over cable or satellite, but it also, and crucially, distinguishes between both of these services versus linear broadcast services that are subject to more stringent obligations and rules. In other words, as is the case in Canada, the rules for VOD services in the EU are subject to much lighter requirements with respect to catalogue quotas and investment requirements—a point that generally seems to be lost on most of the Canadian Culture policy advocacy groups, who often baldly state that following the EU on media policy would subject the GAFAM group of internet giants and Netflix to broadcasting-style regulations. This is incorrect. Those same advocates usually also fail to mention that the expectations and obligations that are to be met in the context of the twenty-eight countries that comprise the EU cannot be simply transposed into the context of just one country, i.e. Canada. Lastly, it must be acknowledged as well that there is a big gap between the EU countries' rhetorical commitments to the media and cultural policy goals of the AVMS Directive versus the number of countries that have actually implemented those obligations in enabling national laws or regulations. Indeed, while the AVMS Directive is often celebrated (or denounced, as the case may be) for bringing online VOD services like Netflix, Amazon and Apple under its umbrella, only five countries have actually put in place formal obligations that require foreign online VOD services such as Netflix, Amazon Video and Apple to invest in or pay a set levy to support domestic or European media content: Belgium (Dutch bilingual region), Denmark, France, Germany and Italy (Donders, Raats, Komorowski, Kostovska, Tintel & Lordache, 2018, pp. 14-15).

Sixth, the discussion of media and cultural policy objectives rests on an underlying assumption of "functional equivalent" activities. In short, this means that where functionally equivalent activities are taking place, such as VOD services in the case just referred to, then accepted policy norms and practices should be given serious consideration. This same idea also applies, as was noted in the first report, in two other instances where digital platform regulation can be fortified:

Electoral advertising rules, where as <u>Owen, McKelvey and Dubois</u> have proposed, the same Elections Canada rules that have long applied to broadcasters and the press with respect to funding, disclosure, links to third parties, restrictions on foreign funds and the use of voter information during election campaigns, including all the locational and targeting data connected to such campaigns, should be applied to Facebook, Google and other digital platforms. Revisions to the <u>Canada Elections Act</u> at the end of 2018 go a long way towards these ends.

Drawing an analogy between banks and digital platforms, the first report suggested the idea of annual **Algorithm Audits** of the platforms' "blackboxes" done under regulatory oversight (<u>Bracha & Pasquale, 2008</u>); **fiduciary obligations** that require the digital platforms to protect the value of their clients' data and privacy, with strict limits on third party access to such data (<u>Kerr, 2002</u>; <u>Balkin, 2016</u>); and lastly, digital platforms could be organized as multinational businesses with national subsidiaries subject to the laws of the host countries in which they operate *and* multilateral, international oversight.

One thing that is obviously missing from the above list of regulatory and policy approaches is a focus on *content regulation*. Instead, each of the measures emphasize structural and behavioral approaches to internet regulation in sharp contrast to the excessive emphasis, in this author's view, that can be seen in many quarters within Canada, Europe, Australia and, indeed, around the world, that focus on simply overlaying the *exceptional* standards of content regulation set out for broadcast media and film in the 20th Century onto the internet. That approach, essentially, not only takes the anachronistic standards of speech and publication regulation set out for a limited range of specific media—i.e. radio, television and film—a century ago and generalizes them across the full range of expression conducted over the internet.

The approaches being advocated here also break with the penchant for social media councils now being advocated in some quarters, a model that takes industry-run Broadcasting Standards Councils and Advertising Standards Councils as the preferred template for regulating content on the internet. The crucial problem here is one of delegating one of the most sensitive areas of rights and responsibilities in a liberal democracy to self-regulation by the industry in question itself. Lastly, the idea of social media councils gives governments a free pass with respect to what they are supposed to be doing: governing. When it comes to regulating content online, the standards and limits that apply should meet the expectations of rule-of-law and that Parliament explicitly set out and justify whatever restrictions on the free press and free speech are to be accepted in a democratic society (and there are and should be some, if the point needs to be made explicit).

This focus on structural regulation, functional equivalencies and a constrained approach to content regulation, however, not only collides with fierce opposition from the digital platforms (except, perhaps, with respect to question of speech regulation, where they generally seem to be quite agreeable to voluntary codes of conduct) but also incumbent interests across the telecoms and media industries in Canada for whom recommendations for structural separation, notably, are as anathema to them as they are to Google, Facebook, Amazon and Apple. In this regard, they share similar interests. So, too, whilst communication and media companies, aided and abetted by think tanks and advocacy groups, hurl invective against the "vampire squids" of Silicon Valley, the reality is that both the incumbent Canadian companies and the digital platforms are on the same page when it comes to striking a unified front against that adoption of standards with respect to structural separation, network/platform

interoperability, data portability as well as privacy and data protection rules that use the EU's GDPR as a floor for an approach that could be adopted in Canada.

The irony is that the adoption of such measures would probably go furthest not only in dealing with dominant market power across the network media economy but also in reining in some of the advantages that have allowed Google and Facebook to lock in their dominance of online advertising and, increasingly, advertising overall at the expense of those media in Canada that rely primarily on advertising revenue. Instead, the dominant policy responses to declining advertising and the turbulent times facing advertising-based Canadian media overwhelmingly tends to be anchored in the thin gruel of cultural nationalism.

Indeed, the rhetoric of cultural nationalism aside, there is a shared orthodoxy around the "free market model" of internet, telecoms and media development. As evidence of this, for example, both sets of companies share the same think tanks and consultants. One obvious example of this is how both Facebook and TELUS have engaged one of the telecoms policy advisors to the Trump Presidency, Jeffrey Eisenach. In the case of Facebook, Eisenach was the company's hired expert in India tasked with pushing back against the regulator's concern with Facebook's zero-rated Free Basics program, while in Canada TELUS employed him in the same capacity and to submit essentially the same "expert report" in opposition to the CRTC's move to examine zero-rated data services as a potential violation of common carriage rules (parenthetically, Facebook and TELUS lost in both cases, respectively). The unifying thread in both cases was the push to dismantle communications specific regulation in favour of general competition law—as if there is nothing special about communications, the internet and media from either the standpoint of economics and market dynamics or in the philosophy and institutional arrangements of liberal democracy (see here, here, for example). Indeed, the incumbents have fought tooth-and-nail even the modest regulatory measures that have been adopted in the past halfdecade to deal with the realities that many key segments of the communication, internet and media industries are characterized by the very high levels of concentration and anti-competitive behaviours that this report has chronicled in detail.

The lobbying front has also been in full swing for several years in support of the companies' stance on these matters and against any more attempts "to achieve greater competition", with the C.D. Howe <u>Institute</u> 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 <u>Globe and Mail</u> has published the Institute's call in its op-ed pages, just as the <u>National Post</u> has done for similar reports produced by the Macdonald Laurier Institute. In fact, the marketplace of ideas is regularly 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, a roster of "Culture Policy Advocacy Groups" vilify the vampire squids and promote policy measures that seek to hamstring the global internet giants while turning a blind eye to industry consolidation at home, and a not-too-inconspicuous acceptance that promoting and preserving the interests of select few national champions will guard the nation and help to spread Canadian Culture from coast-to-coast-to-coast.

Meanwhile, independent research and researchers' 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 otherwise cover every think tank report, company press release and quarterly conference call. The public debate is skewed as a result. This is not controversial, but, simply put, 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 ongoing reviews of the *Broadcasting Act* and *Telecommunications Act* are also fraught with peril given this context. Social connections and the revolving door between governments and industry have been a mainstay of the political economy of communications in Canada and have not served us well. Whether the Trudeau government and these review processes can avoid being captured by similar forces amidst the full-court 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 the Liberal Government has so far been rather tepid in the moves it has made in this domain, it should double-down on efforts to promote more competitive markets. In contrast to its predecessor, however, it ought to do so in ways that reflect much 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, it 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 built around a restrictive 1970s model of cable television (which, in itself, was highly restrictive by the lights of what many thought broadband cable communication systems could be come, i.e. the infrastructure of wired cities and the wired nation).

With its fresh mandate, the new Government should also take steps to improve the climate at the CRTC which has backpedalled on its recent resolve to actually deal with market realities as they are, rather than how it might wish them to be. The Commission's ever more parsimonious view of its public obligations with respect to the timely, public release of complete and credible data on these issues also needs to be turned around and put on a footing that is more respectful of the Commission's public interest obligations. As I write, it is December 16th, 2019 and the complete version of the Commission's flagship report, the Communications Monitoring Report, remains to be seen—for the second year in a row and against a past practice of releasing this valuable report sometime between July and October, and occasionally as late as November. At the same time, of the parts of the Communications Monitoring Report that have been released, the once valuable insights that could be gleaned, for example, on the market share of mobile wireless operators on a province-by-province basis (or regional basis, with respect to the Atlantic provinces) has been severely cut and rendered, essentially, useless, while the data obtained from a private consultant on the online video service market that has been released does not seem credible and, instead, more of a piece with the types of "threat inflation" that permeates policy discussion in this area.

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 today – the increasingly 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.

