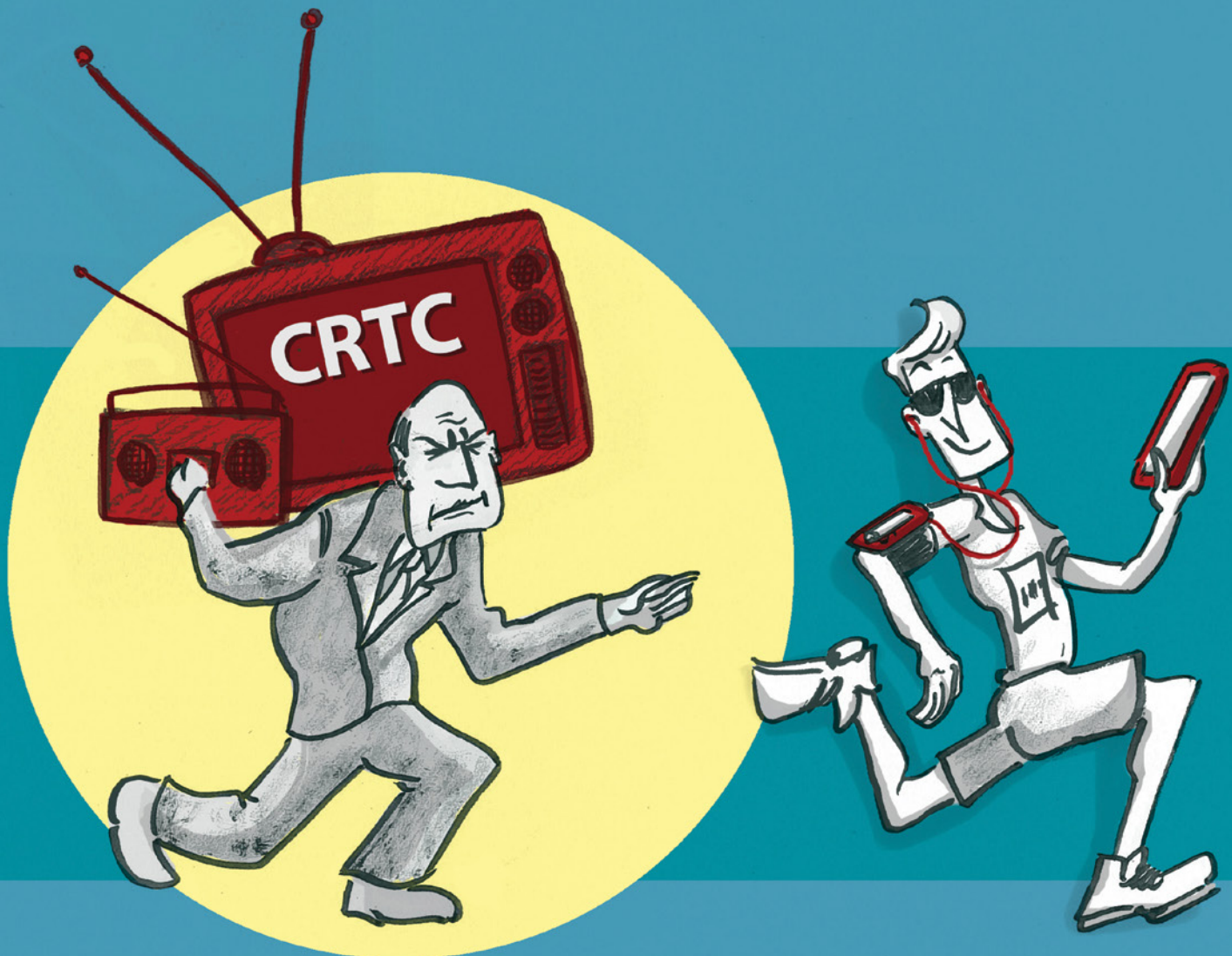


# TECHNOLOGICAL CHANGE AND ITS IMPLICATIONS FOR REGULATING CANADA'S TELEVISION BROADCASTING SECTOR

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## Executive summary

The emergence and growth of digital technologies broadly underlies much of the technological change affecting the TV broadcasting industry. The production of all sorts of programming has been affected by the growing capacity of producers to use computers and even tablets and smartphones to create content. As a consequence, the costs of producing many types of video programming have declined substantially. At the same time, the Internet is becoming a major distribution channel for streaming video content to viewers. The latter development has lowered the cost of distributing video content, while also increasing the demand for content.

Against this background, the Canadian Radio-television and Telecommunications Commission, the CRTC, recently modified its broadcast regulations to facilitate increased consumer choice in viewing TV broadcasting content. Perhaps the most fundamental change is the regulator's mandate to conventional broadcast distributors to make programming available to viewers on a "pick-and-pay" basis. Essentially, viewers will be able to acquire individual programming services or small packages of programming services. Yet in other ways, the structure of the regulatory environment still follows what might be described as a protect-and-subsidize model. This long-standing regulatory strategy limits market competition so as to generate increased profits earned by programming services and broadcast distribution units. The *quid pro quo* is that regulated programming services and broadcast distribution units must contribute to financing the production of Canadian content.

The main justification for the protect-and-subsidize model is that, left alone, market competition would fail to provide "sufficient" Canadian content. This justification is premised on the existence of significant externalities in both the consumption and production of Canadian content. Externalities are benefits or costs affecting "third parties" to economic transactions. The most prominent suggested externality is a strengthening of Canadian national identity associated with viewing Canadian content. That is, Canadians allegedly feel their nationality more strongly when they consume programming that is deemed by the government to be Canadian

content. In fact, there is no compelling empirical support for the national identity externality argument, at least as far as popular entertainment content is concerned, although popular entertainment programming is largely the focus of Canadian content rules and regulations. To the extent that programming imparts consumption externalities, it is more likely to be news, public affairs, and related programming that does so. To the extent that such programming would be “undersubscribed” in the absence of government financial support, it is arguably more efficient and more democratic to subsidize this type of programming directly through the tax system, as in the case of the Canadian Broadcasting Corporation (the CBC).

Production externalities are associated primarily with a deepening of the pool of available creative and technical workers in given locations. This deepening of a skilled labour pool helps create clusters which contribute to improved productivity on the part of the organizations that locate in a cluster. While skilled labour can be created through the activities of subsidized program producers, it is more efficiently created through education and training that can and should be carried out through the educational system.

A second justification for the protect-and-subsidize model is that Canadian producers simply can't compete against US-based producers, because the latter can recapture most of their costs of production through sales in their domestic market. At best, this argument applies to “blockbuster” feature films and made-for-TV dramas. In fact, technological change is creating opportunities for entrepreneurs who are able to exploit new viewing patterns and new distribution channels and devices, and Canadian producers are at no obvious disadvantage relative to US producers in this regard. Indeed, stronger market competition is likely to promote entrepreneurship on the part of Canadian producers of programming content.

A greater reliance on market competition in the TV broadcasting sector would see the regulator eliminate regulatory preferences for Canadian programming, as well as Canadian content requirements. The CRTC would also eliminate required expenditures on Canadian programming by non-exempt programming services and broadcast distribution units (BDUs), such as cable companies. As it currently stands, the exemption enjoyed by so-called over-the-top (OTT) programming services such as Netflix from making financial contributions to Canadian programming is a regulatory asymmetry that provides an inefficient implicit subsidy to OTT services. Rather than expanding financial obligations to OTT services, eliminating existing obligations of non-exempt programming services and BDUs is a preferable option.

The CRTC recognizes the potential competition posed by OTT broadcasting to conventional participants in the sector, but it worries about vertically integrated BDUs abusing market power to forestall actual competition. As a consequence, the regulator has imposed restrictions on vertically integrated BDUs with respect to the latter's dealings with independent program distributors, on the one hand, and with independent BDUs on the other hand. The restrictions may well inhibit investments in programming by vertically integrated BDUs, as well as discourage their investments in innovative distribution platforms. The regulator's concern about vertically integrated BDUs leveraging market power to restrict competition seems inappropriate in the face of increasingly intense competition in programming services and the growing importance of wireless carriers as programming distributors. To be sure, however, the CRTC's commitment to expedite the entry of independent BDUs into the market is to be applauded.

Finally, while the CRTC will apply pricing regulations solely on the entry-level package of services, it has cautioned industry participants that it might intervene at both the wholesale and retail levels if unreasonable prices are charged. The threat of intervention by the regulator into pricing behaviour invites frivolous complaints by non-vertically integrated market participants about either excessively high prices being charged by programming services of non-exempt BDUs or excessively low prices being paid by non-exempt BDUs for programming produced by independents. The CRTC has recognized that uncertainty about what is appropriate or inappropriate behaviour under the Wholesale Code is undesirable from an efficiency perspective. As the TV broadcasting sector becomes increasingly competitive, it seems appropriate for the regulator to largely refrain from intervening into the price negotiation process, as well as into other elements of bargaining between participants in the sector.

## Introduction

Technological change encompasses the introduction and diffusion of new products and production techniques. It is the main source of improvements over time in total factor productivity or the amount of output an economy can produce given the inputs used to produce output. It can also be a major source of disruption to the structure of industries and the nature of competition within industries. Indeed, it can lead to the emergence of fundamentally new economic activities and the demise of old activities, as illustrated by the growth of wireless telephony at the expense of wireline telephony.

Technological change can also obviate the rationale for existing government regulations, as well as the policy tools that are used by regulators to promote ostensibly important social policy goals. The telecommunications industry is a good example of this phenomenon. Historically, the industry was regulated as a natural monopoly under a rate-base rate-of-return model, whereby facilities-based telephone carriers were allowed to earn a target return on invested capital. Prices were regulated such that the carriers could expect to earn the target rate of return. Cross-subsidies were built into the pricing structure of which the most economically important was the cross-subsidy going from long-distance users to local subscribers. The emergence and growth of new long-distance and local carriers using new technologies such as microwave and fibre optics made it increasingly difficult for regulators to embed cross-subsidies into the pricing schemes of incumbent carriers (Schultz, 1996).. The growth of new competition also undermined the basic rationale for regulation, i.e., to prevent “natural monopoly” incumbents from using their market power to charge uncompetitive prices to consumers. Telecommunications regulators, including the Canadian regulator (the CRTC), ultimately deregulated the long-distance portion of the industry while moving away from rate-base rate-of-return regulation in favor of incentive regulations, primarily price caps, in the case of the local portion of the network. Terms and conditions of access at the wholesale level of the industry became a major focus of competition policy concern.



The experience of the telecommunications industry is instructive for the current situation facing the broadcasting industry, particularly television broadcasting. Specifically, the latter is undergoing relatively rapid and significant technological change that is increasingly challenging the rationale, as well as the feasibility, of existing regulations and ownership rules surrounding that industry. This is particularly relevant for Canada where regulatory policies have been manifestly used to promote the production and distribution of “Canadian content” through an explicit system of protection from competition and explicit and implicit financial subsidies.<sup>1</sup> At the same time, technological change is facilitating the emergence of new competitors to the incumbent cable and satellite distributors, and concerns have been raised about the vertically integrated incumbents using their market power to block or restrain the growth of new programming services and broadcast distributors. Hence, as in the case of telecommunications, competition policy issues are becoming increasingly relevant in broadcasting as technological change facilitates the emergence and growth of new participants in the sector.

To be sure, the Canadian Radio-television and Telecommunications Commission (CRTC) has recognized and acknowledged the need for a new television broadcasting regulatory environment in the face of the technological changes surrounding the industry.<sup>2</sup> Indeed, after extensive hearings referenced as the *Let's Talk TV* hearings, the CRTC proposed what might be characterized as modest changes to the broadcasting regulatory environment (see CRTC, 2015-86). Several changes move policy in the direction of deregulation, but others involve increased regulation. The changes were motivated by technological developments affecting the industry and the goal of providing viewers of entertainment content greater choice. This report reviews recent and prospective technological changes affecting the Canadian television broadcasting industry, as well as the regulatory changes proposed by the CRTC.<sup>3</sup> To anticipate the main conclusion, this report supports the general direction of the new policies set out by the regulator but argues that the new policy regime does not go sufficiently far in the direction of relying upon market forces to guide resource allocation decisions in the broadcasting sector. Moreover,

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<sup>1</sup> For a discussion of the implicit subsidy model used to fund Canadian content in broadcasting, see Gliberman (2014).

<sup>2</sup> Moreover, Heritage Minister Joly recently announced the launch of a sweeping evaluation of Canada's broadcast, media, and cultural industries in light of the growth of digital technologies. (See LeBlanc, 2016).

<sup>3</sup> Since the CRTC's recent hearings focused on the television sector which, arguably, is undergoing more significant changes in supply and demand conditions than the radio sector, this report focuses on television broadcasting.

the underlying justifications for continuing to subsidize the production of popular entertainment programming by Canadian companies remain questionable.

The paper proceeds as follows. The next section of the paper discusses the major technological changes affecting the broadcasting industry. Section 2 provides an overview of recent changes to the rules and regulations as they apply to Canadian broadcasters. Section 3 offers an assessment of the changes identified in Section 2. Conclusions and recommendations for additional policy changes to promote the government's goals with respect to broadcasting are provided in the final section of the paper.

# 1. Technological Change and the Broadcasting Industry

When identifying the major technological changes affecting the broadcasting sector, it is useful to keep in mind the full set of activities that the sector encompasses. These activities include the production, distribution, and reception of programming, and each of these broad activities is being affected by technological changes.<sup>4</sup> It is also useful to identify the main participants in the sector. The producers of programming content and viewers of programming are unregulated participants. Programming services include local and specialty television services. Programming services aggregate programs for broadcast. Broadcast distributors (BDUs) aggregate programming services for distribution to viewers. Programming services and BDUs include licensed services that are subject to regulation and exempt services. Broadcasting services delivered over the Internet or on mobile devices are examples of exempt services.

## Digital technology and production

In broad terms, the emergence and growth of digital technologies underlies much of the technological change affecting the production of programming, as it does in the case of many other industries. Production of all sorts of programming has been affected by the growing capacity of producers to use computers and even tablets and smartphones to create content. In particular, the costs of producing video programming have declined substantially with the increasing capabilities and lower costs of computer-based technologies.<sup>5</sup> The proliferation of programming available on Internet websites such as YouTube and Hulu is testimony to the

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<sup>4</sup> For a comprehensive discussion of technological changes affecting radio and television broadcasting, see ITU (2013).

<sup>5</sup> By way of illustration, Bill Gates has been quoted as saying that putting an hour of video online cost US\$400 in the late 1990s, while it cost around two cents in 2013 (*Economist*, 2013, June 29).

ability of individuals to create very low cost programming content.<sup>6</sup> To be sure, “star” entertainers demand large salaries which add substantially to the cost structure of “blockbuster” feature films and made-for-TV dramas.<sup>7</sup> Nevertheless, it is demonstrably possible for producers located in relatively small countries to succeed in producing popular, made-for-TV programs. Indeed, Canadian producers have had substantial commercial success exporting English-language TV programs, particularly to US television networks (See, for example, Levine, 2009). This success reflects, in part, the growing audience size for so-called reality programming, which is relatively low cost to produce compared to drama<sup>8</sup>; it also reflects the ability of new media companies to operate locally at a relatively small size while still being profitable.<sup>9</sup>

The main point here is that technological change is arguably undermining the long-standing claim that commercially profitable entertainment is inevitably characterized by large, upfront, and indivisible expenditures that must therefore be recovered by sales to large audiences (Hoskins and McFadyen, 1991). By extension, it raises important questions about whether commercial producers of entertainment content based in relatively small countries, such as Canada, require financial subsidies in order to produce popular entertainment content. This policy issue will be considered in more detail in Section 3 of this report.

## **The Internet, mobile, and broadcast distribution and reception**

The Internet created a new medium for distributing broadcasts which one industry observer has called the single greatest advancement to revolutionize broadcasting (Schad, 2013). An increasing number of consumers are accessing programming content using the Internet to deliver that content. This is referred to as “over-the-top” (OTT) content. The emer-

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<sup>6</sup> LYA (2014) in its overview of the television broadcasting sector and the Canadian regulatory regime asserts that anyone can now participate in the creation of video content.

<sup>7</sup> Graham (undated) argues that the cost of star writers and performers continues to make it expensive to produce popular entertainment programs. However, there are recent indications that Hollywood studios can no longer bank on the pulling power of famous actors (see *Economist*, 2016).

<sup>7</sup> See Winter (2013) for a general discussion of how commercially profitable, albeit relatively low –cost, TV programming can be created.

<sup>9</sup> New media companies rely intensively on computer technologies to produce content (see Britton, Tremblay and Smith, 2009).

gence and growth of Internet broadcasting means that there are a much greater number of broadcasting channels available to carry content than was the case in the analogue era of broadcasting. This, in turn, has lowered barriers to entry to distribute content on a global basis and promoted the proliferation of new types of content aggregators such as Netflix and YouTube. Some of the new video service providers are affiliated with licensed programming services and BDUs, while many others are not. Accessing video online is particularly intensive in Canada owing in part to the widespread availability of video-enabling broadband technology and high Internet penetration rates (CIRA, 2013). In this regard, LYA (2014) reports that about 84 percent of Canadians watch online video compared to 63 percent of US consumers.

In addition to watching more programming online, consumers are using a growing number of receiving devices to access programming. These include not just television receivers but also computers and mobile devices, including cell phones. For example, EY (2013) estimated that, by the end of 2012, one out of every three minutes in which viewers consumed digital media occurred through a smart phone or a tablet. This share is undoubtedly higher today.<sup>10</sup> Furthermore, the various screens are often running simultaneously. In this regard, Deign (2013) reports that four out of five smartphone and tablet owners use these devices while watching television. Program services are increasingly taking advantage of omniplatform viewing by supplying complementary programming across different screens. Deign (2013) offers the example from the United Kingdom where the BBC ran a series depicting Sherlock Holmes in a modern day setting. As part of the TV show, whenever Watson was writing his blog, the entry would be posted on the Sherlock Holmes website.

The growth of omniplatform viewing has several implications for the broadcasting industry. Perhaps most prominent, it opens up a new avenue for competition among program services and BDUs for viewers. Specifically, programming that can take advantage of omniplatform viewing will enjoy a competitive advantage over traditional content offerings that do not leverage the complementary capabilities of multiple screens. This, in turn, should create increased opportunity for innovative programming services to succeed in the new marketplace; there is no reason to believe that large and established services should enjoy a long-run competitive advantage in this regard owing to their size or incumbency. Second, a growing number of screens accessing a greater number of broadcasting chan-

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<sup>10</sup> LYA (2014) report that a third of Canadian mobile subscribers reportedly watched TV live or on-demand on their mobile devices in the fourth quarter of 2013. For a discussion of Verizon Communications' initiatives to distribute its video content primarily to cell phone users, see Moritz and Shaw (2016).

nels could promote an increased demand for content, potentially including content created by Canadians and making use of Canadian talent.<sup>11</sup>

Besides receiving content on smartphones and tablets in their homes, viewers are also consuming programming content on these devices outside the home. The growth of mobile broadband communication is facilitating “on-the-go” viewing. At the same time, the increasing demand for “anytime, anywhere” consumption of programming content is stimulating investments in mobile communication capacity including the build-out of Wi-Fi networks. The implication of this development is that the distribution segment of the broadcast industry is becoming more competitive as hybrid and wireless telephone companies become increasingly important participants in the segment. The price of mobile for streaming broadband content is currently relatively high compared to prices charged by traditional broadcast distribution outlets (BDOs), but the former are likely to decrease over time, particularly as hybrid networks evolve that provide fairly complete geographical coverage.<sup>12</sup> The importance of wireless carriage as a broadcast distribution medium will also grow as a consequence of higher quality video tied to carrier investments in 4G technology (Minar, 2013).

An important issue surrounding the broad “net neutrality” policy context is whether the market for Internet service provision is workably competitive, i.e., sufficiently competitive so that abuses of market dominance in one form or another are unlikely. The CRTC’s decision mandating that independent Internet providers must have access to the networks of large incumbent carriers such as Bell Canada (i.e., the provision of wholesale Internet access to third parties) is a prominent competition policy initiative surrounding Internet access (Geist, 2015). Consideration of the CRTC’s access policy is beyond the scope of this study. Suffice to say, however, there is no evidence that market dominance in the provision of Internet access is affecting the availability of OTT programming to viewers.

A more specific competitive concern is whether there is sufficient competition in the supply of equipment customers have on their premises that viewers use to choose and manage the content that they consume. To this point, federal regulators in the US are expected to propose rules that

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<sup>11</sup> To the extent that watching television is made more enjoyable by omniplatform viewing, there may be more viewers watching more hours of television. All demographic groups are exhibiting changes in viewing behavior, but particularly younger viewers.

<sup>12</sup> Hybrid networks encompass Wi-Fi hotspots with cellular networks used to provide signal reception in places that are not within reach of Wi-Fi. For a discussion of companies that are offering alternative wireless networks in competition with the large, incumbent wireless carriers, see Chen (2015).

would give cable and satellite customers more choice in whether to use their service provider's set-top box and cable app, or instead choose competing devices or apps (see McKinnon, 2016). Customers now generally rent devices from their service providers at prices that consumer advocates argue are "inflated." Cable companies argue that any rule restricting the ability of service providers to supply their own navigation devices would raise costs, increase complexity, and potentially upend the channel positioning that the incumbent cable and satellite providers have negotiated with programmers. As discussed in a later section, the CRTC has charged conventional BDUs with the mandate to work together to develop a new generation of programming guides. An alternative policy would rely upon competition to develop new TV programming devices for use by household viewers.

## On-demand viewing

Besides promoting the growth of omniplatform and mobile viewing of broadcast content, the proliferation of OTT distribution is also accelerating the growth of on-demand consumption of programming, whereby viewers select specific programs to receive rather than purchasing bundled options of programs. The delivery of on-demand content by relatively new suppliers of content, such as Netflix, can be expected to increase competition for programming content as well as for the creators of content.<sup>13</sup> Less clear is whether it will increase the demand for all sorts of content or primarily the demand for popular entertainment programs. One argument is that unbundling will result in a much narrower selection of programs for consumers, since advertisers will support only the most popular programs. Put differently, broadcast distributors will be less able to cross-subsidize programs with smaller audiences by implicitly using the revenues earned from selling bundles of programs that include programs attracting larger audiences. A contrary argument is that niche services will focus on fewer and less risky programming ventures, which implies lower costs, so that cross-subsidization by more popular programming is not needed (Berco-vici, 2013).

On-demand viewing is also potentially contributing to a decline in subscribers to BDU services. Specifically, some viewers are opting out entirely of BDU subscription and relying completely on OTT programming.

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<sup>13</sup> For a discussion of the impact of Netflix on bidding for rights to programming content, see Ramachandran and Kostov (2016). In a related note, Apple recently announced that it is developing original video programming material for its streaming service (see Karp, 2016).



Younger viewers in particular are replacing traditional cable-TV subscriptions with online viewing (De Vynck, 2015). By way of illustration, 58 percent of Anglophones 18 to 34 years of age subscribe to Netflix, compared to 14 percent of those aged 65 and over. Among Francophones the disparity is even greater at 24 percent and 1 percent, respectively (CRTC, 2015). As another illustration, the CRTC reports the results of a survey indicating that in 2014, approximately 20 percent of Canadians said they were “very likely” or “somewhat likely” to cut the cord on their current traditional TV subscription in the next twelve months (2015: 140). This was up from a reported 16 percent in 2013. To the extent that BDUs, particularly cable companies, lose conventional subscription customers, they can potentially recapture some portion of those lost revenues through the provision of Internet access to so-called cord cutters.

## Overall assessment

In broad terms, technological change affecting the broadcasting industry is creating a far more competitive and market-driven environment in both the production and distribution of program content. As a result of this increased competition, consumers can potentially enjoy both lower costs and expanded choice. In particular, the growing preference of viewers, particularly younger viewers, for customized, video-on-demand programming represents a competitive threat to conventional programming services that have been traditional packagers of programming. At the same time, OTT viewing poses a direct competitive threat to conventional BDU services. The latter have responded to this threat, in part, by unveiling their own streaming video services. The broad public policy issue raised by these developments is whether and how government regulation of the broadcasting industry should change to reflect these changes in the industry's environment.

As noted earlier, the CRTC recently held extensive hearings into the changing environment surrounding the broadcasting industry and has modified the regulatory regime in response to those hearings. It is therefore appropriate to review the modifications put forward by the regulator in order to assess the emerging regulatory regime. In the next section, recent modifications to broadcasting regulations are discussed against the background of the preceding regulatory regime.



## 2. The Regulatory Regime

Historically, the CRTC's general approach to regulation has been to protect programming services from different sources of competition in exchange for those services producing and presenting Canadian programming (CRTC, 2014-190). For example, broadcasting services have been required to spend portions of their revenues on the creation of Canadian programs and to devote large parts of their schedule to such programs. At the same time, BDUs have been required to offer packages to their subscribers that contain a preponderance of Canadian services, while other rules protect the advertising revenues earned by those services from indirect competition originating from US broadcasting signals. In effect, Canadian content requirements have been imposed by regulation with the *quid pro quo* that protection from competition would enable programming services to meet the financial obligations of the Canadian content mandate. While this basic model has been relaxed somewhat by new regulations, it remains the main approach to promoting Canadian content in television broadcasting.

### Entry-level service

The CRTC has required all licensed terrestrial and direct-to-home distributors to provide to their subscribers by March 2016 an entry-level service that prioritizes Canadian TV services by including all local and regional Canadian TV stations and provincial or territorial educational services currently required under the regulations. The basic package of BDUs will be authorized to include other Canadian over-the-air stations where fewer than 10 local or regional stations are available over the air (to an overall maximum of 10 Canadian over-the-air services). The basic package will also include the major US networks plus US public television (CRTC, 2015-96).

BDUs will not be prevented from providing a first-tier offering that includes other discretionary services as an alternative first-tier offering provided that they also offer the entry-level service. However, they will

not be allowed to require subscribers to buy any services other than those in the entry level service offering in order to access any other services or packaging options. The CRTC has imposed a maximum price of \$25/month on the basic package (not including equipment). It did not consider it necessary to impose any restrictions on the retail prices charged for other individual programming services or packages or services.

## Other programming service options

By March 2016, all licensed BDUs were required to offer all discretionary services either on a pick-and-pay basis or in small, “reasonably priced” packages, which can take the form of either build-your-own package options or small, pre-assembled packages, such as theme packages. By December 2016, all licensed BDUs will be required to offer all discretionary services on both a pick-and-pay basis and in small reasonably priced packages (CRTC, 2015-96).

The CRTC’s decision to mandate a pick-and-pay option for subscribers is, perhaps, the most controversial decision to come out of the regulator’s *Let’s Talk TV* hearings. Various criticisms have been levied against the proposal from a variety of sources. One criticism is that the distribution sector is sufficiently competitive so that there should be no restrictions on the packaging offerings made available by licensed BDUs. Rather, BDUs should be allowed to configure their offerings to maximize profits. In a workably competitive environment, they would be obliged to satisfy consumers’ tastes and preferences in their pursuit of maximum profitability (Hunter, Iacobucci and Trebilcock, 2014). Put simply, in a competitive environment, profit-maximization by sellers does not result in non-competitive prices. Rather, it results in competitive prices that, in turn, promote efficient production. A second and related criticism is that the requirement for BDUs to offer reasonably priced bundles is an indirect form of price regulation. As Corcoran (2015) notes, the words “reasonably priced” are a red flag warning that the CRTC will continue to monitor the pricing and bundling of channels. Again, the concern raised by the new CRTC policy is that if the distribution of programming services is a relatively competitive activity, the direct or indirect regulation of prices and service offerings is likely to result in reduced efficiency and lower consumer welfare.

Another broad criticism of the pick-and-pay option is that it will lead to a major contraction in Canadian broadcast services, as well as less revenue being available to support Canadian programming. The basic notion here is that consumers will choose only the most popular programs on a pick-and-pay basis. In the absence of mandatory carriage rules, less

popular specialty services may be dropped from the “skinny bundles” offered by BDUs or will receive much lower subscriber fees if they continue to be carried. In this case, Canadian specialty programmers might be fewer in number, and there might be reduced expenditures on Canadian specialty programs (Miller, 2015). On the other hand, the growth of OTT broadcasters will put competitive pressure on specialty broadcasters (whose signals are delivered by conventional BDUs) to improve their program offerings. Furthermore, a focus on Canadian programs delivered by cable companies and other BDUs ignores the potential for growth in demand for Canadian programs delivered over the Internet. LYA (2014) highlights the growth of the latter and identifies the potential for such programs to reach an international audience. In this latter case, the overall demand for Canadian programming (however distributed) might increase, even with a reduction in programming carried by conventional BDUs.

## Simultaneous substitution

Simultaneous substitution occurs when a broadcast distributor temporarily replaces the signal of one TV channel with that of another channel showing the same program at the same time. Usually, an American signal is replaced by a Canadian signal. The objective of the policy is to allow Canadian broadcasters to maximize audience sizes and advertising revenues for the non-Canadian programs for which they have acquired the Canadian marketing rights. That is, the Canadian rights-holder can request cable companies and other BDUs to replace the US signal with the Canadian signal when the same program is aired at the same time by an American broadcaster whose signal is distributed in Canada. As a result, the audience for the program is not split across two or more stations which would reduce the size of the Canadian audience. In the 2012-2013 broadcast year, the estimated revenue impact of the simultaneous substitution rule was approximately \$250 million (CRTC, 2015-25).

In addition to the simultaneous substitution rule, provisions of the Canadian Income Tax Act prohibit a Canadian corporation from deducting as an expense for tax purposes any advertising purchased on a non-Canadian broadcasting outlet primarily to reach Canadian audiences. The provisions are meant to discourage Canadian companies from advertising on US border stations near large Canadian population centres. While a separate estimate for this tax provision is unavailable, Nordicity (2011) has estimated that the total impact of simultaneous substitution and the tax provision measures lay in the range between \$274 and \$335 million in additional revenue to English-language broadcasters in Can-

ada in the 2009-2010 broadcast year. To the extent that these measures enhance the market power of Canadian broadcasters vis-à-vis Canadian advertisers, and to the extent that higher advertising costs are passed through in higher prices to consumers, the measures act as an indirect tax on Canadians.

In its *Let's Talk TV* hearings, the CRTC heard complaints about the simultaneous substitution rule. The main complaints centered on timing errors that are made by broadcasters or broadcast distributors such that the substitution of signals interrupts or cuts short the reception of programming that was not meant to be displaced (CRTC, 2015-25). Specific complaints were also registered about the inability of Canadians to view American commercials aired during the Super Bowl. While the CRTC posited that it could foresee a time in the future when simultaneous substitution was no longer needed or would be a less valuable source of revenue for the support of Canadian programming, it will continue to allow the practice of simultaneous substitution “for the time being” (CRTC, 2015-25). However, it did amend the practice so as to disallow the substitution of the Canadian broadcast of the Super Bowl for the American signal starting in 2017 so that Canadians could indeed watch American Super Bowl commercials.

## Canadian content

Radio and TV content policy was first introduced in 1959. The regulations required private conventional television licensees to devote not less than 60 percent of the broadcast year, and not less than 50 percent of the evening broadcast period (6 p.m. to midnight) to Canadian programs. For commercial radio stations, the regulations require that at least 35 percent of popular musical selections and at least 10 percent of “special interest” musical selections aired during each broadcast week be Canadian selections. As well, at least 35 percent of popular musical selections broadcast between 6 a.m. and 6 p.m. Monday to Friday during any broadcast week be Canadian selections. For French language radio stations, regulations require that at least 65 percent of the popular musical selections aired during each broadcast hour be in the French language. They also require that at least 55 percent of popular musical selections aired each week between 6 a.m. and 6 p.m. be French language selections. Exceptions from Canadian content rules exist for music formats such as classical and jazz, where Canadian selections can be as little as 20 percent of all selections played (Globerman, 2014).

In its assessment of Canadian content for the *Let's Talk TV* hearings, the CRTC noted that the policy can have detrimental effects, including the repetition of a particular episode of a program numerous times over the course of a day, a week, a month or longer. It asserted that excessive repetition and recycling of programming does little to achieve the objectives of the Broadcasting Act (CRTC, 2015-86). Notwithstanding, the regulator did not do away with Canadian content requirements. It decided to retain exhibition requirements for private conventional television stations, but only during the evening broadcast hours. Exhibition requirements pertaining to the overall broadcast day will be removed. The commission also set overall daily exhibition requirements for discretionary services at a standard level of 35 percent. There is no minimum requirement for Canadian content during evening hours for paid and specialty services.

The CRTC also announced that it would launch pilot projects that introduce more flexibility in the definition of what constitutes Canadian content. As an exception to the standard Canadian program certification process, it will recognize live-action drama/comedy productions based on the adaptation of bestselling, Canadian-authored novels as Canadian. It will also recognize live-action drama/comedy productions with a budget of at least \$2 million per hour of programming as Canadian. However, the pilot projects will also be subject to the additional criteria: 1) The screenwriter is Canadian; 2) One lead performer is Canadian; 3) The production company is Canadian and at least 75 percent of the service costs and the post-production costs are paid to Canadians (CRTC, 2015-24). These modified criteria to certify programs as Canadian content acknowledge that Canadian stories are a significant element of Canadian content; however, they by and large maintain the identities of factor inputs and nationality of producers of content as the main determinants of Canadian content.

## Preponderance

Another pre-existing regulatory rule was preponderance. The preponderance rule required Canadian broadcasters to provide a majority of Canadian-owned channels to their viewers, regardless of the consumer's services plan or package. This equated to a "50% plus one" of the channels received by viewers to be Canadian-owned. For example, if a consumer subscribed to a cable package from Rogers and received 28 channels, 15 of those channels had to be Canadian-owned. The goal of the preponderance rule was to encourage the predominant use of Canadian creative and other resources in the creation and presentation of programming. Since subscribers had to pay for a majority of Canadian-owned channels if they sub-

scribed at all to the relevant BDU, the Canadian copyright holders whose programs were carried on the distribution service received an implicit financial subsidy through the subscription process (Globerman, 2014).

Under the new rule recently announced, all non-Canadian services must be authorized by the regulator before they can be distributed in Canada. To help ensure that Canadian services have priority, the CRTC will not authorize non-Canadian English and French language services if they compete with Canadian pay and specialty services. Also, beginning in March 2016, broadcast distributors were required to offer more Canadian than non-Canadian services. However, subscribers will be able to choose how many and what Canadian or non-Canadian discretionary channels they wish to receive beyond the entry-level basic service offering (CRTC, 2015-86). Hence, the new rule represents a modest relaxation of the preponderance rule but still promotes an implicit subsidy of Canadian pay and specialty services.

## Video-on-demand

Historically, programming services such as conventional TV stations and specialty channels have acquired exclusive rights to broadcast programs. However, the CRTC has traditionally required that programming services be available to all BDUs. Most video-on-demand (VOD) services are linked to a specific BDU and can be accessed only through a subscription to that BDU and using that BDU's technical platform. As a consequence, such VOD services have had specific obligations that are similar to programming services but also similar to restrictions imposed on BDUs. For example, the CRTC does not allow these VOD services to hold exclusive content. Furthermore, the Digital Media Exemption Order (DMEO) prohibits services from providing exclusive access to programming designed primarily for television, where access to such programming is restricted based on a consumer's subscription to a specific mobile or Internet Service Provider (ISP).<sup>14</sup> Exclusive content is permitted only if it can be accessed by multiple mobile operators or ISPs. Exclusive content is permitted for exempt or unlicensed undertakings. Exemption can be obtained when content is made specifically for online or mobile consumption, whether or not the service is linked to the subscription of a particular mobile operator or ISP.

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<sup>14</sup> Licensed VOD services are also required to make financial contributions to Canadian programming, although their revenues from programming offered online or on other exempt platforms are not included in the base for calculating the appropriate financial contribution (see CRTC, 2015-86).



In light of the *Let's Talk TV* hearings, the CRTC decided to authorize a third category of VOD services based on a hybrid regulatory approach. These hybrid VOD services will constitute a new type of exempt undertaking. Specifically, they will be able to offer exclusive programming in the same manner as currently exempt services. They can also offer their service on a closed BDU network in the same manner as traditional VOD services without the regulatory requirements relating to financial contributions that would normally be imposed on traditional VOD services. However, in order to be eligible for these exemptions, the services must also be offered on the Internet to all Canadians without authentication to a BDU subscription.

At least two public policy issues are raised by the CRTC's hybrid regulatory approach. One is whether it is in the interest of viewers for the regulator to prevent BDU-specific VOD services from having exclusive content unless the services are offered on the Internet to all potential viewers including those who do not have a subscription to the BDU service. A second is whether it is good public policy to exempt services delivered over the Internet from obligations to make financial contributions to Canadian programming when traditional VOD services, including those tied to BDUs, must make such contributions. These issues are considered in Section 3.

## Financing

The CRTC requires most programming services to contribute a portion of their revenues from the sale of advertising and from subscription revenue to the production of Canadian programs. The regulator also requires BDUs with more than 2,000 subscribers to contribute 5 percent of their gross revenues from broadcasting-related activities to the creation of Canadian programming with at least 80 percent of that funding going to the Canada Media Fund and the rest to one or more independent production funds. In addition, the CRTC expects applicants for broadcast licenses to propose financial contributions (known as tangible benefits) with at least 80 percent of the tangible benefits being allocated to the Canada Media Fund or to independent production funds.

Sources of funding for Canadian television production for 2012-2103 are reported in Table 1.

As shown in table 1, licence fees are the largest source of funding of television programs. These fees are driven in part by exhibition requirements imposed on broadcasters (Canadian content quotas) which

**Table 1: Sources of Funding for Canadian Television Production, 2012-2013**

	%	\$ millions
Private broadcaster licence fees	20	461
Public broadcaster licence fees	11	254
Federal tax credit	10	243
Provincial tax credits	18	407
Canadian distributor	11	258
Foreign	8	197
Canada Media Fund	13	300
Other public	1	19
Other private	8	181
Total	100	2,320

Source: LYA, 2014: 55.

help drive broadcasters' demand for Canadian television programming acquired via licence fees. Federal and provincial tax credits are almost as large a source of funding.<sup>15</sup> What is noteworthy is the small share of funding accounted for by "other private," which includes production companies and independent investors. The limited role of private investors as sources of financing for Canadian programs is also illustrated by funding sources for the Canada Media Fund. The CRTC reports that the Canada Media Fund accounted for around \$370 million of funding support for Canadian programs.<sup>16</sup> Independent producers contributed only 4 percent of the 2013-2014 Canada Media Fund budget for English-language programs, while they contributed 1.7 percent of that fiscal year's budget for French language programs (CRTC, 2015-86). The heavy reliance on funding that is mandated by the regulator is a cause for concern, especially in a marketplace that is characterized by increasing competition and growing emphasis on entrepreneurship as a means of competing. In this type of environ-

<sup>15</sup> Since the CBC is primarily funded by the federal government, the public broadcaster licence fee might be seen as another taxpayer-funded source.

<sup>16</sup> It is unclear why LYA's (2014) estimate of the Canada Media Fund's contribution differs from the CRTC's estimate.



ment, a closer connection between creative decision-making and financial risks and rewards would seem appropriate.

Under the new regulatory environment, the CRTC will apply Canadian programming expenditure requirements to all licensed programming services including independent over-the-air stations which, hitherto, have not had such a requirement. The minimum expenditure requirement is 10 percent of broadcast revenues<sup>17</sup> Applicants for new or renewable broadcasting licenses will continue to be expected to propose tangible benefits, while non-exempt BDUs will continue to contribute 5 percent of their revenues to the creation of Canadian programming via publicly or independently administered funds. As noted above, revenues earned from programming online or on other exempt platforms are not subject to Canadian programming expenditure requirements, at least at the present time (CRTC, 2015-86).

Whether requiring programming services and BDUs to make mandatory expenditures or contributions to the creation of Canadian programs is an efficient, or even an appropriate public policy is debatable, and this regulatory policy will be considered in the next main section. A related issue is the potential economic ramifications of exempting online programming services from expenditure requirements while licensed services must bear expenditure requirements. This issue is also considered in the next main section.

## Wholesale Code

The Wholesale Code governs certain aspects of the commercial arrangements between BDUs, programming services, and exempt digital media undertakings. Among other things, it is meant to ensure that negotiations between programming services and BDUs are conducted in a fair manner. The code applies to licensed programming and distribution undertakings. It serves as a guideline for exempt programming, distribution, and digital media undertakings including non-Canadian services. That is to say, the Wholesale Code is binding on licensed distribution and programming undertakings other than radio programming undertakings, including licensed VOD and pay audio services.

There are numerous features of the commercial arrangements between different parties in the broadcasting sector that are covered by the

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<sup>17</sup> One change is that the CRTC will permit all programming services not affiliated with a vertically integrated company to count expenses for third party promotion of their Canadian programs towards a maximum of 10 percent of their Canadian programming expenditure requirements (see CRTC, 2015-86).

code, and it is not feasible to review the provisions of the code in detail.<sup>18</sup> Broadly, the code prohibits contractual terms that prevent the distribution of programming services on either a stand-alone or packaged basis. The code was revised in light of the hearings so that most-favoured-nation provisions, and minimum penetration, revenue, or subscription levels, except when negotiated by an independent programming service, are also prohibited.

The code also sets out commercially reasonable and unreasonable practices. The former identify factors that programming services and BDUs should take into consideration when negotiating a wholesale rate for a programming service. It also stipulates certain protections for independent programming services. For example, where a BDU includes related programming services in theme packages, it should also include all relevant independent programming services in the package. Where a BDU provides its related programming services with access to multiple distribution platforms, it should offer reasonable terms of access to independent programming services, and where a programming service provides a related BDU with programming on multiple distribution platforms, it should offer reasonable terms to other BDUs for their non-linear platform rights at the same time as their linear rights and provide the content on a timely basis. Commercially unreasonable practices encompass practices such as unreasonable rates, unreasonable volume and penetration levels, tied selling, and imposing terms and conditions that restrict a programming service or a BDU from providing programming on multiple distribution platforms.

In summary, the Wholesale Code does not formally regulate wholesale prices; however, it imposes conditions surrounding the negotiation of wholesale rates and conditions of sale and evaluates whether the actual conditions are reasonable or unreasonable on a case-by-case basis. This assessment on a case-by-case basis is triggered by complaints. Presumably, contracting parties will, over time, learn from prior decisions what specific terms and conditions are reasonable or unreasonable, although some uncertainty, and associated costs of uncertainty, is unavoidable. The code also limits the discretion of vertically integrated programming services and BDUs with regard to access (to programming or distribution) provided to independent BDUs and programming services. The willingness and ability of vertically integrated companies to engage in anti-competitive practices is a long-standing issue in the competition policy literature, and concerns about such anti-competitive practices in the context of broadcasting are evident in the Wholesale Code.

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<sup>18</sup> For a full discussion of the provisions of the new Wholesale Code, see CRTC (2015-438).

### 3. Assessing the “New” Regulatory Environment

The regulatory environment that is emerging in the aftermath of the *Let's Talk TV* hearings represents, as noted above, a modest movement away from the traditional model emphasizing protection of incumbent broadcasters and BDUs from competition in exchange for the latter's funding commitments to Canadian content, as well as commitments to distribute that content. Nevertheless, the emerging environment will still feature a relatively extensive amount of regulation, as well as the potential for even more regulation with respect to retail pricing and program packaging. Furthermore, important features of the previous regulatory environment, including Canadian content requirements and the preponderance rule, have been modified but not eliminated. In short, while the CRTC apparently recognizes that television broadcasting is becoming subject to ever-stronger competitive forces, the regulator is evidently not prepared to forebear from regulating. Indeed, in some dimensions, such as dictating the entry-level package and mandating pick-and-pay and bundling as options that must be separately offered by BDUs, there are new features of regulation being imposed.

In assessing the CRTC's new regulatory regime, it is useful to consider the potential failures of market competition to produce efficient social outcomes. In the absence of market failures, there is little argument for regulatory intervention.<sup>19</sup> Indeed, the CRTC acknowledges that its justification for regulation is the failure of market competition to achieve its goals of promoting the production and distribution of Canadian content (CRTC, 2014-190). Furthermore, since government regulation has direct and indirect costs, even the presence of modest market failures might not justify government intervention using a social benefit-cost calculus.

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<sup>19</sup> If there are income distribution issues, the latter are arguably better handled directly through tax-funded income transfers.

## National identity externality

A major argument that has long been used to justify regulation of the broadcasting sector is that the consumption of Canadian content has external benefits for Canadian society in the form of a stronger national identity.<sup>20</sup> The argument basically presumes that the consumption of Canadian entertainment programming by individual consumers somehow encourages the individual to be a “better” citizen which, in turn, conveys benefits on other Canadians. Better citizenship might take the form of more informed voting behaviour, increased participation in community activities, greater honesty in filing and paying taxes and so forth. Such improved civic behaviour on the part of an individual presumably makes other Canadians better off. However, individual consumers will likely ignore the benefits that their consumption conveys to others in making his or her consumption decisions. As a consequence, less will be spent on Canadian programming content than is efficient from a societal perspective. In principle, this externality could justify government subsidies for the production of Canadian content which, by lowering the market price of that content, should encourage increased consumption of it.

There are two key assumptions underlying the consumption externality argument. The main assumption is that Canadian entertainment content is a significant factor promoting a sense of national identity. If it is not and, particularly if other factors are more important in doing so, regulatory policies that divert resources toward the production of Canadian entertainment programming could well be inefficient. That is, national identity might be strengthened more by expenditures on other activities. A second assumption is that regulatory policies to promote the supply and consumption of Canadian content actually achieve their objective. It is clearly a waste of resources to produce output that is eschewed by consumers.

The assumption that Canadian entertainment content promotes a sense of national identity is not easy to test directly. Some evidence bearing upon the assumption is provided by surveys of what constitutes important national symbols to Canadians. Available survey evidence provides modest support for the notion that entertainment industry personalities and institutions are relevant national symbols for Canadians; however, they are substantially less important than other personalities and institutions including Canada's Olympic hockey team. Moreover, from a benefit-cost perspective, what matters is whether Canadian entertainment content will promote a stronger sense of national identity on the margin. In this regard, survey evidence suggests that Canadians, as a whole, have

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<sup>20</sup> This argument is more fully discussed and assessed in Globberman (2014).

a fairly strong sense of national identity, although the degree to which the average citizen identifies herself as Canadian varies across provinces.

The evidence from academic studies on the role that the media plays in shaping values and attitudes is, at best, mixed. For example, Sparkes (1977) found no difference in sociopolitical attitudes held by Canadians irrespective of whether they watched US or Canadian programs. Payne and Caron (1983) found that social background and interpersonal behaviour are stronger predictors of attitudes and information acquisition than media exposure. Conversely, Barnett and McPhail (1980) find evidence that the more Canadians watch American TV, the less Canadian they feel. Similarly, Baer and Winter (1983) conclude that viewership of American TV news leads to anti-Canadian government attitudes by Canadians, but the viewing of Canadian TV news does not have the same effect. Finally, Surlin and Berlin (1991) conclude on the basis of an extensive literature review that the evidence on the impact of the US media on attitudes, values, beliefs, and norms of Canadians is inconclusive, although exposure to the US media makes Canadians more knowledgeable about US public affairs.

With regard to the second assumption, the CRTC has itself acknowledged that much of the Canadian content that has been produced has not been well received by Canadian consumers. Indeed, part of its rationale for mandating a pick-and-pay option is to promote “better” rather than “more” Canadian content. Some evidence that Canadian viewers are not willing to pay for more Canadian content, at the margin, is provided by a survey cited in LYA (2014: 38). The survey of 6,000 Canadians found, among other things, that 67 percent of participants indicated that on-line services should not be required to contribute to the development of Canadian content if it increases the price to consumers. Another finding was that less than 30 percent of respondents were willing to pay \$0.50 per month extra for Canadian content.

The conceptual underpinning for regulating the Canadian broadcasting industry is that Canadian content contributes in a vital way, at the margin, to Canadians' sense of national identity, and that in the absence of regulations that fund and protect Canadian programming, the supply of Canadian content available to consumers will be inefficiently small. The presumed strong link between popular entertainment programming, which is primarily what is subsidized through the regulatory process, and Canadian identity is difficult to document, at least through surveys of Canadians. The argument that the supply of Canadian content will decrease substantially in the absence of existing regulations rests on the notion that US producers have an insurmountable competitive advantage in producing popular entertainment owing to their ability to amortize high costs over a large domestic market. This argument is evaluated in the next section.

## Economies of scale and the unfair competition argument

As noted above, a critical argument for government subsidization of the domestic entertainment programming sector is that popular entertainment programs are very expensive to produce, which puts producers from small countries at a competitive disadvantage compared to producers from large countries. In particular, the large salaries commanded by “star” creative and performing talent whose participation frequently underlies the commercial success of “blockbuster” programs contribute to the absolutely large cost of feature films and made-for-TV dramas. Notwithstanding, it is demonstrably possible for producers located in relatively small countries to succeed in producing popular made-for-TV programs. The British success in exporting talent shows and reality TV shows is a notable international example (*The Economist*, 2013, Nov. 9). It is argued that government policies requiring the BBC and privately owned broadcasters to buy at least 25 percent of their shows from independent producers is the explanation of British success. However, the fact that British broadcasters apparently buy more than 25 percent of their shows from independent producers suggests that other factors are more important contributors to the international success of made-for-TV programs (Globerman, 2014).

It is important to note that the resources used to produce feature films and made-for-TV dramas could be used to produce other types of programming, especially specialized online programming that might well attract larger audiences in the aggregate. This might well be the outcome of increased competition, including foreign competition, in the broadcasting sector. The experience of the magazine industry supports this presumption. For example, Huhmann and Saqib (2007) examined the effects of opening up the Canadian magazine advertising industry to foreign competition. They found that the market share of “mainstream” incumbent English-language magazines declined relative to a benchmark after the opening of the market; however, specialized English-language magazines gained market share.<sup>21</sup>

In short, the argument that the production of Canadian-made programming requires subsidies and protection of Canadian content is simplistic. A more acceptable argument is that specific Canadian producers are likely to benefit from continued subsidies and protection, while others would do better commercially if market forces were allowed freer reign. This qualification is especially relevant given the technological

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<sup>21</sup> The benchmark was the circulation of French-language magazines. Increased production specialization subsequent to reductions in trade barriers is a shared experience of many Canadian industries (see Baldwin and Gu, 2004).



changes surrounding the broadcasting sector. Such changes create opportunities for entrepreneurs, and entrepreneurship ordinarily does not thrive in a highly regulated environment. Conversely, producers that flourished primarily because of subsidies and protectionism are unlikely to fare well in an unregulated, competitive environment.

To be sure, there is likely to be programming content that is uneconomical to produce in a competitive environment in the absence of government subsidy, even if the production is done efficiently. Furthermore, such programming might be in the broad public interest. Possible examples include shows dealing with public affairs, historical documentaries, news analysis, and the like. Such programming is more likely to convey national identity externalities than is popular entertainment programming. In the event, direct subsidies are a more efficient and transparent way to promote the production of such content than are Canadian content regulations and requirements to broadcast the content as part of an entry-level programming package. Simply put, direct subsidies financed through taxes impose lower cost burdens on individuals who provide the relevant subsidies by spreading the costs more broadly than is the case with regulations and, therefore, are less likely to affect the behaviour of individuals in ways that reduce their economic welfare.

## Economic impact

A third but relatively minor argument, identified by the regulator as justification for subsidizing a domestic entertainment production industry, is that there are quantifiable benefits in the form of highly skilled jobs created and revenue generated (CRTC, 2015-86). In fact, this argument can be fairly readily dismissed with the observation that resources used in the entertainment production sector could be used elsewhere in the economy to produce jobs and revenue. A more nuanced argument is that there are significant external economies of scale or production externalities in creating entertainment programming.<sup>22</sup> Simply put, production activities by any individual firm lower the costs to other firms of carrying out those activities by increasing the supply of skilled workers who, in turn, can use the knowledge gained in their previous employment to start new businesses or move to other companies. In this regard, geographic clustering is noteworthy in the case of feature films and TV production.

To be sure, the assumption underlying the argument is that knowledge gained by working in one organization is transferable to other organizations. This dynamic is more likely to be true when the original

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<sup>22</sup> For a fuller consideration of this argument, see Globberman (2014).

employer is a non-profit organization than a for-profit organization, since the latter is more likely to offer firm-specific training rather than general training. Indeed, Britton, Tremblay, and Smith (2009) examine the origin and growth of new media concentrations in Vancouver, Toronto, and Montreal. They conclude that each Canadian concentration of new media, such as computer graphics, has a history of film production which, in turn, was encouraged by the assistance that the National Film Board gave to the development of skills such as animation. At the provincial government level, a common policy of promoting the growth of new media has been support for education and training geared to creating a specialized pool of labour skills. The inference one might draw from these observations is that there is a potential role for government to play in funding education and training of new media skills. This seems a more direct and efficient way to address potential production externalities than by protecting and subsidizing the production activities of for-profit producers of entertainment programming.

In summary, the main arguments for the protect-and-subsidize model for financing Canadian content entertainment are difficult to defend, and they are becoming increasingly less credible as technological change reduces costs of production, as well as the costs of distributing content. Against this background, there is a strong case for terminating specific regulations supporting the model including Canadian content rules and rules requiring BDUs to offer more Canadian than non-Canadian services, as well as rules limiting the carriage of non-Canadian services that compete with Canadian pay and specialty services. Canadian content that is not commercially viable but which is seen by the government as serving an important public interest should be subsidized directly through the tax system. This would make the funding process more transparent, as well as force government decision makers to be explicit about the importance of funding Canadian television programs relative to other uses of taxpayers' money. The simultaneous substitution rule provides an important source of funding for Canadian television programmers, but it is also an indirect tax on consumers to the extent that it results in higher advertising fees paid by Canadian companies, which are presumably passed through to consumers. Again, an argument can be made that funding directly through the tax system is more transparent and more equitable from an income distribution standpoint than funding through requiring simultaneous substitution.<sup>23</sup>

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<sup>23</sup> Lower-income families spend a larger share of their incomes compared to wealthier families, and would therefore likely spend a higher share of their incomes on advertised goods and services.



Direct funding of Canadian content through the tax system would also mitigate a significant concern raised by conventional broadcasting services and BDUs. Namely, over-the-top broadcasters do not have to make contributions to Canadian programming, while VOD broadcasters using cable or satellite distribution systems are required to make financial contributions. The rationale offered by the CRTC for exempting Internet broadcasting from direct and indirect Canadian content financial obligations is that it wants to promote innovation and growth of the new medium in Canada. However, to the extent that Internet broadcasting is an increasingly strong competitor to conventional broadcasting, the asymmetric regulatory system imparts a bias to the competitive process. There is no public interest in providing a financial advantage to broadcasting over the Internet relative to VOD broadcasting over conventional BDUs. The financial performances of programming services and BDUs should be determined by market competition alone. Replacing the protect-and-subsidize model with direct taxpayer funding would facilitate eliminating asymmetric regulation which penalizes conventional broadcasters and BDUs.

## Competition policy issues

The emerging regulatory regime, as did the older regime, contains provisions to address potential competitive abuses by vertically integrated BDUs, i.e., BDUs that have ownership links to programming services. CRTC data highlight the extent of vertical integration. Specifically, 49 percent of specialty, pay, pay-per-view, and VOD services are owned by vertically integrated companies. These services received 84 percent of all subscriber revenues and 92 percent of all discretionary services' advertising revenue in the 2012-2013 broadcast year (CRTC, 2014-190). The basic concern is that BDUs will leverage any market power they enjoy in the distribution activity to favour their own programming services at the expense of independent programming services. Reflecting this concern, the Wholesale Code stipulates that where a BDU includes related programming services in theme packages, it must also include all relevant independent programming services in the same package. The code also requires vertically integrated BDUs to offer reasonable terms of access to independent programming services.

One point to note at the outset is that vertical integration can promote economic efficiency by encouraging investments and innovation that might not take place in the absence of vertical integration. In particular, relevant investments might require participants in the upstream and downstream stages of an industry to make specific investments that create

**Table 2: Number of Subscribers for Top Five Canadian BDUs in 2014 (thousands)**

Rogers	1,983
Shaw	2,760
Videotron	1,771
Cogeco	780
BCE	2,658
<b>Total</b>	<b>9,953</b>

Source: CRTC (2015, p. 132).

contractual hazards if the participants are separate companies. The main hazard is opportunism, whereby one or the other company attempts to “hold up” the second company for new and better terms after the second company has made investments that are sunk cost losses if the relationship between the two companies is terminated. In this environment, neither company might be willing to make the relevant investments if they remained independently owned. As an example, a program distributor might be reluctant to invest in new and experimental programming content made by an independent producer unless the distributor had some control over the distribution rights to the programming.

Notwithstanding the potential efficiency benefits of vertical integration, competitive issues can also be raised. Competitive concerns about vertical integration rest on at least two key assumptions. One is that the vertically integrated company enjoys a position of market dominance in at least one stage of the relevant vertical value chain. A second assumption is that vertical integration allows the company to exploit its market dominance more effectively than it would if it were completely specialized in the stage for which it enjoyed market dominance. The second assumption is related to the notion that it is most profitable for a monopolist to charge a full monopoly mark-up only one time. For example, if a company is a monopolist in, say, an upstream activity such as production, it would take its monopoly profits in that activity, rather than in the more competitive downstream (distribution) activity. However, if prices in the upstream activity are regulated, the “second-best” approach to maximizing profits is for the vertically integrated company to charge non-competitive prices to consumers of the downstream activity, in which case the vertically integrated company has a financial interest in reducing or eliminating competition in the downstream sector.

**Table 3: Average Number of Hours Canadians Watched Traditional Television versus Internet Television (Typical Weekly User)**

Traditional Television		Internet TV Usage	
2010-2011	29.8	2008	1.5
2011-2012	29.5	2009	2
2012-2013	29.3	2010	2.1
2013-2014	29	2011	2.8
		2012	3
		2013	5.1
		2014	7

Source: CRTC (2015, p. 93)

In the context of broadcasting, vertically integrated BDUs might have an interest in forestalling the entry and growth of independent programming services if they enjoyed positions of market dominance in the distribution of programming and if they were prevented from charging above-competitive prices in their distribution activity. For example, BDUs controlled by vertically integrated companies might confer more preferable carriage arrangements on their own programming services.

A full consideration of the market structure of the broadcast distribution sector is beyond the scope of this study.<sup>24</sup> However, there are grounds for arguing that if market dominance of conventional BDUs is currently a problem, it will not likely be so for much longer. As evidence of this point, table 3 reports the average number of hours Canadians watched traditional television versus Internet TV. Notable is the rapid growth of Internet viewing. Table 4 provides additional evidence showing the recent growth of Internet-provided television revenues relative to cable company revenues.

As an additional consideration, wireless carriers will be increasingly strong competitors to cable and satellite broadcast distributors in the distribution of streaming video, and the wireless sector itself is arguably workably competitive (Globerman 2013).<sup>25</sup> Furthermore, with the excep-

<sup>24</sup> Vertically integrated services generated revenues of \$7.1 billion in 2012-2013 compared to revenues of \$1.7 billion for other BDUs (CRTC, 2014-190). Table 2 reports the total number of subscribers of the top five Canadian BDUs.

<sup>25</sup> The CRTC wants to facilitate entry into the BDU segment by broadening the BDU

**Table 4: Revenues of BDUs (\$ millions)**

	2010	Percent	2014	Percent
Cable	5,402	66.4	5,224	57.7
IPTV	208	2.6	1,284	14.2
DTH & MDS	2,385	29.3	2,414	26.6
Non-reporting BDUs	135	1.7	132	1.5
<b>Total</b>	<b>8,130</b>		<b>9,054</b>	

IPTV = Internet-provided television

DTH = direct to home

MDS = multipoint distribution service

Source: CRTC (2015, p. 130)

tion of the entry-level package, retail prices are not directly regulated, although, as noted earlier, they are expected to be reasonable, which could act as an indirect constraint on retail prices. Hence, while the competition policy argument for restrictions on the behaviour of BDUs towards independent program suppliers cannot be dismissed, it is surely a concern that will dissipate over time. Indeed, as competition facing conventional BDUs increases, the latter will have increasingly little choice but to search out the most attractive programming they can afford, including programming sold by independents. The CRTC should therefore be prepared to drop provisions of the Wholesale Code discussed above as independent suppliers are clearly seen to be selling their programming to an increasingly competitive buying sector.

The Wholesale Code also prohibits programming services from providing exclusive access to programming designed primarily for television. The ostensible concern here is that vertically integrated BDUs can use upstream market power, i.e., in programming services, to disadvantage rival BDUs, especially non-integrated BDUs, and thereby reduce competition in the downstream segment of the industry. Under the new hybrid model described earlier, exclusive programming can be offered on a closed BDU network; however, the programming services must also be offered on the Internet to all Canadians without authentication to a BDU subscription.

exemption order to include BDUs with fewer than 20,000 subscribers that wish to enter and compete in markets with licensed BDUs. This would eliminate the waiting period to get a licence (CRTC, 2014-190).

In the context of programming services, it seems difficult to make an argument that vertically integrated BDUs have significant market power in the programming stage of the sector. Programming services are proliferating and many are owned by major companies such as Netflix and Apple. Prohibiting BDUs from distributing exclusive content through traditional VOD services acts as a competitive handicap to the BDUs and might discourage the production of innovative programming by the BDUs' programming services. To the extent that programming services are workably competitive, it seems unnecessary for the CRTC to prohibit "unreasonable" rates charged by programming services or other terms of the contracts between programming services and distributors. The prospect that prices and other conditions of sale might be viewed as unreasonable by the CRTC might discourage the growth of program supply, at the margin, to the extent that it indirectly constrains contracting that would make new programming more profitable or less risky with attendant welfare losses for viewers.

## Exemptions from data usage and predation

Competition in the broadcasting sector can also be indirectly affected by policies regarding competition in the telecommunications sector. In this regard, a specific issue arises regarding whether or not wireless carriers should be able to exempt subscribers to their streaming video services from data constraints applied to the subscriber's overall account. The argument in favour is that the policy acts as an indirect discount on the price of the streaming video service which should increase the quantity demanded of the service. This, in turn, could help new streaming services to become established in the marketplace in rivalry with established VOD services. The ostensible concern with the practice is that vertically integrated wireless companies might subsidize their streaming services using revenues earned on other services they offer. The concern here is that the subsidy represents unfair competition against streaming services that are not affiliated with a wireless carrier.

The argument against allowing wireless carriers to exempt their streaming services from data limitations for their customers is akin to a predatory pricing argument. That is, the implicit subsidy to streaming services allows those services to underprice other programming services. Once the latter are driven from the market, the vertically integrated wireless carriers will raise the price of their streaming services to above-competitive levels in order to recoup the subsidies received by those services plus a non-competitive return on capital. A problem with this argument

is that given the large and growing number of streaming services available from suppliers other than vertically integrated Canadian wireless carriers, it is simply implausible to think that a temporary period of below-cost pricing of their streaming services by those wireless carriers could enable the latter to create sufficient market power in the programming services segment of the industry to make a predatory pricing strategy work.<sup>26</sup> This seems particularly true given the financial resources available to competitive streaming services associated with companies such as Netflix. The latter are unlikely to be driven from the marketplace by any temporary exemption from data usage applied by wireless carriers to their streaming video services. Furthermore, new competitive streaming services could be expected to enter the market if and when vertically integrated carriers raised the prices for their streaming services. In short, it seems more reasonable to view the practice in question as a promotional initiative rather than predation; however, if there is evidence that the practice persists over time and that some non-affiliated programming services are being financially harmed by the practice, the regulator should critically review the legality of the practice.

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<sup>26</sup> As a general point, the conditions for predatory pricing to be successful are exacting and relatively rare.

## Summary and Conclusions

The long-standing model of regulatory policy towards the broadcasting sector has been to protect and subsidize. Under this model, producers of Canadian content have benefitted from subsidies associated with Canadian content requirements, required programming expenditures, and other financial subsidies from programming services and BDUs, while programming services and BDUs have benefitted from direct and indirect protection from competition which enabled them financially to subsidize Canadian programs.

Recent technological changes, including the emergence and growth of streaming video services, have created new competitive threats to established Canadian participants in the broadcasting sector, as well as opened up new opportunities for entrepreneurial content providers, programming services, and programming distributors. In recognition of the changing technological landscape, the CRTC has modified its regulations primarily to provide more choice to Canadian viewers of video content. The relevant modifications are commendable; however, a judicious interpretation of the new regulatory environment is that it still relies heavily upon the protect-and-subsidize model. For example, Canadian content requirements are consolidated but not eliminated. Programming services and BDUs will continue to be expected to make financial contributions to the production of Canadian programming. The practice of simultaneous substitution will continue, and Canadian programming services will still be at least partly protected from foreign competition.

There is a real question about whether the basic ongoing model of protect and subsidize can be maintained, particularly as long as foreign over-the-top broadcasters are essentially exempt from regulation and, by extension, from a requirement to subsidize Canadian content. Specifically, the growth of exempt services will, over time, decrease the revenue pool available to subsidize Canadian content.<sup>27</sup> However, beyond concerns

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<sup>27</sup> As a general statement, increasing competition in an industrial sector drives down prices in that sector, thereby making it increasingly unfeasible to subsidize other business activities from the net revenues earned by the sector in question.



about the sustainability of the traditional regulatory model is the weakness of the assumptions and arguments underlying the model. In particular, the notion that Canada's identity as a nation is critically dependent upon the production of popular entertainment content made by Canadian companies and using Canadian talent is a largely unproven assertion. Indeed, what evidence is available casts serious doubt on the practical importance of the notion. Moreover, economic arguments in support of the model are simplistic and fundamentally flawed. In short, the traditional regulatory model relies upon arguments that are either theoretically or empirically largely unsupported.

In the aftermath of the *Let's Talk TV* hearings, the CRTC had the opportunity to remake Canadian broadcasting in a much more fundamental manner. Specifically, it could have largely done away with the panoply of regulations and rules surrounding the broadcasting sector and recommended greater reliance upon market competition as the mechanism governing resource allocation in the sector. By increasing reliance on commercial market forces in a more enthusiastic manner, the CRTC would have reduced uncertainty surrounding future regulatory interventions and provided even greater benefits to consumers and many, if not all, industry participants.<sup>28</sup>

Within a fundamentally market-oriented model, there is still a role for government to play. Specifically, there is arguably programming of a public service nature that might not be financially sustainable but still justifiable on public interest grounds.<sup>29</sup> Such programming should be funded through direct grants and subsidies financed from general tax revenue. Much of this type of programming will likely be produced or acquired by the CBC, which has an advantage in identifying and acquiring such programming. Programming that serves distinct Canadian audiences and focuses on distinctly Canadian "stories" are unlikely to fall into the category of popular entertainment, which has been the main target of the protect-and-subsidize model. Reliance upon direct subsidies and grants funded by taxpayers seems a more democratic way to support programming of a public goods nature. In this case, Canadians would have a better understanding of the costs of supporting the production of Canadian content.

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<sup>28</sup> In a similar vein, LYA argues that in today's technological and competitive environment, a reliance on commercial market forces is the best way to support the future success of Canadian television content, as well as of Canadian broadcasting (2014: 14).

<sup>29</sup> For example, the CRTC (2014- 190) identifies the services distributed through the basic package as contributing to the public interest by ensuring that Canadians are informed on matters of public concern.



A greater reliance on market forces might also be accompanied by greater symmetry in the regulatory treatment of exempt and (currently) non-exempt programming services and BDUs. Asymmetric regulation that favours OTT and independent programming services, as well as non-vertically integrated BDUs creates a risk that less efficient participants in the market will expand relative to efficient participants. While vertical integration between program services and BDUs can create competitive concerns, the increasingly competitive structures of the upstream and downstream sectors of the broadcasting industry mitigate these concerns. The CRTC's planned initiatives to promote the entry of smaller BDUs are to be applauded in this regard. As it becomes clearer that all sectors of the industry are workably competitive, the regulator should be prepared to abandon the distinction between exempt and non-exempt services, including the hybrid BDU category. Exclusivity should not be a competitive concern when markets are workably competitive. At the same time, exclusivity can be a spur towards innovation much as innovation is stimulated by patents and other legally granted domains of exclusivity.

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