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# **Analysis of Government Support for Public Broadcasting and Other Culture in Canada**

Nordicity Group Ltd.

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*Nordicity Group Ltd. ([www.nordicity.com](http://www.nordicity.com)), founded in 1979, is one Canada's leading strategy consulting firms for clients in the media/entertainment, culture/content, and telecommunications sectors: broadcasting, print, music, television/film production, new media, art/museums, cable, satellite and terrestrial wireless/wire-line telecommunications.*

*Our consultants work with clients in both the private and public sectors to make business and policy decisions, and to understand the impacts of policy and regulatory developments.*

*Nordicity helps businesses make strategic decisions; we also address regulatory and government policy issues for firms, consortia, and industry associations.*

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*Our consultants provide clients with strategic planning, business case analysis, market assessment and forecasting, economic analysis, financial modelling, evaluation frameworks, and other tools for strategic and operational decision making.*

*Nordicity has offices in Ottawa and Toronto, with associates in other Canadian cities. We also offer global delivery of our expertise through affiliations with international professional services firms, notably PricewaterhouseCoopers and IBM Business Consulting Services.*

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## **Executive Summary**

### ***Introduction***

In late 2005, the Canadian Broadcasting Corporation (CBC) asked Nordicity Group Ltd. (“Nordicity”) to analyse the financial resources provided by governments to public broadcasters in Western countries for a comparison to the CBC. This analysis produced results on a per-capita basis; as well, the results were adjusted based on the relative benefits of public broadcasting in each country. It was noted that while Canada appears to derive a significant benefit from public broadcasting, that public broadcasting in Canada receives substantially less support than it does in most other countries. Based on these results, CBC asked Nordicity to examine whether poor funding of Canadian public broadcasting was indicative of Canada’s treatment of its cultural sector overall or whether this was peculiar to Canadian public broadcasting. Nordicity consequently examined federal government support provided to culture in Canada, including that provided to Canada’s private broadcasters, using English-language television as an example.

### ***Government Support for Public Broadcasting in Western Countries***

#### ***International Comparison of Government Support for Public Broadcasters***

We compared the CBC’s support from the federal government to the levels of public funding in 17 other major Western countries for their national public broadcasters, using data for 2004. We identified public funding from all sources, including licence fees, government appropriations, and other subsidies. We converted these amounts to Canadian dollars and normalized the financial support for public broadcasting on a per capita basis for each country.

The per-capita comparison demonstrates that, among 18 major Western countries, Canada had the third lowest level of public funding for its public broadcaster in 2004. At \$33 per inhabitant (all amounts in Canadian dollars, unless indicated otherwise), Canada’s level of funding was only ahead of New Zealand, and the United States (U.S.) What’s more, Canada’s funding for public broadcasting was less than one-half of the \$80 average across the 18 Western countries. And Canada’s level of funding was about one-fifth of the level of the leading country – Switzerland – among those included in the comparison.

#### ***The Potential Benefits of Public Broadcasting***

As a further element in making an international comparison, we postulated the potential benefits to a country that a public broadcaster can provide, and rated the 18 Western countries as to how valuable these benefits would be to that country. We then compared each country’s rating in this benefits calculation to its per-capita level of public funding for public broadcasting. This comparison helped us identify which Western countries are possibly under-funding their public broadcasters, when the public broadcaster could be delivering substantial benefits in that country’s particular socio-political circumstances.

This benefits assessment required a broad review of the social, political and cultural environment, as well as the media-industry structure in each country. While this assessment was qualitative in many respects, it was systematic in terms of comparative analysis. We selected indicators that could be considered indicative of the relevant socio-political conditions for each country. For each indicator we used a simple five-grade scale (high to low) for rating each country. While this approach did not eliminate subjectivity, it did force a discipline to the ranking of the countries.

We undertook basic research of some 18 countries to compare them to Canada along the following four criteria and associated indicators. For each indicator we were able to obtain specific data in order to establish the scale for a relative scoring for each country.

Criteria	Indicators
1. Promotion of culture and common values	<ul style="list-style-type: none"> <li>Population density</li> <li>Number of broadcasting languages – number of official languages broadcast by the public broadcasting services (note: must be rough equivalency in broadcast, not just occasional minority programming broadcast)</li> <li>Ethnic-diversity challenges (third-party risk ratings)</li> </ul>
2. Relative size of domestic language market	<ul style="list-style-type: none"> <li>Population of country or population of various official language groups within a single country</li> </ul>
3. Proximity to a large larger country with the same language	<ul style="list-style-type: none"> <li>Countries bordering countries of similar language with a much larger economy</li> <li>Countries whose mother tongue is English (which are subject to greater pressure from American programming, even if not bordering on the U.S.)</li> </ul>
4. Audience appeal of indigenous programming	<ul style="list-style-type: none"> <li>The number of indigenous programs' among the top ten programs</li> </ul>

Based on these four criteria, we rated each country against six different indicators on a five-point scale. The details of the scoring systems and the data used to derive the scores are presented in Appendix B. In summary:

- A rating of **high** and a numerical score of **five** was assigned when the indicators pointed to an environment where a public broadcaster could potentially generate relatively high benefits to its citizens.
- A rating of **medium** and a numerical score of **three** was assigned when the indicators pointed to an environment where a public broadcaster could potentially generate a relatively moderate level of benefits.
- A rating of **low** and a numerical score of **one** was assigned when the indicators pointed to an environment where a public broadcaster could generate a relatively modest benefit.

Countries could also obtain scores of two or four.

We did not weight the indicators or the criteria in terms of level of importance, and recognize that not doing so is somewhat arbitrary. Nevertheless, this approach provides a systematic basis for gauging and comparing each country's environment, and thereby the relative benefit that a public broadcasting could bring to the country.

The analysis shows that:

- Among the 18 countries included in the analysis, Canada stands to benefit the most from public broadcasting, according to this evaluation. It obtained a score of 23 out of a possible 30 points.
- Other countries that are positioned to realize relatively high benefits from public broadcasting include Switzerland, New Zealand, Australia, Belgium, Ireland, and Austria. They obtained scores of between 17 and 20.
- The next group of countries – with scores of between 11 and 15 – are: Norway, Spain, Finland, Denmark, France, and the U.K.
- The final group with the lowest scores (seven to nine) are: Germany, Italy, U.S. and Japan.

## ***The Federal Government's Economic Support for Culture***

### ***Components of Government Support for Culture***

The federal government provides direct economic support for culture by way of grants and contributions, and other direct program expenditures related to Canada's culture and heritage. The Department of Canadian Heritage oversees the vast majority of these expenditures. They include funding and tax-based support provided to the CBC, Telefilm Canada, Canadian Television Fund, Canada Council for the Arts, museums and art galleries, movable cultural property, Library and Archives Canada, and other programs and agencies with mandates to preserve, promote, and develop Canadian culture.

The federal government also provides indirect economic support to Canada's cultural sector through policies and regulations derived from various legislative authorities. Two measures in particular provide significant indirect economic benefit to Canada's private broadcasters. One of these measures is the Canadian Radio-television and Telecommunications Commission's (CRTC's) policy of simultaneous substitution; the other is section 19.1 of the *Income Tax Act*.

Each year, the CBC receives a financial appropriation from the federal government to finance its operations, capital improvements, and working-capital requirements. Between 1995/96 and 2003/04, the CBC experienced a significant swing in its annual government appropriation levels. In the 1995/96 fiscal year, the CBC's government appropriation totalled \$1,171 million. Over the next two fiscal years, it dropped by 31% to \$806 million in 1997/98. In 2003/04, the CBC's government appropriation was \$1,066 million, or 9% lower than the level in 1995/96.

In addition to the parliamentary appropriations for the CBC, the federal government makes other direct expenditures on operations and programs related to culture. Between 1995/96 and 2003/04, the federal government's other expenditures on culture (excluding the CBC) increased by 39%, from \$1,749 million to \$2,433 million. The data show that the federal government's culture expenditures rose, for the most part, consistently between 1995/96 and 2004/04, while it declined for the CBC.

Section 30 of the CRTC's *Broadcasting Distribution Regulations* compels Class 1 and 2 BDUs to, upon request, substitute the programming of a local or higher-priority signal for another signal, when a television programming is being simultaneously broadcast. In effect, simultaneous substitution permits a Canadian conventional broadcast station to insert its signal for a U.S. border station exhibiting the same program at the same time. Such an action, allows the Canadian broadcaster to capture all the Canadian audience tuning to that program, and thereby transfer advertising revenues from U.S. border stations to Canadian broadcasters. The value of this transfer is an indirect benefit of federal government action.

In 1975, Parliament passed Bill C-58, thereby amending the *Income Tax Act*. As a result, section 19.1 of the Act disallows Canadian broadcasting companies from making deductions from their taxable income for any amounts paid for advertising on foreign broadcasters.

Therefore, section 19.1 discourages Canadian advertisers from purchasing airtime on U.S. border stations (or any American broadcaster for that matter) as a means to reaching Canadian audiences. The effect of this measure is to transfer television advertising sales from American television stations along the Canadian border to Canadian television broadcasters.

In order to estimate the impact of these two indirect support measures, we extrapolated the results of past studies, and developed a low-impact and high-impact scenario.

- Under the low-impact scenario, the total annual revenue impact of the federal government's indirect economic support increased by 31%, from \$207 million in 1995/96 to \$271 million in 2003/04.
- Under the high-impact scenario, the total annual revenue impact increased by 41%, from \$235 million in 1995/96 to \$331 million in 2003/04.

The CBC also sells advertising, and so, to some extent benefits from section 19.1, since it competes with U.S. border stations for Canadians' television tuning and Canadian advertisers' airtime purchases. Under the low-impact scenario, we estimated that CBC garnered \$18 million in incremental advertising revenue in 2003/04 due to section 19.1. Under the high-impact scenario, we estimated that amount to be \$24 million.

### ***Comparison of Trends in Government Support for Culture***

In a comparison of all the components of federal government economic support for culture between 1996<sup>1</sup> and 2004, the following trends emerge:

- The total revenue impact of indirect government support for private broadcasters (under the high-impact scenario) grew by **41%**; under the low-impact scenario, the revenue impact grew by **31%**.
- Federal government spending on other culture (excluding the CBC) grew by **39%**.
- Total federal government spending (excluding national defence and debt payments) grew by **25%**.
- Federal government support for the CBC (including direct and indirect support) **dropped by 9%**.

The comparison demonstrates that while the federal government's economic support for culture and for private broadcasters increased during the 1996-to-2004 period, its support for public broadcasting did not keep pace; indeed it actually dropped.

To conclude, Nordicity's analysis suggests that Canada's relatively poor funding of public broadcasting – specifically the CBC – vis-à-vis funding of public broadcasting in other Western countries is not indicative of Canada's treatment of its cultural sector; it reflects its particular approach to the funding of public broadcasting. This poor treatment of public broadcasting is peculiar in view of this study's conclusion of the large benefits available to Canada from an effective national public broadcaster.

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<sup>1</sup> In this section we have reverted to single-year denominations, e.g., 1996, to account for different year-ends for federal government financial statistics and broadcasting sector statistics. The former have a March 31 year-end; the latter have an August 31 year-end. The term 1996 refers to statistics from the government fiscal and broadcasting years ending in 1996.

# 1 Introduction

## 1.1 Background and Mandate

In late 2005, the Canadian Broadcasting Corporation (CBC) asked Nordicity Group Ltd. (“Nordicity”) to analyse the financial resources provided by governments to public broadcasters in Western countries for a comparison to the CBC. This analysis produced results on a per-capita basis; as well, the results were adjusted based on the relative benefits of public broadcasting in each country. It was noted that while Canada appears to derive a significant benefit from public broadcasting, that public broadcasting in Canada receives substantially less support than it does in most other countries. Based on these results, CBC asked Nordicity to examine whether poor funding of Canadian public broadcasting was indicative of Canada’s treatment of its cultural sector overall or whether this was peculiar to Canadian public broadcasting. Nordicity consequently examined federal government support provided to culture in Canada, including that provided to Canada’s private broadcasters, using English-language television as an example.

We begin our analysis with an international comparison of levels of public funding for public broadcasters in 18 Western countries including Canada. This comparison of public funding levels is expressed on a per-capita basis. It demonstrates that Canada has one of the lowest levels of public funding for its public broadcaster.

We then refine this population-adjusted comparison to take into account the socio-political environment within each the 18 countries, and the potential benefit that a public broadcaster could bring to each country, in light of this socio-political environment. Certain Western countries, such as the United States (U.S.), may have less potential to derive large benefits from a strongly funded public broadcaster; and so, may require little public funding. In contrast, one could argue that a country such as Switzerland, which has four official languages and borders three large countries with similar languages, can derive greater benefit from a public broadcaster, and therefore should fund public broadcasting accordingly.

In order to assess the potential benefit of public broadcasting in Western countries, we constructed a potential-benefit index to demonstrate the extent to which the potential benefits derived from public broadcasting vary around the world. The index was based on a number of measures that gauge the socio-political environment and structure of the media sector within each country. Among the 18 Western countries in our analysis, Canada was seen as having the potential to derive the greatest benefits from public broadcasting, despite the fact that it has one of the lowest levels of government funding for public broadcasting, among the 18 countries.

As an additional comparison we examined the level of overall support provided to culture in Canada by the federal government. Thus, in the final section of the report, we review trends in the CBC’s government appropriation over the last decade and compare it to other areas of federal government spending during the 1995/96-to-2004/05 period. This comparison demonstrates that while the federal government increased its overall program spending, as well as its spending on culture programs, its spending on the CBC actually remained below the 1995/96 level, on both a current- and constant-dollar basis.

## 1.2 What is Public Broadcasting?

In this report, we analyze the financial support provided by governments for public broadcasting – both in Canada and other Western countries. While the concept of public broadcasting may be fairly well understood, the formulation that it has taken has changed both through time and across geography. At the core, public broadcasting is a form of broadcast communications that serves the social, political and cultural needs of a community – typically defined by national (or regional) borders – without strong influence from either government or commercial interests.

The concept of public broadcasting originated out of the view held by many governments and citizenry at the introduction of broadcast communications in the 1920s and 1930s – a view that it was a public resource to which citizens should have universal access.

Today, with the increasing array of commercial broadcast outlets available to viewers and listeners in Western countries, the role of public broadcasting is to provide media content that is universal in content, universal in access, independent from political and commercial influence, and of high quality.<sup>2</sup>

While the current role of public broadcasting from a conceptual basis may be clearly stated, the actual role and mandate for public broadcasters in Western countries does vary. In the U.S., public broadcasters are an outlet for programming that commercial over-the-air broadcasters will not pursue. In contrast, in the United Kingdom and other European countries, the public broadcaster is considered a public service, akin to public education or public spaces. The public broadcaster is tasked with ensuring that all citizens have access to high-quality programming and the kind of discussion that is central to a well-functioning democracy.

One attribute that all public broadcasters around the world share is that they derive a significant portion of their income from a publicly imposed licence fee or public sources. In many countries, a television licence fee is set by a government body, and is collected either by the government, the broadcaster, or a third party. In other countries, the public funding comes in the form of some direct grant from the government. Our analysis focuses on the amount of public financing that supports public broadcasting and how the amount varies across borders and through time.

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<sup>2</sup> Council of Europe, *Public service broadcasting*, Report to the Committee on Culture Science and Education, January 12, 2004, para. 12.

## 2 Government Support for Public Broadcasting in Western Countries

The last several decades have seen a wave of de-regulation and privatization of media industries in the major Western developed economies. Even in the face of this trend, all Western countries maintain some type of public broadcasting. While this is the case, it is also true that government support for public broadcasting in Western countries varies tremendously from country to country. In this section we present a comparison of the relative levels of government financial support for public broadcasting in Western countries. We do this by way of a comparison of the per-capita levels of public subsidy received by public broadcasters in 18 Western countries, including Canada. We further enhance this international comparison by taking into account the potential benefits that public broadcasting can bring and how these potential benefits also vary across Western countries.

### 2.1 International Comparison of Government Support for Public Broadcasters

To construct the 18-country comparison, we totalled all amounts of public funding for the public broadcaster(s) in each country. We included all types of funding that were determined by some branch of the government, including licence fees levied on owners of television/radio receivers, government appropriations, and other forms of direct government aid or grants.

The per-capita comparison demonstrates that, among major Western countries, Canada has one of the lowest levels of population-adjusted funding for its public broadcaster. Among 18 Western countries, Canada had the third lowest level of public funding for its public broadcaster (see Figure 1). At \$33 per inhabitant (all amounts in Canadian dollars, unless indicated otherwise), Canada's level of funding was only ahead of New Zealand (\$20), and the U.S. (\$5). We also note that Canada's funding was less than one-half of the \$80 average across the 18 Western countries. Canada's level of funding was about one-fifth of the level of Switzerland – the leading country among those included in the comparison – where public funding totalled \$154 per capita in 2004.

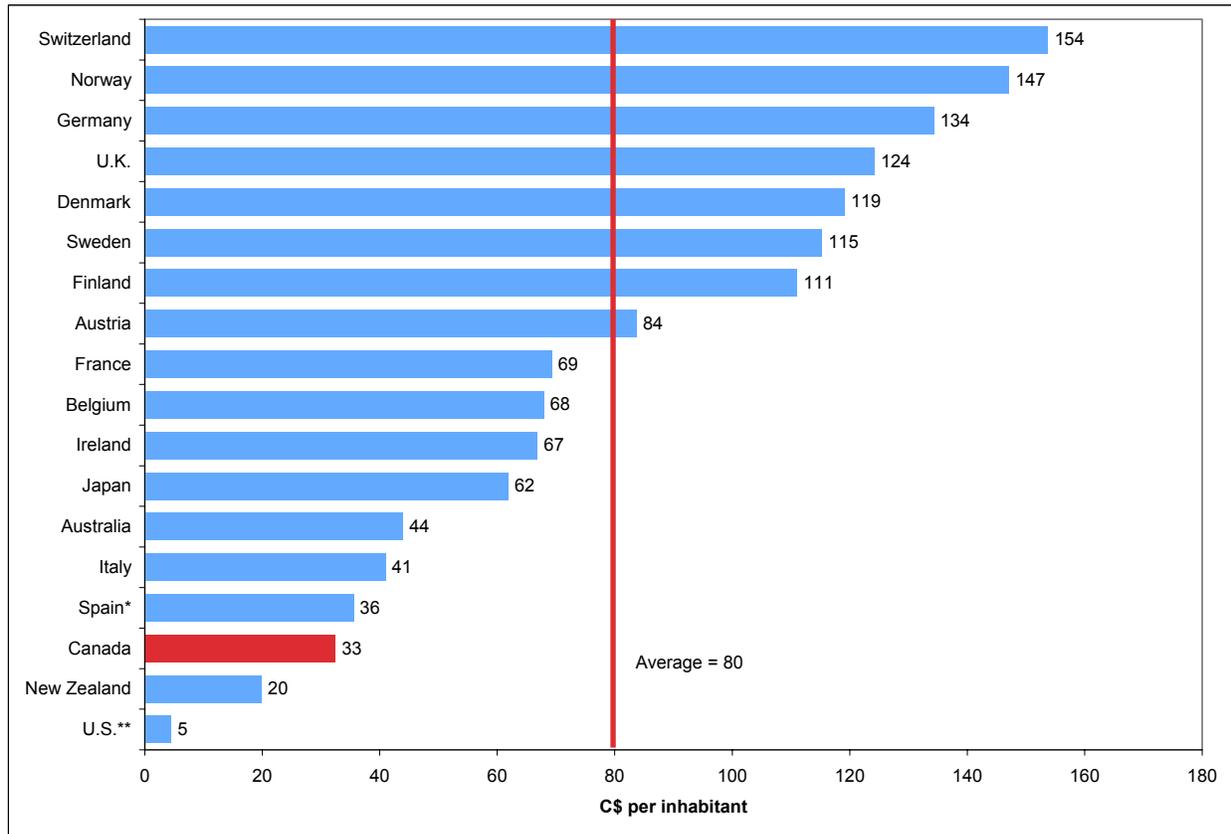
In preparing the comparison we took into account the fact that government financial support for public broadcasting can take various forms. In Canada, the CBC<sup>3</sup> receives direct government financial support in the form of an annual parliamentary appropriation. In 2004, this appropriation totalled \$1,066 billion, or \$33 per inhabitant.

The same can be said of Australia. In Australia, the two national public broadcasters, Australian Broadcasting Corporation (ABC) and Special Broadcasting Service (SBS) both receive government financial support in the form of parliamentary appropriations from the Commonwealth of Australia (the federal government). While ABC does not access advertising revenue, SBS does use advertising to supplement its government appropriation. New Zealand's TVNZ is another public broadcaster that receives its government financial support by way of an appropriation or grant. In the case of TVNZ, it receives part of its government financial support in the form of direct appropriation, and part through grants from New Zealand On Air – a Crown entity established to support domestic programming in New Zealand.

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<sup>3</sup> In addition to the CBC, Canada also has five provincial public broadcasters. We address these public broadcasters later in this section of the report.

**Figure 1 Per capita public funding for public broadcasters, 2004**



Sources: Public funding data obtained from various sources; see Appendix A for list of data sources. Exchange rates from Bank of Canada. Population data from CIA World Factbook.

\* Figures for Spain include an estimate for the public broadcasters of the autonomous regions.

\*\* Data for fiscal year 2003

In the U.S., government appropriation, at both the federal and state levels, is also the main method for supplying government monies to public broadcasters. The federal government provides an annual appropriation to the Corporation for Public Broadcasting (CPB), which in turn, makes financial contributions to public broadcasting through the Public Broadcasting Service (PBS), National Public Radio (NPR), Public Radio International (PRI) and local broadcast stations. The federal government also contributes to public broadcasting through additional grants for education programs delivered by public broadcasters, and certain technology initiatives (such as the transition to digital television). State and local governments also make significant contributions to public broadcasting both directly and indirectly through publicly funded state colleges and other public schools.

Instead of receiving some type of government appropriation, most European public broadcasters collect the bulk of their income by way of a television/radio licence fee levied on users of broadcast receivers. While the licence fee income does not directly come from a government or public body, per se, it is a creation of government regulation or legislation. In effect, the licence fee is imposed by the government. Instead of funding the public broadcaster out of general government revenues, the financial burden is spread across users – that is, households and businesses with broadcast receivers. So, while the method for collecting and remitting the funding for the public broadcaster is different from that in Canada, the substance is the same.

In preparing the comparison, we also took into account the structural differences in public broadcasting in Western countries. In Canada, there is a single national public broadcasting corporation, CBC/Radio Canada, which provides television and radio broadcasting services. In addition to the CBC/Radio Canada, Canada also has five provincial public broadcasters – TVOntario, TéléQuébec, Saskatchewan Communication Network, Knowledge Network (British Columbia) and Access Alberta. The provincial public broadcasters have a tradition of providing largely educational and informational programming; indeed, their broadcast licences from the CRTC require them to televise a certain amount of education programming as part of their schedules. Since our focus is on the CBC and federal government expenditures on Canadian public broadcasting, we have excluded Canada’s provincial public broadcasters from the comparison. Had we included these five broadcasters in the analysis, then it would have added another \$4 per inhabitant to the CBC’s \$33 per inhabitant. While this additional amount does increase the public funding picture for Canada’s public broadcasters, and provides a more suitable basis for international comparison, it does not have a material impact on the conclusions of the analysis: it does not move Canada very much in ranking among the Western countries included in the comparison. Nevertheless, it is important to note this because in many of the comparison countries the public broadcaster has a wider mandate that often includes public-education objectives similar to Canada’s public educational broadcasters.

From the per-capita comparison three distinct country groupings emerge. The first group includes the high-funding nations; those with per-capita funding levels in excess of \$100 per inhabitant. The second group is comprised of the medium-funding nations. This group includes those countries with per-capita funding levels of between \$60 per inhabitant and \$100 per inhabitant. This range includes funding rates that are within plus or minus 20% of the 18-country average of \$80 per-inhabitant. The third category includes the Western countries with per-capita funding rates of less than \$60 per inhabitant. This third category includes the U.S.; however, with a funding level of \$5 per inhabitant, the United States is arguably in a category of its own.

### High-Funding Countries

The high-funding category is comprised of seven countries: Switzerland; the Scandinavian nations of Norway, Denmark, Sweden and Finland; Germany; and the U.K. All of the countries in this group appear to follow the European Anglo-Saxon model of public broadcasting. Two of the countries in this group – Germany and Switzerland – have public broadcasting systems which are highly fragmented; this aspect may add to the cost of maintaining the systems.

Under the European Anglo-Saxon model of public broadcasting, there is a strong tradition of ensuring that the public broadcaster remains independent from government and commercial interests.<sup>4</sup> To achieve this, the European governments in this group have put in place systems that give the public broadcasters sufficient funding so that they can easily maintain independence from both government and the influences of the market.<sup>5</sup>

The U.K. is the prime example of the European Anglo-Saxon model.<sup>6</sup> The British Broadcasting Corporation (BBC) has grown to become the world leader in public broadcasting. Over the last several decades, the U.K. government has provided the BBC with the mandate and resources to be an innovator in broadcasting and to build a global brand.

The Scandinavian governments have also followed the European Anglo-Saxon model.<sup>7</sup> Scandinavian governments and citizens have looked to their public broadcasters to make significant contributions to

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<sup>4</sup> Council of Europe, para. 31.

<sup>5</sup> *Ibid.*

<sup>6</sup> *Ibid.*

<sup>7</sup> *Ibid.*, para. 33.

cultural and social development, and democracy within their countries. They have provided their public broadcasters with sufficient resources to fulfill this role, while at the same time maintaining their independence.

Germany's current public broadcasting system emerged following World War II. Germany's system also follows the European Anglo-Saxon model.<sup>8</sup> Another reason for the high levels of funding in Germany may be due to the highly fragmented structure of its public broadcasting system. Under German law, the states (*Länder*) are responsible for broadcasting. Instead of a single national public broadcaster, there are two national public broadcasting networks, ARD and ZDF, each comprised of several state-level public broadcasters. This regional fragmentation is further compounded by limits on advertising faced by ARD and ZDF.

In Switzerland, the fragmentation of the public broadcasting system is along linguistic lines. In order to serve each of its three major linguistic communities – French, German and Italian – Switzerland has to maintain three public broadcasters. While Switzerland's public broadcasters are under a single corporate umbrella, they produce full program schedules in all three languages. It is interesting to note that even with the highest level of per-capita public funding for public broadcasting, Switzerland's public broadcasters derive about 25% of their revenues from advertising. It appears that high levels of public funding are insufficient to cover the demands of operating in three languages, particularly when three large neighbours – France, Germany and Italy – offer programming in Switzerland's official languages.

### Medium-Funding Countries

The medium-funding category is comprised of five countries: Austria, France, Belgium, Ireland, and Japan. While there is no apparent common thread among these countries, some characteristics do start to emerge which make them distinct from the high-funding countries. Except for Japan all the public broadcasters in this group of countries are permitted to access advertising revenue to supplement their public funding. While these countries may aspire to follow the European Anglo-Saxon model, they have either chosen to or been forced to expose their public broadcasters to some commercial influence.

Canada's national public broadcaster also accesses advertising revenue to supplement its public funding. So, in a way the Canadian government has exposed it to some degree of commercial influence. Despite having this characteristic, Canada's public-funding levels are well below the countries in this group.

Within this group of medium-funding countries, governments leverage commercial broadcasters through regulation as an additional means to meet public policy goals. In particular, France has imposed domestic content regulations on commercial broadcasters. This type of approach allows the government to achieve some of its public broadcasting goals outside the public broadcaster, per se.

Once again, Canada has a similar environment; it too uses regulation to leverage commercial broadcasting to meet public policy goals. Nevertheless, its level of public funding for public broadcasting does not put it in this category of countries.

### Low-Funding Countries

The low-funding category is comprised of six countries: Australia, Italy, Spain, Canada, New Zealand and the U.S. In several of the low-funding countries, governments have put more reliance on the market to meet the public's broadcast needs. From the introduction of radio broadcasting, the U.S. eschewed government influence in the broadcasting sector; lawmakers looked to commercial broadcasters to satisfy

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<sup>8</sup> Council of Europe, para 31.

consumers' needs.<sup>9</sup> Though an innovator and leader in many respects, PBS is a modest component of the overall broadcasting system.

Over the last several decades, Canada, Australia and New Zealand have liberalized their broadcast sectors and introduced more privately owned domestic commercial broadcasting. Canada and Australia have also imposed content regulations on commercial broadcasters as a means to achieve some public broadcasting goals outside of the public broadcaster.

In Italy, the public broadcasters operate almost as if they are commercial broadcasters. The RAI channels broadcast the same type of programs as the private broadcasters, and they compete for advertising dollars. Spain is similar to Italy, although in Spain there are several regional public broadcasters representing the autonomous regions, which operate alongside the national public broadcasters. All of them raise income through a mixture of television/radio licence fees and advertising.

In some respects, Italy and Spain can be classified under the Latin model of public broadcasting.<sup>10</sup> Under this model, governments have traditionally underfinanced the public broadcaster, so that it would be financially dependent on the State, and therefore never have *real* independence from the government.<sup>11</sup>

The per-capita comparison, and the categorization of countries on the basis of it, places Canada among a group that either has had low regard for public-broadcaster's independence from the State, or would rather leverage commercial broadcasters to fulfill public policy goals. Either way, these approaches are unlikely to yield the type of innovative public broadcaster that is needed to properly serve Canada's small French-language market and compete with American programming in the English-language market.

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<sup>9</sup> Peter Grant and Chris Wood, *Blockbusters and Trade Wars: Popular Culture in a Globalized World*, Toronto: Douglas & McIntyre, 2004, p. 176.

<sup>10</sup> Council of Europe, para. 32.

<sup>11</sup> Council of Europe, para 32.

**Table 1 Public broadcasting and public funding mechanisms in comparison countries**

Country	Public Broadcasters	Funding Systems
Australia	ABC (Australian Broadcasting Corporation) SBS (Special Broadcasting Service)	ABC and SBS receive an annual appropriation from the federal government.
Austria	Austrian Broadcasting Company (ORF) - 2 television channels - 4 radio channels	Licence fee
Belgium	VRT – Flemish-language public broadcaster RTBR – French-language public broadcaster	Public funding for RTBR is granted by the Belgium French Community and it covers 75% of the PBS budget. The amount granted by the French community is determined in the management contract stipulated every four years. The VRT mission is linked to the financial envelope granted to it by the Flemish government each year. This financial envelope is laid down in the coordinated media decrees. Further provisos are stipulated in the management contract.
Denmark	DR (Danish Broadcasting Corporation) - 2 television channels - 4 FM radio channels - 16 DAB radio channels	Public funding for DR is the form of a household licence radio/television fee. Parliament sets the licence fee for a four-year period. The proceeds of the licence fee are allocated to DR and TV2. The bulk of the licence fee proceeds go to DR.
Finland	YLE - 2 television channels - Radio services	The government determines the household licence fee. It is collected by the regulatory authority, FICORA.
France	France Télévisions - 3 public television channels Radio France Radio France Internationale Réseau France Outre-mer	Public funding for France's public broadcaster is derived from a television licence fee set by Parliament.
Germany	ZDF ARD	Licence Fees
Ireland	RTE (Irish Public Television) - 2 television channels - 4 radio channels	RTE derives approximately 50% of its revenues from a television licence fee. The government sets the licence fee.
Italy	RAI - 3 television channels - 3 radio channels - International, educational, theme channels	Licence Fees
Japan	NHK	The Broadcast Law requires any person with equipment that can receive NHK broadcasts to pay an receiving-system fee.
New Zealand	TVNZ - 2 television channels	About 10% of TVNZ revenue is derived from contestable funding from New Zealand On Air and direct Charter Specific Government funding
Norway	NRK (Norwegian Broadcasting Corporation) - 2 television channels - 9 radio channels	Public funding for NRK is the form of a household licence radio/television fee. Parliament sets the licence fee.
Spain	RTVE (Radio Televisión Española) - operates national public television and radio channels as well as international and theme channels Broadcasters serving the autonomous regions: Telemadrid, TV-3, Canal 33, Canal Sur, Canal 9, TVG, ETB-1, ETB-2.	Television licence fee
Sweden	SVT (Sveriges Television) - 2 television channels SR (Sveriges Radio) - 4 radio channels UR (Utbildningsradion, Swedish Educational Broadcasting Company)	Public funding for Sweden's three public broadcasters comes from a television licence fee. Parliament decides the size of the licence fee and the allocation among the three public broadcasters. Currently, Sveriges Television receives 58%, Sveriges Radio receives 37%, and UR receives 5%.
Switzerland	SF DRS - Schweizer Fernsehen DRS - 3 German-language television channels TSR - Television Suisse Romande - 2 French-language television channels TSI - Televisione svizzera di lingua italiana - 2 Italian-language channels TvR - Televisiun Rumantscha - 1 Romansch-language channel 4 language-based radio networks	Public funding for public broadcasters is derived from a radio/television licence fee.
United Kingdom	BBC S4C	BBC derives its public funding through television licence fees. BBC World Service's income is form a Grant-in-Aid from the Foreign and Commonwealth Office S4C receives annual grant from Department of Culture, Media and Sport
United States	PBS (Public Broadcasting Service) NPR (National Public Radio) PRI (Public Radio International)	PBS, NPR, PRI and other public broadcasters receive government funding through the Corporation for Public Broadcasting (CPB), other federal government grants, state and local governments, state colleges, and public schools.

## 2.2 The Potential Benefits of Public Broadcasting

In this section, we further develop the international comparison addressed in the previous section by exploring the potential benefits of public broadcasting. We postulate the potential benefits that a public broadcaster can provide to a country, and rate the 18 Western countries as to how valuable these benefits would be to that country. We then compare each country's rating in this benefits calculation to its per-capita level of public funding for public broadcasting. This comparison helps us identify which Western countries are possibly under-funding their public broadcasters, when the public broadcaster could be delivering substantial benefits in that country's particular socio-political circumstances.

### 2.2.1 Benefits of a Public Broadcaster

We begin with the assumption that all countries can benefit from public broadcasting – even the U.S.; that there is a role for public broadcasting in the social, political, and cultural life of a country. Our operating assumption is that that role encompasses more than providing infrastructure and services that are not provided by commercial broadcasters. While the emergence and development of commercial broadcasting may shape the benefits of public broadcasting, they do not replace the public mandate of public broadcasting. Commercial broadcasters may fill many entertainment and other programming needs of a national community; they do not replace the broader role of public broadcasters. We also assume that in Western democracies, public broadcasters have moved away from being a government organ, a role that state-owned broadcasters assumed for some countries in past decades.

As we have described earlier, the role of a public broadcaster does vary somewhat by country, as there are different traditions and different expectations. For example, the following five roles were described by the BBC in its 2004 *Building Public Value* document prepared for its Charter review: (i) democracy, (ii) cultural, (iii) educational, (iv) society/community, and (v) global presence. In Canada, CBC has a relatively similar role in “democracy” (stimulate debate and offer a trusted news source), but does not have an explicit educational role (to some extent taken up by the provincial educational broadcasters), nor the resources to have more than a relatively small global presence role. CBC does have strong cultural and a societal/community roles, though the challenges and the expression of those roles would be different from the BBC.

In contrast in the U.S., PBS carries no responsibility to provide popular entertainment programming; rather, it bills itself as a “public non-profit media enterprise...that uses the power of non-commercial television, the Internet and other media to enrich the lives of all Americans through quality programs and education services that inform, inspire and delight.”<sup>12</sup> While PBS serves nearly 90 million people per week (through on-air and on-line connection), it is specifically designed to appeal to audiences when they want to be informed and educated (through a range of educational programs) on a range of subjects. It is assumed that private networks and cable channels provide general interest, popular programming of all genres and for various niche audiences – and generate 95+ percent of TV viewing.

As technology drives changes in communications, and radio-listener and television-viewer habits, public broadcasters have adapted to different contexts. They have not adhered to a traditional definition of radio and television.

- In the U.K., the BBC is proposing to redefine itself in terms of the personal communications promise of digital media, i.e., not to be stuck in passive broadcasting. It is assumed that nations will expect their public broadcaster to remain relevant to citizens as the platforms evolve, partly to maintain community in a universe of increasing personalization.
- In the U.S., PBS has assumed a leadership role in digital media. It claims to be one of the most visited dot-org Web sites in the world and the home of comprehensive companion Web sites for

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<sup>12</sup> PBS Web site

more than 1,000 PBS television programs and specials. PBS member stations are digital television leaders, in interactive TV, high-definition programming, and multicast services.

## **2.2.2 A Framework for Assessing the Potential Benefits of a Public Broadcaster**

The benefit of public broadcasting is heightened when the jurisdiction served by the public broadcaster displays certain challenges related to the structure of its media industry, and its social, political and cultural environment.

In this part of the analysis, our goal is to assess which Western countries can benefit most from public broadcasting. Such an assessment requires a broad review of the social, political and cultural environment, as well as the media-industry structure in each country. While this assessment is qualitative in many respects, we have developed a systematic approach. We have selected indicators that we believe are indicative of the relevant socio-political conditions and media-industry structure for each country. For each indicator we use a simple five-grade scale (high to low) for rating each country. As indicated earlier, this approach does not eliminate subjectivity, but it does force a discipline to the ranking of the countries.

There are two broad areas to our assessment: community/social cohesion, and culture and domestic programming. We address each of these below.

### ***Promotion of Culture and a Shared Value System***

It is posited that a homogeneous and highly inclusive society would benefit less from public broadcasting than societies with less cohesion where issues can be partly addressed through effective public broadcasting. Public broadcasting can benefit these countries by attempting to bridge some of the gaps through information, education, and by example.

It is difficult to determine which countries would benefit more from public broadcasting on this point, as threats to social cohesion can rise and fall. For example, while France is a very homogeneous country, it has a large Arab minority and less tradition in addressing the needs of minorities than other countries. Canada has a more pluralistic tradition and a more diverse population, but perhaps has a greater tolerance for minorities who may be more easily integrated in Canada. Canada may very well benefit from an effective public broadcaster that can contribute to ensuring social cohesion; however, some European countries may benefit even more urgently because of their difficulties in addressing issues raised by minorities in this way. One could argue that Western European countries benefit from public broadcasting because it can facilitate more effective integration of minorities in their societies – more so than Canada. However, Canada is composed of a far more diverse population that is growing rapidly in its diversity – so can also benefit greatly from a public broadcaster.

The development of community and social cohesion through communications requires an infrastructure to deliver messages. Broadcasting is an efficient medium for this activity; it reaches a large community simultaneously, but it does require a significant and sometime costly communication infrastructure. Commercial broadcasters with goals to maximize profit will often not commit to constructing an infrastructure which reaches the whole population; a public broadcaster is one avenue for overcoming these economic limitations.

Canada's relatively sparse population strung out along the U.S. border would seem to indicate that a public broadcaster with government financial backing would be very beneficial because it could shoulder the economic burden of the infrastructure requirements brought on by geography. This includes not only the physical infrastructure, but also the organizational infrastructure to deliver regional or local programming, in two official languages and sometimes more. A well-established communications infrastructure enables individual and mass communication, but public broadcasting provides the content

and leadership in national discourse. We considered this category an important one in which to rate Canada versus other countries.

Accordingly, in developing our assessment of the relative benefit that a public broadcaster could bring in terms of community/social cohesion, we considered the following criterion, whose attributes reflect the geographic, social, cultural and political environment. It incorporates indicators related to population density and dispersion, the number of broadcasting languages, and cultural diversity and national unity.

- **Promotion of culture and common values**
  - A lower population density suggests an environment in which a public broadcaster would have to absorb the costs of building and maintaining an infrastructure offering universal coverage of the population. Even with satellite transmission now available, CBC has had to build an enormous terrestrial infrastructure, and operate in five time zones.
  - As noted earlier, countries with large ethnic populations, in theory, face more challenges to social cohesion than countries with more homogeneous populations. In practice, it is more complicated, since some countries have more problems arising from a small ethnic population than other countries more experienced in accommodating multiple cultures.

### ***Creation and Availability of Cultural/Indigenous Programming***

Another role or benefit of public broadcasting is that it can contribute, in part, to protecting and strengthening a country's culture, i.e., that which is expressed in radio and television formats (and other platforms). It could be argued that the benefit is greatest where foreign television broadcasters or foreign television programming attracts large audiences versus the audiences for domestic programming. By this criterion, English-language countries face enormous challenges in terms of a public broadcaster attracting audiences in competition with American programming exported the world over. Switzerland, Belgium, Ireland and Austria face similar challenges because they share languages with larger neighbours.

To measure the relative potential benefit, we reviewed Western countries in terms of the relative size of the domestic language market, proximity of a much larger country with strong programming, as well as the record of domestic broadcasters in terms of audience appeal for indigenous versus foreign programming. Accordingly, the criteria for assessing the relative potential benefit of public broadcasting for culture and domestic programming rationale are the following:

- **Relative size of the domestic language market** – In comparison to most manufacturing or service industries, the broadcasting industry is characterized by relatively high sunk and fixed costs of operation, and relatively low incremental costs. The high sunk costs arise largely from the unrecoverable investment that must be made to create broadcast programming. The high fixed costs arise largely from the broadcast infrastructure (e.g., production studios, transmission facilities) that must be acquired or constructed to reach the first viewer. The incremental cost of reaching the second and subsequent viewers is relatively low in comparison to other the costs involved in broadcasting. Because of these economics, broadcasting to a larger audience can be much more economical for a broadcaster; it can realize lower average costs by spreading the sunk and fixed costs over a larger audience base. Countries with relatively small populations may require more government intervention in broadcasting. The small broadcasting market may not attract enough private-sector investment into the production and broadcasting of domestic program content. Domestic viewers, thus, end up receiving relatively less domestic content. Countries with relatively low populations, then, can benefit from a public broadcaster that is not compelled to realize commercial returns on sunk and fixed investments.
- **Proximity to a large larger country with the same language** – It is contended that large and powerful border countries with significant media sectors generating television services in the same language pose a greater threat to indigenous culture. A strong public broadcaster can provide relatively more of benefit in such situations, by providing a continuous stream of television

programming in multiple programming categories. A subset of this indicator would be countries whose populations are primarily English speaking. While not necessarily bordering the US as in the case of Canada, these countries are subject to the same dominant English language television programming emanating from the US.

- **Audience appeal of indigenous programming** – Any dominance by foreign programming can be determined through a review of audience tuning to domestic vs. international programming. The greater the tuning to foreign programming, the greater the potential benefit of a public broadcaster that can devote a large share (or all of) its airtime to exhibiting indigenous programming. Of course, the mere exhibition of indigenous programming does not in itself create a benefit, as the programming must be of sufficient quality and audience appeal to be competitive with the foreign programming.

### 2.2.3 Assessment of Environment for Public Broadcasting

We undertook basic research of some 18 countries to compare them to Canada along the following four criteria and associated indicators. For each indicator we were able to obtain specific data in order to establish the scale for a relative scoring for each country.

**Table 2 Potential-benefits analysis criteria and indicators**

Criteria	Indicators
1. Promotion of culture and common values	<ul style="list-style-type: none"> <li>• Population density</li> <li>• Number of broadcasting languages – number of official languages broadcast by the public broadcasting services (note: must be rough equivalency in broadcast, not just occasional minority programming broadcast)</li> <li>• Ethnic-diversity challenges (third-party risk ratings)</li> </ul>
2. Relative size of domestic language market	<ul style="list-style-type: none"> <li>• Population of country or population of various official language groups within a single country</li> </ul>
3. Proximity to a large larger country with the same language	<ul style="list-style-type: none"> <li>• Countries bordering countries of similar language with a much larger economy</li> <li>• Countries whose mother tongue is English (which are subject to greater pressure from American programming, even if not bordering on the U.S.)</li> </ul>
4. Audience appeal of indigenous programming	<ul style="list-style-type: none"> <li>• The number of indigenous programs' among the top ten programs</li> </ul>

Based on these four criteria, we rated each country against six different indicators on a five-point scale. The details of the scoring systems and the data used to derive the scores are presented in Appendix B. In summary:

- A rating of **high** and a numerical score of **five** was assigned when the indicators pointed to an environment where a public broadcaster could potentially generate relatively high benefits to its citizens.
- A rating of **medium** and a numerical score of **three** was assigned when the indicators pointed to an environment where a public broadcaster could potentially generate a relatively moderate level of benefits.
- A rating of **low** and a numerical score of **one** was assigned when the indicators pointed to an environment where a public broadcaster could generate a relatively modest benefit.

Countries could also obtain scores of two or four.

We did not weight the indicators or the criteria in terms of level of importance, and recognize that not doing so is somewhat arbitrary. Nevertheless, this approach provides a systematic basis for gauging and comparing each country's environment, and thereby the relative benefit that a public broadcasting could bring to the country.

In the table below, we report the aggregate score for each country across the four criteria and six indicators. A higher score indicates that the environment is such that a broadcaster could potentially deliver relatively large benefits. A lower score indicates that the environment is such that a public broadcaster is likely to deliver relatively lower benefits in comparison to other countries. The maximum possible score is 30.

The analysis shows that:

- Among the 18 countries included in the analysis, Canada stands to benefit the most from public broadcasting, according to this evaluation. It obtained a score of 23 out of a possible 30 points.
- Other countries that are positioned to realize relatively high benefits from public broadcasting include Switzerland, New Zealand, Australia, Belgium, Ireland, and Austria. They obtained scores of between 17 and 20.
- The next group of countries – with scores of between 11 and 15 – are: Norway, Spain, Finland, Denmark, France, and the U.K.
- The final group with the lowest scores (seven to nine) are: Germany, Italy, U.S. and Japan.

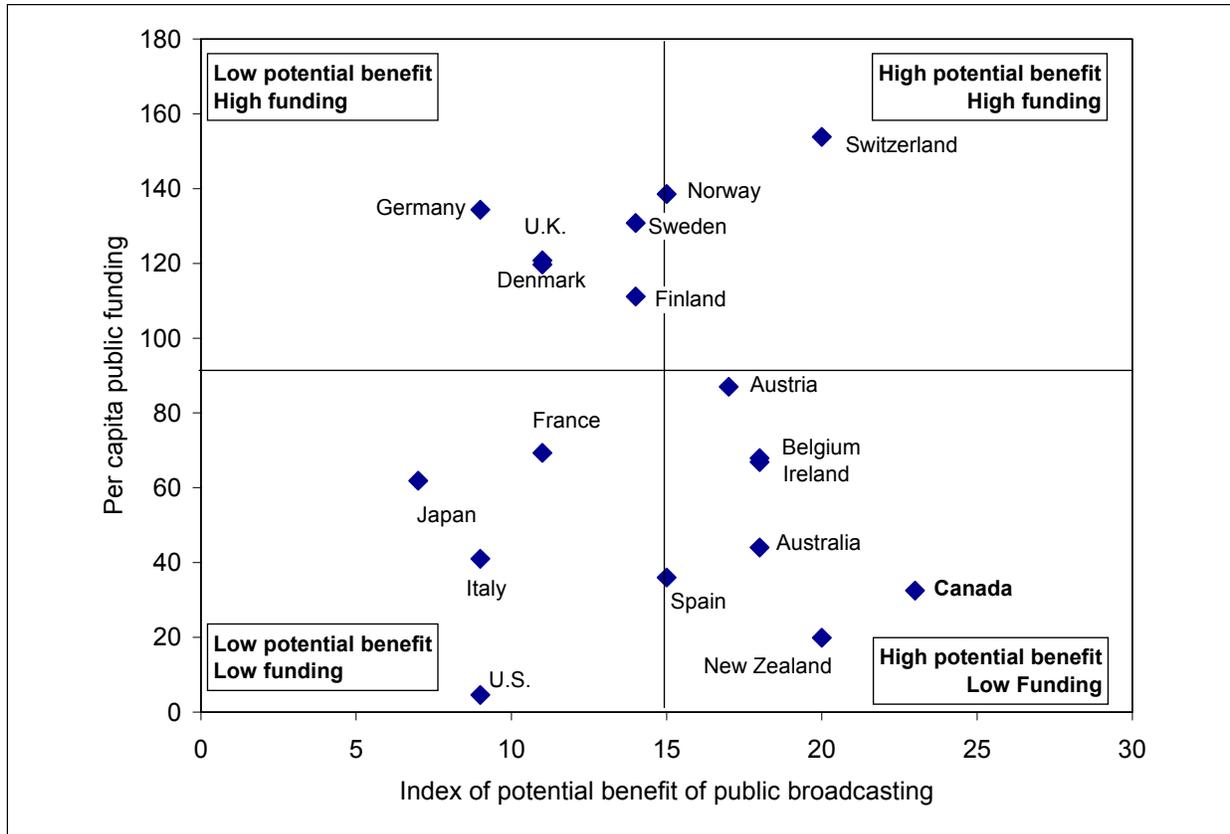
**Table 3 Scoring of environment for public broadcasting benefits**

Country	Aggregate rating (maximum points of 30)	Country	Aggregate rating (maximum points of 30)
Canada	23	Finland	14
Switzerland	20	Sweden	14
New Zealand	20	Denmark	11
Australia	18	France	11
Belgium	18	U.K.	11
Ireland	18	Germany	9
Austria	17	Italy	9
Norway	15	U.S.	9
Spain	15	Japan	7

Source: Nordicity analysis

Based on the aggregation of these qualitative ratings, we positioned each country along a potential-benefit axis in a two-by-two grid. This allowed us to graphically compare the potential benefits of a public broadcaster to the existing relative level of per-capita government funding provided to the public broadcaster. The resulting plot shows Canada with an environment that is likely to generate relative high potential benefits from public broadcasting. The plot also shows that, despite this high potential for benefits, Canada has one of the lowest levels of government financial support for public broadcasting.

**Figure 2 Comparison of potential benefit and funding of public broadcasting**



Source: Nordicity analysis

### 3 The Federal Government's Economic Support for Culture

In the previous section we compared the federal government's financial support for the CBC to levels of public financial support provided through public subsidy in other Western countries. In this section, we examine the Canadian federal government's overall economic support for culture in Canada. As part of this examination we consider both direct and indirect forms of economic support.

The federal government provides direct economic support for culture by way of grants and contributions, and other direct program expenditures related to Canada's culture and heritage. The Department of Canadian Heritage oversees the vast majority of these expenditures. They include funding and tax-based support provided to the CBC, Telefilm Canada, Canadian Television Fund, Canada Council for the Arts, museums and art galleries, movable cultural property, Library and Archives Canada, and other programs and agencies with mandates to preserve, promote and develop Canadian culture.

The federal government also provides indirect economic support to Canada's cultural sector through policies and regulations derived from various legislative authorities. Two measures in particular provide significant indirect economic benefit to Canada's private broadcasters. One of these measures is the CRTC's policy of simultaneous substitution; the other is section 19.1 of the *Income Tax Act*.

First, we review the different components of federal-government support for culture. We begin with CBC's annual parliamentary appropriation – its main source of income. We then use data from Statistics Canada to construct a time series of the federal government's other direct financial support for culture. We also derive estimates of the annual financial impact of the federal government's indirect economic support measures for television broadcasters. We address, separately, the indirect support garnered by private broadcasters and the CBC.

We conclude this section by comparing the trends in CBC's annual support (direct and indirect) to the trends in the federal government's overall spending, its other direct support for culture, and the financial impact of its indirect support for private broadcasters.

#### 3.1 Components of Government Support for Culture

##### 3.1.1 CBC's Parliamentary Appropriation

Each year, the CBC receives a financial appropriation from the federal government to finance its operations, capital improvements, and working-capital requirements. While the CBC does earn advertising and subscriber revenues from some of its broadcast services, the government appropriation represents its largest single source of income.

Between 1995/96 and 2003/04, the CBC experienced a significant swing in its annual government appropriation levels. In the 1995/96 fiscal year, the CBC's government appropriation totalled \$1,171 million. Over the next two fiscal years, it dropped by 31% to \$806 million in 1997/98.

Between 1997/98 and 2003/04, the CBC saw its government appropriation make some recovery; however by 2003/04, the total amount of the appropriation was still 9% below the 1995/96 level.

The drop in the appropriation is even larger when viewed in terms of constant dollars.

**Table 4 CBC/Radio Canada annual appropriations (current and constant 1995 dollars)**

Fiscal year	CBC/Radio Canada's total government appropriation, operating, capital, and working capital	
	Current dollars (\$ millions)	Constant 1995 dollars (\$ millions)
1995/96	1,171	1,171
1996/97	997	981
1997/98	806	772
1998/99	896	859
1999/00	879	828
2000/01	902	828
2001/02	983	880
2002/03	1,047	917
2003/04	1,066	908

Source: CBC Annual Reports; and Statistics Canada (CPI, Catalogue 62-001-XPB, table 4)

**Notes:**

1. Appropriations for 1995-96 include \$106 million in funding for downsizing.
2. Beginning in 2003-04 appropriations include RCI; for the years 1991-92 through 2002-03 RCI was paid by contract and is therefore not included.

### 3.1.2 Other Federal Government Direct Expenditures on Culture and Heritage

In addition to the monies provided to the CBC, the federal government makes other direct expenditures on operations and programs related to culture. In order to assess the federal government's expenditures in this area, we examined Statistics Canada figures for federal government expenditures on culture. For the purposes of comparison with the CBC, we deducted the CBC's annual appropriation from the federal government's total culture expenditures to arrive at a time series for all other culture expenditures.

**Table 5 Federal government expenditures on culture**

Fiscal year	Federal government expenditures on culture		CBC government appropriation		Federal government expenditures on culture (excluding CBC)	
	\$ millions	% change	\$ millions	% change	\$ millions	% change
1995/96	2,920	--	1,171	--	1,749	--
1996/97	2,760	(5.5%)	997	(14.8%)	1,763	0.8%
1997/98	2,670	(3.3%)	806	(19.1%)	1,864	5.7%
1998/99	2,817	5.5%	896	11.2%	1,921	3.1%
1999/00	2,809	(0.3%)	879	(1.9%)	1,930	0.5%
2000/01	2,954	5.2%	902	2.6%	2,053	6.3%
2001/02	3,216	8.9%	983	9.0%	2,234	8.8%
2002/03	3,426	6.5%	1,047	6.5%	2,379	6.5%
2003/04	3,500	2.2%	1,066	1.9%	2,433	2.3%
Increase/(decrease) 1995/96 to 2003/04	580	19.9%	(105)	(9.1%)	684	39.1%

Source: Figures for federal government expenditures on culture are from Statistics Canada; figures for CBC government appropriation are from CBC.

Between 1995/96 and 2003/04, the federal government's total expenditures on culture increased by 20%, from \$2,920 million to \$3,500 million. Because the CBC's annual appropriation comprises such a large share of the federal government's expenditures on culture, it is better to compare the CBC to all other culture expenditures. Between 1995/96 and 2003/04, the federal government's other expenditures on culture (excluding the CBC) increased by 39%, from \$1,749 million to \$2,433 million. Evidently, after one strips out the effect of the CBC parliamentary appropriation, the data show that the federal government's culture expenditures rose, for the most part, consistently between 1995/96 and 2004/04. Federal government expenditures made through the CBC, however, dropped sharply during the mid-1990s before posting somewhat of a recovery.

### 3.1.3 Indirect Government Support for Private Broadcasters

In addition to the direct federal government expenditures on culture, the federal government also provides indirect economic support to Canada's cultural sector in the form of policies, regulations, and tax measures. Two measures in particular – the CRTC's policy of simultaneous substitution and section 19.1 of the *Income Tax Act* – provide significant indirect financial benefit to Canada's private broadcasters. The former helps Canadian broadcasters (typically always private) capture significantly greater benefits from the programming rights they acquire from U.S. distributors than if broadcast distribution undertakings (BDUs) did not have to substitute the Canadian signal for programming exhibited simultaneously. The latter provides a tax disincentive to Canadian advertisers to buy airtime on U.S. border stations to reach Canadian audiences. Both mechanisms discourage Canadian advertisers from purchasing airtime on U.S. border stations available to Canadians by BDUs, and thereby generate, for Canadian broadcasters, incremental advertising revenues that would otherwise flow to U.S. border stations. As an example of the types of indirect government support being provided to private broadcasters in Canada, Nordicity has examined the situation in English television. In this section we derive dollar estimates of the annual financial benefit to private broadcasters in English television flowing from simultaneous substitution and section 19 (1) of the *Income Tax Act*.

#### Simultaneous Substitution

Section 30 of the CRTC's *Broadcasting Distribution Regulations* compels Class 1 and 2 BDUs to, upon request, substitute the programming of a local or higher-priority signal for another signal, when a television program is being simultaneously broadcast. In effect, simultaneous substitution permits a Canadian conventional broadcast station to insert its signal for a U.S. border station exhibiting the same program at the same time. Such an action, allows the Canadian broadcaster to capture all the Canadian audience tuning to that program. Any Canadian advertiser seeking to reach viewers of simulcast television programs must buy their advertising airtime from the Canadian broadcaster; any advertising placed with the U.S. border station will only be seen by American viewers or Canadians receiving American television signals by VHF/UHF antenna.

The economic value of simultaneous substitution has been the subject of several previous analyses by Arthur Donner and various co-authors. Donner's most recent work on this topic was in 1997. In that year he and Fred Lazar derived an estimate of \$147.6 million for the revenue impact of the airtime sales transferred to Canadian English-language television broadcasters because of simultaneous substitution.<sup>13</sup>

To develop our estimates for the simultaneous substitution, we extrapolated Donner and Lazar's estimate for 1996/97 to the period of 1997/98 to 2003/04. We also prepared an estimate for 1995/96 by extrapolating backwards using Donner and Lazar's estimates. The results of this extrapolation can be found in the table below. In Appendix C we provide additional details on our extrapolation methodology.

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<sup>13</sup> Arthur Donner and Fred Lazar, *The Financial Effects of Simulcasting on Canadian TV Broadcasters*, June 1997.

**Table 6 Estimates of the revenue impact of simultaneous substitution for English-language private television broadcasters**

Broadcasting year	Status-quo scenario (\$ millions)	Simulcasting-growth scenario (\$ millions)
1995/96	137	137
1996/97	147	147
1997/98	159	162
1998/99	161	166
1999/00	162	170
2000/01	165	176
2001/02	161	175
2002/03	177	195
2003/04	177	199

Source: Nordicity estimates based on methodology from Donner and Lazar (1997) and 2004 statistics from CRTC

As part of the extrapolation, we prepared estimates for two scenarios. The status-quo scenario assumed no change in broadcasters' simulcasting activity between 1997/98 and 2003/04. In the simulcasting-growth scenario, we incorporated the effect of increased simulcasting activity between 1996/97 and 2003/04. Our own review of television broadcasting statistics indicated that the number of hours of simulcast programs on Canadian television increased during the 1996/97-to-2003/04 period.

- Under the status-quo scenario, the annual revenue impact of simultaneous substitution increased from \$147 million in 1996/97 to \$177 million in 2003/04.
- Under the simulcasting-growth scenario, the annual revenue impact of simultaneous substitution increased from \$147 million in 1996/97 to \$199 million in 2003/04.

#### Section 19.1 of the Income Tax Act

Section 19.1 of the *Income Tax Act* disallows Canadian broadcasting companies from making deductions from their taxable income for any amounts paid for advertising on foreign broadcasters. The relevant legislation is the following:

- 19.1. (1) *Subject to subsection 19.1(2), in computing income, no deduction shall be made in respect of an otherwise deductible outlay or expense of a taxpayer made or incurred after September 21, 1976 for an advertisement directed primarily to a market in Canada and broadcast by a foreign broadcasting undertaking.*
- (2) *In computing income, a deduction may be made in respect of an outlay or expense made or incurred before September 22, 1977 for an advertisement directed primarily to a market in Canada and broadcast by a foreign broadcasting undertaking pursuant to*
- (a) *a written agreement entered into on or before January 23, 1975; or*
- (b) *a written agreement entered into after January 23, 1975 and before September 22, 1976 if the agreement is for a term of one year or less and by its express terms is not capable of being extended or renewed.*

Section 19.1 discourages Canadian advertisers from purchasing airtime on U.S. border stations (or any American broadcaster for that matter) as a means to reaching Canadian audiences. The effect of this

measure is to transfer television advertising sales from American television stations along the Canadian border to Canadian television broadcasters.

Like simultaneous substitution, the economic impact of section 19.1 has been the subject of several previous analyses by Arthur Donner and various co-authors. Donner's most recent work on this topic was in 1990. In that year, the Department of Communications commissioned Donner to prepare a report on the revenue impact of simultaneous substitution and section 19.1. Donner concluded that section 19.1 generated an estimated \$67.3 million in incremental advertising revenues for Canadian broadcasters in 1988.<sup>14</sup>

By applying Donner's methodology to the broadcasting market during the 1995/96-to-2003/04 period, we generated estimates of the annual revenue impact of section 19.1 for Canada's English-language private television broadcasters. The results are presented in the table below. In Appendix D we provide additional details on our methodology.

**Table 7 Estimates of the annual revenue impact of section 19.1**

Broadcasting year	Revenue-growth scenario (\$ millions)	10%-market-share scenario (\$ millions)
1995/96	69	98
1996/97	77	109
1997/98	81	115
1998/99	85	120
1999/00	87	123
2000/01	87	122
2001/02	84	119
2002/03	95	135
2003/04	93	132

Source: Nordicity estimates based on methodology from Donner and 2004 statistics from CRTC

We prepared estimates under two scenarios defined by Donner: the revenue-growth scenario and the 10%-market-share scenario.

- Under the revenue-growth scenario, the advertising-revenue impact increased from \$69 million in 1995/96 to \$93 million in 2003/04.
- Under the 10%-market-share scenario, the advertising-revenue impact increased from \$98 million in 1995/96 to \$132 million in 2003/04.

These amounts exclude any advertising-revenue benefit accrued by the CBC; the benefits accrued by the CBC are addressed in Section 3.1.4 of this report.

<sup>14</sup> Arthur Donner, *The Financial Impacts of Section 19.1 of the Income Tax Act (Bill C-58) and Simultaneous Substitution*, (Her Majesty the Queen in Right of Canada as represented by the Minister of Communications, 1990).

Total Impact of Indirect Government Support

In total, Canada’s English-language private conventional television broadcasters garnered an estimated **\$271 million to \$331 million** in incremental advertising revenues in 2003/04 directly due to two specific measures – simultaneous substitution and section 19.1 – implemented under the powers of the federal government. This compares with the approximate \$350 million of direct government funding allocated to CBC’s English television service.

This range estimate is based on the development of a low-impact scenario and a high-impact scenario. The low-impact scenario includes the status quo estimate for simultaneous substitution and the revenue-growth-assumption scenario for section 19.1. The high-impact scenario incorporates the estimate for the simulcasting-growth scenario and the 10%-market-share-assumption scenario for section 19.1.

**Table 8 Estimates of total annual revenue impact of indirect government support for English-language private conventional broadcasters**

	Low-impact scenario			High-impact scenario		
	(\$ millions)			(\$ millions)		
	Simultaneous substitution	Section 19.1	Total	Simultaneous substitution	Section 19.1	Total
1995/96	137	69	207	137	98	235
1996/97	147	77	224	147	109	256
1997/98	159	81	241	162	115	277
1998/99	161	85	246	166	120	287
1999/00	162	87	249	170	123	293
2000/01	165	87	251	176	122	298
2001/02	161	84	245	175	119	294
2002/03	177	95	273	195	135	330
2003/04	177	93	271	199	132	331

Source: Nordicity estimates based on methodologies from Donner and data from the CRTC

Note: Some totals may not add due to rounding

Under the low-impact scenario, the total annual revenue impact of the federal government’s indirect economic support increased by 31%, from \$207 million in 1995/96 to \$271 million in 2003/04. Under the high-impact scenario, the total annual revenue impact increased by 41%, from \$235 million in 1995/96 to \$331 million in 2003/04.

Other Indirect Government Support

So far, we have addressed the two most important of the quantifiable indirect economic support measures arising from federal interventions. Aside from the quantifiable benefits flowing to private conventional broadcasters, these broadcasters also benefit from an array of other regulatory decisions and provisions, including subsidized programming, domestic market protection, priority carriage rules, and distribution regulations. For example, private sector broadcasters have indirect access to subsidized television programming; i.e., programming with financing from the Canadian Television Fund, and programming accessing federal tax credits. The CBC also accesses this subsidized programming.

We did not explore or quantify the impact of these programming subsidies, mainly because the CBC also benefits significantly from these support mechanisms. However, with further modeling, other private sector market protections arising from regulatory decisions and policies could also be quantified. For example, the growth and development of the pay and specialty-TV services in Canada, largely a private-

sector phenomenon, has been the result of regulated subscriber rates and restricted entry by genre. This regulatory system provides significant financial benefit to the private broadcasting sector. The annual value of subscriber revenues for specialty services benefiting from the CRTC's licensing regime (priority carriage and regulated wholesale rate) is approximately \$900 million according to the CRTC's financial reports. In addition, the profitability of these services now typically exceeds the conventional private broadcasting sector. Similarly, the CRTC's recently created drama incentives provide the private sector with significant financial benefits – increased advertising opportunities during the broadcast of large-audience US programming – if they engage in greater activities in the area of domestic drama programming. Accordingly, we believe the estimates of indirect federal government support generated in this report (\$271 million to \$331 million) are conservative because they only take into account two specific measures that benefit private broadcasters.

### 3.1.4 Indirect Government Support for CBC

As noted above, the CBC also airs advertising, and so, to some extent also benefits from section 19.1; since it also competes with U.S. border stations for Canadians' television tuning and Canadian advertisers' airtime purchases.

Donner's methodology for estimating the advertising-revenue impact of section 19.1 did not distinguish between private conventional broadcasters and the CBC. As such, in order to estimate the CBC's share of the total impact of section 19.1, CBC's share of total advertising revenues in the English language conventional television market was used to allocate a portion of the estimate total amount to the CBC. For example, in 2003/04, the CBC earned \$223 million in advertising revenues; this represented 12% of total conventional television advertising revenues in the English-language conventional television market. Under the revenue-growth scenario, 12% of the estimated total impact of section 19.1 was equal to \$18 million; under the 10%-market-share scenario, 12% was equal to \$24 million. The table details the results of this exercise.

**Table 9 Estimates of the annual revenue impact of section 19.1 for CBC**

Broadcasting year	Revenue-growth scenario (\$ millions)	10%-market-share scenario (\$ millions)
1995/96	19	24
1996/97	17	22
1997/98	20	25
1998/99	17	22
1999/00	16	20
2000/01	17	22
2001/02	17	23
2002/03	16	20
2003/04	18	24

Source: Nordicity estimates based on methodology from Donner and 2004 statistics from CRTC

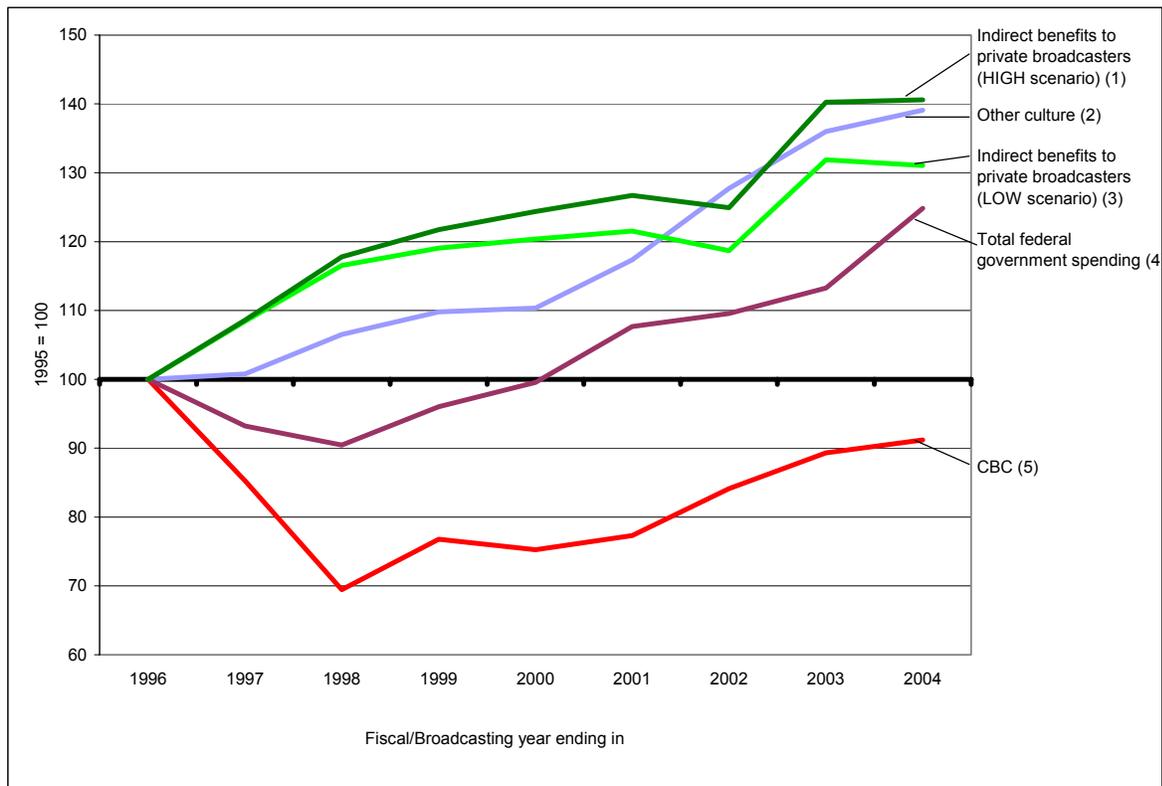
### 3.2 Comparison of Trends in Government Support for Culture

In this section, we compare the trends in different types of federal government support for culture, including the CBC. We also include the federal government’s overall program spending (excluding national defence and debt payments) in the comparison. We base the comparison on current dollars, rather than constant dollars.

Between 1996<sup>15</sup> and 2004, the following trends emerged:

- The total revenue impact of indirect government support for private broadcasters (under the high-impact scenario) grew by **41%**; under the low-impact scenario, the revenue impact grew by **31%**.
- Federal government spending on other culture (excluding the CBC) grew by **39%**.
- Total federal government spending (excluding national defence and debt payments) grew by **25%**.
- Federal government support for the CBC (including direct and indirect support) **dropped by 9%**.

**Figure 3 Federal government support of culture, 1996 = 100**



Source: Nordicity Group calculations based on data from Statistics Canada, CRTC, Donner and Lazar, CBC, and the *Public Accounts of Canada*.

- (1) Indirect benefits to private broadcasters (HIGH scenario) are the sums of estimates for simultaneous substitution and section 19.1.
- (2) Other culture includes all federal government expenditures on culture excluding amounts paid to the CBC.
- (3) Indirect benefits to private broadcasters (LOW scenario) are the sums of estimates for simultaneous substitution and section 19.1.
- (4) Total federal government spending includes all spending except for national defence and debt payments.
- (5) CBC includes annual parliamentary appropriation and estimate of indirect benefit of section 19.1.

<sup>15</sup> In this section we have reverted to single-year denominations, e.g., 1996, to account for different year-ends for federal government financial statistics and broadcasting sector statistics. The former have a March 31 year-end; the latter have an August 31 year-end. The term 1996 refers to statistics from the government fiscal and broadcasting years ending in 1996.

The comparison demonstrates that while the federal government's economic support for culture and for private broadcasters increased during the 1996-to-2004 period, its support for public broadcasting did not keep pace; indeed it actually dropped.

After dropping between 1996 and 1998, overall federal government expenditures showed steady growth between 1998 and 2004. The federal government's expenditures in culture grew by an even faster rate than overall expenditures. Culture expenditures grew steadily between 1996 and 2004; in 2004, they were 39% higher than in 1996.

The effect of the federal government's indirect support measures for private conventional television broadcasters also grew as the conventional television broadcasting market grew between 1996 and 2004. Even under the low-impact scenario included in the comparison chart, the revenue impact of simultaneous substitution and section 19.1 climbed between 1996 and 2001, dipped slightly in 2001, and then continued to climb to 2004. By 2004, the annual revenue impact of the federal government's indirect support measures was 30% higher than where it was in 1996.

In contrast, the total federal government support for the CBC, including its parliamentary appropriation and its share of the estimated revenue impact of section 19.1, fell by 30% between 1996 and 1998, before experiencing a recovery of sorts between 1998 and 2004. During that six-year recovery, the federal government's direct and indirect support for the CBC increased by 32%; but by 2004 it still remained 9% below the 1996 level.

## 4 Summary of Findings

In this report, we have examined government support for public broadcasters around the world. We have also examined the Canadian federal government's economic support for public broadcasting and culture, in general. Both of our analyses indicate that the federal government's support for the CBC has slipped relative to what Canada spends on culture and what other countries spend on public broadcasting.

Through an international comparison of public funding for public broadcasters in 18 Western countries, Canada ranked 16th on a per-capita basis. At \$33 per inhabitant, Canada's level of funding was only ahead of New Zealand, and the U.S. We also note that Canada's funding was less than one-half of the \$80 average across the 18 Western countries. And Canada's level of funding was about one-fifth of the level of the leading country – Switzerland – among those included in the comparison.

When we adjusted the international comparison to take into account the relative potential benefits that public broadcasting could yield in various Western countries, the analysis further underlined the relative position of Canada and the CBC. Among the 18 Western countries included in the analysis, we found that from a social, political and media perspective, Canada could derive significant benefits from public broadcasting when compared to other Western countries. Despite these circumstances, Canada provides some of the lowest levels of funding among Western countries. From our analysis, we found that Canada was one of six countries (Ireland, Belgium, New Zealand, Australia and Spain) that could potentially see relatively high benefits from public broadcasting, but whose per capita contribution to public broadcasting was below the average (C\$80 per capita) of the 18 Western countries included in the analysis.

In order to determine whether poor funding of public broadcasting was reflective of Canada's funding of culture overall, we examined the trends in federal government expenditures and its economic support for culture. We found that all such support consistently rose between 1996 and 2004, with the exception of support for the CBC. Total federal government expenditures (excluding defence and debt payments) rose by 25%. Federal government expenditures on culture (excluding the CBC) rose by 39%. Even the federal government's indirect economic support for private broadcasters was up by at least 30% during this period (and perhaps as much as 41%). In contrast, economic support for the CBC (direct and indirect) actually dropped by 9% between 1996 and 2004.

To conclude, Nordicity's analysis suggests that Canada's relatively poor funding of public broadcasting – specifically the CBC – vis-à-vis funding of public broadcasting in other Western confines is not indicative of Canada's treatment of its cultural sector; it reflects its particular approach to the funding of public broadcasting. This poor treatment of public broadcasting is peculiar in view of this study's conclusion of the large benefits available to Canada from an effective national public broadcaster.

## References and Data Sources

- British Broadcasting Corporation. *Building public value: Renewing the BBC for a digital world*. June 2004. Available at <http://www.bbc.co.uk>.
- Council of Europe. *Public service broadcasting*. Report to the Committee on Culture Science and Education. January 12, 2004. Available at: <http://assembly.coe.int/Main.asp?link=/Documents/WorkingDocs/Doc04/EDOC10029.htm>.
- Donner, Arthur and Fred Lazar. *An Examination of the Financial Impacts of Canada's 1976 Amendment to Section 19.1 of the Income Tax Act (Bill C-58) on U.S. and Canadian Broadcasters*. Department of Communication. January 1979.
- Donner, Arthur and Mel Kilman. *Television Advertising and the Income Tax Act: An Economic Analysis of Bill C-58*. Prepared for the Department of Communications, November 1983.
- Donner, Arthur. *An Analysis of the Importance of U.S. Television Spillover, Bill C-58 and Simulcasting Policies for the Revenues of Canadian TV Broadcasters*. Taskforce on Broadcasting. February 1986 (mimeograph).
- Donner, Arthur. *The Financial Impacts of Section 19.1 of the Income Tax Act (Bill C-58) and Simultaneous Substitution*. Her Majesty the Queen in Right of Canada as represented by the Minister of Communications. 1990.
- Donner, Arthur and Fred Lazar. *Cable, Canadian Program Production and the Information Highway*. Discussion paper prepared for the CCTA. August 1994.
- Donner, Arthur and Fred Lazar. *The Financial Effects of Simulcasting on Canadian TV Broadcasters*. June 1997.
- Grant, Peter and Chris Wood. *Blockbusters and Trade Wars: Popular Culture in a Globalized World*. Toronto: Douglas & McIntyre, 2004.

**Table 10 Data sources for international comparison**

Country	Data Sources
Australia	Australian Broadcasting Corporation, <i>Annual Report 2003/04</i> Special Broadcasting Service, <i>Annual Report 2003/04</i>
Austria	E-mail correspondence with Dr. Denk Herbert, ORF
Belgium	VRT and RTBR
Canadian	CBC
Denmark	Representation of Nordic Public Service Broadcasters ( <a href="http://www.nordicpsb.com">http://www.nordicpsb.com</a> ).
Finland	Representation of Nordic Public Service Broadcasters ( <a href="http://www.nordicpsb.com">http://www.nordicpsb.com</a> ).
France	France Télévision
Germany	<a href="http://www.gez.de/docs/gb2004.pdf">http://www.gez.de/docs/gb2004.pdf</a>
Ireland	RTE, <i>Annual Report, 2004</i>
Italy	RAI Group, <i>Annual Report, 2004</i>
Japan	<a href="http://www.nhk.or.jp/pr/koho-e.htm">http://www.nhk.or.jp/pr/koho-e.htm</a>
New Zealand	New Zealand On Air, <i>Annual Report, 2004</i>
Norway	Representation of Nordic Public Service Broadcasters ( <a href="http://www.nordicpsb.com">http://www.nordicpsb.com</a> ).
Spain	TVE Annual Report 2004 at <a href="http://www.rtve.es">http://www.rtve.es</a>
Sweden	Representation of Nordic Public Service Broadcasters ( <a href="http://www.nordicpsb.com">http://www.nordicpsb.com</a> ).
Switzerland	SRG SSR idée Suisse, <i>Rapport de gestion 2004</i>
United Kingdom	BBC, <i>Annual Report 2003/04</i>
United States	Corporation for Public Broadcasting <a href="http://www.cpb.org">http://www.cpb.org</a>

## Appendix A - Calculation of Per-Capita Funding of Public Broadcasters

To construct the comparison of per-capita funding for public broadcasters, we collected and totalled the amounts of public funding in 2004 for each country's public broadcasters. We included all types of funding that are determined by some branch of the government, including television/radio licence fees and any forms of direct government aid or grants. We converted the public-funding amounts to Canadian dollars using the average exchange rate for 2004.<sup>16</sup> We then divided this Canadian dollar amount by the population of each country. This process yielded a per-capita comparison of the level of public funding for public broadcasters in the 18 countries. The data and calculations for this exercise can be found in the two tables below.

**Table 11 Data for public funding of public broadcasters**

	Government Appropriation (000 000s)	Licence Fees (000 000s)	Government Aid or Grants (000 000s)	Other Public Income (000 000s)	Total Public Funding, 2004 (000 000s)
Australia	\$923.2	--	--	--	\$923.2
Austria	--	€424.1	--	--	€424.1
Belgium	--	--	€435.5	--	€435.5
Canada - CBC	\$1,066.3	--	--	--	\$1,066.3
Denmark	--	€400.3	--	--	€400.3
Finland	--	€359.0	--	--	€359.0
France	--	€2,160.0	€440.0	--	€2,600.0
Germany	--	€6,185.0	--	--	€6,185.0
Ireland	--	€166.2	--	--	€166.2
Italy	--	€1,474.0	--	--	€1,474.0
Japan	--	¥655,000.0	--	--	¥655,000.0
New Zealand	--	--	--	--	\$93.0
Norway	--	€418.1	--	--	€418.1
Spain	--	€950.8	--	--	€950.8
Sweden	--	€642.0	--	--	€642.0
Switzerland	--	--	--	--	SFr. 1,100.0
U.K.	--	£2,798.0	£305.8	--	£3,103.8
U.S.	\$1,038.0	--	--	--	\$1038.0

Sources: See Reference and Data Sources for list of data sources

**Notes:**

Australia includes funding for ABC and SBS

Belgium includes funding for Flemish-language and French-language public broadcasters

Germany includes public funding for ZDF and ARD

Spain includes public funding for RTE and estimates for public funding of public broadcasters for the autonomous regions

U.K. includes public funding for BBC and S4C

U.S. data are from 2003

<sup>16</sup> Except in the case of the U.S. data, which were for 2003 (see notes to the data table).

**Table 12 Calculation of per-capita public funding levels**

	<b>Total Public Funding (000 000s)</b>	<b>Exchange Rate (C\$ per foreign currency)</b>	<b>Total Public Funding in C\$ (000 000s)</b>	<b>Population</b>	<b>Public Funding Per Capita 2004</b>
Australia	\$923.2	0.9582	\$884.6	20,090,437	\$44.03
Austria	€ 424.1	1.6169	\$685.7	8,184,691	\$83.78
Belgium	€ 435.5	1.6169	\$704.2	10,364,388	\$67.95
Canada - CBC	\$1,066.3	1.0000	\$1,066.3	32,805,041	\$32.50
Denmark	€ 400.3	1.6169	\$647.2	5,432,335	\$119.15
Finland	€ 359.0	1.6169	\$580.5	5,223,442	\$111.13
France	€ 2,600.0	1.6169	\$4,203.9	60,656,178	\$69.31
Germany	€ 6,185.0	1.6169	\$11,075.8	82,431,390	\$134.36
Ireland	€ 166.2	1.6169	\$268.7	4,015,676	\$66.91
Italy	€ 1,474.0	1.6169	\$2,383.3	58,103,033	\$41.02
Japan	¥655,000.0	0.012035	\$7,882.9	127,417,244	\$61.87
New Zealand	\$93.0	0.8638	\$80.3	4,035,461	\$19.91
Norway	€ 418.1	0.1931	\$676.4	4,593,041	\$147.18
Spain	€ 950.8	1.6169	\$1,537.3	43,209,511	\$35.58
Sweden	€ 642.0	1.6169	\$1,038.0	9,001,774	\$115.32
Switzerland	SFr. 1,100.0	1.0473	\$1,152.0	7,489,370	\$153.82
U.K.	£3,103.8	2.384	\$7,399.5	59,553,800	\$124.25
U.S.	\$1038.0	1.401	\$1,454.2	295,734,134	\$4.92
			<b>Average</b>		<b>\$79.61</b>

Sources: Sources: See Reference and Data Sources for list of data sources Exchange rates from Bank of Canada. Population data from CIA World Factbook.

**Notes:**

Australia includes funding for ABC and SBS

Belgium includes funding for Flemish-language and French-language public broadcasters

Germany includes public funding for ZDF and ARD

Spain includes public funding for RTE and estimates for public funding of public broadcasters for the autonomous regions

U.K. includes public funding for BBC and S4C

U.S. data are from 2003

## Appendix B - Potential Benefits Analysis

To assess the potential benefits that a public broadcaster could bring to each of the Western countries included in the analysis, we rated each country on the basis of six indicators. Against each indicator we assigned each country a score on a scale of one to five. The tables in this appendix outline the rating schemes, the data used to arrive at each country's ratings, and the aggregate rating for each country.

**Table 13 Rating scale for population density**

Potential benefit	Rating	Population density Number of inhabitant per square kilometre
High	5	<25
	4	25 to 50
	3	50 to 75
	2	75 to 100
Low	1	>100

**Table 14 Rating scale for the number of broadcasting languages**

Potential benefit	Rating	Number of broadcasting languages
High	5	3 or more
	3	2
Low	1	1

**Table 15 Rating scale for the level of ethnic-diversity challenges**

Potential benefit	Rating	PRS Group Inc. rating of ethnic tensions
High	5	1.0 to 1.9
	4	2.0 to 2.9
	3	3.0 to 3.9
	2	4.0 to 4.9
Low	1	5.0 to 6.0

Note: PRS Group Inc. assigned each country a rating on a six-point scale, based on the level of ethnic tensions within the country. Please see <http://www.prsgroup.com> for more information

**Table 16 Rating scale for the size of the domestic language market**

Potential benefit	Rating	Size of domestic language market
High	5	< 10 million
	4	11 million to 50 million
	3	51 million to 100 million
	2	101 million to 200 million
Low	1	>201 million

**Table 17 Rating scale for proximity to a larger country with the same language and/or broadcast programming in English**

Potential benefit	Rating	Proximity situations
High	5	The country is adjacent to a larger country with which it shares the same language.
	4	The country is adjacent to a larger country with which it shares one official language.
	3	The country is not adjacent to a larger country with which it shares a language, but it does broadcast programming in English and thus faces competition from imported American programming.
	2	--
Low	1	The country is not adjacent to a larger country with which it shares a language.

**Table 18 Rating scale for audience appeal of indigenous programming**

Potential benefit	Rating	Number of indigenous programs within the top ten programs
High	5	0 to 2
	4	3 or 4
	3	5 or 6
	2	7 or 8
Low	1	9 or 10

**Table 19 Potential-benefits analysis data and ratings**

	Population Density (inhabitants per square kilometre)		Multiple number of broadcasting languages		Ethnic diversity challenges	
	Data	Score	Data	Score	Data	Score
Australia	2.61	5	<b>1 language:</b> English	1	PRS Group rating = 3.5	3
Austria	97.59	2	<b>1 language:</b> German	1	PRS Group rating = 40	2
Belgium	339.50	1	<b>2 languages:</b> French and Dutch	3	PRS Group rating = 3.0	3
Canada	3.29	5	<b>2 languages:</b> English and French	3	PRS Group rating = 3.5	3
Denmark	126.06	1	<b>1 language:</b> Danish	1	PRS Group rating = 4.0	2
Finland	15.45	5	<b>1 language:</b> Finnish. Swedish speaking minority (8%)	1	PRS Group rating = 6.0	1
France	110.88	1	<b>1 language:</b> French	1	PRS Group rating = 2.5	4
Germany	230.89	1	<b>1 language:</b> German	1	PRS Group rating = 4.0	2
Ireland	57.14	3	<b>2 languages:</b> English Irish	3	PRS Group rating = 5.5	1
Italy	192.89	1	<b>1 language:</b> Italian	1	PRS Group rating = 4.5	2
Japan	337.23	1	<b>1 language:</b> Japanese	1	PRS Group rating = 5.5	1
New Zealand	15.02	5	<b>1 language:</b> English	1	PRS Group rating = 3.5	3
Norway	14.17	5	<b>1 language:</b> Norwegian (small Sami minority)	1	PRS Group rating = 4.5	2
Spain	85.60	2	<b>3 languages:</b> Spanish, Catalan (17%), Galician (7%), and Basque (2%).	5	PRS Group rating = 4.0	2
Sweden	20.01	5	<b>1 language:</b> Swedish. (Some broadcasting in Sámi)	1	PRS Group rating = 5.0	1
Switzerland	181.38	1	<b>3 languages:</b> German, French and Italian.	5	PRS Group rating = 4.0	2
U.K.	243.26	1	<b>1 language:</b> English	1	PRS Group rating = 4.0	2
U.S.	30.71	4	<b>1 language:</b> English	1	PRS Group rating = 5.0	1

Source: Nordicity Group analysis and PRS Group Inc.

**Table 20 Potential-benefits analysis data and ratings (continued)**

	Relative size of domestic language market (population)		Proximity to a larger country with the same language, and/or broadcast programming in English		Audience appeal of indigenous programming	
	Data	Score	Data	Score	Data	Score
Australia	20,090,437	4	No, but faces competition from imported English,- language programming	3	7 out of 10 (3 from US)	2
Austria	8,184,691	5	Yes. Germany	5	7 out of 10 (3 from Germany)	2
Belgium	10,364,388	5	Yes. France (for French); Netherlands (for Dutch/Flemish)	4	North Belgium: 10/10; South Belgium: 6/10; <b>Average (50/50): 8 out of 10</b>	2
Canada	32,805,041	4	Yes. United States	5	English-speaking Canada: 2/10; French-speaking Canada: 10/10; <b>Average (3/4 and 1/4): 4</b>	4
Denmark	5,432,335	5	No.	1	10 out of 10	1
Finland	5,223,442	5	No.	1	10 out of 10	1
France	60,656,178	3	No.	1	9 out of 10 (1 from US)	1
Germany	82,431,390	3	No.	1	10 out of 10	1
Ireland	4,015,676	5	Yes. England	4	8 out of 10 (2 from UK)	2
Italy	58,103,033	3	No.	1	9 out of 10 (1 from Spain)	1
Japan	127,417,244	2	No.	1	9 out of 10 (1 from US)	1
New Zealand	4,035,461	5	Yes. Australia.	5	9 out of 10 (1 from US)	1
Norway	4,593,041	5	No.	1	10 out of 10	1
Spain	43,209,511	4	No.	1	10 out of 10	1
Sweden	9,001,774	5	No.	1	9 out of 10 (1 from US)	1
Switzerland	7,489,370	5	Yes. Germany, Italy, France.	5	German-speaking: 9/10; French-speaking:6/10; Italian-speaking: 9/10; <b>Average (1/3,1/3,1/3): 8/10</b>	2
U.K.	59,553,800	3	No.	3	10 out of 10	1
U.S.	295,734,134	1	No.	1	10 out of 10	1

Source: Nordicity Group analysis

**Table 21 Potential-benefits analysis aggregate ratings**

	Population Density	Multiple number of broadcasting languages	Ethnic diversity challenges	Relative size of domestic language market	Proximity to a larger country with the same language, and/or broadcast programming in English	Audience appeal of indigenous programming	Aggregate rating
Australia	5	1	3	4	3	2	<b>18</b>
Austria	2	1	2	5	5	2	<b>17</b>
Belgium	1	3	3	5	4	2	<b>18</b>
Canada	5	3	3	4	4	4	<b>23</b>
Denmark	1	1	2	5	1	1	<b>11</b>
Finland	5	1	1	5	1	1	<b>14</b>
France	1	1	4	3	1	1	<b>11</b>
Germany	1	1	2	3	1	1	<b>9</b>
Ireland	3	3	1	5	4	2	<b>18</b>
Italy	1	1	2	3	1	1	<b>9</b>
Japan	1	1	1	2	1	1	<b>7</b>
New Zealand	5	1	3	5	5	1	<b>20</b>
Norway	5	1	2	5	1	1	<b>15</b>
Spain	2	5	2	4	1	1	<b>15</b>
Sweden	5	1	1	5	1	1	<b>14</b>
Switzerland	1	5	2	5	5	2	<b>20</b>
U.K.	1	1	2	3	3	1	<b>11</b>
U.S.	4	1	1	1	1	1	<b>9</b>

Source: Nordicity Group analysis

## Appendix C - Estimation of Annual Revenue Impact of Simultaneous Substitution

The revenue impact of simultaneous substitution has been the subject of several previous analyses by Arthur Donner and various co-authors.

- In 1983, Donner and Mel Kilman published the first estimate of the revenue impact of simultaneous substitution. In that report, Donner and Kilman estimated that simultaneous substitution generated \$21.1 million in net advertising revenues for Canadian stations in 1982.<sup>17</sup> This amount represented 3.1% of total advertising revenues of private television broadcasters in that year.
- In 1986, Donner prepared an update to his estimate of simultaneous substitution's revenue impact. He found that the revenue impact of simultaneous substitution had grown to \$52.7 million in 1984.<sup>18</sup>
- In 1990, the Department of Communications commissioned Donner to prepare another update on the revenue impact of simultaneous substitution. Donner concluded that simultaneous substitution generated an estimated \$67.3 million in incremental advertising revenues for Canadian broadcasters in 1988.<sup>19</sup>
- In 1994, the Canadian Cable Television Association commissioned Donner and Fred Lazar to again estimate the revenue impact of simultaneous substitution. Donner and Lazar found that simultaneous substitution generated incremental advertising revenues of between \$114 million and \$159 million during the 1992/93 broadcasting year.<sup>20</sup>
- Donner's most recent work on this topic was in 1997. In that year he and Fred Lazar derived a single estimate of \$147.6 million for the dollar value of airtime sales during the 1996/97 broadcasting, which were transferred to Canadian **English-language television broadcasters** because of simultaneous substitution.<sup>21</sup>

**Table 22 Estimated values of simultaneous substitution**

	1982	1984	1988	1992/93	1996/97
Incremental revenue impact of simultaneous substitution (\$ millions)	21	52.7	67.3	114 to 159	147.6

Sources: 1982 data from Donner and Kilman, 1983; 1984 data from Donner, 1986; 1988 data from Donner, 1990; 1992/93 data from Donner and Lazar, 1994; 1997 data from Donner and Lazar, 1997.

For this report, we sought to generate an update to Donner and Lazar's 1996/97 estimate of the revenue impact of simultaneous substitution by extrapolating it to the 1997/98-to-2003/04 period. Donner and Lazar used a bottom-up approach that calculated the tuning transferred to Canadian broadcasters due to simulcast programs, and married this with advertising rates to arrive at a dollar estimate of airtime sales for simultaneous substitution. For our extrapolation, we used what could be considered a top-down

<sup>17</sup> Arthur Donner and Mel Kilman, *Television Advertising and the Income Tax Act: An Economic Analysis of Bill C-58*, prepared for the Department of Communications, November 1983.

<sup>18</sup> Arthur Donner, *An Analysis of the Importance of U.S. Television Spillover, Bill C-58 and Simulcasting Policies for the Revenues of Canadian TV Broadcasters*, Taskforce on Broadcasting, February 1986 (mimeograph).

<sup>19</sup> Arthur Donner, *The Financial Impacts of Section 19.1 of the Income Tax Act (Bill C-58) and Simultaneous Substitution*, (Her Majesty the Queen in Right of Canada as represented by the Minister of Communications, 1990).

<sup>20</sup> Arthur Donner and Fred Lazar, *Cable, Canadian Program Production and the Information Highway*, discussion paper prepared for the CCTA, August 1994.

<sup>21</sup> Arthur Donner and Fred Lazar, *The Financial Effects of Simulcasting on Canadian TV Broadcasters*, June 1997.

approach. In other words, we examined the share of overall conventional television advertising revenues in 1996/97 that could be attributed back to simultaneous substitution, and then applied this share to the television broadcasting markets during the 1997/98-to-2003/04 period. We also prepared a back-cast for 1995/96 along the same lines.

In doing this, however, we developed two scenarios. In one scenario, the *status-quo* scenario, we assumed that the extent of simulcasting on Canadian television screens did not change between 1996/97 and 2003/04. We also developed a second *simulcasting-growth* scenario in which we incorporated an assumption that simulcasting activity increased between 1996/97 and 2003/04.

In 1996/97, total advertising revenues among English-language private conventional television licensees were \$1,333 million. Simultaneous substitution revenues of \$147.6 million represented 11.1% of the total advertising sales in the English-language private conventional television market. Donner and Lazar's 1996/97 estimate included the incremental revenues earned by CBC affiliates and the CBC; but the amounts were small, \$1.5 million and \$630,000, respectively. Removing the small amount attributed to the CBC, reduces the 1996/97 amount to \$147.0 million, or approximately 11.0% of total English-language private conventional advertising sales.

Between 1996/97 and 2003/04, advertising revenues in the English-language private conventional television market grew by 20.7% to a total of \$1,609 million. To derive the status-quo estimate, we assumed that simultaneous substitution revenues continued to represent 11.0% of the relevant advertising market between 1997/98 and 2003/04. With this assumption, the revenue impact of simultaneous substitution grew from \$159 million in 1997/98 to \$177 million in 2003/04. In effect, under this scenario, the annual revenue impact of simultaneous substitution grew in step with overall television advertising sales in the English-language private conventional television market.

While the status-quo estimate is straight forward and very plausible, there are indications that there was more simulcasting on Canadian television in 2003/04 than there was in 1996/97. The rationale for this: More Canadian broadcasters started to engage in simultaneous substitution during this period. Between 1996/97 and 2003/04, Canada's third-largest English-language private conventional broadcasting group, CHUM Television, started to acquire prime-time American programming that was not a major part of its stations' schedules in 1997. What's more, CH (CanWest MediaWorks Inc.'s second network) also started acquiring more simulcast American programming during this period.

To gauge and quantify the increase in simultaneous substitution, we enlisted CBC Research to prepare sample schedules from November 1997 and November 2003. Based on these schedules, CBC Research tabulated the total number of hours of simulcast American programming in Canada's two major English-language television markets – Toronto and Vancouver – during a four-week period in November 1997 and November 2003.

The comparison of simulcasting in these two markets showed the number of hours of simulcasting in the Toronto market increased by 16%; in the Vancouver market it increased by 19%. In both markets, a large part of the increase in simulcasting can be traced back to the entry of new broadcasters into the respective markets. In Toronto, SunTV entered the market; while in Vancouver, City-TV, A-Channel, and Channel M have come on air since 1997.

**Table 23 Comparison of simulcast activity in the Toronto and Vancouver markets, 1997 and 2003**

	Hours of simulcast American television programs during a four-week sample period		Percentage change
	November 1996	November 2003	
Toronto			
Global Television	70.0	62.5	(11%)
CTV	65.5	62.0	(5%)
CBLT-CBC	2.0	0.0	(100%)
City-TV	15.5	20.5	32%
New VR / A-Channel	20.5	38.0	85%
CHCH	57.0	60.5	(6%)
CFMT / Omni2	8.0	10.0	25%
Sun TV	--	23.0	n.a.
<b>Total</b>	<b>238.5</b>	<b>276.5</b>	<b>16%</b>
Vancouver			
Global	81.0	65.5	(19%)
CIVT (VTV / CTV)	46.5	61.5	32%
CBUT-CBC	2.0	0.0	(100%)
CHEK / CH Vancouver Island	35.0	77.5	121%
City-TV	--	18.0	n.a.
CIVI / A Channel	--	21.0	n.a.
Channel M	--	19.5	n.a.
BCTV	56.5	--	n.a.
<b>Total</b>	<b>221.0</b>	<b>263</b>	<b>19%</b>
<b>Grand total</b>	<b>459.5</b>	<b>539.5</b>	<b>17%</b>

Source: CBC Research  
n.a. – not applicable

A 17% increase in simulcast hours of programming does not necessarily translate into a 17% increase in advertising revenues from simultaneous substitution. This increased programming should increase supply somewhat and put some downward pressure on average airtime rates. With this in mind, we have used an assumption of 12% (approximately 70% of the total rate of growth) to represent the incremental advertising revenues brought in by more simultaneous substitution activity in 2003/04. To estimate the incremental impact for the interim years – 1997/98 to 2002/03 – we assumed a scenario of linear growth. Under this *simulcasting-growth* scenario, then, the annual revenue impact of simultaneous substitution was \$162 million in 1997/98, and grew to \$199 million in 2003/04. By 2003/04, it was 12% higher than the status-quo estimate of \$177 million.

**Table 24 Estimates of revenue impact of simultaneous substitution**

	Back-cast	Base year	Extrapolation						
	1995/96	1996/97	1997/98	1998/99	1999/00	2000/01	2001/02	2002/03	2003/04
Total advertising revenues in English-language private conventional television market (\$ millions)	1,244	1,333	1,445	1,459	1,468	1,493	1,458	1,606	1,609
Simultaneous substitution revenues - Status quo scenario (11% of total advertising revenues in English-language private conventional market (\$ millions))	137	147	159	161	162	165	161	177	177
Simultaneous substitution revenues - Simulcast-growth scenario (\$ millions)	137	147	162	166	170	176	175	195	199
Incremental revenues in simulcast-growth scenario in relation to status quo scenario	0%	0%	1.71%	3.43%	5.14%	6.86%	8.57%	10.29%	12.00%

Source: Nordicity Group calculations based on Donner and Lazar methodology, and Donner and Lazar results for 1996/97.

## Appendix D - Estimation of Value of Section 19.1

Like simultaneous substitution, the economic impact of section 19.1 of the *Income Tax Act* has been the subject of several previous analyses by Arthur Donner and various co-authors.

- In 1979, Donner and Fred Lazar prepared the first estimate of the monetary value of section 19.1. In that report, Donner and Lazar found that section 19.1 increased Canadian broadcasters' advertising sales by \$16.2 million in 1977 and \$23.2 million in 1978.<sup>22</sup>
- In 1983, Donner and Mel Kilman published an updated estimate for the economic value of section 19.1. They estimated that section 19.1 led to between \$28.2 million and \$32.7 million in additional advertising revenues for Canadian broadcasters in 1982.<sup>23</sup>
- In 1986, Donner prepared another update. He estimated that section 19.1 had generated \$35.8 million to \$41.8 million in additional revenues in 1984.<sup>24</sup>
- Donner's most recent work on this topic was in 1990. In that year, the Department of Communications commissioned Donner to prepare a report on the economic value of simultaneous substitution and section 19.1. Donner concluded that section 19.1 generated an estimated \$67.3 million in incremental advertising revenues for Canadian broadcasters in 1988.<sup>25</sup>

With the most recent estimate for the value of section 19.1 being from 1988, we set out to develop estimates for the broadcast years 1995/96 through 2003/04, by applying Donner's methodology to the broadcasting markets in each of these years.

**Table 25 Estimates of impact of section 19.1, 2004**

	1975 Market Share	Revenue Growth Assumption	10% Market Share	15% Market Share
Total potential losses of U.S. border stations (\$ millions)	115	149	193	241

Source: Nordicity estimates based on methodology from Donner and 2004 statistics from CRTC

To derive the 1988 estimate, Donner essentially simulated the U.S. broadcaster revenues in 1988 based on four different scenarios for U.S. station revenue from Canadian advertisers.

1. U.S. stations maintain their 1975 market share (before Bill C-58) of 7.1% of total conventional television advertising expenditures.
2. U.S. stations' share of conventional television advertising expenditures in Canada grows by the same rate as private conventional television advertising revenues in Canada.
3. U.S. stations increase their market share in Canada to 10%.
4. U.S. stations increase their market share in Canada to 15%.

Donner selected scenarios two and three from among these four scenarios, to construct the low- and high-end ranges for his 1988 estimate.

<sup>22</sup> Donner and Lazar, 1979

<sup>23</sup> Arthur Donner and Mel Kilman. *Television Advertising and the Income Tax Act: An Economic Analysis of Bill C-58*. Prepared for the Department of Communications, November 1983.

<sup>24</sup> Donner, 1986

<sup>25</sup> Arthur Donner. *The Financial Impacts of Section 19.1 of the Income Tax Act (Bill C-58) and Simultaneous Substitution*. Her Majesty the Queen in Right of Canada as represented by the Minister of Communications. 1990.

In 1975, immediately prior to the implementation of section 19.1, American border stations accounted for \$16.5 million or 7.1% of Canada's total expenditures on private conventional television advertising.

The estimates under each scenario represent the potential or projected loss experienced by American border stations because of section 19.1. However, as Donner points out, part of this loss was due to simultaneous substitution and not section 19.1, per se. Donner suggests that about 20% of the value of simultaneous substitution can be traced back to lost advertising sales by the border stations. The remaining 80% of the simultaneous-substitution impact can be attributed back to American network advertising. As such, he reduces his section 19.1 estimates by 20% of the simultaneous substitution estimate in order to arrive at a residual estimate of impact of section 19.1.

Using Donner's methodology, we estimated that section 19.1 generated advertising revenues of between \$88 million and \$122 million for Canadian private conventional television broadcasters in the English-language market in 1995/96. To arrive at this range estimate, we derived scenarios two and three for the 1995/96 broadcasting year, and then removed the effect of simultaneous substitution. We applied this approach to each year during the 1995/96-to-2003/04 period and found that the revenue impact of section 19.1 grew to between \$110 million and \$154 million in 2003/04.

Donner's scenario two suggests that American border stations' Canadian revenues would grow in step with the growth of private conventional television advertising revenues in Canada. Between 1975 and 1995/96, the advertising revenues of Canada's private conventional television broadcasters increased by approximately seven-fold from \$214 million to \$1,497 million. In 1975, American border stations garnered \$16.5 million in Canadian advertising revenues. By multiplying the 1975 amount by seven, one obtains an estimate of \$115 million for 1995/96. The scenario-three estimate is simply \$1,497 million multiplied by 10%, or \$150 million.

We repeated the above process for each broadcasting year during the 1995/96-to-2003/04 period, and found that under scenario two, the revenue impact grew from \$115 million to \$149 million. Under scenario three, the revenue impact grew from \$150 million to \$193 million.

The next step in the calculation required us to remove the estimate for the American border stations' lost revenue due to simultaneous substitution. As described in Appendix B, we calculated two estimates for the value of simultaneous substitution. To simplify our analysis we multiplied these amounts by 20% and used the midpoint of the resulting range, to represent the portion of American border stations' lost revenue that would have been lost due to simultaneous substitution. Based on this approach, the portion of the revenue impact attributed to simultaneous substitution was \$27 million in 1995/96, growing to \$39 million in 2003/04.

Donner's 1990 estimate of the revenue impact of section 19.1 did not distinguish between private conventional broadcasters and the CBC. As such, one final adjustment needed to be made to the estimate in order to account for CBC's share of the English-language conventional television advertising market. In 2003/04, the CBC earned \$223 million in advertising revenues; this represented 12% of total conventional television advertising revenues in the English-language conventional television market. To account for the CBC's share of the advertising, we have reduced each estimate by 12% of the total potential loss of U.S. border stations (\$149 million and \$193 million).

Therefore, by applying Donner's methodology to the 2003/04 television advertising market, and removing CBC from the amount, we derived the following estimates for the incremental revenue impact of section 19.1.

- Under the revenue-growth scenario, the advertising-revenue impact increased from \$69 million in 1995/96 to \$92 million in 2003/04.
- Under the 10%-market-share scenario, the advertising-revenue impact increased from \$98 million in 1995/96 to \$131 million in 2003/04.

**Table 26 Estimates of revenue impact of section 19.1**

(\$ millions)	Back-cast	Base year	Extrapolation						
	1995/96	1996/97	1997/98	1998/99	1999/00	2000/01	2001/02	2002/03	2003/04
<b>Revenue growth assumption scenario</b>									
Total potential losses of U.S. border stations	115	123	133	135	136	138	135	148	149
U.S. border station losses due to simultaneous substitution [Note 1]	27	29	32	33	34	35	34	38	39
Estimated losses of U.S. border stations due to section 19.1	88	94	101	101	102	103	101	110	110
CBC's share of advertising market	19	17	20	17	16	17	17	16	18
Revenue gains for private conventional television broadcasters due to section 19.1	69	77	81	85	86	86	84	94	92
<b>Ten percent market share scenario</b>									
Total potential losses of U.S. border stations	150	160	173	175	176	179	176	192	193
U.S. border station losses due to simultaneous substitution [Note 1]	27	29	32	33	34	35	34	38	39
Estimated losses of U.S. border stations due to section 19.1	122	131	140	141	142	144	141	154	154
CBC's share of advertising market	24	22	25	22	20	22	23	20	24
Revenue gains for private conventional television broadcasters due to section 19.1	98	109	115	120	122	122	119	134	131

Source: Nordicity estimates based on methodology from Donner (1990) and 2004 statistics from CRTC and CBC

**Notes:**

(1) Equal to 20% of total value of simultaneous substitution (see Appendix B)

## Appendix E - Statistics for Federal Government Expenditures

Table 27 Federal government expenditure statistics

Fiscal year	Total federal government expenditures on operations and programs (\$ millions)	National Defence (\$millions)	Debt payments (\$ millions)	Total federal government expenditures (less National Defence and debt payment)
1995/96	158,598	11,440	46,877	100,281
1996/97	149,253	10,573	45,184	93,496
1997/98	144,856	10,187	43,971	90,698
1998/99	151,390	10,257	44,832	96,302
1999/00	156,654	11,521	45,310	99,822
2000/01	165,897	11,470	46,448	107,977
2001/02	163,433	12,254	41,328	109,851
2002/03	163,625	12,428	37,619	113,578
2003/04	174,325	13,196	35,931	125,198

Source: *Public Accounts of Canada*.