OFFICE OF
THE PARLIAMENTARY BUDGET OFFICER
BUREAU DU
DIRECTEUR PARLEMENTAIRE DU BUDGET

Bill C-427: Income Averaging for Artists

Ottawa, Canada
September 24, 2012
www.pbo-dpb.gc.ca

The *Parliament of Canada Act* mandates the Parliamentary Budget Officer (PBO) to provide independent analysis to Parliament on the state of the nation's finances, the government's estimates, trends in the Canadian economy, and upon request from a committee or parliamentarian, to estimate the financial cost of any proposal for matters over which Parliament has jurisdiction.

Summary

This short note addresses a request by the House of Commons Standing Committee on Finance regarding the potential cost of Bill C-427, which contains tax measures to support Canadian artists. Finance Canada estimates the cost of the Bill at roughly $25 million per year. At this time without more detailed tax data, PBO is unable to provide an independent, bottom-up cost estimate of its own — however, if PBO receives additional data, we will update the Committee on our subsequent findings. Based on a review of supplementary cost estimates from related measures in other jurisdictions, and a simple back-of-the-envelope calculation, PBO views the cost estimate provided by Finance Canada as reasonable.

* Prepared by Stephen Tapp. For further information, please e-mail: Stephen.Tapp@parl.gc.ca.

1 Proposed Measures

Bill C-427 includes two proposals to lower the taxes payable for Canadian artists. These measures are:

I. allowing Canadian artists to average their income for federal tax purposes; and

II. creating a tax exemption for the first $10,000 of royalty income derived from artistic activities.

2 Finance Canada's Cost Estimate

In response to a PBO information request,[1] Finance Canada provided their analysis of Bill C-427, which they estimate would cost roughly $25 million per year (Table 2-1; Annex A has more details). Finance Canada's analysis suggests that the royalty exemption would be the larger of the two measures contained in the Bill, at roughly $15 million per year. This measure would be larger because, despite benefiting fewer artists (41,600 versus 55,000), the royalty exemption would provide a larger average tax benefit ($330 versus $130).

At the current time, without individual-level, longitudinal personal income tax data, PBO is unable to produce a bottom-up cost estimate for these tax proposals — as Finance Canada has done.[2] Instead, in this note PBO is providing the following supplementary information that compares the proposed Bill with similar measures identified in other jurisdictions. While such analysis cannot constitute an independent validation of Finance Canada's estimate, we hope it can help inform the Committee's deliberations and provide a simple 'test of reasonableness' of the Finance Canada estimate.

Table 2-1

Finance Canada Costs Estimate of Bill C-427

Part 1: General Income Averaging for Artists

Annual cost	Number of beneficiaries	Tax benefit per beneficiary
≈ $10 million	55,000	130

Part 2: Royalty Income Tax Exemption

Annual cost	Number of beneficiaries	Tax benefit per beneficiary
≈ $15 million	41,600	330

Source: Finance Canada (see Annex A).

3 Some Related Measures in Other Jurisdictions

The measures to support artists proposed in Bill C-427 are similar to those previously-enacted in other jurisdictions. While aggregate cost estimates from these other programs are publicly-available, unfortunately data on the number of claimants are not.

Quebec

Since 1995, artists in Quebec may deduct income from copyright or similar royalties when calculating their personal income taxes.[3] In addition, in 2004 Quebec introduced an income averaging mechanism for artists.[4]

[1] The request and response are available on the PBO website, at: http://pbo-dpb.gc.ca/files/files/IR/IR0087_FINA_C399_C427.pdf; & http://pbo-dpb.gc.ca/files/files/IR/Response_IR0087_FINA_C399_C427_EN.pdf

[2] PBO obtained microdata from Statistics Canada from the *Survey of Labour and Income Dynamics*. Unfortunately, the public use files do not permit the tracking of individuals' earnings histories, as required for the costing. Therefore, PBO has requested additional data from Statistics Canada's Longitudinal Administrative Databank, which is a 20% sample of the annual T1 tax files, and is designed as a research tool on Canadians' incomes (Annex B describes the information request). If PBO obtains these data we will report back to FINA with the results of our work.

[3] The deduction cannot exceed $15,000 per year, and is reduced by 50 cents on the dollar for royalties in excess of $30,000. In practice, this means that an artist may claim this deduction if copyright/royalty income is less than $60,000. See Section 1.7 of Quebec (2004) for more details.

[4] Under this system, a recognized artist who acquires an eligible income-averaging annuity may spread, over a maximum period of seven years, the tax applicable to the portion of his year's income derived from artistic activities that exceeds $50,000. See Section 1.8 of Quebec (2004) for more details.

The Quebec government has estimated the cost of the copyright/royalty exemption for artists at $5 million per year and the cost of the income averaging provision at less than $2 million per year (Quebec Finance, 2010). With this information, an alternative cost estimate can be inferred by simply scaling-up of the cost of the Quebec measures to the national level. Of course, this approach is extremely crude because while these measures are similar in spirit they differ in practice from the proposals in Bill C-427.[5] Nonetheless, this simple back-of-the-envelope approach suggests a ballpark cost for the Bill at around $20 to $30 million per year. Finance Canada's estimate of $25 million is the mid-point of this range.

General Income Averaging in Canada

General income averaging was previously used in Canada between 1971 and 1982 — and this previous system seems closely related to the proposed implementation of income averaging in Bill C-427. The basic idea is to address the long-standing concern that when income tax rates are progressive, people with more volatile incomes tend to pay more tax than those with comparable incomes that are more stable (e.g., see Vickrey, 1939). With income averaging, in the year of a large income gain, an individual could reduce their taxes owing by averaging out their current year's inflated income with their lower incomes from other years. Of course, a key point is that income averaging only provides a tax benefit when the income gain moves the individual into a higher tax bracket — and only the income after the start of the higher bracket is taxed at the higher rate.

In practice, two thresholds defined whether the current year's income gain was large enough to trigger the income averaging provision.

Threshold 1 was 110 percent of the taxpayer's income in the previous year:

$$Y_t > 1.1 \cdot Y_{t-1}$$

Threshold 2 was 120 percent of the average income in the previous four years:

$$Y_t > 1.2 \cdot \overline{Y_t}$$

$$\text{where } \overline{Y_t} = \frac{1}{4}[Y_{t-1} + Y_{t-2} + Y_{t-3} + Y_{t-4}]$$

Once triggered, the averaging provision would effectively lower their current year's income to the average of the individual's income over the last five years — where the five-year average included the current year.

An academic research paper written during the time of general income averaging in Canada suggested that the tax benefit for the typical taxpayer were "quite small" and that the averaging provisions were "exceedingly complex" (Davies, 1977).

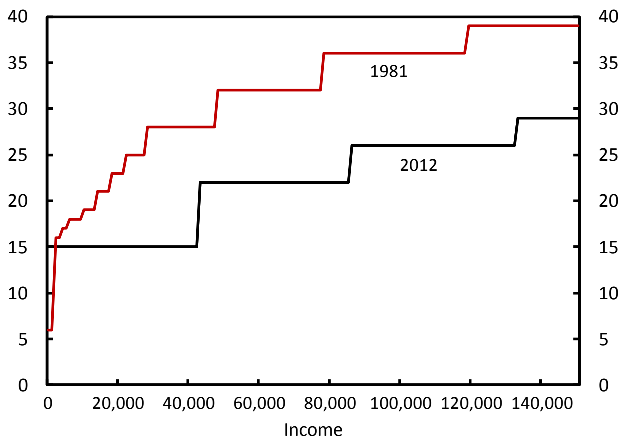
Figure 3-1 shows that Canada's federal personal income tax system has changed significantly since income averaging was last permitted. For instance, there are currently far fewer — and, therefore, wider — tax brackets, with four brackets today rather than 14 brackets in 1981. In addition, today's tax rates are less progressive, ranging from 15% to 29% now rather than from 6% to 39% then. Because of these structural tax changes, the previous experience with income averaging, while instructive, cannot be directly applied to today's circumstances. With this caveat in mind, given the direction of subsequent tax changes, the potential tax benefits from income averaging today would likely be smaller than in the past, other things equal. As a result, it is not surprising that Finance Canada estimates that the average tax benefit for the income averaging artist is relatively small ($130 per potential claimant). With income averaging, the largest potential tax savings would likely occur for higher-income earners.

[5] As two examples: 1) the Quebec measure requires the purchase of an annuity and allows for income averaging over a longer seven year period than the federal proposal of five years; 2) the copyright provision take the form of a deduction in Quebec whereas the proposed federal measure uses a tax exemption. Other things equal, a deduction would result in higher gross income, whereas exempt income would be excluded from gross income. This distinction could matter for some means-tested government benefits.

Figure 3-1

Federal personal income tax rates, current vs. prior general income averaging

per cent



Sources: PBO; 2012 values are from CRA; 1981 values are from the Canadian Tax and Credit Simulator.

Australia

In Australia, artists may average their incomes for tax purposes for a period of up to five years. The Australian government estimated the annual cost at roughly $15 million in 2011 (expressed in current Canadian dollars).

United Kingdom

The U.K. tax system also allows artists and authors to average their royalty-related profits, but only over a two-year period. The U.K. government estimates that the cost of this income averaging provision is "negligible", which means that it is less than £3 million per year (or $4.7 million expressed in current Canadian dollars).

4 Conclusions

As described in Annex A, Finance Canada estimates the cost of Bill C-427 at $25 million per year. At this time without more detailed tax data, PBO is unable to provide an independent, bottom-up cost estimate of its own. However, if PBO receives the requested data, we will update the Committee on our subsequent findings — Box 1 describes our proposed costing approach. Based on a review of supplementary cost estimates from related measures in other jurisdictions, and a simple back-of-the-envelope calculation, PBO views the cost estimate provided by Finance Canada as reasonable for the current 'steady-state' cost the Bill. In practice, if the Bill became law, the cost would likely be lower initially but then build-up over time as more individuals became aware of the new tax provisions and how they could benefit from them.

Box 1: PBO Approach to an Independent Costing

Conditional upon receiving additional data (Annex B contains PBO's information request), PBO's basic costing approach for the income averaging component of the Bill would be similar to that used by Finance Canada. This approach involves three stages:

Step 1: *Calculate the Baseline:* Use longitudinal, individual-level income tax data for artists from tax files over the past five years (2005 to 2009) to determine income profiles and taxes paid by artists. Let T denote aggregate taxes paid by artists in 2009 without income averaging.

Step 2: *Calculate the Counterfactual:* Determine the subset of artists who would be eligible for income averaging using the income gain thresholds previously in place (i.e., the general income averaging described in Section 3.2). For eligible artists, average their individual taxable incomes over the past five years. Using these counter-factual income profiles in conjunction with a detailed personal income tax model (e.g., Canadian Tax and Credit Simulator), determine taxes payable under income averaging. Let $\hat{T}$ denote aggregate taxes paid by artists in 2009 under the counterfactual with income averaging.

Step 3: *Infer the Tax Cost Attributable to Income Averaging:* Calculate the difference between aggregate personal income taxes paid by artists in 2009 with and without income averaging.

$$\textit{Tax expenditure} = T - \hat{T}$$

PBO's basic approach to cost the royalty exemption component of the Bill would effectively be the same as that used by Finance Canada (see Annex A).

Overall, PBO's independent costing approach would be largely comparable to Finance Canada's, though there would likely be some differences regarding data sources available and assumptions used.

References

Australia (2012), Tax Expenditures Statement 2011, January.http://www.treasury.gov.au/~/media/Treasury/Publications%20and%20Media/Publications/2012/Tax%20Expenditures%20Statement%202011/Downloads/Consolidated_TES.ashx

Canadian Tax and Credit Simulator, Kevin Milligan (University of British Columbia, Economics Department) http://faculty.arts.ubc.ca/kmilligan/ctacs/

Davies, Gordon (1977), General Income Averaging, *Canadian Public Policy*, Vol. 3(2), Spring, pp. 164-170. http://www.jstor.org/stable/3549533

Quebec (2004), 2004-2005 Budget: Additional Information on the Budgetary Measures, March. http://www.budget.finances.gouv.qc.ca/budget/2004-2005/en/pdf/AdditionalInfoMeasures.pdf

Quebec (2010), Tax Expenditures 2010 Edition. http://www.finances.gouv.qc.ca/documents/Autres/en/AUTEN_TaxExpenditures2010.pdf

U.K. (2012) Tax Expenditures and Ready Reckoners: Minor Tax Expenditures and Structural Reliefs.http://www.hmrc.gov.uk/stats/tax_expenditures/table-b1.pdf

Vickrey, William (1939), Averaging of Income for Income-Tax Purposes, *Journal of Political Economy*, Vol. 47(3), pp. 379-397. http://www.jstor.org/stable/1825655

Annex A

Finance Canada's Tax Expenditure Estimate of Bill C-427

Background on the Bill

Private Member's Bill C-427 contains two proposals.

First, the Bill proposes "to amend the *Income Tax Act* to permit Canadian artists to benefit from income averaging for the purposes of federal taxation over a maximum period of five years." The apparent intention of the amendment is to allow artists to average their personal income for tax purposes over up to a five-year period, in order to reduce their tax liability when they receive a large amount of income in a single year (e.g., the year in which a significant work is sold).

Second, the Bill proposes to exempt from taxation "the first $10,000 of income that is derived from royalties, gratuities, or other residual payments from the taxpayer's artistic activities."

Revenue Impact

General Income Averaging:

The Department of Finance Canada has assumed that the Bill is proposing what is frequently referred to as general income averaging. Under current rules, tax is generally paid in the year income is received. Under general income averaging, an individual receiving a large amount of income in a year could average their income over a number of years when determining their income for tax purposes, in order to reduce their overall tax liability.

Based on this assumption Bill C-427 could result in forgone tax revenue of roughly $10 million per year. This estimate was obtained as follows:

- It was assumed that the proposal would reinstate the general income averaging formula which was in place in the Canadian tax system prior to 1982 (using taxable income rather than total income to better reflect the calculation of tax under the current system).
- Using information from the 2006 Canadian Census and from T1 data, it was estimated that about 55,000 individuals would benefit from this measure.
- Using tax data for multiple years, the average benefit for artists was estimated to be about $130 for 2012.
- The cost estimate was obtained by multiplying the number of potential beneficiaries by the estimated tax benefit or 55,000 x $130 = $7,150,000. This estimate was rounded up to $10 million given the uncertainty surrounding the number of artists that could benefit from income averaging.

Exemption of Royalty Income:

The Department of Finance Canada estimates that the introduction of an Exemption for Royalty Income under Bill C-427 could result in forgone tax revenue of roughly $15 million per year. This estimate was obtained as follows:

- Using data and information from the Copyright Collective group and from the 2006 Canadian Census it was estimated that approximately 41,600 individuals could benefit from an exemption with respect to their royalty, gratuity and/or residual income.
- Using information from the Copyright Collective group and from T1 data, it was assumed that the average royalty payments exempt from taxation would be about $1,500 per artist in 2012.
- Using information from the 2006 Canadian Census and from T1 data, the marginal federal tax rate applied to this group is assumed to be 22%.
- The cost estimate was obtained by multiplying the number of potential beneficiaries by the estimated tax benefit or 41,600 x $1,500 x 22% = $13.7 million. This estimate was rounded to $15 million.
- Copyright Collective groups include the Society of Composers, Artists and Musicians (SOCAN), the Society for Reproduction Rights of Authors, Composers and Publishers in Canada (SODRAC), COPIBEC in Quebec and Access Copyright in the rest of Canada.

Annex B

PBO Information Request

OFFICE OF THE PARLIAMENTARY BUDGET OFFICER | BUREAU DU DIRECTEUR PARLEMENTAIRE DU BUDGET

PBO Information Request

REQUEST NUMBER:	IR0088
PBO CONTACT NAME:	Stephen Tapp (Stephen.Tapp@parl.gc.ca or 613-947-0570)
TYPE OF REQUEST:	One-time
PRIORITY:	Urgent
DATE REQUEST SENT:	September 18, 2012
RESPONSE REQUIRED BY:	September 24, 2012

PBO OBJECTIVE:

To estimate the fiscal cost of Bill C-427 (income averaging for artists) in order to support the work of the House of Commons Standing Commmittee on Finance.

RELATION TO MANDATE:

PBO's mandate includes estimating the financial cost of any proposal for matters over which Parliament has jurisdiction, when requested to do so from a committee or parliamentarian.

INFORMATION AND DATA REQUESTED:

Bill-C427 includes a provision that would allow artists to average their incomes for federal tax purposes for a period of up to five years. Therefore, in order to provide a detailed costing of this proposal, PBO requires individual-level, longitudinal personal income tax data for the relevant population. As such, PBO is requesting access to the most recent five years of data, covering 2005 to 2009, from Statistics Canada's Longitudinal Administrative Databank (LAD — a 20% sample of the annual T1 Family Files, which is designed as a research tool on Canadians' incomes). These data would allow us to establish a baseline for the cost estimate by calculating artists' tax liabilities without the income averaging provision.

tel/tél: +1 613 992 8026 // fax/téléc: +1 613 947 8480 // pbo-dpb@parl.gc.ca // Ottawa, Canada K1A 0A9 // www.pbo-dpb.gc.ca