COMMENTS OF THE CENTRE FOR CANADIAN INNOVATION AND COMPETITIVENESS

to the

Department of Finance

Ottawa, ON, Canada

In the Matter of:	)	
Review of the Scientific Research and Experimental Development Tax Incentives	)	Public Comment

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ABOUT THE CENTRE

The Centre for Canadian Innovation and Competitiveness is an Ottawa-based affiliate of the Information Technology and Innovation Foundation (ITIF), the world's leading think tank for science and technology policy. As a separately incorporated and registered charity under the Canada Not-for-profit Corporations Act and Income Tax Act, the Centre's mission is to help policymakers and the Canadian public better understand the nature of the innovation economy and the types of public policies that are necessary to drive Canadian innovation, productivity, and global competitiveness. For more information, visit www.innovationpolicy.ca.

INTRODUCTION

Low levels of business spending on R&D have been a perennial problem in Canada, and have been continuously discussed and analyzed since the Minister of Finance's Budget Speech of 1965 that discussed inducing industrial R&D.[1] An op-ed from the *Financial Post* in 1978 noted how Canada's industrial R&D spending barely ranked about Turkey, Greece, and Italy.[2] The *Canadian Encyclopedia* even has an entry on "Industrial Research and Development" which devotes a sizeable portion to explaining how Canadian firms perform much less R&D than their foreign competitors.[3] The Council of Canadian Academies noted in their 2013 report on the state of industrial R&D in Canada that Canada's private sector R&D spending has not kept pace with inflation and is less than half of the OECD average.[4] In the ensuing decade since then, private spending on R&D as a percentage of Canada's GDP has continued trending downward, with Canada falling further behind peer countries like the United States, Korea, and the United Kingdom, all of whom have seen consistent upward trends.[5]

Conducting R&D allows firms to gain an advantage over their competitors by creating products or processes that are superior to those of their competitors. In doing so, they earn private returns on their investments, which a literature review of 22 different studies found to be about 19 percent, though not all innovations are created equally, and not all countries provide equal incentives to conducting R&D.[6] Higher returns on investment endow companies with the capital to invest more into R&D and other innovation-based activities,

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[1] Government of Canada, "Budget Speech Delivered by the Honourable Walter L. Gordon, Minister of Finance, Member for Davenport, in the House of Commons," April 26, 1965: 12, https://publications.gc.ca/collections/collection_2016/fin/F1-23-1-1965-eng.pdf.

[2] Robert Steklasa, "Build our R&D – or see unemployment rise," The Financial Post, February 4, 1978, https://books.google.ca/books?id=i2s_AAAAIBAJ&lpg=PA1&pg=PA4#v=onepage&q&f=false .

[3] Omond Solandt, W.R. Stadelman, Guy P.f. Steed, "Industrial Research and Development," The Canadian Encyclopedia, February 7, 2006, https://www.thecanadianencyclopedia.ca/en/article/industrial-research-and-development.

[4] Council of Canadian Academies, "The State of Industrial R&D in Canada," August 28, 2013, https://cca-reports.ca/wp-content/uploads/2022/11/State-of-Industrial-RD-Full-Report-EN.pdf.

[5] OECD, "Main Science and Technology Indicators," accessed March 7, 2024, https://stats.oecd.org/Index.aspx?DataSetCode=MSTI_PUB.

[6] Bronwyn H. Hall, Jacques Mairesse, Pierre Mohnen, "Chapter 24 - Measuring the Returns to R&D" in *Handbook of the Economics of Innovation*, vol. 2 (2010), 1033-1082.

which perpetuates a virtuous cycle of innovation that increases the overall level of innovation and competitiveness in the Canadian economy.

Most importantly to the Scientific Research and Experimental Development (SR&ED) program, however, knowledge created from company R&D spills over across the economy, which generates a social rate of return that is commonly reported to be on average about 50 percent.[7] The social-to-private return ratio is therefore about 2.6:1. Indeed, recent research is showing that the social returns to R&D are increasing at a higher rate than private returns are in the 21st century, as technology and knowledge become increasingly important in the innovation economy.[8] Since private firms do not consider the positive externalities of knowledge and technological progress that spillover into the economy when calculating how much they should spend on R&D, R&D tax incentives are therefore an appropriate and useful Pigouvian subsidy to correct this market failure by increasing the after-tax private rate of return closer to the social rate of return. In doing so, SR&ED and other R&D tax credits increase R&D spending, creating additional jobs, increasing patent filings, boosting productivity and growth, supporting global competitiveness, and generating more in tax revenues than they cost (at least in the United States).[9]

As a result of declining private R&D spending, the Government of Canada announced its intention to reform the SR&ED tax incentive, first in the 2022 federal budget and then with a consultation paper in January 2024. The government's goal is to ensure that SR&ED is effective at encouraging R&D that benefits Canada and to explore opportunities to modernize and simplify it.[10] In particular, the government's consultation paper focuses on cost-neutrality, streamlining, and retention of intellectual property (IP) within Canada, but appears to be focused less on altering the structure of the tax incentive to better stimulate business R&D spending in Canada.

ITIF has analyzed the scholarly literature and policy performance of R&D tax incentives around the world since 2007. Based on this experience, the Centre for Canadian Innovation and Competitiveness offers recommendations on how the Canadian government can better address low private R&D by realigning incentives to maximize the effectiveness and simplification of the SR&ED application process:

- **Structure the credit quasi-incrementally to incentivize businesses to invest more in R&D.**
- **Make the credit firm-size neutral.**

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[7] National Academy of Sciences, National Academy of Engineering, Institute of Medicine, "Rising Above the Gathering Storm: Energizing and Employing America for a Brighter Economic Future," 2007: 49, https://nap.nationalacademies.org/catalog/11463/rising-above-the-gathering-storm-energizing-and-employing-america-for.

[8] Brian Lucking, Nicholas Bloom & John Van Reenen, "Have R&D Spillovers Changed?", National Bureau of Economic Research, May 2018: 20, https://www.nber.org/papers/w24622.

[9] Robert D. Atkinson, "Create Jobs by Expanding the R&D Tax Credit" (ITIF, January 26, 2010), https://www2.itif.org/2010-01-26-RandD.pdf.

[10] Government of Canada, "Consultation Paper: Scientific Research and Experimental Development", January 31, 2024, https://www.canada.ca/en/department-finance/programs/consultations/2024/consultation-on-scientific-research-and-experimental-development/consultation-paper-on-scientific-research-and-experimental-development.html.

- **Do not cripple SR&ED by adding provisions on IP retention and Canadian ownership.**
- **Simplify applying for the credit and allow stacking.**

Before discussing these recommendations, it's important to note that of the more than 30 nations with R&D tax incentives, virtually all of them are focused on inducing more R&D in the respective nation, regardless of whether that is from small or large firms; domestic or foreign. This is because these policymakers recognize that all R&D, regardless of the type of firm conducting it, spurs economic growth and competitiveness, and provides spillovers to the national innovation system. However, a study commissioned by the Government of Canada comparing tax assistance for R&D found that Canada ranks fourth in the world in terms of generosity to small firms but far below its peers for large firms, and excessively subsidizes small firms.[11] This ultimately costs the government more in assistance to small firms than the societal spillover benefits accrued, while additional tax incentives for large firms would go far further in stimulating innovation and productivity. As such, ITIF strongly urges the government to reject recommendations designed to target most of the benefits to small, Canadian-owned companies. Doing so will make Canada a less attractive place for innovation.

RECOMMENDATION 1: STRUCTURE THE CREDIT QUASI-INCREMENTALLY TO INCENTIVIZE BUSINESSES TO INVEST MORE IN R&D

SR&ED provides an equal credit for all R&D a firm performs. This should be changed. To address declining investment in private sector R&D spending, the Government of Canada should incentivize incremental spending by restructuring SR&ED to be quasi-incremental. This would allow the standard credit rate across all firms to be higher without increasing the costs of the program in the first year, while providing a stronger incentive for firms to boost spending on R&D year over year.

The United States was the first nation to adopt an R&D credit, in 1983. Its credit was completely incremental. Only expenditure increases qualified for the credit. Over the years, policymakers realized that this was not the optimal structure, in part because the variability in annual R&D meant that in some years firms could not take any credit. In response, the U.S. Congress created the Alternative Simplified Credit, a quasi-incremental credit that provides a credit of 14 percent on all spending above 50 percent of the base period expenditures as a share of sales. After remaining relatively flat between 1987 to 2006, the United States' private R&D spending began steadily increasing in the years following the introduction of the alternative simplified credit in 2007, rising from 1.86 percent of GDP in 2007 to 2.7 percent of GDP by 2021. Though the change in tax credit is certainly not the sole cause of the increase, data from both the US and France show that the added marginal revenue from a quasi-incremental system increases the likelihood that firms increase their total spending on R&D year over year.[12]

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[11] John Lester and Jacek Warda, "An International Comparison of Tax Assistance for Research and Development: Estimates and Policy Implications," The School of Public Policy Research Papers, vol. 7, issue 36, November 2014, https://www.policyschool.ca/wp-content/uploads/2016/03/lester-int-tax-researchfinal.pdf.

[12] Emmanuel Duguet, "The effect of the incremental R&D tax credit on the private funding of R&D an econometric evaluation on french firm level data," Revue D'Économique Politique, vol. 122, March 2012, https://www.cairn.info/revue-d-economie-politique-2012-3-page-405.htm.

The proposed SR&ED credit would be calculated with the following steps:

1. Take the firm's average qualified research expenses for the past four years;
2. Multiply this average by 65 percent;[13]
3. Subtract the result of step 2 from the current year's qualified research expenses; and
4. Calculate the credit by multiplying the result of step 3 by 50 percent.

For example, under the existing credit, if a large firm invests $1 million in R&D, it would be eligible for a credit of $150,000. Under our proposed quasi-incremental credit, the same company that has invested an average of $1 million into R&D over the past four years, and once again spends $1 million in the current year will receive $175,000 in their SR&ED credit ($350,000 x 50 percent). However, that higher rate of increased spending will create a greater incentive for the firm to boost R&D the next year because it must only pay for 50 percent of the additional R&D costs. If that same firm increased its R&D spending to $1.25 million in the next year, it would instead receive $300,000 in credits ($600,000 x 50 percent).

The percentages are designed to maintain cost neutrality in the first year, assuming all businesses increase their R&D expenditure by 10 percent from the previous year to capitalize upon the incremental nature of the credit. If businesses are projected to increase their R&D expenditure by five percent, the program would be cost-neutral between the third and fourth year, and if businesses are projected to increase their spending by 15 percent year over year, program spending would increase in the first year (see Appendix 2 for more details). Combined with ITIF's second recommendation of removing the 35 percent enhanced rate for Canadian-controlled private corporations (CCPCs) and creating one rate for all businesses that is size-neutral, SR&ED could maintain cost neutrality assuming modest increases to overall levels of R&D spending.

Using data published by *The Logic* on the amount in SR&ED credits claimed by company size, ITIF has calculated that removing the 35 percent CCPC enhanced rate would lower program spending by 33 percent (see Appendix 1), which could be used to fund the initial incremental portion of the credit and increase the overall generosity.[14] The advantage of such a system is that at the margin, a firm now has considerably more incentive to boost R&D year over year. With the new quasi-incremental system, for every dollar of increased R&D spending over the prior year, the firm gets a credit of almost 50 percent, as opposed to just 15 or 35 percent under the prior system.

If a firm has not incurred any qualified R&D expenditures in previous years because they either are newly founded or have not previously engaged in R&D activities, their credit could be calculated by substituting their four-year average expenditure with their current year expenditure, matching the first example where a firm has not increased its R&D spending year over year. Every year from then on would be calculated into an

[13] We believe that this rate would still let firms avoid significant ups and downs in the amount of research eligible for the credit, but unlike the 50 percent base in the United States and other countries, it would allow a higher revenue neutral credit rate, which in turn would have a greater incremental incentive effect.

[14] Catherine McIntyre, "Shredding tax credits? Why Canada's biggest R&D program may be funding the wrong innovation," The Logic, October 15, 2018, https://thelogic.co/news/the-big-read/shredding-tax-credits-why-canadas-biggest-rd-program-may-be-funding-the-wrong-innovation/.

average, until the company has accumulated four years' worth of R&D tax filings. Additionally, if a company incurs R&D costs less than 65 percent of its three-year average such that the calculation would result in a negative value, it would not be eligible for an ITC in the current year.

Startups in innovation-intensive industries can often be debt-financed and incur high costs while generating no profits in their early years.[15] To allow these startups to benefit from SR&ED, the government should continue to keep the credit refundable for small firms without enough taxable profits to receive the full credit they are eligible for.

Unlike Canada's previous iteration of the incremental R&D tax credit, this quasi-incremental credit would eliminate the instability and resulting precarious employment that a fully incremental ITC would likely cause while still providing greater incentives for firms to increase their spending on R&D year over year. This proposal is designed to be cost-neutral in that the total spending will not increase if R&D does not increase, though it is designed to incentivize total private R&D investment, which would necessitate greater tax expenditure on SR&ED credits as private R&D rises.

RECOMMENDATION 2: MAKE THE CREDIT FIRM-SIZE NEUTRAL

The existing policy regime greatly favours R&D conducted by smaller firms by providing an enhanced, refundable 35 percent tax credit to domestic small and medium-sized enterprises (SMEs). However, the SR&ED could be made far more effective by removing the enhanced rate for CCPCs and using the savings to support a higher rate for other businesses instead. Doing so will increase total R&D spending in Canada, in part by making Canada a more attractive location for multinationals conducting R&D.

Recent evidence from the Canadian Centre for the Study of Living Standards shows that large firms see a private and social rate of return three times higher than small firms.[16] Their report shows that every dollar spent by large firms on R&D generates $1.53 in returns for the firm and an additional $1.52 for the Canadian economy in spillovers while small firms generate a private return of $1.17 and a social return of an additional $1.19. Furthermore, research shows that small firms tend to focus more on experimental development, while larger firms focus more on basic and applied research.[17] Combined with the fact that basic research tends to have the largest impact on long-run economic productivity, followed by applied research and then advanced development, providing greater generosity to larger firms will also provide more of a boost to Canadian productivity.[18]

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[15] Robin Boadway and Jean-Francois Tremblay, "Public Economics and Startup Entrepreneurs," CESifo, April 14, 2003, https://papers.ssrn.com/sol3/papers.cfm?abstract_id=385781.

[16] Myeongwan Kim and John Lester, "R&D Spillovers in Canadian Industry: Results from a New Micro Database," Centre for the Study of Living Standards, August 2019: 43-44, https://www.csls.ca/reports/csls2019-02.pdf.

[17] OECD, "The impact of R&D tax incentives: Results from the OECD microBeRD+ project," September 22, 2023, https://one.oecd.org/document/DSTI/CIIE/STP(2022)3/FINAL/en/pdf.

[18] Xiaohua Sun, Yun Wang, Mingshan Li, "The Influences of Different R&D Types on Productivity Growth in OECD Countries," Technology Analysis & Strategic Management, January 8, 2016, https://www.tandfonline.com/doi/full/10.1080/09537325.2015.1130806.

Firms in many innovation-intensive industries require scale. For innovation-intensive industries that often have high fixed costs of design and development but relatively low marginal costs of production, scale enables them to cover those fixed costs so that unit costs can be lower, and revenues for reinvestment in innovation higher. This also explains why one study of European firms found that high-tech firms' capacity for increasing the level of technological knowledge over time is dependent on their size: "the larger the R&D investor, the higher its rate of technical progress."[19]

The significant drop-off in the generosity of the tax credit for CCPCs that reach taxable capital of over $50 million or decide to go public to gain access to financial capital results in companies being disincentivized to conduct R&D just as they are reaching the capacity to contribute greater social returns on public investment and getting to the point where they are big enough to compete on the global stage. Research comparing Canada, Australia, and Spain has shown that decreases in the generosity of R&D tax credits based on firm size have negative effects on levels of private R&D spending.[20] Canada's overall tax treatment heavily favours small businesses and encourages companies to stay small and less efficient, even incentivizing growth-oriented leaders to migrate or sell their businesses in the US.[21] Removing the enhanced credit for CCPCs and using the savings to boost SR&ED's overall generosity across the board will remove one of the disincentives for Canadian companies to grow, helping to alleviate Canada's scale-up problem.

All of this is not to say that SMEs are undeserving of support for R&D and innovation. However, real-world evidence points to direct subsidies as being more effective for stimulating R&D activities in young, innovation-intensive firms, whereas tax credits work more effectively at continuing or increasing the intensity of R&D.[22] Smaller and younger technology firms inherently take on more risk when they conduct R&D, and do not respond to incremental financial incentives as much as direct funding that helps leverage private investment until a technology platform is developed.[23] SMEs in Canada already have access to several direct funding grant programs, such as the National Research Council of Canada Industrial Research Assistance Program (IRAP) and the Regional Economic Growth through Innovation program offered through the various regional development agencies. After combining the SR&ED enhanced rate with provincial subsidies and support from IRAP, the subsidy rate is 60 percent, which is far above the socially optimal subsidy rate of

[19] Sandro Montresor and Antonio Vezzani, "The production function of top R&D investors: Accounting for size and sector heterogeneity with quantile estimations," Research Policy, vol. 44, issue 2, March 2015: 388, https://www.sciencedirect.com/science/article/pii/S0048733314001462.

[20] Nick Bloom, Rachel Griffith, and John van Reenen, "Do R&D Tax Credits Work? Evidence from a Panel of Countries, 1979-1997," Journal of Public Economics, November 19, 2000, https://www.sciencedirect.com/science/article/abs/pii/S004727270100086X.

[21] Jack Mintz, Patrick Smith and Ven Balaji Venkatachalam, "A New Approach to Improving Small-Business Tax Competitiveness," The School of Public Policy Research Papers, vol. 14, issue 24, October 2021, https://www.policyschool.ca/wp-content/uploads/2021/10/FMK1_Small-Business-Tax_Mintz-et-al.pdf.

[22] Isabel Busom, Beatriz Corchuelo and Ester Martínez-Ros, "Tax incentives… or subsidies for business R&D?" Small Business Economics, vol.43, October 2014, https://www.jstor.org/stable/43553005; Gregory Tassey, "Tax incentives for innovation: time to restructure the R&E tax credit," NIST, January 12, 2007, https://www.nist.gov/publications/tax-incentives-innovation-time-restructure-re-tax-credit.

[23] Gregory Tassey, "Globalization and the High-Tech Policy Response," Annals of Science and Technology Policy, vol. 4, July 8, 2020, https://www.nowpublishers.com/article/Details/ASTP-017.

19 percent to match the positive social returns from spillovers from small firm R&D.[24] R&D tax credits correct the positive externality market failure where companies underinvest in R&D that has enormous positive technological and knowledge spillovers, whereas market failures preventing SMEs from innovating or operating are more related to barriers to entry or access to capital are better resolved through other policy mechanisms.[25]

Some will argue that this is unfair and that large firms have the resources to do R&D while small firms do not and have pointed to the fact that SR&ED gives "too much" to large firms. In fact, according to an article in *The Logic,* in 2021 and 2022 small firms received 69 percent of the SR&ED credits, and large firms with sales over $250,000 million received just 31 percent.[26] However, according to StatsCan, large firms accounted for an estimated 48 percent of Canadian R&D and small firms, 52 percent. In other words, large firms received 35 percent less than they would have had the program been size-neutral.[27] Additionally, this ignores the evidence that R&D tax incentives spur both large and small companies to do more R&D than they otherwise would. Finance Canada's own study found that SR&ED generates $1.38 in in incremental R&D spending per dollar of tax credit, and another study from the Canadian Academic Accounting Association reported the number to be $1.30 in R&D spending per dollar of tax credit.[28]

Rebalancing the levels of support provided to small and large firms under the SR&ED by removing the 35 percent enhanced rate will fund a moderate increase in generosity across the board to all firms. This will increase the overall net social benefit by providing a tax credit for large firms closer to the social rate of return and reducing unproductive tax credits going to small firms that exceed the social rate of return generated from their R&D. In doing so, the government will increase overall benefits that Canada sees from private R&D spending while maintaining cost-neutrality for the incentive program.

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[24] Myeongwan Kim and John Lester, "R&D Spillovers in Canadian Industry: Results from a New Micro Database," Centre for the Study of Living Standards, August 2019: 44, https://www.csls.ca/reports/csls2019-02.pdf.

[25] Kenneth J. McKenzie, "The Big and the Small of Tax Support for R&D in Canada," The School of Public Policy Research Papers, vol. 5, issue 22, July 2012: 16, https://www.policyschool.ca/wp-content/uploads/2016/03/k-mckenzie-rd-tax-final.pdf

[26] Catherine McIntyre, "Shredding tax credits? Why Canada's biggest R&D program may be funding the wrong innovation," The Logic, October 15, 2018, https://thelogic.co/news/the-big-read/shredding-tax-credits-why-canadas-biggest-rd-program-may-be-funding-the-wrong-innovation/.

[27] Stat Can provided data on R&D spending for firms from $100 million to $500 million. ITIF conservatively estimated the share of this spending ($4.3 billion) by firms with $250 to 500 million at $2.5 billion). Source: Statistics Canada, "Business enterprise in-house research and development expenditures, by country of control and employment size ," accessed March 7, 2024, https://www150.statcan.gc.ca/t1/tbl1/en/tv.action?pid=2710033501

[28] Department of Finance Canada and Revenue Canada, "The Federal System of Income Tax incentives for Scientific Research and Experimental Development: Evaluation Report," December 1997, https://publications.gc.ca/collections/Collection/F32-1-1997E.pdf; Klassen, Kenneth J., Jeffrey A. Pittman and Margaret P. Reed, "A Cross-National Comparison of R&D Expenditure Decisions: Tax Incentives and Financial Constraints," Contemporary Accounting Research. Vol. 21, 2004: 639-680. https://onlinelibrary.wiley.com/doi/abs/10.1506/CF2E-HUVC-GAFY-5H56

RECOMMENDATION 3: DO NOT CRIPPLE SR&ED BY ADDING PROVISIONS ON IP RETENTION AND CANADIAN OWNERSHIP

As noted above, tax credits incentivize R&D activities in firms and are ideally implemented to close the gap between the private return on R&D and the social return on R&D, thus increasing the overall amount of private sector R&D performed in a country. SR&ED is a blunt instrument that is not suited to dealing with the issues of commercialization and domestic retention of IP, and the government would be better off incentivizing domestic intellectual policy (IP) retention through the proposed patent box, as well as direct subsidies through IRAP or the forthcoming Canada Innovation Corporation. Tax policy and direct funding have different and complementary roles – tax credits are ineffective in adjusting the composition of industry R&D and innovation activities but are far better at increasing the amount of total R&D investment than direct funding measures.[29] Attempting to impose domestic restrictions would create distortionary issues while adding non-R&D-related expenses as qualified expenditures would be a transfer of public funds to private corporations with unproven economic justification, reducing the overall effectiveness of SR&ED.

Some public responses to the SR&ED consultation have indicated that the government should limit the ability of SR&ED recipients to sell their Canadian-developed IP and business abroad or even prevent firms with headquarters outside of Canada from receiving SR&ED credits. As Canada is a price-taker on the market for IP, particularly due to our geographic and economic proximity to the United States, the sale price of the IP would be unaffected by SR&ED, and the clawback of SR&ED credits would reduce the overall private returns on R&D, thereby disincentivizing firms from conducting R&D.[30] Similarly, selling off IP or seeking exit options is sometimes the only viable strategy for some companies. Instead of allowing Canadian entrepreneurs to operate and seek out returns on the global market, limiting their options could mean bankruptcy if they cannot find a buyer for their IP in Canada. Penalizing firms that sell off their IP or ownership of their businesses abroad would likely be administratively challenging, as this would require the Canada Revenue Agency to enforce performance requirements on tax recipients, requiring constant monitoring of thousands of firms for years after they first apply to SR&ED. Furthermore, closing off the ability for foreign firms to access SR&ED while Canadian firms access foreign R&D tax credits could result in retaliatory actions being taken by Canada's major trading partners.

Research on spillover effects from R&D shows that R&D conducted by firms has a positive effect on other firms across the economy, both within and outside of their industry, regardless of the provenance of the firm conducting the R&D.[31] Another study from Australia found that geographic proximity to firms conducting

[29] Gregory Tassey, "Tax incentives for innovation: time to restructure the R&E tax credit," NIST, January 12, 2007, https://www.nist.gov/publications/tax-incentives-innovation-time-restructure-re-tax-credit.

[30] John Lester, "Tax Support for R&D and Intellectual Property: Time for Some Bold Moves," C.D. Howe Institute, July 19, 2022: 4, https://www.cdhowe.org/sites/default/files/2022-07/E-Brief_330_0718_0.pdf.

[31] David T. Coe, Elhanan Helpman, and Alexander W. Hoffmaister, "International R&D Spillovers and Institutions," IMF Working Paper, April 2008, https://www.imf.org/external/pubs/ft/wp/2008/wp08104.pdf; Jeffrey I. Bernstein, "Canadian Manufacturing, U.S. R&D Spillovers, and Communication Infrastructure," The Review of Economics and Statistics, vol. 82, issue 4, November 2000, https://direct.mit.edu/rest/article-abstract/82/4/608/57230/Canadian-Manufacturing-U-S-R-amp-D-Spillovers-and

R&D has a positive spillover effect on R&D expenditure by their peer firms and clients.[32] Compounded with the fact that firms are likely to relocate their R&D efforts from jurisdictions with less generous credits to more generous ones, closing off SR&ED to foreign firms would result in a loss of not only jobs but also the knowledge and technology that spillovers into our domestic economy.[33] The claim that SR&ED credits do not create new R&D jobs in Canada is simply not supported by the long list of global firms that have chosen to employ significant R&D resources in Canada. Rather than cut off these infusions of R&D, Canada should be doubling down on attracting more of it. Domestic R&D funded from global sources boosts exports, reduces imports, and trains Canadians who often go on to start their own innovative firms.[34]

Ensuring that Canadians fully benefit from IP developed in Canada is a desirable goal that the government should pursue. However, shoehorning SR&ED to cover activities that are neither research nor development will reduce the effectiveness of the program, particularly when the government is already proposing a patent box, the gold standard for achieving the exact objective of incentivizing the retention and commercialization of IP within Canada.

RECOMMENDATION 4: SIMPLIFY APPLYING FOR THE CREDIT AND ALLOW STACKING

Many jurisdictions outside of Canada have far simpler means of applying for R&D tax credits and yet do not have rampant fraud. For instance, the United States, Australia, and Ireland all only require firms to apply simply by filling out a minimal amount of additional boxes on their business tax returns.[35] In contrast, Canada as well as countries like the UK and Germany, requires corporate tax filers to fill out multiple forms and keep up with rigorous compliance requirements that impose enormous administrative burdens, particularly on SMEs with fewer resources to devote to full-time filing.

Given that SR&ED has already been streamlined in the past to exclude capital expenditures, which were the largest source of difficulties in identifying fraudulent or otherwise incorrect applications, there is little reason why this program should not be able to follow in the footsteps of other jurisdictions and do away with the enormous barriers that businesses face in filing for SR&ED. There should be no filing whatsoever. Companies should simply be allowed to take the credit when they file their business tax forms each year. Doing so will eliminate the need for companies to hire dedicated SR&ED consultants who can charge up to 30 percent of the total credit to businesses. The Canada Revenue Agency already has tools and processes to detect whether businesses are submitting fraudulent or ineligible claims, so the government should use those

[32] Sasan Bakhtiari and Robert Breunig "The Role of Spillovers in Research and Development Expenditure in Australian Industries," Economics of Innovation and New Technology, vol. 27, February 21, 2017: 2, https://www.tandfonline.com/doi/full/10.1080/10438599.2017.1290898

[33] Lolita Paff, "State-Level R&D Tax Credits: A Firm-Level Analysis," Topics in Economic Analysis and Policy, September 21, 2005, https://www.degruyter.com/document/doi/10.1515/1538-0653.1272/pdf; Daniel J. Wilson, "Beggar Thy Neighbor? The In-State, Out-of-State, and Aggregate Effects of R&D Tax Credits," The Review of Economics and Statistics, vol. 91, May 2009, https://www.jstor.org/stable/25651347.

[34] Lee Bransetter, "Foreign Direct Investment and R&D Spillovers Is There a Connection?" National Bureau of Economic Research, January 2000, https://www.nber.org/system/files/chapters/c8497/c8497.pdf

[35] EY, "R&D Incentives Reference Guide 2023", accessed March 7, 2024, https://www.ey.com/en_gl/tax-guides/worldwide-r-and-d-incentives-reference-guide

tools and processes instead of shifting the compliance costs solely on the shoulders of tax credit filers. That is how the U.S. IRS does that, regularly auditing companies for R&D credit compliance.

In addition, SR&ED rules also reduce the eligible expenditures that businesses can claim whenever they receive provincial or territorial tax credits, as well as direct federal funding like IRAP. Most other jurisdictions around the world allow businesses to receive tax credits from multiple levels of government and other sources of funding. Penalizing businesses from accessing multiple sources of innovation funding ultimately punishes businesses that are the most likely to succeed, as they have been vetted by the government multiple times and are conducting projects that are innovative enough to receive funding from IRAP. Moreover, the rules around subsidy stacking that result in programs cannibalizing one another can mean that businesses can sometimes receive less in their combined total from different programs than they would otherwise be eligible for had they just applied solely to SR&ED or IRAP.[36] SR&ED has these rules because it appears that the government sees the program as a grant program operated through the tax code, rather than what it should be: a tax provision that lets companies pay less in federal taxes for performing R&D.

CONCLUSION

ITIF commends the Government of Canada for embarking on a modernization of the SR&ED incentive, though the consultation paper indicates that the focus may be more focused on tinkering along the margins rather than making bold changes to the program that would better incentivize R&D and business innovation. This will require a change in mindset -- Canada needs to see SR&ED not as a way to subsidize R&D and ease financial burdens, but as a way to incentivize private companies to increase their R&D expenditures. By changing the tax credit to be quasi-incremental, unifying the rates between small and large businesses, and simplifying the filing process, the government will be able to incentivize private R&D spending more effectively.

Thank you for your consideration.

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[36] R&D Partners, "The Dos and Don'ts of Grant Stacking," June 3, 2021, https://www.rdpartners.com/grant-stacking-secrets/

APPENDIX 1: VALUES DERIVED FROM 2017 SR&ED DATA*

Table 1

	Small	Medium	Large	Total
Number of firms that received SR&ED	11,410	5,758	413	17,581
Total spending on SR&ED under current SR&ED	$800M	$1.2B	$1.5B	$3.5B
Average R&D spending per firm under current SR&ED	$200,326	$595,445	$24.2M	$15.7B
Average credit per firm under current SR&ED	$70,114	$208,406	$3.6M	$3.6B
Average credit per firm without 35% enhancement for CCPCs	$30,049	$89,317	$3.6M	$2.4B
Government spending reduction per firm without 35% enhancement for CCPCs	$40,065	$119,089	$0	$1.1B**

* 2017 CRA data published by the Logic: https://thelogic.co/news/the-big-read/shredding-tax-credits-why-canadas-biggest-rd-program-may-be-funding-the-wrong-innovation/

**32.65% of the current SR&ED spending

APPENDIX 2: QUASI-INCREMENTAL TAX CREDIT CALCULATIONS TABLES

Table 2: Average per-firm credit, quasi-incremental with a 5 percent annual increase

	Average Small Firm	Average Mid-sized Firm	Average Large Firm	Total R&D Credits	Increase From Existing
No increase in firm spending	$35,057	$104,203	$4.2M	$2.8B	-27.3%
Year 1	$40,065	$119,089	$4.8M	$3.1B	-11.4%
Year 2	$42,068	$125,043	$5.1M	$3.3B	-6.1%
Year 3	$44,172	$131,296	$5.3M	$3.5B	-1.0%
Year 4	$46,380	$137,860	$5.6M	$3.6B	3.8%
Year 5	$48,699	$144,753	$5.9M	$3.8B	8.4%

Table 3: Average per-firm credit, quasi-incremental with a 10 percent annual increase

	Average Small Firm	Average Mid-sized Firm	Average Large Firm	Total R&D Credits	Increase From Existing
No increase in firm spending	$35,057	$104,203	$4.2M	$2.8B	-27.3%
Year 1	$45,073	$133,975	$5.4M	$3.5B	1.0%
Year 2	$49,581	$147,373	$6.0M	$3.9B	10.0%
Year 3	$54,539	$162,110	$6.6M	$4.3B	18.2%
Year 4	$59,992	$178,321	$7.3M	$4.7B	25.6%
Year 5	$65,992	$196,153	$8.0M	$5.2B	32.4%

Table 4: Average per-firm credit, quasi-incremental with a 15 percent annual increase

	Average Small Firm	Average Mid-sized Firm	Average Large Firm	Total R&D Credits	Increase From Existing
No increase in firm spending	$35,057	$104,203	$4.2M	$2.8B	-27.3%
Year 1	$50,081	$148,861	$6.1M	$3.9B	10.9%
Year 2	$57,594	$171,190	$7.0M	$4.5B	22.5%
Year 3	$66,233	$196,869	$8.0M	$5.2B	32.6%
Year 4	$76,168	$226,399	$9.2M	$6.0B	41.4%
Year 5	$87,593	$260,359	$10.6M	$6.9B	49.1%