

**SCIENTIFIC RESEARCH AND EXPERIMENTAL
DEVELOPMENT: TAX POLICY**

**Odette Madore
Economics Division**

Revised 27 July 2006



Library of
Parliament
Bibliothèque
du Parlement

**Parliamentary
Information and
Research Service**

The Parliamentary Information and Research Service of the Library of Parliament works exclusively for Parliament, conducting research and providing information for Committees and Members of the Senate and the House of Commons. This service is extended without partisan bias in such forms as Reports, Background Papers and Issue Reviews. Analysts in the Service are also available for personal consultation in their respective fields of expertise.

N.B. Any substantive changes in this publication which have been made since the preceding issue are indicated in **bold print**.

**CE DOCUMENT EST AUSSI
PUBLIÉ EN FRANÇAIS**

TABLE OF CONTENTS

	Page
ISSUE DEFINITION.....	1
BACKGROUND AND ANALYSIS.....	1
A. Justification for Government Support of SR&ED.....	1
B. Description of SR&ED Tax Incentives.....	2
C. Historical Overview.....	4
1. From 1944 to 1986.....	4
2. From 1987 to 1994	6
3. Since 1995	8
D. Comments on Tax Incentives Related to SR&ED.....	10
PARLIAMENTARY ACTION.....	13
CHRONOLOGY.....	13
SELECTED REFERENCES.....	15



CANADA

LIBRARY OF PARLIAMENT
BIBLIOTHÈQUE DU PARLEMENT

SCIENTIFIC RESEARCH AND EXPERIMENTAL DEVELOPMENT: TAX POLICY*

ISSUE DEFINITION

The federal government provides tax incentives to encourage Canadian companies of all sizes and in all sectors to conduct scientific research and experimental development (SR&ED). These tax incentives consist of three components: an income tax deduction, an investment tax credit and, in certain circumstances, a tax credit refund. Tax incentives modify the after-tax cost of SR&ED investment, thereby lowering the company's initial costs and making SR&ED activities more attractive. Each year, over 11,000 companies claim the federal SR&ED tax incentives. It is projected that the tax credit alone will cost the federal government over \$2.6 billion in 2007, making tax incentives the most important element of federal assistance for SR&ED. This Current Issue Review examines the basis for government intervention in this area and explains how federal tax incentives in respect of SR&ED generally work. The history of tax incentives for industrial SR&ED in Canada is then examined, and some observations are made on **the cost-effectiveness and administration of SR&ED** tax incentives.

BACKGROUND AND ANALYSIS

A. Justification for Government Support of SR&ED

Government funding of industrial SR&ED is generally considered justifiable because the resulting benefits to society are greater than the benefits to individual firms. The company conducting SR&ED activities is not always in a position to take full advantage of **the**

* This publication is a revised version of the earlier paper *Research Development: Tax Policy*, first published in October 1989 and regularly updated since that time.

related spillover benefits, since some of the knowledge gained benefits society in general. **In other words, the market fails to allocate an efficient or socially optimal quantity of resources to the performance of SR&ED.** Furthermore, SR&ED results can be copied, at times even before the innovating company has had the opportunity to recover all of its costs. Moreover, the degree of financial risk associated with SR&ED activities may discourage companies from investing in research. It is argued that unless the government supports industrial SR&ED, it is quite likely that companies will not invest sufficiently in SR&ED activities **from society's point of view**, since their actions will be guided solely by the private returns they hope to generate.

Even without any kind of government incentive, some industrial SR&ED research would be carried out, but there would be only as much as would bring private benefits. Consequently, any kind of incentive will have a positive impact if it prompts industry to make more than this minimum SR&ED effort. That is the goal of the federal government's industrial innovation policy, which is aimed at correcting the legendary under-investment in SR&ED by Canadian corporations.

Government support to industrial SR&ED can be “direct” – through grants, subsidies or contributions – or “indirect” – through the use of tax incentives. The specific form of support provided depends on the nature of the market failure and the policy objectives being pursued. Direct support and tax incentives possess different characteristics and may be used to achieve alternative, but complementary, objectives. In contrast to grants, subsidies and contributions, tax incentives appear to be relatively neutral with respect to specific SR&ED activities or sectors of production. Under a regime of tax incentives, it is assumed that the industrial sector is in the best position to decide the type and amount of SR&ED it should undertake and companies are free to decide when to make SR&ED investments.

B. Description of SR&ED Tax Incentives

Federal government tax incentives for SR&ED target three types of research: basic research, work performed for the advancement of knowledge and science without any practical application in mind; applied research, carried out for the advancement of science, but with a specific application in mind; and experimental development, aimed at achieving technological progress. In experimental development, the results of basic and applied research are used to create new products or processes, or to improve those that already exist.

To take advantage of tax incentives for SR&ED, a company must be able to show that it has invested in one of these types of research. Both current and capital expenditures qualify for federal SR&ED tax incentives. Current expenditures include the salaries of research personnel, general SR&ED costs (telephone and electricity, office equipment and so forth), as well as costs, including maintenance costs, associated with facilities and equipment used for SR&ED purposes. Capital expenditures include assets – facilities and equipment, but not buildings – used for SR&ED purposes.

For the purposes of SR&ED tax incentives, corporations are **divided into three categories**: Canadian-controlled private corporations (CCPCs) established in Canada and controlled neither by government-owned agencies nor by non-residents; **other corporations; and proprietorships, partnerships and trusts.**

SR&ED tax incentives apply to intramural SR&ED and extramural SR&ED carried out for other corporations. Most corporations carry out their own SR&ED internally and are thus themselves the beneficiaries of the tax incentives. Others contract out all or part of their SR&ED to entrepreneurs. Corporations that contract out SR&ED are also eligible for SR&ED tax incentives.

Canadian corporations that incur eligible research expenses may benefit from three federal SR&ED tax incentives: the deduction, the tax credit and, in some instances, the tax credit refund. The aim of these tax incentives is to compensate for the high degree of risk involved in investing in research activities by lowering their real costs; the ultimate goal is to enhance the overall SR&ED effort in Canada.

The deduction lowers taxable income and, consequently, the tax payable. With the deduction, a business that spends \$1,000 on SR&ED activities and is taxed at the rate of 30% saves \$300 ($\$1,000 * 30\%$). Thus, its net cost for SR&ED is \$700.

The tax credit, which applies to a percentage of overall SR&ED expenditures, serves to directly lower the tax payable. Suppose that the business in the example above also qualifies for a tax credit of 20%. The value of the credit is \$200 ($\$1,000 * 20\%$). However, for corporate tax purposes, the tax credit amount is considered income and must be included in the firm's taxable income. Thus, the firm's real savings will total $\$200 * (1-30\%)$ or \$140. If the company owes little or no tax at all, it can, **in some circumstances**, claim a total or partial refund of this tax credit.

Therefore, tax incentives lower the after-tax cost of SR&ED investment. In the above example, the real cost of SR&ED is \$560, or (\$1,000 - \$440). In other words, tax incentives allow the firm to recover more than 40% of its initial SR&ED investment.

Such tax incentives, which lower a firm's initial SR&ED costs, represent a tax expenditure or loss of revenue for the federal government (in our example, a loss of \$440). The federal government believes that this loss of revenue leads to increased SR&ED activities in Canada and, ultimately, to positive spinoffs which outweigh the drop in federal revenues. These spinoffs benefit not only the industrial sector, but also the entire Canadian economy. **The Department of Finance (2005) projects that, in 2007, tax expenditures incurred by the federal government under the SR&ED tax credit will amount to over \$2.6 billion.**

C. Historical Overview

The history of federal tax incentives for SR&ED can be divided into three periods. Between 1944 and 1986, traditional tax measures such as the deduction and the tax credit were introduced, together with some additional tax measures that were tested and found wanting. **Between 1987 and 1994**, the deduction and the tax credit were fine-tuned to facilitate their use and improve the administration process. **Since 1995**, which marked the start of the third period, the focus has been on broadening and facilitating access to the SR&ED tax system.

1. From 1944 to 1986

The federal government has for many years been stimulating SR&ED activities through the *Income Tax Act*. As early as 1944, companies could, pursuant to this legislation, deduct immediately from their taxable income an amount equivalent to 100% of current expenditures in respect of scientific research. Until 1960, companies could also deduct one-third of capital expenditures incurred for SR&ED in a taxation year. The legislation was amended in 1961 to make capital expenditures fully deductible in the taxation year in which they were incurred.

From 1962 to 1966, the federal government also allowed an incremental tax deduction equivalent to 50% of current and capital expenditures exceeding the 1961 level. As the name indicates, the incremental tax deduction allowed companies with higher SR&ED expenditures to lower their taxable income even further. Companies claiming the additional deduction reduced their taxes by approximately \$60 million during this period. The measure was replaced in 1967 by

cash grants introduced under the *Industrial Research and Development Incentives Act* (IRDIA). These cash grants were equal to 25% of capital expenditures and 25% of current expenditures in excess of the average for the preceding five years. Their purpose was to offer the same benefits as the additional 50% deduction, while providing financial support to non-taxable companies involved in SR&ED, and in particular to small CCPCs previously unable to take advantage of federal tax incentives. Nearly \$290 million was awarded under the IRDIA, which was repealed in 1975.

In 1977, the federal government **introduced a SR&ED** tax credit ranging from 5% to 10% of current and capital expenditures, depending on the nature of the firm and the region in Canada where the activities were carried out. A new legislative provision, whereby the tax credit had to be taken into account in calculating taxable income, was introduced; this provision, which decreases the full effect of the tax credit through the company's rate of taxation, is still in effect today. In 1978, the basic tax credit rate was increased to 10%, the exceptions being the Atlantic provinces and the Gaspé region, where the rate rose to 20%, and small businesses, where it rose to 25%.

That same year, the federal government introduced another SR&ED tax incentive in the form of an additional tax deduction for scientific research. The deduction was similar to that in effect between 1962 and 1966. Companies were allowed to deduct from their taxable income 50% of all SR&ED expenditures exceeding their recorded average for the three preceding years. Since the goal was to attract venture capital, companies conducting SR&ED were allowed to waive the tax deduction and transfer it to outside investors. This measure spawned abuses, however.

At that time, certain non-taxable companies could not claim the general deduction or the tax credit, while others could not claim the full deduction and credit. This encouraged them to seek out new mechanisms to transfer these tax incentives to those who could use them. Some people set up limited partnerships to act as outside investors. A passive outside investor could arrange to have a research firm conduct SR&ED on his or her behalf. Investments of this nature increased the company's research expenditures, thereby qualifying the investor for the tax deduction and credit. Moreover, SR&ED expenditures that were not considered additional **or incremental** for the research company were viewed as such for the investor, who had previously incurred no such expenses at all. The passive investor was thus also able to benefit from the incremental 50% deduction. It is estimated that claims related to tax relief cost the federal government more than \$2.5 billion.

As a result of reported abuses, the federal government abolished the 50% incremental deduction in 1983 and introduced new tax provisions. To begin with, the tax credit rates were increased by 10 percentage points over their 1978 level. The basic rate was set at 20%, while the rate in effect in the Atlantic provinces and the Gaspé region was set at 30% and the rate for small CCPCs was set at 35%. The government also introduced excellent carry-forward provisions for the tax deduction and credit. **More precisely**, corporations were allowed to carry forward their SR&ED deduction indefinitely to offset future taxable income. Unused tax credits could be combined and either carried back for three years or forward for seven. The federal government also **introduced a partial refundability of unused tax credits of 20% for large corporations; in the case of small CCPCs, the rate was 100% on the first \$2 million of eligible SR&ED expenditures, 40% on capital expenditures and 40% related to research.** The federal government introduced this refund to ensure that small CCPCs with no tax payable would also benefit from tax incentives.

The last measure introduced **in 1983** was the scientific research tax credit. Companies were able to enter into research contracts on behalf of an outside investor who had acquired shares or debt securities for SR&ED purposes. To offset this move, companies were required to waive their tax incentives, while outside investors qualified for a tax credit of 50% of their investment. This measure also proved to be an excellent tax loophole. It allowed outside investors to turn a quick profit by investing in research, without anything to show that the tax savings thus realized were being poured back into SR&ED activities. As a result of this mechanism, outside investors benefited from more than \$1.6 billion in tax relief between 1983 and 1985, when the measure was abolished.

2. From 1987 to 1994

In an effort to broaden its tax base and also probably to limit abuses of the tax system as it applied to SR&ED, in 1987 the federal government launched a major reform of tax incentives for scientific research. Its entire focus was on the traditional tax measures, that is the deduction and tax credit, and on redefining the meaning of “scientific research and experimental development” as set out in the *Income Tax Act*.

The legislation was amended to ensure that the beneficiary of the tax incentives in respect of SR&ED was directly associated with the research activities; the effect of this provision

was to limit the number of passive investors. Furthermore, companies would no longer qualify for tax incentives unless the expenditures incurred were “all or substantially all attributable” (90% or more) to SR&ED activities. The government then moved to exclude expenses incurred for the purchase of buildings from the definition of SR&ED expenditures. However, carry-forward provisions were enriched so that unused credits could be carried forward for 10 years. Moreover, the federal government eliminated the refundable tax credit at the basic rate of 20% for large corporations, but maintained the partial (40%) or full (100%) refund for small CCPCs.

In 1992, two changes were made to the treatment of 1) overhead and administration expenses and 2) capital expenditures in respect of the acquisition of machinery and equipment. Two options were made available to assess the specific portion of overhead expenses and administrative costs directly attributable to SR&ED. Companies can choose to either specifically identify the portion of these expenditures or to use a proxy amount which corresponds to 65% of the salary base directly attributable to SR&ED. In the past, expenditures on machinery and equipment had to be used at least 90% of the time to qualify for the SR&ED tax credit. Changes were made to allow equipment primarily used for SR&ED (more than 50%) to also qualify for the tax credit. This tax credit cannot be forwarded to a future tax year; it must be claimed in two equal instalments in the two years following the year of acquisition.

In 1993, CCPCs with taxable income of between \$200,000 and \$400,000 became eligible for the tax credit for small corporations (prior to that year, only CCPCs with taxable income of \$200,000 or less would qualify). However, the tax credit decreases as the corporation’s taxable income rises. Specifically, the business limit on SR&ED expenditures – which is set at \$2 million – is reduced by \$10 for each dollar by which the taxable income of the corporation exceeds \$200,000. Therefore, at \$400,000 of taxable income, eligibility to this tax credit is fully phased out.

In 1994, the special 30% tax credit rate for companies involved in SR&ED activities in the Atlantic and Gaspé regions was eliminated. The rate now depends on company size, as elsewhere in Canada. It appears that the preferential rate did not succeed in attracting new investment to these regions or in alleviating regional disparities. In addition, the special provisions governing sole-purpose SR&ED performers (those who derive most or all of their income from research-related activities) were eliminated. Sole-purpose SR&ED performers were exempted from the rules that expressly excluded

certain expenses such as legal fees, interest costs, and entertainment expenses from eligibility for the SR&ED tax credit. The change resulted in a more consistent treatment of all corporations carrying out research.

Also in 1994, a time limit was set for identifying SR&ED expenditures incurred in previous years. This change was the result of concerns expressed by the Auditor General of Canada (1994). He had noted that some corporations, realizing that they were eligible for the SR&ED tax credit, were using the carry-forward provision to claim tax credits for several years, thereby considerably increasing the federal government's tax expenditures.

3. Since 1995

In 1995, additional changes to tax credit provisions were made in four specific areas: information technology R&D, contract R&D and non-arm's length transactions; third-party payments; and unpaid amounts.

First, the changes concerning information technology resulted from observations that Canadian chartered banks were claiming tax advantages for information technology development expenditures (on software and hardware for gathering, processing and distributing information). The federal government decided to review this situation and, in the meantime, temporarily made financial institutions ineligible for SR&ED tax advantages with respect to information technology. **On the basis of the review**, the government concluded that the rules governing SR&ED tax incentives must apply to all businesses investing in information technology, including financial institutions.

Second, changes were made to some rules governing SR&ED contracts, particularly transactions between related parties. Companies contracting out SR&ED are eligible for tax incentives applicable to the amount of the contracts. This amount usually includes sums that would not be eligible for the tax incentives if the SR&ED were carried out internally (for example, profits, the costs of renting buildings, and interest payments). When there is a relationship of dependence between the payer and the SR&ED contractor (for example, a parent corporation and a subsidiary), there is clearly greater latitude for setting (or overestimating) the value of contracts. The 1995 changes ensured that expenditures eligible for the tax incentives under contracts with related parties would in future be limited to the costs incurred by the

contractors in carrying out the SR&ED. Formerly, corporations awarding SR&ED contracts had to provide information on the contractors, including names and GST registration numbers.

Third, changes were made to payments to third parties for SR&ED. SR&ED carried out under an agreement with a third party is different from other SR&ED contracts in two ways. Firstly, when SR&ED is contracted out, it is carried out directly for the payer, which obtains ownership of the SR&ED. In the case of payment to a third party, the payer obtains the right to use the results of the SR&ED, but does not have control over the SR&ED itself. Secondly, and unlike the case for other SR&ED contracts, payments to third parties become eligible for the tax incentives when payments are made, and not when the SR&ED is carried out. Since 1995, third parties must provide information about the nature of the SR&ED they have carried out and indicate the related expenditures. As well, payments to third parties are treated like SR&ED contracts: they are eligible for the tax incentives in the year in which the SR&ED is carried out.

Lastly, the federal government limited the tax credits that may be claimed for SR&ED expenditures not yet incurred. SR&ED activities, and thus the related expenditures, often cover a period of several years. Before 1995, corporations claimed tax credits for amounts not yet paid out. **In 1995, new rules made** the tax credit applicable to the year in which payment of the outstanding amount is made (that is, when the full amount of the SR&ED expenditure is paid).

In 1998, in order to prevent unintended benefits under the regime of SR&ED tax incentives, a mechanism was implemented to ensure that when the product of an SR&ED project is sold, the overall cost of the project is reduced and investment tax credits are provided only on the net cost of performing the research. In addition, a review of the administration of tax incentives for SR&ED was undertaken and a new, simplified form for the tax credit was developed.

In 2000, the federal government modified the treatment of provincial deductions for SR&ED that exceed the actual amount of the expenditure to ensure that these “super-deductions” are considered as government assistance and, therefore, are excluded from the calculation of eligible expenditures for federal SR&ED tax purposes.

In 2003, the small business limit for a CCPC was raised from \$200,000 to \$300,000. As a consequence, the \$2 million SR&ED expenditure limit was phased out when taxable income is between \$300,000 and \$500,000.

In 2004, the *Income Tax Act* was amended to ensure that unconnected small businesses engaging in SR&ED do not have to share the enhanced 35% tax credit solely because they receive investments from the same venture capital investors.

In 2005, tax incentives were extended to SR&ED performed in Canada's Exclusive Economic Zone, which encompasses 200 nautical miles for the coastline. The previous limit included only the 12 nautical mile territorial sea.

In 2006, the small business limit for CCPCs was increased to \$400,000 and the \$2 million annual SR&ED expenditure limit can now be reduced when taxable income for the previous taxation year is between \$400,000 and \$600,000. Moreover, the carry-forward period of the tax credit was extended to 20 years.

D. Comments on Tax Incentives Related to SR&ED

The main advantage of these tax incentives is clearly that they are generally applicable, while leaving companies free to make decisions on their scientific research activities. The private sector determines for itself the level and type of SR&ED activities to carry out, basing decisions on cost-effectiveness and marketing potential.

While there does not seem to be much question about whether tax incentives should be used, there is considerable debate about whether the tax incentives for SR&ED are cost-effective. Tax incentives are considered to be cost-effective if the increase in SR&ED investment attributable to the incentives exceeds the amount of tax revenue forgone. Research on the cost-effectiveness of SR&ED tax incentives has focused primarily on tax policy in the United States; American studies generally support the conclusion that the benefits of SR&ED tax incentives exceed the costs. Empirical research in Canada demonstrates some or little cost-effectiveness [Dagenais, Mohnen and Therrien (2004); Department of Finance and Revenue Canada (1997)], but also suggests that Canadian tax incentives produce significantly less SR&ED per dollar of tax revenue forgone than do American tax incentives [Klassen, Pittman and Reed (2004); MacDonald (2004)]. Studies by Warda (1990; 1999) and KPMG (2006) nonetheless suggest that Canada is a leading

promoter of SR&ED and provides one of the most favourable investment climates for SR&ED among OECD countries.

When they form a simple tax structure, tax incentives can be relatively inexpensive to administer and apply. However, the frequent changes to federal SR&ED tax incentives have instead increased the complexity of the taxation system and created an environment of fiscal uncertainty for businesses planning to invest in SR&ED. **The Auditor General of Canada (2000) and industry both raised concerns about** the complexity of the SR&ED tax incentive system. **This complexity** has come about partly because of the growing number of criteria governing the system's application. It is also tied in part with the way scientific research is defined for tax purposes. Companies are required to explain in detail the nature of the SR&ED activities and demonstrate the scientific and technological content of their work. As such, it is difficult at times for them to determine whether or not a particular activity can be considered as scientific research. **Similarly, it is difficult and time-consuming to thoroughly review the claims.**

As with all tax expenditures, SR&ED tax incentives also raise the problem of cost control. Improperly or inadequately assessed tax incentives can turn out to be attractive tax loopholes and result in a significant loss of government revenue. In the 1980s, the federal government fortunately took steps to eliminate potential abuses of the taxation system. This is not to say, however, that it is completely effective in its control and evaluation of the SR&ED tax incentives for Canadian companies. In this regard, the Auditor General of Canada (1994) was critical of the lack of evaluation, and suggested that regular and comprehensive control of SR&ED tax measures be exercised in order to alleviate costs resulting from the federal government shortfall. **In 1997, the Department of Finance and Revenue Canada completed a joint evaluation of the SR&ED tax incentives. The Auditor General (2000), however, found a number of weaknesses in the evaluation report and recommended that future evaluations should examine the tax incentives in the context of overall federal support to industrial SR&ED.**

From an industry perspective, there are a number of impediments to the use of SR&ED tax incentives. One of them raised by Gebremichael and Warda (2003) and the Conference Board of Canada (2002) relates to the refundability of the tax credit which is limited to CCPCs. When a company has no income tax payable, SR&ED tax credits cannot be claimed. For this reason, it has been suggested that the refundability of the tax credit be made available to companies of all sizes. Another barrier to taking advantage of

the SR&ED tax incentives is the cost of complying with the tax credit claim process. As stated above, it takes a significant amount of company time. There is a cost threshold at which it starts to make no sense for the company to claim tax credits. This threshold varies depending on the firm – its size, nature of business, complexity of the claim, etc. This may discourage companies from claiming tax incentives.

A survey by the Canadian Manufacturers & Exporters (2004-2005) shows that only 38% of companies take advantage of SR&ED tax incentives. A majority of companies that do not use the tax incentives report that they do not apply to their business. However, 31% of companies do not use the tax incentives because of administrative or eligibility problems, while 28% say they are not aware of the tax incentives. More marketing may be necessary to let the industry know and understand the benefits of the SR&ED tax incentives.

In its 2005-2006 to 2007-2008 Corporate Business Plan, the Canada Revenue Agency indicated that it will continue its review of the SR&ED program's administrative processes and compare these with those of other countries to identify potential improvements. It also stated that it will enhance its communication initiatives to make the program more broadly known and to ensure accessibility for small businesses.

PARLIAMENTARY ACTION

The federal government has for several years been offering a variety of tax incentives to stimulate industrial SR&ED. Changes have made it possible to increase the number of beneficiaries eligible for these tax concessions. The most notable change has certainly been to allow non-taxable corporations to receive a tax credit refund. The greatest abuses of the system have resulted from measures allowing the transfer of corporate tax breaks to outside investors. Although the development of scientific research may be fundamental to the country's growth, that development must be promoted within the framework of an equitable tax system. **Several changes have been made to the federal SR&ED tax incentives over the years. The tax regime for industrial research appears to be complex and difficult to administer. There is a need to evaluate the cost-effectiveness of the current system.**

CHRONOLOGY

- 1944 – All current expenditures and one-third of capital expenditures on scientific research can be deducted.
- 1961 – Capital expenditures incurred in Canada for research become fully deductible.
- 1962 – Corporations can claim an additional tax deduction of 50% for **incremental current and capital expenditures on** scientific research.
- 1967 – **Elimination of the additional tax deduction of 50%.** Coming into force of the *Industrial Research and Development Incentives Act* (IRDIA), under which the federal government awards grants covering 25% of current and capital expenditures in respect of SR&ED.
- 1975 – **IRDIA program is eliminated.**
- 1977 – Corporations can claim an SR&ED tax credit of between 5% and 10%, depending on the size of the firm and the location of SR&ED activities. **The value of the tax credit must be included in the taxable income.**
- 1978 – **Additional 50% deduction for incremental current and capital expenditures (base: average of 3 preceding years). The tax credit rate is raised to 10% in general, 20% in Atlantic and Gaspé regions, and 25% for small CCPCs.**
- 1983 – **The additional 50% deduction for incremental RS&ED is replaced by a 10% increase in the tax credit rates: basic rate (20%), Atlantic and Gaspé (30%) and small CCPCs (35%). The 100% deduction can be carried forward indefinitely and unused tax credits can be carried back for 3 years or forward for 7 years. Partial refundability of unused tax credits is introduced with 40% for small CCPCs and 20% for the others. The Scientific Research Tax Credit (SRTC) is introduced.**
- 1985 – **The SRTC is eliminated.**
- 1987 – **New terminology of SR&ED for income tax purposes and buildings excluded from the definition. To qualify for tax incentives, 90% of expenditures must be attributable to SR&ED. Carry-forward provisions for unused tax credits are increased to 10 years. Refundable tax credit for large corporations is eliminated.**
- 1992 – **A proxy can be used to calculate the portion of overhead expenses and administrative costs directly attributable to SR&ED. Expenditures on machinery and equipment primarily used for SR&ED (more than 50%) also qualify for the tax credit.**

- 1993 – The tax credit available to small corporations is extended to CCPCs with taxable income of between \$200,000 and \$400,000.**
- 1994 – The special 30% tax credit rate applicable in the Atlantic and Gaspé regions is eliminated. The exemptions applying to sole-purpose SR&ED performers are eliminated. A time limit is set for identifying SR&ED expenditures incurred in previous years.**
- 1995 – Changes are made with respect to information technology expenditures, contract research and non-arm’s length transactions, third-party payments, and unpaid amounts.**
- 1998 – Eligible SR&ED expenditures must be reduced by the revenue gained from the sale of a product of an SR&ED project. A review of the administration of tax incentives for SR&ED is undertaken and a new, simplified form for the tax credit is developed.**
- 2000 – Provincial “super-deductions” must be excluded from the calculation of eligible expenditures for federal SR&ED tax purposes.**
- 2003 – The small business limit for a CCPC is raised from \$200,000 to \$300,000 and the tax credit is extended to businesses with taxable incomes ranging from \$300,000 to \$500,000.**
- 2004 – Unconnected small businesses engaging in SR&ED do not have to share the enhanced 35% tax credit.**
- 2005 – Tax incentives are extended to SR&ED performed in Canada’s Exclusive Economic Zone.**
- 2006 – The small business limit for CCPCs is increased to \$400,000 and the \$2 million annual SR&ED expenditure limit can be reduced when taxable income for the previous taxation year is between \$400,000 and \$600,000. The carry-forward period of the tax credit is extended to 20 years.**

SELECTED REFERENCES

Auditor General of Canada. “Canada Customs and Revenue Agency and Department of Finance: Handling Tax Credit Claims for Scientific Research and Experimental Development,” Chapter 6, *Report of the Auditor General of Canada*, April 2000. http://www.oag-bvg.gc.ca/domino/reports.nsf/html/00menu_e.html

Auditor General of Canada. “Department of Finance and Revenue Canada: Income Tax Incentives for Research and Development,” Chapter 32, *Report of the Auditor General of Canada*, 1994.

http://www.oag-bvg.gc.ca/domino/reports.nsf/html/94menu_e.html

Blais, R. “Bilan et perspectives des crédits d’impôt à la R-D dans les entreprises québécoises.” *Compte rendu du séminaire sur les mesures fiscales d’incitation à la R-D*. Conseil de la science et de la technologie, Montreal, May 1989, pp. 59-97.

Canada Revenue Agency. *Summary of the Corporate Business Plan 2005-2006 to 2007-2008*. http://www.cra-arc.gc.ca/agency/business_plans/2005/prnt_ver-e.html

Canadian Manufacturers & Exporters. *Management Issues Survey, 2004-2005*. <http://www.cme-mec.ca/national/media.asp?id=588>

Canada Revenue Agency. *Claiming Scientific Research and Experimental Development – Guide to Form T661*, 2006. <http://www.cra-arc.gc.ca/E/pub/tg/t4088/>

Canada Revenue Agency. *An Introduction to the Scientific Research and Experimental Development Program*, 20 January 2005. <http://www.cra-arc.gc.ca/E/pub/tg/t4052/README.html>

Canada Revenue Agency. *Income Tax Act: Scientific Research and Experimental Development Expenditures*, Bulletin IT-151R5 (Consolidated), 28 July 2003. <http://www.cra-arc.gc.ca/E/pub/tp/it151r5-consolid/README.html>

Conference Board of Canada. *Tuning the SR&ED Tax Incentive Program: Ideas from the ICT Sector*, July 2002. <http://www.conferenceboard.ca/documents.asp?rnext=409>

Conseil de la science et de la technologie. *Compte rendu du séminaire sur les mesures fiscales d’incitation à la R-D*. Montreal, May 1989.

Conseil de la science et de la technologie. *Les avantages fiscaux associés aux activités de recherche et de développement*. Government of Quebec, March 1988.

Dagenais, Marcel, Mohnen, Pierre and Therrien, Pierre. “Les firmes canadiennes répondent-elles aux incitations fiscales à la recherche-développement?” *L’Actualité économique*, Vol. 80, No. 2-3, June-September 2004.

http://neumann.hec.ca/iea/actueco/vol80no2_3_2004.htm

Department of Finance. *Background on Federal Income Tax Assistance for Research and Development*. Background document prepared for the Standing Committee on Public Accounts, 14 March 1995.

Department of Finance. Federal Tax Initiatives to SR&ED. Evaluation report, 1998 (available at <http://www.fin.gc.ca>).

Department of Finance Canada. *Tax Expenditures and Evaluations*, 2005. <http://www.fin.gc.ca/purl/taxexp-e.html>

Department of Finance Canada and Revenue Canada. *The Federal System of Income Tax Incentives for Scientific Research and Experimental Development: Evaluation Report*, December 1997. http://www.fin.gc.ca/toce/1998/resdev_e.html

Department of Finance Canada. *Why and How Governments Support Research and Development*, December 1997. http://www.fin.gc.ca/resdev/why_e.html

Ernst & Young (Karen Wensley and Allen Szeto). *Using R&D Tax Incentives to Leverage Canada Foundation for Innovation Contributions*, prepared for the Association of Universities and Colleges of Canada, 1 June 1998. http://www.aucc.ca/publications/reports/1998/index_e.html

Freeman A. and B. McKenna. "Banks Ask Millions in R&D Credits." *Globe and Mail* (Toronto), 15 December 1994.

Gebremichael, Goshu Adane and Warda, Jacek. *Canada's SR&ED Tax Incentives*, Final Report, Submitted to Information Technology Association of Canada and Industry Canada, 2003. <http://innovation.gc.ca/gol/innovation/site.nsf/en/in02342.html>

Government of Canada. "Modifications to the Scientific Research and Experimental Development Tax Incentives." *News Release*, 22 December 1992.

Government of Canada. "Federal Government Launches Science and Technology Review." *News Release*, 28 June 1994.

Hamilton, R. "Tax Incentives and Innovation: The Canadian Treatment of R&D." *Canada-United States Law Journal*, Vol. 19, 1993, p. 233-257.

Industry Canada. *Institutional Aspects of R&D Tax Incentives: The SR&DE Tax Credit*, Occasional Paper No. 6, April 1995. <http://strategis.ic.gc.ca/epic/internet/ineas-aes.nsf/en/ra00013e.html>

Industry, Science and Technology Canada. *Support for Technology Development*. 1989.

Klassen, Kenneth J., Pittman, Jeffrey A. and Reed, Margaret P. “A Cross-national Comparison of R&D Expenditure Decisions: Tax Incentives and Financial Constraints,” *Contemporary Accounting Research*, Vol. 21, No. 3, Fall 2004.
<http://www.caaa.ca/CAR/BackIssues/vol21num3/index.html>

KPMG. *Competitive Alternatives: KPMG’s Guide to International Business Costs*, March 2006 <http://www.competitivealternatives.com/download/default.asp>.

MacDonald, Christy. *R&D Tax Incentives: A Comparison of the Incentive Effects of Refundable and Non-refundable Tax Credits*, Workshop Paper, University of Waterloo, 2004 <http://accounting.uwaterloo.ca/schedule-old.html>

McFetridge, D.G. and J.P. Warda. *Canadian R&D Incentives: Their Adequacy and Impact*. Canadian Tax Foundation. Document No. 70, 1983.

Minister of Finance, the Honourable Marc Lalonde. *Research and Development Tax Policies*. A Paper for Consultation. Government of Canada, April 1983.

Minister of Finance, the Honourable Paul Martin. *Tax Measures: Supplementary Information*. Government of Canada, 22 February 1994.

Minister of Finance, the Honourable Paul Martin. *Amendments to the Income Tax Act – Explanatory Notes*. Government of Canada, February 1994.

Rogers, Bereskin and Parr. *Research and Development in Canada: A Practical Guide to Financing, Protecting and Exploiting New Technology*. 1987.

Sapona, I. “The Proposed New Scientific Research and Experimental Development Rules – An Update on Research Incentives.” *Bulletin for International Fiscal Documentation*, Vol. 47, No. 5, May 1993, pp. 255-262.

Secretariat for Science and Technology Review. *Resource Book for Science and Technology Consultations*. Government of Canada, Vol. I, June 1994.

Sweeny, T. and C. Robertson. “Income Tax Incentives for Canadian Research and Development.” *Canadian Taxation Review*, 37:2, March/April 1989, pp. 310-340.

Switzer, L. *Étude des répercussions des mesures fiscales et des dépenses publiques sur les investissements du secteur privé en recherche et développement*. Government of Quebec, MESS, 1986.

Warda, J. *International Competitiveness of Canadian R&D Tax Incentives: An Update*. Conference Board of Canada, May 1995.

Warda, Jacek, *Measuring the Attractiveness of R&D Tax Incentives: Canada and Major Industrial Countries*, Statistics Canada, Cat. No. 88F0006XIB-99010, December 1999
<http://www.statcan.ca/bsolc/english/bsolc?catno=88F0006XIB1999010>