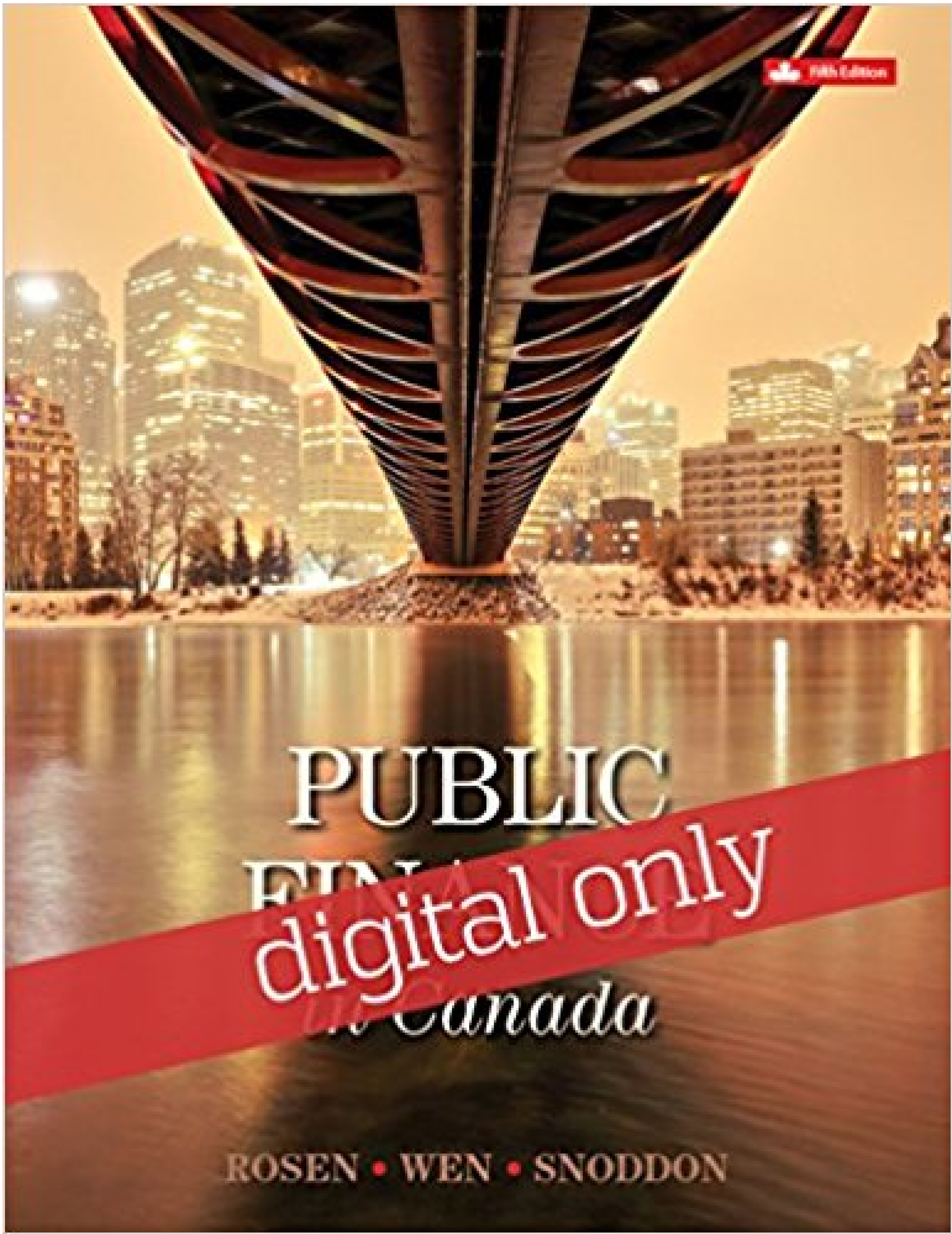
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Fifth Canadian Edition

PUBLIC FINANCE in Canada

Harvey S. Rosen

Jean-François Wen

Tracy Snoddon

PUBLIC FINANCE IN CANADA
Fifth Canadian Edition

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PREFACE

A NOTE FROM HARVEY S. ROSEN

The field of public finance has been changing rapidly in recent years. On the theoretical side, one of the main achievements has been to integrate the analysis of government spending and taxing more closely with basic economic theory. A prime example is the literature on optimal taxation, which has attempted to derive prescriptions for government fiscal behaviour using standard economic tools, rather than to annunciate a set of ad hoc "principles" for tax design. On the empirical side, the most exciting development has been the widespread application of the tools of econometrics to understand how expenditure and tax policies affect individual behaviour and how the government sets its policies.

The results of modern research have been slow entering traditional texts. This book takes its readers to many of the frontiers of current research. The approach to the material, while accessible to undergraduates, is the same as the approach shared by most economists active in the field.

The development of public finance has not proceeded free of controversy. In this book, disputes concerning both methodological and substantive issues are discussed at length. One reviewer of an early draft of the manuscript warned against displaying too much of the profession's dirty laundry in public. My feeling, however, is that "full disclosure" should apply not only in the market for securities, but also in the market for ideas.

There is some tendency for economic analysis to lose touch with the reality it is supposed to describe. I have tried to avoid this tendency. The relevant institutional and legal settings are described in ample detail. Moreover, the links between economic analysis and current political issues are constantly emphasized.

This book is designed for use in undergraduate curricula as well as in graduate programs in public administration. It is assumed that readers are familiar with microeconomic theory at the level of the standard introductory course. Because some use is made of indifference curve analysis, a topic that is not covered in all introductory courses, indifference curves are carefully explained in the chapter "Microeconomics Background for the Study of Public Finance," which is available on the McGraw-Hill Ryerson website, www.mcgrawhill.ca/olc/rosen. This chapter also provides a brief review of other topics in basic microeconomics, including the supply and demand model and marginal analysis. This review should be adequate to refresh the memories of readers who have been away from microeconomics for a while. Finally, a glossary of key terms appears at the end of the book.

The British statesman Edmund Burke noted that, "To read without reflecting is like eating without digesting." To facilitate this digestive process, each chapter ends with a set of discussion questions and problems. Their purpose is to encourage students to apply and extend the principles that they have learned.

Harvey S. Rosen

WHAT'S NEW IN THE FIFTH CANADIAN EDITION?

In the fifth edition of *Public Finance in Canada,* we have undertaken substantial revisions to enhance the currency of the textbook, including coverage of recent theoretical and empirical developments in the literature and major updating of the data. A new feature of this edition is the inclusion of learning objectives at the start of each chapter to help focus the student's attention on the chapter's key concepts, lessons, and applications. Also new to this edition is the inclusion of an encapsulated "In the News" piece in each chapter, which is intended as both an interesting diversion for readers and a demonstration of the application of the chapters' materials in the media. Another major change is the reintegration of cost–benefit analysis into the book, as Chapter 3 (in the previous edition this was an Internet chapter). Some commentators on previous editions indicated their wish to have a simple treatment of efficiency based on the concepts of marginal benefit and marginal cost, while others preferred the more advanced exposition contained in "Fundamentals of Welfare Economics" in Chapter 2. By placing the topic of cost–benefit analysis early in the textbook, we are able to present an alternative discussion of efficiency and distribution in a way that feels natural; after all, cost–benefit analysis is the application of welfare economics to policy issues. In this way, instructors who wish to bypass Chapter 2 can still discuss the basic ideas of welfare economics using Chapter 3.

In Part Two, Chapter 4 contains a new discussion of privatization, based on waste collection in Ontario municipalities. Chapter 5 on externalities now includes a more thorough treatment of how cost-effective emissions reductions can be achieved using either an emissions fee or a permit-trading scheme, illustrated with a simple, two-firm numerical example. The chapter also contains an expanded discussion of public responses to positive externalities. In Chapter 6, income inequality and poverty indicators are now presented in distinct sections to help students more clearly differentiate between the two concepts and how they are measured. The Gini coefficient and the income share of the richest 1 percent of the population have been added to the discussion of common measures of income inequality, while the poverty section focuses on measures of the incidence, and depth, of poverty.

In Part Three, Chapter 7 contains new material on rent-seeking, with an application to the Canadian dairy industry. The coverage of federal grants to provinces in Chapter 8 has been substantially revised to reflect major policy changes since the previous edition.

In Part Four, Chapter 9 on health care now contains a discussion of the Affordable Care Act in the United States in the context of the theory of insurance markets and adverse selection. The systematic exposition on insurance markets in this chapter reflects our view that social insurance is an essential topic for understanding government expenditures in Canada. Chapter 10 now contains a simple model of the labour market search to frame the discussion of how Employment Insurance can affect the unemployment rate. Chapter 11 updates the discussion of intergenerational redistribution from public pensions, and contains a completely rewritten section on empirical estimates of the effect of public pensions on savings. Additions to Chapter 12 should help students to understand the effects of earnings exemptions and benefit clawbacks in welfare-related programs. Chapter 13 on education has been reorganized to better guide the student through the material.

The tax chapters in Parts Five and Six offer some improvements as well. Chapter 17 now describes Tax-Free Savings Accounts and the Working Income Tax Benefit and provides an end-of-chapter exercise on calculating the benefit. Chapter 19 has been reorganized to emphasize Canada's GST rather than the proposals for a flat tax, which are more topical in the United States where there is no national sales tax. Chapter 19 also provides an updated discussion of the insights from optimal tax theory as they pertain to the GST. Revisions to Chapter 21 bring the assessment of the integration between personal and corporate taxation in Canada up to date in light of the new tax rates and the enhanced investment tax credit. Internet Chapter 3 on deficit finance has also been brought up to date.

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PART ONE
Introduction

People's views on how the government should conduct its financial operations are heavily influenced by their political philosophies. Some people care most about individual freedom, whereas others care more about promoting the well-being of the community as a whole. Philosophical differences can and do lead to disagreements as to the appropriate scope for government economic activity.

However, forming intelligent opinions about governmental activity requires not only a political philosophy, but also an understanding of what the government actually does. Where does the legal power to conduct economic policy reside? What does government spend money on, and how does it raise revenue?

Chapter 1 discusses how political views affect attitudes toward public finance and outlines the operation of the Canadian system of public finance. This chapter provides a broad perspective that is useful to remember as we discuss various details in the rest of the book. Chapter 2 examines normative analysis in terms of welfare economics and discusses the economic roles of government. Chapter 3 discusses how the more conceptual framework of welfare economics provides a basis for cost-benefit analysis, a set of procedures for guiding public expenditure decisions in practice.

CHAPTER 1

Introduction to Public Finance in Canada

It shall be lawful for the Queen, by and with the Advice and Consent of the Senate and House of Commons, to make Laws for the Peace, Order, and good Government of Canada, in relation to all Matters not coming within the Classes of Subjects by this Act assigned exclusively to the Legislatures of the Provinces.

–1867 Constitution Act as amended (to 1991)

AFTER READING THIS CHAPTER, THE STUDENT SHOULD BE ABLE TO:

LO1 Summarize the legal framework within which governments in Canada conduct their economic activities.

LO2 Describe the process of how the size of government is measured using annual expenditures.

LO3 Discuss the importance of taking into account population growth, inflation, and growth in the economy when examining how the size of government has changed over time.

LO4 Explain why conventional government budget expenditures may not fully capture the extent to which society's resources are under government control.

LO5 Identify the spending categories that account for the largest share of government spending for the different levels of government—federal and provincial plus local.

LO6 Identify the largest revenue sources for the different levels of government—federal and provincial plus local.

The dawn of civilization, and thus of public finance history, in the third millennium BC is recorded on clay tablets excavated at Lagash, in Sumer, a region that is now known as modern Iraq:

> The people of Lagash instituted heavy taxation during a terrible war, but when the war ended, the tax men refused to give up their taxing powers. From one end of the land to the other, these clay cones say, "there were the tax collectors." Everything was taxed. Even the dead could not be buried unless a tax was paid. The story ends when a good king, named Urukagina, "established the freedom" of the people, and once again, "There were no tax collectors." This may not have been a wise policy, because shortly thereafter the city was destroyed by foreign invaders. (Adams, 1993: 2)

As the above passage from Charles Adams' *For Good and Evil* illustrates, an ambivalence about government is apparent in even the most ancient of civilizations. In this example, the king burdens the people with taxes, but without taxes an army cannot be provided and the city is vulnerable.

Many centuries have passed but mixed feelings about government and its taxing and spending activities remain. This book is about these government activities, a subject usually called public finance but sometimes referred to as public sector economics or public economics. Our focus is on the microeconomic functions of

government, the way government affects the allocation of resources and the distribution of income. The macroeconomic functions of government—the use of taxing, spending, and monetary policies to affect the overall level of unemployment and the price level—are usually taught in separate courses.

The topics considered in public finance include some of the major questions of our time:

- What are the roles of the public and private sectors in the delivery of health care?
- How can social assistance be provided for the poor without curbing incentives for self-reliance?
- How much should government subsidize post-secondary education?
- How can governments help in the wake of disasters such as the earthquake in Japan in 2011?
- How is the tax burden distributed and what are the implications of globalization for tax policies?
- Are locally raised taxes a good way to pay for services provided by provincial and local governments?

These are among the issues examined in this book.

VIEWPOINT OF THIS BOOK

Public finance economists analyze not only the effects of actual government taxing and spending activities, but also what these activities ought to be. Views of how government should function in the economic sphere are influenced by general attitudes toward the relationship between the individual and the state. The notion that the individual rather than the group is paramount is relatively new, and as a political philosophy is stronger in some countries, such as the United States, than in others, such as Canada or Sweden. Historian Lawrence Stone (1977: 4–5) notes that a different political philosophy was dominant before the modern period:

> It was generally agreed that the interests of the group, whether that of kin, the village, or later the state, took priority over the wishes of the individual and the achievement of his particular ends. "Life, liberty and the pursuit of happiness" were personal ideals which the average, educated 16th-century man would certainly have rejected as the prime goals of a good society.

Since then, however, the view that government is a contrivance created by individuals to better achieve their individual goals has come to dominate Anglo-American political thought. However, its dominance is not total—as reflected in the Canadian commitment to "peace, order, and good government." Anyone who claims that something must be done in the "national interest," without reference to the welfare of some individual or group of individuals, is implicitly taking the view that the individual has significance only as part of the community, and that the good of individuals is defined with respect to the good of the whole. More generally, even in highly individualistic societies, people sometimes feel it necessary to act on behalf of, or even sacrifice their lives for, the nation. As Kenneth Arrow (1974: 15) observes, "The tension between society and the individual is inevitable. Their claims compete within the individual conscience as well as in the arena of social conflict."

Not surprisingly, Anglo-American economic thought has also developed along individualistic lines, although less so in Canada than in the United States. Individuals and their wants are the main focus in mainstream economics, a view reflected in this text. However, as stressed earlier, within the individualistic tradition there is much controversy with respect to how active a role government should take. As an example, Canada, in contrast to the United States, has long embraced a major role for government in the provision of health care, and federal equalization payments, embedded in the Canadian Constitution, ensure "sufficient revenues to provide reasonably comparable levels of public services at reasonably comparable levels of taxation" regardless of the province of residence.

The desirability of a given course of action inevitably depends in part on ethical and political judgments. However, ideology by itself is insufficient to determine whether any particular economic intervention should be undertaken. An analysis of the economic consequences of a policy and of the general evolution of economic institutions are also essential parts of policy assessment.[1]

[1] See North (1990) for example.

CANADA'S GOVERNMENT AT A GLANCE

It is useful to have a broad overview of the Canadian system of public finance—the basic "facts" about the fiscal system and how it operates. However, before doing so, it is necessary to briefly discuss the legal framework within which government conducts its economic activities. We also consider some problems that arise in attempts to quantify the role of government in the economy.

The Legal Framework

According to Perry (1990: 17), "the first recorded taxes under the French regime were export taxes on furs—half of the beaver and one-tenth of the moose, first levied about 1650." As trade increased, taxes on imports (referred to as customs duties or tariffs) and excise taxes on items such as tobacco supplanted export taxes as the main source of government revenues. By 1847, taxes set by the colonies on imported goods had replaced the Imperial tariffs, and the colonies were in control of their taxes. Revenues from the taxes were being used to finance roads, canals, ports, bridges, and other public infrastructure.

Canada's initial Constitution, the 1867 British North America Act (now the Constitution Act, 1982), specifies the taxing and spending powers of the federal and provincial governments. We first look at the provisions relating to the taxing and spending powers of the federal government and then turn to the provinces.

Federal Government

Section 91 of the 1867 Constitution Act gives the federal government the power "to make laws for the peace, order, and good government of Canada." This includes the power to raise money by any system or mode of taxation, although Section 125 prevents the federal government from levying taxes on provincial lands and property.

The main sources of tax revenues in Canada at the time of Confederation were taxes on imports and excise taxes. Although the provinces raised 99 percent of their tax revenues (77 percent of total revenues) from these two sources in 1866, the Constitution excluded provinces from future use of these and other "indirect" taxes; customs duties, excise duties and taxes, and other indirect taxes were reserved for the federal government. The Fathers of Confederation planned for a strong federal government and for most of the taxing power to reside at the federal level. Direct taxes—income taxes, taxes on estates and inheritances at time of death, and property taxes—which could also be used by provincial governments were unpopular and little used in the 1860s.

With the federal taxing power went major responsibilities that had previously resided with the provinces. What were these?

The first half of the nineteenth century in North America saw growing appreciation for government's role. According to Donald Creighton (1939: 67), "the philosophy of 'public improvements' made very rapid progress among colonial populations which were otherwise still addicted to negative views of the state." Infrastructure was needed to move people and goods. Adequate private capital was unavailable. Nova Scotia, New Brunswick, Ontario, and Quebec had, prior to 1867, incurred debt to build ports, railways, roads, canals, wharfs, lighthouses, and bridges; in 1866, 29 percent of provincial expenditures were for debt servicing. With Confederation, the federal government assumed the existing debts of the provinces and the responsibility for servicing and repaying these debts. The federal government was also given responsibility for national defence, navigation and shipping, regulation of trade and commerce, the criminal justice system, and money and banking, among other areas.

The intent was to balance responsibilities with revenues. To achieve this, the federal government provided statutory subsidies to provinces for general government, justice, education, welfare, and internal transport services. These subsidies were specified at the time of Confederation, and any future growth in subsidies was to be strictly limited. The Fathers of Confederation did not foresee the extent to which federal grants to provinces would grow and change.

Revenues from customs and excise duties effectively met federal government needs for the first 50 years following Confederation. Today's major taxes remained unused. World War I introduced an excess profits tax and taxes on corporate (1916) and personal incomes (1917) and it was not until 1920 that the federal government introduced a general sales tax. As late as 1919, excise and customs duties accounted for 78 percent of federal tax revenues. Given the prominence of the GST (Goods and Services Tax) and the personal income tax in today's tax discussions, it may seem surprising that income taxes and a broad-based sales tax had no role in federal government finance for more than half a century after Confederation.

Although there was no change to the Constitution Act, the federal government managed to extend its spending powers into areas of provincial responsibility through the use of conditional grants, first in 1912 in the area of agricultural education, education being an area of exclusive provincial jurisdiction. By 1928, conditional grants were being made for employment services, highway construction, technical education, and disease prevention, all areas for which the provinces had major responsibility. And in 1927, the federal government provided conditional grants for old age pensions. The Great Depression of the 1930s created the need to greatly expand federal conditional grants to provinces for social assistance. The terms of the social assistance grants varied according to the needs of individual provinces. By 1936–37, conditional grants accounted for $69 million of the $90 million transferred by the federal government to the provinces. By providing support for provincial action in specified areas, the federal government encouraged provincial governments to use their own limited resources, although only in certain ways. As long as provinces are free to choose whether to participate through their own legislation, and the federal government does not become involved in providing services that are a provincial responsibility, the conditional grants do not appear to violate the Constitution.

A 1940 amendment (Section 91(2A)) to the 1867 Constitution Act gave the federal government responsibility for unemployment insurance, and another amendment in 1951 (Section 94A) provided for shared jurisdiction with provinces for old age pensions. One result flowing from these two measures has been rapid growth in payroll tax rates and revenues over the past several decades.[2]

The expansion of federal powers into areas reserved to the provinces has been protested by many of the provinces, and most strongly by Quebec, over the years. This has led to "opting out" arrangements whereby provinces that choose not to participate in a conditional grant program obtain increased tax room, or taxing power, in order to finance a similar program of their own.[3]

Income taxes, payroll taxes, and the federal sales tax, all unknown at the time of Confederation, grew from 37 percent of federal revenues in 1934 to 87 percent by 2012. Customs and excise tax revenues now pale in comparison. The federal government has used the flexibility provided by the Fathers of Confederation to meet the demand for growing revenues.

Government bills to tax and to spend must originate in the House of Commons (Section 53 of the 1867 Constitution Act), and must be introduced to the House by a minister of the government. They cannot originate in the Senate, a clear distinction between the powers held by the elected House and by the appointed Senate.

Expenditure estimates for the broad range of federal programs must be prepared and approved annually for new and old programs. Tax measures, in contrast, continue to generate revenues without yearly action. The government introduces budgets that include changes in tax legislation more or less as often as economic and political conditions dictate.

As Canada's substantial federal debt so emphatically demonstrates, the federal government is not required to finance all its expenditures by taxation. If expenditures exceed revenues, the government is empowered to "the borrowing of Money on the Public Credit" (Section 91(4)). In 1873, the gross public debt that had been assumed by the Dominion at Confederation stood at $93.7 million ($27 per capita). Although this had risen to $612 billion ($17,482 per capita) by 2013–14, federal government spending required to service the debt was about 10 percent of total spending in 2014, as compared with about 27 percent 130 years earlier.

Provincial and Local Governments

The 1867 Constitution Act limited provinces to the use of direct taxation within the province in order to raise revenue for provincial purposes.[4] Provinces were not given the power to inhibit interprovincial trade through the use of indirect taxes; statutory subsidies to the provinces compensated for the prohibition on indirect taxes. Per capita subsidies, federal grants to operate government and legislatures, licences and fees, the sale of goods and

[2] Di Matteo and Shannon (1995) provide a useful overview of payroll tax evolution in Canada over the past several decades; Lin (2001) offers a more recent update.

[3] The transfer of tax room is accomplished in theory by the federal government reducing its tax rate while the provincial and territorial government that is "opting out" increases its tax rate by an equivalent amount.

[4] A "direct" tax is one that is imposed on the individual who is expected to bear the tax. Thus, the personal income tax is a direct tax. Sales taxes and excise are generally classified by economists as "indirect" taxes; although the person selling or producing the good or service has the statutory obligation to pay the tax, the tax is expected to be borne by the final consumer of the good or service.

services, and revenues from provincial lands and natural resources were to fund the necessary provincial services. Property taxes, income taxes, and succession duties, little used at the time, were also available to provinces.

Federal subsidies, which accounted for about 60 percent of provincial revenues in 1867, fell to 10 percent by 1930. Increased demand for welfare, health, and education services and for intraprovincial transport accompanied economic development and urbanization and led provinces to seek new sources of revenue. British Columbia (1876) and Prince Edward Island (1894) were the first provinces to enact taxes on personal incomes. Ontario, following the example of New York and Pennsylvania, introduced a succession duty in 1892 in order to increase revenues, and by 1896 all provinces had succession duties. Taxes on gasoline and motor vehicle licences were introduced by the 1920s as a way to finance the road systems that were needed with the increasing use of automobiles and trucks.

Provinces held primary responsibility for social welfare, and the Great Depression placed enormous strain on provincial finances. Federal transfers rose from 10 percent in 1930 to 25 percent of provincial revenues by 1937 (Eggleston and Kraft, 1939) due to increasing welfare needs. By 1940, financial pressures had forced all provinces to introduce taxes on personal and corporate incomes, with Saskatchewan and Quebec also using retail sales taxes.[5] Thus, by the time of World War II, both the federal and provincial governments were using corporate and personal income taxes as well as a general sales tax.

Growing disparity between provincial financial needs and resources and an overlap in major revenue sources led the Royal Commission on Dominion–Provincial Relations (Canada, 1940) to recommend that the federal government be the sole user of taxes on personal and corporate income and of successions duties, that it assume responsibility for provincial debts, and that it provide adequate transfers to provincial governments. But it was World War II, rather than the royal commission's recommendations, that led the provinces to relinquish their use of the personal and corporate income taxes. Following the war, a series of federal–provincial agreements provided for federal transfers to provinces based on a combination of per capita grants and a share of the revenues from the income taxes. Per capita grants and statutory subsidies provided an element of equalization among provinces prior to 1957. The 1957–62 agreement included unconditional (equalization) grants based on the per capita yield of the personal and corporate income taxes and succession duties in the two wealthiest provinces—Ontario and British Columbia. The grants were based on these provinces in order to guarantee that per capita provincial revenue would reach a certain standard for all Canadians. Subsequent agreements expanded the basis for equalization payments. By 2006 equalization included 33 provincial revenue sources. A number of changes were made to equalization in the federal government's budget for 2007, including reducing the number of provincial tax bases used to calculate equalization from 33 to 5. Section 36(2) of the 1982 Constitution Act, which entrenches the concept of equalization payments in the Canadian Constitution, states:

> Parliament and the government of Canada are committed to the principle of making equalization payments to ensure that provincial governments have sufficient revenues to provide reasonably comparable levels of public services at reasonably comparable levels of taxation.

The 1982 Constitution Act also amended the Constitution to give provinces greater control over their natural resources, explicitly allowing them to levy indirect taxes on natural resources. Provinces may now raise money by "any mode or system of taxation in respect of . . . nonrenewable resources and forestry resources in the province and the primary production there from . . ." (Section 92A).

As we shall see, the provincial role in public finance in Canada has grown significantly relative to that of the federal government. There has been a dramatic fall in the ratio of federal to provincial government expenditures, from 4.9 to 1 in 1946 to 0.72 to 1 by 2009. The ratio of federal government revenue to provincial revenue (net of federal grants) also fell sharply during this time, from 4.86 to 1 in 1946 to 1.32 to 1 in 2009. Rapid growth in key areas of provincial responsibility—health, education, welfare—during the past half century, and the fact that both federal and provincial governments have access to all major taxes, have also contributed to

[5] In contrast to the generally accepted classification of retail sales taxes and excise taxes on gasoline or tobacco products as indirect taxes, courts in Canada have classified these taxes as direct taxes in interpreting the 1867 Constitution Act. The seller of the good is deemed as the agent designated to collect the tax from the consumer who pays and bears the tax in proportion to the amount of the good consumed.

this shift. Although the Fathers of Confederation may have intended the federal government to dominate the provinces, the distribution of taxing and spending among levels of government is very different than at the time of Confederation.

The Constitution Act (formerly the 1867 Constitution Act) does not refer to local governments. Local authorities have only those taxing and spending powers that provincial governments choose to delegate to them. One result is that there is substantial variation across provinces in local taxing and spending decisions. The dominant revenue source for local authorities was, and is, the property tax. Local government own-source revenues, which were more than double provincial own-source revenues in 1926, were less than 25 percent of provincial own-source revenues in 2009. As provincial reliance on sales and income tax revenues grew rapidly, local governments increasingly relied on transfers from provincial governments. Grants from federal and provincial governments, which accounted for 6.7 percent of local revenues in 1926, accounted for about 40 percent in 2008. In sum, since the time of Confederation the role of provincial governments has increased sharply relative not only to the federal government but to local governments as well.

The Size of Government

What has been the result of these legal prescriptions and trends for government taxing and spending activities? The first item that belongs in any such description is a measure of the magnitude of these activities. Just how big is government? The whole public debate concerning the government's size presupposes that there is some way of measuring it. For now, we will examine some of the measures and measurement issues relating to government size; we return to the issue of how to *explain* the growth in government size in Chapter 7.

One measure often used by politicians and journalists to determine the size of government is the number of workers in the public sector. However, inferences about the size of government drawn from the number of workers it employs can be misleading. Imagine a country where a few public servants operate a powerful computer that guides all economic decisions. In this country, the number of individuals on the government payroll certainly underestimates the importance of government. Similarly, it would be easy to construct a scenario in which a large number of workers is associated with a relatively weak public sector. Although there are many reasons why it is useful to know the number of public sector employees, it does not cast light on the central issue—the extent to which society's resources are subject to the control of government.

A more sensible (and common) approach is to measure the size of government by the volume of its annual expenditures. There are basically three types:

1. *Purchases of goods and services.* The government buys a wide variety of items, everything from fighter planes to services provided by forest rangers.
2. *Transfers of income to people, businesses, or other governments.* The government takes income from some individuals or organizations and gives it to others. Examples are welfare programs such as the Guaranteed Income Supplements under the Old Age Security Act and farm programs that guarantee prices for certain commodities.
3. *Interest payments.* The government often borrows to finance its activities and, like any borrower, must pay interest for the privilege of doing so.

The budget is presented by the federal minister of finance each year, traditionally in February, outlining anticipated changes in tax and spending programs and setting forth the anticipated revenues and expenditures for the coming fiscal year. The April 21, 2015, federal budget predicted that spending would exceed revenues by $2.1 billion in fiscal year 2014–15. The federal deficit has fallen in recent years, especially in comparison to the deficits recorded in the years immediately following the 2008 recession. Each provincial finance minister goes through a similar budgetary process. Local authorities also approve their tax and spending programs set forth in an annual budget. Consolidated financial data for government spending and revenues are available, but often with a lag. The latest available consolidated data for federal, provincial, and local governments, for 2008–09, show $633.7 billion in revenue and $631.3 billion in spending, or $18,947 in per capita spending with a per capita surplus of $73.

Typically, if government spending (in total or in per capita terms) increases, people conclude that government has grown. Unfortunately, conventional budget expenditures can convey a misleading impression of the

IN THE NEWS

CANADA'S MILITARY SPENDING GETS A BOOST FROM FEDERAL BUDGET

The federal government has substantially increased its military spending over the past 15 years. The current build-up began in 1999, but it accelerated as a result of Canada's participation in the war in Afghanistan following the terrorist attack in the United States on September 11, 2001, until the Canadian combat mission ended in 2011. In 2014–15, Canada spent $20.1 billion funding its military. Canada now spends more (in inflation-adjusted terms) than at any time since the end of World War II. The cost of the war in Afghanistan is estimated to have been at least $18 billion—and that does not include the cost of caring for veterans and their families or the loss of Canadian soldiers and personnel who died as a result of the conflict.

Pundits will continue to debate whether the mission in Afghanistan was worth it. But the ongoing turmoil and armed conflict in the world suggests that Canada's spending on its military forces will remain at relatively elevated levels for the foreseeable future. Indeed, the 2015 federal budget announced a boost of $11.8 billion to its baseline military funding over the next decade, which does not include incremental funding for special missions.

Based on Robinson (2011), Starr (2015), and "What Canada did – and did not – achieve in Afghanistan." Editorial. *The Globe and Mail.* Mar. 14, 2014.

Complete reference for this feature can be found in the References section.

extent to which society's resources are under government control. There are at least two reasons for this: the methods of accounting for off-budget items, and hidden costs of government.

Accounting Issues

Several complications arise in the computation of government expenditures. Some of these are due to the government's role in lending programs. The government provides **loan guarantees** for individuals, Crown corporations and other businesses, and nonprofit institutions. Because of the government guarantee, the loans are at lower rates than otherwise. In the case of default, the government is on the hook. The total amount outstanding for guarantees by the federal government was $407 billion as of March 31, 2014.[6] In order to attract investments, provincial governments also provide loan guarantees, and make direct loans in some cases. These too lead to future draws on the public purse if loans default.

How should these credit programs be treated for budgetary purposes? One possibility would be to recognize payments and receipts associated with these programs only in the year they are made or arrive. To see the problems with this approach, suppose that the government guarantees some student loans this year and the loans do not come due for four years. The loan guarantees would not show up on this year's budget. However, there will be defaults on at least some of these loans in the future, so by making the loan guarantees now, the government is committing itself to some expenditures in the future. A sensible approach, then, would be so-called accrual accounting, which takes into account the future liabilities created by present decisions. Public accounts normally provide for such liabilities, but high levels of uncertainty may accompany the size of any such provision.[7]

[6] See Table 11.5, Canada (2014), page 335.

[7] Similar issues arise in the context of government insurance activities, which are also sizable. The Canada Deposit Insurance Corporation (CDIC) protects hundreds of billions of dollars ($665 billion in 2013–14) in individual deposits in banks and trust and loan companies. Bank failures in the early 1980s resulted in a CDIC loss of $650 million in 1983 on insured deposits of about $150 billion (all in current dollars). Losses could have been larger in this tumultuous period, although in the sixteen years from 1967 to 1982 there had been virtually no losses and during the economic expansion of the 1990s losses were nominal or non-existent. Any CDIC losses incurred are partially offset by the premiums paid by member institutions. In 2013–14, member institutions paid $192 million in premiums. (Working Committee on Canada Deposit Insurance Corporation, *Final Report,* Ottawa, 1985; Canada Deposit Insurance Corporation, *Annual Report 2014* (Ottawa, 2014); http://www.cdic.ca/CDIC/FinRpts/Pages/AR2014.aspx

Government pension plans, including the Canada and Quebec Pension Plans (CPP and QPP), also result in contingent liabilities. Governments have an obligation to pay pensions to individuals who have been paying into the pension plans, and the government's net liability changes from year to year depending on the number and age of the contributors. Through accrual accounting, an increase in liability would be reflected as an expenditure commitment, which may increase a deficit or decrease a surplus. If, instead, increased pension payments show up on the government accounts only at the time they are paid, the public accounts may show a lower level of expenditure, and a lower level of accumulated debt.

The government should also fully account for contingent environmental liabilities associated with contaminated sites and the contingent liabilities of aboriginal claims. High levels of uncertainty may well exist. A further problem identified by the Auditor General (http://www.oag-bvg.gc.ca) is that the disbursements under the Child Tax Benefit program should be considered as program *spending* rather than as an offset to personal income tax revenues, as the government is now doing.

We conclude, then, that the size of the official government budget depends on some rather arbitrary accounting decisions concerning whether and how certain items are to be included. Hence, considerable caution is required in interpreting budgetary figures.

Hidden Costs of Government

Some government activities have substantial effects on resource allocation but may involve minimal explicit outlays. For example, issuing regulations per se is not very expensive, but compliance with the rules can be costly. Airbags and other safety requirements raise the cost of cars. Regulations ensuring sanitary conditions in slaughterhouses, dairies, and bakeries were among Canada's early health regulations that raised costs for businesses. Permit and inspection fees increase the price of housing. Banks, insurance companies, brokerage firms, stock markets, and other financial institutions are subject to extensive regulation. Health and safety regulations for workers increase the cost of labour. Expensive testing required of the drug industry slows the pace and increases the price at which new drugs become accessible to consumers, while patent laws encourage (possibly excessive) research for new drugs.

Unfortunately, it is exceedingly difficult to compute the total costs of regulation. We can easily imagine even pharmaceutical experts disagreeing on what new cures would have been developed in the absence of drug regulation. Similarly, it is hard to estimate how much government-mandated safety procedures in the workplace increase production costs. As with other government activity, the benefits may far outweigh the costs. Nonetheless, through regulatory activity the government sector has a major impact on society and the economy; private costs of compliance may, in some cases, add as much to total costs as do tax liabilities.[8]

Two other "hidden" aspects that deserve mention are (a) **tax expenditures**, and (b) the flow of current services from capital investments. Tax expenditures refer to the value of incentives and preferences given through the tax system for purposes that could be achieved through direct expenditures. For example, a government may choose to provide a direct payment to individuals who are 65 or older, or it may allow a deduction of $1,000 from pension income that would otherwise be taxable. Similarly, the government could make a grant of $250 to a business for every $1,000 invested on Cape Breton, or it could give a tax credit of 25 percent. Although tax expenditures and direct expenditures may reflect comparable levels of government activity and involvement, in the case of direct expenditures this is reflected in the annual budget; in the case of tax expenditures it is not.[9]

The government does not distinguish between capital and current expenditures in the way the private sector does. Capital investments are usually consumed, or depleted, over several years as the capital is used to produce

[8] One estimate for Canada suggests that if price and output regulation are taken into account when calculating government spending as a percentage of GDP, its share would increase by at least an additional 10 percentage points [See Cross (2014)].

[9] The Department of Finance first published estimates of tax expenditures in December 1979. Their most recent publication is *Tax Expenditures and Evaluations, 2014* (Ottawa: Department of Finance) http://www.fin.gc.ca/taxexp-depfisc/2014/taxexp14-eng.asp. The estimates include federal tax expenditures made through the corporate income tax and the Goods and Services Tax (GST) as well as the personal income tax. Several provinces have provided estimates of provincial tax expenditures at the time of their annual budgets. According to Sheikh (2014), including federal-provincial tax expenditures increases the size of government in 2009 from 44 to 54 percent of GDP.