



**COULD DO BETTER:
Grading Atlantic Canada's
2004/05 Provincial Finances**



DAVID MURRELL

February 2005

The Atlantic Institute for Market Studies (AIMS) is an independent, non-partisan, social and economic policy think tank based in Halifax. The Institute was founded by a group of Atlantic Canadians to broaden the debate about the realistic options available to build our economy.

AIMS was incorporated as a non-profit corporation under Part II of the *Canada Corporations Act* and was granted charitable registration by Revenue Canada as of October 3, 1994; it recently received US charitable recognition under 501(c)(3) effective the same date.

The Institute's chief objectives include:

- a) initiating and conducting research identifying current and emerging economic and public policy issues facing Atlantic Canadians and Canadians more generally, including research into the economic and social characteristics and potentials of Atlantic Canada and its four constituent provinces;
- b) investigating and analyzing the full range of options for public and private sector responses to the issues identified and acting as a catalyst for informed debate on those options, with a particular focus on strategies for overcoming Atlantic Canada's economic challenges in terms of regional disparities;
- c) communicating the conclusions of its research to a regional and national audience in a clear, non-partisan way; and
- d) sponsoring or organizing conferences, meetings, seminars, lectures, training programs, and publications, using all media of communication (including, without restriction, the electronic media) for the purpose of achieving these objectives.

Board of Directors

Chair: David McD. Mann; Vice-Chairs: John F. Irving, Peter C. Godsoe, John C. Walker

Chairman Emeritus: Purdy Crawford

Directors: George Bishop, George T.H. Cooper, Hon. John C. Crosbie, Brian Lee Crowley, Jim Dinning, J. Colin Dodds, Frederick E. Hyndman, Bernard Imbeault, Dianne Kelderman, Phillip R. Knoll, Colin Latham, Martin MacKinnon, G. Peter Marshall, John T. McLennan, Norman Miller, J.W.E. Mingo, Elizabeth Parr-Johnston, Derrick Rowe, Jacquelyn Thayer Scott, Paul D. Sobey

President: Brian Lee Crowley

Advisory Council

John Bragg, Angus A. Bruneau, Don Cayo, Purdy Crawford, Ivan E.H. Duvar, James Gogan, Denis Losier, Hon. Peter Lougheed, James W. Moir Jr., James S. Palmer, Gerald L. Pond, John Risley, Cedric E. Ritchie, Joseph Shannon, Allan C. Shaw

Board of Research Advisors

Chair: Professor Robin F. Neill, University of Prince Edward Island

Professor Charles S. Colgan, Edmund S. Muskie School of Public Service, University of Southern Maine; Professor Jim Feehan, Memorial University of Newfoundland; Professor Doug May, Memorial University of Newfoundland; Professor James D. McNiven, Dalhousie University; Professor Robert A. Mundell, Nobel Laureate in Economics, 1999; Professor David Murrell, University of New Brunswick

2000 Barrington Street, Suite 1006, Halifax, Nova Scotia B3J 3K1

Telephone: (902) 429-1143; fax: (902) 425-1393

E-mail: aims@aims.ca; web site: www.aims.ca

COULD DO BETTER:

Grading Atlantic Canada's 2004/05 Provincial Finances

DAVID MURRELL

Atlantic Institute for Market Studies
Halifax, Nova Scotia

February 2005



© 2005 Atlantic Institute for Market Studies

Published by Atlantic Institute for Market Studies
2000 Barrington Street, Suite 1006
Halifax, Nova Scotia B3J 3K1

Telephone: (902) 429-1143
Fax: (902) 425-1393
E-mail: aims@aims.ca
Web site: www.aims.ca

I would like to thank AIMS President Brian Lee Crowley and Vice President and Director of Operations Charles Cirtwill for their considerable patience and guidance during the entire course of this project. I would also like to thank Don McIver for his assistance in preparing the provincial economic forecast data, the Dominion Bond Rating Agency for its generous contribution of comparative data, and Barry A. Norris for his excellent work in editing the manuscript. Finally, I would like to thank five anonymous referees for their thoughtful comments and suggestions for improvements. Any errors in this study remain mine.

Edited and prepared for publication by Barry A. Norris; design by Gwen North.

The author of this report has worked independently and is solely responsible for the views presented here. The opinions are not necessarily those of the Atlantic Institute for Market Studies, its Directors, or Supporters.

CONTENTS

About the Author	iv
Executive Summary	v
Introduction	1
The Recent Economic Background and Fiscal Trends	3
The Grading System	7
Presenting the Grades	12
Summary and Directions for Further Research	19
References	21
Appendix Tables	22



ABOUT THE AUTHOR

David Murrell is a Professor in the Department of Economics, University of New Brunswick, where he teaches regional economic development and public finance. He has published widely on economic development in Atlantic Canada, including articles in *Canadian Public Policy* and the *Canadian Journal of Regional Science*. He is a member of the editorial board of the *Canadian Journal of Regional Science* and the editor of the *Atlantic Canada Economics Association Papers and Proceedings*.

EXECUTIVE SUMMARY

During the past two years, Atlantic Canada's economy has grown faster than the national economy as a whole, perhaps misleading finance ministers of the four provinces into increasing provincial expenditures at an accelerated rate in fiscal year 2003/04. As a result, Newfoundland and Labrador and Prince Edward Island have found themselves in serious fiscal crisis, while Nova Scotia and New Brunswick have engendered worrisome budget deficits.

In view of these recent economic and fiscal trends, how does the health of the Atlantic provinces' finances actually fare, relative to each other and to the Canadian average? Given the crucial assumption that the best budgets are those that promote economic growth by reducing taxes, deficits, debts, and overall government expenditures, this study attempts to assign a grade to each province's financial state.

The overall grade for each province is an average of three subgrades: Grade I, which measures the province's fiscal health before the tabling of the fiscal year 2004/05 budget in spring 2004; Grade II, which reflects the accuracy of the 2003/04 budget compared with data from the independent Dominion Bond Rating Service and the revised data in the 2004/05 budget; and Grade III, which grades the 2004/05 budget itself.

Using this methodology, the ten-province Canadian average grade is C+, while the Atlantic provinces collectively earn a slightly below average C.

Individually, New Brunswick's C+ is the highest of the four provinces, a reflection of the good state of its finances in 2003/04 and its decisions in the 2004/05 budget to reduce the growth of government spending to a more realistic rate and to eschew major tax increases. The province also does well in the accuracy of its 2003/04 budget predictions.

Nova Scotia earns an overall grade of a C/C+, or halfway between C and C+. Although the province ended 2003/04 in reasonably good fiscal health, its grade is reduced by a high-spending, tax-raising 2004/05 budget that is hardly conducive to promoting a healthy environment for economic growth.

For its part, Prince Edward Island rates a C-/C, reflective of the province's relatively severe fiscal difficulties, which are largely the result of chronic overspending. In its 2004/05 budget, however, PEI has undertaken fairly restrictive measures to deal with these problems, which is to its credit.

The lowest grade of the four Atlantic provinces goes to Newfoundland and Labrador, with a C-. As with PEI, this below-average mark reflects both the province's fiscal woes and the current provincial government's constructive, though perhaps insufficient, attempts to address them.



As a region that is economically poor relative to the rest of Canada and with a population that is hardly growing at all, the Atlantic provinces ought to be trying hard to promote an economic environment that attracts business capital and skilled labour. At the same time, each of the four provincial governments finds itself having to address voters' demands for public goods and services — a balancing act requiring a degree of budgetary skill that, on the whole, they have failed to display. In the period leading up to the tabling of their 2004/05 budgets, the Atlantic provinces were fiscally worse off than the nation as a whole. In the light of that warning sign, their 2004/05 budgets are both a disappointment and an opportunity missed. This is a lesson worth heeding as we enter the 2005/06 budget season.

INTRODUCTION

Each spring, the release of Atlantic Canada's provincial budgets typically draws considerable media commentary. In 2004, with labour turmoil in Newfoundland and Labrador and labour controversy in New Brunswick, the release of the budgets for the 2004/05 fiscal year attracted heavier-than-usual coverage. The media's attention is, however, fleeting and superficial — on Budget Day and the day after, aggregate fiscal numbers are bandied about without much context, and the media move on to more digestible stories. In any event, given the complexity of the statistics that make up a province's annual budget statement, it is difficult for the media and ordinary citizens to judge the successes and failures of the exercise.

The purpose of this study is to fill that knowledge gap by providing an overview of the finances of the four Atlantic provinces in a way that is more approachable for the nonexpert reader and makes them easier to compare. Provincial budgets should be judged on their usefulness as tools to stimulate economic growth. To that end, budgets that reduce taxes, deficits and debts, and aggregate government expenditures are more desirable than budgets that do not.

The method I use is to grade each Atlantic province's financial state — to take a snapshot of where each stands relative to the others and to other Canadian provinces. For each budget, I assign three subgrades: Grade I, which judges the state of the province's fiscal finances leading up to the release of the fiscal year 2004/05 budget; Grade II, which assesses the accountability of the 2003/04 budget statistics in relation to standardized budget data and revised data one year later — in effect, a measure of the budget's accuracy; and Grade III, which marks the 2004/05 budget. In turn, each of the three subgrades is made up of four indicators — twelve in all — that provide specific information about areas where improvements are possible.

In choosing the indicators, I observed two rules. First, for simplicity's sake, I wanted to use only the broad fiscal aggregates described in a budget's summary tables or overall budget plans, rather than get bogged down attempting to grade the composition of provincial expenditures and revenues. Accordingly, I make no pronouncements about the size or rate of change of expenditures and revenues of specific departments. Second, I wanted to use fiscal measures that are indicative of future economic growth. For example, I assumed that high provincial debt and deficits retard economic growth since high debt levels imply higher future taxation¹ and hinder in-migration of capital and

1 This is the theorem of "Ricardian equivalence", which states that consumers (and suppliers of taxable labour and capital) are forward looking and realize that today's borrowing must be paid for with tomorrow's tax dollars (see Barro 1974; Mankiw 1992). US literature exists that links high taxes in state budgets to slower state economic growth (see Scully 1989; Barro 1991).



productive labour. High provincial debt also implies high interest payments, nearly all of which leave Atlantic Canada, reducing spending potential within the region.

After sketching the background of economic and fiscal trends in the Atlantic provinces and describing the system I use to grade their provincial finances, I come to the heart of the study — the grades themselves. Very broadly, the four provinces receive a C for their collective provincial public finances, which is slightly below the Canadian average of C+. Individually, New Brunswick leads the way with a C+. Nova Scotia follows with a grade of C/C+, just slightly below average — in other words, a mark halfway between C and C+ (one could round it either way). Nova Scotia's score would have been higher but for its high-expenditure, tax-raising 2004/05 budget, which threatens to harm the province's economy. Prince Edward Island registers a C-/C, but the province is taking steps to cope with a fiscal crisis, as is Newfoundland and Labrador, which rates a C-.

As for the three subgrades, for Grade I, on the state of their fiscal health leading up to the spring budgets, the four provinces collectively earn a C. For Grade II, on fiscal accuracy, the region as a whole earns a C/C+, slightly below the national average. For Grade III, on their 2004/05 budgets, both Newfoundland and Labrador and PEI post scores that are higher than the Canadian average, while New Brunswick and Nova Scotia rate below-average scores.

Following the presentation of the grades for the four provinces, the paper concludes with some proposed directions for future research. This report responds to the urgent need for more public accountability of governments for their fiscal and budgetary performance. Although the methodology undoubtedly will evolve over time, I trust readers will agree that this initial attempt is a useful starting point for regular, publicly accessible, and understandable assessments of Atlantic Canada's finances — assessments that decisionmakers and taxpayers alike can use to pinpoint ways to improve the fiscal environment for the region's economic growth.²

2 I invite readers who wish to examine the technical details of the methodology, assumptions, and data on which this study is based to view the companion paper, "Grading Atlantic Canada's 2004/05 Provincial Finances: Data Calculations and Sources", available from the Atlantic Institute for Market Studies; see web site: <www.aims.ca>.

THE RECENT ECONOMIC BACKGROUND AND FISCAL TRENDS

By any yardstick, the Atlantic provinces face considerable financial difficulties in fiscal year 2004/05. Slower economic growth in 2003/04 put a crimp in the provinces' own-source revenues — that is, revenues raised through, for example, taxation and user fees, exclusive of transfers from the federal government. Economic growth in the region as a whole is expected to decelerate noticeably in the current fiscal year. All four provinces also face increasing health care cost pressures because of their aging populations — indeed, the region's population is aging disproportionately faster than that in the rest of Canada. Moreover, the region's slow population growth threatens to limit the growth in federal transfers, particularly payments made under equalization and the Canada Health Transfer (CHT) and Canada Social Transfer (CST).

Slow as economic growth was in Atlantic Canada, it was still higher than that for Canada as a whole in both 2002 and 2003, posting real output gains in gross domestic product (GDP) of 6.7 percent and 2.8 percent, respectively, in those years (see Table 1). Atlantic Canada's slow population growth makes the corresponding per capita real GDP growth numbers even more remarkable, with growth rates of 6.8 percent and 2.6 percent, respectively, for 2003 and 2004, in contrast to 2.2 percent and 0.8 percent for Canada as a whole. Much of the superior performance came from Newfoundland and Labrador's energy-producing sector and from the then-low Canadian dollar, which boosted tourism and natural resource revenues denominated in US dollars.

Table 1: *Estimated and Forecast Growth in Real GDP and Per Capita Real GDP, Atlantic Provinces and Canada, 2002–04*

	Newfoundland and Labrador	Prince Edward Island	Nova Scotia	New Brunswick	Atlantic Provinces	Canada
	<i>(year-over-year percentage change)</i>					
Real GDP						
2002	15.4	5.7	4.4	4.0	6.7	3.3
2003	6.5	1.9	0.9	2.6	2.8	1.7
2004	2.6	2.6	2.7	2.7	2.6	3.0
Per capita real GDP						
2002	16.0	5.5	4.3	4.0	6.8	2.2
2003	6.4	1.3	0.7	2.5	2.6	0.8
2004	2.6	1.9	2.5	2.6	2.5	2.4

Sources: *Statistics Canada Daily*; average consensus forecasts taken from various banks' economic forecasts.

**Table 2: Growth Rates in Components of Provincial Government Revenue, Atlantic Provinces and Canada, fiscal years 2002/03 to 2004/05**

Component	Newfoundland and Labrador	Prince Edward Island	Nova Scotia	New Brunswick	Atlantic Provinces	Canada
<i>(year-over-year percentage change)</i>						
Own-source revenue						
2002/03	12.6	9.4	6.5	0.5	6.1	1.9
2003/04	4.1	2.2	2.2	7.9	4.2	3.9
2004/05	4.8	3.9	2.0	3.2	3.6	N/A
Transfers						
2002/03	(1.3)	(10.5)	(6.6)	(5.1)	(5.0)	5.3
2003/04	(3.2)	12.8	9.5	0.6	3.4	5.8
2004/05	(16.4)	8.3	8.3	7.9	4.0	N/A
Total revenue						
2002/03	6.5	1.0	1.6	(1.8)	1.6	2.4
2003/04	1.2	6.2	4.7	4.7	3.9	4.2
2004/05	(3.3)	3.1	4.2	5.1	2.6	N/A

Sources: Beauchemin et al. 2004; various provincial budgets for fiscal year 2004/05; and author's calculations.

Trends in Provincial Government Revenue

Buoyant economic growth in 2002 translated into strong own-source revenue growth in the Atlantic provinces in fiscal year 2002/03, outpacing that for the nation as a whole by 6.1 percent to 1.9 percent (see Table 2). It was, however, a different story in 2003. In that year, while Atlantic Canada's economy still managed to grow about 1 percentage point faster than the national economy (2.8 percent versus 1.7 percent), the region's own-source revenues grew at only a slightly higher rate than the national average (4.2 percent versus 3.9 percent). As Tables 1 and 2 show, the story differs from province to province. New Brunswick's economy grew by 2.6 percent but its own-source revenues grew by a healthy 7.9 percent. Newfoundland and Labrador, in contrast, experienced real GDP growth of 6.5 percent but own-source revenues grew by only 4.1 percent, while Nova Scotia and PEI had not only anemic real GDP growth rates but own-source revenue growth that fell below the national average.

Much of the slow growth in total government revenues in Atlantic Canada — 1.6 percent in fiscal year 2002/03 and 3.9 percent in 2003/04 — is, however, accounted for by the relatively slow growth of federal transfers to the region over the past two years. In 2002/03, federal transfers actually declined by 5 percent, even as they increased by 5.3 percent nationally. The region's strong economic growth that year led to a clawback of equalization payments, while its slow population growth was reflected in relatively reduced per-capita-based transfers such as those made under the CHT and CST. In 2003, as economic growth rates in Atlantic Canada slowed to a level closer to the national average, federal transfers to the region increased by 3.4 percent but by 5.8 percent for the nation as a whole.

Among the individual Atlantic provinces, PEI, Nova Scotia, and New Brunswick increased their total government revenues in 2003/04 and 2004/05, with federal transfers climbing considerably from 2002/03. As Table 2 shows, however, Newfoundland and Labrador saw a decline in the growth of total government revenues over the three fiscal years, largely due to drastic cutbacks in federal receipts, including a stunning 16.4 percent drop expected in 2004/05. Again, a large part of the reason for these cuts is the clawback of equalization payments as a result of increased oil royalties and a declining population, a situation the “Valentine’s Day Accords” just signed between the federal government and the provinces of Nova Scotia and Newfoundland and Labrador are intended to address.

Trends in Provincial Expenditure Growth

One might have expected sluggish government revenue growth rates to have prompted the Atlantic provinces to restrict the growth of their expenditures — and, indeed, they did so to a limited extent in fiscal year 2002/03 (see Table 3). Yet growth in provincial government spending outpaced growth in total government revenues in the region in both 2002/03 and 2003/04, with spending in the latter year actually growing at a rate marginally higher than that for Canada as a whole. Government spending in the region is expected to increase again in 2004/05, despite negligible population growth. By contrast, the rest of the country — thanks to positive net interprovincial immigration and high international in-migration — is experiencing a steadily rising population stock.

Table 3: Growth Rates in Components of Provincial Government Expenditures, Atlantic Provinces and Canada, fiscal years 2002/03 to 2004/05

Component	Newfoundland and Labrador	Prince Edward Island	Nova Scotia	New Brunswick	Atlantic Provinces	Canada
<i>(year-over-year percentage change)</i>						
Health						
2002/03	5.9	15.3	2.9	3.1	4.3	5.8
2003/04	3.2	0.3	6.6	4.8	4.9	6.3
2004/05	1.1	1.7	8.0	4.4	4.6	N/A
Interest						
2002/03	(0.9)	(0.5)	(7.0)	2.9	(4.0)	(2.8)
2003/04	3.6	9.1	3.5	4.4	4.9	3.5
2004/05	18.6	3.0	1.2	2.7	5.7	N/A
Residual						
2002/03	2.7	(2.9)	1.4	3.3	2.0	2.4
2003/04	6.2	3.2	3.4	2.4	4.0	3.2
2004/05	(2.9)	(8.7)	3.6	1.3	0.4	N/A
Total						
2002/03	3.2	2.1	0.2	3.2	2.0	3.0
2003/04	4.9	4.7	4.6	4.6	4.7	4.5
2004/05	1.2	(3.6)	4.9	2.3	2.5	N/A

Sources: Beauchemin et al. 2004; various provincial budgets for fiscal year 2004/05; and author’s calculations.



What accounts for Atlantic Canada's high growth in total expenditures? Clearly, one reason is that strong public demand is driving increased spending on health care. As Table 3 shows, spending in this key area increased by more than 4 percent in 2002/03 and 2003/04 and is projected to increase by another 4.6 percent in 2004/05. Interest payments on accumulated provincial debt also grew faster than the national average in 2003/04, following a welcome decline in 2002/03, and are forecast to rise another 5.7 percent in the current fiscal year.

Given the Atlantic provinces' apparent political commitment to rising health care spending and their legal obligations with respect to debt repayment, one might expect them to have limited spending in other areas, such as education, social services, transportation, and general government. Yet, as Table 3 shows, "residual" spending, which includes these components, continued to grow in 2002/03 and 2003/04 — in the latter year by a profligate 4 percent versus 3.2 percent for the nation as a whole. Newfoundland and Labrador, despite its declining population, increased residual spending by a whopping 6.2 percent in 2003/04. Nova Scotia and New Brunswick have increased their residual spending as well — occasionally at above the average national rate, again despite the two provinces' essentially zero population growth.

In summary, increases in total government revenues in Atlantic Canada in fiscal years 2002/03 and 2003/04 failed to keep pace with rising government spending in those years, setting the stage for drastic fiscal action in 2004/05. In its current budget, Newfoundland and Labrador expects to hold spending increases to just 1.2 percent, while cutting spending on "residual" components by nearly 3 percent. PEI is cutting total spending by more than 3.5 percent, while slashing its spending on residual outlays by 8.7 percent. New Brunswick, too, is limiting the growth of its total spending to 2.3 percent, just half the growth rate of 2003/04, with its spending "residual" is budgeted to grow by only 1.3 percent. Nova Scotia, in contrast, plans to increase spending once again, albeit with substantial tax increases, at a rate similar to the national average despite its slow-growing economy and population base.

THE GRADING SYSTEM

A Province's Financial Health: More than Its Spring Budget

With the Atlantic provinces' recent economic and fiscal history in hand, the next step is to devise a way to assess — to grade — their provincial finances. One cannot, however, simply look at the most recent spring budget in order to determine a grade, for several reasons.

First, the budget revises estimates set out in the previous year's budget and forecasts spending, revenues, and balances for the coming year. In that sense, the budget is only the provincial government's written promise as to how and where it will levy taxes and spend tax money. Since the budget is merely a promise, a miscreant provincial government could overstate fiscal data, thereby inflating any grade that might be applied to it.

Second, the provinces do not use standardized ways of presenting budget data. Newfoundland and Labrador, for example, provides budget deficit statistics on a "cash" basis, rather than an "accrual" basis as the other provinces do, which would lead to data comparison errors.

A third, and perhaps more fundamental, reason for looking beyond the spring budget to measure a province's fiscal health is the need to take *context* into account. For example, a deeply indebted province might feel obliged to slash spending by far more than another, less-indebted province, resulting in its budget being awarded a higher grade than it deserves. Accordingly, to make valid comparisons among the provinces, one should look at their fiscal situations at a point just prior to the tabling of their spring budgets. Consider the analogy of a fitness clinic that might want to grade each member on his or her promise (or plan) to lose weight; the obvious starting point would be to see how much the member's actual weight deviated from his or her desired, or "optimum", weight. One could call this first measure, which gives context to the spring budget, *Grade I*.

The next step is to compare the statistics from the previous fiscal year's budget — in this case, the budget for 2003/04 — with standardized budget data from an independent source, the Dominion Bond Rating Service (DBRS) as reported in its most recent annual study (Beauchemin et al. 2004), and with revised data for the previous fiscal year contained in the current budget (in this case, for 2004/05). Call this second measure *Grade II*. In the fitness clinic analogy, Grade II, in effect, measures the accuracy of the data self-reported by the member; in the assessment of provincial finances, Grade II measures the accuracy of the government's budget predictions.



The third step is to grade the spring budget itself on its perceived contribution to the goal of improving the environment for economic growth. Call this *Grade III*. At the fitness clinic, it is analogous to evaluating the member's weight-loss goals for the upcoming class.

Finally, to obtain an overall grade for the province, one simply averages the three subgrades.

Determining Grades: The Twelve Indicators

How are the three grades to be determined? Above, I stated the assumption that lower deficits (and debt) and lower spending are key to strong economic growth. That assumption accordingly influences the choice of indicators to look at in assigning grades. For each of the three grades, I examine four indicators (see Table 4). Some indicators are negative in the sense that a rise in them means slower economic growth — these are designated by a minus sign. Positive indicators, where a rise implies faster economic growth, are designated by a plus sign.

For Grade I, which focuses on the previous fiscal year (in this case, 2003/04), two of the four indicators denote the status of the province's debt and deficit and two measure government expenditure:

- Indicator 1: the debt interest paid per capita (–);
- Indicator 2: the deficit per capita (–);
- Indicator 3: ordinary expenditures per capita less debt interest paid (–);
- Indicator 4: the number of “public administration employees” per 1000 population (–).³

Each of the four indicators is weighted equally, so that each of the pairs of debt/deficit and expenditure variables accounts for 50 percent of Grade I.

For Grade II, two indicators compare fiscal data from the province's budget books for the previous fiscal year (2003/04) with statistics from the DBRS, and two compare the province's forecast of fiscal aggregates from the previous year's budget with the revised data for that year in the current year's (2004/05) budget books:

- Indicator 5: the per capita deficit error, calculated as the negative of the absolute value of the per capita deficit in the previous year's budget minus the per capita deficit as reported by the DBRS (+);
- Indicator 6: the per capita spending error, calculated as the negative of the absolute value of per capita government spending in the previous year's budget minus per capita spending as reported by the DBRS (–);
- Indicator 7: the per capita deficit forecasting error, calculated as the per capita deficit for the previous fiscal year as reported in the current year's budget minus the per capita deficit for the previous year as forecast in the previous year's budget (+);

3 As, defined by Statistics Canada, “public administration employees” does not include health, education, or social workers, or other professional occupations beyond those on direct departmental payrolls.

Table 4: Definitions of the Fiscal Indicators Used to Compile the Three Grades

Indicator	Definition
Indicator 1	2003/04 per capita debt interest paid
Indicator 2	2003/04 per capita deficit (or surplus)
Indicator 3	2003/04 per capita ordinary expenditures less debt interest
Indicator 4	Number of provincial employees per 1000 population in 2003
Indicator 5	Negative of the absolute value of the 2003/04 per capita deficit error (DBRS vs. budget documents)
Indicator 6	Negative of the absolute value of the 2003/04 per capita spending error (DBRS vs. budget documents)
Indicator 7	2003/04 deficit estimate error (2003/04 vs. 2004/05 estimates)
Indicator 8	2003/04 expenditure estimate error (2003/04 vs. 2004/05 estimates)
Indicator 9	Change in per capita deficit (or surplus) from 2003/04 to 2004/05 (from budget documents)
Indicator 10	Change in per capita debt interest from 2003/04 to 2004/05 (from budget documents)
Indicator 11	Change in per capita dollar expenditures from 2003/04 to 2004/05 (from budget documents)
Indicator 12	Qualitative estimate of tax rate and tax base changes

- Indicator 8: the per capita spending forecast error, calculated as per capita spending in the previous year's budget minus per capita spending for the previous year as reported in the current year's budget (+).

Again, in the calculation of Grade II, each of the four indicators is equally weighted. Note that if a government considerably underestimates or overstates spending deficits relative to data from the DBRS, that is considered a negative. Similarly, if the province considerably overstates or underestimates its deficit and expenditures in the previous year's budget relative to the revised data in the current budget, that is also considered a negative.

For Grade III, the first three indicators are taken from projections in the current budget, while the final indicator is a subjective assessment of tax rate changes:

- Indicator 9: the projected change in the current fiscal year's per capita deficit (or surplus) from that of the previous year, as reported in the current budget (+);
- Indicator 10: the projected change in per capita debt interest paid in the current year from that of the previous year, as reported in the current budget (-);
- Indicator 11: the projected change in per capita total government expenditures in the current year from that of the previous year, as reported in the current budget (-);
- Indicator 12: a subjective assessment of tax rate changes, grading (in descending order of importance) those for corporate income tax, personal income tax, and sales tax (-); see Table 5.⁴

Again, all four indicators are equally weighted to obtain Grade III.

⁴ Note that it is extremely difficult to aggregate tax bases and tax rates into a single tax intensity indicator due to the difficulty of obtaining effective tax rates, especially now that the provinces are freer to change personal and corporate income tax bases. Consequently, I use expenditure statistics, which are more easily comparable across provinces.

**Table 5: Announced Tax Changes by Province, fiscal year 2004/05 Budget**

	Corporate Income and Capital Taxes	Personal Income Taxes	Sales and Excise Taxes	Other Taxes and User Fees	Indicator 12 Grade	Explanation
Newfoundland and Labrador			excise taxes on tobacco products raised		C+	No meaningful tax changes, except as announced, thus “average” grade of C+
Prince Edward Island	Capital tax rate raised from 3% to 5%		Excise tax rate on gasoline raised by 3¢ per litre	User fees raised on a variety of gov. services	D+	Capital taxes inhibit economic growth, and raised this tax by a lot
Nova Scotia	Financial corp. capital taxes raised to 4%; large corp. capital taxes raised to 3%	Phased out rate decreases announced in previous budgets		Some user fees raised	F	Capital taxes raised; province reneged on previous personal income tax cuts
New Brunswick				Some user fees and penalties raised	B-	Only revenue increases were user fees, the least economically damaging tax
Quebec	Capital tax exemption on SMEs raised to \$1 million	Child Assistance Tax Credit raised; falsely touted as “tax decrease”			C+	No tax changes except for minor adjustment to capital tax base
Ontario		Piggybacked new Health Tax onto personal income tax	Taxes on cigarettes and alcohol raised		F	New Health Tax is a massive personal income and is regressive
Manitoba	Corporate income tax rate reduced by 0.5 percentage point to 15%	6% tax cut on middle-income brackets announced			A	Broad-based tax cuts on personal and corporate incomes announced
Saskatchewan		Some brackets and rates de-indexed	Sales tax increased from 6% to 7%	Various user fees and revenues increased	F	De-indexation of personal income tax is an effective and hidden tax increase; sales tax rate increase is a major tax increase
Alberta	Corporate income tax rate cut by 1.0 percentage point to 11.5%			School property tax rate cut by 2.3%	A-	Commendable corporate income tax cuts, but no personal income tax cuts
British Columbia	Tax incentives increased for businesses	Threshold for homeowner grant increased to \$585,000			B-	Unspecified corporate income tax incentives promised, but little else

Table 6: The Grading Scheme

Grade	Z-Score Interval	Grade Interpretation
A+	1.11 and above	outstanding
A	0.91 to 1.1	excellent
A-	0.71 to 0.9	excellent to very good
B+	0.51 to 0.7	very good
B	0.31 to 0.5	good
B-	0.11 to 0.3	slightly above average
C+	-0.1 to 0.1	average
C	-0.11 to -0.3	slightly below average
C-	-0.31 to -0.5	mediocre
D+	-0.51 to -0.7	mediocre to poor
D	-0.71 to -0.9	poor
D-	-0.91 to -1.1	very poor
F	-1.11 and below	failure

With the data for the first 11 indicators in hand, the next step is to convert them into standard scores, or “z-scores”, a statistical device that allows data from different provinces to be graded relatively — “on a curve”, to use a common phrase — and compared (see Games and Klare 1967, 151) in order to assign Grades I, II, and III. Z-scores are a powerful and useful tool: *Macleans*’ magazine uses them in its ranking of universities, and so does the United Nations in its ranking of countries’ “economic development” (the UN Development Index).

To arrive at an overall grade that describes a province’s finances, I simply added the z-scores for Grades I, II, and III, but giving the first two grades a weight of 0.4 each and Grade III a lower weight of 0.2 (because it evaluates a subjective promise of future fiscal behaviour, rather than the actual results that underpin the other grades). I then assigned 13 different letter grades, from A+ to F, to ranges of z-scores, along with intuitive interpretations of the grades (see Table 6). Thus, for example, C+ — right in the middle between A+ and F — also happens to be close to the ten-province Canadian average. It makes sense, then, to call that grade “average”.



PRESENTING THE GRADES

If C+ is the average grade for the current overall state of provincial finances in Canada, how do the four Atlantic provinces measure up? Collectively, they earn only a C, a mark slightly below average. Individually, only New Brunswick manages to garner an average C+. The other three provinces all fall short of the Canadian average. Newfoundland and Labrador, in the midst of corrective steps to resolve its fiscal crisis, earns a mediocre C-. Prince Edward Island, in similar fiscal difficulties, earns a marginally higher C-/C. Nova Scotia would have received an average mark or better except that its budget accuracy needs improving and its most recent budget is a poor, high-expenditure, tax-raising effort that threatens to dampen economic growth in the province — accordingly, it rates a C/C+.

A look at the components of the overall grade, however, reveals some divergence within the region. For Grade I — on their fiscal health leading up to the fiscal year 2004/05 budgets — the four provinces collectively rate a C, but both PEI and Newfoundland and Labrador score much more poorly. For Grade II — on the accuracy of their budget predictions — the region earns a C/C+. Individually, PEI and New Brunswick perform well, while the other two provinces are slightly below average. For Grade III — on the contribution of their 2004/05 budgets to the goal of stimulating economic growth — the Atlantic provinces are right at the Canadian average with a C+. The budgets of PEI and Newfoundland and Labrador rate better than average, while those of New Brunswick and Nova Scotia fall short.

Table 6 summarizes the grades of the government finances of all ten Canadian provinces. Let us look now at the four Atlantic provinces individually.

Newfoundland and Labrador

Overall Grade: C-

Newfoundland and Labrador's slightly below average overall grade is a reflection both of the province's fiscal woes and of the current government's attempts to address them. The precarious nature of the province's finances prior to its tabling of the fiscal year 2004/05 budget last April rates it a very poor D-/D for Grade I and a slightly below average C for the budget numbers offered up in its 2003/04 and 2004/05 budgets (Grade II). For its commendable 2004/05 budget plan, the province earns a B. Newfoundland and Labrador is making some efforts to address its fiscal problems, but one wonders if the province's expenditure cutting so far is enough to do the job.

Table 6: Grades for Provincial Government Finances and Budgets

	Grade I	Grade II	Grade III	Overall Grade
Atlantic Canada	C	C/C+	C+	C
Newfoundland	D-/D	C	B	C-
Prince Edward Island	D-/D	C+	B-/B	C-/C
Nova Scotia	B-	C	C-	C/C+
New Brunswick	C	B-	C	C+
Quebec	D/D+	B-	C	C
Ontario	B+/A-	F	D+	C-/C
Manitoba	B+	C+	B	B-/B
Saskatchewan	C	B+	C	C+/B-
Alberta	A	A-	B-	A-
British Columbia	B	C+	C+/B-	B-

Grade I (Budget Context): D-/D

In presenting the 2004/05 budget, Newfoundland and Labrador's finance minister Loyola Sullivan acknowledged his province's severe financial circumstances and said that ongoing deficits would "compromise the fiscal integrity of the province" (Newfoundland and Labrador 2004, 1). He added that higher debt loads would, by 2007/08, "cost the province an additional \$150 million in interest payments every year" (p. 6). The data support the finance minister's assertions. The per capita interest payment on the province's debt in 2003/04 (Indicator 1), as measured by the DBRS, was \$980, the third-highest of any province in the country, as was its DBRS-measured deficit (Indicator 2), at \$410 per person. These two indicators earn the province its low mark on Grade I. (For a province-by-province summary of marks for the three grades and for their 12 indicator components, see Appendix Tables A-1, A-2, and A-3.)

As noted earlier, Newfoundland and Labrador's high deficits are largely the result of the structural decline in the province's equalization payments and its high rate of government spending. Indeed, the province could have taken firmer control of its spending over the past two years. For example, its per capita program spending of \$6409 in 2003/04 (Indicator 3) was nearly a thousand dollars per person higher than the ten-province average and the second-highest in the country. Considering its fiscal difficulties, Newfoundland and Labrador has been spending at a very high rate, at least until its 2004/05 budget. The province's 13.2 public administration employees per 1000 population in 2003/04 (Indicator 4) was also the second highest in the country.



Grade II (Budget Accuracy): C

Despite the government's considerable reworking of the numbers in its 2004/05 budget, the data in the 2003/04 budget had been stated fairly conservatively — particularly compared with the drastic revisions that took place in the budgets of Ontario and PEI — which led the province to overstate its deficit by a considerable margin. For this per capita deficit error (Indicator 5), the province earns a poor D–/D. The government also overestimated total provincial spending (Indicator 6), to earn a C. On the whole, its 2003/04 budget forecasts were reasonably accurate, with a below-average D+/C– for its deficit estimate (Indicator 7) — attributable to the province's failure to forecast accurately the sudden drop in federal equalization payments — offset by a very good B+ for its spending estimate (Indicator 8). On the positive side, the province has begun to move from a cash to an accrual measure of deficit spending, as the DBRS had urged.

Grade III (The Economic Strength of the 2004/05 Budget): B

The tabling of the spring 2004 budget was followed by a serious strike of public service employees. Here, however, I avoid comment on that controversy and focus instead on the relative merits of the budget itself. Starting with its good points, the budget states up front the government's intention to fight its large deficit (Indicator 10) by reducing expenditures, not by raising taxes, which earns it an excellent A/A+. Indeed, per capita total expenditures (Indicator 11) are expected to grow by only a modest \$56 in 2004/05 over a year earlier, for which the province earns a B/B+. By forgoing major tax increases (Indicator 12), except on tobacco products, it earns an average C+, a mark it also receives for the budget's projection of a modest decline of only \$85 per person in the 2004/05 deficit.

Prince Edward Island

Overall Grade: C–/C

Prince Edward Island receives a poor D–/D for the state of its finances before the tabling of the 2004/05 budget (Grade I) — more for the province's high spending habits than for its debt and deficit situation *per se*. Its budget accuracy mark (Grade II) of C+ reflects erratic 2003/04 budget predictions that offset an otherwise well-prepared budget data methodology. The province earns a B–/B for its promise of a rather stark fiscal retrenchment in its 2004/05 budget (Grade III). In summary, PEI faces considerable fiscal difficulties, but the provincial government has undertaken fairly restrictive measures to address them.

Grade I (Budget Context): D–/D

In his 2004/05 budget speech, PEI provincial treasurer Mitch Murphy blamed the federal government for shortfalls in transfers to his province. Yet the DBRS reports that federal transfers increased

in 2003/04 by nearly 13 percent over the previous year, compared with 5.8 percent for the country as a whole or 3.4 percent for the Atlantic region. To be sure, the province saw a sharp drop in the growth of own-source revenues, but the increase in transfers meant that total revenues grew by a fairly healthy 6.2 percent in 2003/04.

PEI's marks for its debt and deficit levels (Indicators 1 and 2) are at or slightly above average. Provincial treasurer Murphy worried that "the fiscal position deteriorated significantly during the past year" (Prince Edward Island 2004, 1), without specifically discussing deficit numbers. However, the per capita deficit estimate from the DBRS of about \$174 is actually moderately lower than that for the Atlantic region, and is lower than the national average.

The deficit problem in PEI's 2003/04 budget was the result of rather high spending growth — 4.7 percent as measured by the DBRS, mainly in nonhealth care spending and interest payments on the provincial debt. PEI rates an F for its much higher than average per capita program spending (Indicator 3). That the island province's small scale likely plays a significant role in boosting per capita spending does not absolve the government of the need to address this problem. On Indicator 4, the province scores another failing grade for its 22 public administration employees per 1000 population, more than three times the national average and nearly twice the average for Atlantic Canada.

Grade II (Budget Accuracy): C+

For a small province with a limited staff of number crunchers, PEI does a commendable job of keeping its budget document figures in line with DBRS statistics. Nevertheless, the province found it necessary to revise its 2003/04 forecast deficit and expenditure numbers (Indicators 7 and 8) drastically in the 2004/05 budget. A projected \$23 million deficit for 2003/04 came in at almost \$104 million in the 2004/05 budget, while total expenditures for 2003/04 rose from a projected \$1.053 billion to an actual \$1.106 billion in the 2004/05 budget. For these errors, the province rates very poor grades.

Grade III (The Economic Strength of the 2004/05 Budget): B–/B

PEI's 2004/05 budget set fairly good guide markers in two key areas, which one hopes the province will follow conscientiously. First, it sets out an ambitious plan to lower the per capita deficit from \$753 in 2003/04 to \$237 in 2004/05 — sufficient to earn the province an A for Indicator 9, the highest of any province. Second, although the provincial treasurer was vague about specific details, the budget projects both total spending and per capita spending to fall, which earns the province an outstanding A+ for Indicator 11. As for interest payments on the provincial debt (Indicator 10), the budget's forecast of a small per capita increase earns it a C–, or slightly below the ten-province average. Increases in the capital tax on financial corporations and the gasoline tax give the province a fairly poor D+ on Indicator 12.



Nova Scotia

Overall Grade: C/C+

Entering 2004, the state of Nova Scotia's finances was rather good, with the province managing to avoid the severe financial crises that beset Newfoundland and Labrador and PEI. On Grade I, therefore, Nova Scotia earns a slightly above average B-. As for Grade II, although the province accurately forecast its 2003/04 fiscal estimates, its 2003/04 own-budget data deviate considerably from adjusted financial data reported by the DBRS; accordingly, a slightly below average C is all Nova Scotia can muster. And certainly, given its hikes in personal income tax rates and lavish spending plans, the 2004/05 budget is a disappointment, earning it a C- for Grade III.

Grade I (Budget Context): B-

In the 2004 budget speech, finance minister Peter Christie claimed success for his plan to "balance the budget within three years" (Nova Scotia 2004, 1), yet the province's debt and deficit problems are far from solved. Per capita interest payments in 2003/04 were significantly above the national average, earning the province a poor D-/D on Indicator 1. Despite this flaw, Nova Scotia has been making some progress, as the slightly above average mark for Grade I reflects. Its spending levels also compare favourably with the ten-province average. The number of provincial public administration workers per 1000 population, at 9.5, is only moderately above the national average — a good signpost for a small Maritime province. And 2003/04 provincial per capita expenditures, at \$5270, compare well with the national average of \$5481.

The trouble with Nova Scotia's spending is that its year-over-year increase has been too high for a province with such slow population growth. According to the DBRS, despite only a marginal increase in its population, the province increased total spending by 4.6 percent in 2003/04; the national average was 4.5 percent. The finance minister's apparently sanguine attitude toward the province's debt and debt interest payments thus offers misplaced support for the strong spending increases in the current budget.

Grade II (Budget Accuracy): C

On the positive side, Nova Scotia predicted its major 2003/04 fiscal aggregates more accurately than the Canadian average. A discrepancy exists, however, between the government's major fiscal numbers and those of the DBRS, with the province claiming a 2003/04 budget surplus of \$14.5 million, while the DBRS estimates a \$120 million *deficit*. Similarly, the province claims a total spending figure that is \$420 million lower than the DBRS-adjusted estimate. For these poor showings of Indicators 5 and 6, the province earns an overall mark for Grade II that is slightly below average. Nova Scotia seems to offer a budget picture that falls short of fully reflecting the province's borrowing and debt picture.

Grade III (The Economic Strength of the 2004/05 Budget): C–

In its 2004/05 budget, Nova Scotia set a very small surplus target of \$2.1 million, a slight decline from the revised 2003/04 budget surplus. The province also expects a modest increase in debt-service payments. It bears emphasizing, however, that Nova Scotia might be underestimating its actual deficit, causing it to assume, wrongly, that it can increase expenditures at a faster pace than might be prudent. In his budget speech, finance minister Christie enthusiastically declared that it would take a considerable amount of his time that day to account for the “new dollars we will invest through this year’s budget to make life better and a little easier for Nova Scotia families” (Nova Scotia 2004, 1). Indeed, the budget calls for a rather large 4.9 percent increase in total spending, a growth rate much higher than that of the other three Atlantic provinces.

As for tax increases, Nova Scotia has reneged on the personal income tax cuts announced three years ago and is phasing in rate increases for middle- and upper-income taxpayers. The very highest income earners will pay even more tax than they did before the tax cuts. The province is also increasing its financial capital tax rate from 3 percent to 4 percent, and its large corporation capital tax rate from 0.25 to 0.33 percent. These personal and corporate income tax increases can only hurt the province’s economic growth prospects. Accordingly, its 2004/05 budget rates a mediocre grade of C–.

New Brunswick

Overall Grade: C+

Like Nova Scotia, New Brunswick entered the fiscal year 2004/05 budget cycle without facing a severe budget crisis. Its debt and deficit situation, although far from ideal, is better than the national ten-province average. The province’s spending, however, is worryingly above the national norm. The 2004/05 budget accordingly rates only a C, slightly below the national average. New Brunswick avoided major tax increases in the current budget, set a deficit target that is somewhat better than the national average, and projects total spending right at the national average. Per capita debt interest payments are, however, expected to rise at a rate above the national average. Having said that, the accuracy of the province’s finances is modestly good, and on Grade II it earns a B–.

Grade I (Budget Context): C

Of all the Atlantic provinces, New Brunswick had the highest mark (B–) for its per capita debt interest payments (Indicator 1), which were considerably lower than the national average. Moreover, its DBRS-measured deficit was considerably less than the corresponding ten-province per capita deficit, which earns it a B– for Indicator 2. Provincial spending was somewhat higher than the national average, however, which brings down the overall mark for Grade I to slightly below the national average.



Grade II (Budget Accuracy): B–

To its credit, the province’s Finance Department releases clear, carefully constructed budget numbers — its “Budget Plan” tables are the most comprehensive of any of the ten provinces — and its 2003/04 deficit numbers match the corresponding DBRS estimates almost exactly. The province’s spending, however, comes in considerably above the corresponding DBRS estimates, which earns it a very poor D– on Indicator 6. With deficit and expenditure forecasts at or slightly better than average, the province rates a B– on Grade II, the highest of the four Atlantic provinces.

Grade III (The Economic Strength of the 2004/05 Budget): C

In two key areas — deficit positioning and tax policy (Indicators 9 and 12) — New Brunswick’s financial plans as expressed in the 2004/05 budget are fairly good. The province promises to balance its 2004/05 budget, following a fairly significant deficit in the previous year. However, its debt-interest payments are expected to rise considerably faster than average. Per capita provincial spending is also above average, again despite the province’s near-zero population increase. Finally, the 2004/05 budget schedules no major tax increases other than nominal rises in user fees, fines, and penalties. Overall, however, New Brunswick’s most recent budget scores slightly below the national average.

SUMMARY AND DIRECTIONS FOR FURTHER RESEARCH

When provinces plan budgets, they often find themselves on a knife edge — wanting to please their constituents' demand for government goods and services while avoiding higher taxes, deficits, and debt. A province that fails to keep taxes, deficits, and debt down risks becoming a less attractive location for potential corporate investment and the in-migration of entrepreneurs. A relatively less well developed region like Atlantic Canada, however, must attract corporate and small business formation to grow.

The state of the Atlantic provinces' finances before their most recent spring budgets was slightly below the national average. One had hoped that the provinces would use the opportunity of their 2004/05 budgets to improve this state of affairs. Yet their collective mark of C+ for Grade I reflects only an average effort on their part to attract productive businesses and skilled labour.

Newfoundland and Labrador and PEI face crisis-level debt and deficits, which they are trying to address through spending cutbacks. In view of the fact that both provinces still expect to register budget deficits, however, their retrenchment efforts do not go far enough. Nova Scotia and New Brunswick began the most recent budget cycle in comparatively better financial shape, but Nova Scotia has veered off toward irresponsibly higher spending and taxes — a stance not conducive to economic growth. New Brunswick, in contrast, has kept spending increases to a more modest level and has avoided tax increases, which keeps its overall performance at the national average.

Given these mixed results and the improbability of uniformly bad or good provincial fiscal performance, the construction of a clear and easily understandable grading system for provincial government finances is a critical analytical tool for decisionmakers and taxpayers alike. In assigning a grade, one must decide what indicators to include, what they are to measure, and how to weight them.

Grading the fiscal context of a province's budget (Grade I), its budget data accountability (Grade II), and the contribution of the current budget to stimulating economic growth (Grade III) are all useful objectives in their own right. The grading system should also be uncluttered and easy to understand. Thus, I concentrate on constructing aggregate, well-recognized fiscal data — data that, for the most part, are reported in summary budget tables.

Fruitful areas for further research nevertheless exist. First, the grading system should include a quantitative provincial revenue indicator, rather than a simple indicator of per capita own-province revenues, for the following reason. Assuming away tax rate information — holding that constant for a moment — one would expect a rich province (such as Alberta) to have higher per capita own-source



revenues than a poorer province (such as New Brunswick). Consequently, tax rates become crucially important. The public finance literature suggests, moreover, that marginal tax rates are more important than average tax rates in influencing future provincial economic growth. Thus, one has to find a way to identify different marginal tax rates across different tax sources (personal income, corporate income, and so on) and across provinces. In other words, one needs to construct an ideal tax intensity index.

Second, although I chose to use aggregate indicators for the sake of simplicity, one could make a case for investigating the composition of aggregate spending. In a way, such an investigation is implicit in my use of ordinary provincial spending, rather than total provincial spending, whereby I subtract capital spending (since it could be argued that capital spending stimulates provincial economic growth). Carrying this argument further, the composition of provincial ordinary expenditures might well matter. One could argue, for example, that provincial subsidies to business are more harmful than, say, education expenditures. Since the economic literature exploring the relationship between the composition of provincial (or state) spending and economic growth is nonexistent, however, it may take time to develop reliable indicators of this type.

Finally, readers may want to challenge this grading system's composition — its weighting, the actual indicators used, and perhaps even the study's basic objectives and assumptions. Alternative suggestions are welcome and might well lead to useful fine tuning. I would be cautious about making wholesale changes, however, in order to be able to compare grades year to year in subsequent analyses of the Atlantic provinces' government finances.

REFERENCES

- Barro, Robert. 1974. "Are Government Bonds Net Worth?". *Journal of Political Economy* 82 (November-December): 1095–1117.
- . 1991. "Economic Growth in a Cross-Section of Countries". *Quarterly Journal of Economics* 106 (May): 407–33.
- Beauchemin, Eric, et al. 2004. *The Canadian and Provincial Budgets: 2003 Overview*. Toronto: Dominion Bond Rating Service.
- Games, P.A., and George R. Klare. 1967. *Elementary Statistics: Data Analysis for the Behavioral Sciences*. New York: McGraw-Hill.
- Mankiw, N. Gregory. 1992. *Macroeconomics*, 2nd ed. New York: Worth.
- Newfoundland and Labrador. 2004. *Budget Speech, 2004: Protecting Our Future*, presented by the Hon. Loyola Sullivan. St. John's.
- Nova Scotia. 2004. *Nova Scotia Budget for the Fiscal Year 2004-2005*. Halifax.
- Prince Edward Island. 2004. *Budget Address: 2004*. Charlottetown.
- Scully, Gerald W. 1989. "The Size of the State, Economic Growth and Efficient Utilization of National Resources". *Public Choice* 63: 149–64.



APPENDIX TABLES

Table A-1: Scores for Indicator Components of Grade I

	Indicator 1	Indicator 2	Indicator 3	Indicator 4	Grade I
Atlantic Canada	C-/C	C+	C-	C+	C
Newfoundland and Labrador	D-	D-/D	D+/C-	F/D-	D-/D
Prince Edward Island	C+	B-	F	F	D-/D
Nova Scotia	D-/D	B	B-	A	B-
New Brunswick	B-	B-	D	C-/C	C
Quebec	F	D	B-/B	D+/C-	D/D+
Ontario	C+	B-	A/A+	A+	B+/A-
Manitoba	A/A+	B+	B-/B	B-	B+
Saskatchewan	C+	F/D-	B-	C+/B-	C
Alberta	A+	A+	B+	C-/C	A
British Columbia	B+/A-	D-	A/A+	A-/A	B

Table A-2: Scores for Indicator Components of Grade II

	Indicator 5	Indicator 6	Indicator 7	Indicator 8	Grade II
Atlantic Canada	C+	D+	C/C+	B-	C/C+
Newfoundland and Labrador	D-/D	C	C-/D+	B+	C
Prince Edward Island	A+	A	F	D-/D	C+
Nova Scotia	D+	D	B-	B	C
New Brunswick	A+	D-	C+	B-/B	B-
Quebec	F/D-	C	B-/B	A+	B-
Ontario	F/D-	D+/C-	F	F	F
Manitoba	D/D+	A-	C	C+/B-	C+
Saskatchewan	B	A+	B+	B-/B	B+
Alberta	B	A+	A+	D	A-
British Columbia	A/A+	F	B-	C+	C+

Table A-3: Scores for Indicator Components of Grade III

	Indicator 9	Indicator 10	Indicator 11	Indicator 12	Grade III
Atlantic Canada	C+	C+	C+	C/C+	C+
Newfoundland and Labrador	C+	A/A+	B/B+	C+	B
Prince Edward Island	A	C-	A+	D+	B-/B
Nova Scotia	C-/C	C+	D+	D+	C-
New Brunswick	B-	D/D+	D+/C-	B-	C
Quebec	C+/B	F/D-	C+	C+	C
Ontario	A-	F	D	F	D+
Manitoba	B-	A+	D	A	B
Saskatchewan	C-/C	C+	B	D	C
Alberta	F	A+	B-	A-	B-
British Columbia	A-	C+	D	B	C+/B-

Selected Publications from the AIMS Library

Books

Retreat from Growth: Atlantic Canada and the Negative-Sum Economy, by Fred McMahon

Road to Growth: How Lagging Economies Become Prosperous, by Fred McMahon

Looking the Gift Horse in the Mouth: The Impact of Federal Transfers on Atlantic Canada, by Fred McMahon (photocopies only)

Commentary Series

Locking Up the Pork Barrel: Reasoned Economic Development Takes a Back Seat to Politics at ACOA, by Brian Lee Crowley and Bruce Winchester

Following the Money Trail: Figuring Out Just How Large Subsidies to Business Are in Atlantic Canada, by David Murrell

First, Do No Harm: What Role for ACOA in Atlantic Canada? by Brian Lee Crowley

Research Reports

Debtor's Prison II: Shortening the Sentence, by Roland T. Martin

Debtor's Prison: Public Sector Debt and What It Means for You, by Tom Riley

The Atlantica Power Market: A Plan for Joint Action, by Gordon L. Weil

New Brunswick's Plastics Industry: Rhetoric versus Reality, by Isaiah A. Litvak

Fencing the Last Frontier: The Case for Property Rights in Canadian Aquaculture, by Robin Neill

Grading Our Future: Atlantic Canada's High Schools' Accountability and Performance in Context, by Rick Audas and Charles Cirtwill

Definitely Not the Romanow Report, by Brian Lee Crowley, Brian Ferguson, David Zitner, and Brett J. Skinner

Rags to Riches: How "The Regions" Can and Should Be Leading Canada's Productivity Push, by Brian Lee Crowley

Taxing Incentives: How Equalization Distorts Tax Policy in Recipient Provinces, by Kenneth J. Boessenkool

Fiscal Equalization Revisited, by Professor James M. Buchanan, Nobel Laureate

Testing & Accountability: The Keys to Educational Excellence in Atlantic Canada, by Charles Cirtwill, Rod Clifton, and John D'Orsay

Public Health, State Secret, by Dr. David Zitner and Brian Lee Crowley

Port-Ability: A Private Sector Strategy for the Port of Halifax, by Charles Cirtwill, Brian Lee Crowley, and James Frost

Taking Off the Shackles: Equalization and the Development of Nonrenewable Resources in Atlantic Canada, by Kenneth J. Boessenkool

Equalization: Milestone or Millstone?, by Roland T. Martin

Beyond a Hard Place: The Effects of Employment Insurance Reform on Atlantic Canada's Economic Dependency, by Rick Audas and David Murrell

Operating in the Dark: The Gathering Crisis in Canada's Public Health Care System, by Brian Lee Crowley, Dr. David Zitner, and Nancy Faraday-Smith (photocopies only)

Conferences

Atlantic Canada and the Canada-American Border of the Future, November 22, 2002, Halifax, Nova Scotia

Borderlines: Canada in North America, September 13, 2002, Calgary, Alberta

Plugging in Atlantic Canada: How Will Competition, Deregulation and Privatization in the Continental Electricity Market Affect Us? October 27, 2000, Halifax, Nova Scotia

These publications are available at AIMS, 2000 Barrington St., Suite 1006, Halifax NS B3J 3K1
Telephone: (902) 429-1143 Facsimile: (902) 425-1393 E-mail: aims@aims.ca
They can also be found on our web site: www.aims.ca



2000 Barrington St., Suite 1006
Halifax NS B3J 3K1

Telephone: (902) 429-1143

Facsimile: (902) 425-1393

E-mail: aims@aims.ca

Web site: www.aims.ca