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Prepared for the
Canadian Association of Income Funds

Tax Revenue Implications of Income Trusts

Final Report

November 23, 2005

HDR | HLB Decision Economics Inc.

Risk Analysis • Investment and Finance
Economics and Policy

Canadian Association of Income Funds

Tax Revenue Implications of Income Trusts

Final Report

Prepared by: HDR|HLB Decision Economics Inc.

November 23, 2005

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EXECUTIVE SUMMARY

The Canadian Association of Income Funds (CAIF) has retained HDR|HLB Decision Economics Inc. (HDR|HLB) to assess whether growth in the income trust market results in tax leakage to the Government of Canada, and if so, to what degree. CAIF is seeking an independent assessment of the tax leakage question as a validation of the tax revenue impacts released by the Department of Finance in the Consultation Paper: "Tax and Other Issues Related to Publicly Listed Flow-Through Entities (Income Trusts and Limited Partnerships) dated September 8, 2005. This report provides HDR|HLB's assessment of the tax leakage question based on the modeling framework developed by HDR|HLB in 2004 and reported in the March 2004 report: "Risk Analysis of Tax Revenue Implications of Income Trusts".

The key findings of HDR|HLB's assessment are:

- The parameter estimates and methodology employed by HDR|HLB in assessing tax leakage is for the most part aligned with Finance's approach which yields a tax leakage estimate of $255 million in 2004. The key difference in the approaches is that HDR|HLB examines the issue using a Net Present Value based framework that values the future taxes associated with income trust distributions that are paid into currently tax exempt accounts such as Registered Retirement Savings' Plans (RRSP's) and pensions. In the HDR|HLB approach, these distributions are assumed to be re-invested until they are ultimately withdrawn at some future date and thus become taxable. The Finance approach is founded on a budget-based approach and therefore does not explicitly consider taxes payable outside the budget planning horizon;

- Including deferred taxes, HDR|HLB estimates that the net tax leakage associated with income trusts activities in 2004 is expected to be $71 million or 0.2% of total projected 2004 federal corporate income taxes. Current year tax losses of $178 million are partially offset by future year taxes of $108 million. Table 1 provides the tax leakage estimates by sector;

Table 1: 2004 Federal Tax Leakage by Sector, Mean Estimates ($ Millions)

	Business Trusts	Oil and Gas	REIT's	Total
Tax Leakage (Excl. Deferred Taxes)	-$83	-$25	-$71	-$178
Deferred Tax Gain	$49	$32	$26	$108
Net Tax Leakage Impact	-$33	$7	-$45	-$71

Note: Figures in Table may not add due to rounding.

- HDR|HLB conducted a sensitivity analysis to determine the impact on the 2004 estimate of tax leakage if it was assumed that planned future corporate rate reductions were fully implemented in 2004. Table 2 provides the mean estimates of tax leakage by sector assuming the planned corporate income tax rate reductions were in place. The end result is that there is no tax leakage associated with income trust activities, in fact there is a net tax gain of $56 million;

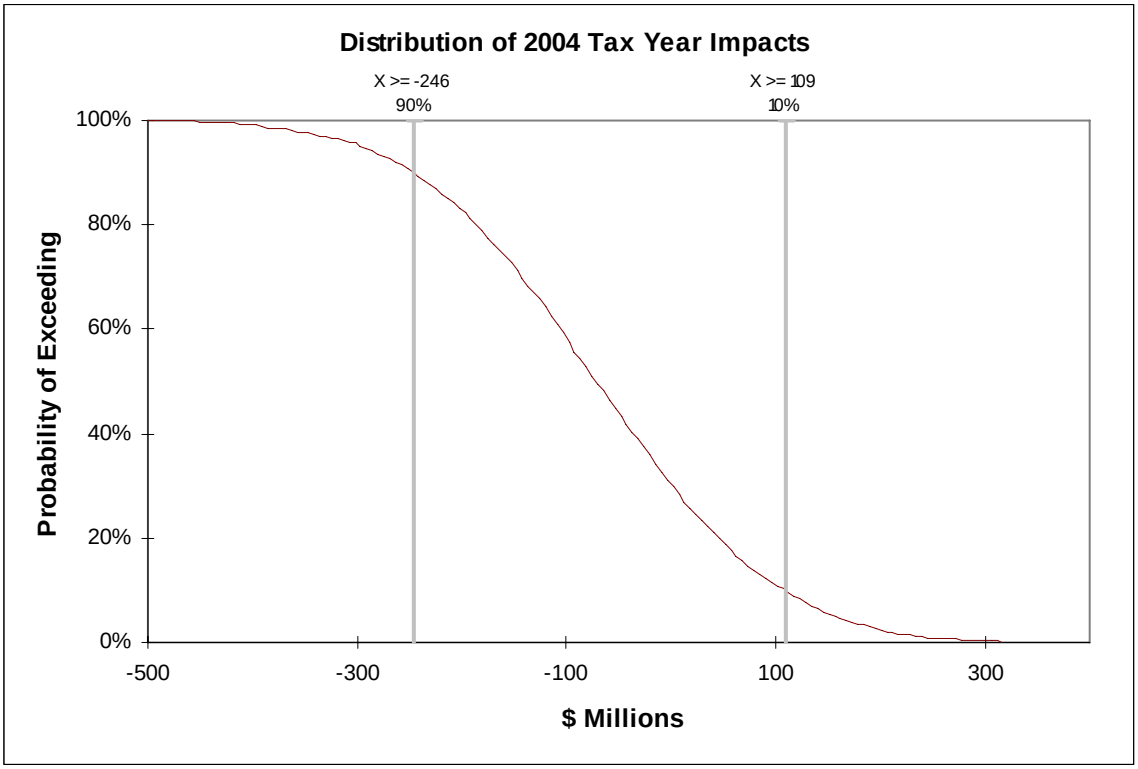
Table 2: 2004 Federal Tax Leakage by Sector, Mean Estimates ($ Millions) – Planned Federal Rate Reductions Fully Implemented in 2004

	Business Trusts	Oil and Gas	REIT's	Total
Tax Leakage (Excl. Deferred Taxes)	-$40	$52	-$54	-$43
Deferred Tax Gain	$46	$28	$25	$99
Net Tax Leakage Impact	$6	$80	-$29	$56

Note: Figures in Table may not add due to rounding.

- There is a great deal of uncertainty associated with any determination of whether the income trust structure necessarily results in tax leakage to the Government of Canada. To assess the tax leakage question, numerous assumptions have to be made and in most instances supporting data for key parameter estimates is limited. Compounding the uncertainty in estimating tax leakages associated with income trusts are many diverse means by which trust distributions can be received (e.g., interest, dividends and return of capital), by what market segment (business, oil and gas, and REITs), by what investor type (retail, institutional, non-resident and tax exempt) and the relative income levels of unit-holders. Any tax leakage estimates must be considered with a clear understanding of this reality. The degree of uncertainty is such that even though HDR|HLB's estimate includes the value of deferred tax impacts, Finance's estimate of tax leakage of $255 million for the income trust sector is not statistically different than HDR|HLB's estimate of $71 million; and,

Figure 1: Decumulative Distribution of Total 2004 Tax Impacts of Income Trusts



- The tax leakage ramifications of continued and sustained growth in the income trust sector was also assessed using a budget-based approach. Due to the planned federal corporate income tax rate reductions through 2010, there is not expected to be significant escalation in tax leakage over the next five years. Even if the income trust market doubles over that timeframe, the expected increase in the level of tax leakage is not significant. In fact, a doubling of the market size over the next 5 years would only result in an approximate $30 million increase in annual tax leakage by 2009.

1. INTRODUCTION

The Canadian Association of Income Funds (CAIF) has retained HDR|HLB Decision Economics Inc. (HDR|HLB) to assess whether growth in the income trust market results in tax leakage to the Government of Canada, and if so, to what degree. CAIF is seeking an independent assessment of the tax leakage question as a validation of the tax revenue impacts released by the Department of Finance in the Consultation Paper: "Tax and Other Issues Related to Publicly Listed Flow-Through Entities (Income Trusts and Limited Partnerships) dated September 8, 2005. This report provides HDR|HLB's assessment of the tax leakage question based on the modeling framework developed by HDR|HLB in 2004 and reported in the March 2004 report: "Risk Analysis of Tax Revenue Implications of Income Trusts".

In that report, HDR|HLB concluded that the total tax revenue impact[1] associated with income trusts is approximately break-even when deferred taxes (e.g., future taxes associated with income received in tax exempt accounts such as RRSPs) are considered. The analysis also demonstrated that there is a high degree of statistical uncertainty in assessing the tax leakage question as numerous assumptions are required, and in most instances supporting data for key parameter estimates is limited. This previous analysis utilized 2002 financial data for the income trust sector. In August 2004, on behalf of CAIF, HDR|HLB Decision Economics updated the analysis as fiscal year 2003 data became available and assessed the proposed budgetary changes related to the oil and gas sector[2]. The main findings of the March 2004 report were supported in that report update.

Since the release of the August 2004 report, HDR|HLB Decision Economics has met with Department of Finance staff to discuss the specific methodology of estimating income trust tax leakage and some of the key assumptions/parameter estimates. HDR|HLB is of the opinion that the parameter estimates utilized in Finance's consultation paper are generally reasonable. However, it is important to acknowledge that data in support of many of the parameter estimates is limited and thus any estimate of tax leakage is subject to significant statistical uncertainty. Furthermore, small variations in some of the parameter estimates can significantly alter the estimates of tax leakage. For example, a one percentage point variation in the effective corporate income tax rate impacts the tax leakage estimate by about $110 million in fiscal 2004.

In addition, HDR|HLB generally endorses the methodology employed by Finance in estimating the tax leakages associated with income trusts. To a significant degree, the HDR|HLB approach and the Finance approach are aligned. However, there is one fundamental difference between the approaches. The HDR|HLB approach examines the tax leakage issue from the perspective of whether growth in the income trust market leads

[1] Federal plus provincial tax impact.

[2] This is reported in "Analysis of Proposed Budgetary Tax Changes to Non-Resident Taxation and the Definition of Taxable Canadian Property", dated August 12, 2004.

to tax erosion utilizing a Net Present Value approach. That is, tax effects associated with income trusts are valued irrespective of the year in which they occur. For example, if an income trust pays out distributions that are received in an RRSP account, while the distribution does not immediately yield tax revenues for the Government, the future value of taxes that will be payable when that income is withdrawn from the tax exempt account is considered. Finance's approach is designed to assess the annual fiscal impacts of income trusts for budget planning purposes and therefore future tax impacts are not explicitly considered.

This report is structured as follows: In Chapter 2, HDR|HLB provides an updated assessment of tax leakages associated with income trusts using the economic framework previously developed with updated parameter estimates to reflect the latest financial data and evidence. In Chapter 3 of this report, HDR|HLB examines the tax leakage question from a fiscal framework or budgetary perspective in order to assess whether further growth in the income trust sector leads to significant levels of tax leakage. To be consistent with the Finance Consultation Paper, results are presented by sector and only federal tax impacts are considered.

2. FEDERAL TAX LEAKAGE ESTIMATION - NPV APPROACH

This section provides the updated assessment of federal tax leakage associated with income trust activities in 2004. Taxes are estimated for income trust entities related to 2004 operations and compared to a simulated estimate of taxes that would have been paid if the income trust had been structured as a corporation. As these estimates represent an update to a previous analysis, some of the key parameter changes are also discussed.

2.1 Changes to Parameter Estimates

This section provides an overview of the key changes in parameter estimates utilized in tax leakage estimates by income trust sector for 2004. The detailed overall methodology for estimating tax leakage is provided in Appendix A which contains the March 2004 HLB report.

Key Parameter Estimates

There are three key differences between the parameters employed in this study relative to those employed in HDR|HLB's previous studies:

- The financial data for the income trust sector reflects the latest available data (2004 data);
- The estimates of average effective corporate income tax rates as a percent of EBITDA have been updated to reflect average industry data from Statistics Canada. In the original HDR|HLB analysis, the average rates were based on a sample of corporations prior to conversion to income trusts. As the market matures, HDR|HLB considers that the industry average data will provide the best mean estimate of effective corporate income tax rates for the purposes of estimating tax leakage; and,
- The estimates of income trust holdings by investor type has been updated to reflect the current market place based on consultation and to correct an error in HLB's March 2004 report.

Fiscal 2004/Unitholder Data

Table 3 provides a summary of the estimates of the income trust market for 2004 by sector. The base financial data is consistent with that employed by the Department of Finance. Note that the analysis that follows is focused on the income trust sector and therefore excludes limited partnerships[3].

[3] The Department of Finance Consultation Paper includes both income trusts and limited partnerships.

Table 3: 2004 Financial Data for the Income Trust Sector ($ Estimates in Millions)

	Business Trust	Oil and Gas	REITs	Total
Market Capitalization	$51,635	$41,774	$17,382	$110,791
EBITDA	$4,751	$5,638	$2,529	$12,918
Distributions	$3,339	$3,844	$1,201	$8,384
Yield (%)	6.4%	9.2%	6.9%	7.8%
Distributions by Type:				
Taxable	73.7%	70.8%	32.2%	66.5%
Dividends	8.4%	0.3%	1.0%	3.6%
Return of Capital	17.9%	28.9%	66.7%	29.9%
Holdings of Income Trusts by Investor Type[4]:				
Retail	55.7%	36.4%	58.1%	47.2%
Mutual Fund	24.0%	15.7%	25.1%	20.3%
Pension Fund	10.0%	10.0%	10.0%	10.0%
Non-Resident	10.3%	37.9%	6.8%	22.5%
Percentage of Investments Held in Non Tax-Exempt Accounts:				
Retail	69%	69%	69%	69%
Mutual Fund	69%	69%	69%	69%
Pension Fund	0%	0%	0%	0%
Non-Resident	100%	100%	100%	100%
Federal Personal Tax Rates:				
Interest	25.0%	25.0%	25.0%	25.0%
Dividends	14.6%	14.6%	14.6%	14.6%
Capital Gains	12.5%	12.5%	12.5%	12.5%
Non-Resident Tax Rates:				
Trust-taxable distributions	15.0%	15.0%	15.0%	15.0%
Dividends	15.0%	15.0%	15.0%	15.0%
Trust – tax-deferred distributions	0.0%	15.0%	15.0%	15.0%
Interest	10.0%	10.0%	10.0%	10.0%

[4] In conducting the update of revenue tax leakage estimates for this report an error was discovered in the March 11, 2004 report "Risk Analysis of Tax Revenue Implications of Income Trusts". In that report, the percentage distribution of unit holders between pension funds and mutual funds were inadvertently transposed (variable#16 and variable #17 on p.32). The proportion of trusts held by mutual funds should have been 23.4% for mutual funds and 7.5% for pension funds at the median. In terms of that study, the impact on the tax revenue impact is not material (+10 million) because based on the approach there is a trade-off between current and deferred tax impacts.

Effective Corporate Income Tax Rates

The most critical single variable when assessing whether there is tax leakage associated with income trusts is the level of corporate income taxes that trusts would be paying if they were structured as a corporation. In most instances, it is difficult to determine the level of corporate taxation for the entity even if it had been structured as a corporation previously. Furthermore, even if that data was readily available, it would not necessarily mean that the level of corporate taxation would be expected to be stable into the future. To benchmark corporate taxes payable pre-conversion, effective corporate taxes as a percent of EBITDA are employed. A one percentage point variation in the estimate for the entire income trust market would vary the tax leakage estimate by about $110 million.

In the 2004 HDR|HLB reports, the effective tax rates as a percent of EBITDA were derived from the pre-conversion financial statements of corporations that ultimately converted to income trusts. In this analysis, HDR|HLB has instead utilized industry average data for corporations by sector. As the trust market matures, this will likely be a better proxy for the sector. Table 4 provides a comparison of the average effective corporate income tax paid as a percentage of EBITDA for the income trust entity under the corporate form. Overall, the revised estimates based on Statistics Canada data are close in aggregate to that employed in the prior HDR|HLB studies, however significant variations exist in the business and oil and gas sectors.

Table 4: Pre-Conversion, Federal Corporate Income Tax as a Percent of EBITDA

	Business Trust	Oil and Gas	REITs	Total
HLB 2004 Estimate	9.3%	3.7%	4.9%	6.0%
Current Estimate From Statistics Canada[5]	6.8%	6.3%	5.0%	6.2%

Corporations on average pay only 6.2 percent of earnings (as measured by EBITDA) in federal corporate taxes which is well below the statutory rate of 21 percent for non-resource corporations and resource corporations 25 percent (excluding surtaxes).

Other factors contributing to uncertainty

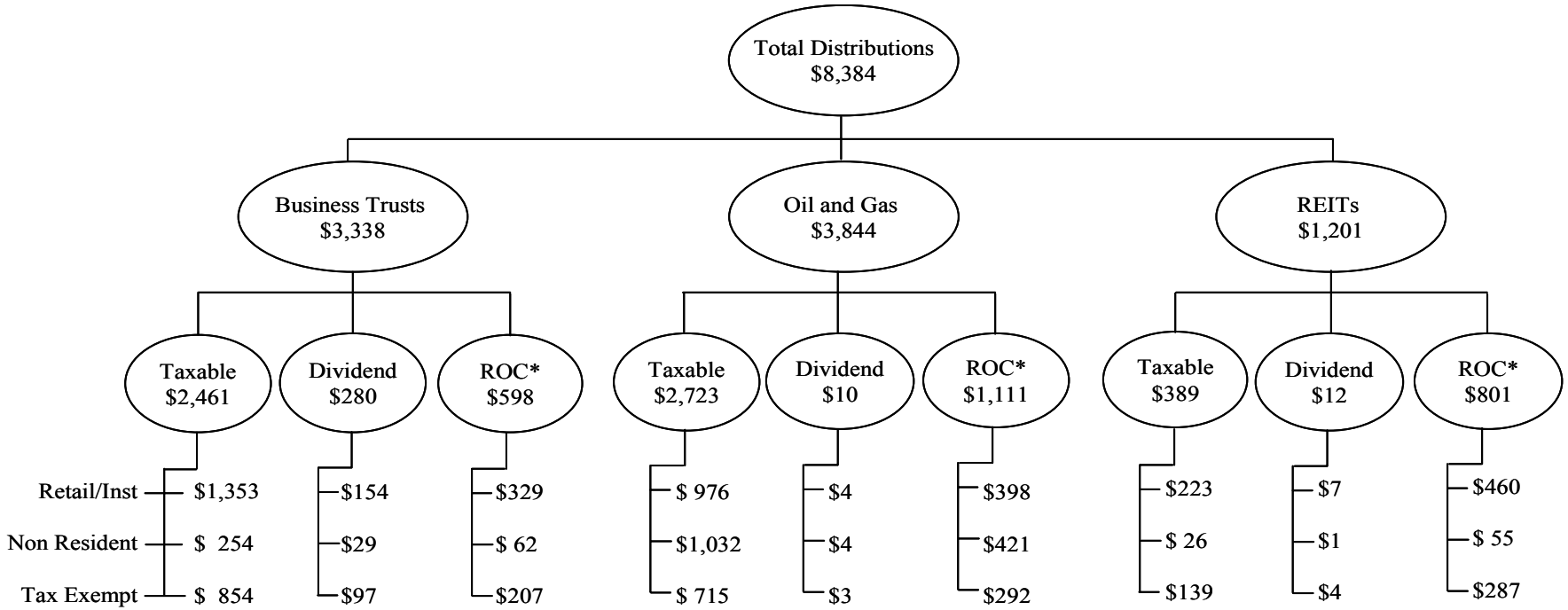
Compounding the uncertainty in estimating tax leakages associated with income trusts is many diverse means by which trust distributions can be received (e.g., interest, dividends and return of capital), by what market segment (business, oil and gas, and REITs), by what investor type (retail, institutional, non-resident and tax exempt) and the relative income levels of unit-holders. All of these factors ultimately influence the level of taxation on income trust distributions. The mix of distributions for income trusts and corporations are provided in Figure 2 and Figure 3.

[5] Statistics Canada: Financial and taxation statistics for enterprises, 2003 - Catalogue no. 61-219-XIE and the Department of Finance Consultation Paper: "Tax and Other Issues Related to Publicly Listed Flow-Through Entities (Income Trusts and Limited Partnerships) dated September 8, 2005.

In addition, the taxation of shares of corporations has similar complexities (see Figure 4 and Figure 5). Both the income and personal taxation structures under both forms are quite different. For example, two-thirds of income trust distributions are interest which is taxable at the full personal income tax rate. In contrast, 72 percent of corporate income is capital gains which are taxed at the half the full personal rate. Furthermore, distributions of return of capital for business trusts and REITs to non-residents are not subject to withholding taxes, as is the case for oil and gas trusts.

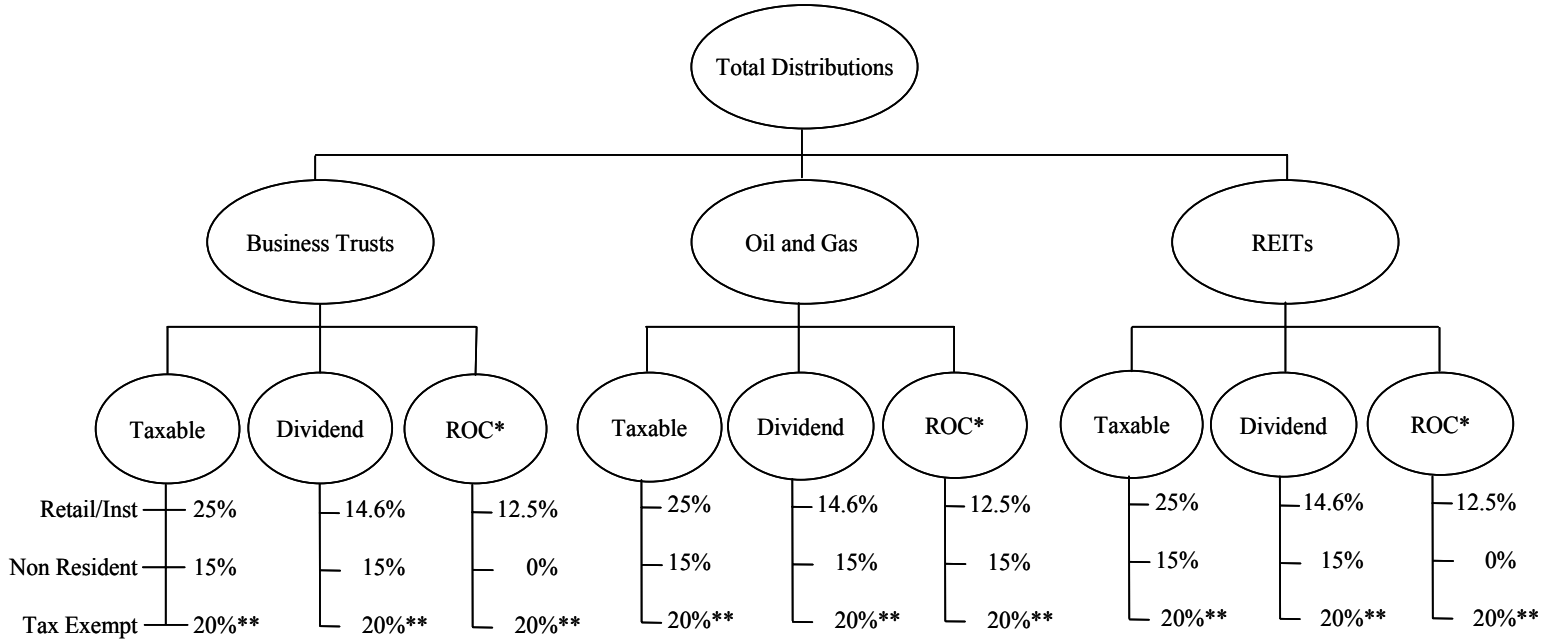
Given that the tax impacts could vary significantly depending on the relative distributions of the holdings by investor type and market segment, this further compounds the task of assessing tax leakage.

Figure 2: 2004 Income Trust Market Distributions



* ROC = Return of Capital

Figure 3: Income Trust Market, Effective Tax Rates on Income Trust Income



* ROC = Return of Capital
** Upon withdrawal from tax exempt account

Figure 4: 2004 Income Trust Market (Income Levels Assuming Entity Structured as a Corporation)

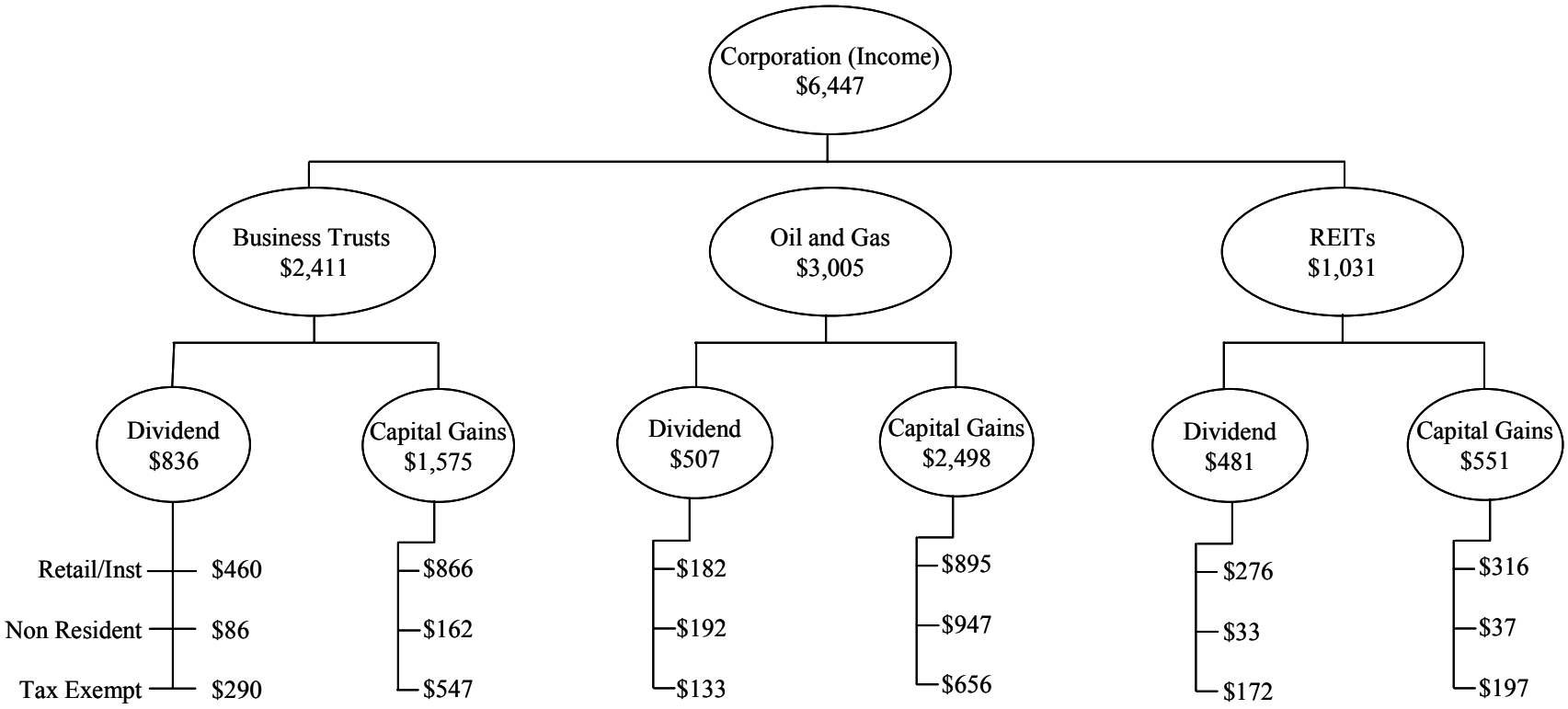
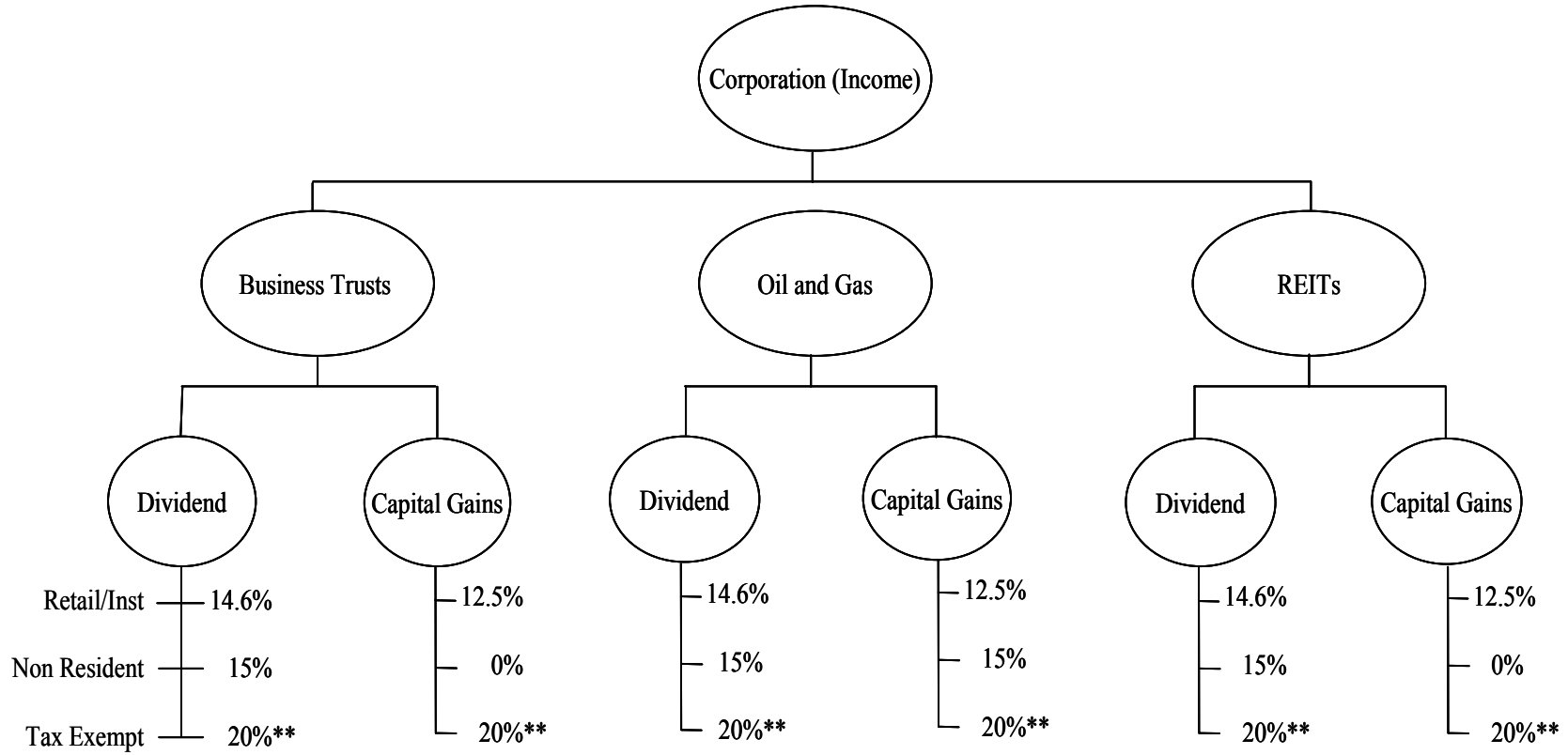


Figure 5: 2004 Income Trust Market (Income Levels Assuming Entity Structured as a Corporation) Effective Tax Rates on Income Trust Income



Estimates of 2004 Federal Tax Leakage From Income Trusts

In determining the 2004 federal tax leakage from income trusts, taxes paid now or in the future as associated with income trust activities in 2004 are estimated and compared to a simulation of what taxes would have been under the corporate form[6]. Simplistically stated, under the income trust form, trusts pay out income to unit-holders who are taxable unless the trust units are held in tax exempt accounts such as RRSP's or pension funds. In these accounts, the distributions are only taxable at some future date when they are withdrawn from RRSP's or paid out to pensioners. Structured as a corporation, the entity pays corporate income taxes and provides income in the form of accrued capital gains and dividends. Again, if the dividend or capital gain is received or accrued in a tax exempt account, it is not immediately taxable.

In the Finance Consultation Paper, the estimated 2004 federal tax leakage associated with income trusts is estimated to be $255 million. As the estimate is based on a budgetary basis, future tax impacts associated with income received in tax exempt accounts are not explicitly considered. HDR|HLB's tax leakage estimates for fiscal year 2004 are analogous to Finance's estimate with two exceptions: (i) deferred taxes are considered in HDR|HLB's analysis, and (ii) HDR|HLB has updated its data regarding the distribution of unit-holders. Excluding deferred taxes, the federal tax leakage associated with income trust 2004 activities is $178 million. Including deferred taxes[7], HDR|HLB estimates that the tax leakage associated with income trusts activities in 2004 is expected to be $71 million. The value of future taxes is expected to be $108 million. Table 5 provides the mean estimates of tax leakage by sector.

Table 5: 2004 Federal Tax Leakage by Sector, Mean Estimates ($ Millions)

	Business Trusts	Oil and Gas	REIT's	Total
Tax Leakage (Excl. Deferred Taxes)	-$83	-$25	-$71	-$178
Deferred Tax Gain	$49	$32	$26	$108
Net Tax Leakage Impact	-$33	$7	-$45	-$71

Note: Figures in Table may not add due to rounding.

Risk Analysis

As discussed previously, the estimates of tax leakage are subject to considerable statistical uncertainty. In HDR|HLB's March 2004 report, it was concluded that the net combined federal/provincial tax impact for 2004 ranged between a leakage of $459 million and a net tax gain of $409 million eighty percent of the time. This was based on

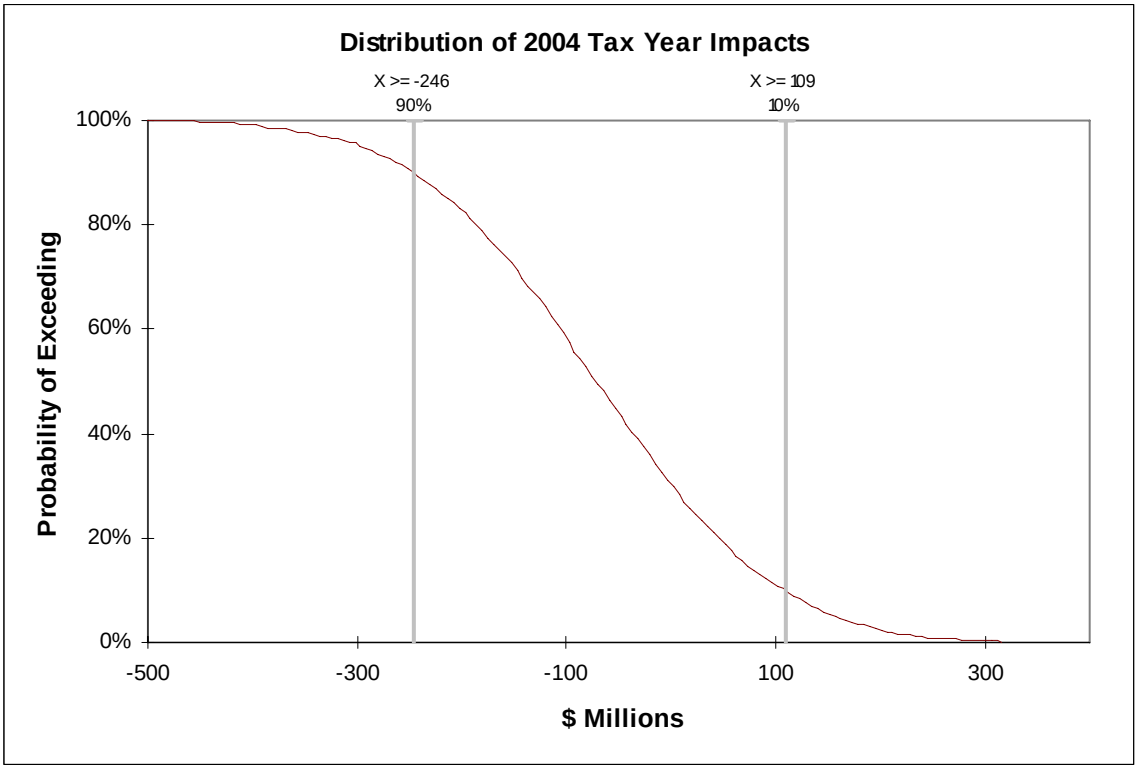
[6] See Appendix A for more detail on HDR|HLB's general methodology.

[7] In deriving the estimates of deferred taxes, it was implicitly assumed that the distributions received in tax exempt accounts would be re-invested at an effective rate equal to the Federal Government's rate for discounting cash flows. If one assumed the re-investment rate was 1 percentage point in excess of this discount rate deferred taxes would increase by $22 million and therefore tax leakage would decrease by $22 million.

2002 financial data available at that time and market forecasts to 2004. The degree of statistical uncertainty in estimating the tax leakage impact should not be understated.

The degree of statistical uncertainty in the updated estimates of tax leakage is illustrated in Figure 6 which provides the decumulative distribution of the net tax leakage including deferred taxes using Monte Carlo simulation techniques. Based on 2004 actual financial data, the estimates of tax leakage are more statistically precise than that developed previously. However, while the mean estimate is a net tax leakage of $71 million, the risk analysis highlights the degree of uncertainty in this estimate. There is approximately a thirty percent probability that there is no tax leakage associated with income trusts and a ten percent probability of losses in excess of $246 million. The degree of uncertainty is such that even though HDR|HLB's estimate includes the value of deferred tax impacts, the Federal estimate of tax leakage of $255 million for the income trust sector is not statistically different than HDR|HLB's estimate of $71 million[8].

Figure 6: Decumulative Distribution of Total 2004 Tax Impacts of Income Trusts



[8]Using HLB's risk-based approach, a 9 percent probability exists of realizing a Federal tax leakage estimate of $255 million or greater.

Planned Federal Rate Reductions Implemented

Budget 2005 announced the proposed elimination of the federal corporate surtax in 2008 and the reduction of the general income tax rate to 19 percent by 2010. The federal tax rate for resource companies is also proposed to be reduced to 21% by 2007, as outlined in Budget 2003. HDR|HLB conducted a sensitivity analysis to determine the impact on the 2004 estimate of tax leakage if it was assumed that these corporate rate reductions were fully implemented in 2004. Table 6 provides the mean estimates of tax leakage by sector. The results show that the current year federal tax leakage associated with income trusts for 2004 activities is $43 million, while the value of future taxes is expected to be $99 million. The end result is that there would be no tax leakage associated with income trust activities if the planned corporate rate reductions were implemented. In fact, there would be a net tax gain of $56 million.

Table 6: 2004 Federal Tax Leakage by Sector, Mean Estimates ($ Millions) – Planned Federal Rate Reductions Fully Implemented in 2004

	Business Trusts	Oil and Gas	REIT's	Total
Tax Leakage (Excl. Deferred Taxes)	-$40	$52	-$54	-$43
Deferred Tax Gain	$46	$28	$25	$99
Net Tax Leakage Impact	$6	$80	-$29	$56

Note: Figures in Table may not add due to rounding.

3. FISCAL FRAMEWORK APPROACH

In addition to analyzing the tax leakage question from a Net Present Value perspective, in this updated analysis HDR|HLB also assessed the tax leakage issue by approximating the budgetary impacts (including future tax impacts) by converting the tax impacts in Section 2 to a cash tax impact by year. This analysis was conducted to determine if sustained growth in the income trust sector would lead to additional tax erosion. As opposed to the results reported in Section 2, the fiscal framework approach converts the present value of deferred tax impacts (and capital gains) into annualized impacts. For example, if one assumes that $30 in income is held on average for 30 years in an RRSP account with periodic withdrawals, one could convert it to a cash flow of $1 of income for 30 years[9].

To approximate the annual budgetary impacts, a number of assumptions and methodologies had to be adopted to facilitate the analysis. These are outlined below:

1) 2004 is the first or base year of the analysis. The annual budgetary tax leakage impacts going forward reflect income trusts activities and distributions in 2004 and beyond. Prior year activities and income are not considered in this analysis;
2) Tax leakage is simulated ten years into the future based on alternative constant market growth rates. While income trust EBITDA and total income trust distributions grow, parameters such as the distribution of unit-holders, type of distributions, etc. are held fixed over time;
3) Taxes received in tax exempt accounts are assumed to be (on average) withdrawn and therefore become taxable uniformly over a thirty year period. For example, one-thirtieth of income received in a tax deferred account in 2004, would become taxable each and every year forward from 2004 through 2033. Income received in tax exempt accounts is assumed to be re-invested[10];
4) To determine the annual taxes associated with capital gains income, which is only taxable at the disposition of the shares, it has been assumed that the shares are held on average for 5 years. As a result, the capital gains income in one year becomes taxable uniformly over a 5 year period[11]. For example, one-fifth of capital income received in a tax deferred account in 2004, would become taxable each and every year forward from 2004 through 2008. Shares not disposed of are assumed to accumulate additional capital gains income[12];
5) The analysis assumes that the planned Federal corporate income tax reductions are implemented. The federal corporate income tax rate falls to 19% by 2010 and the federal resource tax rate falls to 21% by 2007. In

[9] Re-investment returns are not considered in this example for simplicity.
[10] Returns are assumed to be equivalent to the federal discount rate.
[11] It should be noted that the broad conclusions of the analysis that follows are robust to the assumptions related to the timing of the realization of capital gains and the withdrawal of tax deferred income from tax exempt accounts.
[12] Returns are assumed to be equivalent to the federal discount rate.

addition, the corporate surtax is eliminated by 2008[13]. The outcomes of the analysis that follows are dependent on these reductions being implemented; and,

6) The analysis excludes the impact of transitional capital gains upon conversion to a trust.

The critical assumption required to assess the annual budgetary impacts of income trusts is the annual rate of growth for the income trust market going forward. As the rate of market expansion is subject to considerable uncertainty, HDR|HLB had conducted the fiscal framework tax leakage analysis using alternative assumptions for sustained market growth. As one would expect, the conclusions of the analysis are quite sensitive to this assumption. The annual fiscal tax leakage estimates of income trusts over a broad range of market growth rates are provided in Table 7.

Table 7: Tax Leakage Estimates ($M) Under Alternative Market Growth Rate Assumptions, Planned Federal Rate Reductions Implemented

Average Annual Market Growth	Total		
	2004	2009	2014
0%	$139	$111	$76
5%	$139	$127	$114
10%	$139	$146	$166
15%	$139	$168	$236
20%	$139	$192	$330
25%	$139	$218	$454

The analysis highlights several key findings:

- Tax leakage associated with income trusts is not expected to escalate significantly over the next five years due to the planned federal corporate income tax rate reductions;
- If the income trust market grows at a rate of 5 percent or less, the level of annual tax leakage is expected to decline over the next five years; and,
- The market would have to expand at an annual rate of approximately 18 percent per year for annual tax leakage to double over the next ten years. If that occurred, the total income trust market would have to be approximately five times larger than it currently exists.

In general, the analysis indicates that assuming that the planned corporate income tax rate reductions take effect, Federal Government tax leakage associated with income trusts is expected to be relatively stable over the next five years. Furthermore, there should not be appreciable growth in tax leakage over the next ten years unless there continues to be significant annual market expansion.

[13] The tax reductions are reported in the Department of Finance Consultation Paper and the 2005 Federal Budget.

Sensitivity of Findings to Implementation of Corporate Income Tax Rate Reductions

It should be noted that if the planned corporate income tax rate reductions do not take effect, the above conclusions do not hold. This is illustrated in Table 8 which highlights significant growth in tax leakage should the planned corporate income tax rate reductions not be implemented.

Table 8: Tax Leakage Estimates ($M) Under Alternative Market Growth Rate Assumptions, Planned Federal Rate Reductions Not Implemented

Average Annual Market Growth	Total		
	2004	2009	2014
0%	$139	$234	$220
5%	$139	$285	$348
10%	$139	$345	$538
15%	$139	$416	$817
20%	$139	$498	$1,220
25%	$139	$595	$1,792

APPENDIX A: MARCH 2004 REPORT

Canadian Association of Income Funds and Canadian Institute of Public and Private Real Estate Companies

Final Report

Risk Analysis of Tax Revenue Implications of Income Trusts

REFERENCE NUMBER 6799

Submitted by:

HLB Decision Economics Inc.
Ottawa, Ontario

March 11, 2004

HLB DECISION ECONOMICS INC.

RISK ANALYSIS · INVESTMENT AND FINANCE
· ECONOMICS AND POLICY

Canadian Association of Income Trusts
and
Canadian Institute of Public and Private Real Estate Companies

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March 11, 2004

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BACKGROUND

The Canadian Association of Income Funds (CAIF) and the Canadian Institute of Public and Private Real Estate Companies (CIPPREC) jointly retained HLB Decision Economics Inc. to ascertain the effect of income trusts on governments' tax revenues. Previous studies and press reports give an array of estimates, ranging from virtually zero net effect to about $1 billion in net annual "tax expenditures" (i.e., foregone governments' tax revenues). Ascertaining the true impact of income trusts on governments' revenues is a matter of properly representing the tax treatment of income funds; accounting correctly for the economic and financial behaviour of the various participants in the income trust marketplace; and accurately quantifying the various factors that enter into the appropriate economic and financial calculus.

HLB employed a four-step analysis process consisting of (i) developing a detailed computer simulation model of the income fund market; (ii) quantifying the factors that enter into the simulation model based on actual income fund transactions; (iii) eliciting opinion on the soundness of the model logic and quantification from third-party experts;[14] and (iv) employing the simulation model to estimate the impact of income funds on governments' tax revenues.

A core element of the HLB methodology is called "risk analysis." Risk analysis is employed in economic research when the values of the various factors that bear importantly on the accuracy of conclusions cannot be known with absolute certainty. Probabilities are assigned to such factors as a means of accounting explicitly for the risk of data imprecision. The simulation model then yields, in addition to the findings, the risk that different outcomes would actually be realized. Much as a weather forecast might foresee a dry day with a 10 percent probability of rain, this study gives the statistically best indication of the tax impacts of income trusts together with the quantitative significance (expressed in probability) of other possible outcomes.

[14] Whereas HLB is indebted to the third-party experts who provided review and comment on the analysis as it evolved and as presented here, responsibility for all models, data analysis, assumptions, findings and conclusions rests exclusively with HLB Decision Economics Inc. The third-party experts were: Mr. Brian Arnold of the University of Western Ontario; Mr. Oscar Belaiche of Dynamic Mutual Funds; Professor Vijay Jog of Carleton University; Mr. Sandy McIntyre of Sentry Select Capital Corporation; and Professor Allan Maslov of Carleton University.

FINDINGS

Table 1 provides the statistically best estimates of the annual tax impacts of income trusts in the years 2002, 2003 and 2004. These results are separated into:

- Current year tax revenue effects of income trusts;
- Out-year tax revenue effects of income trusts (the value of future government receipts on income received in the current year); and
- Total impacts, combining both current year and out-year effects.

The statistically best estimate (the "mean" estimate) indicates that, by comparison to the tax yield associated with enterprises in their previous corporate form, the conversion to income trusts produced a small net gain in governments' tax revenues in each of the three years (about $51 million in 2004). If taxes associated with one-time transitional capital gains are excluded, the statistically best estimate represents a small tax loss to governments of about $5 million in 2004.

Current Year Impact of Income Trusts on Governments' Revenues

The statistically best estimates indicate current-year tax losses to governments in 2002, 2003 and 2004 of $12 million, $154 million and $217 million respectively. This means that current year tax receipts from income trust distributions did not offset foregone corporate income taxes and foregone personal taxes from common share appreciation and dividends.

Although risk analysis indicates a possibility that governments forfeited more than the $217 million in 2004 indicated by the statistically best estimate, the probability that the amount foregone exceeded $560 million is less than 10 percent. There is also a small chance that governments' revenues actually increased as a result of income funds (by about $72 million in 2004). The probability of this outcome is less than one-in-ten, however. In other words, tax receipts from income trust distributions will offset foregone corporate income taxes and foregone personal taxes from common share appreciation and dividends one out of every ten years.

Table 1: Annual Tax Impacts of Income Trusts ($Millions), Mean Estimates

Tax Effect	2002	2003	2004
Current Year Tax Effects			
Taxes Under Corporate Structure			
Corporate Income Taxes	($461)	($826)	($893)
Taxes From Dividends	($20)	($39)	($45)
Taxes From Capital Gains	($139)	($262)	($301)
Downstream Interest Effects	($22)	($39)	($44)
Total Taxes Under Corporate Structure	($642)	($1,166)	($1,283)
Taxes Under Income Trust Structure			
Corporate Income Taxes from Trusts	$71	$139	$151
Personal Taxes from Trust Distributions	$404	$754	$859
One-Time Transitional Capital Gains	$155	$119	$56
Total Taxes Income Trust Structure	$630	$1,012	$1,066
Net Current Tax Impact	($12)	($154)	($217)
Present Value of Deferred Taxes			
Foregone Taxes Under Corporate Structure	($264)	($476)	($572)
Taxes Under Income Trust Distributions	$380	$702	$840
Total Value of Deferred Taxes	$116	$226	$268
Total Net Impact	$104	$72	$51

Note: Present values are calculated with a discount rate of seven percent.

Out-Year and Total Impacts of Income Trusts on Government Revenues

Income deposited into tax-exempt accounts creates governments' tax receipts in future years when investors make withdrawals from such accounts. An examination of enterprises that converted to the income trust form as of 2004 indicates that the value of future tax receipts on income from personal investments in these enterprises is estimated to have been $572 million (see Table 1). Personal income tax on deferred income earned

by unit holders in the trust form of these enterprises, however, is estimated to have been $840 million - a $268 million gain in tax revenues to governments.

When the out-year impacts of income funds are combined with current year effects, the statistically best estimate indicates a net tax gain to governments in 2002, 2003 and 2004. In 2004, the statistically best estimate represents the small net gain to governments of $51 million referenced earlier.

When the risk is taken into account, the analysis indicates the possibility that governments did forfeit some tax receipts in 2004 due to income trusts. The probability that such losses exceeded $409 million in 2004 is less than ten percent, however.

1. INTRODUCTION AND BACKGROUND

INTRODUCTION

The Canadian Association of Income Funds (CAIF) and the Canadian Institute of Public and Private Real Estate Companies (CIPPREC) jointly retained HLB Decision Economics Inc. to ascertain the effect of income trusts on governments' tax revenues. Previous studies and press reports give an array of estimates, ranging from virtually zero net effect to about $1 billion in net annual "tax expenditures" (i.e., foregone governments' tax revenues). Ascertaining the true impact of income trusts on governments' revenues is a matter of properly representing the tax treatment of income funds; accounting correctly for the economic and financial behaviour of the various participants in the income trust marketplace; and accurately quantifying the various factors that enter into the appropriate economic and financial calculus.

Accordingly, HLB employed a four-step process consisting of (i) developing a detailed computer simulation model of the income fund market; (ii) quantifying the factors that enter into the simulation model based on actual income fund transactions; (iii) eliciting opinion on the soundness of the model logic and quantification from third-party experts;[15] and (iv) employing the simulation model to estimate the impact of income funds on governments' tax revenues.

A core element of the HLB methodology is called "risk analysis." Risk analysis is employed in economic research when the values of the various factors that bear importantly on the accuracy of conclusions cannot be known with absolute certainty. Probabilities are assigned to such factors as a means of accounting explicitly for the risk of data imprecision. The simulation model then yields, in addition to the findings, the risk that different outcomes would actually be realized. Much as a weather forecast might foresee a dry day with a 10 percent probability of rain, this study gives the statistically best indication of the tax impacts of income trusts together with the quantitative significance (expressed in probability) of other possible outcomes.

The paper is presented in seven sections. Section 1 provides an introduction to the issue including a brief synopsis of the literature. Section 2 provides a description of HLB's RAP© process. Section 3 provides the key assumptions underpinning this evaluation. Section 4 provides the methodology employed in estimating the tax impacts. Section 5 provides a discussion of the income trust market for 2002 that was used to construct the modelling base. Section 6 provides the enumeration of the model variables. Section 7 provides the estimates of tax impacts due to income trusts.

[15] Whereas HLB is indebted to the third-party experts who provided review and comment on the analysis as it evolved and as presented here, responsibility for all models, data analysis, assumptions, findings and conclusions rests exclusively with HLB Decision Economics Inc. The third-party experts were: Mr. Brian Arnold of the University of Western Ontario; Mr. Oscar Belaiche of Dynamic Mutual Funds; Professor Vijay Jog of Carleton University; Mr. Sandy McIntyre of Sentry Select Capital Corporation; and Professor Allan Maslov of Carleton University.

BACKGROUND

Appendix 1 provides the details of the sampling approach used in deriving the parameter estimates for the income trust market segment.

The value of the Canadian income trust market has quadrupled since 2000. This significant increase has led to an increased level of scrutiny for this investment vehicle including an ongoing debate as to the impact of this growth on governments' tax revenues. The following three reports are most often referred to when the issue of potential "tax losses" from income trusts is discussed:

1. Hayward, Paul (2002), "Income Trusts: A 'Tax-Efficient' Product or the Product of Tax Inefficiency?", *Canadian Tax Journal,* Vol. 50 (5), pp. 1529 – 1569;

2. Shenfeld, Avery (2003), "The Economic Benefits of Income Trusts", *CIBC World Markets Economic Perspectives,* March 7, 2003; and,

3. Aggarwal, Lalit and Jack Mintz (2003), "Income Trusts and Shareholder Taxation: Getting it Right", *manuscript prepared for Capital Markets Institute, University of Toronto.*

However, there is little consensus among the authors as to whether the surge of income trust financing actually results in a tax loss to governments and if so, the magnitude of such a loss. The estimates provided in these studies suggest that the annual tax revenue impact of income trusts ranges between $1 billion in tax losses to the impact being almost revenue neutral. The authors acknowledge that the calculations used to derive such estimates are complex and that not all of the potential revenue effects have been considered in their analysis. Rather, the estimates provided in the studies are intended to provide "order of magnitude" estimates.

While these reports are most often referred to in discussions of potential tax losses, it is noteworthy that this is not the primary theme of any of any of these reports. A very brief synopsis of each paper is provided below as it relates to the quantification of tax revenue impacts.

Hayward

Hayward provides an overview of income trusts as an investment product and corporate structure, and outlines a number of questions that their proliferation raises from a tax policy perspective. This paper provides a discussion of various policy responses to issues arising from the structure.

Hayward notes that the income trust structure may have a negative impact on total tax revenue. An estimate of a total tax loss of $1 billion in 2002 is provided. However, this figure, sourced from a "National Post" article by S. Rubin (August 15, 2002), nor its derivation, is discussed further.

Shenfeld

Shenfeld responds to Hayward's (2002) paper by providing a discussion of the economic benefits that the income trust structure has provided for the Canadian economy.

Shenfeld notes that the $1 billion impact cited in the media is overstated and that the "government revenue impacts from reduced corporate income taxes are substantially offset by increased and accelerated personal tax collections". This is based on an order of magnitude quantification of the potential major tax effects of income trusts.

Aggarwal and Mintz

Aggarwal and Mintz note that the surge in income trust financing is at least partly due to the lack of full integration of corporate and personal taxes. They suggest "cutting dividend taxes by enhancing the dividend tax credit for distributions from high tax sources of income should be considered as an approach to improve the efficiency of capital markets". A range of $500 to $700 million is provided.

One of the efficiency effects noted in the study is that trust "financing results in a lower cost of capital for businesses due to the tax benefits received by investors. We estimate that tax benefits are $600 million".

Their "order of magnitude assessment" is based on the following tax revenue impacts:

1. A reduction in corporate income tax revenues;
2. An increase in personal income taxes from income trust distributions;
3. A reduction in dividend payments and corresponding tax on dividends; and
4. A reduction in capital gains on shares and following capital gains taxes.

It is noteworthy that the estimate of a $600 million tax loss represents an estimate for current year 2004 tax impacts.

2. RISK ANALYSIS PROCESS OVERVIEW

Economic impact assessments traditionally take the form of a single "expected outcome", or "most likely outcome", supplemented with alternative scenarios. The limitation of an assessment with a single expected outcome is clear — while it may provide the single best statistical estimate, it offers no information about the range of other possible outcomes and their associated probabilities. This problem becomes particularly important when uncertainty surrounding the underlying assumptions is material.

A common approach is to create "high case" and "low case" scenarios to bracket the central estimate. The scenario approach, however, can exacerbate the problem of dealing with risk because it gives no indication of likelihood associated with the alternative outcomes. The commonly reported "high case" may assume that most underlying assumptions deviate in the same direction from their expected value, and likewise for the "low case." More specifically, in the "high case" the values of key input factors would typically be higher than the expected or average value, and in the "low case" they would be lower. In reality, the likelihood that all underlying factors shift in the same direction simultaneously is just as remote as that of everything turning out as expected.

Another common approach to providing added perspective on reality is "sensitivity analysis." Key assumptions are varied one at a time in order to assess their relative impact on the expected outcome. A problem here is that the assumptions are often varied by arbitrary amounts. A more serious concern with this approach is that, in the real world, assumptions do not deviate from actual outcomes one at a time. It is the impact of simultaneous differences between assumptions and actual outcomes that is needed to provide a realistic perspective and risk profile of an impact assessment.

Risk Analysis provides a way around the problems outlined above. It helps avoid the lack of perspective in "high" and "low" cases by measuring the probability or "odds" that an outcome will actually materialize. This is accomplished by attaching ranges (probability distributions) to the forecasts of each input variable. The approach allows all inputs to be varied simultaneously within their distributions, thus avoiding the problems inherent in conventional sensitivity analysis. The approach also recognizes interrelationships between variables and their associated probability distributions.

The Risk Analysis Process involves four steps:

Step 1. Define the structure and logic of the impact assessment problem;

Step 2. Assign estimates and ranges (probability distributions) to each variable and coefficient in the developed structure and logic model;

Step 3. Engage experts and stakeholders in a review of the model and its assumptions, and risks to their realization (the "RAP Session"); and

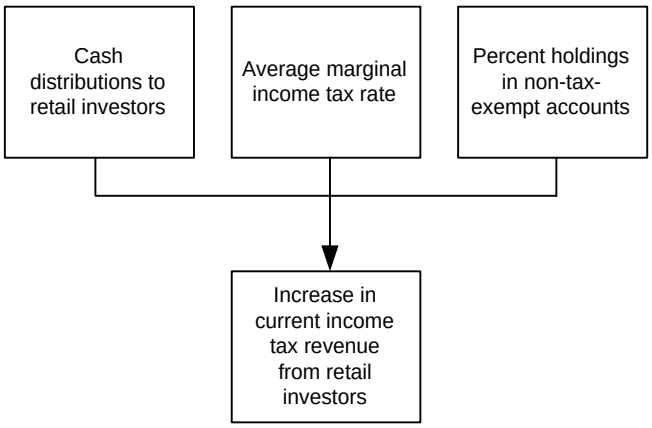
Step 4. Conduct (or execute) the impact assessment and risk analysis of outcomes.

Each of these steps is discussed in more detail below.

Step 1. Define Structure and Logic of the Impact Assessment Problem

A "structure and logic model" depicts the variables and cause and effect relationships that underpin the impact assessment problem at-hand (Figure 1). Although the structure and logic model is written down mathematically to facilitate analysis, it is also depicted diagrammatically in order to permit stakeholder scrutiny and modification in Step 3 of the process (see below).

Figure 1: Illustrative Example of a Structure and Logic Model: Increase in Current Income Taxes Paid by Retail Investors



Step 2. Assign Central Estimates and Conduct Probability Analysis

Each variable is assigned a central estimate and a range (a probability distribution) to represent the degree of uncertainty. Special data sheets are used (see Table 2) to record the estimates. The middle column gives an initial median while the first and third columns define an uncertainty range representing an 80 percent confidence interval. This is the range within which there exists an 80 percent probability of finding the actual outcome. The greater the uncertainty associated with a model variable, the wider the range.

Table 2: Illustrative Example Data Sheet : Percent Holdings in Tax-Deferred Accounts

TAX-EXEMPT ACCOUNTS (PERCENT OF TOTAL)			
INVESTOR TYPE	**10% LOWER**	**MEDIAN**	**10% UPPER**
Retail	25	30	35

Probability ranges are established on the basis of both statistical analyses of historical data as well as subjective probability assessment by experts in the field. Probability ranges need not be normal or symmetrical ─ that is, there is no need to assume the bell shaped normal distribution. The bell curve of normal distribution assumes an equal likelihood of the values of a model variable being lower and higher than the average expected value. However, it might well be the case, for example, that if a projected inflation rate deviates from expectations, circumstances are such that it is more likely to be higher than the median expected outcome, rather, than lower than the median expected outcome.

The RAP© computer program transforms the ranges as depicted above into formal probability distributions (or "probability density functions"). This liberates the non-statistician from the need to appreciate the abstract statistical depiction of probability and thus enables stakeholders to understand and participate in the process whether or not they possess statistical training.

Step 3. Conduct Expert Evaluation: The RAP Session

Step 3 involves the formation of an expert panel and the use of facilitation techniques to elicit their risk and probability beliefs about:

The structure of the forecasting framework; and

The uncertainty attached to each variable and forecasting coefficient within the framework.

In (1), experts are invited to add variables and hypothesized causal relationships that may be material, yet missing from the model. In (2), panelists are engaged in a discursive protocol during which the central estimates and ranges, provided to panelists in advance of the session, are modified according to subjective expert beliefs. This process is aided with an interactive "groupware" computer tool that permits the visualization of probability ranges under alternative belief systems.

Step 4. Conduct Risk Analysis

Once all of the data sheets (i.e. input values) are finalized, the risk analysis software is used to transform ranges given in the data sheets into statistical probability distributions.

These distributions are combined using simulation techniques that allow all variables to vary simultaneously from their expected values (see Figure 2). The result is *the expected impact of income trusts on tax revenues* together with higher and lower values of the possible impact and estimates of the probability of obtaining these values given the uncertainty in the underlying assumptions (see Table 3 for an example).

Figure 2: Combining Probability Distributions

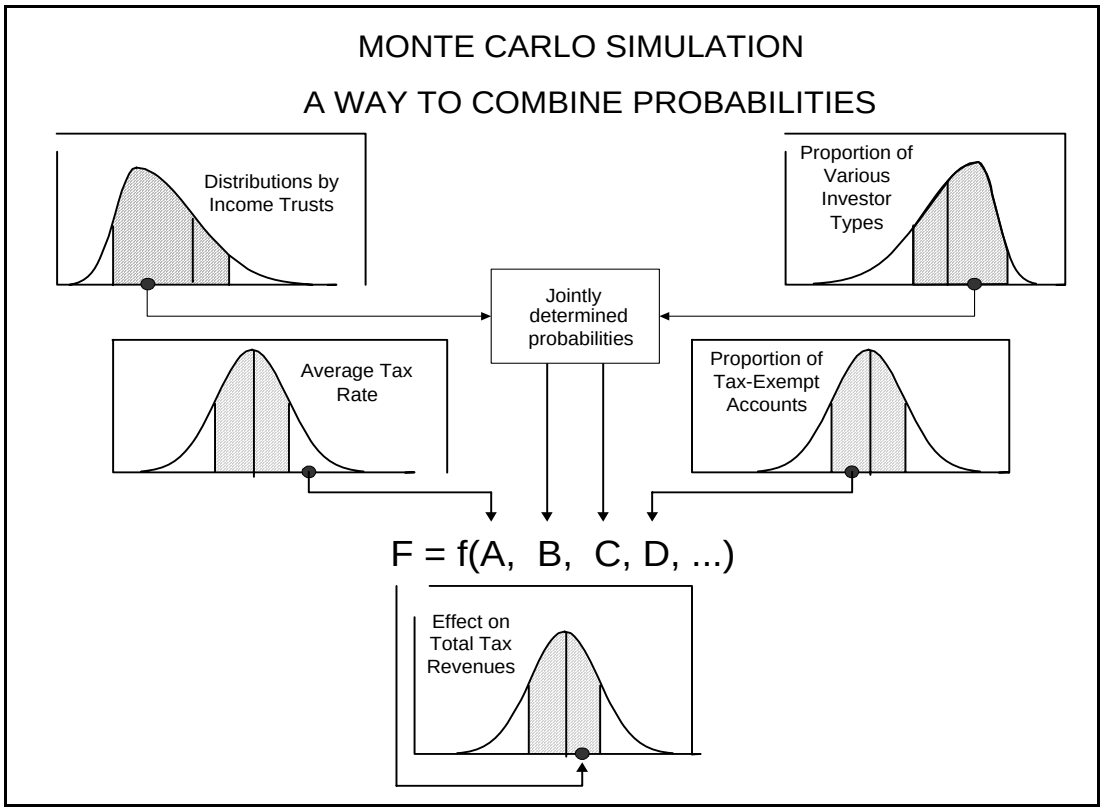


Table 3: Example Results of Impact Assessment: Total Effect of Income Trusts on Tax Revenues ($Millions)

Total Tax Loss	Probability of Not Exceeding the Value at Left in Percent
$1,500 M	95%
$1,200 M	90%
$1,000 M	80%
$600 M	70%
$400 M	60%
$200 M	50%
$100 M	40%
$50 M	30%
$0 M	20%
-$10 M	10%
-$99 M	5%

3. KEY MODELING ASSUMPTIONS

There are several key modeling assumptions, underlying the analysis, that are important to note prior to the presentation of any discussion of methodology or results. These modeling assumptions are made to help ensure the objectivity of the analysis and are important to keep in mind when interpreting the results.

All tax impacts presented represent the tax impact on both federal and provincial governments. No attempt has been made to isolate tax impacts by government level or individual province.

The comparison point for estimating tax effects is "corporate form" versus "income trust form". The estimates of tax changes provided reflect the difference between taxes paid with the operating entity structured as a corporation relative to that same entity structured as an income trust. This study makes no attempt to speculate that in the absence of the income trust form, the corporate entity may have re-structured into other more tax efficient forms such as limited liability partnerships, etc.

When quantifying tax effects, the distribution of income trust investors by investor type (e.g., retail, non-resident, institutional) is used as the modeling base. We explicitly assume that in the absence of the income trust form, these same investors would hold common shares in the same entity structured as a corporation. The same holds for the relative proportion of income held in tax-exempt accounts.

The 2002 fiscal year data for the income trust market segment is used as the base year for the study. This is the most recent fiscal year that has complete financial statements available for all income trusts. Many parameter estimates are derived from this 2002 data. Extrapolations are made to 2003 and 2004 based on industry forecast growth rates, etc.

The value of income received from both corporations and income trusts in (currently) tax-exempt accounts is quantified. This income is assumed to be re-invested in these accounts until it is withdrawn at some point in the future. At the time of withdrawal, it is taxable – likely at a lower marginal rate. The present value of these future taxes is included in this assessment. Income received in pension funds is treated similarly. All study results are presented both inclusive and exclusive of these deferred taxes.

Taxes derived from capital gains for both income trusts and common shares (in non tax-deferred accounts) are treated as a current year impact. While these gains are not actually realized until the share or unit is sold, this assumption is utilized for simplification.

4. MODEL STRUCTURE AND LOGIC

The conversion of a corporation to an income trust has two broad ranging tax effects. The first is that a trust changes the nature of the tax payments. Under the corporate form, income taxes are received from corporations and individual taxes for dividends received and capital gains realized. Under the income trust form, corporate income taxes are (mostly) eliminated as the income trust distributes all income to its unit-holders in the form of interest, dividends and returns of capital. The unit holders are taxed on this income. The second broad effect is that the trust structure changes the timing of tax payments as some of the income received by unit holders is held in currently tax-exempt accounts or is received as a return of capital that it only taxable when the income trust unit is sold.

This study quantifies the tax revenue impacts associated with the income trust structure relative to a corporate structure. The period 2002 through 2004 is used as the study period where tax effects are quantified. The tax implications are calculated using income trusts currently active in the market as of January 2004. Earnings before interest, taxes, depreciation and amortization (EBITDA) is the primary variable utilized for quantifying all the tax effects modeled. It is a measure of the underlying business for both income trust and corporations.

The following market segments stratify the income trust market in this evaluation:

- Diversified businesses;
- REITs;
- Oil and gas; and,
- Other.

In analyzing tax impacts on individuals, the shareholder/income trust unit-holder population is divided into the following four groups:

- Pension funds;
- Mutual funds;
- Retail investors; and
- Non-resident investors.

Tax Effects Modeled

Through a meta-analysis of literature and input from the expert panel and other stakeholders, several tax effects are identified and modeled. These are presented in Table 4:

Table 4: Tax Effects Modeled

#	Tax Effects
Taxes Under the Corporate Structure	
1	Foregone Corporate Income Taxes Paid
2	Foregone Personal Income Taxes From Capital Gains
3	Foregone Personal Income Taxes From Dividend Income
4	Foregone Taxes Related to Third-Party Corporate Interest Payments
Taxes Under the Income Trust Structure	
5	Corporate Income Taxes Paid by the Income Trust
6	Personal Income Taxes From Income Trust Distributions of Interest and Dividends
7	Personal Income Taxes From Income Trust Capital Gains (e.g., unit-price appreciation and return of capital)
8	Corporate Income Taxes from Transitional Capital Gains (e.g., appreciation in market value at conversion to income trusts)
9	Taxes Related to Third-Party Corporate Interest Payments

Two other tax effects were identified by panel members but are not modeled in this assessment. First, capital tax effects are not modeled as the effect of income trusts is not expected to be material and capital taxes are in the process of being phased out by the Federal government. Also, provincial land transfer tax effects, a one-time tax effect, were also identified but are not modeled for similar reasons.

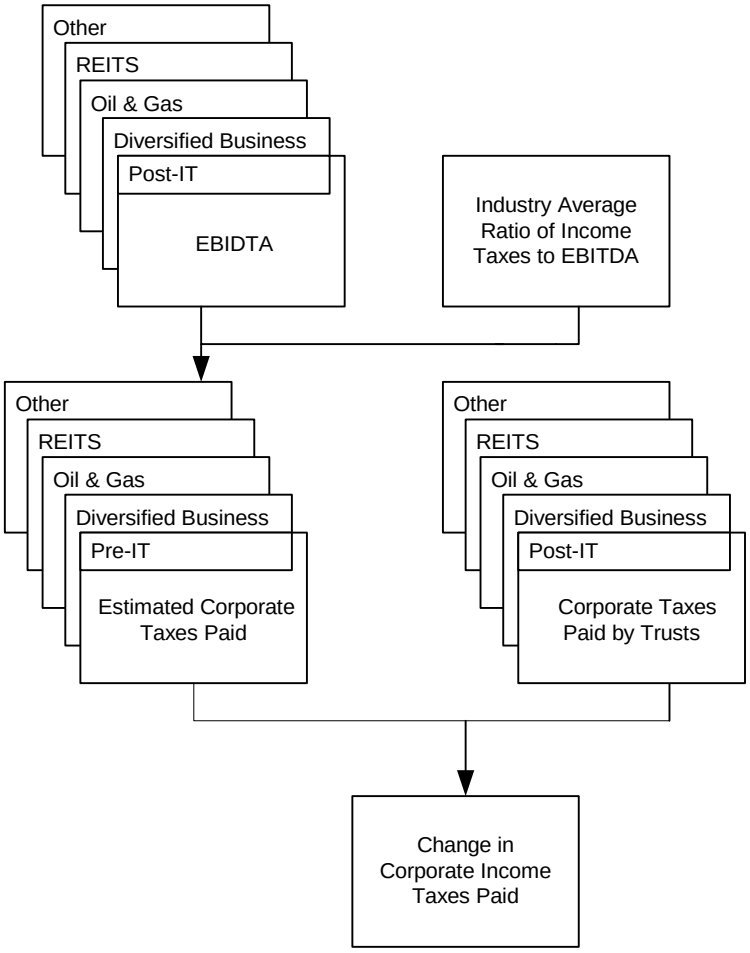
The remainder of this section provides an overview of each tax effect modeled and includes structure and logic diagrams which provide a graphic representation of how each effect is quantified.

Tax Effects #1, #5: Change in Corporate Income Taxation

Under the income trust structure, the entity reduces its tax liability by paying tax-deductible interest on the loan to the trust. The trust acts as a flow-through vehicle where income earned by the trust flows through to unit-holders who pay tax on the income received.

EBITDA is used as the measure of income for determining both corporate taxes paid under the corporate form and income trust form. The ratio of corporate income taxes to EBITDA has been used to calculate the taxes paid by the entity under both corporate form and income trust form. The enumeration of these ratios is based on actual corporate and income trust financial data and is discussed in Section 6. Figure 3 provides the logic model for quantifying the change in corporate income tax effects.

Figure 3: Structure and Logic Model of Corporate Income Tax Effects



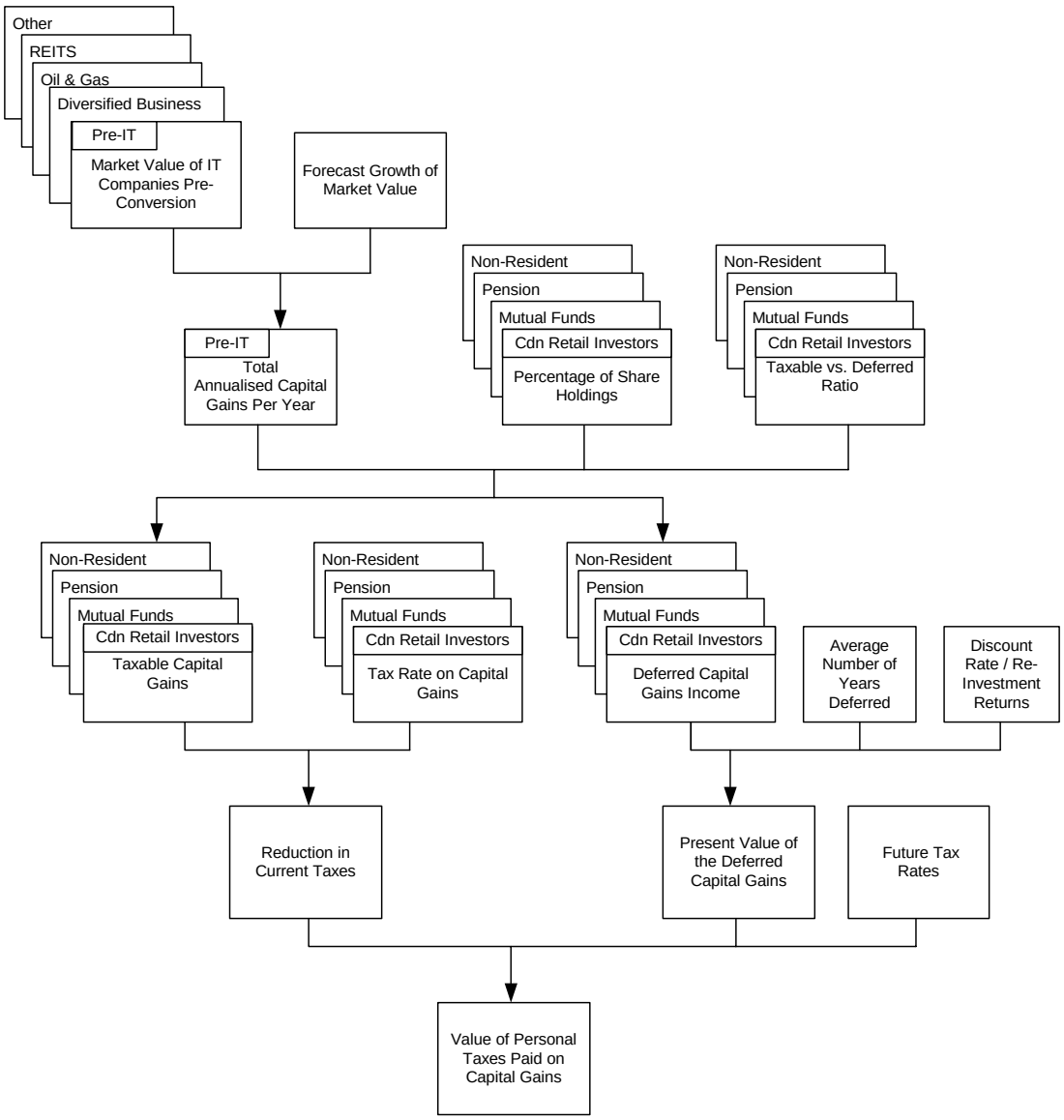
Tax Effect # 2: Foregone Personal Income Taxes From Capital Gains

Common shareholders of corporations have the potential for realizing capital gains through the appreciation of the share units over time. In recent years, capital gains have become an increasingly important part of the corporations' total return. Capital gains are only realized at the time of sale and can be offset by capital losses elsewhere in the portfolio. Capital gains are immediately taxable in the hands of the shareholder at their marginal tax rates (adjusted for a 50% inclusion rate) if it is held in a non-tax exempt account. If it is held in a tax exempt account, it is not taxable until it is withdrawn as

income at some point in the future. The present value of these future taxes is estimated and included in this evaluation.

Figure 4 provides the structure and logic model for quantifying foregone personal income taxes from corporate capital gains. The type of common shareholder and the proportion of capital gains realized in tax-deferred accounts are accounted for in this modeling framework.

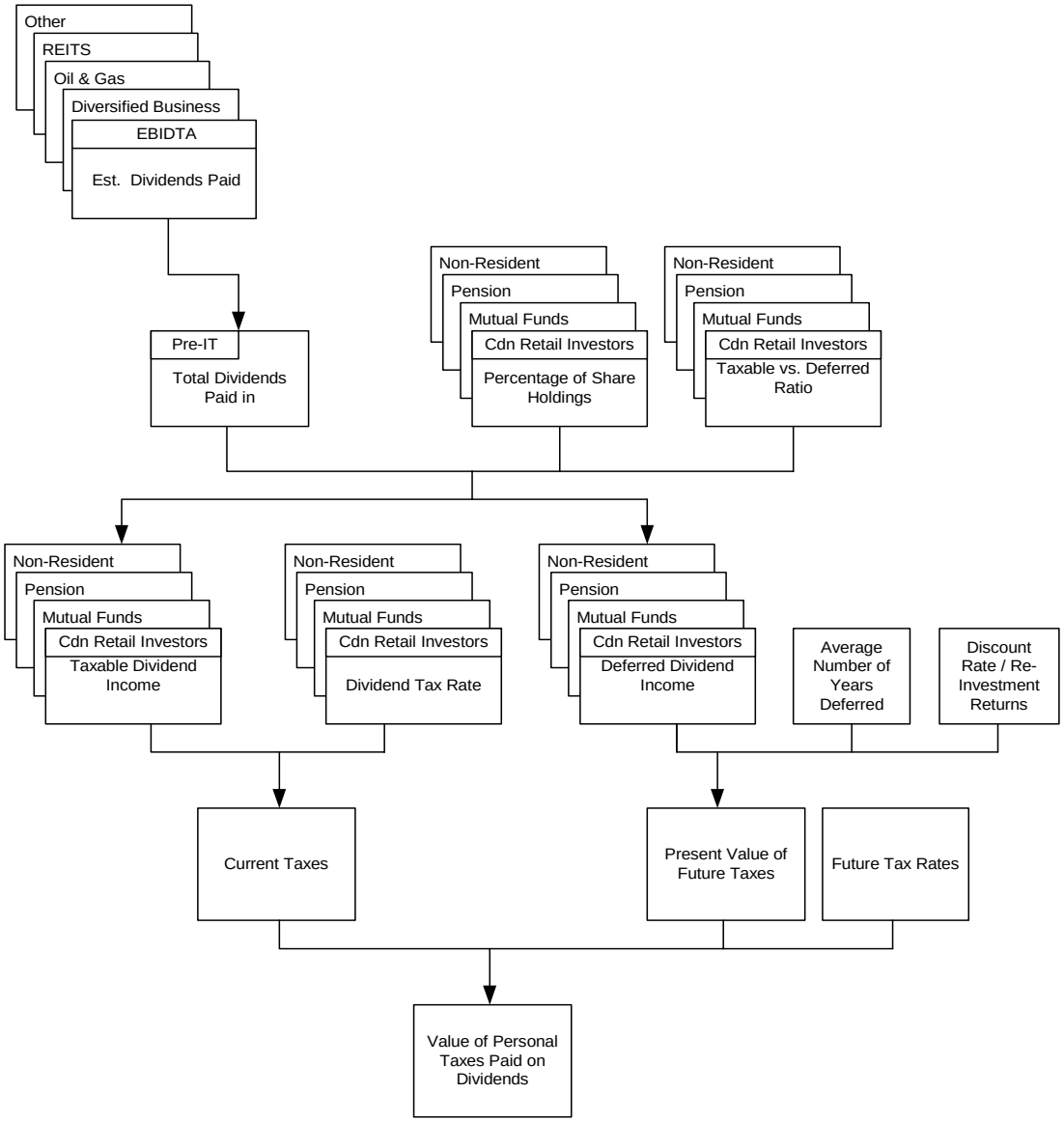
Figure 4: Structure and Logic Model of Foregone Personal Income Taxes From Capital Gains



Tax Effect # 3: Foregone Personal Income Taxes From

Corporations pay out a fraction of their after-tax income to common shareholders in the form of corporate dividends. This dividend income is immediately taxable in the hands of the shareholder at their marginal tax rates for dividends if it is held in a non-tax exempt account. If it is held in a tax exempt account, it is likely to be re-invested until it is withdrawn as income at some point in the future. Personal income taxes will be paid on that income at that future date. The present value of these future taxes is estimated and included in this evaluation. Figure 5 provides the logic model for quantifying foregone personal income taxes from dividend income.

Figure 5: Structure and Logic Model of Foregone Personal Income Taxes From Dividend Income



Tax Effect #6: Personal Income Taxes From Income Trust Distributions of Interest and Dividends

Trusts as flow-through vehicles transfer the tax burden from the operating company to the trust's unit holders. Most of the trusts' holdings in the operating company are considered debt and as a result most of the income flows through to unit holders as interest income. Income is also distributed to unit holders in the form of dividends. The income is divided into tax-deferred and immediately taxable amounts by investor type as discussed above. Figure 6 and Figure 7 illustrates the quantification of these tax effects.

Figure 6: Personal Income Taxes From Income Trust Distributions of Interest

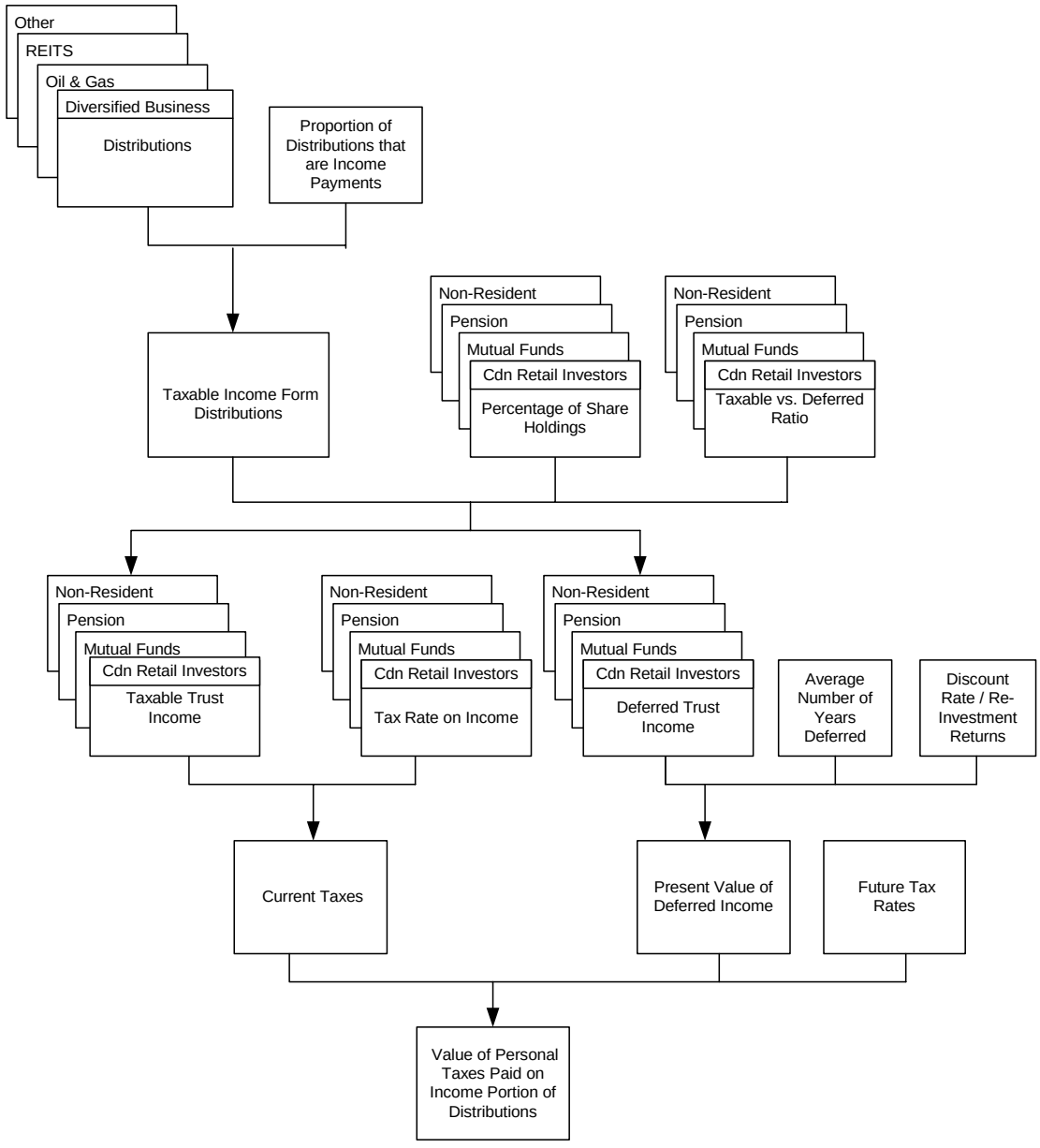
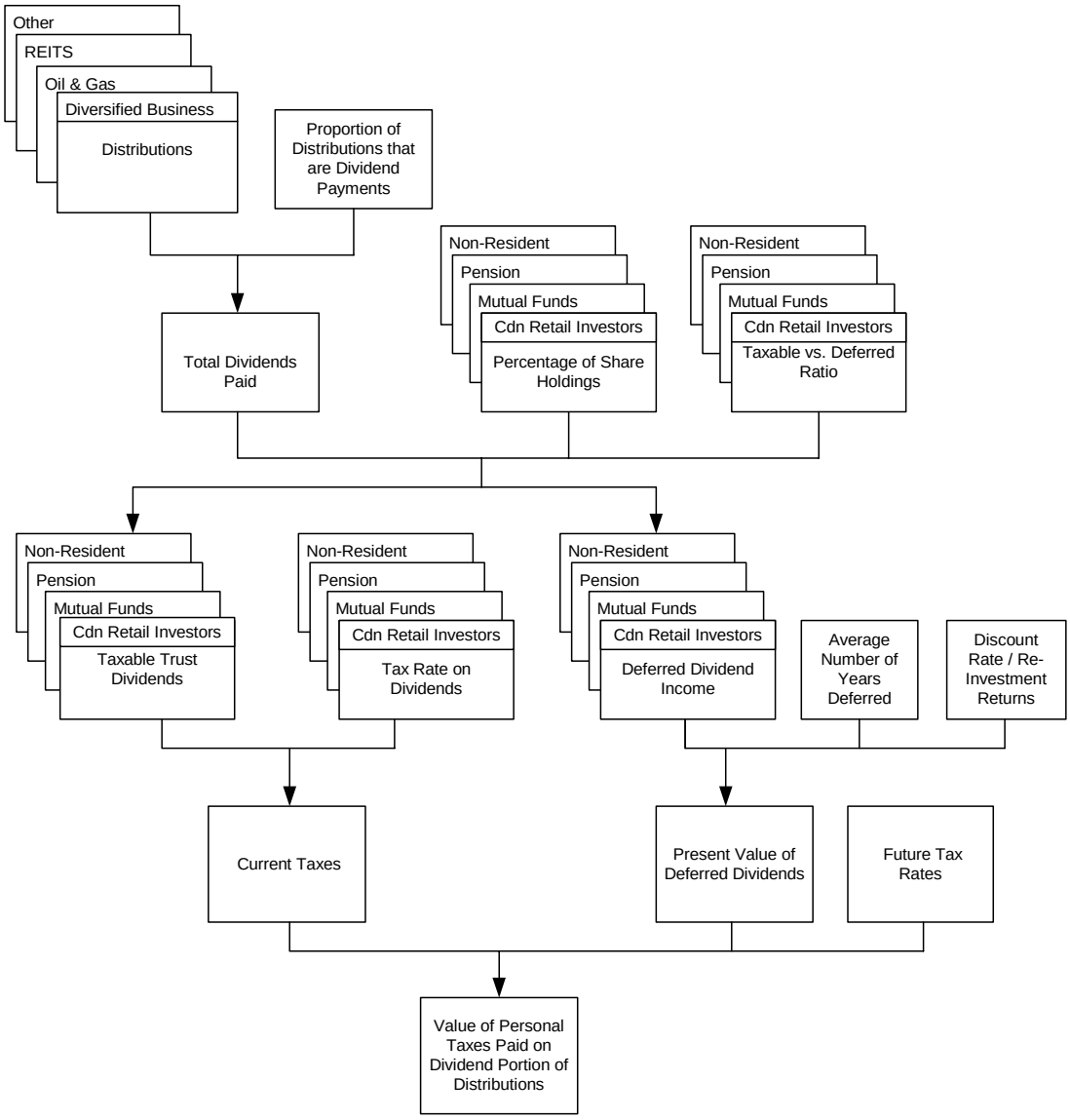


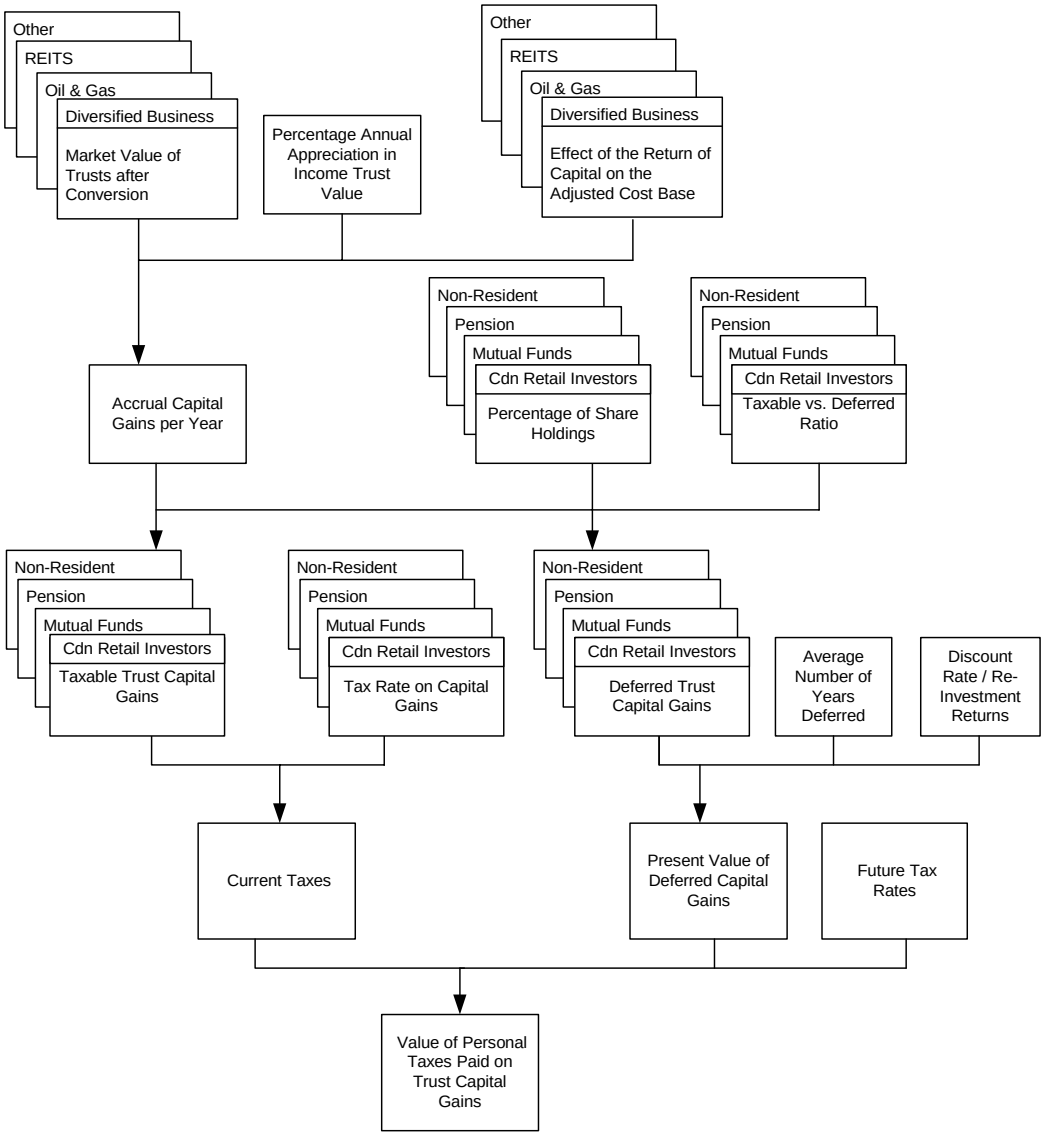
Figure 7: Personal Income Taxes From Income Trust Distributions of Dividends



Tax Effect #7: Personal Income Taxes From Income Trust Distributions of Return of Capital and Income Trust Capital Gains

Trusts, which are designed to pay out most of the earnings to the unit holders, are not expected to generate significant capital gains. The return of capital portion of distributions does, however, reduce the adjusted cost base of the units. This will in effect cause a capital gain to be realized by unit holders. The logic model of the quantification of personal income taxes from capital gain income is provided in Figure 8.

Figure 8: Personal Income Taxes From Income Trust Distributions of Return of Capital and Income Trust Capital Gains

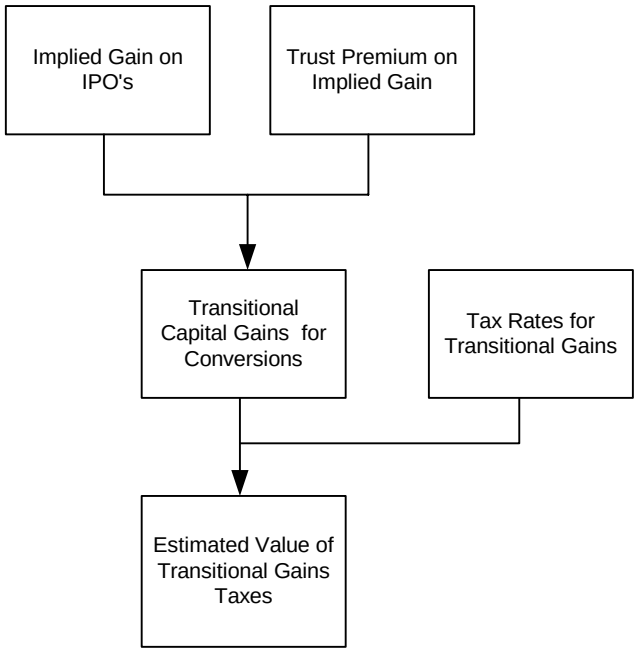


Tax Effect #8: Corporate Income Taxes from Transitional Capital Gains

Upon conversion to an income trust, a potential capital gain is triggered. The actual amount of the gain depends on the cost base of the entity being transferred into the income trust and the proceeds received for these assets at the time of conversion. As has been documented in previous income trust studies, there is a usually a significant premium attached to the value of operating that are converted to income trusts.

The transitional capital gain is a one-time benefit to governments' tax revenues. It should be pointed out that only the portion of the gain attributable to the premium provided by the trust structure itself is quantified. Also, potential transitional capital gains associated with conversions where a straight share unit for trust unit has occurred is not quantified. Figure 9 provides the logic diagram for quantifying transitional capital gains.

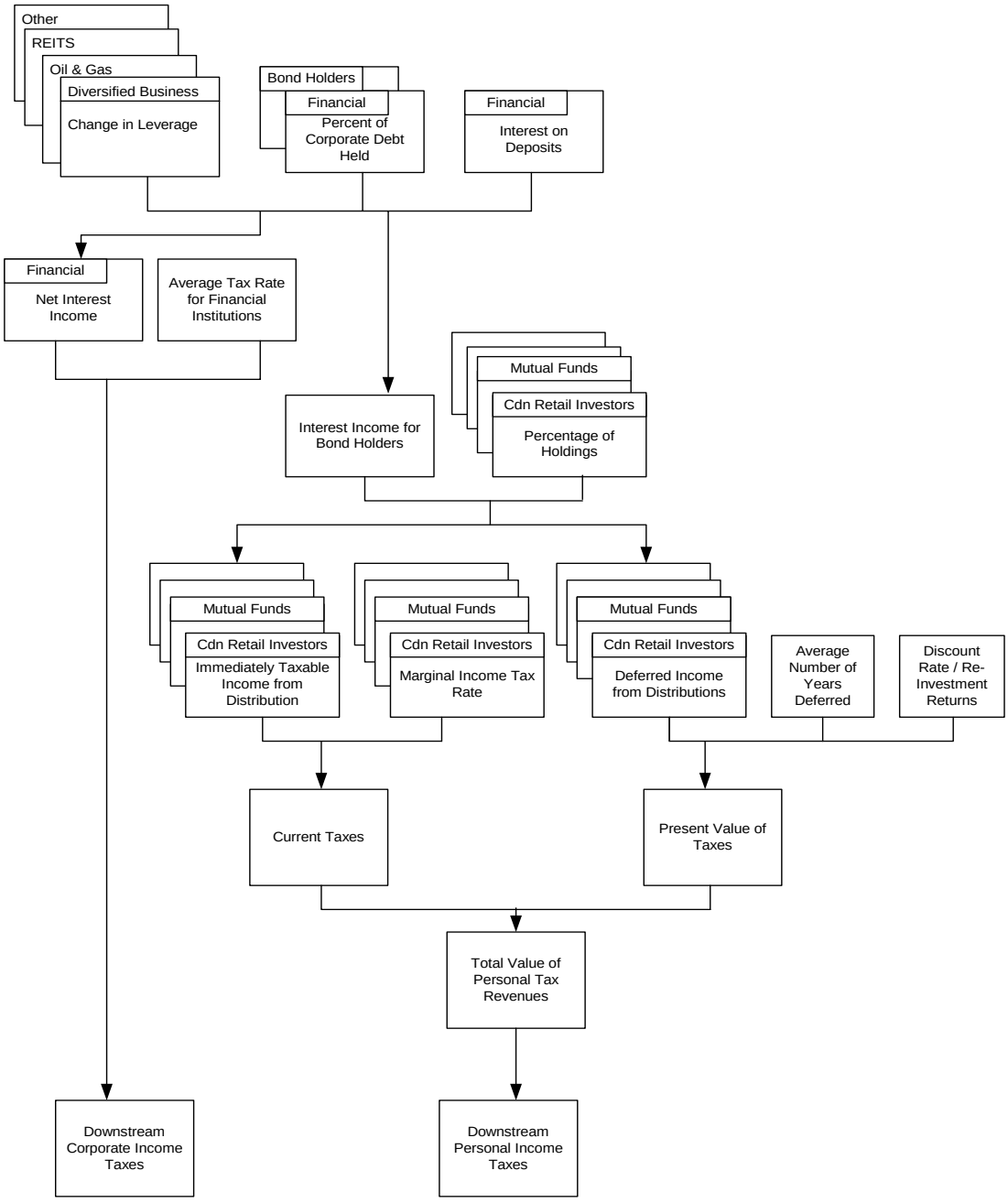
Figure 9: Structure and Logic Model for Corporate Income Taxes from Transitional Capital Gains



Tax Effects #4, #9: Downstream 3rd Party Interest Taxation Effects

Relative to the corporate form, the amount of third-party debt held by an income trust is significantly reduced as it is replaced by debt held by the trust. There are downstream effects on taxation associated with the third-party debt that was replaced providing less income to bond-holders and financial institutions. Figure 10 provides the structure and logic model for quantifying these effects.

Figure 10: Structure and Logic Model for the Change in Taxes Due to Downstream 3rd Party Interest



5. INCOME TRUST MARKET – 2002

As fiscal year 2002 is the latest fiscal year for which publicly reported annual data on the income trust sector is available, it was selected as the base year for this analysis. All of the financial data for income trusts is obtained from the annual reports, financial statements and prospectuses available on the SEDAR website www.sedar.com. Additionally, distribution data was collected from the T-3 forms contained on The Canadian Depository for Securities website www.cds.ca.

Income Trust Sector

The starting point for defining the income trust sector in this analysis is the 135 publicly traded income trusts at the end of 2003.[16] From this list, a number of income trusts were excluded from the study because:

- They are currently listed as limited liability partnerships (6 trusts);
- Their previous form was a limited liability partnership and as such the tax effects relative to the income trust form are likely offsetting (6 trusts); and,
- They conduct all of their business in the United States (8) and thus would not result in an erosion of Canadian corporate income taxes.

Of the remaining 115 trusts, data is available for 89 trusts in 2002 as many of these trusts were not formed until 2003 (or late 2002). To estimate forgone corporate income tax revenues, pre-income trust financial data was collected for a sample of 42 of these trusts.

Characteristics of the Income Trust Data Set

The financial statistics for the 89 income trusts examined for 2002 is provided in Table 5 by major market segment – diversified business, oil and gas, REITs and other (power, pipelines and terminals and storage). It is interesting to note that:

- The income taxes were not completely eliminated for the income trust sector in 2002 as $70.6 million in corporate income taxes were paid;
- Almost two-thirds of EBITDA were paid out to unit-holders in the form of distributions;
- Income trusts still had significant amounts of third party debt and interest payments; and,
- The average effective yield for the income trust market in 2002 is 8.9%.

[16] Trusts listed by the CIBC as being active at the end of 2003 can be found in the CIBC World Markets Equity Research reports.

Table 5: Financial Data for the Income Trust Sector, 2002 ($ Figures in Millions)

Segment	# of Trusts	Market Cap	EBITDA	Income Taxes	3'rd Party Interest	Distributions
Diversified Business	39	$9,874	$1,062	$37.1	$90.3	$613
Oil and Gas	18	$12,551	$2,138	$26.2	$148.1	$1,516
REIT's	17	$9,096	$1,432	$2.3	$513.0	$734
Other	15	$6,994	$781	$5.0	$77.6	$574
Total	89	$38,515	$5,412	$70.6	$829.0	$3,437

Table 6 provides the breakdown of income trust distributions by type of distribution – interest, return of capital and dividends. For 2002, in aggregate, 55.1 percent of income trust distributions are interest payments, 41.5 percent are return of capital and 3.4 percent are dividends. These proportions vary significantly across individual market segments with the Oil and Gas and REIT distributions consisting of significantly more in return of capital.

Table 6: 2002 Income Trust Distributions ($millions)

	Distributions ($M)				% of Total		
Segment	Total	Interest	ROC	Dividends	Interest	ROC	Dividends
Diversified Business	$613	$448	$118	$47	73.1%	19.2%	7.7%
Oil and Gas	$1,516	%801	$710	$4.4	52.9%	46.8%	0.3%
REIT's	$734	$292	$426	$15.5	39.8%	58.1%	2.1%
Other	$574	$353	$173	$48.3	61.5%	30.1%	8.4%
Total	$3,437	$1,895	$1,427	$115.5	55.1%	41.5%	3.4%

6. MODEL PARAMETER VALUES

This section provides the model variables and parameter values that are used in the quantification of the tax effects of income trusts. For each variable, the following three statistical values are provided:

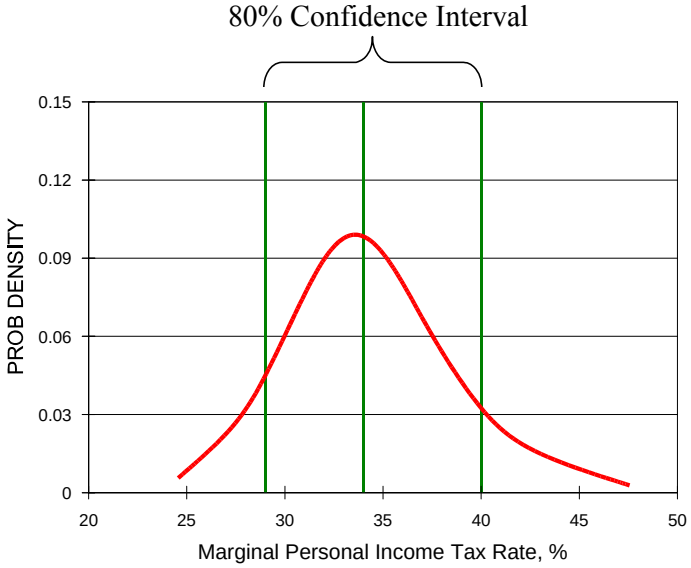
- the value that represents a 90 percent probability of exceeding (POE) in actuality;
- the value that represents a 50 percent probability of exceeding in actuality; and,
- the value that represents a 10 percent probability of exceeding in actuality.

These values are used to determine the shape of the probability distribution for the particular variable under consideration. Probability density functions are provided for some of the key model parameters. All other variables used in the risk analysis are provided in tabular form in Table 7.

Average Marginal Personal Tax Rate

Figure 11 provides the probability density function for the rate at which personal income is taxed.

Figure 11: Probability Density Function for Personal Income Tax Rate on Income



	Probability of Exceeding		
	90%	50%	10%
Marginal Personal Income Tax Rate	29%	34%	40%

The median estimate of 34% reflects the average marginal tax rate employed in the study by Aggarwal, Lalit and Jack Mintz. This tax data was provided to these authors by the Department of Finance. The 90 percent and 10 percent probability of exceeding estimates reflect both opinion from industry experts and an HLB assessment of average tax rates using Statistics Canada data. A similar shape is used for the density functions of other personal tax rates on dividends and capital gains tax rates after adjusting for dividend tax credits and inclusion rates.

Average Pre-IT Corporate Income Tax Rate

Pre-income trust financial data was collected for 42 of the 115 income trusts identified (pre-income trust data was not readily available for those income trusts that have been established for a number of years). The sample consisted of 26 diversified business trusts, 7 oil and gas trusts, 6 REITs and 3 other trusts. For each of these current income trusts, pre-conversion corporate income taxes paid as a percentage of EBITDA, EBITDA and other financial parameters as collected.

Probability density functions for pre-trust income tax rates were estimates using multiple regression techniques. Pre-income trust tax was estimated as a function of EBITDA and type of industry, namely:

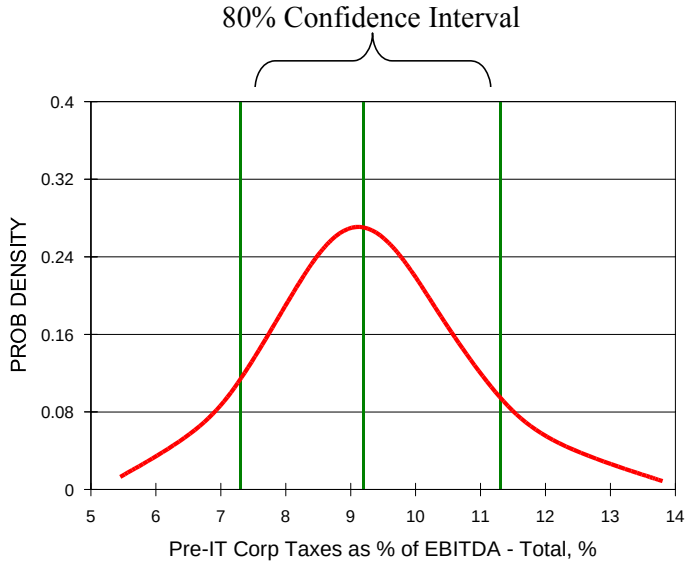
Equation 1: $\text{Pre-it tax}_{ij} = \beta_1 * \text{Ebitda}_{ij} + \beta_2 * \text{Ebitda}_{ij} * \text{Industry}_i + \varepsilon_{ij}$,

where Pre-it tax_{ij} represents the pre-IT tax amount for an individual company within an industry sector, Ebitda_{ij} represents the 2002 EBITDA for that company, Industry_i represents the industry sector the company belongs to, β_1 and β_2 are parameters that are estimated by the regression, and ε_{ij} are error terms with zero mean and constant variance.

Analysis using the multiple regression model depicted in Equation 1 is similar to conducting simple linear regression models (without the intercept) of pre-IT tax on 2002 EBITDA separately for the four industry sectors. However, by pooling the data into a single multiple regression equation, a pooled estimate of the variance is used, making the regression more powerful than the individual regressions. Diagnostic tests were conducted to validate the model assumptions such as constant variance across all industry segments. These tests were satisfied.

Figure 12 provides the probability density function for pre-income trust average corporate taxes as a percent of EBITDA across all industry segments. The average effective corporate income tax rate is 9.2 percent of EBITDA. The eighty percent confidence interval ranges between 7.3 percent and 11.2 percent. Industry specific parameter tax rates are provided in Table 7.

Figure 12: Probability Density Function for Pre-IT Corporate Taxes as a Percent of EBITDA



	Probability of Exceeding		
	90%	**50%**	**10%**
Pre-IT Corporate Taxes Paid as a % of EBITDA – Total	7.3%	9.2%	11.3%

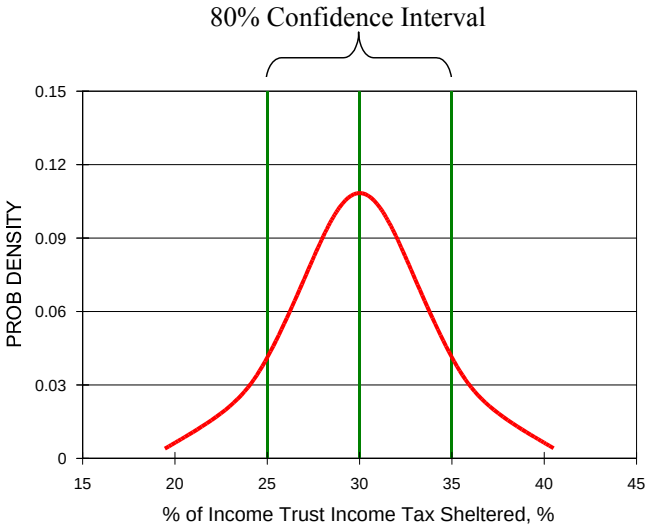
For those income trust market segments where sample representation was relatively low, HLB directly contacted the Chief Financial Officer of several income trusts to discuss the tax issue. HLB also examined several large Oil & Gas companies suggested by these CFO's to see how they were different from the sample. An adjustment was made to both the leverage range and the level of dividend payments as a result.

In discussions with the REIT sector, HLB found that three of the largest REITs - CREIT, Riocan REIT and Summit REIT all started out in the 1980s as mutual funds. They all converted to REITs in the early 1990s. Mutual funds are also flow-through investments and those three REITs never paid any corporate taxes or any dividends. HLB also examined several large publicly traded real estate companies suggested by these CFO's to see how they were different from the sample. Only the dividend payments were adjusted, as a result, to take into account the extra information about the market.

Percent of Personal Holdings Held in Tax Exempt Accounts

Figure 13 provides the density function for the percent of income trust units and common shares held in tax exempt accounts. The median estimates and 80 percent confidence level has been derived by HLB based on input from financial industry experts. On average, 30 percent of income trust holdings are held in tax exempt accounts.

Figure 13: % of Personal Investments Held in Tax Exempt Accounts

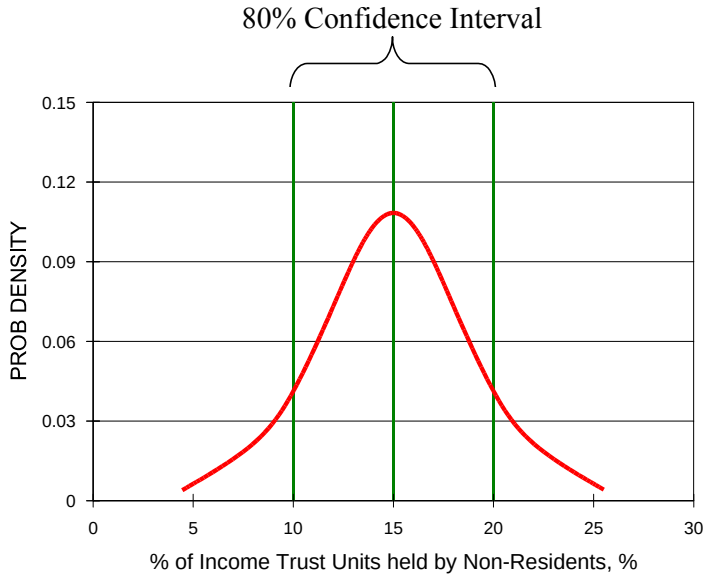


	Probability of Exceeding		
	90%	50%	10%
% of Trust Income Tax Sheltered	25%	30%	35%

Percent of Income Trust Holdings by Non-Residents

Figure 14 provides the density function for the proportion of income trust units held by non-residents. The median estimates and 80 percent confidence level has been derived by HLB based on input from financial industry experts. Currently, it is expected that approximately 15 percent of income trust holdings are held by non-residents. It has also been assumed that a 15 percent withholding tax is applied to income received by non-residents.

Figure 14: Percent of Income Trust Holdings by Non-Residents



	Probability of Exceeding		
	90%	**50%**	**10%**
% of Income Trust Units Held by Non-Residents	10%	15%	20%

Other Model Parameters

Table 7 provides a complete list of all variables included in the model with medians and 80 percent confidence intervals. In addition, the individual tax effects (listed in Table 4) that the variable impacts is provided along with a brief discussion of the data sources.

Table 7: Model Parameters

	Variable	Tax Effect #	90% POE	50% POE	10% POE	Source
1	Estimated Corporate Taxes as a Percentage of EBITDA Diversified Business	1	17.5%	20.9%	24.3%	Sample data taken from the annual reports of companies prior to conversion (where available), as well as, from the IPO prospectuses which had sufficient financial data. www.sedar.com
2	Estimated Corporate Taxes as a Percentage of EBITDA Oil & Gas	1	2.0%	3.4%	10.0%	
3	Estimated Corporate Taxes as a Percentage of EBITDA REITs	1	5.3%	7.6%	9.9%	
4	Estimated Corporate Taxes as a Percentage of EBITDA Other	1	3.6%	7.3%	10.9%	
5	Growth In EBITDA 2003 Diversified Business	1,2,3,4,5,6, 7,9	97%	114%	132%	Median figure is the actual change in 2003 taken from the CIBC World Markets *In Yield We Trust* dated January 26th 2004. It is the change in Market Cap between 2002 and 2003. 2002 Market cap was taken from January 10th 2003 In *Yield We Trust*.
6	Growth In EBITDA 2003 Oil & Gas	1,2,3,4,5,6, 7,9	100%	118%	136%	
7	Growth In EBITDA 2003 REITs	1,2,3,4,5,6, 7,9	33%	39%	45%	
8	Growth In EBITDA 2003 Other	1,2,3,4,5,6, 7,9	31%	37%	43%	
9	Growth In EBITDA 2004 Diversified Business	1,2,3,4,5,6, 7,9	10%	15%	20%	The growth rate chosen for 2004 by HLB.

	Variable	Tax Effect #	90% POE	50% POE	10% POE	Source
10	Growth In EBITDA 2004 Oil & Gas	1,2,3,4,5,6, 7,9	10%	15%	20%	
11	Growth In EBITDA 2004 REITs	1,2,3,4,5,6, 7,9	10%	15%	20%	
12	Growth In EBITDA 2004 Other	1,2,3,4,5,6, 7,9	10%	15%	20%	
13	Adjustment For Cross Border Income	1,2,3,4,5,6, 7,9	4%	5%	6%	An adjustment was made for those trusts, which had significant operations in the US. It was decided that the EBITDA would be reduced to account for the effects of US taxation
14	Average Holding Period For Shares	2,7	8 Years	10 Years	12 Years	HLB's proxy used to calculate the capital gains impact.
15	Proportion of Trusts Held By Retail Investors	2,3,6,7	48.8%	54.2%	59.6%	The break down of trust unit holders was taken from the Capital Markets Institute's Study that used data from Statistics Canada. This was the best publicly available data on this parameter.
16	Proportion of Trusts Held By Mutual Funds	2,3,6,7	6.7%	7.5%	8.2%	
17	Proportion of Trusts Held By Pension Plans	2,3,6,7	21.0%	23.4%	25.7%	
18	Percentage of Investments Held In Open Accounts Retail Investors	2,3,6,7	60%	70%	80%	This data is derived from a number of large financial institutions, which

	Variable	Tax Effect #	90% POE	50% POE	10% POE	Source
19	Percentage of Investments Held In Open Accounts Mutual Funds	2,3,6,7	60%	70%	80%	manage significant investments in trusts. According to their internal figures 70% of the investments in trusts are held in open accounts.
20	Percentage of Investments Held In Open Accounts Pension Plans	2,3,6,7	0%	0%	0%	
21	Percentage of Investments Held In Open Accounts Non-Residents	2,3,6,7	100%	100%	100%	
22	Reinvestment Rate Equities	2,3,6,7	6.1%	8.2%	10.3%	Long-term nominal figure for Canadian equities.
23	Reinvestment Rate For Slow Growth Businesses	2,3,4,6,7,9	85.0%	90.0%	95.0%	An adjustment was made to the nominal re-investment rate to reflect the lower growth possibilities of mature businesses. Expressed as a percentage of the equity rate.
24	Current Tax Rates On Interest Retail Investors	2,3,4,6,7,9	28.9%	34.0%	40.0%	The Capital Markets Institute's Study which uses aggregate Statistics Canada data and represents the best publicly available figures. Pensions are assumed not to have any current income.
25	Current Tax Rates On Interest Mutual Funds	2,3,4,6,7,9	28.9%	34.0%	40.0%	
26	Current Tax Rates On Interest Pension Plans	2,3,4,6,7,9	NA	NA	NA	
27	Current Tax Rates On Interest Non-Residents	2,3,4,6,7,9	15%	15%	15%	Defined By Treaty
28	Current Tax Rates On Dividends Retail Investors	2,3,4,6,7,9	15.0%	17.7%	20.4%	The Capital Markets Institute's Study base table with the appropriate correction for the dividend tax credit.
29	Current Tax Rates On Dividends Mutual Funds	2,3,4,6,7,9	15.0%	17.7%	20.4%	

	Variable	Tax Effect #	90% POE	50% POE	10% POE	Source
30	Current Tax Rates On Dividends Pension Plans	2,3,4,6,7,9	NA	NA	NA	Pensions are assumed not to have any current income.
31	Current Tax Rates On Dividends Non-Residents	2,3,4,6,7,9	15%	15%	15%	Defined By Treaty
32	Current Tax Rates On Capital Gains Retail Investors	2,3,4,6,7,9	14.5%	17.0%	20.0%	The Capital Markets Institute's base taxation table with the appropriate correction for the taxation of capital gains. Pensions are assumed not to have any current income.
33	Current Tax Rates On Capital Gains Mutual Funds	2,3,4,6,7,9	14.5%	17.0%	20.0%	
34	Current Tax Rates On Capital Gains Pension Plans	2,3,4,6,7,9	NA	NA	NA	
35	Current Tax Rates On Capital Gains Non-Residents	2,3,4,6,7,9	0%	0%	0%	Defined By Treaty
36	Future Tax Rates on Deferred Income	2,3,4,6,7,9	23.1%	27.2%	32.0%	All deferred income has the same applicable tax rate. A reduction of 20% has been applied, by HLB, to take into account the assumed retirement purpose.
37	Average Holding Period	2,3,4,6,7,9	15	20	25	The average holding period for shares/units is designed by HLB to account for the assumed retirement purpose and that the funds will be withdrawn over a period of years.
38	Pre Trust Dividends as a Percentage of EBITDA Diversified Business	3	5.0%	7.6%	10.2%	This data was taken from the pre it sample. Modifications were made, by HLB, to the level of dividends for Oil & Gas, REITs and Others giving them a base value of 2.9%. This was
39	Pre Trust Dividends as a Percentage of EBITDA Oil & Gas	3	0.9%	2.9%	4.8%	

	Variable	Tax Effect #	90% POE	50% POE	10% POE	Source
40	Pre Trust Dividends as a Percentage of EBITDA REITs	3	0.9%	2.9%	4.8%	done in light of secondary tests and expert opinion. See the discussion on page 28.
41	Pre Trust Dividends as a Percentage of EBITDA Other	3	0.9%	2.9%	4.8%	
42	Pre Trust Interest Payments as a Percentage of EBITDA Diversified Business	4	11.5%	15.4%	19.2%	The median value represents data from the sample. The data was collected from the annual reports of the companies pre it and IPO prospectus. www.sedar.com
43	Pre Trust Interest Payments as a Percentage of EBITDA Oil & Gas	4	2.9%	3.9%	4.9%	
44	Pre Trust Interest Payments as a Percentage of EBITDA REITs	4	30.6%	40.8%	51.0%	
45	Pre Trust Interest Payments as a Percentage of EBITDA Other	4	22.5%	30.0%	37.5%	
46	Bonds Being Held By Retail Investors	4,9	19%	25%	31%	The aggregate figures provided by Statistics Canada and used in the Capital Markets Institute Study are taken.
47	Bonds Being Held By Mutual Funds	4,9	18%	24%	30%	
48	Bonds Being Held By Pension Plans	4,9	17%	22%	28%	
49	Bonds Being Held By Non-Resident	4,9	29%	29%	29%	
50	Bonds Being Held In Open Accounts Retail Investors	4,9	36%	48%	60%	Median figures are taken from the Capital Markets Institute Study estimates of the breakdown of investment holdings held in open
51	Bonds Being Held in Open Accounts By Mutual Funds	4,9	36%	48%	60%	

	Variable	Tax Effect #	90% POE	50% POE	10% POE	Source
52	Bonds Being Held In Open Accounts By Pension Plans	4,9	0%	0%	0%	accounts. The original source is Statistics Canada.
53	Bonds Being Held In Open Accounts By Non-Resident	4,9	100%	100%	100%	
54	Profit Percentage of Downstream Financial Intermediaries	4,9	8%	10%	12%	Statistics Canada Quarterly Financial Statistics for Enterprises Third quarter 2003.
55	Trust Corporate Taxation as a Percentage of EBITDA Diversified Business	5	3.0%	3.5%	4.0%	Actual for 2002 taken from the trusts' annual reports available on SEDAR www.sedar.com
56	Trust Corporate Taxation as a Percentage of EBITDA Oil & Gas	5	0.8%	1.2%	1.6%	
57	Trust Corporate Taxation as a Percentage of EBITDA REITs	5	0.1%	0.2%	0.3%	
58	Trust Corporate Taxation as a Percentage of EBITDA Other	5	0.4%	0.6%	0.8%	
59	Income as a Percentage of Total Distributions Diversified Business	6	75.8%	73.1%	70.4%	Actual data for distributions for 2002 was taken from the trusts' annual reports. Additional information on the actual breakdown of distributions by type of income taken from the T3 forms. The annual reports can be found on SEDAR www.sedar.com the T3s at www.cds.ca
60	Income as a Percentage of Total Distributions Oil & Gas	6	57.6%	52.9%	48.1%	
61	Income as a Percentage of Total Distributions REITs	6	45.8%	39.8%	33.8%	
62	Income as a Percentage of Total Distributions Other	6	65.4%	61.5%	57.7%	

	Variable	Tax Effect #	90% POE	50% POE	10% POE	Source
63	Dividends as a Percentage of Total Distributions Diversified Business	6	6.9%	7.7%	8.5%	Actual data for distributions for 2002 was taken from the trusts' annual reports. Additional information on the actual breakdown of distributions by type of income taken from the T3 forms. The annual reports can be found on SEDAR www.sedar.com the T3s at www.cds.ca
64	Dividends as a Percentage of Total Distributions Oil & Gas	6	0.3%	0.3%	0.3%	
65	Dividends as a Percentage of Total Distributions REITs	6	1.9%	2.1%	2.3%	
66	Dividends as a Percentage of Total Distributions Other	6	7.6%	8.4%	9.3%	
67	Annual Price appreciation of Trust Units	7	-1.0%	0.0%	1.0%	The median value holds with HLB's assumption that there was not any price appreciation in trust units. This is somewhat artificial but was done in an effort to remove any perceived distortion caused by the current Market conditions.
68	Annual Reduction in the Adjusted Cost Base Diversified Business	7	1.4%	1.9%	2.4%	The capital gains attributed to the units are strictly as a result of the return of capital portion of distributions, which reduce the adjusted cost base. The reduction percentage was based on the assumption of a unit price of $10 with
69	Annual Reduction in the Adjusted Cost Base Oil & Gas	7	3.5%	4.7%	5.9%	
70	Annual Reduction in the Adjusted Cost Base REITs	7	4.4%	5.8%	7.3%	

	Variable	Tax Effect #	90% POE	50% POE	10% POE	Source
71	Annual Reduction in the Adjusted Cost Base Other	7	2.3%	3.0%	3.8%	an average yield of 10%. An examination of the actual distributions and IPO unit prices was the basis for that decision.
72	Percentage of the Implied Gain Attributed to the Trust Structure	8	10%	15%	40%	There are a wide variety of opinions on this subject. The Capital Market Institute Study suggests that the valuation can potentially double. Canaccord Capital puts the figure at 25% in their *Daily Letter* dated Thursday March 4th 2004. In *Income Trusts: Old Wine in New Bottles?* by Paul Halpern and Oyvind Norlik, the transitional gain is placed at up to 40% in some cases. HLB's Median figure is based on the NPV of projected tax savings.
73	Implied Gain as a Percentage of the IPO	8	80%	89.2%	100%	The calculated implied gains were then compared to the IPO amount as a means of estimating the implied gain for those IPOs where it was difficult to determine and to estimate the implied gains for 2003. The IPO figure provided an easily attainable figure that did not have any need to eliminate subsequent offerings.

	Variable	Tax Effect #	90% POE	50% POE	10% POE	Source
74	Trust Interest Payments as a Percentage of EBITDA Diversified Business	9	6.4%	8.5%	10.6%	Actual for 2002 taken from the trusts' annual reports available on SEDAR www.sedar.com
75	Trust Interest Payments as a Percentage of EBITDA Oil & Gas	9	1.5%	1.9%	2.4%	
76	Trust Interest Payments as a Percentage of EBITDA REITs	9	26.9%	35.8%	44.8%	
77	Trust Interest Payments as a Percentage of EBITDA Other	9	7.5%	9.9%	12.4%	

	Variable	Tax Effect #	Value	Source
78	Discount Rate	2,3,4,6,7,9	7%	30 year government bond rate plus 2%
80	Average Combined Federal and Provincial Corporate Tax Rates 2002	8	40.1	Canadian Revenue Agency's website www.ccra-adrc.gc.ca
81	Average Combined Federal and Provincial Corporate Tax Rates 2003	8	38.1	
82	Average Combined Federal and Provincial Corporate Tax Rates 2004	8	36.1	

7. RISK ANALYSIS RESULTS

The study results that follow are based on the model structure and logic presented in Section 4, the income trust 2002 base year estimates provided in Section 5 and the model parameters presented in Section 6. Latin hypercube sampling techniques are used to derive these risk-adjusted forecasts.

Findings

Table 8 provides the statistically best estimates of the annual tax impacts of income trusts in the years 2002, 2003 and 2004. These results are separated into:

- Current year tax revenue effects of income trusts;
- Out-year tax revenue effects of income trusts (the value of future government receipts on income received in the current year); and
- Total impacts, combining both current year and out-year effects.

The statistically best estimate (the "mean" estimate) indicates that, by comparison to the tax yield associated with enterprises in their previous corporate form, the conversion to income trusts produced a small net gain in governments' tax revenues in each of the three years (about $51 million in 2004). If taxes associated with one-time transitional capital gains are excluded, the statistically best estimate represents a small tax loss to governments of about $5 million in 2004.

Current Year Impact of Income Trusts on Governments' Revenues

The statistically best estimates indicate current-year tax losses to governments in 2002, 2003 and 2004 of $12 million, $154 million and $217 million respectively. This means that current year tax receipts from income trust distributions did not offset foregone corporate income taxes and foregone personal taxes from common share appreciation and dividends.

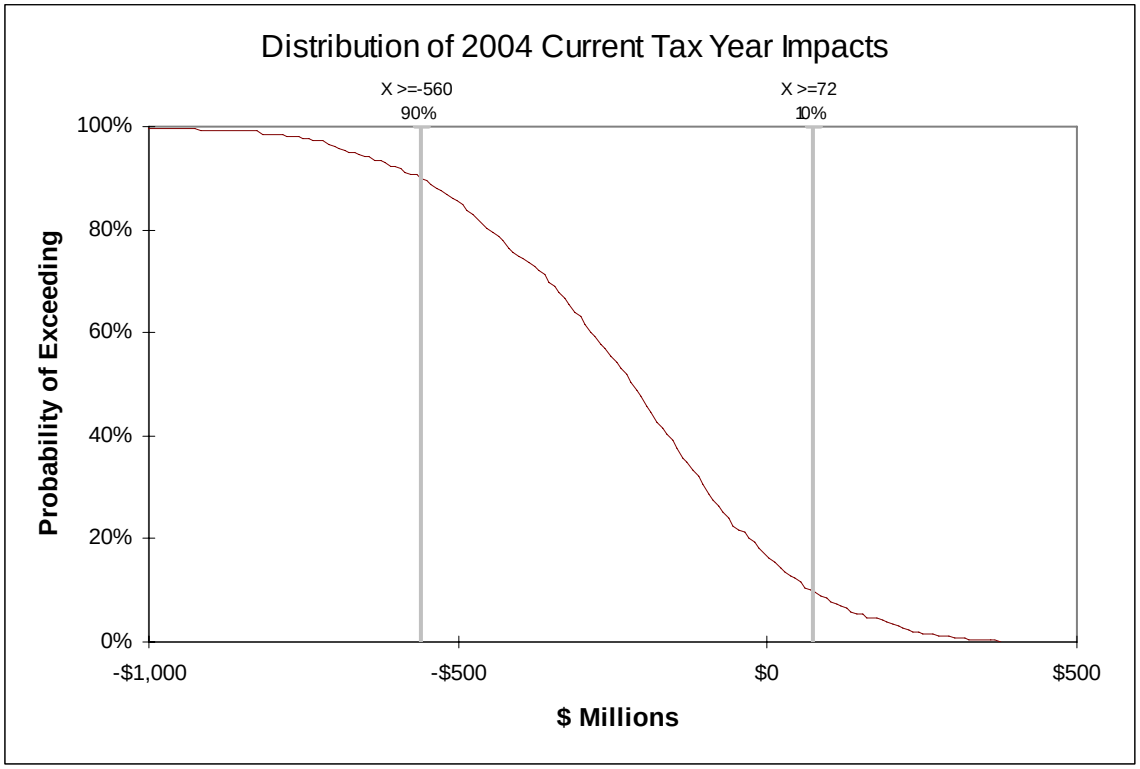
Although risk analysis indicates a possibility that governments forfeited more than the $217 million in 2004 indicated by the statistically best estimate, the probability that the amount foregone exceeded $560 million is less than 10 percent (see Figure 15). There is also a small chance that governments' revenues actually increased as a result of income funds (by about $72 million in 2004). The probability of this outcome is less than one-in-ten, however. In other words, tax receipts from income trust distributions will offset foregone corporate income taxes and foregone personal taxes from common share appreciation and dividends one out of every ten years.

Table 8: Annual Tax Impacts of Income Trusts ($Millions), Mean Estimates

Tax Effect	2002	2003	2004
Current Year Tax Effects			
Taxes Under Corporate Structure			
Corporate Income Taxes	($461)	($826)	($893)
Taxes From Dividends	($20)	($39)	($45)
Taxes From Capital Gains	($139)	($262)	($301)
Downstream Interest Effects	($22)	($39)	($44)
Total Taxes Under Corporate Structure	($642)	($1,166)	($1,283)
Taxes Under Income Trust Structure			
Corporate Income Taxes from Trusts	$71	$139	$151
Personal Taxes from Trust Distributions	$404	$754	$859
One-Time Transitional Capital Gains	$155	$119	$56
Total Taxes Income Trust Structure	$630	$1,012	$1,066
Net Current Tax Impact	($12)	($154)	($217)
Present Value of Deferred Taxes			
Foregone Taxes Under Corporate Structure	($264)	($476)	($572)
Taxes Under Income Trust Distributions	$380	$702	$840
Total Value of Deferred Taxes	$116	$226	$268
Total Net Impact	$104	$72	$51

Note: Present values are calculated with a discount rate of seven percent.

Figure 15: Decumulative Distribution of 2004 Current Year Tax Impacts of Income Trusts



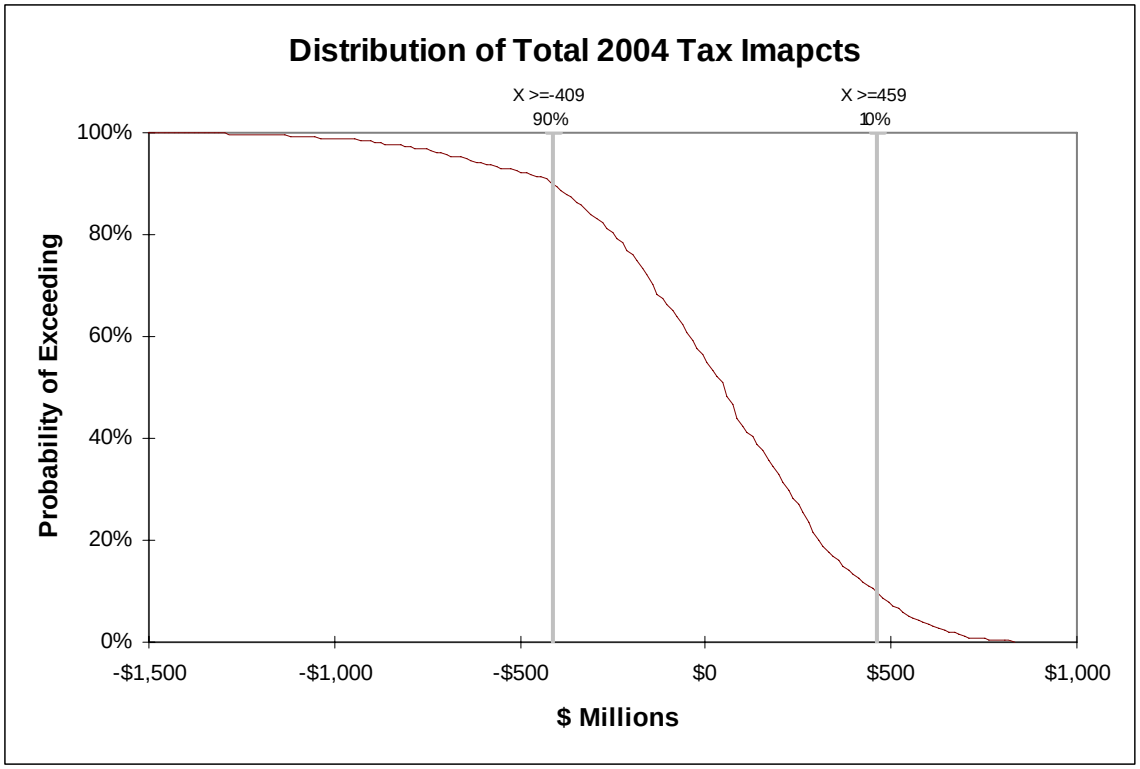
Out-Year and Total Impacts of Income Trusts on Government Revenues

Income deposited into tax-exempt accounts creates governments' tax receipts in future years when investors make withdrawals from such accounts. An examination of enterprises that converted to the income trust form as of 2004 indicates that the value of future tax receipts on income from personal investments in these enterprises is estimated to have been $572 million (see Table 8). Personal income tax on deferred income earned by unit holders in the trust form of these enterprises, however, is estimated to have been $840 million - a $268 million gain in tax revenues to governments.

When the out-year impacts of income funds are combined with current year effects, the statistically best estimate indicates a net tax gain to governments in 2002, 2003 and 2004. In 2004, the statistically best estimate represents the small net gain to governments of $51 million referenced earlier.

When the risk is taken into account (see Figure 16), the analysis indicates the possibility that governments did forfeit some tax receipts in 2004 due to income trusts. The probability that such losses exceeded $409 million in 2004 is less than ten percent, however.

Figure 16: Decumulative Distribution of Total 2004 Tax Impacts of Income Trusts



APPENDIX A. TRUST DATA SET

The Study looked at the universe of income trusts that existed in 2003 according to the CIBC list. From that list a number were excluded from the study on the grounds that they do not represent a tax leakage for the government. The table below contains all names from the list that were excluded.

CIBC Names Excluded from the Study	
Current Limited Partnerships	**Industry**
TransAlta Power LP	Power
TransCanada Power LP	Power
Fort Chicago Energy Partners LP	Pipelines
Inter Pipeline Fund (LP)	Pipelines
Gaz Metro	Gas Prop.
Taylor NGL LP	Gas Prop.
2002 Limited Partnerships Pre Trust	**Industry**
Consumers' Waterheater Income Fund	DB
The Keg Royalties income Fund	DB
FP Newspapers Income Fund	DB
2003 Limited Partnerships Pre Trust	**Industry**
Innergex Power Income Fund	Power
Enbridge Income Fund	Pipelines
Keyspan	Gas Prop.
US based Companies Pre Trust	**Industry**
ACS Media Income Fund	DB
Custom Direct Income Fund	DB
Great Lakes Carbon Income Fund	DB
Heating Oil Partners	Gas Prop.
IPC US Income	REIT
Specialty Foods Group	DB
Volume Services America Holdings Inc.	DB
TGS North American REIT	REIT