



**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

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EXECUTIVE SUMMARY

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;¹ 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.

¹ 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;² 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.

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

BACKGROUND

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 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:

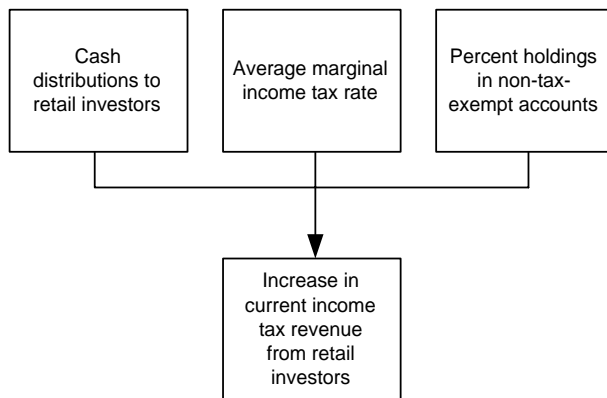
- Step 1. Define the structure and logic of the impact assessment problem;
- Step 2. Assign estimates and ranges (probability distributions) to each variable and coefficient in the developed structure and logic model;
- Step 3. Engage experts and stakeholders in a review of the model and its assumptions, 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

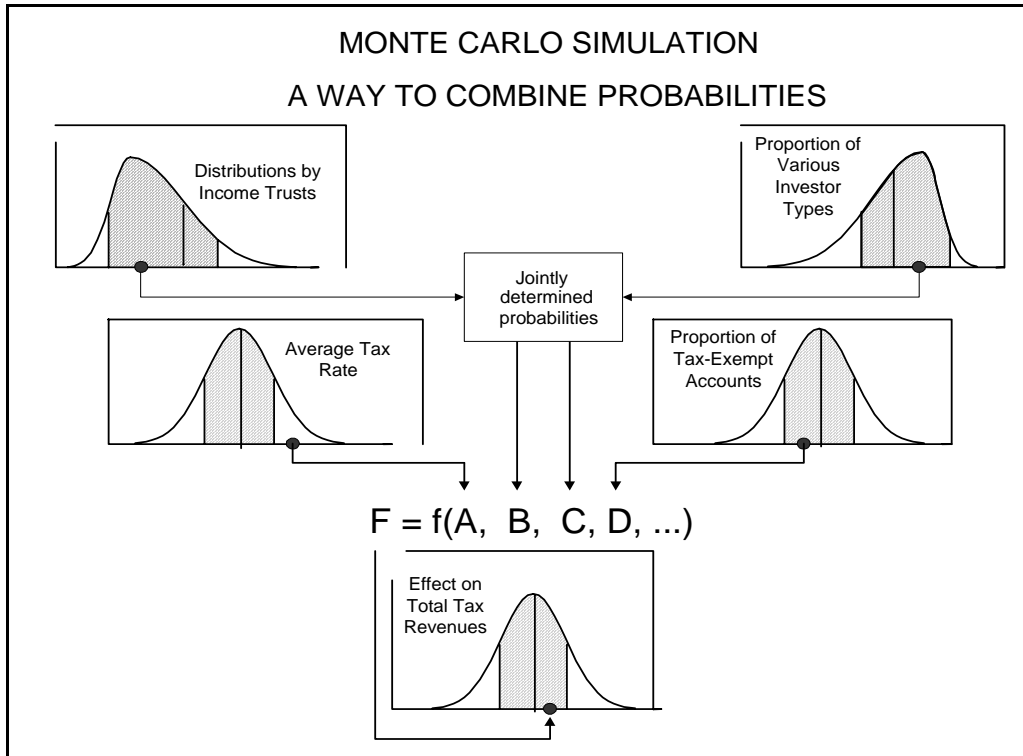


Table 3: Example Results of Impact Assessment: Total Effect of Income Trusts on Tax Revenues (\$Millions)

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.

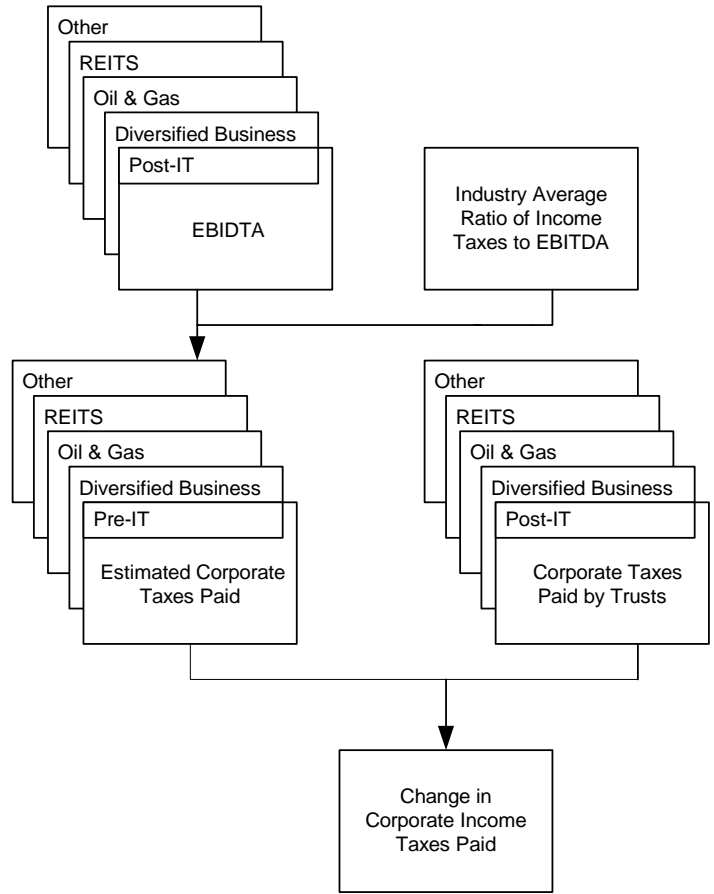
Tax Effects #1, #5: Change in Corporate Income Taxation

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

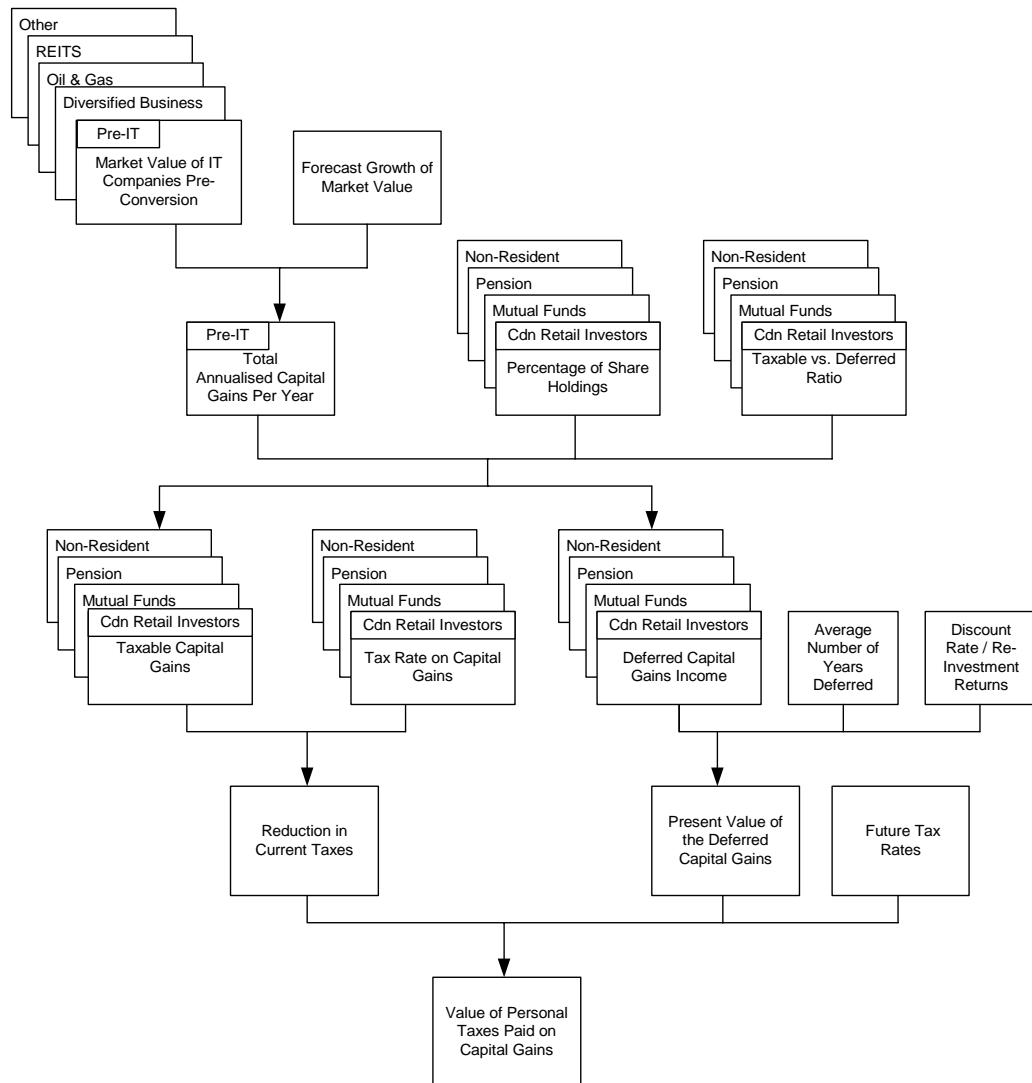


Tax Effect # 2: Foregone Personal Income Taxes From Capital Gains

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.

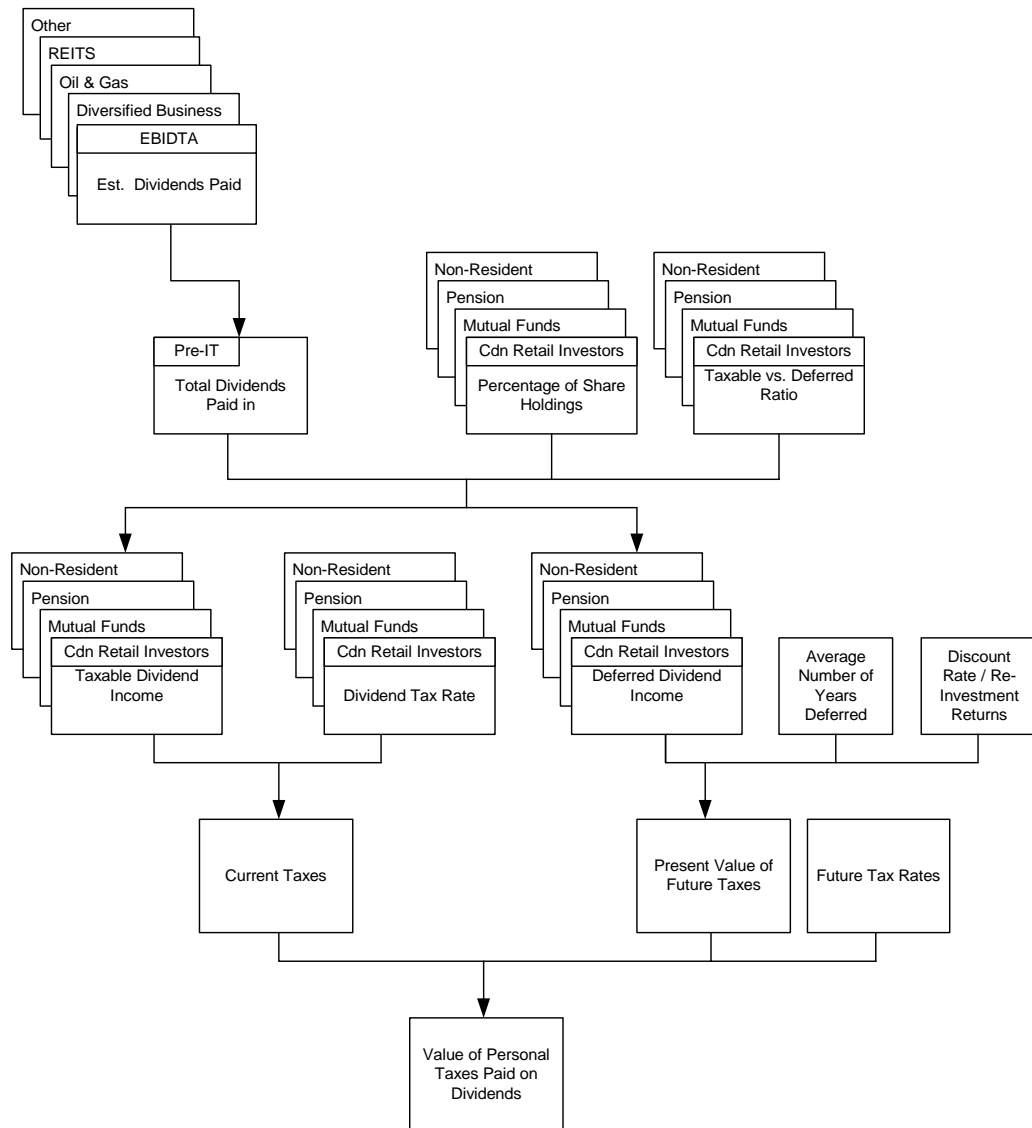
Figure 4: Structure and Logic Model of Foregone Personal Income Taxes From Capital Gains



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

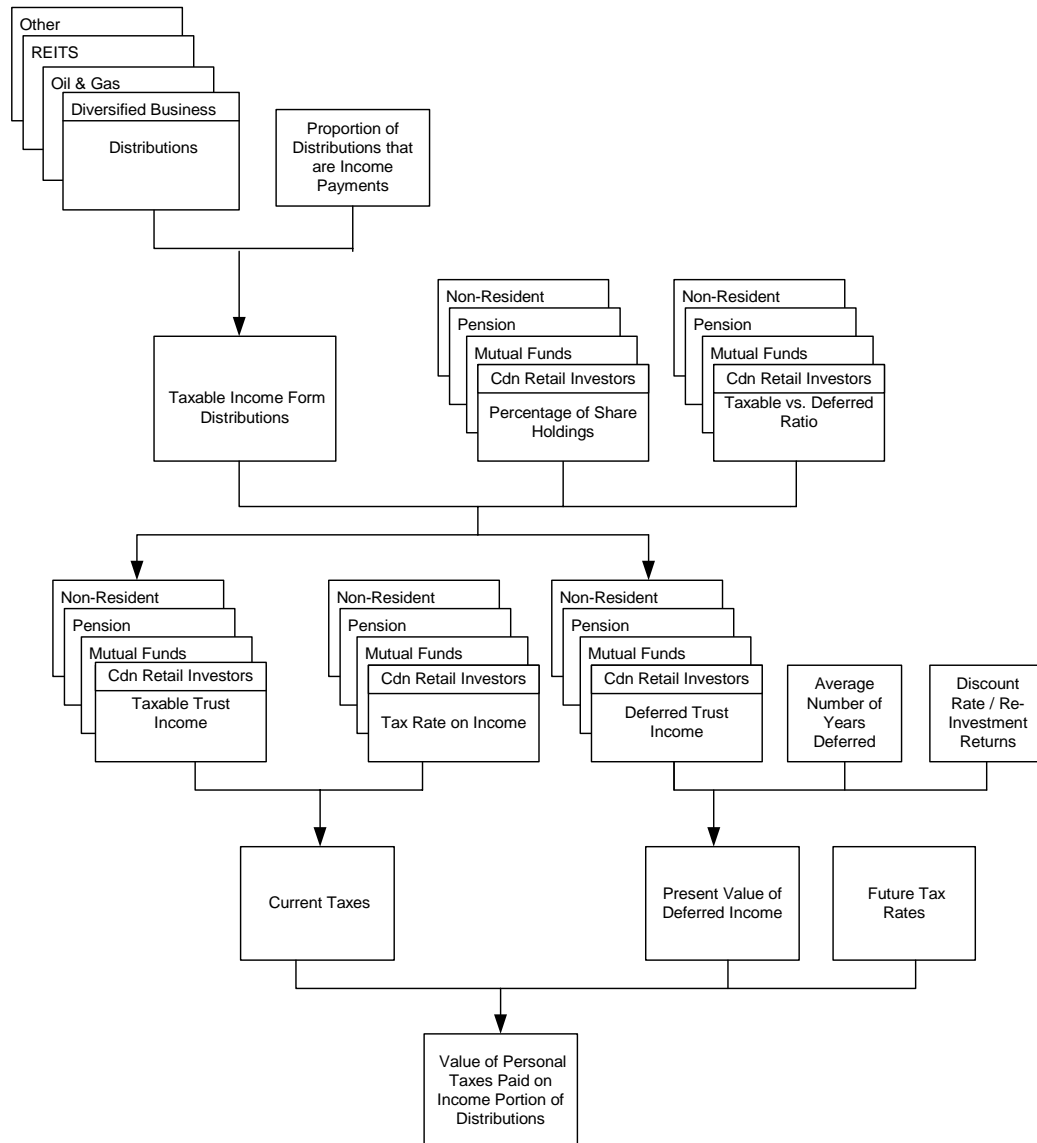
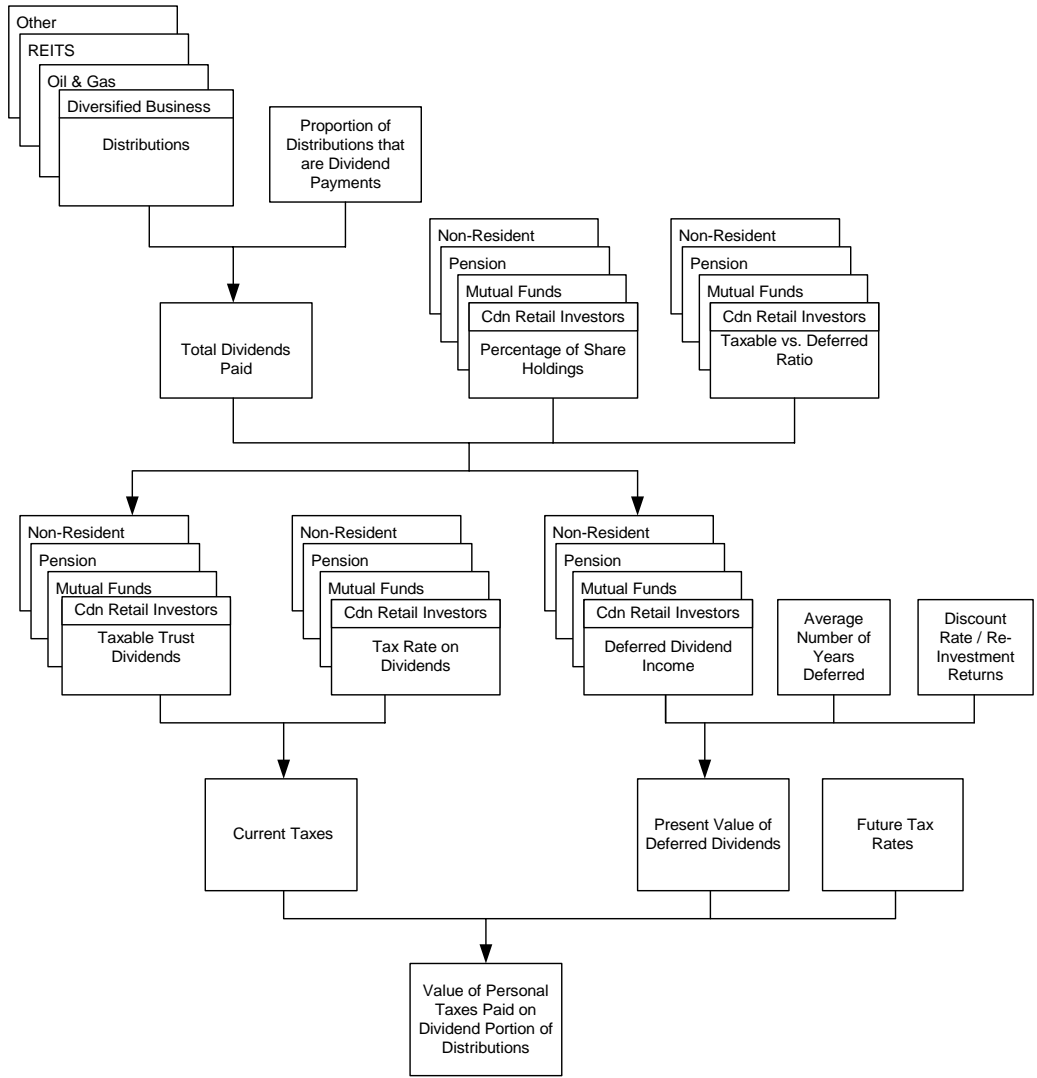


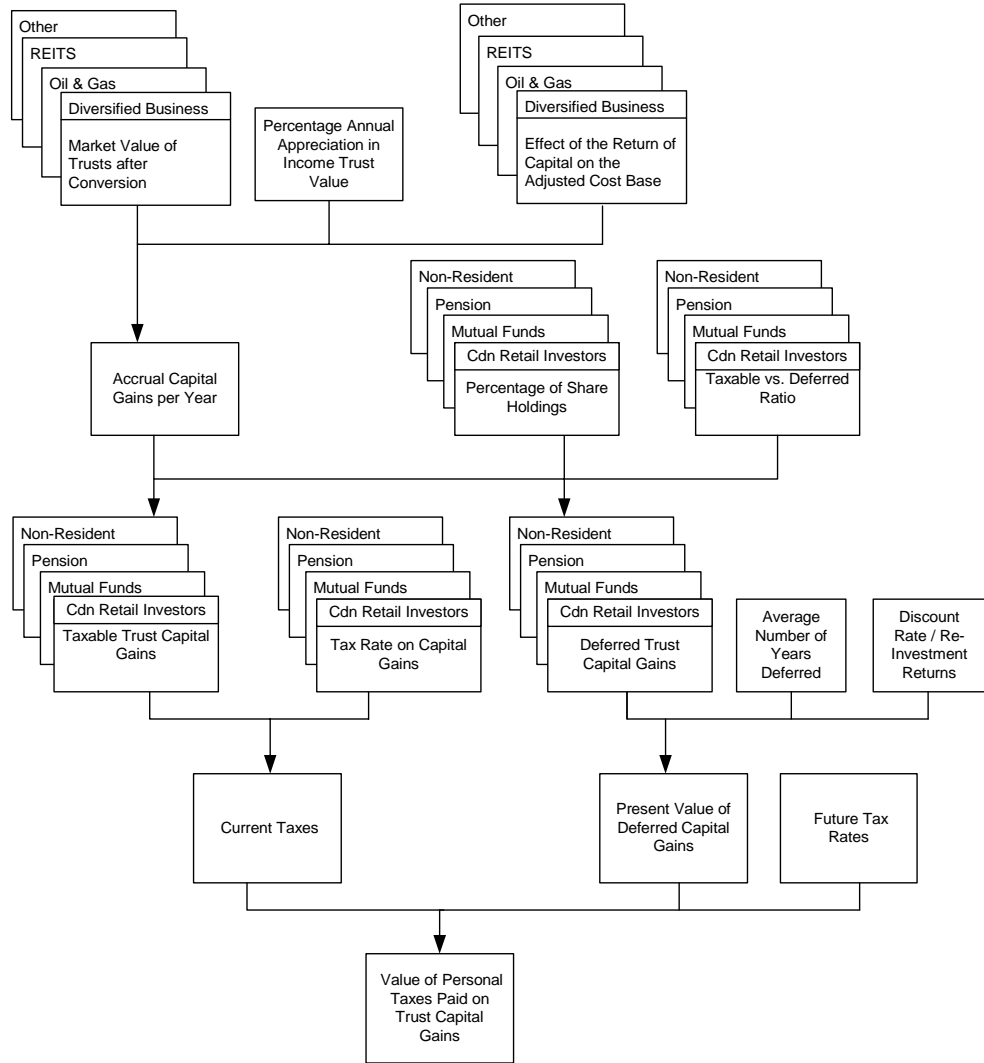
Figure 7: Personal Income Taxes From Income Trust Distributions of Dividends



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

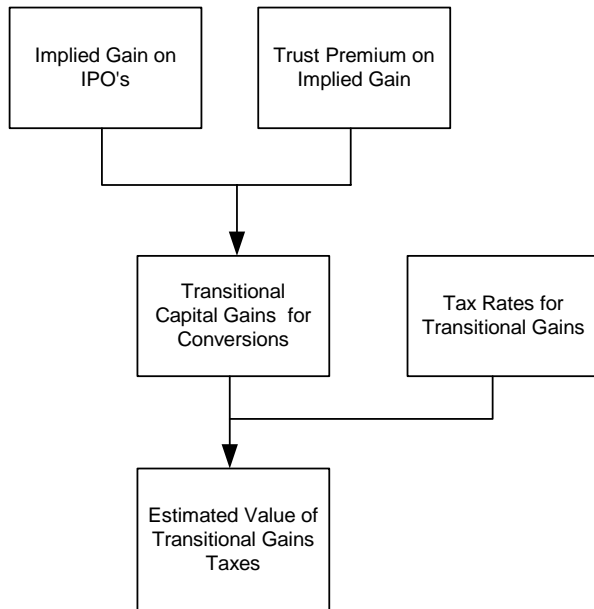


Tax Effect #8: Corporate Income Taxes from Transitional Capital Gains

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.

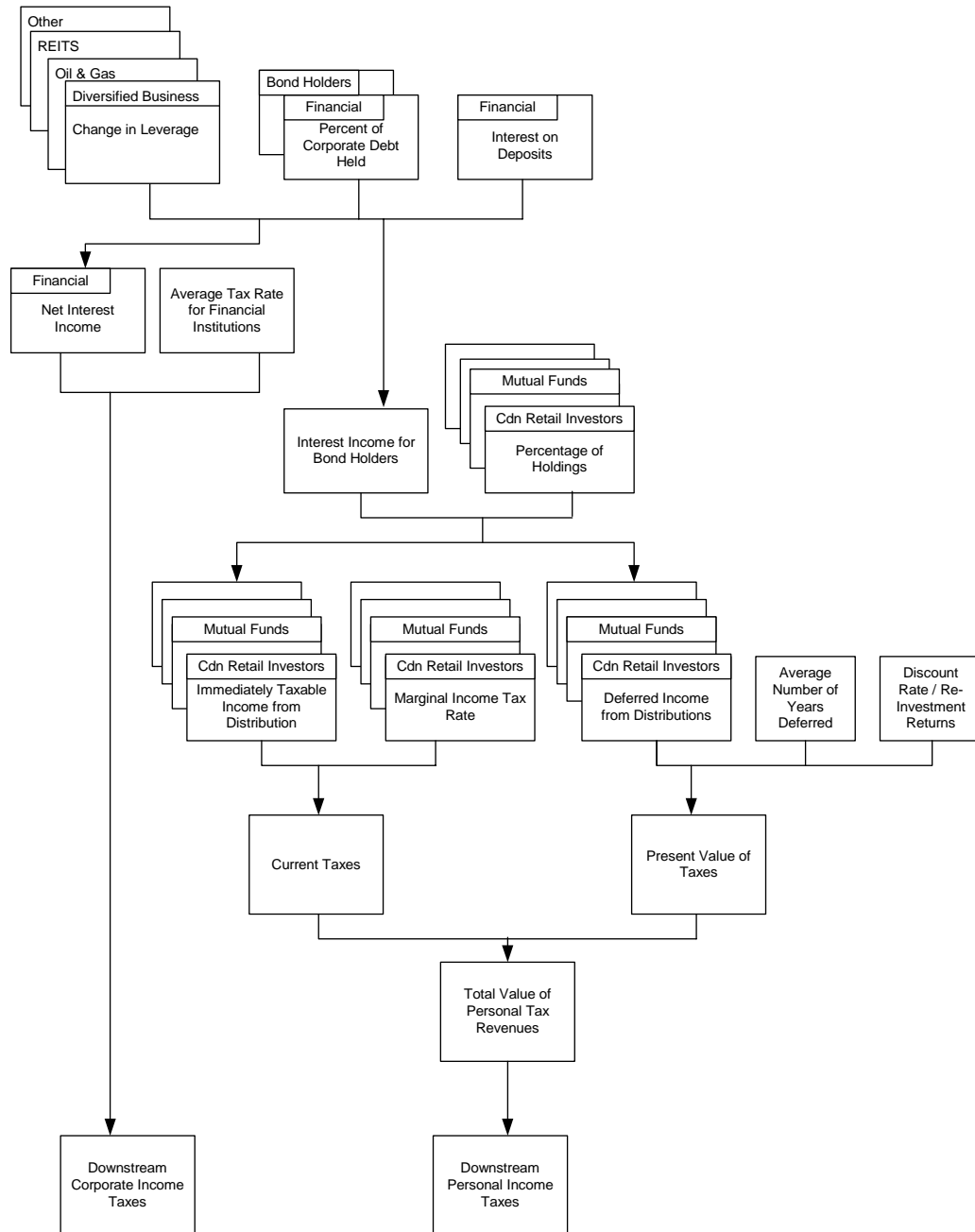
Figure 9: Structure and Logic Model for Corporate Income Taxes from Transitional Capital Gains



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 2003.³ 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%.

³ 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)

Segment	Distributions (\$M)				% of Total		
	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:

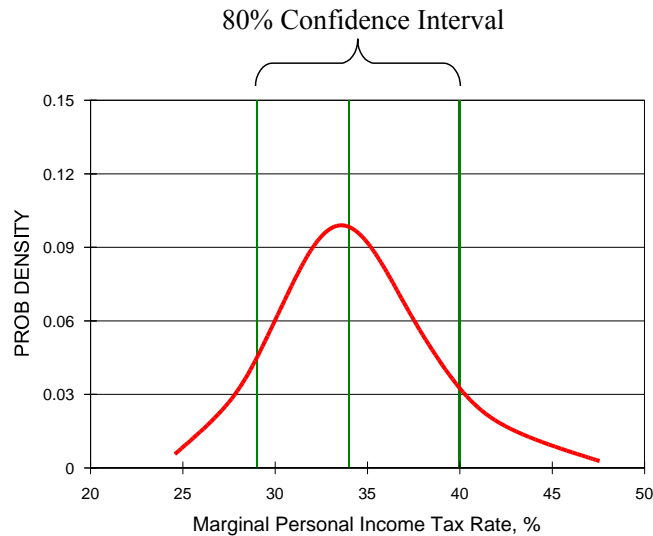
- the value that represents a 90 percent probability of exceeding (POE) in actuality;
- the value that represents a 50 percent probability of exceeding in actuality; and,
- the value that represents a 10 percent probability of exceeding in actuality.

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:

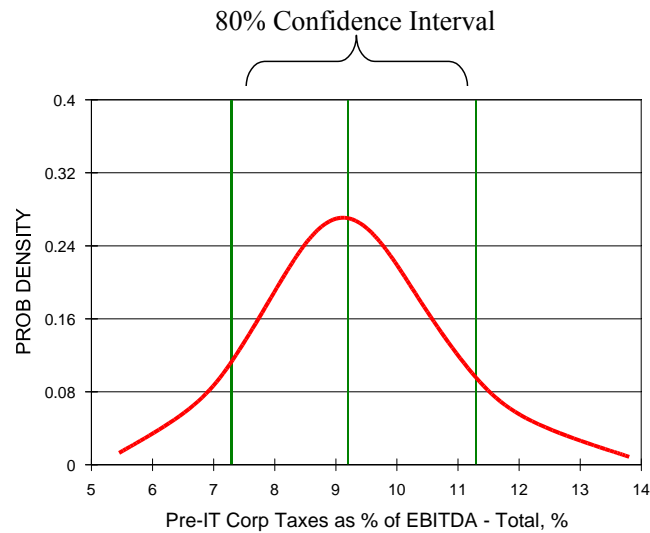
$$\text{Equation 1: Pre-it tax}_{ij} = \beta_1 * \text{Ebitda}_{ij} + \beta_2 * \text{Ebitda}_{ij} * \text{Industry}_i + \varepsilon_{ij},$$

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, β₁ and β₂ 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%

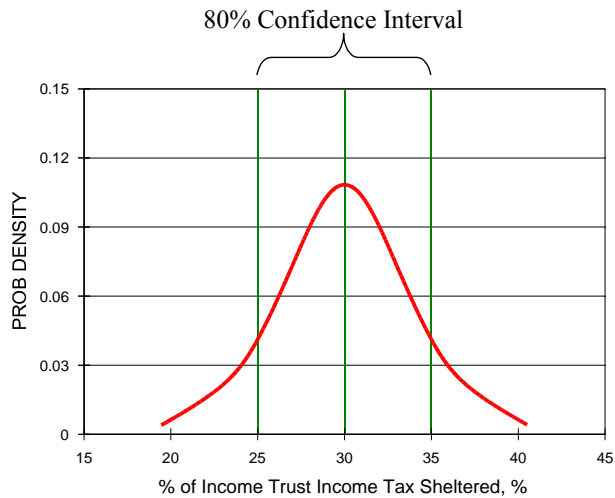
For those income trust market segments where sample representation was relatively low, HLB directly contacted the Chief Financial Officer of several income trusts to discuss the tax issue. HLB also examined several large Oil & Gas companies suggested by these CFO's to see how they were different from 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

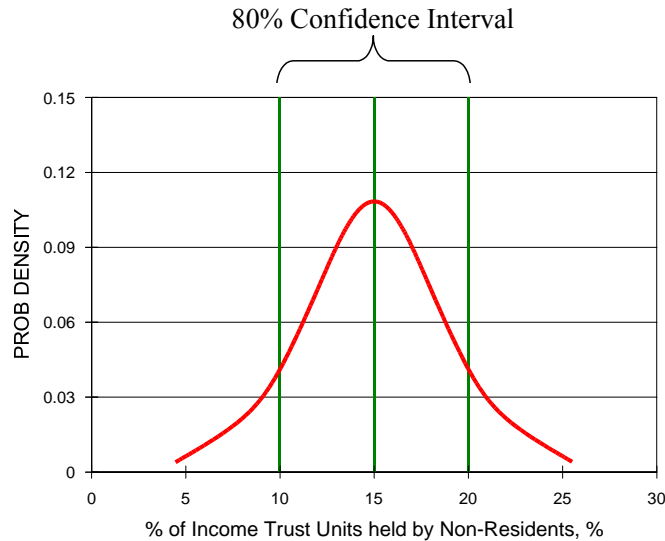


	Probability of Exceeding		
	90%	50%	10%
% of Trust Income Tax Sheltered	25%	30%	35%

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 <i>In Yield We Trust</i> dated January 26 th 2004. It is the change in Market Cap between 2002 and 2003. 2002 Market cap was taken from January 10 th 2003 <i>In Yield We Trust</i> .
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 manage significant investments in

	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

	Variable	Tax Effect #	90% POE	50% POE	10% POE	Source
29	Current Tax Rates On Dividends Mutual Funds	2,3,4,6,7,9	15.0%	17.7%	20.4%	base table with the appropriate correction for the dividend tax credit. Pensions are assumed not to have any current income.
30	Current Tax Rates On Dividends Pension Plans	2,3,4,6,7,9	NA	NA	NA	
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.

	Variable	Tax Effect #	90% POE	50% POE	10% POE	Source
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 done in light of secondary tests and expert opinion. See the discussion on page 28.
39	Pre Trust Dividends as a Percentage of EBITDA Oil & Gas	3	0.9%	2.9%	4.8%	
40	Pre Trust Dividends as a Percentage of EBITDA REITs	3	0.9%	2.9%	4.8%	
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%	
47	Bonds Being Held By Mutual Funds	4,9	18%	24%	30%	The aggregate figures provided by Statistics Canada and used in the Capital Markets Institute Study are taken.
48	Bonds Being Held By Pension Plans	4,9	17%	22%	28%	

	Variable	Tax Effect #	90% POE	50% POE	10% POE	Source
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 accounts. The original source is Statistics Canada.
51	Bonds Being Held in Open Accounts By Mutual Funds	4,9	36%	48%	60%	
52	Bonds Being Held In Open Accounts By Pension Plans	4,9	0%	0%	0%	
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

	Variable	Tax Effect #	90% POE	50% POE	10% POE	Source
60	Income as a Percentage of Total Distributions Oil & Gas	6	57.6%	52.9%	48.1%	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
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%	
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

	Variable	Tax Effect #	90% POE	50% POE	10% POE	Source
69	Annual Reduction in the Adjusted Cost Base Oil & Gas	7	3.5%	4.7%	5.9%	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 an average yield of 10%. An examination of the actual distributions and IPO unit prices was the basis for that decision.
70	Annual Reduction in the Adjusted Cost Base REITs	7	4.4%	5.8%	7.3%	
71	Annual Reduction in the Adjusted Cost Base Other	7	2.3%	3.0%	3.8%	
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 <i>Daily Letter</i> dated Thursday March 4 th 2004. In <i>Income Trusts: Old Wine in New Bottles?</i> 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.

	Variable	Tax Effect #	90% POE	50% POE	10% POE	Source
73	Implied Gain as a Percentage of the IPO	8				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. Actual for 2002 taken from the trusts' annual reports available on SEDAR www.sedar.com
			80%	89.2%	100%	
74	Trust Interest Payments as a Percentage of EBITDA Diversified Business	9				
			6.4%	8.5%	10.6%	
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.cra-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.

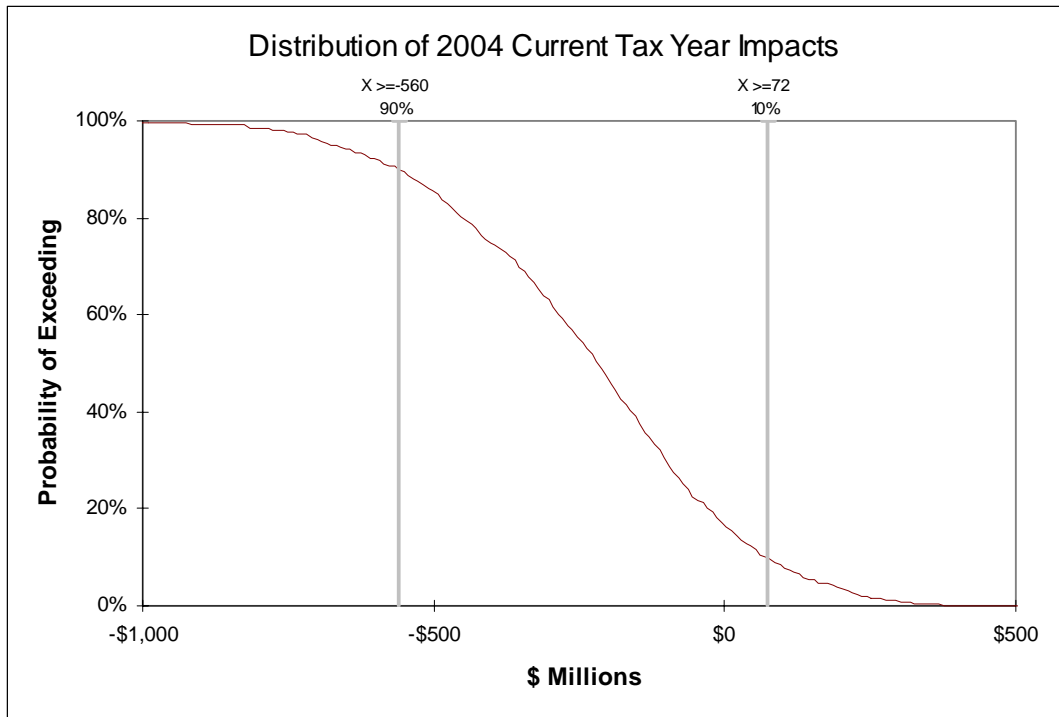
Although risk analysis indicates a possibility that governments forfeited more than the \$217 million in 2004 indicated by the statistically best estimate, the probability that the amount foregone exceeded \$560 million is less than 10 percent (see Figure 15). There is also a small chance that governments’ 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



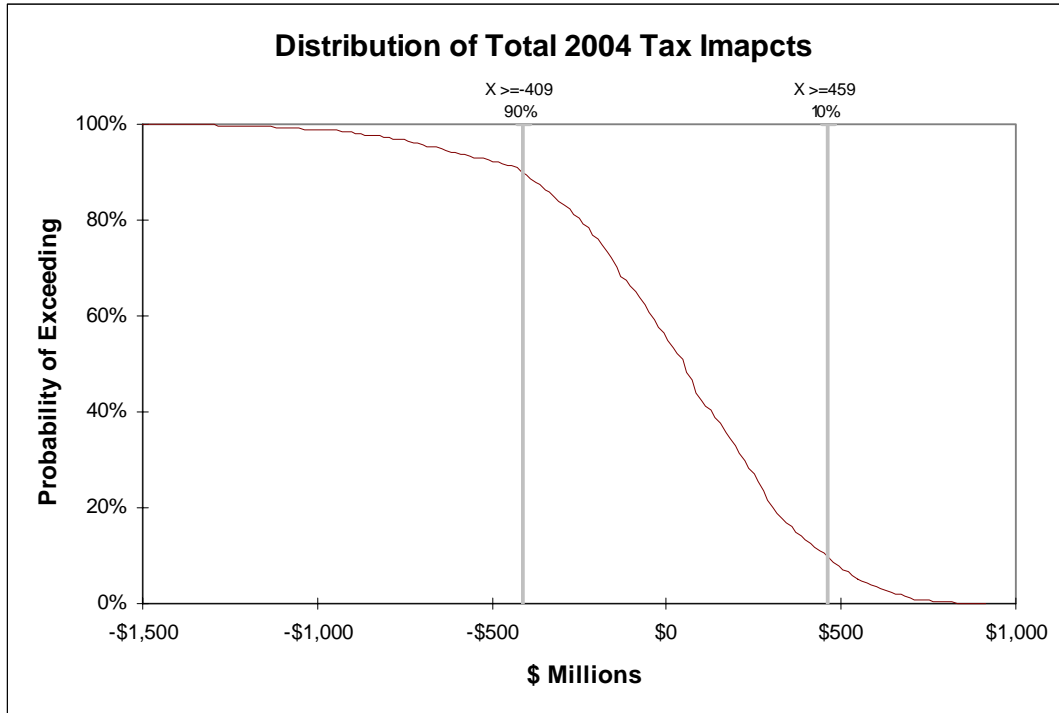
Out-Year and Total Impacts of Income Trusts on Government Revenues

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