



**Distribution Components in Flow-Through Entities:  
Causes and Consequences of Economic and Governance Factors**

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## **Distribution Components in Flow-Through Entities: Causes and Consequences of Economic and Governance Factors**

### **Abstract**

We investigate whether reporting incentives influence income trusts' calculation and reporting of distributable cash, and whether investors see through distributable cash management. Using Standardized Distributable Cash as the starting point to the calculation of distributions, we split distributions in three components. Results suggest that income trusts use their discretion to overstate distributable cash when they would report a decrease in Standardized Distributable Cash, and when board ownership is higher. Income trusts that experience a decline in yield record higher over distributions, while income trusts with higher managerial equity incentives and higher board ownership record lower over distributions. Independent trustees constrain managers' ability to pay distributions higher than disclosed distributable cash. Finally, we find that Standardized Distributable Cash and abnormal distributable cash are valued positively, while over (under) distributions are valued negatively (positively). In our view, this finding substantiates the primacy of cash distributions in the valuation of income trusts, with management's use of discretion in the calculation of distributable cash making possible stability in that regard.

**Keywords:** income trusts, earnings management, non-GAAP measures, cash distributions, corporate governance.

## **La distribution de liquidités dans les entités intermédiaires : une perspective financière et de gouvernance**

### **Abstract**

Dans cette étude, nous nous intéressons, d'une part, aux facteurs explicatifs de la manipulation du montant de liquidités distribuables des fiducies de revenu et, d'autre part, de la façon dont les marchés boursiers valorisent les diverses composantes des liquidités distribuables. À partir d'une mesure standardisée des liquidités distribuables, nous divisons la distribution de liquidités en trois composantes. Nos résultats montrent que les fiducies de revenu exercent leur marge de manœuvre comptable pour augmenter le montant de liquidités distribuables dans le cas où elles devraient autrement présenter une diminution des liquidités distribuables standardisées par rapport à l'année précédente, et lorsque l'actionnariat détenu par les membres du conseil d'administration est significatif. Les fiducies de revenu ayant subi une diminution de liquidités distribuables montrent une distribution excédentaire alors que l'inverse est observé lorsque les dirigeants ont des options sur titres et que la valeur intrinsèque de ces options est positive, et lorsque l'actionnariat détenu par les membres du conseil est élevé. Un conseil indépendant semble restreindre la capacité des dirigeants à distribuer plus de liquidités que le montant de liquidités distribuables publié. Enfin, nos résultats montrent que la mesure standardisée des liquidités distribuables et la distribution anormale sont valorisées positivement par les marchés boursiers alors que la distribution excédentaire (sous-distribution) est valorisée négativement (positivement). Ces constats montrent la primauté de la mesure de distribution des liquidités pour la valorisation par les marchés boursiers des unités de fiducie, avec en toile de fond l'exercice par la direction de leur marge de manœuvre comptable pour assurer autant que possible la stabilité de cette variable.

**Mots clés :** Fiducies de revenu, gestion des résultats, distribution des liquidités, gouvernance.

## **1. Introduction**

Flow-through entities encompass many different legal structures. However, they usually share two key attributes. First, flow-through entities typically own mature assets that generate excess or free cash flows. Second, flow-through entities commit to distribute most of these cash flows to investors. In light of these attributes, flow-through entities have historically been popular investment vehicles in some industries such as oil and gas royalties or real estate (including lodging and hotels). In most cases, the entities will not pay income taxes or income will be taxable in investors' hands, thus eliminating the double taxation of corporate income, a major issue in some countries. However, irrespective of a potential tax advantage, flow-through entities also commit managers to disgorge most if not all of their free cash flows, thus potentially preventing them from making suboptimal investments, a policy that is consistent with the free cash flow hypothesis (Jensen, 1986).

This paper addresses three related questions that underlie flow-through entities' commitment to distribute most of their free cash flow to investors. First, what are managerial incentives underlying the measurement of distributable cash? Second, do managers actually engage in distributable cash management to modify actual cash distributions? Third, how do investors value such entities, i.e., how do they weigh alternative performance indicators and do they solely focus on actual cash distributions? We investigate these questions in the context of Canadian income trusts, a type of flow-through entity which arose from the real estate and oil and gas industries but which eventually migrated to most sectors of the Canadian economy. In contrast to corporations, which mandate, constitution and governance are set within the parameters of the Business

Corporations Act, each income trust is a distinct legal entity, governed by a private trust deed, and so structured as to control an underlying operating company or a set of income generating assets. The trust's key focus is to maximize its periodic cash distributions to unitholders so that it does not retain any excess cash. Up until October 2006, income trusts were the top-selling product on Canadian securities markets (Toronto Star, October 27 2005). The total market capitalization of income trusts went from less than 20 billion dollars in January 2000 to more than 200 billion dollars in March 2006, i.e. more than 10% of the market capitalization of all companies traded on the Toronto Stock Exchange (TSX) (Standard & Poor's, April 10 2006). Initial public offerings (IPOs) of income trust units dominated the market for new equity issues, and the largest IPO ever made in Canada, the Yellow Pages Income Trust, raised more than 3 billion dollars (Globe and Mail, July 6 2005).

Despite their popularity, income trusts have been criticized extensively. Such criticisms essentially revolve around three issues. First, income trust governance is relatively unchartered, as trusts do not have directors but trustees, which powers and responsibilities are governed by a private trust deed, not by corporate laws. Second, until 2007, the measurement of distributable cash was solely at the discretion of an income trust's management and completely outside the scope of regulators' standards or guidelines. This unregulated context contributed to the so-called distributable cash game with income trusts managing the distributable cash figure to deceive investors about the sustainability of cash distributions (Canadian Business, October 10 2005). Third, to assess the value and performance of income trusts, investors and financial analysts examine the level and stability of past cash distributions and forecast future distributions.

Rating agencies also publish stability ratings to help in assessing the stability of future distributions.<sup>2</sup> A trust that either cuts or suspends distributions is called a “fallen angel” because the announcement often results in a large decrease in unit price. Moreover, the yield demanded by investors generally increases with the risk of a cut or suspension in distributions. In light of investors’ fixation on cash distributions, income trusts have strong incentives to maintain a stable or increasing trend in distributions from year to year, possibly in a way that is detrimental to long term value creation.

Our investigation of these concerns involves the following steps. First, we investigate the determinants of abnormal distributable cash. We expect income trusts that would otherwise report a decrease in Standardized Distributable Cash from the previous year, income trusts with higher managerial equity incentives and those with higher board ownership to record higher abnormal distributable cash, i.e. overstate disclosed distributable cash. Since a higher proportion of independent trustees on the board should limit income trusts managers’ ability to manipulate the distributable cash figure, we also expect income trusts with a higher proportion of independent trustees on the board to record lower abnormal distributable cash. Our results suggest that income trusts use their discretion to overstate distributable cash when they would otherwise report a decrease in Standardized Distributable Cash, and when board ownership is higher.

Second, we examine the determinants of over (under) distributions. On one hand, we expect income trusts that would report a decrease in disclosed distributable cash to record higher over distributions. On the other hand, we expect income trusts with higher

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<sup>2</sup> For example, Dominion Bond Rating System (DBRS) provides stability ratings that measure the volatility and sustainability of distributions per fund unit over time. DBRS’ stability ratings consider seven main factors, among which the stability and sustainability of EBITDA.

managerial equity incentives and board ownership to record lower over distributions to avoid a decrease in unit price. Similarly, we expect trusts with a higher proportion of independent trustees on the board to record lower over distributions. After controlling for the cash available to pay the distribution and the cumulative distributable cash reserve at the beginning of the period, we find that income trusts that experienced a decline in disclosed distributable cash from the previous year seem to record higher over distributions, but that income trusts with higher managerial equity incentives and higher board ownership record lower over distributions. Our results also seem to indicate that independent trustees constrain managers' ability to pay distributions higher than disclosed distributable cash to protect unit value.

Finally, we examine whether and how the market values the three components of cash distributions. Consistent with prior research on the value-relevance of dividend, dividend changes and accruals, we expect investors to value positively Standardized Distributable Cash and abnormal distributable cash if reporting abnormal distributable cash allows income trusts to maintain their cash distributions. However, if the cash distribution exceeds disclosed distributable cash, then the over distribution component should be negatively valued as it constitutes a return of capital. Our results are consistent with our expectations.

The paper extends prior literature in the following ways. First, most prior research on financial reporting by flow-through entities focuses on U.S. Real Estate Investment Trusts (REIT). Evidence gathered so far suggests that the REIT industry-sponsored performance measure, Funds from Operations, is subject to manipulation by managers who want to access capital markets. Moreover, as an indicator of value creation, Funds

from Operations are not necessarily superior to net earnings prepared according to Generally Accepted Accounting Principles (GAAP) (Vincent, 1999; Fields, Rangan and Thiagarajan, 1998). In contrast, income trusts comprise firms from almost all industrial sectors and rely on unique legal and financial structures (Halpern and Norli, 2006). In addition, while U.S. REITs' non-GAAP reporting is standardized at the industry level, such is not the case for Canadian income trusts.

Second, income trusts allow for an investigation of corporate financial and reporting decisions within a context in which legal and governance structures as well as reporting practices are subject to few standards. Within such a context, our findings show the tight integration between managerial financial incentives, financial reporting, cash distributions and stock market valuations.

Third, the paper provides further evidence on the role of governance in corporate decision-making, especially financial reporting and dividend distributions. Our evidence is consistent with corporate governance being effective in attenuating managerial influence and, thereby, enhancing the quality of financial reporting and the reliability of cash distributions.

Finally, the paper provides evidence that the valuation of firms for which the focus is the maximization of cash distributions relies extensively on the extent of such distributions and does not completely adjust for the sustainability of such distributions. Such findings are consistent with prior evidence that dividends and dividend changes provide information that is potentially value relevant. However, it appears that investors do not completely apprehend the sustainability of future cash distributions in their assessment of income trust values. These findings bring further insights into the debate

about the need and usefulness to standardize financial reporting. Moreover, in contrast to previous papers interested in the value-relevance and information content of alternative performance measures in the real estate investment trust (REIT) industry (e.g. Gore and Stott, 1998; Vincent, 1999; Graham and Knight, 2000), we decompose cash distributions into their discretionary and non-discretionary components and examine the value-relevance of each component separately for a sample of income trusts from a variety of industries.

The rest of the paper is organized as follows. Section 2 describes the institutional environment in which income trusts are evolving. Research propositions are developed in Section 3. The method is presented in Section 4. Results are discussed in Section 5. Finally, Section 6 concludes and discusses the paper's contributions.

## **2. Background**

### **2.1 Income Trusts and their Institutional Environment**

An income trust is a legal entity structured to hold equity and interest-bearing debt from an underlying operating company that operates a business (e.g. public, restaurants, consumer product companies and manufacturing companies) or holds a set of income generating assets (e.g. real estate, oil and gas properties, and mining properties). The operating company might be a private company that decides to raise financing through an income trust vehicle in a manner similar to a traditional IPO; a private or public company that decides to spin off part of its business into an income trust; or a public company that decides to convert its common shares into trust units without any new financing (Jog and Wang, 2004). The income trust is legally required to distribute any money generated to its unitholders. To maximize periodic cash distributions to

unitholders, the trust ideally owns mature assets that require little ongoing capital expenditures, face little competition and provide a predictable stream of cash flows (King, 2003) (see Figure 1).

{Insert Figure 1 here}

Income trusts differ from regular corporations because they are a flow-through structure that allows income to be taxed at the investor level only. Interest payments to the income trust reduce the operating company's taxable income and minimize corporate taxes at the operating company level. The income trust then distributes the interest earned to unitholders and claims a deduction on its taxable income for the distributions, to achieve the goal of distributing all taxable income for the year. Finally, investors tax themselves on the distributions according to their individual circumstances. Therefore, they can receive a higher level of cash distribution than is possible when the same assets are held by a corporation (King, 2003).

On October 31, 2006, the federal government of Canada announced its intention to impose taxes on Canadian flow-through entities (including income trusts) in a manner similar to corporations. Bill C-52 received Royal assent on June 22, 2007. The revised tax structure immediately subjects all new flow-through entities to the federal tax rate while existing entities are exempt until 2011. Real estate investment trusts (REITs) are exempt to the change in tax policy. Commonly referred to as the "Halloween Massacre", the announcement put an end to the conversion frenzy and resulted in a loss of \$19 billion in market capitalization in the first day of trading alone. Critics expected existing income trusts to reconvert to corporations, acquire corporations with large tax losses, or become the target of private equity and foreign entities (Standard & Poor's, 2006c).

One year later, reports of their demise are considered to be greatly exaggerated. Business trusts' total return since October 2006 is positive. The CIBC World Markets Business Trust Index posted gains in 8 of the 11 months between November 2006 and September 2007. It posted a total return of 23.5% between November 30, 2006 and September 30, 2007; 9.3% if you go back to October 31, 2006. There were 78 distribution increases and 27 special distributions announced since October 31, 2006. Even though 46 trusts have been bought out, 50% of them have gone to Canadian buyers (Financial Post, October 29, 2007). At their annual general meetings, many trusts announced their intention to maintain their trust status until 2011 to take advantage of the tax shelter and others indicated they would remain as income funds beyond 2011 given the accumulated tax shelters and cash flow growth that would counter the tax expense (Standard & Poor's, 2007b). Therefore, the evidence to date seems to suggest that it is too early to conclude on their quick disappearance from the capital markets.

The market value of an income trust largely depends on its ability to maximize and maintain cash distributions. Income trusts have a median distribution of 87% of cash flow from operations as compared to a median distribution of 7% of cash flow from operations for comparable corporations (Halpern and Norli, 2003). To assess the value and performance of income trusts, investors and financial analysts examine the level and stability of past cash distributions and forecast future distributions. Rating agencies also publish stability ratings to help in assessing the stability of future distributions. Dominion Bond Rating Services' stability rating measures the stability and sustainability of cash distributions per fund unit over time (DBRS, 2004). Standard & Poor's stability rating measures the prospective relative sustainability and variability of an income trust's

distributable cash flows (Standard & Poor's, 2005). Unfortunately, stability ratings are only available for approximately 10% of listed income trusts.

In the world of income trusts, a trust that either cuts or suspends distributions is called a “fallen angel” because the announcement of a cut or suspension of distributions often results in a large decrease in unit price. For instance, Canadian Business reports a 77% average decline in unit price of the 13 business trusts that have suspended distributions in 2006 (Canadian Business, September 25 2006). Investors are then left with an investment that pays less income and has declined in value (Globeadvisor.com, March 29 2006). Consequently, the yield demanded by investors increases with the risk of a cut or suspension in distributions.<sup>3</sup> Overall, given the impact of a cut or suspension of distributions on unit price and yield, income trusts have strong incentives to maintain a stable or increasing trend in distributions from year to year. In the next section, we discuss the opportunities offered to management by the high degree of discretion allowed in the calculation of distributable cash to meet that objective.

## **2.2 Distributable Cash**

Cash distributions are contingent on a trust's available distributable cash. Distributable cash generally refers to the net cash generated by the income trust's businesses or assets that is available for distribution, at the discretion of the income trust, to the unitholders (CSA, 2004). The calculation and reporting of distributable cash has attracted the attention of regulators since at least 2003. In Staff Notice 52-306 – Non-GAAP Earnings Measures, the CSA explicitly identifies distributable cash as a non-GAAP financial measure. Similar to other non-GAAP measures, income trusts are asked

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<sup>3</sup> The yield is calculated by dividing the annual distribution rate by the unit price and multiplying the result by 100.

to provide a reconciliation of distributable cash to the most directly comparable measure calculated in accordance with GAAP (preferably cash flows from operations). They are expected to discuss the reconciling items, especially when they are discretionary in nature. They should also disclose cash distributions with equal or greater prominence than distributable cash (CSA, 2003). Unfortunately, Staff Notice 52-306 neither provides a single definition for distributable cash nor specific requirements regarding its calculation and reporting. This has resulted in a wide variety of practices in the denomination, computation and disclosure of distributable cash and related measures by income trusts (CICA, 2007).

In a report published in 2004, the CSA reviewed the continuous disclosure records of 40 income trusts. Of the 40 income trusts reviewed: 18 included a statement of distributable cash in the MD&A; 16 presented distributable cash information in a note to financial statements; 3 presented distributable cash as a separate financial statement; and 3 did not present distributable cash information. Moreover, 9 trusts presented distributable cash figures without a reconciliation to the audited financial statements; 26 provided a reconciliation between distributable cash and net earnings; and the remainder provided a reconciliation with some other financial measure such as earnings before interest, taxes, depreciation and amortization (EBITDA), net cash from operations, or cash and cash equivalents (CSA, 2004). In a similar report published in early 2006, Standard & Poor's examined distributable cash calculations among a sample of 40 income trusts. 19 different terms (e.g. cash available for distribution, amount available for distribution, net cash available to unitholders) were used to characterize distributable cash (Standard & Poor's, 2006a). After adjusting for an average two-year reporting distortion

of 26%, 30% of the income trusts had distributable cash that was lower than what was reported by management and insufficient to cover distributions over a two- to three-year period (Standard & Poor's, 2006b).

The lack of consistency and transparency in the calculation and reporting of distributable cash has led to what many call the distributable cash game: income trusts take advantage of the fact that there aren't any standard financial reporting rules or regulatory guidelines for the calculation of distributable cash to manipulate the distributable cash figure and misguide investors about the sustainability of cash distributions (Canadian Business, October 10 2005). It is a significant issue because it has the potential to result in misinformed investment decisions. Furthermore, if manipulating the distributable cash figure allows for a cash distribution that exceeds the distribution that can safely be paid without eroding the productive capacity or threatening the sustainability of future distributions, then the excess amount should be properly identified as a return of capital, rather than a return on capital to avoid a Ponzi scheme in which unitholders' investment is used to pay the distributions (CSA, 2007).

To improve the consistency, comparability and transparency of distributable cash measurement and reporting, the CSA issued revisions to National Policy 41-201 – Income Trusts and Other Indirect Offerings in July 2007. National Policy 41-201 states that “distributable cash is fairly presented only when reconciled to cash flows from operating activities as presented in the income trust's financial statement, including changes in non-cash working capital”. It recommends the grouping of adjustments to cash flows from operating activities into one of the following categories: 1) capital adjustments; 2) non-recurring adjustments; and 3) other adjustments including

discretionary items, together with a detailed discussion of the nature of the adjustments (CSA, 2007). However, it still does not provide a single definition for distributable cash.

Within a few days of the issuance of National Policy 41-201, the CICA's Canadian Reporting Performance Board (CPRB) issued its final Interpretative Release – Standardized Distributable Cash in Income Trusts and Other Flow-Through Entities, a non-mandatory guidance document. The CPRB believes that its guidance complements National Policy 41-201 by providing a standardized measure of distributable cash and a framework for its disclosure. The CPRB defines Standardized Distributable Cash as “the periodic cash flows from operating activities as reported in the GAAP financial statements, including the effects of changes in non-cash working capital and any operating cash flows provided from or used in discontinued operations, less adjustments for total capital expenditures as reported in the GAAP financial statements; restrictions arising from compliance with financial covenants restrictive at the date of calculation; and limitations arising from the existence of a minority interest in a subsidiary. No other adjustments for one-time or unusual items should be made to cash flows from operating activities in the calculation of Standardized Distributable Cash” (CICA, 2007).

Standardized Distributable Cash should be disclosed in the MD&A together with an analysis of the relationship between Standardized Distributable Cash and changes in working capital, distributions, investing and financing activities; the entity's definition and recent history of productive capacity, strategy for managing productive capacity, and financing strategy; the extent of compliance with financial covenants; unit based and ratio disclosures; and the tax attributes of distributions (CICA, 2007).

Critics have expressed concerns over the fact that Standardized Distributable Cash is still not part of GAAP and that the recommendations are a little late in coming given October 2006's tax ruling (MacIntyre, 2007). Nevertheless, according to Standard & Poor's (2007a), accounting and disclosure issues remain of utmost importance to the income trust market and are in no way diminished by Bill C-52 because investors are still exposed to significant information risk in the transition period. It is still too early to assess how income trusts will respond to National Policy 41-201 and the Interpretative Release as well as how many will actually adopt the concept of Standardized Distributable Cash. However, the Interpretative Release provides a conceptual framework to assess income trusts' calculation and reporting practices prior to its adoption. The conceptual framework, as well as our research propositions, is discussed in the next section.

### **3. Conceptual Framework and Research Propositions**

#### **3.1 Conceptual Framework**

In the absence of a standardized definition for distributable cash or specific requirements regarding its calculation and reporting, income trusts' managers can manipulate the distributable cash figure to appear to 1) pay a distribution that is lower or equal to distributable cash; and 2) maintain a stable or increasing trend in distributions. The concept of Standardized Distributable Cash provides a standardized measure of distributable cash to assess the extent to which income trusts make use of the available discretion to reach these two objectives.

Standardized Distributable Cash reorganizes the GAAP Statement of Cash Flows to reflect the interaction between cash flows from operating activities and capital

expenditures. Financing and investing activities (other than capital expenditures) are not considered in the calculation of Standardized Distributable Cash. They either provide complementary sources of cash or compete with distributions as uses for distributable cash (CICA, 2007). Therefore, Standardized Distributable Cash measures the cash available for distribution after investing in the maintenance and growth of the trust's productive capacity. It clearly illustrates how distributable cash is generated, whether managers decide to retain part of the distributable cash to invest in other activities and whether external financing is needed to fund distribution payments.

Prior to the adoption of the CICA's Interpretative Release, there were two identifiable components to the cash distribution: 1) disclosed distributable cash; and 2) the difference between the cash distribution and disclosed distributable cash, which we call the over (under) distribution. Using Standardized Distributable Cash as the starting point to the calculation of the cash distribution allows us to now split the distribution in three components: 1) Standardized Distributable Cash; 2) the difference between disclosed distributable cash and Standardized Distributable Cash, which we call abnormal distributable cash; and 3) the over (under) distribution. Under the latter, income trusts would have incentives to maximize abnormal distributable cash and minimize over distributions to appear to pay a distribution that is lower or equal to distributable cash; and maintain a stable or increasing trend in distributions.

Figure 2 illustrates the three components of the distribution for a trust that discloses a distributable cash figure higher than Standardized Distributable Cash, and pays a distribution lower than disclosed distributable cash. Figure 2 shows how a trust can overstate the distributable cash figure to give the impression of being conservative

(i.e. paying a distribution lower than distributable cash) while actually paying a distribution higher than Standardized Distributable Cash, the real cash generated by the operating activities after capital expenditures.<sup>4</sup> In the next section, we discuss economic and governance factors that could explain such behaviour.

{Insert Figure 2 here}

## **3.2 Determinants of Distribution Components**

### **3.2.1 Smoothing**

Prior research shows that regular corporations tend to engage in both earnings and dividend smoothing. Earnings smoothing occurs when the accounting components of earnings are managed to reduce the variability of reported earnings around some level considered normal for the firm (Bartov, 1993; Leuz *et al.*, 2003). Dividend smoothing occurs when the current dividend is largely influenced by the prior dividend, and relatively insensitive to current earnings (Aivazian *et al.*, 2006). Income trusts differ from regular corporations in that the assessment of the business is predicated on cash generation and availability for distribution as opposed to earnings (Standard and Poor's, 2006a). As such, the smoothed figures are more likely to be disclosed distributable cash and cash distributions.

Given their incentive to show a stable or increasing trend in distributable cash and cash distributions, income trusts are more likely to overstate the disclosed distributable cash figure not to report a shortfall as compared to the previous year, than to understate a disclosed distributable cash figure that is larger than the previous year. To avoid a reduction in disclosed distributable cash, income trusts can modify the way in which they

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<sup>4</sup> For example, the income trust could exclude the changes in the working capital accounts or capital expenditures from the calculation of disclosed distributable cash.

calculate disclosed distributable cash, understate maintenance capital expenditures, use discretionary adjustments, draw from a distributable cash reserve, etc. If income trusts overstate disclosed distributable cash to avoid reporting a decrease, then trusts with a decrease in Standardized Distributable Cash will record higher abnormal distributable cash. Given their incentive to show a stable or increasing trend in cash distributions, income trusts are also more likely to pay a distribution higher than disclosed distributable cash not to report a distribution cut or to minimize its magnitude. If such is the case, then trusts with a decrease in disclosed distributable cash will record higher over distributions.

### **3.2.2 Managerial Equity Incentives**

Increased use of stock-based compensation along with other equity incentives over the past decade have raised concerns they may persuade managers to increase short-term stock prices in order to subsequently benefit from selling shares or exercising options (Cheng & Warfield, 2005). Cheng and Warfield (2005) show there is a significantly higher incidence of meeting or just beating analyst forecasts for firms with higher managerial equity incentives. Lev (1992) suggests that in cases where managers have incentives to manage stock price, they will choose to delay or accelerate the disclosure of bad and good news so that it moves in the desired direction. In other words, they will try to minimize stock price (and the exercise price) when stock options are granted, and maximize it when the options can be exercised.<sup>5</sup> Finally, Efendi, Srivastava, and Swanson (2005) show that managers are likely more sensitive to a

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<sup>5</sup> Empirical studies generally support the stock price management hypothesis. Yermack (1997) finds that stock options are generally granted shortly before higher than expected quarterly earnings are announced, and followed by favourable stock price movements. Aboody and Kasznik (2000) show that unfavourable (favourable) stock movements generally occur before (after) stock options are granted. They also find that the granting of stock options is preceded by negative but insignificant abnormal returns and followed by positive and significant abnormal returns, consistent with managers accelerating (delaying) the announcement of bad (good) news prior to the granting.

decrease in the value of their options when they are not only exercisable with a profit (in-the-money), but also when the existing profit is important compared to their wealth (that is, deep in-the-money).

Managers' decisions with respect to disclosed distributable cash can negatively impact unit price if there is a decreasing trend in distributable cash (that leads to a decrease in distributions), or the distribution ends up being higher than distributable cash (i.e. partly a return of capital). To avoid a decrease in unit price, managers of trusts with higher equity incentives would then have an incentive to overstate disclosed distributable cash and minimize over distributions. If such is the case, trusts with higher managerial equity incentives will record higher abnormal distributable cash. They will record lower over distributions.

### **3.2.3 Board Ownership**

To align the interests of directors with those of shareholders, regulators and governance activists (e.g. the Coalition for Good Governance) recommend that directors have a significant investment in the shares of the entities they govern. However, the increase in shareholdings also increases the importance of insider trading to directors (Ronen et al., 2006). Hence, Ronen et al. (2006) show that directors with higher shareholdings allow managers to manage earnings in order to engage in profitable insider trading. The desire to make profitable insider trades leads directors to create an information asymmetry between themselves and the market. As such, they prefer earnings management that conceals the truth.

If unit ownership makes trustees more sensitive to changes in unit price and leads them to support managerial opportunism that results in higher unit prices, then trustees

with higher ownership will let managers overstate disclosed distributable cash. However, they will avoid distributions in excess of disclosed distributable cash. If such is the case, trusts with higher director ownership will record higher abnormal distributable cash. They will record lower over distributions.

### **3.2.4 Board Independence**

Even though income trusts' managers may have incentives to take advantage of the lack of standards to manipulate the distributable cash figure, their ability to do so ultimately depends upon the constraints they face. One such constraint is the scrutiny of the board of trustees. The board of directors (trustees) must promote accurate, high quality and timely disclosure of financial and other material information to the public markets, and to shareholders (Blue Ribbon Committee, 1999). An important function of the board of directors (trustees) is also to minimize agency costs that arise from the separation of ownership and control i.e. to ensure that management is working in the best interests of the corporation and its shareholders to enhance corporate economic value (Fama and Jensen, 1983). Independence of the board members is judged critical to ensuring that they fulfill their oversight role and hold management accountable to shareholders. Independent directors are generally considered better monitors because they have the ability to act with a view of the best interests of the corporation (Toronto Stock Exchange, 1994). They also have incentives to develop a reputation as experts in decision control and monitoring to maintain the value of their human capital (Fama, 1980; Fama and Jensen, 1983).

Prior empirical research on the relationship between the extent of earnings management and board of directors' independence generally support the hypothesis that

independent directors effectively constrain more or less severe cases of earnings management. A first line of research shows that a higher proportion of independent directors on the board reduces the probability of a company restating its earnings (Agrawal and Chadha, 2005); the likelihood of financial statement fraud (Beasley, 1996); and the probability of being the object of a SEC enforcement action (Dechow et al., 1996). A second stream of literature finds that a higher percentage of independent directors reduces the likelihood of belonging to a high discretionary accruals group (Bedard et al., 2004); and the level of discretionary accruals (Klein, 2002; Xie et al., 2003).

Overstating disclosed distributable cash can misguide investors about the nature (i.e. return on capital vs. return of capital) and the sustainability of cash distributions and result in misinformed investment decisions. Thus, a higher proportion of independent trustees on the board should limit income trusts managers' ability to manipulate the distributable cash figure. If such is the case, then income trusts with a higher proportion of independent trustees on the board will record lower abnormal distributable cash. Independent trustees should also limit managers' ability to declare a distribution higher than disclosed distributable cash to protect unit value. If such is the case, then trusts with a higher proportion of independent trustees on the board will record lower over distributions.

### **3.3 Valuation of Distribution Components**

Our next research question is whether investors see through distributable cash management, i.e. whether and how they value the three components of cash distributions. It can be inferred that the nature and purpose of income trusts leads to the establishment

of a strong implicit contract between income trusts' trustees and managers and their owners with respect to cash distributions. However, the unregulated nature of distributable cash reported by income trusts, which provides their managers with more discretion, as well as the institutional importance of cash distributions are bound to affect their value relevance.

Prior theoretical work (Bhattacharya, 1979; Miller and Rock, 1985) and empirical evidence (Aharony and Swary, 1980; Asquith and Mullins, 1983) document the potential information content of dividends. Prior research also shows that a decision by a firm to change its dividend provides investors with a credible signal about its future prospects. In other words, a change in dividends is a benchmark that adds credibility to reported earnings. Sivakumar and Waymire (1993) as well as Cormier et al. (2000) document that in an environment with few mandatory disclosure requirements or restrictions on accounting methods, dividends and dividend changes are value-relevant to a greater extent than reported earnings. Furthermore, Cormier et al. (2000) show that discretionary accruals can actually be more valued than non-discretionary accruals in a dividend-focused environment such as Switzerland. This suggests that investors will value positively both standardized and abnormal distributable cash if abnormal distributable cash allows income trusts to maintain their cash distributions. However, if the cash distribution exceeds disclosed distributable cash, then the over distribution component should be negatively valued as it constitutes a return of capital.

## 4. Method

### 4.1 Sample and Data

Sample income trusts are drawn from Investcom ([www.investcom.com](http://www.investcom.com)). Financial data is obtained from Compustat, Stock Guide and annual reports. Governance and compensation data is obtained from sample trusts' proxy statements. Investcom lists 241 income trusts as at December 1, 2005, and 175 of the 241 income trusts are found in Compustat. Data is pooled over the 2000-2005 period. Overall, complete data is available for 402 income trust-year observations.

### 4.2 Models and Variables

#### 4.2.1 Determinants of Abnormal Distributable Cash

The following pooled regression model is used to examine the determinants of abnormal distributable cash:

$$ABNDCASH_{i,t} = \beta_0 + \beta_2 DEVSTDDCASH_{i,t} + \beta_3 PEROPTIONS_{i,t} + \beta_4 ITMOPTIONS_{i,t} + \beta_5 BODOWN_{i,t} + \beta_6 BODINDEP_{i,t} + \beta_7 OWN_{i,t} + \beta_8 SIZE_{i,t} + TYPE_{i,t} + \varepsilon_{i,t} \quad (1)$$

Where:

<i>ABNDCASH</i>	=	Disclosed distributable cash for year t minus Standardized Distributable Cash for year t scaled by the number of units outstanding at the end of year t
<i>DEVSTDDCASH</i>	=	1 if Standardized Distributable Cash for year t is lower than Standardized Distributable Cash for year t-1; 0 otherwise
<i>PEROPTIONS</i>	=	Average percentage of the top paid executives' compensation paid in options for the year t.
<i>ITMOPTIONS</i>	=	Average value of "in the money" stock options held by the top paid executives at the end of year t divided by their total compensation for year t
<i>BODOWN</i>	=	Total number of units owned by the trustees at the end of year t scaled by the number of units outstanding at the end of year t
<i>BODINDEP</i>	=	Percentage of outsiders on the board of trustees for year t, as disclosed in the trust's proxy statement
<i>OWN</i>	=	1 if an external unitholder controls more than 10 percent of outstanding votes at the end of year t (i.e. the trust is closely-

	held); 0 otherwise
<i>SIZE</i>	= Natural logarithm of lagged total assets
<i>TYPE</i>	= Business, real estate, resource or utility trust as per Investcom's classification

Abnormal distributable cash (*ABNDCASH*) is the difference between disclosed and Standardized Distributable Cash for year *t*. Thus, *ABNDCASH* is positive if disclosed distributable cash is higher than Standardized Distributable Cash (i.e. overstated) and negative if disclosed distributable cash is lower than Standardized Distributable Cash (i.e. understated). Standardized Distributable Cash is calculated in accordance with the CICA's Interpretative Release, i.e. periodic cash flows from operating activities as reported in the GAAP financial statements less adjustments for total capital expenditures as reported in the GAAP financial statements and limitations arising from the existence of a minority interest in a subsidiary. Distributions paid to minority unitholders for year *t* are used to proxy for the limitations arising from the existence of a minority interest in a subsidiary.

*DEVSTDDCASH* measures income trusts' incentives to overstate disclosed distributable cash in order to maintain a constant or increasing level of distributable cash from year to year. Accordingly, we expect *DEVSTDDCASH* to be positively related to abnormal distributable cash. We use two proxies for managerial equity incentives: 1) the average percentage of their compensation that is paid in stock options (*PEROPTIONS*) and 2) the average value of the in-the-money options they hold in proportion to their annual compensation (*ITMOPTIONS*). We expect *PEROPTIONS* and *ITMOPTIONS* to be positively related to abnormal distributable cash. *BODOWN* measures board ownership. We expect *BODOWN* to be positively related to abnormal distributable cash.

Finally, *BODINDEP* is the percentage of independent trustees on the board. We expect *BODINDEP* to be negatively related to abnormal distributable cash.

Two control variables are included in the model (*OWN*, *SIZE*). We control for ownership because prior research shows that reporting incentives of closely-held firms tend to differ (Hogler & Hunt, 1993). Firm size is included as a control variable to proxy for various aspects of the income trust.

#### 4.2.2 Determinants of Over (Under) Distributions

The following pooled regression model is used to examine the determinants of over (under) distributions:

$$\begin{aligned}
 EXCDISTR_{i,t} = & \beta_0 + \beta_1 CASH_{i,t} + \beta_2 CUMRESERVE_{i,t} + \beta_3 DEVDCASH_{i,t} + \\
 & \beta_4 PEROPTIONS_{i,t} + \beta_5 ITMOPTIONS_{i,t} + \beta_6 BODOWN_{i,t} + \beta_7 BODINDEP_{i,t} + \beta_8 OWN_{i,t} + \\
 & \beta_9 SIZE_{i,t} + \beta_{10} LEVERAGE_{i,t} + TYPE_{i,t} + \varepsilon_{i,t}
 \end{aligned} \tag{2}$$

Where :

<i>EXCDISTR</i>	=	Distribution for year t – disclosed distributable cash for year t scaled by the number of units outstanding at the end of the year t
<i>CASH</i>	=	Cash and cash equivalents at the end of year t scaled by the number of units outstanding at the end of year t
<i>CUMRESERVE</i>	=	Cumulative distributable cash reserve at the beginning of year t scaled by the number of units outstanding at the end of year t
<i>DEVDCASH</i>	=	1 if disclosed distributable cash for year t is lower than disclosed distributable cash for year t-1; 0 otherwise
<i>PEROPTIONS</i>	=	Average percentage of the top paid executives' compensation paid in options for the year t.
<i>ITMOPTIONS</i>	=	Average value of “in the money” stock options held by the top paid executives at the end of year t divided by their total compensation for year t
<i>BODOWN</i>	=	Total number of units owned by the trustees at the end of year t scaled by the number of units outstanding at the end of year t
<i>BODINDEP</i>	=	Percentage of outsiders on the board of trustees for year t, as disclosed in the trust's proxy statement
<i>OWN</i>	=	1 if an external unitholder controls more than 10 percent of outstanding votes at the end of year t (i.e. the trust is closely-held); 0 otherwise

<i>SIZE</i>	=	Natural logarithm of lagged total assets
<i>LEVERAGE</i>	=	Total liabilities at the end of year t divided by equity at the end of year t
<i>TYPE</i>	=	Business, real estate, resource or utility trust as per Investcom's classification

*EXCDISTR* is the difference between the distributions declared during year t and disclosed distributable cash for year t. Thus, *EXCDISTR* is positive if declared distributions exceed disclosed distributable cash and negative if declared distributions are lower than disclosed distributable cash. Income trusts are more likely to pay a distribution higher (lower) than distributable cash if they have (don't have) cash available to pay the distribution. As such, we expect *CASH* to be positively related to *EXCDISTR*. *CUMRESERVE* is calculated by adding the difference between disclosed distributable cash and declared distributions for each sample year prior to year t. We expect *CUMRESERVE* to capture trusts' historical tendency to declare distributions lower or higher than disclosed distributable cash, i.e. *CUMRESERVE* to be negatively related to *EXCDISTR*.

*DEVDCASH* measures income trusts' incentives to declare distributions higher than distributable cash in order to maintain a constant or increasing level of distributions from year to year. Accordingly, we expect *DEVDCASH* to be positively related to *EXCDISTR*. We use the same two proxies for managerial equity incentives. We expect *PEROPTIONS* and *ITMOPTIONS* to be negatively related to *EXCDISTR*. *BODOWN* measures board ownership. We expect *BODOWN* to be negatively related to *EXCDISTR*. Finally, *BODINDEP* is the percentage of independent trustees on the board. We expect *BODINDEP* to be negatively related to *EXCDISTR*.

Two control variables are included in the model (*OWN*, *SIZE*). We control for ownership because prior research shows that reporting incentives of closely-held firms tend to differ (Hogler & Hunt, 1993). Firm size is included as a control variable to proxy for various aspects of the income trust.

### 4.2.3 Valuation of Distribution Components

The following pooled regression is used to examine the value-relevance of distribution components, incremental to book value:

$$PRICE_{i,t} = \beta_0 + \beta_1 BVALUE_{i,t} + \beta_2 STDDCASH_{i,t} + \beta_3 ABNDCASH_{i,t} + \beta_4 EXCDISTR_{i,t} + TYPE_{i,t} + \varepsilon_{i,t} \quad (3)$$

Where:

<i>PRICE</i>	=	Price at the end of year t
<i>BVALUE</i>	=	Book value at the end of year t scaled by the number of units outstanding at the end of year t
<i>STDDCASH</i>	=	Standardized Distributable Cash for year t scaled by the number of units outstanding at the end of year t
<i>ABNDCASH</i>	=	Disclosed distributable cash for year t minus Standardized Distributable Cash for year t scaled by the number of units outstanding at the end of year t
<i>EXCDISTR</i>	=	Distribution for year t – disclosed distributable cash for year t scaled by the number of units outstanding at the end of the year t
<i>TYPE</i>	=	Business, real estate, utility or resource trust as per Investcom's classification

We expect book value per share (*BVALUE*), Standardized Distributable Cash per share (*STDDCASH*), and abnormal distributable cash (*ABNDCASH*) to be positively related to unit price; and the over (under) distribution (*EXCDISTR*) to be negatively related to unit price.

## 5. Results

### 5.1 Descriptive Statistics

Table 1 presents the industry and category distribution of sample income trusts. Investcom.com identifies four different categories of income trusts: Business, Resource, Utilities and Real Estate. We rely on Investcom.com's classification. Table 1 shows that most sample income trusts either belong to the business (175 income trust-years) or resource (102 income trust-years) categories. The number of complete observations is multiplied by 6 between 2000 and 2005: 17 income trust-year observations are included in the sample in 2000 while 121 income trust-year observations are available for 2005. This trend is consistent with the increased use of the income trust structure over the period studied.

{Insert Table 1 here}

Table 2 presents descriptive statistics for the variables included in the regression models. Table 2 shows median (average) Standardized Distributable Cash of \$0.7804 (\$0.4061) per unit and median (average) abnormal distributable cash of \$0.3834 (\$0.9969) per unit. This suggests that the median (average) income trust takes advantage of the available discretion to overstate disclosed distributable cash by 33% (71%). Sample trusts exhibit a median (average) under distribution of \$0.0746 (\$0.2159) per unit. However, when the distribution is compared to Standardized rather than disclosed distributable cash, the median (average) distribution paid exceeds Standardized Distributable Cash by \$0.3088 (\$0.7810) per unit. Thus, the overstatement of disclosed distributable cash potentially allows sample trusts to mislead investors as to the nature of the distribution they receive (return of capital as opposed to return on capital).

The median income trust experiences an increase in Standardized Distributable Cash as well as in disclosed distributable cash from the year before (both *DEVSTDDCASH* and *DEVDCASH* have a zero median). The median income trust also does not rely on managerial equity incentives (both *PEROPTIONS* and *ITMOPTIONS* have a zero median). However, on average, sample trusts pay out 3.98% of top executives' compensation in options and the value of their in-the-money options represents 60.29% of their total compensation. Trustees own an average of 4.28% (median of 0.87%) of the outstanding units, potentially to align their interests with those of the unitholders. Finally, 75% (74.14%) of the trustees on the board of the median (average) trust are independent. This percentage seems high given that governance is not regulated in the income trust industry, with some people going as far as comparing it to the Wild West (Report on Business, October 25, 2006). It could be due to the fact that we base our classification on the information disclosed by the trusts in their proxy statements. Since there is no standardized definition of an independent director, trusts can exercise discretion as to whom they consider as outsiders.

The median (average) trust has cash of \$0.1359 (\$0.3114) per unit and a cumulative distributable cash reserve of \$0.0462 (\$0.2266) per unit. Hence, the overstatement of disclosed distributable cash can also allow for the creation of artificial distributable cash reserves. Median (average) leverage may appear to be high at \$0.8623 (\$1.1122) of liabilities for each dollar of equity. However, this high level of debt is necessary to be able to deduct the interest paid by the operating company to the trust and minimize corporate taxes at the operating company level; and to maximize cash

distributions to unitholders at the trust level. Finally, the median (average) unit price is \$12.55 (\$14.13) and the median (average) book value per unit is \$8.33 (\$8.08).

{Insert Table 2 here}

Table 3 presents Pearson correlations between variables included in our regression models. All correlations are below 0.339 for the abnormal distributable cash model. All correlations are below 0.254 for the over (under) distribution model, except for the correlation between *EXCDISTR* and *CUMRESERVE* (-0.605). This seems to indicate that a trust's distribution decision is influenced by its prior distribution decisions. Finally, all correlations are below 0.54 for the valuation model, except for the correlation between *PRICE* and *EXCDISTR* (-0.544); and the correlation between *STDDCASH* and *ABNDCASH* (-0.901). The correlation between unit price and the over (under) distribution is consistent with the difference between disclosed distributable cash and cash distributions being a significant driver of unit price. Standardized Distributable Cash and abnormal distributable cash are correlated by design.

{Insert Table 3 here}

Table 4 compares the distributions paid to disclosed distributable cash and Standardized Distributable Cash for each type of trust. It also compares the number of trusts with over (under) distributions prior to and after the use of Standardized Distributable Cash as the benchmark measure. Panel A shows a high percentage of trusts paying a distribution lower than disclosed distributable cash (74.9% of business trusts; 80% of real estate investment trusts; 62.5% of utility trusts; 98% of resource trusts; 80.6% overall). The percentages drop significantly in Panel B when Standardized Distributable Cash is used as the benchmark (41.7% of business trusts; 28.2% of real

estate investment trusts; 20% of utility trusts; 7.8% of resource trusts; 28.1% overall). Finally, Panel C shows that the use of Standardized Distributable Cash as the benchmark measure leads to the reclassification of 67.5% of the trusts with a distribution lower than disclosed distributable cash as compared to only 10% of the trusts with a distribution higher than disclosed distributable cash. Overall, consistent with Table 2, this suggests that income trusts take advantage of the available discretion to overstate disclosed distributable cash, and that the overstatement allows them to mislead investors as to the nature of the distribution they receive.

{Insert Table 4 here}

## 5.2 Multivariate Results

Table 5 presents the results of the pooled regression examining the determinants of abnormal distributable cash. All reported t-statistics are based on robust standard errors. The model is significant ( $p < 0.000$ ) with a  $R^2$  of 31.07%. Consistent with our prediction, the coefficient on *DEVSTDDCASH* is positive and significant ( $p < 0.000$ ). This seems to suggest that income trusts use their discretion to overstate distributable cash and avoid reporting a decrease in distributable cash and cash distributions. Also consistent with our prediction, the coefficient on *BODOWN* is positive and significant ( $p < 0.041$ ). Thus, it would seem that unit ownership makes trustees more sensitive to changes in unit price and leads them to support managerial opportunism in the form of overstated disclosed distributable cash. Managers of trusts with higher equity incentives do not seem to have an incentive to overstate disclosed distributable cash to avoid a decrease in unit price, as *PEROPTIONS* is negative and not significant ( $p < 0.598$ ) and *ITMOPTIONS* is positive and not significant ( $p < 0.268$ ). A higher proportion of

independent trustees on the board also does not seem to constrain managers' ability to manipulate the distributable cash figure since the coefficient for *BODINDEP* is not significant ( $p < 0.495$ ). None of the other coefficients are significant.

{Insert Table 5 here }

Table 6 presents the results of the pooled regression examining the determinants of over (under) distributions. The model is significant ( $p < 0.000$ ) with a  $R^2$  of 43.99%. Consistent with our prediction, the coefficient on *CASH* is positive, but marginally significant ( $p < 0.090$ ). This seems to indicate that income trusts are more likely to pay a distribution higher than distributable cash if they have cash available to pay the distribution. The coefficient on *CUMRESERVE* is negative and significant ( $p < 0.000$ ) as predicted. As such, *CUMRESERVE* seems to capture trusts' historical tendency to declare distributions lower or higher than disclosed distributable cash. The coefficients on *OWN*, *SIZE* and *LEVERAGE* are not significant.

Our results support all of our research propositions. *DEVDCASH* is positively associated with *EXCDISTR*, and the association is significant ( $p < 0.000$ ). Thus, trusts seem more likely to pay a distribution higher than disclosed distributable cash if they experienced a decline in disclosed distributable cash from the previous year.

*PEROPTIONS* and *ITMOPTIONS* are negatively associated with *EXCDISTR*, and the association is marginally significant ( $p < 0.087$  and  $p < 0.067$ ). This suggests that managers with higher equity incentives avoid paying a distribution higher than disclosed distributable cash to protect unit price. *BODOWN* is negative and marginally significant ( $p < 0.086$ ), consistent again with unit ownership making trustees more sensitive to a decrease in unit price and supportive of managerial opportunism. Finally, *BODINDEP* is

negative and marginally significant ( $p < 0.089$ ). This seems to indicate that independent trustees constrain managers' ability to pay distributions higher than disclosed distributable cash to protect unit value.

{Insert Table 6 here}

Table 7 presents the results of the pooled regression examining the value-relevance of Standardized Distributable Cash, abnormal distributable cash and over (under) distributions, incremental to book value. The model is significant ( $p < 0.000$ ) with a  $R^2$  of 60.63%. The coefficient on *BVALUE* is positive and significant as predicted ( $p < 0.000$ ). Standardized Distributable Cash and abnormal distributable cash are both positively associated with unit price and the association is significant ( $p < 0.000$  and  $p < 0.000$ ). This result is consistent with either of two scenarios: 1) investors are not able to see through distributable cash management and use disclosed distributable cash as a benchmark measure; or 2) investors value both measures positively because abnormal distributable cash allows income trusts to maintain their cash distributions. Finally, the coefficient on *EXCDISTR* is negative and significant as predicted ( $p < 0.045$ ). This seems to suggest that investors appropriately consider over distributions as a return of capital, rather than a return on capital. Similarly, it seems to indicate that investors react positively to the decision to retain available distributable cash by paying a distribution lower than disclosed distributable cash.

{Insert Table 7 here}

## 6. Conclusion

This paper investigates whether and how reporting incentives and constraints influence income trusts' calculation and reporting of distributable cash and cash

distributions. We also examine whether investors see through distributable cash management. Using Standardized Distributable Cash as the starting point to the calculation of the cash distribution, we split declared distributions in three components: 1) Standardized Distributable Cash; 2) the difference between disclosed distributable cash and Standardized Distributable Cash, which we call abnormal distributable cash; and 3) the difference between the cash distribution and disclosed distributable cash, which we call the over (under) distribution.

First, we investigate the determinants of abnormal distributable cash. Our results suggest that income trusts use their discretion to overstate distributable cash when they would otherwise report a decrease in Standardized Distributable Cash, and when board ownership is higher. Second, we examine the determinants of over (under) distributions. After controlling for the cash available to pay the distribution and the cumulative distributable cash reserve at the beginning of the period, we find that income trusts that experienced a decline in disclosed distributable cash from the previous year seem to record higher over distributions, but that income trusts with higher managerial equity incentives and higher board ownership record lower over distributions. Our results also seem to indicate that independent trustees constrain managers' ability to pay distributions higher than disclosed distributable cash to protect unit value. Finally, we examine whether and how the market values the three components of cash distributions, incremental to book value. Our results show a positive association between Standardized Distributable Cash and unit price, and abnormal distributable cash and unit price; and a negative association between over (under) distributions and unit price. In our view, this finding substantiates the primacy of cash distributions in the valuation of income trusts,

with management's use of discretion in the calculation of distributable cash making possible stability in that regard.

On October 31, 2006, the federal government of Canada announced its intention to impose taxes on Canadian flow-through entities (including income trusts) in a manner similar to corporations, and Bill C-52 received Royal assent on June 22, 2007.

Commonly referred to as the "Halloween Massacre", the announcement put an end to the conversion frenzy and resulted in a loss of \$19 billion in market capitalization in the first day of trading alone. Thus, critics have expressed concerns over the fact that the CICA's recommendations are a little late in coming (MacIntyre, 2007). Nevertheless, according to Standard & Poor's (2007a), accounting and disclosure issues remain of utmost importance to the income trust market and are in no way diminished by Bill C-52 because investors are still exposed to significant information risk in the transition period. Our results support the CSA's and CICA's initiative by showing that income trusts take advantage of the high degree of discretion allowed in the calculation and reporting of distributable cash to overstate distributable cash and maintain a stable or increasing trend in distributions.

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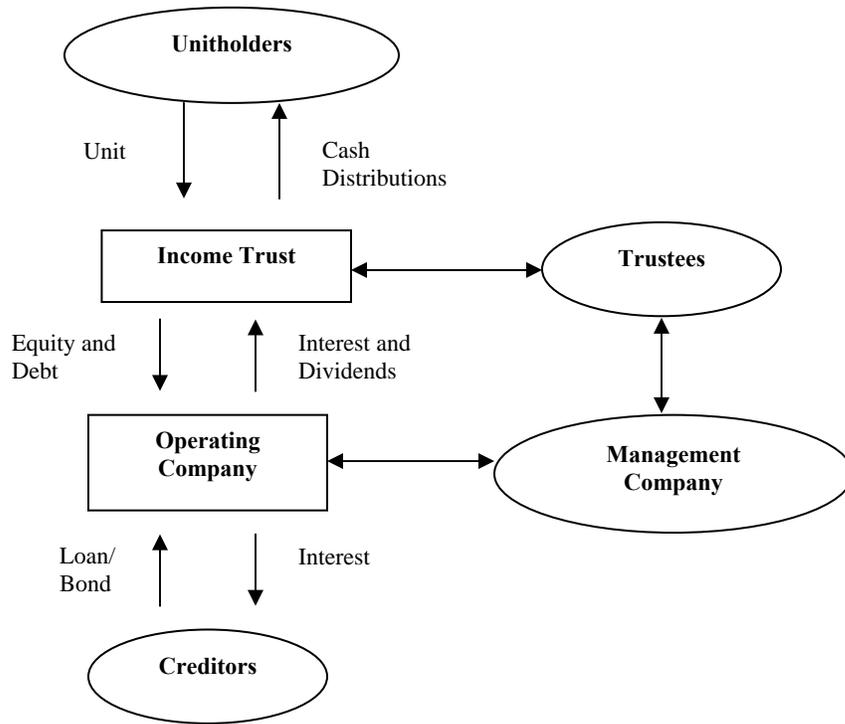
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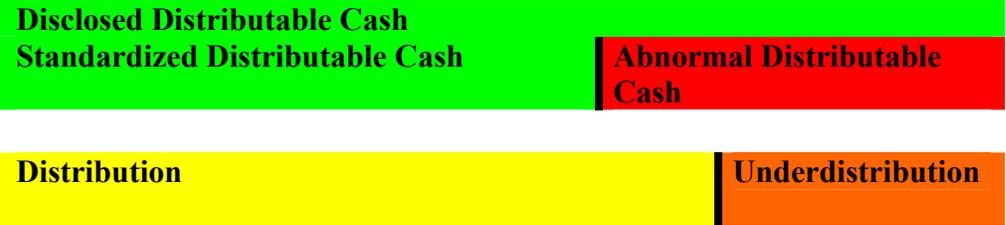
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**Figure 1**  
**Structure of an Income Trust**



**Figure 2**  
**Distribution Components**

**Disclosed Distributable Cash > Standardized Distributable Cash**  
**Distribution < Disclosed Distributable Cash**



**Table 1**  
**Sample by Type and Year**

	<u>2000</u>	<u>2001</u>	<u>2002</u>	<u>2003</u>	<u>2004</u>	<u>2005</u>	<u>Total</u>
<b>Business</b>	4	6	13	37	59	56	175
<b>Real Estate</b>	6	6	11	20	28	31	85
<b>Utilities</b>	3	2	3	7	13	12	40
<b>Resource</b>	4	6	13	17	23	22	102
<b>Total</b>	<b>17</b>	<b>20</b>	<b>40</b>	<b>81</b>	<b>123</b>	<b>121</b>	<b>402</b>

**Table 2**  
**Descriptive Statistics**

<b>Variable**</b>	<b>Mean</b>	<b>Median</b>	<b>Minimum</b>	<b>Maximum</b>
<i>STDDCASH</i>	0.4061	0.7804	-18.5092	3.1289
<i>ABNDCASH</i>	0.9969	0.3834	-1.4450	19.5843
<i>DEVSTDDCASH</i>	0.3508	0.0000	0.0000	1.0000
<i>PEROPTIONS</i>	0.0398	0.0000	0.0000	1.0000
<i>ITMOPTIONS</i>	0.6029	0.0000	0.0000	24.2400
<i>BODOWN</i>	0.0428	0.0087	0.0000	0.5976
<i>BODINDEP</i>	0.7414	0.7500	0.0000	1.0000
<i>SIZE</i>	6.0403	6.0821	3.0863	8.9057
<i>OWN</i>	0.5274	1.0000	0.0000	1.0000
<i>EXCDISTR</i>	-0.2159	-0.0746	-3.4548	0.6842
<i>CASH</i>	0.3114	0.1359	0.0000	6.2930
<i>CUMRESERVE</i>	0.2266	0.0462	-0.5448	9.9191
<i>DEVDCASH</i>	0.1517	0.0000	0.0000	1.0000
<i>LEVERAGE</i>	1.1122	0.8623	0.0092	11.4192
<i>PRICE</i>	14.1329	12.5500	1.8900	47.8300
<i>BVALUE</i>	8.0848	8.3326	0.7558	19.6861

\* This table presents descriptive statistics for the variables included in the regression models.

\*\* Variable definitions:

<i>ABNDCASH</i>	Disclosed distributable cash for year t minus Standardized Distributable Cash for year t scaled by the number of units outstanding at the end of year t
<i>DEVSTDDCASH</i>	1 if Standardized Distributable Cash for year t is lower than Standardized Distributable Cash for year t-1; 0 otherwise
<i>PEROPTIONS</i>	Average percentage of the top paid executives' compensation paid in options for the year t.
<i>ITMOPTIONS</i>	Average value of "in the money" stock options held by the top paid executives at the end of year t divided by their total compensation for year t
<i>BODOWN</i>	Total number of units owned by the trustees at the end of year t scaled by the number of units outstanding at the end of year t
<i>BODINDEP</i>	Percentage of outsiders on the board of trustees for year t, as disclosed in the trust's proxy statement
<i>OWN</i>	1 if an external unitholder controls more than 10 percent of outstanding votes at the end of year t (i.e. the trust is closely-held); 0 otherwise
<i>SIZE</i>	Natural logarithm of lagged total assets
<i>EXCDISTR</i>	Distribution for year t – disclosed distributable cash for year t scaled by the number of units outstanding at the end of the year t
<i>CASH</i>	Cash and cash equivalents at the end of year t scaled by the number of units outstanding at the end of year t
<i>CUMRESERVE</i>	Cumulative distributable cash reserve at the beginning of year t scaled by the number of units outstanding at the end of year t
<i>DEVDCASH</i>	1 if disclosed distributable cash for year t is lower than disclosed distributable cash for year t-1; 0 otherwise
<i>LEVERAGE</i>	Total liabilities at the end of year t divided by equity at the end of year t
<i>PRICE</i>	Price at the end of the fiscal year
<i>BVALUE</i>	Book value at the end of the year scaled by the number of units outstanding at the end of the year
<i>STDDCASH</i>	Standardized Distributable Cash for year t scaled by the number of units outstanding at the end of year t

**Table 3  
Correlation Matrix**

	<i>ADCASH</i> (1)	<i>DEV</i> <i>SDCASH</i> (2)	<i>PEROPT</i> (3)	<i>ITMOPT</i> (4)	<i>BODIND</i> (5)	<i>BODOWN</i> (6)	<i>OWN</i> (7)	<i>SIZE</i> (8)			
(1)	1.000										
(2)	0.339*										
(3)	0.116*	0.046									
(4)	0.266*	0.100*	0.104*								
(5)	0.028	-0.021	-0.006	-0.092							
(6)	0.146*	0.036	0.039	0.096	-0.154*						
(7)	0.155*	0.027	0.069	0.208*	0.090	-0.214*					
(8)	-0.071	-0.014	-0.044	-0.096	-0.016	0.233*	-0.254*	1.000			
	<i>EDISTR</i> (1)	<i>CASH</i> (2)	<i>CUMRES</i> (3)	<i>DEVDC</i> <i>ASH</i> (4)	<i>PEROPT</i> (5)	<i>ITMOPT</i> (6)	<i>BODIND</i> (7)	<i>BODOWN</i> (8)	<i>SIZE</i> (9)	<i>OWN</i> (10)	<i>LEV</i> (11)
(1)	1.000										
(2)	0.024										
(3)	-0.605*	0.088									
(4)	0.210*	0.022	-0.032								
(5)	-0.174*	-0.030	0.018	-0.064							
(6)	-0.202*	-0.054	0.059	-0.103*	0.104*						
(7)	-0.113*	-0.059	0.108*	-0.052	-0.006	-0.092					
(8)	-0.139*	-0.026	0.052	-0.098*	0.039	0.096	-0.154*				
(9)	-0.066	0.075	0.046	0.081	0.069	0.208*	0.090	-0.214*			
(10)	0.132*	0.081	-0.121*	-0.087	-0.044	-0.096	-0.016	0.233*	-0.254*		
(11)	0.006	0.146*	0.004	-0.042	-0.015	-0.004	0.032	0.028	0.233*	0.032	1.000
	<i>PRICE</i> (1)	<i>BVALUE</i> (2)	<i>STDDCASH</i> (3)	<i>ABNDCASH</i> (4)	<i>EXCDISTR</i> (5)						
(1)	1.000										
(2)	0.424*										
(3)	0.444	0.015									
(4)	0.293*	0.122*	-0.901*								
(5)	-0.544*	-0.114	-0.017	-0.315	1.000						

**Table 4**  
**Distributions, Disclosed Distributable Cash and**  
**Standardized Distributable Cash Per Type**

<b>Panel A: Distributions vs. Disclosed Distributable Cash</b>			
	<b>Distribution &gt; Disclosed Distributable Cash</b>	<b>Distribution ≤ Disclosed Distributable Cash</b>	<b>Total</b>
<b>Business</b>	44	131	175
<b>Real Estate</b>	17	68	85
<b>Utilities</b>	15	25	40
<b>Resource</b>	2	100	102
<b>Total</b>	78	324	402
<b>Panel B: Distributions vs. Standardized Distributable Cash</b>			
	<b>Distribution &gt; Standardized Distributable Cash</b>	<b>Distribution ≤ Standardized Distributable Cash</b>	<b>Total</b>
<b>Business</b>	102	73	175
<b>Real Estate</b>	61	24	85
<b>Utilities</b>	32	8	40
<b>Resource</b>	94	8	102
<b>Total</b>	289	113	402
<b>Panel C: Before and After Over (Under) Distributions</b>			
	<b>Distribution &gt; Disclosed Distributable Cash</b>	<b>Distribution ≤ Disclosed Distributable Cash</b>	<b>Total</b>
<b>Distribution &gt; Standardized Distributable Cash</b>	70	219	289
<b>Distribution ≤ Standardized Distributable Cash</b>	8	105	113
<b>Total</b>	78	324	402

**Table 5**  
**Determinants of Abnormal Distributable Cash\***

Variable**	Predicted Sign	Coefficient	P >  z ***
<i>DEVSTDDCASH</i>	+	0.9141	0.000
<i>PEROPTIONS</i>	+	-0.3727	0.598
<i>ITMOPTIONS</i>	+	0.4903	0.268
<i>BODOWN</i>	+	2.1637	0.041
<i>BODINDEP</i>	-	0.2967	0.495
<i>OWN</i>	?	0.2231	0.152
<i>SIZE</i>	?	0.0497	0.673
Intercept		-0.3461	0.735
N			402
Wald Chi-2			74.91 (0.000)
R-square			31.07%

\*This table presents the results of the pooled regression examining the determinants of abnormal distributable cash. Parameter estimates are based on the following model:

$$(1) \quad ABNDCASH_{i,t} = \beta_0 + \beta_1 DEVSTDDCASH_{i,t} + \beta_3 PEROPTIONS_{i,t} + \beta_4 ITMOPTIONS_{i,t} + \beta_5 BODOWN_{i,t} + \beta_6 BODINDEP_{i,t} + \beta_7 OWN_{i,t} + \beta_8 SIZE_{i,t} + TYPE_{i,t} + \varepsilon_{i,t}$$

\*\*Variable definitions:

<i>ABNDCASH</i>	Disclosed distributable cash for year t minus Standardized Distributable Cash for year t scaled by the number of units outstanding at the end of year t
<i>DEVSTDDCASH</i>	1 if Standardized Distributable Cash for year t is lower than Standardized Distributable Cash for year t-1; 0 otherwise
<i>PEROPTIONS</i>	Average percentage of the top paid executives' compensation paid in options for the year t.
<i>ITMOPTIONS</i>	Average value of "in the money" stock options held by the top paid executives at the end of year t divided by their total compensation for year t
<i>BODOWN</i>	Total number of units owned by the trustees at the end of year t scaled by the number of units outstanding at the end of year t
<i>BODINDEP</i>	Percentage of outsiders on the board of trustees for year t, as disclosed in the trust's proxy statement
<i>OWN</i>	1 if an external unitholder controls more than 10 percent of outstanding votes at the end of year t (i.e. the trust is closely-held); 0 otherwise
<i>SIZE</i>	Natural logarithm of lagged total assets
<i>TYPE</i>	Business, real estate, utility or resource trust as per Investcom's classification

\*\*\*One-tailed if directional prediction, two-tailed otherwise. z-statistics based on robust standard errors.

**Table 6**  
**Determinants of Over (Under) Distributions\***

<b>Variable**</b>	<b>Predicted Sign</b>	<b>Coefficient</b>	<b>P &gt;  z ***</b>
<i>CASH</i>	+	0.0284	0.090
<i>CUMRESERVE</i>	-	-0.1919	0.000
<i>DEVDCASH</i>	+	0.1674	0.000
<i>PEROPTIONS</i>	-	-0.2998	0.087
<i>ITMOPTIONS</i>	-	-0.0171	0.067
<i>BODOWN</i>	-	-0.6878	0.086
<i>BODINDEP</i>	-	-0.0995	0.089
<i>OWN</i>	?	0.0158	0.723
<i>SIZE</i>	?	-0.0338	0.135
<i>LEVERAGE</i>	?	-0.0059	0.543
Intercept		0.2565	0.122
N			402
Wald Chi-2			79.57 (0.000)
R-square			43.99%

\*This table presents the results of the pooled regression examining the determinants of over (under)distributions. Parameter estimates are based on the following model:

$$(2) \quad EXCDISTR_{i,t} = \beta_0 + \beta_1 CASH_{i,t} + \beta_2 CUMRESERVE_{i,t} + \beta_3 DEVDCASH_{i,t} + \beta_4 PEROPTIONS_{i,t} + \beta_5 ITMOPTIONS_{i,t} + \beta_6 BODOWN_{i,t} + \beta_7 BODINDEP_{i,t} + \beta_8 OWN_{i,t} + \beta_9 SIZE_{i,t} + \beta_{10} LEVERAGE_{i,t} + TYPE_{i,t} + \varepsilon_{i,t}$$

\*\*Variable definitions:

<i>EXCDISTR</i>	Distribution for year t – disclosed distributable cash for year t scaled by the number of units outstanding at the end of the year t
<i>CASH</i>	Cash and cash equivalents at the end of year t scaled by the number of units outstanding at the end of year t
<i>CUMRESERVE</i>	Cumulative distributable cash reserve at the beginning of year t scaled by the number of units outstanding at the end of year t
<i>DEVDCASH</i>	1 if disclosed distributable cash for year t is lower than disclosed distributable cash for year t-1; 0 otherwise
<i>PEROPTIONS</i>	Average percentage of the top paid executives' compensation paid in options for the year t.
<i>ITMOPTIONS</i>	Average value of “in the money” stock options held by the top paid executives at the end of year t divided by their total compensation for year t
<i>BODOWN</i>	Total number of units owned by the trustees at the end of year t scaled by the number of units outstanding at the end of year t
<i>BODINDEP</i>	Percentage of outsiders on the board of trustees for year t, as disclosed in the trust's proxy statement
<i>OWN</i>	1 if an external unitholder controls more than 10 percent of outstanding votes at the end of year t (i.e. the trust is closely-held); 0 otherwise
<i>SIZE</i>	Natural logarithm of lagged total assets
<i>LEVERAGE</i>	Total liabilities at the end of year t divided by equity at the end of year t
<i>TYPE</i>	Business, real estate, utility or resource trust as per Investcom's classification

\*\*\*One-tailed if directional prediction, two-tailed otherwise. z-statistics based on robust standard errors.

**Table 7**  
**Valuation of Distribution Components\***

<b>Variable**</b>	<b>Pred</b>	<b>Coefficient</b>	<b>P &gt;  z ***</b>
<i>BVALUE</i>	+	0.7146	0.000
<i>STDDCASH</i>	+	4.3806	0.000
<i>ABNDCASH</i>	+	4.2404	0.000
<i>EXCDISTR</i>	-	-1.9015	0.045
Intercept		1.9310	0.151
N			402
Wald Chi-2			51.11 (0.000)
R-square			60.63%

\*This table presents the results of the pooled regression examining the value-relevance of distribution components. Parameter estimates are based on the following model:

$$(2) \quad PRICE_{i,t} = \beta_0 + \beta_1 BVALUE_{i,t} + \beta_2 STDDCASH_{i,t} + \beta_3 ABNDCASH_{i,t} + \beta_4 EXCDISTR_{i,t} + TYPE_{i,t} + \varepsilon_{i,t}$$

\*\*Variable definitions:

<i>PRICE</i>	Price at the end of year t
<i>BVALUE</i>	Book value at the end of year t scaled by the number of units outstanding at the end of year t
<i>STDDCASH</i>	Standardized Distributable Cash for year t scaled by the number of units outstanding at the end of year t
<i>ABNDCASH</i>	Disclosed distributable cash for year t minus Standardized Distributable Cash for year t scaled by the number of units outstanding at the end of year t
<i>EXCDISTR</i>	Distribution for year t – disclosed distributable cash for year t scaled by the number of units outstanding at the end of the year t
<i>TYPE</i>	Business, real estate, utility or resource trust as per Investcom's classification

\*\*\*One-tailed if directional prediction, two-tailed otherwise. z-statistics based on robust standard errors.