Mutual Fund Governance

Cost Benefit Analysis

FINAL REPORT

Prepared for the Ontario Securities Commission

by

Keith A. Martin

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A. Introduction

In March 2002 the Canadian Securities Administrators (CSA) issued concept proposal 81-402 *Striking a New Balance: A Framework for Regulating Mutual Funds and their Managers*. In response to comments received to that paper, and after further consideration by the CSA, it was decided to develop a revised proposal for mutual fund governance and to include a comprehensive Cost Benefit Analysis (CBA) of the estimated impact of the proposed changes.

The new regime will remove legislated prohibitions or constraints on related party transactions and, subject to appropriate oversight by an Independent Review Committee (IRC), permit these to take place. The objective of this paper is to provide estimates of the financial impact resulting from the ability of mutual funds to enter into such transactions for each of the following groups:

- Mutual funds related to securities dealers (dealer related funds)
- Mutual funds not related to a securities dealer
- The mutual fund industry as a whole
- The securities and capital markets in general (if identifiable costs and benefits are found).

B. Summary of Results

The estimates show that the introduction of the new fund governance regime would result in directly quantifiable financial benefits to the mutual fund industry as a whole, ranging between $86 million to $158 million per year. Over a ten-year period, the discounted present value of these annual amounts would be between $808 million and $1.5 billion.
As discussed in the main body of the paper, the impact of the 60-Day Rule and the ability to carry out interfund trading are the two areas for which financial estimates have been developed for the industry as a whole, and which result in benefits for both the dealer-related and non-dealer related sectors. Results showing a negative benefit (in brackets), should not be viewed as a cost per se, but rather a benefit that one group is currently enjoying over the other, as a result of the current regulatory structure. The following tables summarize the estimates:

### Estimated Annual Benefits

<table>
<thead>
<tr>
<th></th>
<th>Total</th>
<th>Dealer-related</th>
<th>Non-Dealer Related</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>High</td>
<td>Low</td>
<td>High</td>
</tr>
<tr>
<td>60-Day Rule</td>
<td>$ 95</td>
<td>$ 51</td>
<td>$ 124</td>
</tr>
<tr>
<td>Interfund Trading</td>
<td>$ 63</td>
<td>$ 35</td>
<td>$ 25</td>
</tr>
<tr>
<td><strong>Total Impact</strong></td>
<td>$158</td>
<td>$ 86</td>
<td>$149</td>
</tr>
</tbody>
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### Discounted Present Value of Estimated Annual Benefits

<table>
<thead>
<tr>
<th></th>
<th>Total</th>
<th>Dealer-related</th>
<th>Non-Dealer Related</th>
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<tbody>
<tr>
<td></td>
<td>High</td>
<td>Low</td>
<td>High</td>
</tr>
<tr>
<td>60-Day Rule</td>
<td>$ 889</td>
<td>$ 481</td>
<td>$1,160</td>
</tr>
<tr>
<td>Interfund Trading</td>
<td>$ 588</td>
<td>$ 327</td>
<td>$ 234</td>
</tr>
<tr>
<td><strong>Total Impact</strong></td>
<td>$1,477</td>
<td>$ 808</td>
<td>$1,394</td>
</tr>
</tbody>
</table>

Furthermore, while not readily translatable into dollar terms, there will be improved efficiencies and a leveling of the playing field for both dealer and non-dealer related mutual funds. The analysis reflects both quantitative and qualitative impacts. In addition, we have provided some anecdotal evidence, based on discussions with individual mutual fund groups.

### Impact on Small Mutual Fund Groups

While the new governance regime may bring some financial benefits to mutual fund groups with less than $2 billion in assets, we have not quantified these.

We have not identified any fund groups with less than $2 billion in assets that would meet the definition of a dealer-related fund. Therefore, small fund families will see no directly quantifiable benefits from the removal of the 60-Day Rule.
That said, all funds will benefit from the long run effects of a lower cost of capital, as discussed in Section I of this paper.

We also analyzed the potential impact of interfund trading on small fund groups. Given the relatively small number of funds in such groups and their average asset values, it appears that the ability to engage in interfund trading will result in relatively insignificant (well under one basis point) savings for such groups as a whole.

Although not quantified for any of the fund groups, we believe that all funds, regardless of size, should benefit from an IRC’s oversight of best execution standards in conjunction with soft dollar arrangements.

C. Contribution of Independent Review Committees

As discussed in the Draft National Instrument and the accompanying Request for Comment, The Code for Mutual Funds and their Managers: The Future of Mutual Fund Regulation in Canada, the establishment of an independent review committee (IRC) by each fund manager is central to the new approach to fund governance. The functions of the IRC will include monitoring the extent that “the manager of a mutual fund acts or proposes to act in the best interests of the mutual fund in circumstances when a reasonable person would question whether the manager can objectively determine that it is giving priority to the interests of the mutual fund”. While related party transactions will be subject to oversight and approval by an IRC, the removal of the legislated prohibitions will result in a leveling of the playing field for all sectors of the industry.

For the dealer-related funds, the new regime will facilitate investment in securities which have, until now, been prohibited under current legislation and rules, thus removing a disadvantage vis à vis the non-dealer related sector. For the latter, the new rules will enable them to enter into certain transactions (e.g. inter-fund trades), subject to these meeting the criteria established by the IRC. Furthermore, and as discussed below, the requirement for all funds to meet standards set out by their IRCs should ensure that no individual fund or sector has an unfair advantage. The primary responsibility of the IRC is to ensure that, where a potential conflict of interest exists, decisions and actions are taken that are in the best interests of the mutual fund. In developing the analysis it is assumed that IRCs will take into consideration various elements in making such determinations. Examples of these are:
(1) **Investments in securities in which a related party has participated in the underwriting.**

IRCs will presumably wish to ensure that such investments are made on the same terms and conditions as those for an arms-length non-related third-party.

In the United States, Rule 10f-3 of the Investment Companies Act (1940) permits a fund to invest in securities underwritten by a related party, provided that the purchase price is not more than the public offering price prior to the end of the first full business day after the first date on which the issue is offered to the public and, that the amount of securities purchased by a fund cannot exceed 4% of the principal amount of the offering.

While the draft Code does not contain any such provisions, some fund managers may consider applying standards of a similar nature.

(2) **Investment by mutual funds in securities of a related party**

Over the past year or so, there have been several applications to the Canadian Securities Administrators for approval to invest, or continue to hold investments, in a related party, on the grounds that such investments are in the best interests of the funds' investors.

The granting of such relief has been made with various conditions, including the requirement that the fund manager appoint an Independent Review Committee (IRC) whose responsibilities will include reviewing the funds’ purchases, sales and continued holdings of securities of related companies, not less frequently than every three months.

Assumptions made with regard IRC standards adopted for other conflicts are detailed in the section dealing with the specific conflict.

**IRCs are the Preferred Structure**

It might be argued that for certain related party transactions it would be sufficient for them to be subject only to scrutiny or review by portfolio managers or an internal compliance officer. However, implementing a single standard (i.e. the IRC) for overseeing and approving all potential conflicts should ensure that fundamental governance principles are being observed by all industry participants.

While the criteria established by individual IRCs will undoubtedly vary from fund to fund, the proposed new regime will establish an environment in which a committee of independent individuals is ensuring that the manager of a mutual fund acts, or proposes to act, in the best interests of fund. The fact that the IRC of one fund group may appear to be applying a more liberal standard than the IRC for another fund group should not, in itself, be a concern. Ultimately, market
forces should dictate whether an IRC is being too liberal or too conservative in performing its responsibilities.

Thus, while the new Code provides the framework for the structure, responsibilities and ongoing conduct of an IRC, each Committee will be responsible for establishing the specific policies that it deems appropriate for the funds whose activities it is overseeing. The overall result should be a more level playing field for all market participants while, at the same time, ensuring that the transactions are in the best interests of the mutual fund.

D. Financial Impact Analysis

The following is a discussion of the estimated financial impact of the various changes. As stated in the Introduction, there is an estimated annual benefit of between $86 million and $158 million. Details as to the make up of these figures are contained in Appendix 2. Between $51 million and $95 million is attributable to the impact of the 60-Day Rule, discussed below. In addition, it is anticipated that the ability to carry out interfund trading could contribute a further $35 million to $63 million.

I. Impact of 60-Day Rule

(a) Summary

Both dealer related and non-dealer related funds will benefit from the removal of the current NI 81-102 60-Day Rule and the permitting of such transactions to take place under appropriate conditions established by an IRC. Dealer-related funds will now be able to invest in IPOs and secondary offerings of securities on essentially the same terms as the independent funds. This will result in a positive financial impact on the dealer-related group. In addition, all investors should benefit from the greater liquidity in capital markets as a result of “new money” being available for investment.

Our estimates indicate that the industry as a whole should experience annual benefits between $51 million and $95 million or, using a ten-year time frame, a discounted present value benefit of between $481 million and $889 million. The dealer related funds could experience annual gains between $98 and $124 million as a result of the replacement of the 60 Day Rule with the new fund governance regime. This is offset by a negative impact on the non-dealer related of between $29 million and $47 million. It is felt that the latter will be more of a short run effect, reflecting an initial shift in order flow from the non-dealer related and pension fund sectors. However, in the longer run, it is believed that the increase in the amount of investment capital available, as a result of the dealer related funds becoming players in the first 60 days of trading in the IPO and debt markets, will have an overall positive impact on all sectors.
Non-dealer related funds should also benefit from the broader market for securities issued under an IPO as well as for secondary offerings. This could manifest itself in two ways – an increase in the number and dollar value of IPOs and the resulting potential enhancement to portfolio returns and a more liquid market in the shares of companies that have come to market for the first time.

It has also been suggested that by effectively expanding the pool of domestic capital, some issuers may be able to save on the costs of seeking foreign investors.

Appendix 1 provides a more in-depth discussion of the methodology used to analyze the impact of the 60-Day Rule and also describes the findings in greater detail.

(b) Objectives and Assumptions

The objective of the analysis was to obtain a projected estimate of the financial benefits that will result from dealer-managed funds being able to invest in initial public offerings (IPOs) of common shares, new issues of corporate bonds and commercial paper, even though such securities have been underwritten or primarily offered by a related party dealer. We also addressed the impact on new income trust issues.

Other studies on the impact of broadening the investor base for equities (Merton, Hardevoulis, etc.) would suggest that there could also be a positive impact with respect to the ability of dealer-related funds being able to invest in new secondary offerings during the first 60 days. The section captioned “Other Considerations” discusses this in greater detail.

Where possible, and if appropriate, the estimates represent the impact for a twelve month period. Also, rather than providing point estimates, we believe that ranges are a better indicator of the potential financial impact of the new regime.

While we have been able to develop some dollar estimates based on a relatively simple model, there are other positive financial impacts that can be translated into savings for specific groups or to the industry as a whole. In addition to the quantitative results, we have also identified qualitative impacts as well as reporting some examples of savings, provided by individual mutual fund managers. The following discussion focuses on IPOs as well as containing some comments regarding secondary offerings.
(c) How the estimates were developed

(i) Impact of Initial Public Offerings

There have been numerous studies over the past twenty years demonstrating that, on average, shares issued under an IPO trade at significantly higher prices shortly after public trading begins. This phenomenon is referred to as underpricing and is experienced, to a greater or lesser extent, in markets around the world. Because dealer related funds have been prevented from investing in IPOs during the first 60 days of trading, they have not been able to profit from any price increases during that time-frame. Such gains would be expected, given the research on underpricing of IPOs.

However, after reviewing a number of underpricing studies, we were not able to identify any that focused specifically on the first sixty days of trading. On the other hand, we felt that the time and cost required to develop and carry out a statistically valid study (which would have included developing a complete data base of Canadian IPOs and their price history over ten years) difficult to justify for the purpose of this analysis.

We therefore decided to use the results of an existing Canadian study by Professor Vijay Jog of Carleton University and Liping Wangii (which we will refer to as “the Jog Study”) in which they demonstrate that, between 1990 and 1999, IPOs on the Toronto Stock Exchange reflect an average underpricing of 12%. While we cannot categorically state that such a percentage gain would be experienced in the first 60 days of trading, we believe that a substantial portion of such gains would be attributable to this period. In fact, this is born out, to a degree, by a somewhat less rigorous analysis we made of the average change in price during the first 60 days for 228 IPOs between 1990 and 1999 which showed a 7.52% increase.

As we are providing estimated ranges of the financial impact as well as making various other assumptions regarding asset mix and the decisions of fund managers, we feel that it is reasonable to use the 12% underpricing factor to estimate the 60-day Rule impact.

Apart from the Jog Study we also identified work carried out by Maher Kooli, Research Advisor at the Caisse de dépôt et placement du Québec and Jean-Marc Suret, School of Accountancy (Laval University)iii, which reflects an average underpricing for TSE IPOs of 12.02% for the period 1997 to 1999. This result is almost identical to that of the Jog Study which covered a longer period of time. As a matter of interest, The Kooli-Suret study also shows that between 1997 and 1999, “on average, Canadian (TSE and CDNX) IPOs are less underpriced than U.S. IPOs (18.95% versus 37.75%).iv
As discussed in greater detail in Appendix 1, the estimated IPO impact on the mutual fund industry as a whole, ranges from a negative $3 million to a positive $40 million.

(ii) Impact of Bonds and Commercial Paper

Under the 60-day rule, dealer-managed funds have been prevented from buying corporate bonds when they first come to market. This, coupled with the fact that such bonds have not been readily available in the secondary market, has resulted in dealer-managed funds being underweighted in this sector. The extent of the underweighting is reflected in dealer-managed mutual funds' holdings of corporate bonds being 23% of total bond investments, compared with non-dealer managed funds' holdings of around 32%.

For purpose of the analysis, we have assumed that dealer-related funds have invested in Government of Canada bonds as a result of not being able to obtain an adequate supply of corporate bonds. Using the 10 year average spread between Government of Canada 5 year bonds and 5 year Corporate Bonds, the estimated annual financial impact would be $36.7 million.

An approach similar to that used in the bond analysis was taken for assessing the financial impact of the 60-day rule on commercial paper. In this case dealer-managed funds holdings of commercial paper is about 16% of their total Cash and Short term investments; the comparable figure for non-dealer related funds is 45%. Similarly, investments in Canadian Treasury bills represent about 49% of the dealer-managed group's total Cash and Short Term investments whereas the non-dealer group holds only 13% in Canadian treasury bills.

For analysis purposes, we assumed that dealer related funds invested in Government of Canada Treasury bills instead in lieu of commercial paper. Using the 10 year average spread between 60 day Commercial Paper and 60 Day Treasury Bills, the impact is an estimated $17.9 million.

As noted elsewhere, Appendix 1 shows in greater detail, how these findings have been used in developing the financial impact estimates.

(iii) Other Considerations

The above does not take into account other factors that will come into play. These include:

- Bought Deals and lead managers
- The effect of over-subscriptions
- Under optimization of sector allocation
- Impact on cost of capital
- **Bought Deals and Lead Manager Situations**

In those situations where a related securities dealer is either the lead or sole manager, or the issue is a bought deal, the impact of a mutual fund not being able to invest in a particular issue becomes even greater. This applies both to IPOs and secondary offerings. In both cases, various factors have a potentially negative effect on returns. Apart from the lost profit opportunity resulting from not being able to invest in the new issue, there are potential costs flowing from a manager not being able to implement a particular strategy for a specific market development.

One market participant described a transaction where the issue price on a secondary offering was $24.45. Because the fund was related to a dealer who was the syndicate lead manager, it could not invest in the securities for 60 days. In this case, the fund obtained exemptive relief from the regulators with the result that purchases could then be made twenty-four days after the issue came to market. However, by then the price had risen to $28.40 – a 16.16% increase over twenty-four days. Had the 60 day restriction not been in place, the fund could have realized a 16.16% gain, if it had sold on day 24; alternatively, if it had held the shares for the first 60 days, it would have made a gain of 6.34%.

While no general conclusions can be reached, it is likely that each dealer related fund will have experienced situations with similar results. Had the new regime been in place, and the investment met the IRC’s standards, each dealer related fund would have enjoyed the gains described above in this, or other issues.

- **Under Optimization of Sector Exposures**

The 60-Day rule restriction has also undermined the ability of dealer related mutual fund managers to achieve the desired exposures to various industry sectors. Another consequence of the delay in the situation described above was that the fund experienced underweighting in the industry sector which resulted in a 179 basis point negative impact on the total return of the sub-index and an overall negative 7 basis points effect on the total return of the entire fund. Once again, similar situations have historically arisen for all dealer related funds and have had an affect on overall performance.

Assuming they meet the IRC’s criteria, the new regime should permit funds a greater ability to maintain optimal sector exposures and thus enhance fund performance.

- **Oversubscriptions**

Professor Jog’s study notes that a number of hypotheses have been offered to explain underpricing in efficient capital markets. He cites a model developed by K. Rock which suggests that “informed investors invest in information production and subscribe to IPOs only when they believe the equilibrium aftermarket price
would be higher than offer price. The uninformed investors, on the other hand, may subscribe to every IPO, as they are unable to distinguish *a priori* between underpriced or overpriced IPOs. Consequently, underpriced IPOs would be more commonly oversubscribed and overpriced IPOs would be undersubscribed."

However, he goes on to say that “uninformed investors would no longer subscribe (to) IPOs unless the IPOs are, on average, underpriced. In order to keep uninformed investors in the IPO market, issuers must set their issue price lower than the expected aftermarket price. In a sense, underpricing can be considered as compensation to uninformed investors for their continuing participation."

Additional investment dollars available from the dealer related funds as a result of eliminating the 60 Day Rule, could presumably result in a higher level of oversubscriptions. However, the additional investment capital would be from informed investors and, under the foregoing analysis, presumably reflect the expectation that the equilibrium market price will be higher than the issue price. Thus, assuming “uninformed” investors are desirable participants in the IPO market, there will continue to be underpricing of IPOs. It might even be argued that, with the increase in the capital pool from informed investors, issuers might set their issue price lower in order to retain and even expand the “uninformed” investor sector.

- **Cost of Capital Impact**

It is believed that the new regime could result in an overall reduction in the cost of capital for Canadian issuers, based on the following rationale.

As a result of dealer related funds being able to purchase shares in IPOs from the outset there should be an increase in the total capital available for investment in new issues. To take a simplistic example, assume that under the current rules there is a total capital pool of $10 billion which potentially could be invested in IPOs. Of this, assume that $3 billion is held by non-dealer related funds, $2 billion by dealer related funds and the remaining $5 billion by other institutional and individual investors. Under current rules, $8 billion is available for investment in IPOs within the first 60 days. Under the new regime, the entire $10 billion (i.e. a 25% increase) is theoretically available. Thus, there is an overall expansion (from the institutional dealer-related sector) in the potential investor base for each new offering.

While no direct research is available for the Canadian market, there are some studies that support the fact that an increase in the investor base will result in a decrease in the cost of capital, including Nobel prize winning economist Robert Merton’s paper *A simple model of capital market equilibrium with incomplete information*[^14][^15], which states that “an increase in the relative size of the firm’s
investor base will reduce the firm’s cost of capital and increase the market value of the firm”.vii

Although it analyzes the effect of stock market integration in Europe on the cost of equity capital, some of the conclusions made in a paper entitled *The Impact of Globalization on the Equity Cost of Capital* viii might also be adapted to this analysis. One of the findings in this study is that an influx of investors who are better diversified in their portfolio will result in a reduction in the cost of equity. Generally speaking, institutional investors are better diversified than individuals so it might be argued that, in the long run, because it has the effect of increasing the institutional investor base, the new regime will result in a lower cost of capital.

Thus, the removal of the current restrictions should open the door for additional investment capital, thus benefitting all issuers and investors. Also, from an issuer perspective, whether through IPOs or secondary offerings, the expanded investor base establishes a more favourable environment for raising capital in the future.

## II Investment by mutual funds in securities of a related party

### Objective

To assess the cost-benefit of a mutual fund being able to invest in securities issued by a related party. This is currently prohibited under various provincial legislation, including Subsection 111(2) of the OSA.

### Impact on Industry

Over the past year or so, there have been several applications to the CSA for approval to invest, or continue to hold investments, in a related party, on the grounds that such investments are in the best interests of the funds’ investors. Many of these requests have been granted in anticipation of a larger comprehensive policy study by the Canadian Securities Administrators for a definitive model on fund governance. There is every reason to believe that it will continue to be in the best interests of mutual funds for them to enter into similar transactions.

The granting of such relief has been made with various conditions, including the requirement that the fund manager appoint an Independent Review Committee (IRC) whose responsibilities will include reviewing the funds’ purchases, sales and continued holdings of securities of related companies not less frequently than every three months.
It is difficult to quantify in dollar terms the overall financial benefit to mutual funds, as a group, being able to make related party investments. However, there have been several instances in which a fund has wanted to continue to hold significant blocks of shares in related entities. Where a fund has to dispose of a significant position in the shares of a related party it would have done so by selling the shares on the open market. Given the size of such transactions, this would constitute a block trade. Even though block trades are typically executed over a period of several days, according to several studies they do have an impact on the market price of the stock being bought or sold.

While we did not identify a Canadian study regarding the market impact of block trades, we did identify several US studies. Although there may be some differences between the markets, we believe that the US experience is relevant in a Canadian context. One of the US studies\textsuperscript{x} estimates that there is 0.35\% decline in the average price from the opening on the day the first trade of a block is executed to the close on the day (usually the fourth of fifth day) on which the last trade for the block is done. Another US study\textsuperscript{x} reports that, for larger stocks (over US$1 billion in market capitalization) the average market impact cost is 0.20\%, or $0.09/share on a $45 stock, and for smaller stocks the average impact is 0.33\%, or $0.15/share on a $45 stock.

The Case Study shown below is an example of a situation where, under current restrictions, there is a readily identifiable cost and thus, under the proposed new regime, a financial benefit.

**Case Study**

Note: The calculations have been made independently but have been verified. Fictional names have been used.

**“TARGET” Fund Group**

In 2001 ABC Corporation, though a subsidiary “SUBCORP”, acquired the TARGET Group. According to the MRRS Decision document various Target mutual funds held voting securities in ABC Corporation and in various ABC subsidiaries and affiliates. Collectively, the funds held 2.2\% of the shares of DEFCO, 2.11\% of the shares of ABC Financial, 3.95\% of the shares of ABC Corp of Canada and 0.28\% of the shares of SUBCORP. Applying these percentages to the outstanding common shares of each company, the total value of the TARGET holdings would have been around $1 billion.

In the normal course of events, TARGET would have been forced to sell all of its holdings as a result of the related party rule, - as more particularly set out under clauses 111(2) (a) and (c) and 111(3) of the Securities Act (Ontario). Because of the dollar size and the relatively large percentage of shares held, there would have been a significant impact on the fund as well as on the market.

Even assuming an orderly sale over a period of time to minimize the market impact (which would, in any event, have required regulatory approval), there would have undoubtedly been a decline in value of the shares. Apart from any other consideration,
the fact that this was a “forced sale” would be known to the street and bids would likely have reflected this. Assuming a 0.35% drop in the share price, the market impact would have been about $127 million and the overall loss to investors in the TARGET Funds would have been around $3 million. Not only would both retail and institutional investors in the shares of ABC Corporation suffered but so too would the TARGET Funds’ investors.

It could be argued that relief would have been granted in any event, given the potential significance of TARGET Funds being forced to divest the ABC Corp holdings. On the other hand, there could very well be situations in the past where mutual funds decided that the potential gains lost by foregoing an investment in a related party were outweighed by the costs of preparing and filing with the appropriate securities commission, a request for exemption.

Those funds that have sought exemption orders have estimated that, from start to finish, (i.e. the granting of the order) the process has sometimes taken as long as six months. Even then, the fund has to ensure that the conditions set out in the exemption are met. This includes identifying individuals to serve on the IRC, and the establishment of appropriate guidelines and oversight procedures.

Thus the new regime will, once the infrastructure is established, result in actual dollar savings as well as a more rapid decision making process for a fund to invest in related party securities.

III. Mutual fund purchasing or selling securities (including mortgages) of any issuer from or to related parties, including inter-fund trading.

Objective

To identify any costs or benefits arising from a mutual fund being able to purchase or sell securities of any issuer from or to a related party (principal trading), including trades between mutual funds in the same group (inter-fund trading).

Impact on Industry

Both dealer and non-dealer related fund groups have indicated they would derive financial benefits from being able to engage in purchasing or selling securities from or to related parties and, in particular, inter-fund trading. In some cases mutual funds groups may create several funds that track the performance of corresponding mutual funds. For example, an insurance company may appoint a mutual fund manager to manage its segregated funds under the same investment style and objectives as for a group of existing mutual funds (these
might be viewed as “clone” funds). Such fund structures can often benefit by being able to enter into portfolio transactions with one another.

One example is where certain investors hold units in an existing fund, but would benefit from being able to invest in a fund (i.e. a clone fund) specifically created to meet their needs and those of other similar investors. After the creation of a class of “clone” funds for a specific investor group, investors in the old fund may wish to redeem their holdings in the new fund and reinvest the proceeds in the new clone fund. To meet the redemptions, the old fund will need to sell securities; on the other hand, the clone fund will have to buy those or similar securities in order to emulate the old fund’s asset mix.

Another example arises where a security position that is no longer appropriate for one fund may be appropriate for another fund within the same group. Also, certain rebalancing activities may be more efficiently carried out through interfund trades.

In all of these situations, the ability to carry out interfund trades will generate cost savings as well as increased efficiencies. One large fund group with assets over $25 billion and more than fifty individual funds has estimated the impact of being able to execute inter-fund trades could be between one and two basis points. We used this fund family as the “benchmark” for estimating the overall industry impact.

Savings should be generated from a combination of not having to pay brokerage commissions and potentially lower transaction fees. Although not specifically factored into the analysis, there should also be some cost reductions in back-offices not having to troubleshoot trade settlement problems.

We have assumed that in approving related party trades IRCs would reflect standards along the lines of those expressed in the CSA’s paper: Regulating Conflicts of Interest in the Management of Mutual Funds: The Current Regime, OSC, March 1995, page 36. These include:

(a) Purchase price not more than, or the sale price not less than, the price generally available for the same quantity of securities to other market participants in independent, arm’s length transactions.

(b) Terms of purchase or sale no less beneficial to the fund than those generally available to other market participants in arms-length transactions.

(c) Fund obtains at least one quote from an independent, arms-length purchaser or seller, immediately before the purchase or sale.

Some applications to the CSA also reflect other conditions that might be set by an IRC including:
(a) The interfund trade must be consistent with the fundamental investment objectives of the mutual funds;

(b) All interfund trades must be made on the basis of cash delivery against payment and shall be restricted to trades in liquid securities for which there is a readily established market;

(d) all interfund trades must be approved by the IRC as being in the best interests of the mutual funds.

IRCs need to be involved in approving and monitoring interfund trading because there is a high potential for conflict of interest as well as criticism from individual mutual unit holders. There appears to be a feeling in some retail sectors that mutual funds that are part of large financial institutions are investing in shares purchased from their dealer affiliates which the latter has been unable to sell to other investors. While there may be no factual basis for this, it is vital that any interfund transaction be subject to as high a level of independent scrutiny as possible. Hopefully, an IRC will be considered to be an unbiased body and not subject to some of the (arguably unfounded) criticisms or skepticism with which other groups or individuals might be viewed.

An IRC might also consider using a tool such as a Volume Weighted Average Price (VWAP) for ascertaining that a block of shares traded between members of the same fund family is traded at a market price.

In calculating the potential industry impact, we first applied the high (1.71 bps) and low (1.01 bps) savings estimated by the benchmark group to all the fund families, based on their size relative to the benchmark group. We then weighted these results by the number of funds within a fund group, in an endeavour to reflect the fact that a group with fewer funds would have less opportunity for interfund trading.

After taking these factors into account, the estimated overall benefit to the industry would be between $35 million and $63 million (0.8 bps to 1.4 bps.). On a ten-year discounted to present value basis this would represent savings of $327 million to $589 million. For the non-dealer related sector the estimated financial benefit ranges between $21 million and $38 million (0.7 bps to 1.3 bps) while the dealer–related funds could enjoy savings in the $14 million to $25 million range (0.9 to 1.6 bps).

It is possible that interfund trades could also reduce the market impact of a significant block of shares or bonds being traded in the public market. That said, it might be argued that, notwithstanding the earlier discussion on the impact of block trades on prices, the introduction of the TSX’s POSIT™ Canada electronic order matching system that prices trades at the mid-point of the bid and ask, might mitigate this effect for equities.
A case might also be made for suggesting that the benefits from an IRC permitting interfund trading might be offset by a reduction in liquidity and price discovery in the market.

It should also be pointed out that, apart from related party considerations, other securities regulations may apply to certain situations. In such cases, the IRC could not approve a related party transaction without prior consultation with the securities commission and possibly having to file a formal request.

**IV Investment in issuers in which related party is an officer or director**

**Objective**

To identify any costs or benefits arising from the ability of a dealer managed mutual fund to invest in an issuer in which a related party is an officer, partner, director, or employee even though such individual or individuals:

(a) participate in the formulation of investment decisions made on behalf of the dealer managed fund;
(b) has access before implementation to information concerning investment decisions made on behalf of the dealer managed fund; and

(c) influences, other than through research, statistical and other reports generally available to clients, the investment decisions made on behalf of the dealer managed mutual fund.

Currently, NI 81-102, Part 4, Subsection 4.1(2) prohibits the above; also, various provincial securities acts contain similar restrictions.

**Analysis**

The phrase “sober second thought” used in the original Concept Proposal, will almost certainly apply to an IRC’s role in overseeing transactions of this type. That said, there are likely situations where the inability of a fund to invest in such securities works to the detriment of the unit holders themselves.

Examples of such situation include the current exclusion of a dealer related fund from being able to invest in a new share issue of a financial institution.

If an IRC can satisfy itself that appropriate measures are in place to avoid any conflict of interest concerns, dealer managed funds should benefit by the ability to make such investments. That said, we have not attempted to quantify this.
V. Contracting of services to be provided to a fund by a related party.

Objective

To identify any cost-benefits associated with an IRC’s oversight of contracts with related parties for services to be provided to the fund, including:

- Directors
- Custodian
- Trustee
- Registrar and transfer agency
- Back-office services – shareholder servicing
- Valuation
- Counterparties (derivatives and securities lending)
- portfolio management

There are no existing prohibitions or restrictions provided that such related party arrangements are disclosed in prospectuses and that custodians must meet requirements of Part 6, NI 81-102, which excludes the manager itself from acting as custodian of fund.

Analysis

We have not carried out any market research in this area. However, IRCs should be able to obtain fairly readily information on various products and services and be able to determine what the going rate is for these. This can be done from a variety of sources including independent industry surveys, research studies, articles and anecdotal evidence.

An IRC will likely require a manager to ensure that all such arrangements are done on a "best execution" type basis - i.e. should get competitive quotes on custody, trustee and back office services, directors’ compensation and qualifications should be on par with market etc.

Placing all such arrangement under the scrutiny of an IRC should benefit both the dealer-related and the non-dealer sectors as there will be a more level playing field for both groups when they negotiate for services to be provided by third parties.
VI. Allocation of portfolio transactions with related dealers (best execution) and Soft Dollar Arrangements

The current rules require a manager to exercise its powers in the best interests of a fund. As discussed in Chapter 3 of the Request for Comment on the proposed National Instrument, “If a manager is in a conflict situation….the Code requires it to seek recommendations from the independent review committee….before acting.” The commentary in this section provides various examples of business conflicts, including soft dollar commissions. Soft dollar arrangements are relatively common in the investment industry. Such arrangements are defined by the U.S. Securities and Exchange Commission as:

“arrangements under which products or services other than execution of securities transactions are obtained by an adviser from or through a broker-dealer in exchange for the direction by the adviser of client brokerage transactions to the broker-dealer”

In addition, potential costs or benefits might arise in situations where a fund manager either favours a related party dealer or intentionally direct trades to a non-related dealer in connection with portfolio transactions.

There could also be a potential business conflict (both with related and non-related parties) in connection with fund managers directing trades to a dealer as compensation - through the brokerage commissions generated by the purchases and sales of securities - for the dealer providing the dealer-managed fund with research or other services, such as computer terminals for market data, etc.

Analysis

In a recently published report issued by the United States General Accounting Office, Mutual Funds Information on Trends in Fees and Their Related Disclosure it is noted that:

“One academic study estimated that [in the US] mutual funds pay brokerage commissions of about $0.06 per share traded. Because individual investors trading through discount broker-dealers can trade for as little as $0.02 per share, the study’s author attributes the higher amount of commissions—about 66 percent of the total amount per share — paid by mutual funds to charges for soft dollar research.”

In Canada, it is estimated that a soft dollar transaction costs $0.06 per share compared with $0.03 per share for trades where soft dollar arrangements are not a factor.
In looking at any soft-dollar arrangements, consideration should be given to ensuring that such arrangements are, in fact, in the best interests of the fund and that they do not compromise best execution standards. IRCs might also want to review whether the funds are placing the same amount of emphasis on reducing their expense ratios as they would, if they were paying for research and other services outright. In addition, where soft dollar arrangements exist between the dealer-managed fund and its related securities dealer, IRCs may wish to consider implementing some form of independent monitoring of best execution standards.

Thus, the financial impact of the new governance regime might be to foster higher best execution standards while maximizing the benefits flowing from soft dollar arrangements. There may also be some impact on overall commission costs and expense ratios in general.
**Individuals Consulted during the course of the Study:**

Sian Brown, B.A., LL.B., Senior Legal Counsel, Mackenzie Funds Limited

D’ Arcy Chadwick, LL.B., LL.M., Assistant General Counsel, Royal Bank of Canada

Leo de Bever, Ph. D., Senior Vice President, Research & Economics, Ontario Teachers’ Pension Plan

Frank Gambino, CFA, RBC Global Investment Management Inc.

Trent Gow, M.A. (Econ.) President, Thompson Gow & Associates

Martin T. Guest, CFA, FCSI, Vice President & Corporate Counsel, Fidelity Investments Canada Limited

Paul Halpern, Ph. D., Professor of Finance, Rotman School of Management, University of Toronto

Vijay Jog, Ph.D., Professor, Eric Sprott School of Business, Carleton University

Eric Kirzner, MBA, BA., Professor of Finance, Rotman School of Management, University of Toronto

Teri McCoppin, CFA, Partner, Vice President Investments, KBSH Capital Management

Mark D. Pratt, Senior Counsel, Royal Bank of Canada

Warner Sulz, Vice-president & Portfolio Manager, RBC Global Investment Management Inc.

Terrence Wright, Q.C., Senior Counsel, Investors Group

**Other Resources:**

Benefits Canada

Datalinx

Morningstar

Investor Economics

The Toronto Stock Exchange

**BIBLIOGRAPHY:**


and Government Sponsored Enterprises, Committee on Financial Services, House of Representatives, United States General Accounting Office, March 12, 2003


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ii Aftermarket Volatility and Underpricing of Canadian Initial Public Offerings, Vijay Jog and Liping Wang, Social Science Research Network Electronic Paper Collection, January 22, 2002

iii How cost-effective are Canadian IPO markets?, © 2002 Maher Kooli, Research Advisor at the Caisse de dépôt et placement du Québec and Jean-Marc Suret, School of Accountancy (Laval University), Centre interuniversitaire de recherche et analyse des organizations (CIRANO)


vii Op. Cit, page 500

viii The Impact of Globalization on the Equity Cost of Capital, Gikas Hardouvelis, Dimitrios Malliaropoulos and Richard Priestley, CEPR [Note to draft: Need full publishing info and date]


x Equity Trading Costs : An Introduction, David New, CFA Senior Consultant and Director of Research, Wurts & Associates, Research Notes, April 27, 2001


xii Testimony Before the Subcommittee on Capital Markets, Insurance and Government Sponsored Enterprises, Committee on Financial Services, House of Representatives

Appendix 1

Methodology and Analysis of 60-Day Rule Impact

A Simple Model

The results of the analysis of the impact of the 60-Day Rule show that the new fund governance regime could have an overall financial benefit to the mutual fund industry ranging from $52 million to $95 million. This breaks down into a benefit for dealer related funds of $98 million to $124 million while the non-dealer sector could experience a negative impact of between $29 million and $46 million. However, it is felt that the latter is a short run phenomenon and could readily be outweighed by other factors such as more efficient capital markets.

In developing the analysis we decided to adopt a relatively simple approach. A more elaborate approach might have included assumptions concerning growth rates for the industry as well as certain statistical techniques for carrying out a study of this nature. However, we felt that the simpler approach will allow readers to focus on the overall impact, rather than leading to a discussion as to the appropriate analytical methodology employed.

While we agree that applying some kind of sensitivity analysis or using different techniques would likely give different outcomes, we believe that all approaches would show an overall benefit to the mutual fund industry and, as mentioned in the main paper, to capital markets in general.

Industry Data Base

To get a sense of the overall impact we developed a financial profile of the professionally managed investment pools in Canada. For all practical purposes, these can be divided into mutual funds and pension plans. We used figures as of May 2002 as they contain the most recent readily available data showing asset mix for both groups. Also we felt that the dollar totals were more representative of the size of the respective pools. The total assets managed by these two groups are about $1 trillion, with pension plans representing $516.4 billion and mutual funds with $482.3 billion. Dealer-managed mutual funds’ assets are around $160.9 billion – i.e. about one-third of total mutual fund assets and almost 16% of total institutionally managed assets.

As an aside, we did not attempt to factor in participation in Canadian IPOs by international or individual investors. The primary reason for not doing so is that it is difficult to obtain accurate data on the overall dollar value of direct equity holdings (as opposed to holdings through pooled investment funds) of these two groups. Secondly, we suspect that the overall impact would not be that material for purposes of this analysis.
Basic Assumptions

Our analysis assumes:

- Common shares issued though an IPO will, on average, increase in value over the first 60 days of public trading.

- Because they cannot invest in new corporate bond issues for the first 60 days and then cannot buy any meaningful amounts in the secondary market, it has been assumed that, as an alternative, dealer-managed funds have invested in 5-year Government of Canada bonds.

- Similarly, because dealer-related funds cannot invest, for a period of 60 days, in commercial paper if their related party dealer participates in the initial distribution, we have assumed that such funds have invested in 60 day Government of Canada Treasury Bills.

Common Share IPOs

Several approaches have been used to develop estimates of the financial impact of the 60-Day Rule on IPOs:

- 12% underpricing factor as developed in the Jog Study.

- Estimate of IPO price changes during the first 60 days of trading.

- An analysis of underpricing of Canadian IPOs on both the TSE and the CDNX.

Using data provided by the Toronto Stock Exchange, we calculated that the average annual value of common share IPOs on the TSE over the 10 years from 1990 to 1999 is $2.6 billion. This period was selected because it matches the time frame used in the Jog Study of underpricing in Canadian IPOs.

To determine the financial benefit to dealer related funds being able to invest in IPOs, we developed two sets of calculations to reflect the average gains from IPOs during the first 60 days. The first allocated all such gains to the non-dealer related funds and the large pension plans. The second allocated the same value of benefits over all three groups. The difference between the results under the new and old scenarios represents the impact of the new fund governance regime.

To determine the basis for estimating the historical value of the gains from IPOs in the first 60 days we first calculated the dollar value and percentage holdings that each of the non-dealer funds and pension plans had in Canadian domestic
equities. To determine the basis for the new regime, we made similar calculations for all three groups. The results are shown below:

<table>
<thead>
<tr>
<th>($ millions)</th>
<th>Old Rules</th>
<th>“New Regime”</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dealer related</td>
<td>-</td>
<td>$ 38,569.0</td>
</tr>
<tr>
<td>Non-Dealer related</td>
<td>$ 90,514.2</td>
<td>$ 90,514.2</td>
</tr>
<tr>
<td>Large pension plans</td>
<td>$ 44,300.0</td>
<td>$ 44,300.0</td>
</tr>
<tr>
<td>Totals</td>
<td>$ 134,814.2</td>
<td>$173,383.2</td>
</tr>
</tbody>
</table>

We then apportioned the $2,594.5 million 10 year average value of TSE IPOs on the same basis, as follows:

<table>
<thead>
<tr>
<th>($ millions)</th>
<th>Old Rules</th>
<th>“New Regime”</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dealer related</td>
<td>-</td>
<td>$ 577.1</td>
</tr>
<tr>
<td>Non-Dealer related</td>
<td>$ 1,742.0</td>
<td>$ 1,354.5</td>
</tr>
<tr>
<td>Large pension plans</td>
<td>$ 852.5</td>
<td>$ 662.9</td>
</tr>
<tr>
<td>Totals</td>
<td>$ 2,594.5</td>
<td>$ 2,594.5</td>
</tr>
</tbody>
</table>

The following describes how we applied the various scenarios to these calculations.

**Implied Gain from IPOs under “old” rules**

Using the Jog 12% underpricing factor, the combined average annual gain experienced historically by the non-dealer-managed and the pension plan investor groups is an estimated $311.3 million. Apportioned on the basis of 67.1% and 32.9% respectively, (the relative market share noted above) this represents gains of $ 209 million for the mutual funds and $102.3 million for the pension plans.

**Applying the analysis to the new governance regime**

Under the new regime, dealer managed funds will be able to invest in IPOs, provided such investments meet the criteria established by an independent review committee.

For this analysis we took the same approach as described under the “old” rules but apportioned the total $311 million of gains from IPOs over all three groups, based on the percentages shown in the table above. The results show an implied benefit to dealer related funds of $69.3 million per year. The mutual fund industry, as a whole, would enjoy an implied annualized gain of $22.8 million. Table 1 provides further details of these calculations.
### TABLE 1

<table>
<thead>
<tr>
<th>(Canadian $ 000,000s)</th>
<th>Allocation of IPOs based on Sector Market Share</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Total Domestic Equity Investments</td>
<td>Old Rules</td>
</tr>
<tr>
<td></td>
<td>Max % of IPOs Purchased</td>
<td>Dollar Value of IPO Allocations, assuming each group takes maximum possible</td>
</tr>
<tr>
<td>Mutual Funds</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Dealer Related</td>
<td>$38,569.0</td>
<td>0.0%</td>
</tr>
<tr>
<td>Non-Dealer Related</td>
<td>$90,514.2</td>
<td>67.1%</td>
</tr>
<tr>
<td>Total Mutual Funds</td>
<td>$129,083.2</td>
<td>67.1%</td>
</tr>
<tr>
<td>Large Pension Plans</td>
<td>$44,300.0</td>
<td>32.9%</td>
</tr>
<tr>
<td>Total Industry</td>
<td>$173,383.2</td>
<td>100.0%</td>
</tr>
</tbody>
</table>

| Eligible to participate in IPOs | $134,814.2 | 173,383.2 |

**Implied Industry Gain on IPOs**

\[
\text{Dollar value of IPOs X Underpricing Factor} = \$2,594.5 \times 12.00\% = \$311.3
\]

Because the Jog Study covers a 10 year period (1990 to 1999) and we believe it to be a rigorous analysis of Canadian IPO underpricing, we have used the results as the high end of the range for the estimated financial benefit that will be gained from the new governance regime, for investments by dealer-related funds in IPOs. We have also used the results for the low end estimate of the impact on non-dealer related funds. The range estimates are shown in Table 2.

**IPO Price Changes over first Sixty-one Days of Trading**

Although our data-base was not complete, and in some cases was missing prices for specific days, we did perform an analysis of the price changes between the first day of trading and the sixty-first day of trading for IPOs on the Toronto Stock Exchange between 1996 and 1999. This reflects an average price
increase of 7.52%. Using the same dollar values as for the previous scenario, this would imply an estimated $43.4 million annual gain for the dealer-related sector and an overall gain for the mutual fund industry of some $14.3 million. While recognizing the deficiencies in this analysis, we have used the results as the low-end estimate (see Table 2) of the impact of the new governance regime on the dealer-related funds.

The “Kooli-Suret” Analysis

Apart from the Jog Study we also identified work carried out by Maher Kooli, Research Advisor at the Caisse de dépôt et placement du Québec and Jean-Marc Suret, School of Accountancy (Laval University)ii, which reflects an average underpricing for TSE IPOs of 12.02% for the period 1997 to 1999. This result is almost identical to that of the Jog Study which covered a longer period of time.

The Kooli-Suret study also shows that between 1997 and 1999, “on average, Canadian (TSE and CDNX) IPOs are less underpriced than U.S. IPOs (18.95% versus 37.75%). iii Because the time-frame only covers three years, we did not believe that the results could be used as the basis for a reasonable estimate of the financial impact of the 60-Day Rule. That said, we thought it worthwhile to calculate the effect of the 18.95% underpricing. This is reflected in what we have called an "Upper Limit High" of the range of estimates shown in Table 2.

Corporate Bonds

Under the 60-day rule, dealer-managed funds have been prevented from buying corporate bonds when they first come to market. This, coupled with the fact that such bonds have not been readily available in the secondary market, has resulted in dealer-managed funds being underweighted in this sector. The extent of the underweighting is reflected in dealer-managed mutual funds’ holdings of corporate bonds being 23% of total bond investments, compared with non-dealer managed funds’ holdings of around about 32%.

To estimate the impact of the 60 day rule on corporate bond investments by dealer-related funds it has been assumed that such funds have invested in government of Canada 5 year bonds, in lieu of being able to buy corporate debt issues either during the initial offering or in the secondary market. It has been further assumed that the dealer related funds give-up on yield is represented by the 10-year average spread between 5-year corporate bonds and 5-year government of Canada bonds. This spread, according to statistics provided by the Bank of Canada, is 107 bps.

To estimate the potential financial impact under the new approach it was assumed that the dealer-managed funds would increase their holdings to the same level as the non-dealer group, i.e. 31%. As a result, they would enjoy an
increased return of 107 bps on the incremental 9% exposure (from 23% to 32%). This translates into an additional annualized return of $36.7 million.

**Commercial Paper**

An approach similar to that used in the bond analysis was taken for assessing the financial impact of the 60-day rule on commercial paper. In this case dealer-managed funds holdings of commercial paper is about 16% of their total Cash and Short term investments; the comparable figure for non-dealer related funds is 45%. Similarly, investments in Canadian Treasury bills represent about 49% of the dealer-managed group’s total Cash and Short Term investments whereas the non-dealer group holds only 13% in Canadian treasury bills.

To estimate the impact of the 60 day rule on commercial paper being held by dealer-related funds it has been assumed that such funds have invested in Government of Canada 60-day Treasury Bills, in lieu of being able to buy 60-day commercial paper either during the initial offering or in the secondary market. It has been further assumed that the dealer related funds give-up on yield is represented by the 10-year average spread between 60 day Treasury Bills and 60-day commercial paper. This spread, according to statistics provided by the Bank of Canada, is 25 bps.

As with the bond impact analysis, it was assumed that the dealer-managed funds would increase their holdings of commercial paper to the same level as the non-dealer group, i.e. 45% of total Cash and Short Term investments. As a result, they would enjoy an increased return of 25 bps on the incremental 29% exposure (from 16% to 45%). This translates into an additional annualized return of $17.9 million.

**Income Trusts**

Total investment in income trusts by mutual fund is $4.1 billion – just under 1% of total assets under management. Dealer related funds hold $2.6 billion (1.6% of total assets) while non-dealer related funds hold $1.6 billion (about 0.5% of total assets). Using the SPTSX Income Trust Index for the period January 1997 to October 2002, the average change in price over a 60 day period is 3.4%. The Total Return Index reflects an average gain over a 60 day period of 6%. While no general conclusions can be reached it could be argued that the dealer related funds’ holdings would, on average, have experienced a 6% ($1.6 million) higher total return in this asset category.

We have not included these figures in the range of estimates as they are not significant in dollar terms. However, from a total return point of view, and as investments in these securities increases, the impact will be more material.
## Impact of 60-Day Rule - Summary of Results

### Table 2

<table>
<thead>
<tr>
<th></th>
<th>Total</th>
<th>Dealer Related</th>
<th>Non-Dealer Related</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>&quot;Upper Limit&quot; High</td>
<td>High &quot;Jog&quot; Study Low</td>
<td>&quot;Upper Limit&quot; High</td>
</tr>
<tr>
<td>IPOs (See Notes 1 and 2)</td>
<td>$ 92.8 $ 40.5 $ (3.1)</td>
<td>$ 109.4 $ 69.6 $ 43.4</td>
<td>$ (16.6) $ (29.1) $ (46.5)</td>
</tr>
<tr>
<td>Bonds (See Note 3)</td>
<td>36.7 36.7 36.7 36.7</td>
<td>36.7 36.7 36.7 36.7</td>
<td>- - - -</td>
</tr>
<tr>
<td>Commercial Paper (See Note 4)</td>
<td>17.9 17.9 17.9 17.9</td>
<td>17.9 17.9 17.9 17.9</td>
<td>- - - -</td>
</tr>
<tr>
<td></td>
<td>$ 147.4 $ 95.1 $ 51.5</td>
<td>$ 164.0 $ 124.2 $ 98.0</td>
<td>$ (16.6) $ (29.1) $ (46.5)</td>
</tr>
</tbody>
</table>

**Notes:**

1. "Upper Limit High" for IPOs has been calculated using the Kooli-Suret findings that, on average, over the period 1997 to 1999, Canadian IPOs were underpriced by 18.95%.

2. For Dealer-related funds, low for IPOs has been calculated using 61 Day price change analysis for the period 1990 to 1999. Low for non-dealer related funds uses the Jog Study results.

3. The "Jog" Study showing an average underpricing of 12% for TSE IPOs 1990-1999 has been used as the High end of the range of estimates because the analysis covers a full 10 year cycle.

4. Values for Bonds and Commercial Paper have been shown under the respective columns to obtain total impact of 60-Day Rule.
1 Aftermarket Volatility and Underpricing of Canadian Initial Public Offerings, Vijay Jog and Liping Wang, Social Science Research Network Electronic Paper Collection, January 22, 2002
2 How cost-effective are Canadian IPO markets? © 2002 Maher Kooli, Research Advisor at the Caisse de dépôt et placement du Québec and Jean-Marc Suret, School of Accountancy (Laval University), Centre interuniversitaire de recherche et analyse des organisations (CIRANO)
3 Op. Cit., p 2
### Appendix 2

**SUMMARY OF DIRECTLY QUANTIFIABLE FINANCIAL IMPACT OF NEW FUND GOVERNANCE REGIME**

#### Table 1: Estimated Annual Benefits  (Cdn$ millions)

<table>
<thead>
<tr>
<th></th>
<th>Total</th>
<th>Dealer Related</th>
<th>Non-Dealer Related</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>&quot;Upper Limit&quot;</td>
<td>High &quot;Jog&quot; Study</td>
<td>Low</td>
</tr>
<tr>
<td></td>
<td>High</td>
<td>Low</td>
<td></td>
</tr>
<tr>
<td>60 Day Rule</td>
<td>$ 147.4</td>
<td>$ 95.1</td>
<td>$ 51.5</td>
</tr>
<tr>
<td></td>
<td>(Cdn$ millions)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Interfund Trading</td>
<td>63.0</td>
<td>63.0</td>
<td>35.0</td>
</tr>
<tr>
<td></td>
<td>(Cdn$ millions)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total Impact</td>
<td>$ 210.4</td>
<td>$ 158.1</td>
<td>$ 86.5</td>
</tr>
<tr>
<td></td>
<td>(Cdn$ millions)</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

#### Table 2: Estimated ten-year present discounted value basis using 7% as the discount rate  (Cdn$ millions)

<table>
<thead>
<tr>
<th></th>
<th>Total</th>
<th>Dealer Related</th>
<th>Non-Dealer Related</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>High</td>
<td>Low</td>
<td></td>
</tr>
<tr>
<td></td>
<td>&quot;Jog&quot; Study</td>
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<td></td>
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<tr>
<td>60 Day Rule</td>
<td>$ 888.8</td>
<td>$ 481.3</td>
<td></td>
</tr>
<tr>
<td></td>
<td>(Cdn$ millions)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Interfund Trading</td>
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<td>$ 327.1</td>
<td></td>
</tr>
<tr>
<td></td>
<td>(Cdn$ millions)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total Impact</td>
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<td>$ 808.4</td>
<td></td>
</tr>
<tr>
<td></td>
<td>(Cdn$ millions)</td>
<td></td>
<td></td>
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</tbody>
</table>