

CITATION: Fischer v. IG Investment Management Ltd. et al. 2026 ONSC 4142
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DATE: 20260716

ONTARIO
SUPERIOR COURT OF JUSTICE

BETWEEN:

DENNIS FISCHER, SHEILA SNYDER,
LAWRENCE DYKUN, RAY SHUGAR
and WAYNE DZEOBA

Plaintiffs

– and –

IG INVESTMENT MANAGEMENT
LTD., CI MUTUAL FUNDS INC.,
FRANKLIN TEMPLETON
INVESTMENTS CORP., AGF FUNDS
INC. and AIC LIMITED

Defendants

*Peter R. Jervis, Joel P. Rochon, Sarah
J. Fiddes and Jessica Marshall for the
plaintiffs*

*David Conklin, Melanie Ouanounou,
Tamryn Jacobson, Caitlin Woodford, and
Ayesha Khanna for the defendant CI
Mutual Funds Inc.*

*Kirsten Crain, Graham Splawski, Monica
Kozycz, and Natalia Paunic for the
defendant AIC Limited*

HEARD: April 28-30, May 1-2, 5-6, 12-
16, 23, June 16, August 6-8, 2025

KOEHNEN J.

REASONS FOR JUDGMENT

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OVERVIEW

- [1] These reasons arise out of a class action against a number of mutual fund companies for permitting and facilitating frequent trading in certain of their mutual funds (the “Certified Funds”). Although the style of cause refers to a number of fund companies, the plaintiffs settled with all but two defendants some time ago. As a result, only two defendants remain: CI Mutual Funds Inc. and AIC Limited.
- [2] In reasons indexed as *Fischer v. IG Investment*, 2023 ONSC 915, I found CI and AIC liable for permitting frequent trading in their funds. The trial had been bifurcated into liability and damages trials by an earlier order of Perell J. as case management judge. The present reasons arise out of the damages trial.
- [3] The funds were designed for and marketed to retail investors. They were intended as long term investments. The prospectuses of the defendants warned that if an investor redeemed their units within 60 or 90 days of purchase, they could be subject to a 2% fee. That fee was designed to prevent frequent trading. Frequent trading was undesirable because it harmed the interests of long term unitholders by diluting the value of their units.
- [4] Unbeknownst to the Class Members and public at large, the defendants allowed certain sophisticated hedge funds to engage in frequent trading in the Certified Funds. In the liability reasons I found the defendants negligent for permitting frequent trading but limited the recovery of damages to one form of frequent trading

referred to as time zone arbitrage. Precisely what that is will be addressed later in these reasons. The defendants allowed over \$90 billion of time zone arbitrage to occur in the Certified Funds.

- [5] A parenthetical note about terminology. Throughout the liability and damages trials, the parties referred to the trading at issue as time zone arbitrage, frequent trading, and market timing. Similarly, the traders involved were referred to as time zone arbitrageurs, frequent traders, and market timers. I will use the same expressions interchangeably in these reasons. Unless the context indicates otherwise, the three expressions all refer to the specific harm at issue here: time zone arbitrage.
- [6] The plaintiffs claim damages in the principal amount of \$90.4 million from CI and \$41 million from AIC. In addition, the plaintiffs submit that simple prejudgment interest is not appropriate because the damages arose between 1998 and 2003 in mutual funds that the defendants marketed as long term investments which would enjoy the benefit of compounding. The plaintiffs have submitted a variety of potential returns. Once prejudgment interest is added, the judgment the plaintiffs seek against CI ranges between approximately \$140.7 million and \$320 million. The judgment the plaintiffs seek against AIC ranges between approximately \$68.6 million and \$155.3 million.
- [7] The defendants say the plaintiff class has suffered no damages.
- [8] The parties come to such diametrically opposed views because of the different methods they use to assess damages.

- [9] There were two principal methods to assess damages presented at trial. The plaintiffs advocated the use of what was referred to as the Next Day NAV¹ method. The defendants advocated the profits method.
- [10] In my view, the Next Day NAV method is the more appropriate method to use. It endeavours to measure the specific harm that time zone arbitrage caused: harm referred to as dilution. The profits method assesses damages at the amount of profit the frequent traders made. In my view, the profits method measures the wrong thing. Damages are the harm that the plaintiffs suffered as a result of the negligence of the mutual fund companies in permitting frequent trading. The frequent traders' profits are not the harm the plaintiffs suffered. The frequent traders' profits are irrelevant to the harm the plaintiffs suffered. The harm caused by the defendants permitting over \$90 billion in frequent time zone arbitrage trading in retail mutual funds is the dilution that such frequent trading caused.
- [11] The parties differ further on how to identify time zone arbitrage trades. The defendants submit that the plaintiffs were required to introduce evidence of the subjective motivation of the frequent traders because the trading could have been the result of strategies other than time zone arbitrage. I disagree. The plaintiffs introduced sufficient evidence about how time zone arbitrage works and its characteristics to permit the court to assess time zone arbitrage based on objective

¹ NAV stands for Net Asset Value which reflects the total value of the underlying assets of a fund and is calculated daily. The value of a unit in a fund is the NAV divided by the number of issued and outstanding units in the fund.

characteristics of the trades. Moreover, the defendants introduced no evidence of other strategies beyond a bald assertion that they could exist.

[12] During the course of an investigation by the Ontario Securities Commission (the “OSC”) into the affairs of various mutual funds, it was determined that the defendants had entered into agreements with certain sophisticated hedge funds which allowed the latter to engage in frequent trading in the defendants’ funds. The plaintiffs say they have now identified frequent traders in addition to those identified by the OSC and in respect of which they also seek damages. The defendants resist the inclusion of any additional traders in the damages assessment. I have concluded that the additional traders the plaintiffs wish to add in respect of AIC should be included in the damages assessment. I have also concluded that some additional traders should be included in the damages assessment vis-à-vis CI. The additional traders within CI require further identification based on the filters that I establish later in these reasons. I remain seized of this matter to resolve any issues arising out of the application of those filters or other issues related to the finalization of the judgment amount.

[13] Although I have found in favour of the plaintiffs and adopt the Next Day NAV method they espouse, I have applied a discount of 10% to the judgment against CI and a discount of 3% to the judgment against AIC to take into account the possibility that the calculation of damages using the Next Day NAV method is not necessarily scientifically precise. I hasten to add though that the profits method the defendants

espouse is also not scientifically precise either. The discounted damage amount is then subject to deductions that all parties agree are required.

[14] In the end result, I grant judgment against CI in the amount of \$60.48 million plus an additional amount in respect of additional accounts once the relevant filters are applied.

[15] I grant judgment against AIC in the principal amount of \$37,900,659.

[16] I have concluded that the appropriate prejudgment rate of return is the prescribed rate of simple prejudgment interest of 2.8% which was in effect when the action was commenced. In my view, compounding is not appropriate given the huge variation in investment horizons among the over 1,000,000 class members and in light of evidence that many of those class members redeemed their units long before the trial of this action.

[17] A number of preliminary issues arose at the damages trial which are useful to address before turning to the claim itself.

ONE: PRELIMINARY ISSUES

I. Is the OSC Settlement Conclusive?

[18] The defendants, and in particular AIC, submit that there are no damages to be awarded because the plaintiff class has already been fully compensated by an investigation the OSC carried out into frequent trading in the funds.

[19] In 2003, the OSC began an investigation into market timing in mutual funds in Ontario. In the course of its investigation, the OSC identified certain accounts within certain mutual fund companies that were engaging in time zone arbitrage. The parties referred to the accounts that the OSC identified within CI and AIC as the Identified Accounts and the holders of those accounts as Identified Timers. I will use the same terminology in these reasons. The OSC found that certain mutual fund companies had acted improperly by permitting time zone arbitrage to occur in their funds. The fund companies that were subject to the investigation ultimately entered into Settlement Agreements with the OSC.

[20] As a result of the Settlement Agreements, CI paid \$49.3 million into its affected funds and AIC paid \$58.8 million into its affected funds. In addition, CI paid a further \$3.6 million and AIC paid a further \$1.2 million to settle an investigation commenced by the Investment Dealers Association, the self-regulating agency governing investment dealers. The damages claimed in this action are in addition to the amounts paid to the OSC and the Investment Dealers Association. The defendants submit that the settlements more than compensated the plaintiff class, and that they preclude any further damage claims. In support of this submission, the defendants point to the following:

- i. The OSC Probe Report which summarized the investigations and their outcomes states that “the resulting settlement payments were a theoretical quantification of the harm caused to the relevant funds and the security

holders of those funds arising from the frequent trading market timing activity”.²

- ii. The OSC stated that “through the Settlement Agreements, we were able to secure reimbursement for the affected investors of the amount lost by them as a result of the market timers’ activities”.³
- iii. David Brown, the then Chair and CEO of the OSC, stated publicly: “We ensured that the investors will be reimbursed for losses.”⁴

[21] I am unable to agree with the defendants in this regard.

[22] The defendants raised the same argument on the certification motion to prevent this claim from proceeding as a class action. Although certification was denied at first instance, the Divisional Court reversed and ordered the action to be certified. The Court of Appeal for Ontario and the Supreme Court of Canada upheld the Divisional Court decision certifying the proceeding.

[23] All three appellate courts dismissed the notion that the claim was precluded by the OSC settlement. When doing so, the Supreme Court of Canada noted that: (i) The main jurisdiction of the OSC was not to compensate but to prevent future harm to Ontario’s capital markets.⁵ (ii) The OSC settlements were without prejudice to the

² Liability Trial Exhibit 1, JDB Tab 011 – OSC Probe Report at p. 16.

³ Liability Trial Exhibit 1, JDB Tab 011 – OSC Probe Report at p. 17.

⁴ Liability Trial Exhibit 2 – Supplemental Joint Document Brief Tab 596, Speech by David Brown dated March 17, 20025 at p. 4.

⁵ *AIC Limited v. Fischer*, 2013 SCC 69 at para. 54

pursuit of viable civil claims.⁶ (iii) Precluding civil claims because of the OSC settlement raised significant concerns about access to justice because investors were not part of the OSC proceeding and because the details of how the OSC arrived at the settlement amounts are not known and have remained confidential at all times.⁷

[24] Further, the plaintiffs submit that they have since identified additional time zone arbitrage accounts (the “Additional Accounts”) that the OSC had not identified and which did not form part of the settlement.

II. Use of Chalmers and Tufano Evidence by AIC

[25] Both defendants initially delivered expert reports from Professors Chalmers and Tufano with respect to damages. Shortly before the damages trial, Professors Chalmers and Tufano announced that they had a conflict with AIC and withdrew their opinions in respect of AIC. AIC nevertheless sought to rely on the concepts contained in the CI reports of Professors Chalmers and Tufano. The plaintiffs objected, noting that the defendants insisted that the plaintiff’s expert, Professor Zitzewitz, redact all references to AIC from his reply reports after the conflict with AIC arose. Having insisted that Professor Zitzewitz remove all references to AIC from his reply reports, the plaintiffs submit that it would be unfair and prejudicial to allow AIC to use the evidence of Professors Chalmers and Tufano for its own

⁶ *AIC Limited v. Fischer*, 2013 SCC 69 at para. 59.

⁷ *AIC Limited v. Fischer*, 2013 SCC 69 at paras. 63 and 54.

benefit. In addition, the plaintiffs submit that I should draw an adverse inference from AIC's failure to call any expert at the damages trial.

[26] At the damages trial, I ruled that I would hear AIC's case as they wished to present it and would address objections to AIC's use of the Chalmers and Tufano evidence in my reasons.

[27] Having heard the evidence, I have determined that there is no unfairness to the plaintiffs if AIC is permitted to rely on most of the evidence of Professors Chalmers and Tufano. I come to that conclusion because most of their evidence was not particular to CI. Rather, it involved higher level concepts like which damage methodology to use and how to distinguish time zone arbitrage from other trading strategies. In doing so, they relied on academic literature and general economic and statistical concepts. Nothing in their analyses was particular to CI other than the mathematical calculations that arise out of their respective approaches to damages. Professor Zitzewitz took a similar approach for the plaintiffs. Apart from a general allegation of unfairness, the plaintiffs did not point to any particular evidence of Professors Chalmers or Tufano that prejudiced the plaintiffs because they had redacted information in Professor Zitzewitz's reply reports that related to AIC. In addition, the plaintiffs delivered an initial report from Professor Zitzewitz relating to AIC that was not redacted. As a result, I have considered the concepts in the CI Reports of Professors Chalmers and Tufano when addressing damages against AIC but not the mathematical calculations contained in those reports.

III. Use of Professor Christoffersen's Report

[28] Professor Susan Christoffersen delivered an expert's report on behalf of both defendants at the liability trial and testified at the liability trial. No one called her as a witness at the damages trial. AIC nevertheless wishes to rely on her report and evidence from the liability trial for purposes of the damages assessment. Her overriding conclusion was that the AIC unitholders were overcompensated by the OSC settlement.

[29] The plaintiffs object to the use of Professor Christoffersen's evidence at the damages trial. They say that they did not cross-examine Professor Christoffersen on damages because the focus of her evidence was liability. She did not deliver a report on damages, and she did not respond to Professor Zitzewitz's damage reports. As a result, the plaintiffs submit that they have been precluded from cross-examining Professor Christoffersen on whether her evidence is applicable to the determination of damages.

[30] AIC submits that the liability and damages trials are a single proceeding and that the trial record from the liability proceeding, including exhibits, can be used at the damages trial.

[31] In my view, Professor Christoffersen's report and evidence forms part of the record at the damages trial and can be relied on by AIC. It may, however, have less weight given that it was used for the purpose of the liability trial, not the damages trial and given that she did not respond to Professor Zitzewitz's damage reports.

[32] As with Professors Chalmers and Tufano, the damages analysis of Professor Christoffersen is high level and is not specific to AIC. It focuses on how to detect time zone arbitrage by applying a series of filters to eliminate transactions that do not exhibit the characteristics of time zone arbitrage. The filters she applies overlap with those that Professors Tufano and Chalmers employ. Her evidence is therefore directionally consistent with the approach taken by Professors Chalmers and Tufano and should not take the plaintiffs by surprise.

IV. Admissibility of David Brown's Evidence

[33] The plaintiffs sought to admit David Brown as an expert witness. The David Brown in question is not to be confused with the Chair of the OSC during the course of the OSC investigation but is a lawyer with extensive experience in the US investment industry, including four years with the office of the New York Attorney General where he was responsible for prosecuting mutual fund companies for permitting market timing in their funds.

[34] The plaintiffs called Mr. Brown to respond to the defendants' assertion that what the plaintiffs identify as time zone arbitrage, is actually the product of some other trading strategy. To that end, Mr. Brown testified that no defendant in the New York

prosecutions ever suggested that they were pursuing strategies other than time zone arbitrage.⁸

[35] The defendants opposed his admission as an expert. They submit that the prejudice caused by his evidence exceeds its probative value because Mr. Brown was testifying about matters that occurred over 20 years ago without ever having consulted his notes or files and without being able to identify by name any of the parties he interviewed to form the basis of his evidence.

[36] I admitted Mr. Brown as an expert as requested noting that the submissions about the frailty of Mr. Brown's evidence may lead me to discount or exclude it entirely. I was concerned, however, that the plaintiffs' evidence about alternative trading strategies was equally frail and was reluctant to exclude Mr. Brown's evidence without the benefit of a full evidentiary record.

[37] Although I admitted Mr. Brown as an expert, I was concerned about his ability to recall details about events that occurred over 20 years ago without having had an opportunity to refresh his memory by reviewing notes or files. I do not say this critically of Mr. Brown. He struck me as a balanced, fair-minded individual who was giving evidence to the best of his ability while acknowledging its limitations without being argumentative or defensive.

⁸ Or, in some cases, liquidity arbitrage; another strategy that will be addressed later in these reasons.

[38] As a result, I have not relied on his evidence concerning the absence of trading strategies other than time zone arbitrage. In the limited instances where I refer to Mr. Brown's evidence, I do so in relation to matters that are more in the nature of common sense that one would expect from someone with experience in the industry rather than evidence that depends on a detailed recollection of conversations from over 20 years ago.

TWO: PROPER METHOD TO CALCULATE DAMAGES

[39] The parties differ over the proper method to calculate damages. The plaintiffs advocate what is referred to as the Next Day NAV method. The defendants advocate what is referred to as the profits method. To understand those options and to determine which is more appropriate, it is necessary to examine more closely the damages at issue.

[40] At the end of the liability trial, an issue arose about the scope of damages the plaintiffs could claim. Could they claim for all damages arising from any form of frequent trading or were damages limited, as the defendants submitted, to those arising from one particular form of frequent trading referred to as time zone arbitrage trading. As noted in greater detail in the Liability Decision, I held that the defendants' negligence was to permit frequent trading of any sort but that damages were limited to time zone arbitrage because that is the damage the statement of claim complains about.

I. What is Time Zone Arbitrage?

[41] Time zone arbitrage is a form of trading that tries to take advantage of inaccurate prices of foreign shares held in North American mutual funds. For ease of reference, when I refer to foreign shares in these reasons, I am referring to securities traded on European or Asian exchanges. When I refer to domestic

shares, I am referring to securities traded on exchanges in North and South America regardless of country.

[42] As a general rule, the prices of domestic securities in North American mutual funds reflect their true market value because the mutual funds determine the value of their units based on the market prices of the underlying securities at the close of the North American markets at 4 PM Eastern on each trading day. The prices of domestic shares reflect true market value because, generally speaking, they trade freely until the markets close at 4 PM.⁹

[43] By way of contrast, prices of the foreign shares in North American mutual funds at the end of each trading day may not reflect their true value because they reflect the last closing price of those shares on the foreign exchange. In the case of stocks listed on European exchanges, the prices stem from the close of those exchanges at 11:30 AM Eastern time on the North American trading day. In the case of Asian stocks, the prices stem from the close of the Asian exchanges at approximately 2 AM Eastern time on the North American trading day.

[44] Since the 1980s, European and Asian stock exchanges have tended to follow the pattern of North American exchanges as reflected in the S&P 500 (the "S&P").¹⁰ As a result, if prices on the S&P increased on a Monday, there was a strong likelihood

⁹ There is an exception to that general rule for stocks that are not widely traded with which we need not concern ourselves at the moment but to which we will return later.

¹⁰ The S&P (Standard & Poor) 500 is a stock market index that tracks the performance of the 500 largest publicly traded companies in the United States of America. It is widely regarded as a reliable indicator of movements in large-cap American equities.

that prices in Europe and Asia would increase when those markets opened on Tuesday morning local time. In addition, general economic news that emerged in North America on Monday would be reflected in European and Asian prices on Tuesday. As a result of these phenomena, the prices of European and Asian shares in North American mutual funds were said to be “stale” at 4:00 PM Eastern on each trading day.

[45] Time zone arbitrageurs took advantage of this stale pricing by purchasing units in North American mutual funds with foreign content towards the end of the North American trading day on those days when North American prices had increased after the close of the European or Asian markets. I will refer to the day of purchase as T Day (i.e. Trade Day). When the foreign shares in those mutual funds increased within a few minutes of opening of the foreign exchange the next day (“T + 1”), frequent traders were able to reap the value of the difference between the stale price of the foreign shares and the real value realized when the foreign markets open on T + 1.

[46] The following simplified example illustrates the basic mechanics of time zone arbitrage. Assume a fund has 10 unitholders and that 50% of its holdings are foreign securities (trading in Asia and Europe) and 50% are domestic securities trading in North America. Assume that when the foreign markets close on T -1 (the day before Trade Day), the value of the foreign and domestic shares in the fund is

\$1,000 for each category. Assume further that the S&P rose significantly on T Day. To keep calculations simple, we will assume the S&P increased by 10%.¹¹

[47] At the end of T Day in North America, the mutual fund calculates its Net Asset Value (“NAV”) based on the closing values of its securities as follows: \$1,100 for the domestic shares + \$1,000 for foreign equities for a total Net Asset Value (“NAV”) of \$2,100 or \$210 for each of its 10 units.

[48] Shortly before the close of North American markets at 4:00 PM on T Day, the time zone arbitrageur buys a unit in the mutual fund for \$210. For purposes of the example, we will assume the fund holds the arbitrageur’s \$210 in cash and does not invest it in securities.

[49] After the foreign equity markets open on T+1, the foreign equities catch up in price and would be worth \$1,100. If we assume that there are no further changes to prices on T + 1, the fund would calculate its NAV at the end of T + 1 as follows: \$1,100 from the domestic shares + \$1,100 from the foreign shares + \$210 from the time zone arbitrageur for a total NAV of \$2,410 or \$219.09 for each of its now 11 units.

[50] At this point, the state of affairs is as follows:

¹¹ 10% is an unrealistically large move for one day. I use it to keep numbers simple and illustrate the point.

- a. The time zone arbitrageur has paid \$210 to get something that would have cost \$220 had the stale pricing been corrected.¹²
- b. With the time zone arbitrageur in the fund, each unit is worth \$219.09 instead of \$220.

[51] Let us continue with the same hypothetical by examining the outcome in a declining market. As noted, at the end of T + 1, the fund's NAV is \$2,410 or \$219.09 for each of its 11 units. Assume that, on T + 2, the S&P declines by 10%. At the end of T + 2 the fund calculates its NAV as follows: \$990 from domestic stocks which have declined by 10% from \$1,100 to \$990; + \$1,100 from foreign securities which have not yet declined in value + \$210 from the arbitrageur for a total calculated NAV of \$2,300 or \$209.09 for each of the 11 units.

[52] Assume as well that the time zone arbitrageur sells his unit towards the end of trading on T + 2 for \$209.09.

[53] After the foreign equity markets open on T + 3, the foreign shares follow the S&P and decline by 10%. Assuming no further changes in the market, the fund calculates its NAV at the end of T + 3 as follows: \$990 domestic shares + \$990 foreign shares + \$210 from the arbitrageur minus \$209.09 that the arbitrageur removed on the sale of its unit for a total NAV of \$1,980.91 or a unit value of \$198.09 for each of the now 10 remaining unitholders.

¹² (\$1100 Domestic + \$1100 foreign) divided by 10 unitholders = \$220.

[54] At this point the state of affairs is as follows:

- a. The time zone arbitrageur has received \$209.09 for something that would have been worth \$199.09 had the stale pricing been corrected.¹³
- b. The remaining 10 unitholders now have units worth \$198.09 instead of \$199.09.

[55] We will return to this example later to see how the plaintiffs and defendants view it from different perspectives.

[56] The effect that the frequent trader's purchases and sales at stale prices has on longer term unitholders is referred to as dilution.

[57] The hypothetical discussed above is necessarily oversimplified to help understand how dilution arises. The 10% change in the S&P is unrealistically large. The assumption that foreign markets would track perfectly any change in the S&P on every trading day is also unrealistic. While the use of more realistic metrics would diminish the size of the dilution, it would not alter the fundamental concept underlying the example. When time zone arbitrage trades are repeated with great frequency and in large dollar amounts, the dilution can become considerable.

[58] While describing the concept of dilution is relatively easy, measuring damages from it is more contentious. As the plaintiffs put it in response to a question from the

¹³ (\$990 domestic + \$990 foreign + \$210 trader cash) divided by 11 units = \$199.09

court, the truly perfect way to measure dilution would be to wake up the foreign markets at 4 PM when North American markets close, inform them of North American economic developments that day and have them engage in trades for each of the foreign shares in the North American mutual fund to resolve the stale pricing. That is obviously impossible. The next best thing might be to look at trading prices of the foreign shares a few minutes after the foreign markets open on T + 1 and the stale pricing has had a chance to resolve. That is both impossible and imperfect. Impossible, because we do not have prices for the foreign shares a few minutes after the opening of foreign markets during the five-year Class Period.¹⁴ Imperfect, because even the trading prices a few minutes after foreign markets opened would reflect more than just the resolution of stale pricing. They would also reflect any economic news that emerged after the close of trading in North America on T Day and the opening of the foreign market on T + 1.

[59] As a result, there is broad consensus that we must use a proxy for dilution to calculate damages. There are three generally accepted proxies: the Next Day NAV Method, the Profits Method, and the Fair Value Method.

[60] The Next Day NAV method calculates damages by comparing the fund's NAV and unit value calculated at 4 pm on T Day with the Nav and unit value of the fund at the close of trading on T + 1 (i.e. the next day). The plaintiffs, supported by their expert, Professor Zitzewitz, use the Next Day NAV Method. Under the Next Day

¹⁴ The Class Period for AIC runs from January 1, 1999 to September 30, 2003. The Class Period for CI runs from September 1, 1998 to September 30, 2003.

NAV method, damages equal the net number of units purchased times the difference between the Next Day NAV and current day NAV.

[61] Using the example set out in paragraphs 46 to 54 above, the Next Day NAV method would calculate damages on the purchase as being \$9.09¹⁵ and damages on the sale as being \$11,¹⁶ for total damages on the transaction of \$20.09. According to Professor Zitzewitz, when all of the time zone arbitrage trading is totalled and the OSC and IDA settlements are deducted, the Next Day NAV method results in net principal damages of \$90.4 million against CI and \$41 million against AIC.

[62] The profits method, like the name suggests looks at the profit the arbitrageur made on the purchase and sale of the mutual fund units and views this as the damage.

[63] The profits method can be an appropriate to use if the inflows from timers are “held in cash” and not invested¹⁷ and the portfolio managers¹⁸ cash holdings were not otherwise affected by the arbitrageur’s inflows.¹⁹ The plaintiffs and defendants differ over whether these conditions were met. Those differences are addressed later in these reasons.

¹⁵ The difference between NAV on T Day of \$210 and NAV on T + 1 of \$219.09.

¹⁶ The difference between NAV on T Day of \$209.09 and NAV on T + 1 of \$198.09.

¹⁷ Tufano Responding Report at para. 113, 138, 148, pp. 36, 43-44.

¹⁸ As noted in para. 31 of the Liability Decision, the manager of an individual mutual fund is properly referred to as a portfolio manager. A fund manager is, technically speaking, the overall corporate entity that manages a family of funds. I will continue to adopt that distinction in these reasons and refer to the managers of the Certified Funds as portfolio managers.

¹⁹ Transcript Day 11, May 15, 2025, p. 2293 L 3-7.

- [64] In the example as set out in paragraphs 46 to 54 above, the arbitrageur sustained a loss of \$0.91 having purchased at \$210 and sold at \$209.09, as a result of which the profits method would ascribe no damages to the transactions.
- [65] The defendants, supported by their experts Professors Chalmers and Tufano, use the Profits Method. They note that the gross profit that the Identified Timers earned at CI comes to \$83.4 million. When the amounts paid on the settlements and other credits²⁰ are subtracted, the remaining profit of the Identified Timers comes to \$16 million. The defendants apply further filters to limit the damages to those trades that they say are consistent with time zone arbitrage and conclude that CI has already overpaid the plaintiffs by approximately \$4.4 million.
- [66] The gross profits earned by the arbitrageurs at AIC come to \$57,950,804. AIC has already paid \$61,551,833.92 in settlement payments. As a result, AIC says the plaintiffs have been overpaid by at least \$3,601,029.92.
- [67] The Fair Value Method uses information available until 4 pm on T Day to determine an estimate of the “true” or “fair value” of the foreign shares in the mutual fund. It requires the valuator to make a number of assumptions and apply a fair degree of subjective judgement. Some mutual funds use the Fair Value method to value individual shares which are suspected of having stale pricing embedded in them, but it is not generally used to value an entire portfolio of shares because of its

²⁰ The amounts the funds earned under the Switch Agreements which charged the frequent traders a fee for trading and interest earned on the frequent traders’ cash.

complexity. Professor Zitzewitz used a fair value calculation as a check on his Next Day NAV calculations but not as his main approach.

II. Which Method to Choose

[68] For the reasons set out in this section, I have concluded that the Next Day NAV method is the preferable method to apply.

[69] The defendants launch a number of attacks on the Next Day NAV method. They submit that it: (i) is overinclusive because it includes more than just dilution; (ii) is contrary to the proper legal approach to calculating damages; (iii) is inappropriate to use because the time zone arbitrageur's funds were not invested but were held in cash; and (iv) is a novel, untested theory.

(i) Is the Next Day NAV Method Overinclusive?

[70] The most obvious criticism of the Next Day Nav method is that it may take into account more than just dilution. By calculating damages as the difference between NAV at end of trading on T Day and the end of trading on T + 1, it includes: (i) changes in the value of foreign shares that arose because of economic news that emerged between the close of markets on T Day and the opening of foreign markets on T + 1; (ii) changes in the prices of foreign shares on T + 1 due to news that emerges during the foreign trading day on T + 1; and (iii) changes between the close of trading on T day and the close of trading on T + 1 of prices in any domestic

shares that the mutual fund may hold. All three factors affect prices for reasons that go well beyond dilution from stale prices in foreign shares.

[71] The defendants highlight the effect of price increases in domestic shares on the Next Day NAV method because the Certified Funds do not contain exclusively foreign shares. The AIC Certified Funds contain an average of 8% domestic content. The CI Certified Funds contain domestic content ranging between 0% and 70%.

[72] There are three high level responses to this concern.

[73] First, the profits method that the defendants espouse incorporates the same extraneous market movements but for a longer period of time. Instead of potentially including one day of extraneous movement, the profits method incorporates extraneous movements until the arbitrageur sells its units which could be several days later. If the defendants are content to include domestic returns in the profits method, it seems inconsistent to raise this as a reason to reject the Next Day NAV method.

[74] Second, the Liability Decision found that the defendants were negligent for allowing frequent trading generally in their funds, not just for allowing time zone arbitrage. As set out in para. 252 of the Liability Decision, AIC conducted an internal analysis of the effect of frequent trading and concluded that the uninvested cash of a frequent trader would dilute long-term unitholders if the market increased regardless of the fund's foreign content. Damages at this trial were limited to time

zone arbitrage because that was the harm pleaded, not because frequent trading in domestic funds was harmless. As set out in greater detail in the Liability Decision, the defendants' prospectuses warned against the harm that frequent trading of any sort could cause to the funds. In addition, in his closing argument, counsel for CI explained that the profits method properly includes returns on domestic securities for that very reason.²¹ As a result, to the extent the Next Day NAV method results in any overinclusion of domestic returns, that overinclusion reflects damages arising from negligent conduct, albeit negligent conduct that is not the subject of the damages analysis. If there is a risk of undercompensating the plaintiffs by excluding time zone arbitrage damages or a risk of overcompensating the plaintiffs by including some component of damage that arises from domestic shares, I prefer the latter risk. That risk is acceptable because I have a high degree of assurance that there is no such overcompensation from domestic shares as a result of the third high level response to which I now turn.

[75] The third high level response arises out of the concept of autocorrelation. Autocorrelation, in the context of this case, measures the degree to which an up day in the market is followed by another up day, or a down day is followed by another down day. Although a more granular analysis of this evidence will follow shortly, all of the experts appear to agree that, in principle, autocorrelation should net out to zero over a longer period of time. That is to say that, over the longer

²¹ Closing argument August 7, 2020, p. 3463-3466.

term, any upward market movement between one particular T Day and T + 1 will be cancelled out by downward movements between another T Day and T + 1.

[76] Professor Chalmers stated in his report:

While assuming that this component will be zero might be a reasonable simplifying assumption over a long period of time with a large number of assets, the outcome of this market risk is certainly not required to equal zero and does not represent dilution or damages.²²

He goes on to say that "... there is no **assurance**"²³ that autocorrelation will net out to zero (emphasis added).

[77] Professor Tufano stated in his report:

While the academic literature commonly assumes that markets follow a random walk,²⁴ it **does not guarantee** that the noise in the next-day NAV Dilution calculation will average to zero over every time period, especially the short time periods we observe in this case (emphasis added).²⁵

[78] The plaintiffs are not, however, required to establish their case with **assurance** or **guarantee**. They are required to do so on a balance of probabilities.

[79] In the quotation cited above, Professor Tufano refers to "the short time periods we observe in this case." He does not indicate what sort of time period or conditions

²² Chalmers Report July 11, 2024, at para. 62.

²³ Chalmers Report July 11, 2024, at para. 63.

²⁴ The random walk theory is another way of saying that autocorrelation equals zero over the long term. That is to say that price increases or decreases between two sequential days cancel each other out over time.

²⁵ Tufano Report September 19, 2024, at para. 157.

would be expected for autocorrelation to net out to zero when dealing with securities. This is particularly important given his choice of words: “especially the short time periods we observe in this case.” It is not entirely clear from that phrase whether he is referring to the 5-year Class Period or the shorter intervals of the Class Period that are the subject of his autocorrelation analysis.

[80] I conclude that he is referring to the shorter time periods that he examines in his report. I arrive at that conclusion because he actually examines several shorter time periods in his report. In his phraseology quoted above, he refers to time periods in the plural. Had he intended to refer to the Class Period, he should have been referring to period in the singular. In addition, Professor Tufano agreed in chief that the market displayed “next to zero” autocorrelation over the Class Period.²⁶

[81] Despite its position at the damages trial, AIC in effect admitted at the liability trial, that autocorrelation came to zero over the Class Period. During the liability trial, AIC introduced an internal analysis²⁷ created by Victoria Ringelberg, AIC’s Vice President of Finance and Accounting at the time. She prepared the analysis in response to a market timer’s request to engage in frequent trading at AIC. The analysis made clear that, if the frequent trader’s investment was retained in cash and the market rose, it would harm longer term unitholders. If the market declined while the frequent trader’s investment was held in cash, it could benefit long-term

²⁶ Examination in chief of Professor Tufano Transcript May 5, 2025, page 1130 L. 7 to page 1132 L. eight.

²⁷ Joint Book of Documents Tab 170.

unitholders. The analysis was applicable to purely domestic funds because it did not consider the impact of foreign content. As noted in paragraph 253 of the Liability Decision, AIC justified its decision to permit frequent trading even though the analysis disclosed harm to long-term unitholders when markets rose, by asserting that market returns are a “random walk” that cannot be predicted, as a result of which the dilution on days when markets rose would be offset by the positive effects on days when markets declined.²⁸

[82] I turn now to a more granular assessment of each expert’s autocorrelation analysis.

(a) Zitzewitz Analysis

[83] Professor Zitzewitz acknowledged, in his first report that extraneous factors like domestic returns could affect his Next Day NAV calculation. As a result, he conducted a mathematical analysis of autocorrelation over the entire Class Period with reference to the S&P. He concluded that autocorrelation averaged out to minus 0.019. That meant, that a day on which the S&P increased by 1% was followed by a day on which it declined by 0.019%. For Professor Zitzewitz, this essentially meant that autocorrelation netted out to zero during the Class Period and was not influencing his Next Day Nav calculations. In Professor Zitzewitz’s view, the 5-year

²⁸ Examination and cross-examination of Victoria Ringelberg March 2, 2022, p. 2641 L. 14 – p. 2642 L. 7; p. 2715 L. 17-20.

Class Period was a sufficiently large data set in which any positive autocorrelation was eliminated.

[84] The defendants criticize Professor Zitzewitz's use of the S&P to calculate autocorrelation. They point out that the composition of the S&P differs from that of the Certified Funds and submit that a proper analysis would require autocorrelation to be measured with respect to the individual securities held by each Certified Fund. The defendants describe this as a holdings level or securities level analysis.

[85] Professor Zitzewitz does not disagree that a holdings level analysis for each Certified Fund would be preferable. The difficulty is that holdings level data for the Class Period are unavailable because the defendants do not have and/or did not maintain holdings level data for the Class Period. As a result, the only analysis that could be performed for the entire Class Period was one that involved using a proxy, like the S&P.

[86] In response to criticisms to his initial autocorrelation analysis, Professor Zitzewitz performed a variety of other analyses to test his results. He examined autocorrelation not on every day of the Class Period but on only those days that the Identified Timers transacted.²⁹ He applied calculations in various permutations, including weighted and unweighted, calculations limited to the Identified Timers, and calculations including all traders that he identified as time zone arbitrageurs. He performed a more refined analysis using not just the S&P 500 but a combination

²⁹ Zitzewitz Reply Report Table 16 (p. 161).

of the S&P 500, S&P MidCap 400, S&P Small-Cap 600 and Toronto Stock Exchange 60 indices to better reflect the limited information he was able to obtain about the domestic content of the Certified Funds.

[87] Although, as might be expected, the specific autocorrelation coefficients for each of these variations did not come to precisely -0.019%, they nevertheless all arrived at virtually zero, with a slight overall negative inclination. Not a surprising result given Professor Tufano's admission that market autocorrelation was "next to zero" over the Class Period.

[88] Professor Zitzewitz also tested his autocorrelation analysis against a fair value analysis that took into account 240 different permutations. The result of that analysis was that Professor Zitzewitz's damage calculation using the Next Day NAV method was slightly lower than the average of his fair value calculations for the Class Period as a whole.

(b) Tufano analysis

[89] Professor Tufano objects to Professor Zitzewitz's autocorrelation analysis both in principle and in application.

[90] With respect to principle, Professor Tufano says the hypothesis of net zero autocorrelation fails when markets exhibit positive autocorrelation; that is to say when they continue in the same direction over a longer time. He says domestic markets displayed significant positive autocorrelation during parts of the Class

Period, particularly from late 2001 to late 2002. In his view, the trailing 12-month autocorrelation coefficient peaked at about 0.1 in late July 2002, indicating that a 1% increase in the S&P would, on average, be followed by a 10-basis-point³⁰ increase the next day. He argues that the Next Day NAV approach would mistake this for dilution damage. Again, that should be a nonissue given his admission that market autocorrelation was next to zero over the Class Period.

[91] With respect to application, Professor Tufano testified that Professor Zitzewitz's analysis included Next Day NAV return on domestic securities. Given that the damages analysis concerns only foreign securities, a more accurate Next Day NAV assessment requires one to isolate foreign securities and conduct the Next Day NAV analysis on them alone. Even then, the analysis would be flawed because it would include returns on foreign securities that are attributable to economic developments over the course of the 24 hours between the close of trading on T Day and T +1 that have nothing to do with stale pricing.

[92] Professor Tufano then conducted a securities level analysis of certain CI funds for the portion of the Class Period for which such data was available and concluded that domestic shares accounted for 51% of the dilution during that period.³¹

³⁰ A basis point is 1/100th of a per cent.

³¹ Professor Chalmers performed a similar analysis. In addition, Professor Chalmers applied the arbitrageur's trading in the CI Global Fund to the CI Canadian Growth Fund which contained no foreign shares yet produced "dilution". The CI Canadian Growth Fund, however, also contained small cap stocks which can also be subject to stale pricing because of their illiquidity.

- [93] The data Professor Tufano used was referred to at trial as the Holdings Data. There are, in my view, significant limitations to that data and therefore also to Professor Tufano's analysis.
- [94] The Holdings Data is materially incomplete. It purports to cover the three years between September 1998 and September 2001. The Class Period extends for a further two years to September 30, 2003. The Holdings Data covers only 25.3% of the trades of the Identified Timers. It contains complete data for only seven quarters: the first quarter of 2000 to the third quarter of 2001.³² It does not cover trades in futures or other derivatives. It appears from CI's annual and semi-annual reports that the Certified Funds had significant futures holdings.
- [95] It applies only to CI. AIC has not produced any securities level data.
- [96] The Holdings Data was produced only in December of 2024 leaving limited time for analysis before the damages trial began on April 28, 2025. According to Professor Zitzewitz, there are large, unexplained gaps between the changes in net asset value ("NAV") and the corresponding changes in the domestic and foreign share values from which the NAV is derived.³³ In its closing argument, CI submitted that these concerns "have been resolved" with the affidavits of Carol Faull and Gregory Shin.³⁴ Those affidavits were sworn only two weeks before the trial began.³⁵ The

³² Zitzewitz Sur-Sur Reply Report at para. 22.

³³ Exhibit 20B, Zitzewitz Day 2 Slides, p. 23.

³⁴ CI Closing Argument para. 333 (a).

³⁵ The affidavit of Carol Faull was sworn on April 15, 2025, and that of Gregory Shin April 17, 2025.

affidavits, on their face, address issues but do not purport to resolve them. Ms. Faull's affidavit merely refers to documents and says that they have been produced "In an attempt to address *certain* of the inconsistencies raised by Professor Zitzewitz."³⁶ She provides no further information about what issues have not been addressed or how the documents she produces resolve any issues. Mr. Shin's affidavit goes a little further. It explains the data gaps in paragraph 19 and then states in paragraph 22:

This alleged inconsistency **can be explained, at least in part**, by the timing difference between the "trade date" in the portfolio-level trading data and the "transaction date" in the securities-level data, as well as by corporate actions and/or reinstated trades (which were not shown in the initial dataset). (Emphasis added)

[97] Thus, even Mr. Shin does not claim that any issues have been resolved but merely that they have been explained, **in part**. The plain implication of that expression is that they have not been explained in full.

[98] Professor Zitzewitz repeated his concerns during his examination in chief.³⁷ He was not cross-examined on them. CI submits that the Shin and Faull affidavits must be accepted on their face because they were not cross-examined on either. Given the qualified explanations those affidavits contain, there was no need to cross-examine their affiants.

³⁶ Faull affidavit para. 21.

³⁷ See for example slide 23 of Ex. 20 B.

[99] Returning to the results of Professor Tufano's Next Day NAV analysis, all of the positive autocorrelation he identified is attributable to trades in three quarters: the first, second and third quarters of 2000. The period his analysis covers includes a substantial part of the inflation of the internet bubble, a period of substantial positive autocorrelation.

[100] Professor Zitzewitz agrees that the Holdings Data period was one of positive autocorrelation due to those three quarters; but the Class Period was not.

[101] AIC picks up on Professor Zitzewitz's admission of autocorrelation in the three quarters and argues³⁸ that although Professor Zitzewitz admitted that positive autocorrelation would require adjustments for returns from domestic securities, he failed to make them.³⁹ AIC argues that this failure is a further reason for rejecting the Next Day NAV method. That does not fairly reflect the evidence. What Professor Zitzewitz said was that if autocorrelation had been positive for the entire Class Period, he would have to make adjustments to his method.⁴⁰ Autocorrelation was not, however, positive for the entire Class Period.

[102] The fundamental weakness in Professor Tufano's approach is that, while he acknowledges autocorrelation should, in principle, converge to zero over a sufficiently long period and with sufficiently robust data, he then undertakes an

³⁸ At para. 164.

³⁹ Zitzewitz Cross-Examination (04-29-2025), p. 436 L. 12 – p. 437 L. 8.

⁴⁰ Professor Zitzewitz cross-examination April 29, 2025, page 436 L. 24-page 437 L. 7.

analysis based on only 25% of the trades, relies on limited, flawed data, but nevertheless concludes that there was positive autocorrelation attributable to domestic securities.

[103] Professor Tufano conceded in cross-examination that one could not extrapolate his analysis to the entire Class Period. He then suggested he was using the Holdings Data analysis as a check on or benchmark to other analyses. The theory being that if his Holdings Data analysis is consistent with other benchmarks, it gives some assurance that the other benchmarks are also accurate.⁴¹ The fact that other analyses are consistent with a flawed analysis of only 25% of the trades, during a period that is not representative of the Class Period as a whole, does not provide great assurance about the validity of the other analyses.

[104] One such other analysis of Professor Tufano's is to examine one quarter where the Zitzewitz Next Day NAV calculation arrives at dilution of \$19 million while the Zitzewitz fair value calculation for the same quarter comes to only \$3.2 million.⁴² Professor Zitzewitz admitted in examination in chief that his autocorrelation analysis would not be appropriate for a single quarter precisely because of such variations. Over a period of five years, however, those variations disappear.⁴³ The fact that someone can find several short-term exceptions to a general rule, does not mean that the general rule is inapplicable.

⁴¹ Tufano Reply Report Dated December 24, 2025, para. 36.

⁴² Trial Transcript Day 6, May 5, 2025, p. 1243-1244.

⁴³ Trial Transcript May 16, 2025, p. 2571 – 2573.

[105] Professor Tufano conducted a further analysis to demonstrate that domestic returns generate false positive results under the Next Day NAV method. He examined 43 large cap US mutual funds in which the defendants say time zone arbitrage was impossible because they held only domestic securities. The analysis is summarized in Exhibit 3A of Professor Tufano's report. It indicates that, had the Identified Timers replicated their trades in the large cap US funds under examination, they would have generated approximately \$20 million of Next Day NAV "dilution" from domestic stocks, which Professor Tufano notes amounts to 20.6% of the Next Day NAV dilution that Professor Zitzewitz calculates at CI.⁴⁴

[106] Professor Zitzewitz responded to this analysis in cross-examination by noting that Professor Tufano's analysis uses averages of groups of US mutual funds. Professor Zitzewitz noted that Exhibit 3A had a column for average domestic Next Day NAV dilution and a column for maximum domestic Next Day NAV dilution, but no column for minimum Next Day NAV dilution. Professor Zitzewitz viewed this as cherry-picking the maximum domestic next-day dilution without including the minimum dilution figures, which could very well be negative. As a result, Professor Zitzewitz said he was not inclined to take the table seriously.⁴⁵

[107] I have some sympathy for Professor Zitzewitz's reaction. The differences between the maximum and average domestic dilution numbers on Professor Tufano's Exhibit 3A are such that the minimum numbers must be negative or considerably lower

⁴⁴ Tufano Report at para. 165.

⁴⁵ Zitzewitz Cross-examination Day 14, June 16, 2025, p. 2919

positive positions. By way of example, the first line summarizes the Next Day Nav dilution in 13 US Large Blend funds. It shows an average domestic dilution of \$25.1 million. The maximum domestic dilution is \$87.9 million. One could arrive at that average by having one fund with positive dilution of \$87.9 million, one fund with negative dilution of \$238.4 million and 11 funds with zero dilution. Similarly, one result of negative dilution of \$183.4 million with 11 results with relatively modest dilution of \$5 million would achieve the same average of \$25.1 million.

[108] Professor Tufano’s Exhibit 3A also indicates that the 43 large-cap U.S. funds held an average of 5.1% in non-U.S. equities. If those holdings consisted of European or Asian securities, they would have been subject to stale pricing. Class counsel notes that the CI Certified Funds held an average foreign content of approximately 33.7%—about 6.6 times the foreign exposure of Professor Tufano’s fund sample. Applying that ratio to Professor Tufano’s estimated dilution of \$20.1 million yields approximately \$132.7 million, a figure remarkably close to Professor Zitzewitz’s estimate of \$136.3 million in dilution caused by the Identified Timers in the CI Certified Funds.

[109] CI challenges this comparison on the basis that “non-U.S. equity” may include securities traded on exchanges within North and South American time zones. Professor Tufano acknowledged that possibility in his report⁴⁶ but did not determine whether it applied. In those circumstances, it would be speculative to assume,

⁴⁶ Tufano Report dated September 19, 2024, para. 164.

without supporting evidence, that the entire 5.1% consisted of securities traded within North or South American time zones. This is particularly so given that Professor Tufano prepared the exhibit, recognized the issue, and left it unresolved.

(c) Professor Chalmers' Analysis

[110] I begin my review of Professor Chalmers' evidence with the assignment he was asked to undertake. An expert's assignment is critical to understanding their evidence. Professor Chalmers described his assignment as follows in paragraph 9 of his first report:

I have been asked by counsel to comment on two damages reports submitted by Professor Eric Zitzewitz dated November 9, 2023. In connection with the assignment, I evaluate whether Professor Zitzewitz's methodology for calculating dilution is reliable, and whether all the trades included in his dilution calculations are likely to be time zone arbitrage trades.

[111] It is noteworthy that Professor Chalmers was not asked to determine what if any damages flowed from the court's liability finding. Professor Chalmers, to his credit, was candid about the extent of his assignment. When it was put to him in cross-examination that his report would be used to help the Court understand the full measure of the harm caused by time zone arbitrage, he answered:

That was not my assignment. My assignment was to assess Professor Zitzewitz's estimates and whether they were reliable.⁴⁷

⁴⁷ Trial Transcript May 13, 2025, p. 1774 L. 20 – p. 1775 L. 2.

[112] Professor Chalmers' report is, in essence, a critique report. The challenge with a critique report that focuses only on the other expert's methodology is that the author might in fact have arrived at the same end result had he been allowed to answer the substantive question in dispute, albeit perhaps using a different or modified method. The fact that someone is asked only to evaluate another's method rather than arrive at their own answer leaves me somewhat curious about what the author's independent answer would be.

[113] Professor Chalmers began his autocorrelation analysis by looking at a two-week window at the end of 2001 and another at the end of 2002 in 4 of the 24 CI Certified Funds. He concludes that during the last two weeks of 2001, domestic shares contributed to approximately 49% of the \$4 million dilution that Professor Zitzewitz calculated for that period. For the last two weeks of 2002, Professor Chalmers concluded that domestic shares contributed 46% of the \$5 million dilution that Professor Zitzewitz calculated.

[114] In his Sur-Sur Reply Report, Professor Zitzewitz pointed out some of the idiosyncrasies of Professor Chalmers' approach. Professor Chalmers' results were highly sensitive to the particular windows he examined. Small variations in the start or end of each window would produce materially different conclusions. By way of example, the year-end 2001 period runs from a Monday to a Wednesday while the year-end 2002 period runs from a Tuesday to a Thursday. One might intuitively have expected the periods to run for complete trading weeks beginning on Monday

and ending on Friday or, if one were beginning in midweek, to start and end on the same day of the week.⁴⁸ Professor Zitzewitz's Sur-Sur Reply report demonstrates that if one changes the window by as little as one day, the returns from domestic securities decrease by approximately \$3 million per window, thereby eliminating the contribution of domestic securities to any Next Day NAV dilution in Professor Chalmers' analysis.

[115] Professor Chalmers responded to this criticism during his examination in chief as follows:

And after he made his comments and suggested alternative windows, I did test what those would have done, and while things do sometimes look different, basically the result holds that 50 percent is a reasonable number. Although I will say if you extend the windows a full month, in one year you have domestic security returns contribute about 90 percent of the net NAV and then in one year you have them contributing zero.⁴⁹

Far from giving me comfort about his analysis, Professor Chalmers' answer highlights the concern about examining a limited period of time as opposed to the entire Class Period. Professor Chalmers supports his choice of two-week windows by explaining that CI's annual reports disclosed year-end fund holdings, which allowed him to conduct a security level analysis. Nevertheless, the wide variation in results suggests that such a narrow window does not reliably measure dilution or identify its source.

⁴⁸ Such as Wednesday to Wednesday or perhaps Wednesday to Tuesday if one were looking for a five-day trading week.

⁴⁹ Chalmers examination in chief Day 8, May 12, 2025, p. 1695 L. 6 – 1697 L. 2.

[116] Professor Chalmers also analyses one day of information from the Holdings Data to assess for autocorrelation. Exhibits 1A and 1B of his Sur-Reply Report, analyze data for January 31, 2000, and conclude that of the \$287,492 of calculated “dilution” on that day, \$178,741 was attributable to an increase in the value of domestic securities.⁵⁰ However, Professor Chalmers’ data also includes days that tend in the opposite direction which he does not highlight. By way of example, his data for April 25, 2000, indicated negative autocorrelation of -1.1% because domestic securities had declined by \$98,000. As a result, an increase in the value of foreign securities of \$176,000 was calculated as dilution of only \$78,000. This again demonstrates the fragility of conclusions drawn from isolated snippets of information.

[117] Professor Chalmers also tested autocorrelation by taking the arbitrageurs’ trades in the CI Global Fund in which Professor Zitzewitz had found dilution of \$37 million and mirroring them in the CI Canadian Growth Fund, a fund without foreign content. The result produced “dilution” of \$30 million in the CI Canadian Growth Fund.

[118] Professor Zitzewitz points out that this is not a comparable analysis because, among other things, the CI Canadian Growth Fund contains a large number of small or mid-cap stocks which are not as liquid as the holdings in the Certified Funds and could therefore be subject to stale price arbitrage as a result of that relative illiquidity.

⁵⁰ Chalmers Sur-Reply Report at Exhibit 1B, PDF p. 48 of 73.

[119] Professor Chalmers next criticizes Professor Zitzewitz because one of his analyses calculates autocorrelation using only days on which arbitrageurs transacted and conducts the calculation on a trade weighted basis (i.e. one that reflects the size of the trades). This appears to be a red herring. In its closing submissions, CI admits that conducting an unweighted analysis would result in a similar, slightly negative autocorrelation co-efficient over the Class Period.⁵¹

[120] Professor Chalmers nevertheless referred to Professor Zitzewitz's approach as "non-standard" and that it "make(s) it harder to know how to interpret" Professor Zitzewitz's figures.⁵²

[121] The fact that something is "non-standard," does not make it inappropriate. Indeed, Professor Chalmers did not say the method was inappropriate. Rather he described the method as follows:

Now, his estimate may have useful meaning in the context he wants to use it, but again, it isn't a standard autocorrelation coefficient and shouldn't be interpreted as one.⁵³

[122] As Professor Zitzewitz explained, he used a weighted average because it spoke to what he was trying to do: namely to determine how domestic securities may have contributed to Next Day NAV dilution on the days following the ones on which the

⁵¹ CI Closing para. 341.

⁵² Chalmers Re-Examination (05-13-2025), pp. 2012 – 2013.

⁵³ Transcript Day 9, May 13, 2025, p. 2010 L. 11 – p. 2011 L. 4.

market timers actually traded.⁵⁴ Given that 90% of the Identified Accounts' trading occurred on 25% of the days, Professor Zitzewitz was of the view that it made sense to focus on the days on which trades actually occurred.⁵⁵ That does not sound unreasonable. If the exercise is to determine the degree to which domestic autocorrelation contributed to Next Day Nav returns, using a weighted approach produces a more accurate measurement of the autocorrelation associated with actual trades.

[123] Finally, Professor Chalmers criticizes Professor Zitzewitz because the autocorrelation coefficients he arrived at were “not statistically different from zero” or put another way, were “statistically insignificant”.

[124] The defendants suggest that the term statistically insignificant undermines the accuracy of Professor Zitzewitz's analysis that autocorrelation over the Class Period was net zero.

[125] The plaintiffs and Professor Zitzewitz explained why the attack was invalid. In its simplest form, something that is “statistically significant” means that it is unlikely to have arisen through pure chance.⁵⁶ Statistically insignificant means that something may have arisen through pure chance. Expressed with more nuance: Statistical insignificance means that the data does not provide sufficient evidence of a relationship between variables. By way of example, if one recorded the daily

⁵⁴ Zitzewitz Sur-Sur Reply Report, p. 179, para 54.

⁵⁵ Transcript Day 12, p. 2546 L 7 – p. 2547 L 17; p. 2551 L 6-21; p. 2556 L 4 - p. 2557 L 4.

⁵⁶ Transcript Day 12, p. 2559 L 6-9; Cross Examination of Professor Zitzewitz Day 14, June 16, 2025, p. 2894 L. 25 – p. 2895 L. 4.

temperature at 4 PM for the past year, the fact that the weather results were statistically insignificant means that the data set at hand does not allow one to conclude that one day's temperature predicts the next. It does not suggest that the recorded temperatures are inaccurate.⁵⁷

[126] As a result, the fact that Professor Zitzewitz's autocorrelation analysis is statistically insignificant simply means that, over the course of the Class Period, the data Professor Zitzewitz used does not predict that an increase or decrease in the S&P on Day T will lead to an increase or decrease on T + 1. The statement does not mean that the movements Professor Zitzewitz recorded were inaccurate or unreliable. If anything, that the results are statistically insignificant strengthens the conclusion that autocorrelation results to net zero in the long run because, in the long run there is no predictable relationship between market returns on one day and the next.

(d) Findings on Overinclusion

[127] As has emerged from the discussion above, much of the difference between the plaintiffs' and defendants' experts on the issue of autocorrelation turns on defence experts' preference for calculating autocorrelation using what limited Holdings Data is available and the plaintiffs' expert's preference for calculating autocorrelation for the entire Class Period using the proxy of the S&P.

⁵⁷ Cross-Examination of Professor Zitzewitz Day 14, June 16, 2025, p. 2894 L. 25 – p. 2895 L. 4

[128] There is no doubt that it would be preferable to be able to conduct the analysis based on holdings data for the entire Class Period. Professor Zitzewitz agreed that this would be the ideal approach.

[129] Unfortunately, neither defendant was able to produce securities level data for the entire Class Period. AIC could not produce such data for any period. CI could produce such data only for 25% of the trades.

[130] What I was not told about securities level data is perhaps more important than what I was told. AIC stated no securities level data had been produced because none existed. CI stated limited Holdings Data was available for the first three years of the Class Period but not thereafter because the accounting function was outsourced to Royal Trust in September 2001 and Royal Trust did not retain the data.

[131] The defendants did not explain when holdings data ceased to be available at AIC, when it ceased to be available from Royal Trust, or why it became unavailable, apart from being told that neither AIC nor Royal Trust retained the data. I was not told for how long either AIC or CI and its agents retained securities level data. I was also not told whether the OSC received securities level data and, if so, for what period.

[132] At some point, the Holdings Data became important to CI and it produced what remained available. Its relevance to the issues is therefore beyond dispute. Where a party fails to produce relevant information in a timely manner and cannot provide a persuasive explanation for that failure, that party must bear the risk arising from

the absence of the information, particularly where the information was within its control. A bare assertion that the information was not retained is not enough. The party must explain when the information ceased to be retained and why.

[133] The risk associated with missing information should fall on the party that had control of, and access to it. This is not a finding of wrongdoing. It is simply an allocation of risk. In the first instance, the risk should fall on the party that controlled the information. That party may discharge the risk by providing a satisfactory explanation for the information's absence. Without such an explanation, the risk—and any resulting consequences—remain with the party that had control of the information.

[134] In these circumstances the best information I have about autocorrelation for the entire Class Period comes from Professor Zitzewitz. That information is confirmed by CI's and Professor Tufano's admission that autocorrelation came to net zero during the class period, Professor Chalmers' admission that autocorrelation should, in principle net zero over a sufficiently long period of time and AIC's statement at the liability trial to the effect that it was not bothered by the adverse results of Ms. Ringelberg's analysis because markets were a random walk.

[135] At the same time, however, I remain mindful of the fact that autocorrelation is a concept that is not scientifically precise. Results can turn on the data used and the specific period under consideration. Although I have confidence in Professor Zitzewitz's approach and calculations, I recognize that they are not as precise as tallying up revenues and expenses to calculate a damages award. As discussed

later,⁵⁸ however, aggregate damages in class actions are based not on what is perfectly accurate but on what is reasonable. Recognizing these potential imperfections, and to err on the side of caution, I would reduce CI's damages by 10% to take into account any possible imperfections in autocorrelation.

[136] AIC submitted, that as an alternative to the damages award the plaintiffs sought against it, the court should apply a discount of 8% to any damages it assesses against AIC to reflect the 8% domestic content in its Certified Funds. An 8% discount strikes me as excessive. It would assume that autocorrelation did not net to zero and that 8% of the Next Day NAV dilution in AIC's funds was attributable to domestic securities. However, I accept that autocorrelation did net to zero. I am applying a cautionary discount to take the possibility for imperfection into account. I am not rejecting the theory. In my view, a discount of 3% on the damages ascribed to AIC is a reasonable reflection of that risk given the substantially lower domestic holdings within AIC than within CI.

(ii) Proper Legal Approach to Damages

[137] The defendants submit that use of the next day NAV method runs counter to the proper "but for" approach to calculating tort damages. To understand the arguments and issues surrounding the proper legal approach to damages, it is

⁵⁸ See paragraph 401 and following below.

useful to recap the core monetary features of the hypothetical example set out in paragraphs 46 to 54 above. The essential monetary points on the purchase are:

- a. The frequent trader paid \$210 for something for which he should have paid \$220 had an adjustment been made for stale pricing.⁵⁹
- b. Without the time zone arbitrageur, the value of each unit would be \$220.
- c. With the time zone arbitrageur each unit is worth \$219.09. Using the Next Day NAV method, the value of each long-term unitholder has been diluted by \$0.91 resulting in a total dilution to the fund of \$9.09.⁶⁰

[138] The essential monetary points on the sale are:

- a. The frequent trader has received \$209.09 for something for which he should have received \$199.09 had there been an adjustment for stale pricing.⁶¹
- b. The remaining 10 unitholders have units worth \$198.09.⁶²
- c. Had the frequent trader received \$199.09 on exit, the value of the remaining unit would also be \$199.09.⁶³

⁵⁹ (\$1,100 domestic + \$1,100 foreign) divided by 10 unitholders.

⁶⁰ Although the frequent trader should have paid \$10 more for the unit than it did, the Next Day NAV method calculates dilution as: the number of units purchased $\times$ (Next Day NAV – Current Day NAV) which in this case is $1 \times (\$219.09 - \$210) = \$9.09$

⁶¹ (\$990 domestic + \$990 foreign + \$210 trader cash) divided by 11 units equals \$199.09

⁶² (\$990 domestic + \$990 foreign + \$210 frequent trader cash - \$209.09 the frequent trader received on exit) divided by 10 unitholders

⁶³ (\$990 domestic + \$990 foreign + \$210 frequent trader cash - \$199.09 the frequent trader should have received on exit) divided by 10 unitholders

- d. Using the Next Day NAV method, the value of each of the remaining 10 unitholders has been diluted by \$1.10 for total dilution of \$11 for the fund.⁶⁴
- e. The frequent trader has suffered a loss of \$0.91 having paid \$210 on entry and having received \$209.09 on exit.
- f. The unit value after the frequent trader's entry and exit is \$198.09. Had the frequent trader never entered the fund, the unit value would be \$198.⁶⁵

[139] The profits method the defendants espouse would ascribe no damages to the transaction because the frequent trader has made no profit but has sustained a loss. The defendants test this result against what they submit is the goal of a damage award in tort which is to put the plaintiffs back into the position they would have been in but for the defendants' conduct, insofar as it is possible to do so through a payment of money.⁶⁶

[140] The defendants carry out the but for analysis by comparing the unit price after the frequent trader's exit to the unit price that would have prevailed had the frequent trader never entered the fund. Since the units are worth \$0.09 more after the trader left than they would have been worth had the trader never been in the fund, the defendants submit there can be no damage. I do not agree.

⁶⁴ Dilution being the difference between current day NAV of \$ 209.09 and Next Day NAV of \$198.09.

⁶⁵ (\$990 domestic + \$990 foreign) divided by 10 unitholders.

⁶⁶ Klar and Jefferies, *Tort Law*, 7th ed (Toronto: Thomson Reuters, 2023) at pp. 582-583. See also *Zhang v Primont Homes (Caledon) Inc.*, 2024 ONCA 622 at para 21.

[141] There are two interrelated parts to the defendants' analysis that I will try to separate:

(a) the but for analysis; and (b) the confusion of profits with damage.

[142] In my view, the defendants construe the but for test too narrowly and measure damages with reference to the wrong metric.

a. The But for Analysis

[143] The Ontario Court of Appeal recently described the objective of a damages award in tort as follows;⁶⁷

A successful plaintiff in a tort action is entitled to be **compensated for all reasonably foreseeable losses** caused by the tort and to be put into the position they would have occupied but for the injury caused by the defendant, insofar as it is possible to achieve this through a monetary payment. (Emphasis added)

Proof of causation is fact-specific. As stated by Roberts J.A. in *Bowman*⁶⁸, at para. 10, citing *James Street Hardware and Furniture Co. v. Spizziri* "[T]he restoration of the plaintiff's position **requires an approach that is** not unnecessarily complicated or rule-ridden but **responsive to the facts of each given case**".⁶⁹ (Citations omitted)

[144] Limiting the but for analysis to a comparison of the unit value after the frequent trader's exit with the unit value in the absence of the frequent trader, fails to compensate for all foreseeable losses and fails to respond to the facts of this case.

⁶⁷ *Zhang v. Primont Homes (Caledon) Inc.*, 2024 ONCA 622.

⁶⁸ *Bowman v. Martineau*, 2020 ONCA 330, 447 D.L.R. (4th) 518.

⁶⁹ *Zhang v. Primont Homes (Caledon) Inc.*, 2024 ONCA 622 at paras. 21-22.

[145] I explore this by returning to the hypothetical example. When the frequent trader entered, the value of a unit was \$220. The frequent trader paid \$210. Without the frequent trader, units would be worth \$220 each. With the frequent trader, they are worth \$219.09. Pausing there for a moment, any Class Members who sold their units after the trader entered but before the market dip, suffered a loss in value. They received only \$219.09 per unit as opposed to \$220. The defendants' narrow view of the but for test completely ignores that loss.

[146] While the hypothetical works with a single sample transaction for illustrative purposes, the Identified Timers purchased units in CI Certified Funds 4,563 times.⁷⁰ The Identified Timers bought units in AIC Certified Funds 964 times. The Additional Timers in AIC made an additional 3,551 purchases.⁷¹ This amounts to 9,078 purchases, not counting the Additional Timers in CI which I exclude because they have not yet been identified with specificity. In monetary terms it amounts to frequent trading in an amount in excess of \$90 billion.⁷² Mutual funds are liquid investments that trade daily. It was reasonably foreseeable that Class Members would be selling units on the days following the frequent traders' purchases.

[147] In addition, by having the frequent trader buy in at \$210 instead of \$220, the fund has lost those \$10 forever. Those \$10⁷³ could have been invested for the benefit

⁷⁰ Zitzewitz CI Report, Table 1.

⁷¹ Zitzewitz AIC Report Tables 1 and 4.

⁷² \$70 billion in the Identified Accounts at CI (Zitzewitz CI Report Table 1); \$13 billion in the Identified Accounts at AIC (Zitzewitz AIC Report Table 1) and over \$12.8 billion in the Additional Accounts at AIC (Zitzewitz AIC Report Table 4).

⁷³ Or more precisely, that portion of the \$10 that was not paid out to class members who sold their units.

of unitholders or could have been held in cash to take advantage of dips in the market. The defendants ignore that loss. The defendants argue that the \$10 could not be invested because the market declined. I disagree. Markets rise and fall on a daily basis. Although the hypothetical example has the frequent trader exit on a down day, that does not mean the market was permanently down. There were many up days even in the latter part of the Class Period which would have allowed Class Members to exit at higher prices had the fund had the benefit of the \$10 that the frequent trader underpaid. In addition, there have been several bull markets since the Class Period ended in which the fund has lost the chance to invest the \$10 that the arbitrageur failed to pay on entry.

[148] Similarly, on the frequent trader's exit, the units of long-term investors were worth only \$198.09 instead of the \$199.09 they would have been worth had the frequent trader not enjoyed the benefit of stale pricing on exit. Any Class Member who sold after the frequent trader's exit therefore suffered a loss in value. The defendants' approach also ignores the \$10 overpayment to the frequent trader when it left the fund. Those \$10⁷⁴ could have been invested for the benefit of unitholders or could have been held in cash to take advantage of dips in the market. There were essentially as many sales by frequent traders as there were purchases. Thus, Class Members suffered dilutive harm on the over 9,000 sales by frequent traders similar to the damage suffered on the over 9,000 purchases.

⁷⁴ Again, more precisely, that portion of the \$10 that was not used to pay out class members who sold their units.

[149] The defendants characterize dilution and the Next Day NAV method as putting the plaintiffs into the position they would have been in had the frequent trader paid and received a fair price rather than putting the plaintiffs into the position they would be in but for the negligent conduct. I do not see it that way.

[150] The proper measure of damages is the foreseeable loss that flows from the negligent act. The negligent act is not that the frequent traders made profits or incurred losses. The negligence is that the defendants *permitted and facilitated* frequent trading in retail mutual funds when they knew or ought to have known that frequent trading caused the sorts of dilutive harms we have been discussing. The damage that flowed from the defendants' permitting frequent trading is dilution. But for the defendants' negligence in permitting frequent trading, that dilution would not have occurred. The proper but for damages assessment requires the court to determine the quantum of dilution that actually did occur and not merely restrict itself to comparing post exit unit prices with and without the frequent trader.

[151] The defendants argue that using dilution to measure damages is an unrealistic application of the but for analysis because the frequent traders would not have traded had they been required to pay and receive the true price on entry and exit. There are three problems with that submission. First, it is irrelevant. The inquiry here is not what the arbitrageurs would or would not have done. The inquiry is to determine what losses flowed from the fact that the defendants *allowed* frequent trading when they knew or ought to have known about the dilutive effect of such trading. Second, the submission says nothing more than if the defendants had

complied with their duties and representations, no harm would have occurred. That is axiomatic. It does not mean that we refuse to award damages when defendants breach their duties. The point is that the defendants *did* allow frequent trading. Dilutive harm has actually occurred. That egg cannot be unscrambled. The issue now is to quantify that harm. Third, the profits method that the defendants advocate suffers from the same supposed flaw. If the arbitrageurs had not been allowed to keep their profits, they would never have traded, yet that does not stop the defendants from advocating for the profits method.

b. Confusion of Profits with Damages

[152] The profits method does not measure damages flowing from the negligence. It focuses on the upside or downside to the frequent trader. How the trader fared in the piece is irrelevant. The frequent traders are neither the defendants nor the negligent parties. The negligent parties are the defendant fund management companies. It is their negligence from which damages flow.

[153] The damages being assessed here are those caused by one particular form of frequent trading that the defendants permitted in breach of their duties to Class Members: time zone arbitrage. The harm to the funds from time zone arbitrage is not that frequent traders earned profits or sustained losses. The harm is that the funds received less than true value on the trader's entry, paid more than true value on the traders' exit, and had unitholders who sold at prices lower than they otherwise would have because the fund companies permitted frequent trading. It is these specific harms that must be compensated.

[154] The profits method would permit the defendants to use the frequent traders' losses on some trades to hide the dilution damages on almost all trades by focusing on profitability rather than on dilution. The profit that the arbitrageur made in an upmarket clearly shows the harm dilution causes. The frequent trader purchased a unit for \$210 that was worth \$220. Had the frequent trader sold before the market dip, it would have sold for \$220. In that scenario, the defendants' experts assess damage at \$10 because that is the frequent trader's profit. However, the fact that the trader made a profit of \$10 is not the harm to the fund. The harm to the fund is that the trader's purchase diluted other units by \$0.91 per unit or \$9.10 for the fund as a whole. The frequent trader's subsequent sale on the market dip in the second part of the hypothetical does not eliminate the \$9.09 dilution on the purchase. It simply hides it by measuring something entirely different: profitability.

[155] Let us return to the defendants' comparative approach but look at the comparison more broadly. The trader bought at \$210 and sold at \$209.09. Had he paid and received true value, he would have paid \$220, sold at \$198.09 and suffered a loss of \$21.91. Instead, he has suffered a loss of only \$0.91. Almost all of the remainder has been absorbed by Class Members as dilution: \$9.09 on the purchase and \$11 on the sale for a total of \$20.09. That \$20.09 is reflected in lower unit values for those Class Members who sold and in less capital for the funds to invest for the benefit of all unitholders. In essence, the Class Members have been forced to insure the frequent trader against most of the adverse consequences of its trading.

[156] Comparing positions from another perspective, when the frequent trader entered, true value was \$220.⁷⁵ Assuming the trader had paid \$220, NAV would be \$2,420 divided by 11 units for a value of \$220 per unit.⁷⁶ On the frequent trader's exit, NAV would have been \$2,200 divided by 11 for unit value of \$200.⁷⁷ Had the frequent trader been paid \$200 on the exit, the long-term unitholders' value per unit would also have been \$200⁷⁸ compared to a unit value of \$198.09 after the trader's exit at a stale price. Each class members' unit value is \$1.91 less per unit than it otherwise would have been had the frequent trader paid and received true value.

[157] Preventing frequent trading would have been easy for the defendants to do. They had in fact already announced the mechanism for doing so in their fund prospectuses. Each prospectus advised that someone who sold a unit within 60 or 90 days of purchase could be charged a 2% fee. It is generally agreed that charging the 2% fee would have put an end to frequent trading.

[158] The defendants also point out that some form of dilution occurs whenever anyone buys or sells a unit, including long-term unitholders. Had it been a long-term retail unitholder who bought on T Day for \$210 they would have caused the same sort of dilution. Why then should the defendants be held liable for the dilution caused by

⁷⁵ (\$1100 domestic securities + \$1100 foreign securities) divided by 10 unitholders.

⁷⁶ (\$1100 domestic + \$1100 foreign + \$220 trader cash) divided by 11 unitholders.

⁷⁷ (\$990 domestic + \$990 foreign + \$220 of trader's cash) divided by 11 unitholders.

⁷⁸ (990 domestic + 990 foreign + 220 trader cash - \$200 trader withdrawal) divided by 10 unitholders.

the Identified and Additional timers when such dilution is simply an incident of the mutual fund business?

[159] While it is correct that the retail purchaser who bought at \$210 would have caused the same sort of dilution, it causes minimal harm because the retail purchaser is buying for the long term. The harm arises when the defendants allow a select few to engage in frequent short-term trading in the tens of billions of dollars. By allowing, and indeed facilitating that sort of trading, CI and AIC have allowed a select few to take what was an incident of the mutual fund business and magnify it exponentially to the detriment of Class Members and the Certified Funds. It is to prevent such harm that the mutual fund companies gave themselves the right to charge a 2% fee for frequent trading in the first place.

[160] I referred in paragraph 154 above to the frequent trader's sale in a down market not eliminating dilution but hiding it. Professor Zitzewitz calculated the profit of the Identified Timers within CI at \$83 million but dilution at \$136 million (before deducting settlement payments and switch fees). In other words, the profits method hides \$53 million of dilutive harm by the Identified Timers within CI alone. The defendants acknowledge that their profit is lower than dilution because the market had generally declined over the Class Period.⁷⁹ As is evident from the hypothetical example, there can be dilution to the fund even if the market declines and even if

⁷⁹ Professor Tufano Cross-examination Transcript Day 11, May 15, 2025, p. 2314 L 16-23; CI Closing Submissions at para 190. Professor Christoffersen also recognized the distinction during the liability trial by acknowledging that dilution is not profit and profit is not necessarily dilutive effect.

the arbitrageur loses money on the trade. Similarly, the defendants agree that if the market had generally increased during the Class Period, profits would have been higher than dilution.

[161] The concern about the profits method hiding dilution in a downward market is especially salient here because 75% of the time zone arbitrage trading occurred during the last two years of the Class Period, when the market was in general decline.

[162] In light of the foregoing, I conclude that the use of dilution and the Next Day NAV method does not offend the but for damages principle but is consistent with it when applied properly to measure the harm that flows from the negligence at issue and when applied to include all foreseeable losses. This is most starkly illustrated by the simple example of the Class Member who sold after the frequent trader had entered in a rising market. Those class members clearly sold their units at a price that is lower than what they would have sold for in the absence of frequent trading. Those Class Members who sold have clearly suffered harm. This is not to ignore the other harms such as further dilution on the sale and the fund's loss of ability to invest the underpayments and overpayments but simply to identify one clear form of loss that the defendants narrow application of the but for principle ignores.

(iii) Did frequent Trader Funds Affect Fund Management?

[163] Much time was spent at trial debating about the extent to which the Certified Funds invested the frequent traders' capital or held it in cash. The defendants submit that

if the funds were held in cash, the profits method is the appropriate one to calculate damages, and that Professor Zitzewitz admitted as much.

[164] That is not quite what Professor Zitzewitz said. In cross-examination, Professor Zitzewitz agreed that the profits method was a “recognized and accepted measure of damages” when funds were held in cash only in the sense that some people used it. He, however, did not think it was appropriate to use.

[165] There appeared to be consensus that the profits method could be appropriate to use where: (i) The fund did not invest the arbitrageurs’ inflows in securities or futures but held them in cash; and (ii) the portfolio manager made no changes to average cash levels to offset this.⁸⁰

[166] The manner in which funds used frequent trader inflows gives rise to two sub-issues: (i) did the inflows affect average cash levels; and (iii) did the funds purchase futures with frequent trader cash?

a. Did Inflows Affect Average Cash Levels?

[167] As Professor Zitzewitz explained in his Reply Report, additional cash in a fund can cause it to underperform when compared to its peers. Portfolio managers may therefore make any number of adjustments in response to incoming cash flows. The simplest is to hold less cash than they otherwise would on days when the

⁸⁰ Zitzewitz Reply Report at para. 102. He also acknowledges that the profits method can be used where the time zone arbitrage flows are invested, and that the method usually assumes that the return on this investment is represented by the NAV returns of the fund: Exhibit 16, Tab 4 – Zitzewitz Sur-Sur-Reply Report at para. 153.

frequent traders are not invested by targeting an average cash level in the fund which takes into account the range of volatility in cash holdings over a particular period of time. They could also move from less volatile to more volatile stocks or shift from bonds to stocks. He then points out that these longer-term adjustments are essentially impossible to detect in an objective manner. The profits method ignores this problem and simply assumes that the frequent trader inflows increased the cash holdings of the affected fund dollar for dollar and that the portfolio manager made no changes to offset this, not even by holding less cash on days that the frequent traders were not invested.⁸¹

[168] Professor Zitzewitz's point about portfolio managers targeting an average cash level makes sense. It would be virtually impossible to maintain a constantly stable percentage of cash given the constant purchases and sales within mutual funds. The only practical solution would be to target an average percentage of cash holdings over the course of a period of time. A 2009 research paper of Professor Zitzewitz's concluded that portfolio managers in US global and international equity funds did just that to address inflows from frequent trading.⁸²

[169] Although Professor Tufano's report also refers to an analysis that he did on some of the Holdings Data to support of the proposition that there were no changes to cash holdings, the challenge with that analysis is that it covers only a portion of the Class Period and, more importantly, as Professor Zitzewitz pointed out, the data

⁸¹ Zitzewitz Reply Report at paras. 100-102.

⁸² Zitzewitz Reply Report at para. 104, pp. 106-107.

contained significant and variable timing gaps between trades and cash holdings making him question its reliability and usefulness.

[170] The issue is further complicated within AIC because it produced no cash holdings data for its Certified Funds.

[171] As a result, the only people who could truly testify to the effect of frequent trading on cash holdings were the portfolio managers. The defendants did not call any portfolio managers at the damages trial.

[172] In support of its position that frequent traders did not lead to any changes in cash holdings, AIC points to the following evidence from one of its portfolio managers, Neil Murdoch, at the liability trial:

Q. And did short term trading have any impact on cash in the fund?

A. In the funds I managed, no.⁸³

[173] That is an ambiguous answer. Short term trading must have had some impact on cash in the fund unless the inflow was invested immediately. If that is the case, then all expert witnesses appear to agree that the profits method has no application. If the inflow was not invested, the inflow presumably increased the amount of cash in the fund at least at the moment it was injected. Mr. Murdoch's answer could well mean that the inflow had no impact on the cash in the fund because, as Professor

⁸³ Murdoch Direct Examination (02-25-2022), p. 2155 L. 17 – 19.

Zitzewitz explained, the portfolio manager would target an average cash holding, the practical effect of which was there was less cash when the arbitrageur was out of the fund and more when it was in the fund.

[174] The question and answer quoted above was not part of a longer exegesis about portfolio manager behaviour. It was an isolated single question and single answer at the liability trial. There would have been no reason for the plaintiff to cross-examine on that isolated question-and-answer because it had no bearing on liability.

[175] There was, however, other evidence at the liability trial which suggested that portfolio managers did modify their behaviour in response to frequent trader inflows.

[176] Anne-Mette de Place Filippini was a portfolio manager at AIC. In her testimony at the liability trial, she stated that the presence of frequent traders created “friction” for portfolio managers. She described “friction” as the conflict between the obligation to invest cash for the best interests of all unitholders on the one hand and the cash volatility attributable to frequent traders on the other. She indicated that this friction interfered with a portfolio manager’s ability to take advantage of opportunities that the manager saw in the market. While Ms. Filippini did not say it, the ability to take advantage of market opportunities is presumably restricted even further by an underpayment on entry and overpayment on exit.

[177] There was also evidence at trial that CI portfolio managers were encountering overdrafts in their funds because of the entry and exit of frequent traders. Exhibit

49 is a 36-page package of emails written between May 2002 and February 2003 in which CI portfolio managers are being advised of overdrafts in their funds and the need to bring them back into good standing. The consistent explanation for the overdraft is that frequent traders removed funds. The overdrafts were significant. By way of example the email of May 28, 2002, points out overdrafts in the following Certified Funds in the following amounts:

CI Global C\$81,339,050.00

CI International Balanced C\$47,844,790.00

CI Global Boomernomics Sector: C\$4,416,849.00

[178] The deficiency in the CI International Balanced fund of C\$47,844,790.00 represented approximately 5% of its NAV.⁸⁴

[179] In response to an email from Royal Bank of Canada on July 10, 2002, complaining of an overdraft of \$15 million in the CI Pacific fund, CI responded:

The CI Pacific Fund in particular goes into overdraft solely as a result of the "market timer". We cannot control this activity, all we can do is attempt to minimize the costs to our investors and to maximize their returns. One of the reasons why we are slow to cover these overdrafts through stock sales is that on a number of occasions we have liquidated positions at great expense to meet the overdrafts, only to be told the next day that the cash is back and that we need to reinvest it. This is a costly exercise.

⁸⁴ Ex 51, Shin read in brief tab 16 p. 475 q. 1447.

[180] That answer suggests that the frequent traders' funds, at least in the CI Pacific Fund, were invested, thereby removing an underlying prerequisite to even consider using the profit method. At the same time, the comment about being slow to cover overdrafts because cash would return shortly, suggests that the CI Pacific Fund was managing its cash position to have lower cash on days when frequent traders were out of the fund and higher cash when traders were in the fund; thereby removing another prerequisite to consider using the profits method; at least in the CI Pacific fund at that particular point in time.

[181] The evidence read in as admissions from CI's examination for discovery included the following:

- a. These cash deficiencies arose because a frequent trader had purchased units, the portfolio manager had invested that cash into securities, and the fund no longer had the cash to redeem the frequent traders' units when he wanted to exit.⁸⁵
- b. At least on occasion, frequent traders affected management of the portfolio because it caused premature liquidation of security positions to facilitate the market timing.⁸⁶

⁸⁵ Ex 51: Examination from discovery of Gregory Shin November 12, 2015, Shin read in brief tab 30 page 683 -684, Q. 2006-2007.

⁸⁶ Ex 51, Shin read in brief tab 13, tab 34 p. 448-449, q. 1351.

- c. It appears that portfolio managers were liquidating investments that were probably part of a long-term investment plan in order to cover a cash deficiency caused by a frequent trader.⁸⁷
- d. The goal of portfolio managers was to get the best long-term return for the investors, not to get the maximum return for short term traders.⁸⁸

[182] CI tries to diminish this evidence by noting in its closing argument that the CI Pacific Fund was subject to *only* 550 roundtrips involving “*less than*” \$700 million.⁸⁹ CI suggests this was a small fund and was not representative of the Certified Funds as a whole. The issue appears to have been broader than one fund though. Numerous funds experienced cash deficiencies in amounts as high as \$40 million and \$80 million. In addition, the e-mail from Royal Bank dated July 10, 2002, warned CI:

Your **funds** are **constantly** going into overdraft, I suggest due to the market timers with the money market funds. Please raise enough funds in order to avoid these negative positions. (Emphasis added)

The use of the plural funds, and the reference to constant overdrafts suggests that this was not an isolated issue.

⁸⁷ Ex. 51 tab 14 Q. 1345-1346.

⁸⁸ Ex. 51 tab 27 Q. 1337-1339.

⁸⁹ CI Closing Argument at para. 231.

[183] The point here is not that the experience of the CI Pacific Fund or the RBC emails should be extrapolated as a finding of fact to each of the Certified Funds, but rather that they create further doubt about the appropriateness of using the profits method to calculate damages in this case.

[184] In response to this evidence, CI delivered the affidavit of Gregory Shin two weeks before the damages trial began.

[185] Mr. Shin was the Vice President and Senior Vice President fund accounting with CI during the Class Period. He oversaw accounting for 200 funds. He had no granular information about what each portfolio manager invested in or how much cash they held. He was never a portfolio manager. In his affidavit he states that his recollection is that the Identified Timers' inflows into the CI funds were generally held in cash during the Class Period. Paragraph 26 of his affidavit states:

My recollection is that the Identified Timers' inflows into the CI funds were generally held in cash during the Class Period. For purposes of preparing this affidavit, I have since reviewed the cash holdings and trading data referenced above, which confirms my recollection as to how the portfolio managers would have generally handled the inflows of the Identified Timers during the Class Period.

[186] He does not, however, explain what if any analysis he undertook to determine whether, as Professor Zitzewitz suggests, portfolio managers were targeting an average cash position such that cash was lower on days when frequent traders were out of the fund and higher when they were in the fund. Mr. Shin addresses that issue more specifically in paragraph 27 of his affidavit where he states:

I am also not aware of CI's portfolio managers, as a general practice, decreasing their baseline cash holdings on days when the Identified Timers were not invested in the funds in anticipation of increased cash from their inflows when they entered the funds. If the portfolio managers were routinely reducing cash positions in CI's funds in this way, my department, Fund Accounting, would have known about it because there would have been a significant increase in trading activity.

[187] I do not find that evidence persuasive. Mr. Shin's point about portfolio managers not routinely reducing their "baseline cash holdings" misses the point. "Baseline cash holdings" is an unusual turn of phrase in the circumstances. When used in a finance or an accounting context, baseline cash holdings suggests a minimum cash holding.⁹⁰ The point is not that portfolio managers actively reduced cash below a minimum holding position but that they targeted an average cash position which took into account outflows and inflows from arbitrageurs. As Professor Zitzewitz noted, an outside observer would not have any way of knowing whether a portfolio manager was targeting an average cash position.

[188] Mr. Shin's explanation in the latter part of paragraph 27 of his affidavit that his department would have been involved if portfolio managers were "routinely reducing cash positions [...] in this way" also suggests he is referring to it as a minimum cash position. If portfolio managers were reducing their minimum cash position, one might expect the increase in trading activity to which Mr. Shin refers in paragraph 27 of his affidavit because reducing a minimum cash level implies that

⁹⁰ *Cambridge Business English Dictionary*, Cambridge University Press : Baseline: "A minimum level of quality, safety, etc. that is considered to be necessary in a particular situation."

one might run out of cash and have inadequate cash reserves. The absence of such increased trading activity may simply be evidence of portfolio managers targeting and managing an average cash position effectively. A portfolio manager who did so would not require increased trading activity. They would not, however, as Ms. Filippini explained, be able to take advantage of market opportunities when they presented themselves.

[189] The plaintiffs ask me to draw an adverse inference from the defendants' failure to call even a single portfolio manager as a witness at the damages trial. By drawing an adverse inference, I would be entitled to infer that the evidence of the portfolio managers was not helpful to the defendants' case. The defendants offer two explanations for failing to call portfolio managers. First, they submit that if they had called one or two portfolio managers, they would be criticized for not calling all portfolio managers. That answer is not satisfactory. One or two portfolio managers would be better than none. Given the amounts at issue in the claim, it would not have been disproportionate to have called a manager from each of the Certified Funds or to have explained why those managers were not available. I am not saying there was an obligation on the defendants to call a manager from each of the Certified Funds, but merely that it would not have been disproportionate to do so. If the defendants' position that frequent trading had no impact on fund management is correct, they could probably also have made that point by calling a sampling of portfolio managers that were representative of the Certified Funds as a whole.

[190] AIC submits that it was under no obligation to call evidence and that the issue is whether the plaintiffs have discharged their burden of proof. While legally correct, the proposition carries an inherent risk: in the absence of evidence to the contrary, the court may conclude that the plaintiffs have met the burden of proof.

[191] AIC submits further that the plaintiffs could have recalled Mr. Murdoch and Ms. De Place Fillippini from the liability trial as witnesses in the damages trial. If there is no obligation on the defendants to call evidence, there is certainly no obligation on the plaintiffs to call the defendants' portfolio managers. Particularly not when the plaintiffs have already adduced evidence to support the point they want to make and that evidence goes unanswered.

[192] The state of the evidence before me is that portfolio managers tend to target an average cash holding that takes into account volatility of inflows and outflows. Of necessity, that cash holding would be implicitly influenced by the timers' inflows and outflows. That is supplemented by with Ms. De Place Fillippini's evidence about the "friction" caused by timer activity and contemporaneous emails about cash overdrafts caused by market timers. In response I have the high level recollection of Gregory Shin, an accountant, not a portfolio manager, of events up to 28 years ago and one question and answer from Mr. Murdoch at the damages trial.

[193] I do not have to go as far inferring that the portfolio managers' evidence would not have been helpful to the defendants. On the record before me, the plaintiffs have demonstrated on a balance of probabilities that, at a minimum, frequent traders' inflows affected the management of the Certified Funds and that portfolio managers

made changes to average cash levels to offset those inflows. In addition, the inflows of frequent trader funds affected the ability of portfolio managers to take advantage of market opportunities. The absence of any responding evidence from the defendants' portfolio managers provides one further reason for excluding the profits method as being the appropriate method to apply in this case.

[194] In further response to these issues, the defendants rely on evidence from the plaintiffs' answers to written discovery questions. According to those responses, Professor Zitzewitz concluded that: (i) trading in response to market timing inflows was minimal within CI and that he did not have the necessary data for AIC to perform this analysis; and (ii) he concluded that CI was holding enough cash when timers were both in and out of the funds and as a result was unable to conclude that CI was holding more cash due to market timing. For AIC he did not have the necessary data to perform this analysis.

[195] These answers are not inconsistent with the point Professor Zitzewitz makes in his reports which is to say that he would expect portfolio managers to target average cash positions and that it is virtually impossible for an outsider to determine whether those cash positions were consciously affected by the market timer inflows. If, however, one is targeting an average cash position, it cannot but be influenced by the overall volatility of inflows and outflows, including those from market timers. The furthest these answers would go is to suggest that the cash deficiencies from market timers noted in the emails introduced at trial were more in the nature of

isolated incidents. That too, however, is consistent with Professor Zitzewitz's point about managers adjusting their behaviour to take into account the cash volatility associated with market timers. It suggests that portfolio managers were generally successful in targeting the correct average cash amounts but, as one might expect, encountered instances where the averages were off, the funds went into overdraft, and the managers were forced to sell securities. Put another way, at most the answer suggest that the portfolio managers were generally effective in managing the "friction" the frequent traders caused. The point though is that they caused friction which required changes to portfolio manager behaviour.

[196] The defendants underscore that there was no specific evidence about how portfolio managers responded to the arbitrageurs' inflows. The defendants were, however, in the best position to introduce such evidence. In the absence of specific evidence to that effect I am more inclined to accept the more intuitive proposition of Professor Zitzewitz that inflows from arbitrageurs led portfolio managers to hold less cash when they were out of the fund in order to maintain an overall average cash balance. As a result, the arbitrageurs' cash inflows did affect the cash holdings of the portfolio managers and would make the profits method less appropriate.

c. Use of Futures

[197] After Professor Zitzewitz reviewed the CI's Holdings Data and noticed large gaps in the reporting of cash, he formed the view that those gaps may be attributable to the funds having purchased futures. The Holdings Data did not include information about futures and CI did not otherwise preserve its futures data.

[198] The issue gained greater acuity at trial during the cross examination of Professor Tufano when he was presented with an expert's report he had prepared for American litigation involving the Putnam mutual fund company. In that report, Professor Tufano did not use the profits method because Putnam had "invested" the cash by "equitizing" it using futures.⁹¹

[199] Futures could be attractive to portfolio managers because they allow the fund to obtain exposure to the market by depositing only 7% of the market exposure with a futures trader while holding the remaining funds in cash. This would, among other things, reduce the transaction costs of purchasing shares. That cash could not, however, be considered as a cash holding in the fund. As a result, if arbitrageurs' funds were being used to purchase futures contracts, they would not appear as an increase in the fund's cash holdings.

[200] It is agreed that AIC did not purchase futures. The situation at CI is different. The 2002 CI Semi Annual report shows purchases of futures contracts in excess of \$1.5 billion in indices like the S&P, FTSE, and Nikkei; the types of futures that could be used to equitize cash in the Certified Funds.

[201] Since CI has not preserved its futures data, it is uncertain whether any of those contracts were held in the Certified Funds and, if so, whether they were held as part of an overall investment strategy of the portfolio manager or whether they were held to protect the portfolio manager against excess cash exposure from arbitrage

⁹¹ Transcript Day 11, May 15, 2025, p. 2308 L 4-25.

inflows. Emails introduced at trial, however, indicated that at least some of the “cash deficiencies” that the funds experienced were resolved by selling futures contracts to raise cash.⁹²

[202] Evidence from portfolio managers about the extent to which the Certified Funds purchased futures contracts, whether they were purchased as part of their ordinary investment strategy or as a response to the influx of frequent trader money and the extent to which they were sold to cover the frequent traders’ redemptions could have resolved those uncertainties.

[203] Gregory Shin testified that he doubted there were extensive purchases of futures contracts because they would have led to accounting issues in his department. It is clear, from the annual reports of CI, however, that its funds purchased \$1.5 billion in futures contracts, in 2002 alone. Mr. Shin also agreed that the futures contracts would not come into the accounting department if a fund held an account with a futures broker and kept cash in that account to have it readily available when needed. Evidence at trial indicated that this would have been a more efficient way of trading futures than constantly transferring money back-and-forth between a fund and a futures broker.

⁹² JBD, Tab 234, Email dated May 28, 2002, from John Myklusch to Letty Dewar et al re: Cash Deficiencies – CIX168228; JDB, Tab 236B - Email dated June 17, 2002, from Pavel Rouha to Letty Dewar et al re CI Funds compliance as of June 14th, 2002, including CashCoverSummary061402 – CIX158918.

[204] In the end result, the ambiguity and uncertainty concerning the use of futures lies on CI's shoulders. That ambiguity is one further reason for preferring dilution and the Next Day NAV method to calculate damages over the profits method.

d. Novel Untested Method

[205] The defendants point to the comments of the case management judge of this action who, in an endorsement on a productions motion noted that the claim was "profoundly novel" because a duty of care to prevent market timing had not yet been established, what counts as damages arising from any such breach had yet to be determined, the economic consequences of market timing were the "theoretical construct of economists;" and dilution was a matter of economic opinion.⁹³

[206] Although the case management judge may have expressed those views, the action was nevertheless certified by the Divisional Court, the Court of Appeal and the Supreme Court of Canada. As has been noted many times, novelty is no reason for dismissing a case. *Donoghue v Stevenson*⁹⁴ was a novel case when it was heard but is now a cornerstone of tort law. So it is with countless other cases in different areas of law. The law must continuously develop and adapt to changing circumstances.

[207] All of that said, this case is not as novel as the defendants suggest. The Case Management Judge's comments were made early on in the case without the benefit

⁹³ *Fischer v IG Investment Management Ltd.*, 2015 ONSC 3525 at paras. 19-20.

⁹⁴ *Donoghue v Stevenson*, [1932] AC 562.

of a full evidentiary record. The liability judgment is based on conventional duty and standard of care analysis as well as the law of misrepresentation. The damages analysis is based on concrete harm done to the funds which flow from the breach of the duty and standard of care.

[208] As a result, I do not find the defendants' assertion of novelty to be a persuasive reason for declining to award damages based on dilution using the Next Day NAV method.

III. Conclusion on Choice of Method

[209] The only options I have been given in the record before me to assess those damages are Next Day NAV, profits and fair value. For the reasons set out above, on my view of the evidence it is more appropriate to use dilution and the Next Day NAV method to calculate damages than the profits method.

[210] Dilution and the Next Day NAV method are a more precise measures of the specific harm caused by the defendants' negligence than is the profits method.

[211] On a balance of probabilities, the prerequisites of using the profits method, principally that there has been no change to the management of the fund due to the influx of frequent traders' funds, have not been met.

[212] Although the Next Day NAV method contains inherent risk of being overly inclusive, that risk is answered by both the theory of autocorrelation and its specific calculation during the Class Period as a whole.

[213] Whatever risks there are on the record before me in using the Next Day NAV method are ultimately attributable to the defendants. It is the defendants who: (i) Failed to preserve a full set of securities level Holdings Data, which might have provided a more precise measure of damages; (ii) Failed to preserve futures data;⁹⁵ and (iii) Failed to call portfolio managers at the damages trial to testify about the degree to which frequent trader funds affected investment and cash management decisions.

[214] Although one might have some sympathy for defendants who are called on to produce documents about events that occurred between 23 and 28 years ago, the action was preceded by the OSC investigation. It began in November 2003, two months after what was later established to be the end of the Class Period. The Settlement Agreements were executed in December 2004.

[215] It is reasonable to infer that, before agreeing to pay tens of millions of dollars to the OSC, both defendants undertook a substantial investigation of the underlying issues. That investigation would likely have involved extensive document collection, witness interviews, and detailed damages analysis. One would expect it to have addressed matters such as the extent to which portfolio managers retained cash or

⁹⁵ In this case limited to CI.

invested it, the time typically required to invest cash inflows of a given magnitude, cash management practices such as average cash targets, calculations relating to profit and next-day NAV methodologies, and the role of futures contracts in the Certified Funds, including whether such contracts were used and, if so, for what purpose. I was not provided any information about that investigation. I was not provided any explanation for why such investigation and analysis was not done at the time of the OSC investigation or why such information is not available.

[216] When faced with the choice of relying on Mr. Shin's general recollection of events between 23 and 28 years ago or relying on contemporaneous emails, the evidence of a portfolio manager like Ms. De Place Filippini and the evidence of Professor Zitzewitz about portfolio manager behaviour, I prefer the latter more specific evidence over the general recollection of Mr. Shin.

THREE: HOW TO IDENTIFY TIME ZONE ARBITRAGE TRADES

[217] The defendants submit that the plaintiffs must introduce direct evidence to demonstrate that each specific trade or series of trades was motivated by a time zone arbitrage strategy before the court can find damages. As part of this position, the defendants submit that: (i) the trades were potentially motivated by strategies other than time zone arbitrage; (ii) the plaintiffs failed to call frequent traders as witnesses at trial; and (ii) the plaintiffs are using circumstantial evidence to which the defendants need not respond.

[218] These arguments and my reasons for dismissing them are discussed below.

I. Trades Motivated by Strategies Other than Time Zone Arbitrage

[219] The defendants note that much of the trading by the Identified Timers occurred in funds with low foreign content. The defendants point to Table 1 of Professor Zitzewitz's CI report which shows that out of total trading of \$71 billion in the CI certified accounts, \$67.5 billion occurred in global or balanced funds with less than 50% foreign exposure. The defendants submit that this demonstrates that the Identified Timers were motivated by strategies other than time zone arbitrage, namely tactical asset allocation, sector rotation, momentum trading and technical trading.

[220] There are three high level responses to this theory.

[221] First, the defence experts do not say that the arbitrageurs' trading was the product of such strategies but merely that it "could" have been. On cross-examination Professor Tufano admitted that he was "speculating or hypothesizing"⁹⁶ about other strategies the timers engaged in.

[222] Second, frequent traders appear to have had more money than funds in which they could invest. As David Brown explained, the central "day to day" concern of frequent traders was which funds they could get into, which they would be kicked

⁹⁶ Transcript Day 7, May 6, 2025, p. 1371 L 2-6.

out, and how much money could invest in a fund.⁹⁷ In Mr. Brown's experience, mutual funds would sometimes limit the amount of market timers could invest. As a result, timers would "look for opportunities to grab the arbitrage" wherever they could, including in funds with lower foreign content.⁹⁸ While Mr. Brown was speaking of his experience with arbitrageurs in the US investigations, the evidence before me was that Identified Timers had similar challenges. The Identified Timers regularly exceeded the limits the defendants set in the Switch Agreements,⁹⁹ suggesting that the arbitrageurs here also had more cash than mutual funds in which they could invest.

[223] Time zone arbitrage was profitable, even in funds with lower foreign content. In his 2003 paper, *"Who Cares About Shareholders? Arbitrage-proofing Mutual Funds"*¹⁰⁰ Professor Zitzewitz demonstrated that time zone arbitrage trading produced annualized excess returns of approximately 40% in international equity funds and 25% for global or balanced funds.¹⁰¹ In other words, arbitrageurs could earn 25% more profit through time zone arbitrage in global funds with less than 50% foreign content than they could have earned from exposure to that asset class without time zone arbitrage.¹⁰² Although a 25% excess return is not as good as a 40% excess

⁹⁷ Transcript Day 10, May 14, 2025, p. 2062 L 15-22.

⁹⁸ Transcript Day 10, May 14, 2025, p. 2079 L 6-16.

⁹⁹ As set out in the Liability Decision, the Switch Agreements were written agreements which permitted the Identified Timers to engage in frequent short-term trading in the Certified Funds.

¹⁰⁰ "Who Cares About Shareholders? Arbitrage-proofing Mutual Funds," 2003, Journal of Law, Economics, and Organization.

¹⁰¹ International funds are those with foreign content of 50% or more. Global and balanced funds are those with less than 50% foreign content. Zitzewitz Reply Report at para. 21, p. 90.

¹⁰² Transcript Day 1, April 28, 2025, p. 154 L 15-25, p. 155 L 1-18.

return, it nevertheless represents a substantially attractive premium over ordinary investments.¹⁰³

[224] Third, the defendants' requirement for evidence that a specific trade be *motivated* by a time zone arbitrage strategy before it becomes part of the damages assessment is inherently flawed. The motivation of the arbitrageur is irrelevant. Damages flow from the negligence of the defendants, not the motivation of the arbitrageur. The negligence of the defendant was to permit frequent trading in retail mutual funds. Damages are restricted to those frequent trades that give the frequent trader the benefit of stale foreign prices, i.e., time zone arbitrage. If the effect of the trade was to give the frequent trader the benefit of stale pricing resulting from time zone differences, it should be included as part of the damages assessment without inquiry into the subjective motivation of the trader.

[225] I turn now to a more detailed assessment of the defendants' arguments about the need for evidence about specific trades.

[226] Although the alternative strategies the defendants refer to are shorter-term ones than the buy and hold strategy the defendants promoted to their retail investors, they are nevertheless strategies of a longer-term nature than the time zone arbitrage trading at issue here.

¹⁰³ Transcript Day 1, April 28, 2025, p. 156 L 12-14.

[227] Professor Chalmers describes tactical asset allocation as selling asset classes that have appreciated and investing in asset classes that have depreciated.¹⁰⁴ He described momentum trading as trading on the assumption that a current trend will persist over time.¹⁰⁵ Those descriptions, by their very nature imply investments of a longer duration than the one day to two week intervals¹⁰⁶ relevant to time zone arbitrage. Indeed, Professor Chalmers stated in his report that momentum strategies lead to profits “albeit over longer time periods.”¹⁰⁷

[228] The defendants submit that Professor Zitzewitz acknowledged that momentum trading was a profitable short-term trading strategy used during the Class Period. Although he did so, he also said it was a strategy used for individual stocks, not mutual funds and with less frequency than the trading at issue in this action.¹⁰⁸

[229] According to Professor Tufano, there was no inherent reason for hedge funds not to engage in these other short-term trading strategies in mutual funds. As he explained it, by executing the strategies in mutual funds, hedge funds could avoid the costs of: setting up a trading desk, buying and selling securities, paying for bid-ask spreads, and driving prices up when purchasing securities and driving them down when selling.¹⁰⁹ As a short aside, this last factor only highlights the damage

¹⁰⁴ Chalmers Report dated July 11, 2024, para. 42.

¹⁰⁵ Chalmers Report dated July 11, 2024, para. 42.

¹⁰⁶ The specific trading interval required to be taken into account for damages is in dispute and will be discussed later in these reasons.

¹⁰⁷ Chalmers Report at para. 42.

¹⁰⁸ Transcript Day 3, April 30, 3035 (Zitzewitz Cross Continued), 601 L. 17 – 603 L.24.

¹⁰⁹ Transcript Day 11, May 15, 2025 (Tufano Re-exam), p. 2426 L17 – p. 2428 L. 24.

that dilution causes. The frequent trader wants to benefit from what they perceive will be a price movement but is concerned that if they buy the shares directly, the price will be driven up and deprive them of some or all of the benefit of the anticipated price upswing. The solution is to buy mutual fund units, have the money held in cash so as not to affect share prices, and enjoy the benefits of the share price increase that was earned using the money of long-term unitholders.

[230] Professor Tufano's views about the other cost savings he lists are speculative. He simply lists a series of costs that are associated with trading individual securities. He does not compare those costs to the costs of the hedge funds trading in mutual funds.¹¹⁰ It also assumes that the hedge funds would not incur the cost of something like a trading desk or brokerage arrangements for any of their other business. It would be somewhat surprising for hedge funds to have gone through the time and expense of setting themselves up in tax-free jurisdictions like Bermuda and the Cayman Islands but then have no ability to trade other than through retail mutual funds. Moreover, Professor Tufano does not explain how these other strategies, which generally require a longer investment horizon, are implemented in the very short holding periods that characterize the Identified Timers' trading.

[231] As Professor Zitzewitz explained, hedge funds could have pursued strategies like asset allocation or momentum trading more conveniently and cheaply during the

¹¹⁰ Which include switch fees in the millions.

Class Period through futures or Exchange Traded Funds. Had they done so, however, they would not have benefitted from stale pricing.¹¹¹

[232] I find it less likely that sophisticated hedge funds like the Identified Timers would invest in retail mutual funds to pursue a momentum strategy. If the portfolio managers of the Certified Funds were truly such astute stock pickers, it is difficult to understand why the sophisticated clients of hedge funds would not simply invest in the funds directly rather than paying fees to a hedge fund manager and to the mutual fund. Equally perplexing is why sophisticated clients of hedge funds would be content to pay hefty hedge fund management fees only to have the hedge fund offload its investment decisions to a retail mutual fund.

[233] In cross-examination, Professor Zitzewitz was taken to a journal article entitled *What Do We Know About the Profitability of Technical Analysis?*¹¹² to support the suggestion that technical analysis was a known strategy during the Class Period. He agreed, as a general proposition, that it was a known strategy during the Class Period but not that it was used as a basis to buy or sell mutual fund units. That proposition was never put to him. Nor does the article suggest that technical trading was being applied in the purchase and sale of mutual fund units. Indeed, the article also contains the following passage:

Finally, there remains a large and persistent gap between the views of many market participants and large numbers of

¹¹¹ Zitzewitz Reply Report at para. 182.

¹¹² Cheol-Ho Park, Scot H. Irwin, *What Do We Know About the Profitability of Technical Analysis?* (2007) 21 Journal of Economic Surveys 786.

academics about technical analysis. Therefore, researchers are strongly encouraged to directly elicit and analyse the views and practices of technical traders in a broad cross-section of speculative markets. This would provide a much richer understanding of the actual use of technical trading strategies in real-world markets.

It appears that even the article the defendants rely on to suggest that technical trading was used to trade mutual funds recommends direct evidence from traders and to obtain a better understanding of its usage. Given that the defendants were trying to establish the point that arbitrageurs were pursuing technical trading strategies, it was incumbent upon them to introduce such evidence.

[234] Following the hearing I sent a number of written questions to counsel, one of which asked whether there was any evidence indicating that technical trading strategies were pursued in the purchase and sale of mutual fund units as opposed to individual stocks. I was not pointed to any evidence or authority to support that proposition.

[235] Professor Tufano provides one example of a trade on August 2, 2001, that he says “could” be the result of a technical trading strategy referred to as the double average moving crossover strategy¹¹³ which would generate a buy signal on that day. This is the only example from the defendants of a trade that could have been motivated by a technical trading strategy. One would think that if such strategies were being pursued, the defendants could have come up with a more consistent pattern of technical trades than a single example during the 5-year Class Period.

¹¹³ Tufano Report at para. 76.

[236] Finally, the defendants point to the fact that the frequent traders had Switch Agreements that permitted them to trade in domestic funds as proof of alternative strategies to time zone arbitrage. I do not find that persuasive. The funds in which the Switch Agreements permitted frequent trading were predominantly international or global funds which held foreign securities. The domestic funds they listed tend to be money market funds¹¹⁴ in which the frequent traders parked their money when it was not invested in an equity fund. There were also a small number of growth funds¹¹⁵ in which frequent trading occurred, and which were subject to liquidity arbitrage.

[237] Liquidity arbitrage is the practice of exploiting price discrepancies of securities that trade less frequently. Since they trade less frequently, market news is not incorporated into their share prices as quickly as it is with more liquid stocks. This can create price differences for the same security on different exchanges and can allow the security to be bought on one exchange at a lower price and then sold on another exchange at a higher price. It can also allow for the purchase of an illiquid stock before the market has incorporated certain news into the share price and then sell on the same exchange once the news has been incorporated into the share price.

¹¹⁴ See for example joint document brief tab 204 from the liability trial.

¹¹⁵ See for example joint document brief tab 213 from the liability trial.

[238] AIC tried to dispel the possibility of liquidity arbitrage in their closing submissions,¹¹⁶ by citing Michael Lee-Chin's evidence at the liability trial that the AIC Advantage Funds consisted primarily of mid-cap securities that were liquid. More accurately, Mr. Lee-Chin did not state that the securities in those funds "were liquid" but rather, he stated that they were "pretty liquid. They were not -- I wouldn't say they were as liquid as Coca-Cola, but they were liquid. You could exit within a couple days".¹¹⁷ A delay of a couple of days before one could exit creates ample time for stale pricing.

[239] As legal authority for the proposition that the court was required to examine individual trades, AIC in particular relied on the Ontario Court of Appeal's decision in *Zraik v. Levesque Securities Inc.*,¹¹⁸ which it submits calls for a transaction-by-transaction assessment, because a transaction should be included in a damage calculation only where each transaction amounts to a breach of duty, which in this case AIC submits is permitting time zone arbitrage.¹¹⁹ As a starting point, as noted earlier, the negligence was permitting frequent trading. Time zone arbitrage was the form of frequent trading to which damages were limited.

[240] The penultimate paragraph of *Zraik* notes that each case must turn on its own facts. It is one thing to require a transaction by transaction analysis in a case like *Zraik* which involved the analysis of a single retail trading account managed by a single

¹¹⁶ AIC Closing Submission at para. 44.

¹¹⁷ Liability Trial Transcript Brief, March 4, 2022, Michael Lee Chin, p. 2777 L. 1-5.

¹¹⁸ *Zraik v. Levesque Securities Inc.*, 2001 CanLII 21223.

¹¹⁹ *Zraik v. Levesque Securities Inc.*, 2001 CanLII 21223 at paras. 29 – 32 (ON CA).

broker. It is entirely another thing when one is dealing with thousands of transactions involving trades in the tens of billions of dollars, across 28 mutual funds¹²⁰ over five years. A transaction by transaction assessment of the strategy behind each individual trade is a practical impossibility and should not be required.

II. Should a Minimum Movement in the S&P be Required

(i) The Thresholds of the Various Experts

[241] The defence experts submit that, for the purpose of calculating damages, only trades executed by the Identified Timers on T Days associated with a minimum threshold movement in the S&P should be considered. In contrast, Professor Zitzewitz includes all trades executed by the Identified Timers in his damages analysis, regardless of the magnitude of the S&P movement on the relevant T Day. The adoption of a minimum S&P movement threshold has a significant impact on the resulting damages calculation.

[242] Professor Chalmers applies a threshold movement of 1% in the S&P for funds with more than 50% foreign content and 2% for funds with less than 50% foreign content. Professor Chalmers also excludes all sales if the purchase has not met the minimum threshold regardless of the size of the S&P movement on the sell day.¹²¹

¹²⁰ Four in AIC and 24 in CI

¹²¹ Zitzewitz Reply Report at para. 32, p. 93.

His approach would exclude 81% of trades by volume in the Identified Accounts at CI and 52% at AIC.

[243] Professor Tufano applies thresholds that vary with the foreign content of the fund. They range from an increase of 0.31% in the S&P for funds with high foreign content to an increase of 1.67% for funds with lower foreign content. This would exclude 66% of the trades in Identified Accounts at CI and 43% at AIC.

[244] Professor Christoffersen excludes all trades by Identified Timers in funds with less than 50% foreign content but requires only a positive S&P increase in funds with over 50% foreign content. This would exclude 56% of the trades at AIC.¹²²

[245] The effect of the S&P thresholds of all three defence reports is to conclude that the plaintiffs have already been overcompensated by the OSC and IDA Settlements.

(ii) Rationale for the Thresholds

[246] Professor Christoffersen excludes all trades in funds with foreign content of less than 50% because the literature on time zone arbitrage did not show widespread market timing in funds with lower content and her assignment was limited to a literature review.¹²³

¹²² AIC Closing para. 49 which states she found that only 44% of the Identified Market Timers' trades met her criteria within AIC.

¹²³ Examination and Cross-Examination of Professor Christoffersen at Liability Trial March 7-8, 2022, p. 3046 L 20 - 3047 L.6, p. 3249 L. 11-22.

[247] Professors Tufano and Chalmers explain their S&P threshold on the basis that time-zone arbitrage trading is not risk-free. Consequently, a frequent trader would be unlikely to enter such a trade without a strong level of comfort that the trade will be profitable.

[248] Professor Zitzewitz includes all trades of the Identified Timers because: The OSC had already identified them as time zone arbitrageurs. Time zone arbitrage led to excess returns of between 25% and 40% which incentivized arbitrageurs to engage in it whenever possible. Those who had a contractual right to trade frequently under the Switch Agreements would have no reason to ignore between 43% and 81% of the time zone arbitrage opportunities as the defendants would have them do.¹²⁴ There is little likelihood of overinclusion given his measurement of net zero autocorrelation.

(iii) Analysis of Rationales for Thresholds

[249] I do not accept as valid Professor Christoffersen's exclusion of trades in funds with foreign content of less than 50% because academic literature did not show widespread market timing in such funds. The academic literature Professor Christoffersen reviewed focussed on whether time zone arbitrage was profitable. As Professor Christoffersen explained, its profitability is more easily demonstrated by examining funds with higher concentrations of foreign shares.¹²⁵ The court's task is different. It is to determine damages arising out of time zone arbitrage by

¹²⁴ This being the range of excluded shares referred to in paras. 241-243 above.

¹²⁵ Examination of Professor Christoffersen at Liability Trial March 7, 2022, p. 3094 L. 1-7.

the Identified Timers in the Certified Funds, regardless of the fund's foreign content. Professor Christoffersen ultimately agreed that dilution would occur regardless of whether the fund held 25% foreign content or 100% foreign content.

[250] The defendants justify Professor Chalmers' exclusion of sales if the purchase did not meet his S&P thresholds on the grounds that he did not apply any filters on a sale. If the purchase met his filters, then the sale was automatically included in the calculation. I do not accept that explanation. Dilution can occur on either a purchase, a sale or both. Even if there were no dilution on a purchase, there could still be dilution on a sale.

[251] Professor Chalmers justified the automatic exclusion of such sales by asserting that traders have control over when to enter the market, but "are more constrained" on when to exit because the market may move in unpredictable ways.¹²⁶ What we are trying to address is damage from frequent trading. Why the frequent traders sold is not relevant to that issue. The point they sold shortly after buying.

[252] On the evidence before me, the defendants' concern about the risk of time zone arbitrage is exaggerated. The defendants highlight that there were five quarters between Q1 2001 and Q1 2003, in which the Identified Timers lost a total of \$806,000.¹²⁷ They cite this as evidence that their trading was unprofitable and was

¹²⁶ Transcript Day 8 (Chalmers Chief), May 12, 2025, p. 1652 L. 8 – 1653 L. 1 and 1714 L. 13-19.

¹²⁷ Exhibit 28 – Tufano Slide Deck at slide 20; Transcript Day 6, May 5, 2025 (Tufano Chief), p. 1244 L. 8 -1246 L. 17.

not all time zone arbitrage. Accepting for the moment that profit is the correct measure, the same exhibit shows that even with those losses, the Identified Timers still made a profit of \$83,409,869 by trading in CI funds. Even between Q1 of 2002 and the end of the Class Period, which was generally a down market, the Identified Timers earned profits of \$13,081,830 by trading in CI Certified Funds. The fact that there may have been periods of loss does not negate the overall consistent and significant profitability of the strategy.

[253] Time zone arbitrageurs pursued the strategy not the trade. Although an individual trade might turn out to be unprofitable, the overall strategy remained sound. As Professor Zitzewitz pointed out in his Reply Report, the risk return trade-offs improve as one averages the results of multiple trades. In the context of high-frequency trading, transactions with slightly less attractive risk-return ratios in isolation can still improve the risk return ratio of the strategy on the whole.¹²⁸

[254] Moreover, even if the trade did not produce quite the profit in precisely the time frame the trader wanted, if worse came to worse, they could simply continue to hold until the unit price recovered to or exceeded the purchase price and sell. Given that trades were being made on relatively small movements in the S & P and given that prices fluctuated daily, even in a downward market, holding until a day on which the unit price recovered was unlikely to take especially long.

¹²⁸ Zitzewitz Reply Report para. 186.

[255] The triggers proposed by the defendants also conflict with the actual behaviour of the Identified Timers. Their trades throughout the Class Period frequently occurred at lower thresholds.

[256] Table 1 of Professor Zitzewitz's report of May 27, 2024, examines the trading of certain Identified Timers in AIC funds. The average buys in the Global Advantage and Global Diversified funds (both of which had foreign content of under 50%) occurred at average S&P movements of 1.22% and 1.07. Those are well below the defence thresholds of 2% or 1.67%. Moreover, given that these are averages, many of the purchases would have occurred on days with even lower S&P movements.

[257] Professor Tufano summarizes his conclusions about the degree of change required in the S&P to qualify as a time zone arbitrage trade in Exhibit 7 of his Report dated September 19, 2024. As his Report explains it, Exhibit 7 shows the average next-day return for each CI Certified Fund during the Class Period as a function of the same-day S&P returns by decile. Green highlighting indicates fund and S&P Index return combinations for which the average next-day NAV return was statistically significantly greater than zero. The green highlighted returns would potentially make it into the damages calculation because those returns were statistically greater than zero.

[258] What is striking is the large number of positive returns that Professor Tufano excludes because they are not statistically significant. Whether the return was

statistically significant is unlikely to be of much practical concern to the frequent trader. From a practical perspective, the point is that the return was positive.

[259] Professor Chalmers' exclusions demonstrate dilution ratios of 0.19% to 0.33% which indicates profitable trading. The average dilution ratio of the Identified Accounts on purchases and sales within CI was 0.19%.¹²⁹ Although the OSC identified them as time zone arbitrage trades, Professor Chalmers S & P thresholds would exclude them.

[260] The limitations of the defendants' approach are further demonstrated by Exhibit 35, a worksheet of Professor Chalmers'. It includes a purchase by Reliable of \$22,000,000 on April 25, 2000. The S & P movement on that day was negative 1.1%. Next Day NAV dilution of \$80,344 was comprised of a positive contribution of \$176,000 from foreign stocks and a negative contribution of \$98,000 from domestic stocks. This shows that time zone arbitrage can have significant benefits even for purchases on days where the S&P is down.

[261] The defendants submit that the plaintiffs' approach is replete with counterintuitive transactions that make no sense. According to the defendants, the plaintiffs' theory would call on frequent traders to purchases on up days and sell on down days. Yet there were many purchases occurring on down days and sales occurring on up days.

¹²⁹ Zitzewitz CI Report dated June 1, 2024, Table 1.

[262] In his reply report, Professor Zitzewitz demonstrated that the defendants found these transactions to be counterintuitive because they defined an up or down day by the net result of the S&P return over the entire trading day of 9:30 AM to 4 PM. What was more important, however, was the movement between 11:30 am (after the close of European markets) to 4 pm. In the vast majority of cases, movement during that time period was positive on buy days and negative on sell days. That time frame is significant because it is the S & P movement after the close of foreign markets that is more indicative of what foreign markets were likely to do the next day. Although the 9 AM to 4:30 S & P return might be negative, the 11:30 AM to 4 PM return could often be positive, ranging from 0.83% to 2.02%.¹³⁰ The same phenomena presented itself on sell days that were supposedly positive.

[263] Professor Chalmers notes in Appendix D.1A of his report that, even when the 11:30 a.m. to 4:00 p.m. window is used, counterintuitive trades continue to generate dilution of approximately \$5.4 million.¹³¹ That Appendix, however, applies the 11:30 AM to 4 PM window to European stocks but applies the 9:30 AM to 4 PM window to Asian stocks. There is no apparent reason for that distinction. Asian stocks could respond on T + 1 to developments that occurred between 11:30 AM and 4 PM on T Day just as much as European stocks could.

¹³⁰ Zitzewitz Reply Report, Exhibit 4.

¹³¹ During his examination in chief, he increased that number to \$8 million because of adjustments, the nature of which were not specified.

[264] The situation is also more nuanced than simply looking at returns between 11:30 a.m. and 4:00 p.m. Even if the return is negative during the 11:30 AM to 4 PM window, it remains possible for news released later in the trading day to trigger an upward market movement that could be expected to generate a positive reaction on foreign markets when they open on T +1 even though the news has not worked itself through the North American market with sufficient force to change the T Day result from negative to positive. Similarly, the S&P could be down even between 11:30 AM and 4:30 PM but news about a particular sector might be positive which could prompt purchases of funds with weighing in those sectors like the CI Global Telecom Fund or the CI Global Small Companies Fund.

[265] The defendants observe that Professor Zitzewitz's analysis still identifies 242 "buys" on down days and 902 "sells" on up days within CI. As Professor Zitzewitz explained during cross-examination, the 242 buys on down days account for only 3% of the total purchases. When analyzing thousands of trades, the relevant question is not whether every trade conforms to the expected pattern, but whether a generally reliable pattern emerges from the data. Exceptions are inevitable. A consistency rate of 97% strikes me as reliable. Especially when there are commonsense explanations for the 3% of exceptions.

[266] Professor Zitzewitz also explained that the 902 sells on up days within CI can be explained by impatient selling or investors who were willing to "give up a little bit of expected profit to exit the market early" and that "in almost all of the cases" a "sell"

on a “wrong” day occurred when the S&P movement was very small.¹³² For instance, of the 902 sells on up days, 650 occurred on days where the S&P rose between 0 and 0.2%.¹³³

[267] The defendants criticize Professor Zitzewitz and the plaintiffs for what they say are inconsistencies in their positions. In doing so, the defendants are not, in my view, characterizing the evidence fairly.

[268] The defendants submit that Professor Zitzewitz admitted that time zone arbitrage is not a risk-free strategy, acknowledged that market timers would be trying to make money on every individual trade;¹³⁴ and that a larger movement in the S&P would lower the risk associated with the trade,¹³⁵ yet still includes all of the Identified Timers’ trades in his damage assessment.

[269] The “admissions” of Professor Zitzewitz on which the plaintiffs rely relate to statements he agreed with when they were associated with an individual trade. As Professor Zitzewitz pointed out, however, frequent traders were not viewing these as individual trades. They saw this as a trading strategy whose success was not based on a single trade but on the results of a pattern of high volume, repeated trades over an extended period of time.

¹³² Trial Day 3 Transcript, April 30, 2025, p. 529 L 17-25, p. 540 L 1.

¹³³ Zitzewitz Reply Report, Exhibit 13A; Trial Transcript Day 3, April 30, 2025, p. 530 L 1 - p. 531 L 14.

¹³⁴ Zitzewitz Cross-Examination (04-30-2025) p. 616 L. 21 – 25, p. 656 L. 6 – 10.

¹³⁵ Zitzewitz Cross-Examination (04-30-2025), p. 615 L. 20 – 22.

[270] The defendants accuse Professor Zitzewitz of being inconsistent because he applies no S&P triggers to the Identified Accounts but does so vis-à-vis the additional market timers he seeks to include in the damages assessment. In addition, they note that Mr. Brown expected arbitrageurs to trade on some sort of a market signal, yet the plaintiffs apply no signal to the Identified Accounts. Any alleged inconsistencies in this regard are, at most, superficial. Triggers were not required with respect to the Identified Timers because the OSC had already established that they had engaged in market timing trades of over \$70 billion at CI and over \$13 billion at AIC. When trying to ascertain whether there were additional frequent traders among the 261,000 accounts at AIC¹³⁶ and the 1.3 million accounts at CI,¹³⁷ it was necessary to apply various filters to detect frequent traders among that larger account population.

[271] The defendants see further inconsistency between Professor Zitzewitz's evidence at trial and his written submission to Congress in 2003 in which he advocated for an S & P trigger of 0.75%. Again, any purported inconsistency is superficial. Professor Zitzewitz's Congressional submission did not address the calculation of damages for time zone arbitrage. Rather, it spoke to the circumstances in which mutual funds should use fair value methods to set net asset values, as opposed to using last the quoted market price. As Professor Zitzewitz explained to Congress, some mutual funds were applying fair value methods only after an increase in the

¹³⁶ Zitzewitz AIC report dated May 27, 2024, at para-34

¹³⁷ Zitzewitz CI Report dated June 1, 2024, at para-38

S&P of 3% or more. He further explained that applying fair value methods after a .75% increase in the S & P would eliminate 90% of staleness. That means 10% of staleness would remain. A mutual fund that allows frequent trading in breach of its representations to its clients is liable for 100% of the damages caused by the frequent trading, not 90%. It also makes more sense to apply a higher threshold before requiring a mutual fund to undertake a costly fair value exercise than before requiring it to stop facilitating practices that harm its unit holders.

III. The Failure to Call Arbitrageurs as Witnesses

[272] The defendants, and in particular AIC, criticize the plaintiffs for having failed to call direct evidence from the Identified Timers to demonstrate that their trades were motivated by a time zone arbitrage strategy as opposed to some other strategy. They ask me to draw an adverse inference against the plaintiffs for their failure to call the Identified Timers. I have addressed the issue of motivation earlier. I address here whether the plaintiffs should have called the arbitrageurs and whether I should draw an adverse inference for their failure to do so.

[273] The plaintiffs have put forward a great deal of evidence to support damages from time zone arbitrage. Indeed, the defendants' experts essentially agree that the practice causes dilution to longer term unitholders. The disagreement lies in how to calculate damages. At a minimum, the plaintiffs have led enough evidence to establish that, in the absence of contrary evidence, the frequent trading that Professor Zitzewitz analyses caused significant dilution due to time zone arbitrage.

[274] It is the defendants who are trying to establish the proposition that the trades were motivated by something other than time zone arbitrage. As a general rule, the burden of proof is on the party seeking to establish an evidentiary proposition. To the extent that the defendants assert that the trades are motivated by another strategy, it is up to them as the proponents of the proposition to establish it.

[275] The defendants argue that, as a practical matter, they could not call the arbitrageurs because the arbitrageurs are members of the class, as a result of which they are class counsel's clients with whom the defendants were prohibited from speaking. In doing so they rely on *Nardi v. Sorin Group Deutschland, GMBH*.¹³⁸

[276] To the extent there is any validity to that proposition, it would not apply to the Identified Timers who were specifically excluded from the class by Justice Perell. Thus, even on its own theory, AIC was entitled to speak to the Identified Timers and failed to do so.

[277] Furthermore, courts have recognized circumstances in which defendants to a class action would be entitled to speak to someone who is technically a member of a class. In *Nardi*, Perell J. recognized such exceptions as including the following:

A defendant may have a pre-existing and ongoing relationship with the class members, who may be the defendant's customers, clients, investors, shareholders, suppliers, employees, franchisees, taxpayers, or patients, etc. Although once an action commences there is an opposing party relationship, depending upon the circumstances of the particular case, the defendant and its

¹³⁸ *Nardi v. Sorin Group Deutschland, GMBH*, 2022 ONSC 4766 at para. 52.

lawyer may have legitimate and proper reasons to communicate with the putative class members.¹³⁹

[278] The defendants never made any effort to obtain the plaintiffs' or the court's consent to approach the Identified Timers to the extent such consent was even necessary.

[279] As a practical matter, it would have been far easier for the defendants to call an Identified Timer as a witness than it would have been for the plaintiffs to do so. The defendants knew who the Identified Timers were. The Liability Decision makes clear based on the defendants' own documents that they allowed market timing to occur and knew or could easily have determined who was doing it. The defendants had agreements with certain market timers permitting the practice. To the extent that the relationship between the Identified Timers and the defendants was conducted through an intermediary broker and the defendants had no direct contact with the timers during the Class Period, they could more easily have sought the help of the intermediary broker to contact the arbitrageurs than could the plaintiff. The defendants had an ongoing business relationship with the broker. The plaintiffs did not. The defendants have commonality of interest with the timers. The plaintiffs do not. All of these factors make it far easier for the defendants to have approached market timers than for the plaintiffs to have done so.

[280] With respect to the additional accounts that the plaintiffs seek to add as market timers, AIC did not disclose identifying information for them until after the Liability

¹³⁹ *Nardi v. Sorin Group Deutschland, GMBH*, 2022 ONSC 4766 at para. 52(c).

Decision was released even though it had the information since at least the end of the Class Period in September 2003. Moreover, given that only two additional traders within AIC were responsible for \$13 billion in trades, it should not have been difficult for AIC to have identified them many years ago.

[281] As a result of the foregoing, I conclude that there was no obligation on the plaintiffs to call arbitrageurs as witnesses.

IV. Use of Circumstantial Evidence

[282] The defendants criticize the plaintiffs for having introduced only circumstantial evidence of time zone arbitrage trading and caution that circumstantial evidence must be capable of reasonably supporting the inference that the plaintiffs ask the Court to accept.¹⁴⁰ The defendants rely on the decision of the Court of Appeal for Ontario in *R. v. Morrissey*¹⁴¹ to submit that where there is no evidentiary basis for an invited inference or where the inference does not flow logically and reasonably from facts established by the plaintiffs, the inference cannot be drawn because it is no more than speculation.¹⁴²

[283] As always, the application of a general principle of this sort turns on the facts of the case from which the principle arises and the manner in which the principle is sought to be applied in the case before the court. In *Morrissey*, the comments arose out of the following circumstances: The accused was a Christian Brother who had been

¹⁴⁰ *Diaczuk v. Holloway*, 2007 CanLII 10406 (ON SC).

¹⁴¹ *R. v. Morrissey*, (1995) 22 O.R. (3d) 514 at para. 52 (C.A.).

¹⁴² *R. v. Morrissey*, (1995) 22 O.R. (3d) 514 at para. 52 (C.A.).

charged with sexual assault and assault causing bodily harm. A document was introduced at his trial which contained comments written by an unknown person which were made when the accused applied to renew his vows as a Christian Brother in 1962. The accused was not permitted to renew his vows. The note in question read: "Devoted to class work and rel. obligations, evidence of emotional immaturity and of indiscretion. Pleasant character." The trial judge inferred that the reference to emotional immaturity and indiscretion was consistent with evidence of sexual assault. The Court of Appeal held that the inference was not logical, reasonable, or available to the trial judge. The Court of Appeal noted further that there is a distinction between conjecture and speculation on the one hand, and rational conclusions from the whole of the evidence on the other. The comment about immaturity and indiscretion could only be tied to sexual assault through speculation.

[284] The defendants submit that the evidence led by the plaintiffs calls for speculation because the plaintiffs ask the court to conclude that certain types of trades were motivated by time zone arbitrage when in fact there were a variety of other trading strategies that could have prompted similar trades. As noted earlier, motivation is irrelevant. What the court is being asked to do is award damages for the damage caused by that subset of frequent trading which involves stale prices in foreign shares.

[285] The defendants submit further that they are not obliged to call evidence to refute the circumstantial evidence of time zone arbitrage proffered by the plaintiffs, or the

factual inferences that the plaintiffs invite the court to draw. They argue that the circumstantial evidence from which the Court is asked to draw an inference, does not shift the burden of proof to the defendants. They rely on the decision of the British Columbia Court of Appeal in *British Columbia (Director of Civil Forfeiture) v. Angel Acres Recreation and Festival Property Ltd.*¹⁴³ in support of that proposition. It is important, however, to read the full paragraph that AIC cites. That paragraph as follows:

The fact that a party adduces evidence from which the judge is invited to draw an inference does not shift the burden of proof to the opposing party. The opposing party has a choice. It may choose to adduce its own evidence on the point, but it is not obliged to do so. It is for that party to assess its risk in deciding whether or not to adduce evidence. Once all the evidence is in, the trier of fact will weigh it and determine whether to draw the invited inference. In doing so, a judge will ordinarily consider alternative available inferences before deciding whether to draw the invited inference.¹⁴⁴

[286] Thus, while the defendants are, strictly speaking, correct in the sense that there is no formal shifting of the burden of proof, the defendants take significant risk if they fail to refute the circumstantial evidence because the trier of fact may find it sufficiently persuasive.

¹⁴³ *British Columbia (Director of Civil Forfeiture) v. Angel Acres Recreation and Festival Property Ltd.*, 2023 BCCA 70 at para. 178.

¹⁴⁴ *British Columbia (Director of Civil Forfeiture) v. Angel Acres Recreation and Festival Property Ltd.*, 2023 BCCA 70 at para. 178.

[287] The record contains ample evidence of time zone arbitrage as a phenomenon during the Class Period. This includes newspaper articles, articles in finance journals, evidence from mutual portfolio managers and disclosures in mutual fund prospectuses. The Certified Funds are all funds that had material foreign content. They were therefore potential targets for time zone arbitrage. The defendants permitted frequent trading in those accounts. The Liability Decision held that the breach of the defendants was to permit frequent trading of all sorts. Time zone arbitrage was merely one subset of frequent trading. If the evidence of time zone arbitrage is circumstantial, then as *Angel Acres* set out, the court may decide to draw the inference the plaintiff asks for. In that case, the risk was on the defendants that their fairly high level speculation about competing trading strategies would not be enough to overcome the evidence of time zone arbitrage in the record.

[288] *Angel Acres* refers to the requirement for the court to consider alternative available inferences before deciding whether to draw the invited inference. Doing that here does not assist the defendants. Even if I accept that the Identified Timers' transactions were motivated by a strategy other than time zone arbitrage, the transactions nevertheless gave rise to dilution caused by time zone arbitrage because of the foreign content of the funds in which the transactions occurred. Damages for those trades are therefore nevertheless appropriate. Even more so when one considers that the presence of stale pricing in the Certified Funds almost guaranteed a return equal to the stale pricing effect which thereby reduced any risk associated with any frequent trading motivated by other strategies. If permitting frequent trading is the negligence but damages are limited to those associated with

time zone arbitrage, then damages for the time zone arbitrage arising out of other trading strategies is equally appropriate to award.

V. Conclusion on Damages for Identified Timers

[289] As a result of the foregoing, I assess damages vis-à-vis the Identified Timers at CI and AIC using the Next Day NAV method and by applying a discount of 10% with respect to CI and 3% with respect to AIC.

[290] To keep things simpler, I will conduct one final damages calculation at the end of these reasons in paragraphs 444 and following below.

FOUR: SHOULD ADDITIONAL ACCOUNTS BE ADDED TO DAMAGES?

[291] The plaintiffs wish to include in the damages analysis the trades of certain additional accounts that they say engaged in time zone arbitrage within AIC and CI (the “Additional Accounts”). The plaintiffs submit that the Additional Accounts they wish to add caused \$39,343,979¹⁴⁵ of dilution damage within AIC and \$14,340,432¹⁴⁶ of dilution damage within CI.

¹⁴⁵ Zitzewitz AIC Report Table 4 total of first 22 accounts.

¹⁴⁶ Zitzewitz CI Report Table 8 total of Group 1 and 2 accounts.

[292] The defendants object to any Additional Accounts being included in the damages analysis for reasons which I will address momentarily.

[293] If the Additional Accounts are included in the damages analysis, Professor Tufano assesses damages from them at \$8.4 million within CI. In doing so he agrees that the profits method is not appropriate because he believes their inflows were invested and were not held in cash. Professor Tufano prefers the fair value model to determine damages for the Additional Accounts which he assesses at \$8.4 million. His next day NAV calculation comes to \$9.1 million.

[294] If the Additional Accounts were to be included in the damages analysis, Professor Chalmers would apply certain filters which would reduce damages from them to \$7.8 million within CI.

[295] For the reasons set out below, I include in the damages calculation the proposed Additional Accounts within AIC. In addition, I include in the damages calculation those Additional Accounts within CI that satisfy the filters I set out in this section.

I. Defence Reasons for Excluding Additional Accounts

(i) *Pleading Limited to Identified Timers*

[296] The defendants submit that the Amended Statement of Claim pleads material facts relating only to the Identified Timers and not to any other additional investors. I do not read the Amended Claim in the same way.

[297] Paragraphs 22-35 of the Amended Claim describe the issue of time zone arbitrage generally. The Amended Claim then goes on to describe the OSC investigation against each of the defendant mutual funds. Paragraphs 99-107 set out the causes of action against all defendants collectively. The most salient one in light of the Liability Decision is the cause of action for negligence set out in paragraph 100 of the Amended Claim. It reads as follows:

100. The Defendants, as fund management companies, owed a duty of care to their associated Plaintiff and Class Members to:

- a) discharge the duties of their office honestly, in good faith and in the best interests of the funds;
- b) exercise the degree of care, diligence and skill that a reasonably prudent person would exercise in the circumstances;
- c) establish and/or maintain internal controls sufficient to ensure that harmful market timing activity would not take place in the subject funds;
- d) disseminate accurate and truthful information about the funds and the management of the funds;
- e) act in accordance with the stated policies relating to the management of the funds;
- f) not favour one class of investor over another;
- g) minimize the risk of dilution and other increased costs and inefficiencies in the funds;
- h) ensure that market timing activity and the associated financial harm to the funds was not occurring in the funds under their management.

[298] These are general allegations of negligence. They are not allegations that are limited to the defendants' conduct vis-à-vis the Identified Timers. Although the defendants' conduct vis-à-vis the Identified Timers is described in the Amended

Claim, it is not described in a way that limits the allegations in the Claim to them or to the findings of the OSC. Rather, the OSC Investigation is set out as part of the background to the more general negligence claim. Put another way, the OSC Investigation may amount to part of the factual matrix which helps support the negligence claim, but the negligence claim is not limited to that part of the factual matrix.

[299] AIC further submits that the Amended Claim does not contemplate recovery for all stale trading.¹⁴⁷ It cites paragraphs 35-36 of the Liability Decision in support of this submission. Paragraphs 35 and 36 of the Liability Decision do not support that submission. Those paragraphs state:

[35] In my view, the recovery of damages in this action is limited to harm caused by time zone arbitrage.

[36] The scope of an action is defined by the pleadings. On my reading, the Amended Statement of Claim complains about time zone arbitrage, not other forms of frequent trading.

[300] Those paragraphs merely indicate that damages are limited to harm caused by time zone arbitrage because that is what the Amended Claim asks for. They do not exclude time zone arbitrage damages caused by the Additional Timers.

[301] In a similar vein, AIC submits that the pleaded class definition does not include any investors other than the Identified Market Timers.¹⁴⁸ I disagree. Paragraph 21 of

¹⁴⁷ AIC Closing Argument para. 174.

¹⁴⁸ AIC Closing Argument para. 174.

the Amended Claim pleads the class as unit holders of AIC funds excluding AIC employees and “any individual or entity which engaged in market timing activities in the CI Funds.” The last provisions would exclude those additional individuals that the court finds to be market timers.

[302] AIC submits that the Claim lacks several categories of material facts to support the requested amendment to the Class. Those categories and my response to them are set out below:

- (i) There is no specific definition for what constitutes market timing in the AIC Funds, such that a market timer’s trading can be distinguished from the trading of a Class Member.

The claim does in fact describe the sort of market timing that the plaintiffs are complaining of as time zone arbitrage.¹⁴⁹

- (ii) There are no criteria for identifying the Additional Timers, such that an Additional Timer can be distinguished from a member of the Class.

The description of frequent trading and market timing in the Amended Claim sets out such criteria.¹⁵⁰ In addition, identifying the market timers is a core part of the damages analysis and the damages trial. Both sides have led extensive evidence on that point.

- (iii) There are no criteria for differentiating between the 22 Additional Timers the plaintiffs wish to add within AIC and the larger number of accounts Professor Zitzewitz initially identified as Additional Timers but that the Plaintiffs now wish to exclude.

Professor Zitzewitz does in fact provide criteria for distinguishing between the two in his expert reports.¹⁵¹ AIC also introduced substantial evidence about how to distinguish market timing from non-market timing trades. That too was one of the purposes of the damages trial.

¹⁴⁹ See for example paras. 26-33 and 43-45 of the Amended Statement of Claim.

¹⁵⁰ See for example paras. 26-33 and 43-45 of the Amended Statement of Claim.

¹⁵¹ See for example: Zitzewitz AIC Report dated May 27, 2024, paras. 34-52 and the Tables referred to therein; Zitzewitz CI Report dated May 27, 2024.

- (iv) There are no particulars of the Additional Timers' alleged market timing. Under the heading "Details of the Defendants' Market Timing Practices", the Amended Statement of Claim only pleads details related to the time zone arbitrage of the Identified Market Timers.¹⁵²

While that is correct with respect to the particular allegations under the heading referenced, other portions of the claim complain about time zone arbitrage and describe its characteristics more generally.¹⁵³

[303] In addition, AIC submits that the plaintiffs have not moved to amend the statement of claim but have only moved to amend the class definition to exclude the Additional Timers.¹⁵⁴ Given my view of the broadly drafted nature of the Amended Claim, there is no need to amend it.

(ii) Adequacy of Evidence for Additional Timers

[304] The defendants submit that the grounds on which the court found the defendants liable do not apply with respect to the Additional Timers. They point to paragraph 319 of the Liability Decision which states that the defendants fell beneath the standard of care because, among other things, they facilitated frequent trading through Switch Agreements, failed to ask why hedge funds were investing in retail mutual funds, allowed the Identified Timers to conduct individual trades in the tens of millions of dollars and aggregate trades in the billions, and allowed trading limits and in Switch Agreements to be exceeded. The defendants submit that none of

¹⁵² Amended Statement of Claim, para. 88 ff.

¹⁵³ See for example paras. 26-33 and 43-45 of the Amended Statement of Claim.

¹⁵⁴ AIC Closing Argument para. 169.

these factors are present with respect to the Additional Timers. CI, in particular notes that over 75% of the Zitzewitz Additional Accounts within CI are individuals.¹⁵⁵ It notes further that even the names of many corporate accounts do not sound like market timers. These include names like Grimsby Pharmacy, Bell Optical and Heritage Custom Homes.

[305] There is some merit to those submissions.

[306] Although the Liability Decision also found negligence because the defendants “failed to implement policies and procedures to detect and monitor frequent trading activity even though they knew it was harmful,” that does not mean that every account that conducted one or two trades in small amounts that could be characterized as time zone arbitrage should be included in the damage calculation. Those could easily be instances of retail investors who either changed their minds about an investment or who unexpectedly needed the funds for another purpose. The damages award is not intended to punish the defendants for offering retail investors liquidity. Nor is it intended to punish the defendants for failing to apply the 2% fee to every retail investor who withdrew funds within 60 or 90 days regardless of the reason. It strikes me that these considerations can more readily be taken into account when developing filters to identify Additional Accounts rather than through an outright refusal to consider the issue.

¹⁵⁵ Schedule “C” to the Plaintiffs’ draft Order. Blank entries reflect individuals.

(iii) Additional Timers Within AIC

[307] AIC rejects the inclusion of any Additional Accounts in the damages assessment because it submits that the plaintiffs have not met the burden of proving that all of the trades of these timers were motivated by a time zone arbitrage strategy and because there is no evidence from those Additional Account holders. I reject those submissions for the reasons set out earlier in relation to the Identified Timers. I will, however, address here the more general evidence concerning the Additional Accounts at AIC which leads me to conclude that they should be included in the damage assessment.

[308] There were 261,289 accounts at AIC during the Class Period. Professor Zitzewitz applied filters to reduce the possible time zone arbitrage traders to 71 accounts. Professor Zitzewitz concluded that any “reasonable variations” of his account level filters had “minimal impact” on the dilution calculations.¹⁵⁶ After further analysis he reduced the 71 accounts to the 22 that he listed on Table 4 to his AIC Report which is reproduced below:¹⁵⁷

TABLE 4

Account no.	Account registration	Trades	Gross amount (C\$)	Dilution (C\$)	Average signed S&P change	Median Holding Period	Mean share of position sold

¹⁵⁶ Zitzewitz AIC Report at para. 63, p. 12.

¹⁵⁷ Table 4 of Professor Zitzewitz’s AIC reports also contained additional entries for potential arbitrageurs which he ultimately excluded. Those entries have not been reproduced here.

Likely market timing accounts						
Two largest accounts		760	12,856,379,904	36,249,190	0.98%	
13832845	INVESTMENTS TRIANGLE INTERNATIONAL LTD	462	6,549,824,512	19,375,364	1.00%	3
15780695	CREDIT LYONNAIS CAYMAN ISLANDS BRANCH	298	6,306,555,392	16,873,826	0.96%	2
Cambridge Investments		1,099	235,536,449	812,312	0.97%	
19394758	CAMBRIDGE INVESTMENTS INC	48	5,823,473	66,221	1.15%	1
19885292	CAMBRIDGE INVESTMENTS INC	210	35,021,412	120,285	1.13%	1
20255055	CAMBRIDGE INVESTMENTS INC	143	39,589,780	78,973	0.90%	1
19394741	CAMBRIDGE INVESTMENTS INC 3	50	5,590,940	52,952	1.04%	1
19885649	CAMBRIDGE INVESTMENTS INC 3	209	39,428,108	130,365	1.08%	1
16117368	CAMBRIDGE INVESTMENTS INC CIBC FINANCIAL CENTER	439	110,082,736	363,516	0.89%	1
McGill		742	228,692,209	1,372,201	1.16%	
17137423	MCGILL CAPITAL 3	342	103,944,200	590,425	1.16%	1
20721692	MCGILL CAPITAL INC 2	10	7,370,852	21,575	1.33%	1
16957813	MCGILL COLLEGE	368	107,499,880	703,573	1.13%	1
20685111	MCGILL NO 3	22	9,877,277	56,628	1.29%	1
Standard Atlantic and TIE Limited		438	140,750,582	628,380	0.86%	
17611450	STANDARD ATLANTIC LTD CRAIG MUIR CHAMBERS	214	62,183,468	343,060	0.83%	1
18478073	TIE LIMITED	41	16,416,766	77,444	0.79%	1
17989609	TIE LIMITED ACCT #1	183	62,150,348	207,876	0.91%	1
Smaller accounts		512	87,651,193	281,896	0.90%	
21067632	ACORN HOLDINGS	30	5,578,951	9,266	0.71%	1
20943502	AILUJ INC	66	12,173,855	38,082	0.76%	2
20425617	ANONYMOUS INDIVIDUAL	24	9,853,705	35,315	0.50%	1
17605015	ANTICA FOUNDATION INC	186	23,245,496	97,341	0.80%	1
21191150	EBODA INC	28	8,024,051	1,738	0.80%	2
20078291	EVETS INC	94	17,363,330	55,139	1.26%	1
20247151	NOMISONE INC	84	11,411,805	45,015	1.19%	1

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[309] As is evident from the data on Table 4, all 22 accounts exhibit high trading volume, high correlation with market movements, short median holding periods and high average liquidation; all indicia of time zone arbitrage.

[310] As with the Identified Timers, there is no self-evident reason for institutions to engage in the number of trades, in the amounts indicated, for the holding periods indicated other than to take advantage of stale prices and engage in time zone arbitrage.

[311] Even more striking is that the top two accounts in Table 4, Triangle and Credit Lyonnais each engaged in over \$6 billion in trades resulting in dilution of \$36,249,190 between them. The average size of each of Triangle's 462 trades was

\$4,177,109. The average size of each of Crédit Lyonnais' 298 trades was \$21,162,937. That is quite simply not the sort of trading for which the Certified Funds were created and marketed.

[312] The plaintiffs submit that both accounts are managed by Trout Management, a large Bermudian hedge fund which also operated Reliable and SII, two traders that the OSC identified as market timers.¹⁵⁸ AIC submits there is inadequate evidence to support that finding.

[313] The plaintiffs' submission is based the following answer to an undertaking that CI provided on discovery:

The trading data for these accounts (CIX152720) indicates that the accounts were sequential in their trading:

- 13922471 – Triangle – trading from October 27, 1999, to September 18, 2000
- 25615659 – Credit Lyonnais – trading from September 18, 2000, to November 23, 2001
- 29330933 – SII – trading from November 23, 2001, to September 5, 2003

In addition, CI's review of the flow of funds indicates that an equivalent amount of monies from the Triangle account flowed to the Credit Lyonnais account and then to the SII account on the same dates as the mutual funds were sold in one account and bought in the other account in virtually the same amounts.

¹⁵⁸ See paragraph 298 of Liability Decision.

[314] Although this certainly suggests a connection between the three accounts, whether it suffices to find as a fact that Trout managed the Triangle and Credit Lyonnais accounts is somewhat beside the point. The real point is that the trading of Triangle and Crédit Lyonnais is consistent with time zone arbitrage with no evidence being offered to the contrary, apart from a general assertion that there could be other strategies behind the trades. The fact of the apparent sequential trading and CI's conclusion that there was a connection between the two accounts and Trout is an additional contextual fact but is not essential to the finding of time zone arbitrage.

[315] There has been no explanation for why the OSC did not include Triangle and Crédit Lyonnais in their AIC investigation.¹⁵⁹ AIC has not even tried to explain the omission. If AIC had an explanation which helped demonstrate that the trading was not time zone arbitrage trading, one would expect that AIC would have brought it to the fore.

[316] The closest AIC came to offering an explanation was to note that both accounts made some purchases on days when the S&P was down, sold units on days the S&P was up, and held some of their units longer than 2 or 3 days. As noted earlier, there are exceptions to every general pattern and explanations for those exceptions. AIC provided no information about the holding periods that were longer than the two to three day medians recorded on Table 4. If that information

¹⁵⁹ Although one reason may be that the OSC Investigation focussed on those traders with whom mutual fund companies had Switch Agreements. Some frequent traders may have had Switch Agreements with one fund company but not another.

undermined the reliability of the recorded medians, I expect AIC would have disclosed it.

[317] The next largest Additional Trader that Professor Zitzewitz discovered at AIC is Cambridge Investments with six accounts listed on Table 4.

[318] In addition to the data on Table 4 which discloses trading patterns characteristic of zone arbitrage, Cambridge was also an OSC Identified Timer at CI.¹⁶⁰

[319] AIC submits that the fact that the OSC recognized Cambridge or other Additional Timers as market timers within CI does not, on its own, establish that they were engaging in market timing within AIC. I agree.

[320] AIC also observes that, although the OSC identified BMO Nesbitt Burns as Market Timer at CI, the Plaintiffs concede that the accounts registered to BMO Nesbitt Burns at AIC did not engage in Time zone arbitrage.¹⁶¹ That too is correct.

[321] What one makes of those two submissions turns on a more nuanced examination of the facts.

[322] The four BMO accounts that Professor Zitzewitz initially identified but ultimately excluded at AIC, reflected the trading by four different individuals or entities. There was nothing to suggest that the four BMO account holders at AIC were the same

¹⁶⁰ Agreed Statement of Facts (Liability Trial) at para. 28(a), p. 9.

¹⁶¹ Exhibit 16, Tab 1 – Zitzewitz AIC Report, para. 59.

as the account holders at CI. Moreover, the BMO trading at AIC did not bear the hallmarks of time zone arbitrage. It exhibited no correlation to changes in the S&P and it involved average liquidation rates of between 0.7% and 4.4%. That information is inconsistent with time zone arbitrage. The data associated with the Cambridge accounts at AIC is different. It demonstrates a close correlation between trading and changes in the S&P, reflects a mean holding period of one day, and reflects mean share dispositions of between 98.6% and 100%; all factors consistent with time zone arbitrage.

[323] In addition, while by no means dispositive, five out of the six of Cambridge accounts share the same address in Hamilton, Bermuda. The sixth has a registered address in Grand Cayman.¹⁶²

[324] The four “McGill” accounts on Table 4 share the same address in Montréal. They conducted a total of 742 trades totalling \$228.7 million. The trades were associated with average changes in the S&P of above 1%, involved a median holding period of one day, and reflected a mean disposition rate of 100%.

[325] The Standard Atlantic and TIE accounts on Table 4 invested \$140.7 million through 438 trades and caused dilution of \$628,380. Their trading exhibits all of the hallmarks of time zone arbitrage. Trading in the tens of millions, trading associated with changes to the S&P, short median holdings (1 day), and disposition rates of

¹⁶² Letter to Rochon Genova re AIC, March 12, 2025.

99.9 % or 100%. In addition, TIE which holds two of the accounts under the Standard Atlantic heading, was also an OSC Identified Timer at CI.¹⁶³

[326] The seven additional smaller institutional accounts listed on Table 4 invested a total of \$87.6 million through 512 trades and caused dilution of \$281,896. The trading in these smaller accounts was associated with average S&P changes of 0.9%, median holding periods of one or two days and a liquidation rate of 100% – all characteristics of time zone arbitrage. Four of these smaller accounts (Ebdoa Inc., Ailuj Inc, Evts Inc., and Nomisone Inc.), share an address with the four McGill accounts.¹⁶⁴

[327] I am satisfied that the plaintiff has established, on a balance of probabilities, that the accounts listed on Table 4 engaged in time zone arbitrage and should be included in the damages calculation with respect to AIC.

[328] The total dilutive harm caused by these Additional Accounts, as calculated and set out at Table 4 in Professor Zitzewitz's AIC Report is \$39,343,979 to which I apply a discount of 3% for a total of \$38,163,659.53.

¹⁶³ Agreed Statement of Facts (Liability Trial) at para. 28(a), p. 9.

¹⁶⁴ Transcript Day 2, April 29, 2025, p. 258 L 8-12; Letter to Rochon Genova re AIC, March 12, 2025.

(iv) Additional Timers Within CI

[329] There were approximately 1.3 million unique client accounts at CI that traded in the Certified Funds during the Class Period, of which only 24 were the focus of the OSC Investigation.¹⁶⁵

[330] Professor Zitzewitz initially filtered the Additional Timers down to four groups. By the end of the trial, the plaintiffs were asking that two of the four groups be added as Additional Accounts. The effect of that would be to include 1047 Additional Accounts at CI.

[331] Group 1 consists of 554 accounts that Professor Zitzewitz describes as being most similar in activity to the Identified Accounts.¹⁶⁶ The average signed S&P change for Group 1 was 1.15% and the dilution ratio was 0.34%.¹⁶⁷ As a comparison point, the Identified Timers in CI bought on an average signal of 1.25% and enjoyed an average dilution ratio of 0.19%.¹⁶⁸ The Group 1 and accounts caused \$12.4 million in dilution.¹⁶⁹

[332] Professor Zitzewitz's Group 2 consists of 493 accounts which traded at lower frequency but at a higher average S&P change of 1.37%. Professor Zitzewitz thought it made sense for lower frequency traders to wait for bigger market

¹⁶⁵ Zitzewitz CI Report at para. 38, pp. 52-53.

¹⁶⁶ Transcript Day 2, April 29, 2025, p. 225 L 10-13.

¹⁶⁷ Zitzewitz CI Report, Table 8, p. 74.

¹⁶⁸ Zitzewitz CI Report, Table 1, p. 67.

¹⁶⁹ Zitzewitz CI report, Table 8, p. 74.

movements before trading.¹⁷⁰ The Group 2 accounts collectively caused \$1.9 million in dilution.¹⁷¹

[333] CI objects to the broad range of Additional Accounts Professor Zitzewitz proposes to add. It notes that the proposed Additional Accounts are not all hedge funds, many are personal accounts; and many trade in small volumes.¹⁷²

[334] Professor Tufano applied his own filters to the proposed Additional Accounts and found that 299 met his criteria for time zone arbitrage. The difference in the dilution calculations between Professors Zitzewitz and Tufano with respect to the Additional Accounts is not large when compared to other differences between the parties. Professor Zitzewitz calculates total Next Day NAV dilution for his Groups 1 and 2 accounts of \$14.3 million. Professor Tufano calculates the Next Day Nav dilution for his 299 accounts of \$11.9 million. That said, Professor Tufano prefers fair value calculation for the CI Additional Accounts which he determines to be \$10.6 million.

[335] Professor Chalmers' filters arrive at a Next Day NAV calculation of \$7.8 million for the Additional Accounts at CI.

[336] I turn then to the criteria or filters that are proposed to be applied to the CI Additional Accounts.

¹⁷⁰ Transcript Day 2, April 29, 2025 p. 225 L. 21-25.

¹⁷¹ Zitzewitz CI Report, Table 8, p. 74.

¹⁷² Transcript Day 3, April 30, 2025, (Zitzewitz Cross Continued), p. 589 L. 14 – 590 L.8.

a. Frequency of Trading

[337] Professor Zitzewitz does not apply any filter to exclude Additional Accounts that traded infrequently.

[338] Professor Tufano excludes from the Additional Accounts those that made fewer than 10 roundtrips during the Class Period. This excludes 486 of Professor Zitzewitz's Additional Accounts.¹⁷³

[339] One element that the Liability Decision identifies as a characteristic of time zone arbitrage is frequent trading.¹⁷⁴ Frequency of trading was also an element inherent in the negligence for which the Liability Decision found the defendants liable. There is no specific scientific definition of what constitutes "frequent." As noted in the Liability Decision, most fund prospectuses have provisions that allow a fund to impose a penalty if an investor sells their units within a certain number of days of the purchase. The object is to prevent frequent short-term trading. Those provisions are discretionary. Discretion is warranted because there will be occasions when a long-term investor changes their mind and wishes to unwind a purchase or where a long-term investor needs the funds for another purpose sooner than they anticipated when they made the purchase. The object of the Liability Decision was not to prevent the legitimate exercise of such discretion. Nor was it to hold the defendants liable for permitting retail investors to withdraw funds sooner

¹⁷³ Tufano Report para. 218.

¹⁷⁴ See, for example, Liability Decision, 2023 ONSC 915 at paras. 10-11 and 441.

than expected. As a result, it strikes me that the absence of any filter for frequency with respect to the Additional Accounts would be inappropriate.

[340] Professor Tufano's requirement for 10 round trips during the Class Period appears reasonable. It would allow an investor to purchase and reverse themselves in short order twice a year for 5 years. By way of comparison, the Identified Timers conducted between 100 and 1,500 roundtrips during the Class Period;¹⁷⁵

b. Volume of Trading

[341] Professor Zitzewitz requires the additional accounts to have a volume of buys and sells of at least \$100,000 in the Class Period. That threshold would be satisfied with a single purchase of \$50,000 and its subsequent redemption at roughly the same amount. The plaintiffs note that the OSC sought data on all round-trip trades exceeding \$50,000 during the review period. While that may be correct, the OSC did not necessarily find trading at that level constituted time zone arbitrage.

[342] Professor Tufano excludes accounts with an average roundtrip purchase volume of less than \$25,000. When applying the 10-roundtrip threshold, this equates to trading volume of \$250,000 over the Class Period. By way of comparison, the average size of a single trade for the Identified Timers was approximately

¹⁷⁵Exhibit 16, Tab 2 – Zitzewitz CI Report, Table 2.

\$7.8 million.¹⁷⁶ The total volume of trades for the Additional Accounts at AIC ranged between \$5.7 million and \$6.5 billion.¹⁷⁷

[343] A further element of time zone arbitrage that the Liability Decision identified was high volume of trading. Once again, while there is no scientific definition of what constitutes high volume, it strikes me that Professor Tufano's threshold of an average trade of \$25,000 or \$250,000 during the Class Period is a reasonable minimum to apply.

c. Length of Holding Period

[344] Both Professors Zitzewitz and Tufano impose filters that exclude trades associated with holding periods of longer than 10 days. The difference between them lies in the method of calculating the 10 days.

[345] Professor Tufano excludes accounts with a mean (or average) holding period of longer than 10 days. Professor Zitzewitz excludes accounts with a median holding period of longer than 10 days. Using the median has the result that half of the holding periods will be longer than 10 days and half will be shorter than 10 days.

[346] In my view, it is preferable to use the median of 10 days.

¹⁷⁶Exhibit 16, Tab 2 – Zitzewitz CI Report at para. 22.

¹⁷⁷ Zitzewitz Report Table 4.

[347] As Professor Zitzewitz explained, the median is affected less by a few large or small outliers that may skew the average.¹⁷⁸ By way of example, if the holding periods in the data set were: 2, 3, 4, 5, and 100 days, the median would be 4 days while the mean would be 22.8 days. Using the mean would exclude this account while using the median would include it.

[348] CI correctly points out that using the median would include the 100 day trade in the damages calculation when it clearly falls outside of time zone arbitrage and even falls out of the period of time in which the defendants could have imposed a 2% penalty on the trader.

[349] In the current situation, we are trying to use a larger data set to calculate damages based on the more typical situation within the data. Using the mean in the example above clearly distorts the underlying reality. Although using the median would include one trade that should not be included, it would capture the four others.

[350] The record suggests that there is more distortion arising from use of the mean than from use of the median. By way of example, Table 2 of Professor Zitzewitz's first report summarizes the trades of the five identified timers at CI. It shows both their mean and median holding periods. The mean is always longer than the median by

¹⁷⁸ Transcript Day 1, April 28, 2025, p. 174 L 17-25, p. 175 L 1-14.

between 10% and 70%. As a result, it would appear that using the mean would exclude more accounts than using the median.

d. Degree of Liquidation

[351] Professor Zitzewitz requires the additional accounts to have liquidated an average of 50% of their positions to qualify as time zone arbitrage accounts.¹⁷⁹

[352] Professor Tufano requires 90% position liquidation.¹⁸⁰ He based this on the almost 99% liquidation rate of the Identified Timers.

[353] Professor Zitzewitz chose the lower number for the Additional Accounts on the theory that an arbitrageur with a Switch Agreement will not face any constraints on selling. An arbitrageur without a Switch Agreement may face constraints and may wish to attract less attention by lowering the percentage of units it liquidates.

[354] Professor Zitzewitz provides an example of such a trader in Table 6 of his CI report. The trader in question appeared to build and liquidate positions in stages. During the 7.5-months that the account traded in the Signature Asian Opportunities Fund, it made 18 purchases and 18 sales. A typical purchase exceeded \$60,000. The median holding period was 4 business days, and the average sale liquidated 78 percent of the existing position. A trader of that sort appears to be engaging in time zone arbitrage but would be excluded by the 90% liquidation threshold. Although

¹⁷⁹ Transcript Day 1, April 28, 2025, p. 172 L 11-23.

¹⁸⁰ Exhibit 20B, Zitzewitz Day 2 Slides, p. 19.

not trading in the amounts of the Identified Timers, the frequency and size of purchases and sales would be fairly easy to detect given the appropriate alarm signals in the mutual fund's record keeping system.

[355] As a practical matter, the difference between Professor Zitzewitz's filter and Professor Tufano's is unlikely to be large. Professor Tufano's 90% cut off captures 299 accounts with 11,112 roundtrips and purchases of \$1.7 billion.¹⁸¹ If he adjusts his filter to require liquidation of 50% or more, he captures a total of 304 accounts with 11,504 roundtrips and purchases of \$1.8 billion.¹⁸² I am therefore inclined to use a filter of 50% for liquidation.

e. S&P Movement

[356] Professor Zitzewitz requires that purchases in the Additional Accounts occur on days where the S&P has an upward movement of at least 0.5%.

[357] Professor Tufano applies the same 0.5% S&P return threshold to identify potential Additional Accounts within CI but then also applies to that subset of accounts the same ranges of S&P triggers of between 0.31% and 1.67% as applied to the Identified Timers' transaction to isolate those trades that could qualify as time zone arbitrage trades.

¹⁸¹ Tufano Report Exhibit 9.

¹⁸² Tufano Report Appendix D.1.

[358] Professor Chalmers applies the same triggers of 1% for funds with greater than 50% foreign content and 2% for funds with less than 50% foreign content that he applied to the Identified Timers. Applying those filters to the Additional Accounts reduces Next Day NAV dilution from \$14.3 million to \$7.8 million.

[359] The defendants criticize Professor Zitzewitz for using a 0.5% trigger when the Identified Timers traded at an average S&P signal of 1.25%. They say he has provided no justification for doing so. In my view that is not a fair criticism. There are a variety of factors discernible in the record that make a trigger of 0.5% appropriate to identify Additional Accounts.

[360] First, the trigger is being used to identify potential Additional Traders not to categorize them as such with certainty. There are a number of other filters an account must satisfy before qualifying as an Additional Account. There is, once again, no scientifically precise trigger threshold at which an arbitrageur is likely to trade. The trigger for an individual frequent trader is likely to depend on a variety of circumstances including late changing shifts in the direction of the market, news that is likely to affect stocks in one time zone more than the other, and the frequent trader's thought process or mathematical model it uses to trade. There are no doubt many others. A rigid 1% threshold may also exclude accounts that would appear to demonstrate classic signs of time zone arbitrage. By way of example, Table 4 in Professor Zitzewitz's AIC report shows that one of the largest Additional Accounts,

Crédit Lyonnais, traded on an average S&P change of 0.96%. It would therefore have missed the 1% trigger even though it conducted 298 trades, with value of \$6.3 billion, with a median holding period of two days and a 99.5% liquidation rate. A somewhat arbitrary rate of 1% would therefore exclude what clearly appears to be a time zone arbitrageur.

[361] In view of the foregoing, I would apply a filter of an S&P movement of 0.5% to identify the Additional Accounts.

Conclusion on Additional Accounts at CI

[362] For the reasons set out above, I conclude that the Additional Accounts should be added to the damages assessment for CI in accordance with the filters discussed above. I invite the parties to either come to an agreement on what that amount is or make additional submissions before me in that regard.

[363] I am mindful, however, that applying filters of the sort discussed in this section in a purely mechanical fashion, can lead to arbitrary results. By way of example, I have accepted Professor Tufano's requirement for 10 roundtrips during the Class Period. That could, however, exclude a trader who made nine roundtrips of \$20 million each which are characterized by the hallmarks of time zone arbitrage. Similarly, the use of the median holding period could capture within the ambit of time zone arbitrage outlier trades that are clearly not time zone arbitrage, such as the 100 day trade I refer to when discussing whether to adopt the mean or median holding period. As a result, if any of the filters I have applied to the Additional Accounts at CI result in someone being included who should clearly be excluded or vice versa, I will

continue to be available to resolve those issues and, if necessary, create exceptions to the filters. In making that offer, however, I would discourage the parties from the unrelenting pursuit of metaphysical perfection and encourage the application of a strong dose of proportionality.

FIVE: MOTION TO AMEND THE CLASS DEFINITION

I. The Proposed Amended Definition

[364] The plaintiffs move to amend the definition of the class to exclude the holders of the Additional Accounts as class members. Those who are excluded as class members will not be entitled to participate in any damage award that arises out of these reasons.

[365] The 22 Additional Accounts within AIC are easy to define for purposes of exclusion. The proposed order for CI lists over 1000 accounts to exclude. Any final amended order would list only those accounts that fit within the parameters of Additional Accounts as set out earlier in these reasons.

[366] CI agrees that any Additional Accounts in respect of which the court orders damages should be excluded from the class definition. Although it opposed the inclusion of the Additional Accounts in the damages assessment, it does not oppose the amendment if the court concludes that the Additional Accounts should form part of the damages calculation.

[367] AIC opposes the motion to amend regardless of the findings about Additional Accounts forming part of the damages calculation.

II. History of the Definition

[368] Debate has surrounded the definition of the class since the inception of this action.

I addressed that issue in paragraphs 52 - 68 of the Liability Decision. By way of summary, after much debate and legal argument, the parties ultimately arrived at a class definition that excluded only those market timers that the OSC had identified in Settlement Agreements with each defendant. The plaintiff sought to include within the definition, the right to identify additional market timers as the action proceeded. Perell J. thought that to be inappropriate. Perell J. went on to dismiss the certification motion holding that the OSC Investigation and settlement was the preferable procedure to resolve the dispute. That decision was overturned on appeal to the Divisional Court. In doing so, the Divisional Court kept open the possibility of amending the class definition as the action proceeded saying:

However, I do not see the need to build into the definition a proviso that no further exclusions will be permitted. There is no basis for concluding that the only market timers who can ever be excluded are those already identified by the OSC, provided that the same definition of market timer is accepted throughout. It is possible, for example, that the OSC missed some market timers who fit the already established criteria. There is no logical basis for continuing to include those traders as part of the class. As long as the definition of those excluded is settled as part of the definition of the class, there is no logical reason to restrict further amendment of the class as the action evolves. That unduly ties the hands of a future motion judge if grounds emerge which either of the parties believe warrant amendment to the class definition. There is substantial precedent for maintaining flexibility in these situations, and forbidding future amendment of the

class, regardless of the reason, does not comply with those general principles.

Accordingly, while I agree with the motion judge's observations with respect to the proviso proposed by the plaintiffs referring to possible future exclusions as part of the class definition, I would not endorse the motion judge's proposed addition to the definition purporting to ban exclusions from the class for all time.¹⁸³

[369] The Ontario Court of Appeal and the Supreme Court of Canada upheld the Divisional Court decision without addressing the definition of the class. When the class was ultimately defined in the certification order, it was defined as those individuals and entities who purchased units in the Certified Funds, excluding insiders of the defendants and “Market Timing Traders” identified by the OSC in their Settlement Agreements with the defendants.

III. The Legal Test

[370] Section 12 of the *Class Proceedings Act*, 1992, (the “CPA”) allows the Court to make orders it considers appropriate to ensure the fair and expeditious determination of a class proceeding.¹⁸⁴ Section 8(3) of the CPA gives the Court the discretion to amend the Certification Order. Both provisions are permissive, rather than mandatory.¹⁸⁵

¹⁸³ *Fischer v. IG Investment Management Inc.*, 2011 ONSC 292 at paras. 72-73.

¹⁸⁴ *Class Proceedings Act*, 1992, S.O. 1992, c. 6, s. 12.

¹⁸⁵ *Fanshawe College v LG Philips LCD Co., Ltd.*, 2016 ONSC 3958 at paras. 40 – 42.

[371] Generally speaking, to amend a certification order, the moving party must demonstrate that:

- i. New issues of fact or law have arisen since certification¹⁸⁶ and that the amendment is required to respond to a change in circumstances.¹⁸⁷
- ii. The amendments would make efficient use of judicial resources and further the goals of class actions.¹⁸⁸
- iii. The amendment does not cause procedural unfairness or non-compensable prejudice.¹⁸⁹
- iv. The amendment will not fundamentally change the action as certified.¹⁹⁰

IV. Analysis

(i) Are There New Issues or Changed Circumstances?

[372] In my view, there are new issues of fact and changed circumstances that have emerged since the certification order was issued.

¹⁸⁶ *Wellman v. TELUS Communications Co.*, 2025 ONSC 3257 at para. 65.

¹⁸⁷ *Wellman v. TELUS Communications Co.*, at para. 65, citing *Vester v. Boston Scientific Ltd.*, 2020 ONSC 1308 at para. 8. See also *Corless v. Bell Mobility Inc.*, 2023 ONSC 6227 at para. 13.

¹⁸⁸ *Levac v James*, 2019 ONSC 5092 at para. 19 (citing *Ducharme v. Solarium de Paris Inc.*, 2013 ONSC 2540 at para. 19).

¹⁸⁹ *Fanshawe College v LG Philips LCD Co., Ltd* at para. 53; *Fehr v. Sun Life Assurance Company of Canada*, 2023 ONSC 2554 at paras. 32 – 36 aff'd 2024 ONCA 847.

¹⁹⁰ *Fanshawe College v LG Philips LCD Co., Ltd* at para. 53; *Fehr v. Sun Life Assurance Company of Canada*, 2023 ONSC 2554 at paras. 32 – 36 aff'd 2024 ONCA 847.

[373] In 2023 and 2024 the defendants produced additional trading data that allowed the plaintiffs to determine which of the defendants' clients may have been additional market timers.

[374] The plaintiffs had first sought that information in 2015 on a production motion before Justice Perell. The defendants objected to production because Justice Perell had directed the trial be bifurcated into liability and damages portions and the information sought was irrelevant to the liability issues that were then under consideration. Justice Perell agreed with the defendants and dismissed the Plaintiffs' motion.¹⁹¹

[375] Approximately 10 days after the Liability Decision was released, the plaintiffs renewed their request for information that would identify additional market timers. I ordered production because the information was relevant to the damages trial in that it would define the scope of the defendants' negligence, would contribute to the damages assessment, and would determine which account holders were able to participate in any potential damage award.

[376] Over the course of both the liability and damages trials, it became become clear that there were more market timers than those identified by the OSC. The OSC identified only those market timers with written Switch Agreements. Internal

¹⁹¹ Durante Affidavit at para. 7.

documents at AIC made clear that only a few of the market timers had written agreements.¹⁹²

(ii) Goals of Class Actions

[377] I am satisfied that the proposed amendments further the objectives of access to justice, behaviour modification, and efficient use of judicial resources which underlie the *CPA*.¹⁹³

[378] The amendments further access to justice and behaviour modification by providing damages based on the true extent of the wrongdoing. They promote the efficient use of judicial resources by implementing the effective bifurcation of the proceeding and ensuring there is a full trial on the damages issue.

[379] Including the Additional Timers within the class would further contribute to the goals of class actions by ensuring that market timers who have already benefitted from stale pricing do not benefit again by being able to claim damages for the very harm the frequent trading caused.

[380] AIC submits that the plaintiffs are required to show that the proposed amended class is not unnecessarily broad or narrow. That is to say that the class could not be defined more narrowly without arbitrarily excluding people who share the same interest in the resolution of the common issues.¹⁹⁴

¹⁹² See for example, paragraphs 61-63 of the Liability Decision.

¹⁹³ *Fehr v. Sun Life Assurance Company of Canada*, at para. 33 aff'd 2024 ONCA 847.

¹⁹⁴ *Hollick v. Toronto (City)*, 2001 SCC 68 at paras. 20 – 21.

[381] Excluding the Additional Timers is not arbitrary. The exclusion is based on specific evidence of trading patterns and filters to provide a level of comfort that the individuals being excluded are in fact market timers as opposed to retail investors who happened to change their mind about an investment. As noted above, to the extent any of these filters create an arbitrary result, I remain available to address those issues in a proportionate fashion.

(iii) *Unfairness and Non-Compensable Prejudice*

[382] AIC submits that the delay in seeking the amendments subjects them to procedural unfairness and non compensable prejudice. AIC complains that the amendment is sought after the damages trial, many years after certification, and that it has taken AIC by surprise. I do not accept those submissions.

[383] There can be no surprise to AIC. It knew of the plaintiffs' desire to amend the class definition since the action was certified. The Divisional Court preserved the right to do so. The plaintiffs advised they would do so.

[384] It seems curious for AIC to be claiming delay, surprise, and unfairness when it was AIC who has declined to disclose information about additional market timers since at least 2015. Even after the release of the Liability Decision, the defendants delayed production.

[385] The Liability Decision was released on February 13, 2023. Ten days later, on February 23, 2023, plaintiffs' counsel wrote to defendants' counsel requesting information that would identify Additional Timers in the Certified Funds. Despite

repeated requests after that, the defendants did not produce the relevant data. It was only after I ordered production on August 4, 2023, that AIC produced additional information on September 15, 2023. Even then production was not complete and required further court orders.¹⁹⁵

[386] AIC has had full knowledge of the plaintiffs' position on the Additional Accounts at least since Professor Zitzewitz delivered his initial AIC Report in May of 2024 which set out the case with respect to the Additional Accounts.

[387] AIC had the full opportunity to respond to those reports. They initially did so through reports by Professors Tufano and Chalmers. Those reports were subsequently withdrawn due to an undisclosed conflict. AIC did not seek to introduce any substitute reports.

[388] To preclude the amendment to the certification order because of alleged delay or surprise would be the ultimate "Catch 22". Having refused to produce documents related to the definition of the class for at least 10 years, it hardly lies in AIC's mouth now to complain that the plaintiffs are too late to amend the class definition. The plaintiffs are amending now only because they were forced to by the defendants.

[389] With respect to AIC's complaint that the amendments are being addressed at the end of the liability trial, it was CI's counsel who suggested that be done. AIC did

¹⁹⁵ See my endorsement of January 11, 2024.

not object to the proposal. As a result, it was incorporated into my endorsement of November 1, 2024, as follows:

The issue of the change to the definition of class members will be determined at the end of the damages trial. I am satisfied that this is the appropriate time at which to make that determination because the definition of the class will depend in part on who were the market timers which may depend on evidence at the damages trial.¹⁹⁶

[390] AIC complains that it received a draft notice of motion on February 20, 2025, in which the plaintiffs sought to amend the class definition by excluding the holders of 71 accounts at AIC but that by the end of trial, the final notice of motion sought the exclusion of only 22 accounts.

[391] I can see no prejudice in that. The decrease does not harm AIC but benefits them.

[392] AIC then complains that the Plaintiffs delayed the delivery of the final Notice of Motion until well after conclusion of the evidence against AIC in the Damages Trial and seven months after the deadline contemplated by the litigation timetable. Again, I see no prejudice there. As already noted, the grounds for including the Additional Accounts were set out in the report of Professor Zitzewitz that was delivered in May 2024. The grounds for amending the class definition are as set out in that report and as emerge from the history of the class definition and the class action. The history of the definition and the action can also come as no surprise or prejudice to AIC.

¹⁹⁶ Exhibit 22, Endorsement of Justice Koehnen, dated November 1, 2024, at para 2.

[393] AIC further submits that it requires the opportunity to explore issues with the holders of the Additional Accounts which they have been precluded from doing because the account holders have, until now, been the clients of class counsel. I do not accept that submission for the reasons set out earlier.

(iv) *Amendment Will Not Fundamentally Change the Action*

[394] Finally, AIC submits that the proposed amendment fundamentally changes the action because it expands the factual matrix and introduces new factual issues almost two decades after the action was commenced.¹⁹⁷ Courts have found a “fundamental change” where:

- (i) the proposed amendment requires the court to reconsider all of the issues examined on the original motion to certify the action;¹⁹⁸
- (ii) the proposed amendment expands the factual matrix, requiring further discovery;¹⁹⁹ or
- (iii) the amendment advances a different remedy for the same alleged cause of action.²⁰⁰

[395] None of these considerations apply here. The proposed amendment does not require the court to reconsider any of the issues on the motion to certify. The issues remain the same: did the defendants breach any duties by permitting frequent

¹⁹⁷ *Douez v. Facebook, Inc.*, 2019 BCSC 715 at para. 70.

¹⁹⁸ *Maxwell v. MLG Ventures Ltd.*, (1995) 57 A.C.W.S. (3d) 556 at para. 20 (Ont. C.J. [Gen. Div.]).

¹⁹⁹ *Fehr v. Sun Life Assurance Company of Canada*, para. 32 aff'd 2024 ONCA 847.

²⁰⁰ *Amyotrophic Lateral Sclerosis Society of Essex*, 2017 ONCA 555 at para. 28.

trading in the Certified Funds and what, if any, damages arose from time zone arbitrage in the Certified Funds.

[396] The defendants submit that the amendment expands the factual matrix beyond the certified action because the claim was brought based on the defendants' conduct in relation to the Identified Timers. As discussed earlier, I do not accept that reading of the statement of claim. In addition, by making clear from the outset that they would seek to amend the class definition, the plaintiffs further signalled that the action was not limited to damages caused by the Identified Timers.

[397] The factual matrix remains the same: to assess damages arising from trading marked by the characteristics time zone arbitrage. I do not accept that further discovery is required. If it were, any such discovery would come from the defendants, not the plaintiffs. It is AIC who has the trading records and other information about the Additional Timers, not the plaintiffs. To the extent further discovery is required from others, AIC has only itself to blame for not pursuing it.

(iv) Aggregate Damages for the Additional Timers Within AIC

[398] The plaintiffs seek to further amend the certification order to add an additional common issue requiring the court to calculate damages in the aggregate. All parties agree that damages²⁰¹ can be determined on an aggregate basis for harm caused by the Identified Timers. CI agrees that damages in the Additional Accounts can

²⁰¹ Except for pre-judgment interest or return which will be addressed in the next section of these reasons.

be assessed in the aggregate; AIC does not. This section therefore addresses whether damages for the Additional Timers within AIC can be addressed on an aggregate basis.

[399] Section 24 of the *CPA* provides that aggregate damages can be awarded where:

- (a) monetary relief is claimed on behalf of some or all class members;
- (b) no questions of fact or law other than those relating to the assessment of monetary relief remain to be determined in order to establish the amount of the defendant's monetary liability; and
- (c) the aggregate or a part of the defendant's liability to some or all class members can reasonably be determined without proof by individual class members.

[400] The first two conditions are easily met here. The third condition, that liability can be reasonably determined without proof by individual class members is also met. I understand AIC's argument to be not so much that proof of damages is required by individual class members, but that proof of damages is required against individual Additional Accounts in the sense that the plaintiffs are required to prove that each individual trade in each Additional Account was motivated by time zone arbitrage.²⁰² That argument has already been addressed and dismissed earlier in these reasons. Moreover, if there was something about the trading of the Additional Accounts that made it unreliable to find time zone arbitrage by comparing their trading against the

²⁰² See AIC Closing paras. 200 – 237.

characteristics of time zone arbitrage, AIC had the full opportunity to advance such evidence and argument.

[401] The principles surrounding the application of aggregate damages were helpfully explained by Belobaba J. in paras. 42 -47 of *Ramdath v. George Brown College*.²⁰³ I summarize those principles below using much of Justice Belobaba's language but condensing it somewhat:

(i) Aggregate damages are essential to the continuing viability of class actions.

Aggregate awards should be norm rather the exception.

(ii) The Ontario Law Reform Commission had recommended that aggregate damages be available without proof by class members only if they could be determined with the *same degree of accuracy* as in an ordinary action. The legislature rejected that standard and imposed a less stringent test which allows aggregate damages if they can be *reasonably determined* without proof by individual class members.

(iii) The assessment of aggregate damage awards is based not on what is "accurate" but on what is reasonable. In striking a balance between accuracy²⁰⁴ and access to justice²⁰⁵ the legislature intentionally tilted the balance in favour of access to justice. As a result, s. 24(1) focusses on

²⁰³ *Ramdath v. George Brown College*, 2014 ONSC 3066 affirmed at 2015 ONCA 921 especially at paras. 47-72; 75-78, 99-107.

²⁰⁴ And the possibility that a defendant may be faced with a damages award that exceeds the injury inflicted.

²⁰⁵ And the desire to avoid the risk of denying recovery to persons who have been injured.

whether monetary damages can *reasonably* be determined without proof by individual class members.

(iv) The question is whether the proof of damages is *sufficiently reliable* to permit a *just determination* of the defendant's liability.

[402] Justice Belobaba concluded the passage by setting out the following factors for the court to consider when determining whether aggregate damages can *reasonably be determined*:

- a. The reliability of the non-individualized evidence the plaintiff presents.
- b. Whether using this evidence will result in any unfairness or injustice to the defendant (for example, by overstating the defendant's liability).
- c. Whether denying an aggregate approach will result in "a wrong eluding an effective remedy" and thus a denial of access to justice.

[403] In my view, damages can be reasonably determined from the non-individualized evidence the plaintiff has presented. The question at this stage is to determine what, if any, damages arise from time zone arbitrage by virtue of the defendants having permitted frequent trading in the Certified Funds. On the record before me, the presence of time zone arbitrage is best determined by comparing the trading at issue against the characteristics of time zone arbitrage trading. Furthermore, the damages sustained are damages to the funds. Those damages are, by definition, aggregate. That damage does not turn on proof of individual harm by the plaintiffs.

Even the defence experts take an aggregate approach to the calculation of damages. The debate between the experts is not whether it is reasonably possible to calculate aggregate damages. The debate is about which the method to use when doing so.

[404] As a result, there should be no concern about whether aggregate damages per se will result in any unfairness or injustice to the defendant. The concern is whether the particular choice of method to calculate aggregate damages may overstate or understate AIC's liability.

[405] I have assessed the methods of calculating aggregate damages earlier in these reasons. While I agree that none is perfect, I have concluded that the Next Day NAV approach is the most reasonable because it is the method that most precisely targets the specific damage from time zone arbitrage (dilution) and controls the risk of overstating liability through the calculation of autocorrelation.

[406] The failure to use aggregate damages will result in "a wrong eluding an effective remedy." Having each of the million class members prove damages is a practical impossibility. To the extent that AIC's objection to calculating aggregate damages refers to the lack of specific evidence about the intention behind the Additional Timers' trades, as noted earlier, it was open to AIC to have called them as witnesses to testify about the other strategies they were allegedly pursuing or to have demonstrated that the trading was consistent with another strategy. They made only speculative assertions in this regard which I have not accepted for the grounds set out earlier.

[407] Although it is possible that some measure of individual proof might be required for individual class members to make a claim against the pool of damages created by the judgment, it is not required to establish the size of the pool, nor is that issue before me.

SIX: APPROPRIATE RATE OF PREJUDGMENT RETURN

I. The Positions of the Parties

[408] The plaintiffs submit that a pre-judgment return that reflects some sort of compounding factor is appropriate.²⁰⁶ The defendants submit that the only return that can be awarded on an aggregate basis is simple pre-judgment interest.

[409] The plaintiffs delivered an expert's report from Errol Soriano of KSV. The defendants delivered a report from Howard Rosen of Secretariat. Both were qualified as experts on the quantification of interest and rates of return applicable to damage assessments.

[410] Mr. Soriano calculated a range of both simple and compound rates of return based on an assumed judgment of \$93,409,000 against CI. Those calculations are set out in Schedule 1 of his report. Mr. Soriano issued subsequent reports in which he made relatively minor corrections to his numbers based on critiques from Mr.

²⁰⁶ *Bank of America Canada v. Mutual Trust Co.*, 2002 SCC 43 at para. 55.

Rosen. For purposes of this discussion, I will continue to use the figures Mr. Soriano used in his initial Schedule 1 because I am not using these figures to calculate a precise amount owing as a prejudgment return but merely to provide a directional sense of the differences in approach. Mr. Soriano conducted a similar analysis based on a judgment against AIC in the amount of \$40.465 million. The various prejudgment returns he arrived at are set out in the table below.

Basis of Prejudgment Return	CI Hypothetical Judgment \$93.4 Million	AIC Hypothetical Judgment \$40.565 Million
PJI at date of claim (simple)	\$63,570,000	\$32,480,000
PJI at date of claim (compounded annually)	\$88,730,000	\$47,060,000
PJI in effect during each year of the loss period (simple)	\$50,300,000	\$27,660,000
PJI in effect during each year of the loss period (compounded annually)	\$64,830,000	\$36,860,000
Interest on OSC settlement (compounded annually)	\$209,300,000	\$114,310,000

Weighted average CI/AIC return (compounded annually)	\$143,370,000	(\$29,970,000) ²⁰⁷
MSCI ACWI Total Return Index ²⁰⁸ (compounded annually)	\$192,480,000	\$48,360,000 (MSCI EAFE Index ²⁰⁹)

[411] For the reasons set out below, I find that it is most appropriate to award simple prejudgment interest at the prescribed rate in effect when the action was commenced of 2.8%.

II. Provisions of the Courts of Justice Act

[412] The starting point of the analysis is found in section 128 (1) of the *Courts of Justice Act*,²¹⁰ which provides that

A person who is entitled to an order for the payment of money is entitled to claim and have included in the order an award of interest thereon at the prejudgment interest rate, calculated from the date the cause of action arose to the date of the order.

[413] This provides for simple, non-compound interest.

²⁰⁷ Applying the return on the AIC funds to a notional damages award would have resulted in a deduction of approximately \$29.37 million because of the negative returns on AIC funds during the Class Period.

²⁰⁸ The Morgan Stanley Capital International All Country World Index. This is a widely used global equity benchmark that measures the performance of stocks across both developed and emerging markets and is the benchmark CI used for the majority of its funds.

²⁰⁹ The Morgan Stanley Capital International Europe, Australasia, and the Far East Index. It is an index of large- and mid-cap companies across 21 developed markets countries around the world. It is the benchmark against which AIC measured many of its funds.

²¹⁰ *Courts of Justice Act*, RSO 1990, c C.43

[414] Section 130 of the *Courts of Justice Act* gives the court discretion to vary the prejudgment interest rate. As follows:

130 (1) The court may, where it considers it just to do so, in respect of the whole or any part of the amount on which interest is payable under section 128 or 129,

- (a) disallow interest under either section;
 - (b) allow interest at a rate higher or lower than that provided in either section;
 - (c) allow interest for a period other than that provided in either section.
- (2) For the purpose of subsection (1), the court shall take into account,
- (a) changes in market interest rates;
 - (b) the circumstances of the case;
 - (c) the fact that an advance payment was made;
 - (d) the circumstances of medical disclosure by the plaintiff;
 - (e) the amount claimed and the amount recovered in the proceeding;
 - (f) the conduct of any party that tended to shorten or to lengthen unnecessarily the duration of the proceeding; and
 - (g) any other relevant consideration.

[415] The Ontario Court of Appeal recently summarized the principles applicable to prejudgment interest as follows in *Aubin v. Synagogue and Jewish Community Centre of Ottawa (Soloway Jewish Community Centre)*:²¹¹

- (i) Section 128 sets up a rebuttable presumption that should only be deviated from where the party seeking a higher or lower rate demonstrates that there are unusual or special circumstances sufficient to justify such a departure, having regard to the mandatory criteria under s. 130(2).²¹²
- (ii) Each factor informing the exercise of the court's discretion need not, by itself, amount to unusual or special circumstances, so long as the court is satisfied that, in considering the relevant circumstances as a whole, there are unusual or special circumstances.²¹³
- (iii) The rationale for the rebuttable presumption and onus is that prejudgment interest should be viewed as part of the compensation due to the plaintiff.²¹⁴
- (iv) The presumptive prejudgment interest rate scheme represents the will of the legislature to establish a coherent scheme that sacrifices perfection "in the interest of consistency and certainty."²¹⁵
- (v) Courts cannot depart from the presumptive scheme unless it is just to do so in light of the mandatory factors set out in section 130 (2).²¹⁶
- (vi) Interest should not be used as either a reward or a penalty but should reflect the value of money wrongfully withheld from the plaintiff.²¹⁷

[416] At the same time, in *Bank of America Canada v. Mutual Trust Co.*,²¹⁸ the Supreme Court of Canada recognized that:

²¹¹ *Aubin v. Synagogue and Jewish Community Centre of Ottawa (Soloway Jewish Community Centre)*, 2024 ONCA 615

²¹² *Aubin v. Synagogue and Jewish Community Centre of Ottawa (Soloway Jewish Community Centre)*, at para. 32.

²¹³ *Aubin* at para. 32.

²¹⁴ *Aubin* at para. 33.

²¹⁵ *Aubin* at para. 33.

²¹⁶ *Aubin* at para. 34.

²¹⁷ *Aubin* at para. 49.

²¹⁸ *Bank of America Canada v. Mutual Trust Co.*, 2002 SCC 43 (CanLII), [2002] 2 SCR 601.

- (i) Compound interest is now commonplace.
- (ii) The common law now incorporates the economic reality of compound interest.
- (iii) The restrictions of the past should not be used today to separate the legal system from the world at large.
- (iv) Simple interest makes an artificial distinction between money owed as principal and money owed as interest. Compound interest treats a dollar as a dollar and is therefore a more precise measure of the value of possessing money for a period of time.
- (v) Compound interest is the norm in the banking and financial systems in Canada and the western world and is the standard practice of both the appellant and respondent.

[417] With those general principles in mind, I return to the factors set out in s. 130(1).

(a) Changes In Market Interest Rates

[418] A consideration of changing market interest rates under ss. 130 (2) (a) refers to more than prejudgment interest rates.²¹⁹ It can also refer to other rates of interest such as secured and unsecured loans.

[419] The closest either side came to introducing evidence of market interest rates was Mr. Rosen's comment that there were long periods of time in Canada where the market risk-free return was lower than 2.8%. There was, however, no specific evidence of what those risk-free interest rates were. In the absence of evidence

²¹⁹ *Aubin v. Synagogue and Jewish Community Centre of Ottawa (Soloway Jewish Community Centre)*, 2024 ONCA 615 at para. 59.

about market rates, I have considered the historical evolution of the prescribed prejudgment interest rate since the commencement of this action.

[420] The prescribed prejudgment interest rate has varied widely since the inception of the action. The prescribed rate at the time the action was commenced was 2.8%. The rate then began to climb to a high of 4.8% in 2008 from which it declined to 0.5% in 2009. It then hovered around the 1% mark until 2020 when it fell back to 0.5%. Since 2020 it has crept up to as high as 5.3% in 2024 but has since fallen to 2.5% where it sits at the time of writing these reasons. Those variations militate in favour of the presumptive rate of 2.8%. It reflects a compromise between the wide range of rates that prevailed throughout the Class Period.

(b) The Circumstances of the Case

[421] There are two circumstances in this case which the plaintiffs say make it appropriate for a compound return: it arises out of long-term investments and now spans a period of 28 years since the beginning of the Class Period in 1998.

[422] In cases involving investment advisors, courts have recognized that the loss of opportunity to earn a return on investments is a relevant head of damages. Those damages have usually been assessed by reference to returns on similar portfolios or market indices.²²⁰ An alternative, simpler method is to award compound

²²⁰ Robin P. Roddey and Paul F. Monahan, *The Law Relating to Investment Advisors* (Markham: LexisNexis Canada, 2015), p. 215-216; *Davidson v. Noram Capital Management Inc.*, 2005 CanLII 63766 at para. 66; *Hayward v. Hampton*, 2002 CanLII 53227 at paras 217-219; *Vipond v. AGF Private Investment Management*, 2012 ONSC 7068 at paras. 216, 221, *Boughner v. Greyhawk Equity Partners Limited Partnership (Millenium)*, 2013 ONSC 163.

prejudgment interest.²²¹ In other contexts, courts have awarded compound interest where the parties had a reasonable expectation that compound interest would be awarded.²²² This arises most frequently in contract cases where the underlying contract provides for compound interest.

[423] In *McFlow Capital Corp. v. James*,²²³ the Court of Appeal observed that, although compound interest is usually reserved for cases like breach of contract where the contract itself calls for compound interest, it could also be awarded in other cases as consequential damages but would require proof of that damage.²²⁴

[424] The plaintiffs argue that the Class Members invested in a mutual fund which the defendants advertised as long-term, buy and hold investments, that would be subject to the benefit of compounding returns over time.²²⁵ The defendants' negligence deprived the plaintiffs of a portion of their capital and return. The plaintiffs submit that it is difficult to see why the defendants should not be held to the same compounding benefit they promoted when marketing their funds. It should certainly come as no surprise to the defendants that many of the Class Members were long term investors who were attracted by the compounding benefits the defendants highlighted.

²²¹ Robin P. Roddey and Paul F. Monahan, *The Law Relating to Investment Advisors* (Markham: LexisNexis Canada, 2015), p. 215-216.

²²² *Bank of America Canada v. Mutual Trust Co.*, 2002 SCC 43 at para. 55.

²²³ *McFlow Capital Corp. v. James*, 2021 ONCA 753

²²⁴ *McFlow Capital Corp. v. James*, 2021 ONCA 753 at para. 59.

²²⁵ See Liability Decision paras. 142-161.

[425] The defendants note that there are over 1 million class members. The defendants submit that an award of compound interest requires the plaintiffs to prove that each class member would have remained invested throughout the Class Period and throughout the 23 years since its expiry. There are many individual factors that affect the likelihood of any class member remaining invested over that long a period. These include: the class member's investment horizon, changes in risk tolerance, changes in investment objectives, and the need for funds for other purposes. The defendants note that since the expiry of the Class Period, we have experienced, among other things, a global financial crisis and the Covid pandemic, both of which affected many people's investment decisions to say nothing of the financial ups and downs of the over 1 million class members.

[426] As examples of these sorts of variations of objectives and needs among Class Members, the defendants point out that: (i) in 2008, approximately 27.3% of the outstanding units of the CI Global Fund were redeemed; (ii) the representative plaintiff, Sheila Snyder, withdrew her investment in January 2008; and (iii) the representative plaintiff, Wayne Dzoba, deposed that he invested to fund his son's university education. That would have required him to withdraw funds by now.

[427] All agree that assessing a rate of return individually for each class member would be a practical impossibility. That is why, explains Mr. Rosen, we have prejudgment interest rates. Mr. Soriano, on the other hand, explained that while class members may have had different investments and objectives, given the large number of class

members, their investment returns would trend towards an average market rate of return of 6-7% per year.²²⁶

[428] The length of time involved also raises concerns about inflation and the real rate of return. Mr. Rosen agreed in cross-examination, that simple interest of 2.8% would barely exceed inflation, which averaged an annual rate of 2.12% from 2003 to 2024.²²⁷ Mr. Rosen justified this as being acceptable because it represented a risk-free return for the class for a period during which the market risk-free rate of return was frequently lower than 2.8%.²²⁸ A risk free rate of return usually refers to the return on government issued treasury bills. I am not sure I would agree that prejudgment interest is equivalent to a risk-free rate of return. Collectability turns on the solvency of the defendant.²²⁹ Over a period of 28 years, much can change to affect the ability to collect. Businesses can fail. Class members can die, which no doubt many have given the class pool of over 1,000,000 and the lengthy period at issue.

²²⁶ Trial Day 4 Transcript, May 1, 2025, p. 783 L 23 – p. 784 L 15.

²²⁷ Transcript Day 11, May 15, 2025, p. 2466 L 11-21; Exhibit 45, Plaintiffs' Brief for the Cross-Examination of Howard Rosen, Tab 9, p. 143.

²²⁸ Exhibit 19, Tab 1 – Secretariat Report, Figure 7-1: OSC Settlement Rate compared to 1-year Canada Government Debt Rate, PDF p. 35.

²²⁹ Although the Canadian Investor Protection Fund provides coverage for up to \$1 million in losses for securities that have gone missing in an insolvency of a mutual fund company, it does not provide coverage for misrepresentation or a drop in value of investments for any reason. It may therefore not apply in the event of an insolvency of one of the defendants.

[429] A compound return is generally not available without evidence that the plaintiff would have invested in a manner consistent with the basis on which a compound return is sought.²³⁰

[430] In my view, the lengthy period of time at issue and the nature of the underlying claim as one arising out of long-term investments militate in favour of compounding. The variation in investment needs and preferences of the class of this size militate in favour of simple interest.

(c) Partial Payment

[431] As noted earlier, payments were made to investors as a result of the settlements reached in the OSC and IDA proceedings.

[432] The only argument made by either side that relates to the earlier partial payment and how it might be relevant to a prejudgment return was AIC's observation that 72% of the cheques issued to AIC unitholders under the OSC Settlement were for less than \$200.00.²³¹ AIC submits that it is speculative and goes against common sense to assume that an investor, when compensated with less than \$200.00, would immediately invest these proceeds, especially in an investment associated with transaction costs or management fees. I am not sure that is the correct way of looking at the issue. Whatever the size of the settlement cheque, it represented

²³⁰ *TechHi Holding Ltd. v. Merrill Lynch Securities Inc.*, 2004 CanLII 5767 at para. 273 (Ont Sup Ct J).

²³¹ Exhibit 45 – Plaintiffs' Brief for the Cross-Examination of Howard Rosen, Tab 3 – Affidavit of Alan Friedman sworn October 2, 2008, Exhibit 3, PDF p. 27.

funds that should have been embedded in a Certified Fund's unit value for as long as the Class Member remained in the fund.

(d) Medical Disclosure

[433] This factor is not relevant and is listed only to preserve the same lettering that is found in s. 130 (1) of the *Courts of Justice Act*.

(e) Amount Claimed and Recovered

[434] When departing from the prescribed rate of prejudgment interest, the court must bear in mind the overall goal of ensuring that there is a measured consideration of all relevant factors that seeks to achieve overall fairness amongst the parties.²³² It must ensure that the rate of return remains compensatory, not punitive or disproportionate to the nature the wrongdoing.²³³

[435] In those scenarios of Mr. Soriano that depart from simple or compound interest at the prescribed rate, the return component varies from \$143.3 million to \$230 million on a hypothetical damage award of \$93.4 million. In my view, in the circumstances of this case, such an award would be disproportionate. This is not a situation where the defendants have taken the amount of the judgment and have had use of it for the past 26 years. In that sort of a scenario, a prejudgment return of \$230 million might be appropriate. The closest "use of money" theory applicable here is that the

²³² *Aubin v. Synagogue and Jewish Community Centre of Ottawa (Soloway Jewish Community Centre)*, 2024 ONCA 615 at para. 35; *Henry v. Zaitlen*, 2024 ONCA 614 at para. 32.

²³³ *Henry v. Zaitlen*, 2024 ONCA 614 at paras. 27-28; *MacDonald v. BMO Trust Company*, 2020 ONSC 93 at paras. 79-83.

defendants ought, in theory, to have paid the judgment when the action was commenced in 2006 and in that sense have had use of the principal amount of the judgment since then. That remains qualitatively different from a defendant who has taken and retained \$90.3 million to which it was not entitled.

[436] The defendants have also raised a number of legitimate criticisms about the other benchmarks that Mr. Soriano refers to.

[437] Although the defendants may have referred to the MSCI indices as benchmarks in their prospectuses, Class Members had no reasonable basis to expect that their returns would match those of the indices.²³⁴ In addition, investors cannot invest directly in the MSCI indices. They would have had to invest in exchange traded funds that tracked the indices and in respect of which they would have been required to pay management fees which would reduce the compound returns calculated.

(f) Conduct Lengthening the Proceeding

[438] Neither party has made any submissions in this regard as a result of which I do not consider it.

III. The Balancing Exercise

²³⁴ Soriano Cross-Examination (05-01-2025), p. 810 L. 9 – p. 814 L. 3.

[439] At the end of the day the exercise of considering whether to vary the ordinary prejudgment interest rate is one that requires the court to

... recognize that rates of prejudgment interest require variation to keep pace with economic realities and to ensure that plaintiffs are not overcompensated nor undercompensated for the lost value of their damage award over time.²³⁵

[440] It is a balance similar to the one involved in determining whether aggregate damages are appropriate: the object is to find a balance between unachievable scientific accuracy and a reasonable rate of return.

[441] In my view, the appropriate balance here is one that awards the simple prejudgment interest rate of 2.8% that was in effect when the action was commenced.

[442] While I do not accept that the only way to award a compound return for a class of this size is to have each class member provide proof of damages, I nevertheless conclude that the huge variability of changing investment horizons among class members over a period of 28 years makes a compound award inappropriate. One primary source of damage identified in these reasons arises with respect to unitholders who sold after the entry or exit of the frequent traders and did so at a lower price. Those are unitholders who, by definition, did not remain invested beyond their exit date, at least not with respect to the units they sold. I am also mindful of the 27.3% redemption rate in the CI Global Fund in 2008. I accept that

²³⁵ *Cobb v. Long Estate*, 2017 ONCA 717 at para. 88.

2008 may have been a year with a particularly high redemption rate given the financial crisis that arose in September of that year. I was not, however, given any information about redemption rates in other years. I am mindful of the need for an evidentiary basis to award compound interest. Information about redemption rates would have provided a helpful basis on which determine whether such an award was appropriate. In the absence of evidence showing a relatively low redemption rate over time, simple interest at the prescribed rate appropriately balances the competing interests at play.

SEVEN: Conclusion and Costs

[443] For the reasons set out above, I award the plaintiff class damages based on a calculation of dilution using the Next Day NAV method subject to a discount of 10% for CI and 3% for AIC.

[444] With respect to CI, Professor Zitzewitz calculated gross damages for the Identified Accounts at \$136.2 million. Applying a 10% discount to that sum arrives at a gross damage figure of \$122.58 million. From that amount Professor Zitzewitz would deduct the OSC settlement of \$49.3 million, switch fees of \$9.2 million and the IDA settlement of \$3.6 million for net damages from the Identified Accounts at CI of \$60.48 million.

[445] Damages from the Additional Accounts at CI will be added to the judgment once they are calculated in accordance with the filters and the 10% discount discussed earlier.

[446] With respect to AIC, Professor Zitzewitz calculated gross damages for the Identified Accounts at \$62.1 million to which I apply a discount of 3% for a gross damage figure of \$60.237 million. As set out in paragraph 328 above, I assess damages for the Additional Accounts at AIC, after applying the 3% discount at \$38,163,659.63. The total gross damage award against AIC is therefore \$98,400,659. From that amount Professor Zitzewitz would deduct the OSC settlement of \$58.8 million, Switch Fees of \$0.5 million and the IDA settlement of \$1.2 million for a net award of \$37,900,659.63.

[447] Simple prejudgment interest will apply to all amounts owing at the rate of 2.8% from the commencement of the action.

[448] I remain seized of this matter to address issues arising out of these reasons. By way of example, there may be further submissions required to resolve the filters applicable to the Additional Accounts at CI and any anomalies that may arise out of them. Similarly, some of the judgment amounts rely on figures in the submissions of the parties which may have been rounded. It may be that a more precise number is appropriate. There may also be adjustments necessary to take into account Class Members in other provinces.

[449] If the parties cannot agree on costs, they can contact me directly either with a timetable to resolve the issue or for a case conference to set a timetable to resolve the issue.

[450] In closing, I wish to extend my thanks to all counsel, including those who are not on the counsel slip but who assisted outside of court. An action like this is always a team effort in which each team member plays an indispensable part. I am truly grateful for the contributions of all team members and for the professional approach with which all conducted themselves in what has been a long, hard fought action.

Released: July 16, 2026

Koehnen J.

CITATION: Fischer v. IG Investment Management Ltd. et al. 2026 ONSC 4142
COURT FILE NO.: 06-CV-307599CP
DATE: 20260716

ONTARIO
SUPERIOR COURT OF JUSTICE

BETWEEN:

DENNIS FISCHER, SHEILA SNYDER,
LAWRENCE DYKUN, RAY SHUGAR
and WAYNE DZEOBA

Plaintiffs

– and –

IG INVESTMENT MANAGEMENT LTD., CI
MUTUAL FUNDS INC.,
FRANKLIN TEMPLETON INVESTMENTS CORP.,
AGF FUNDS INC. and AIC LIMITED

Defendants

REASONS FOR JUDGMENT

Koehnen J.

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