BLUE TRACTOR

November 16, 2017

Brent J. Fields
Secretary
U.S. Securities and Exchange Commission
100 F Street, NE
Washington DC 20549-1090

RE: Notice of Designation of a Longer Period for Commission Action on a Proposed Rule Change to Adopt a New NYSE Arca Equities Rule 8.900 and to List and Trade Shares of the Royce Pennsylvania ETF, Royce Premier ETF, and Royce Total Return ETF under Proposed NYSE Arca Equities Rule 8.900 (Release No. 34-81977; File No. SR-NYSEArca-2017-36)

Dear Mr. Fields,

I am pleased to provide the U.S. Securities and Exchange Commission (the "Commission") with comments regarding the Commission's October 30, 2017 notice (the "Notice") designating a longer period whether to approve or disapprove the rule change application submitted on April 14, 2017 by NYSE Arca, Inc. (the "Exchange").[1, 2] My comments complement the two comment letters the Commission received on July 18, 2017 and October 31, 2017 from my colleague at Blue Tractor Group, LLC ("Blue Tractor"), Terence Norman[3].

I have read with interest the rebuttal letters filed with the Commission on October 11 and 12, 2017[4] by Messrs. Criscitello and McCabe with Precidian Investments LLC ("Precidian") and on behalf of Blue Tractor wish to provide our thoughts about their statements, as well as other more specific comments on the rule change filing by the Exchange and the intellectual property from Precidian that underpin the three proposed exchange traded funds (the "ETF Funds") sub-advised by Royce & Associates, LP ("Royce")[5] that the Exchange proposes to list and trade.

Letters from Messrs. Criscitello and McCabe

In their rebuttal letters, both Messrs. Criscitello and McCabe take umbrage with the fact that third parties such as Blue Tractor continue to question the Precidian ETF structure despite their protestations that they have successfully dealt with the Commission on all the matters raised by commenters. This is a perplexing attitude since the Commission's commenter process is specifically designed to garner third party input – both pro and con. And as of the date of this letter it certainly appears to be working well as I count ten (10) letters, including the July 7, 2017 letter in support of the Exchange rule change from J.P. Morgan Asset

[1] See https://www.sec.gov/rules/sro/nysearca/2017/34-81977.pdf (Release No. 34-81977; File No. SR-NYSEArca-2017-36)
[2] See https://www.nyse.com/publicdocs/nyse/markets/nyse-arca/rule-filings/filings/2017/NYSEArca-2017-36,%20Re-file.pdf (Release No. 30-80553; File No. SR-NYSEArca-2017-36)
[3] See https://www.sec.gov/comments/sr-nysearca-2017-36/nysearca201736.htm (letters from Mr. Norman)
[4] See https://www.sec.gov/comments/sr-nysearca-2017-36/nysearca201736.htm (letters from Messrs. Criscitello and McCabe)
[5] https://www.roycefunds.com/

Management that was inexplicably removed from the Commission's public comment page in October but has now re-appeared as an appendix to Mr. McCabe's comment letter.[6]

Moreover, Mr. Criscitello says that Blue Tractor has a financial conflict of interest in making negative comments. His claim is wholly disingenuous – the Commission has again received a letter in support of the Exchange's rule change application from Legg Mason, Inc., a minority Precidian investor (19.9%) with the right to acquire majority ownership in Precidian.[7] I have no specific knowledge, but one assumes that Legg Mason, Inc. may well exercise its option to acquire the majority of the common shares owned by Messrs. Criscitello and McCabe and the two other partners upon approval of the application for exemptive relief and the Exchange's rule change application.[8]

Mr. Criscitello also provides the reader on page two of his letter a plain vanilla summary of the potential merits of using actively managed exchange traded funds that would not disclose their portfolio contents and weighting on a daily basis. Although I am in full agreement with his list, I'm not sure of its relevance in a rebuttal letter concerning the Exchange's rule change application. The issue at hand is not to question the merits for investors of novel actively managed exchange traded fund strategies, but rather specifically the proposed Precidian ETF structure that the Royce ETF Funds will utilize.

On page one of his letter, Mr. Criscitello complains that Blue Tractor's comments on the Precidian structure are an attempt to stifle innovation; unsurprisingly we reject his contention. First, as demonstrated by Blue Tractor's four filings to date with the Commission for our novel Shielded Alpha℠ ETF structure, we are active participants in ETF innovation. In addition, my colleague Terence Norman is a named inventor on numerous issued U.S. patents concerning non-transparent exchange traded funds.

Second, I may have better appreciated Mr. Criscitello's contention if it were that Blue Tractor's Shielded Alpha℠ structure was a non-transparent ETF (i.e. no daily disclosure of the portfolio holdings) and therefore the approach could be viewed as being in direct conflict with Precidian's own non-transparent structure. But because Blue Tractor's Shielded Alpha℠ structure embraces portfolio transparency (under our structure a minimum 90% of the asset value of the fund's underlying portfolio, though not actual weightings, is disclosed on a daily basis through a published basket disseminated by the National Securities Clearing Corporation ("NSCC")), it is wholly different from the Precidian structure or any other non-transparent exchange traded product currently under review or that has been approved by the Commission.

Precidian's Hopeful Conjecture

On page three of his letter, Mr. McCabe notes,

> *"The "commenters" [his emphasis] have also raised apprehensions that the level of information provided to the public about a Precidian ETF would allow market participants to effectively determine the portfolio holdings and their weightings, which they refer to as "reverse engineering" [his emphasis] the portfolio."*

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[6] https://www.sec.gov/comments/sr-nysearca.../nysearca201736-2636844-161243.pdf (letter from Mr. Christopher Willcox)
[7] See https://www.sec.gov/comments/sr-nysearca-2017-36/nysearca201736.htm (October 12, 2017 letter from Legg Mason, Inc.) and https://www.sec.gov/comments/sr-nysearca-2016-08/nysearca201608-5.pdf (April 15, 2016 letter from Legg Mason, Inc.)
[8] http://www.imdealsblog.com/2016/02/legg-mason-acquires-minority-stake-in-precidian.html

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My colleague Terence Norman's letters to the Commission on July 18, 2017 and October 31, 2017 raise more than "apprehensions". They instead demonstrate with precision how reverse engineering of the Precidian ETF structure can be readily achieved by a motivated predatory party.

I also am puzzled why Mr. McCabe suggests the term "reverse engineering" is something unique to Blue Tractor and others who have commented on this risk. Precidian has in fact referenced this term many times in its public filings, as has the Commission in its public filings about the Precidian ETF structure and in materials referencing non-transparent exchange traded products in general. This has been a common terminology for years - a paper sponsored by the Investment Company Institute back in 2001, authored by Dr. Russ Wermers from the University of Maryland, discussed on page 7 predatory trading and reverse engineering[9],

> *"…**frequent portfolio disclosure would facilitate reverse engineering** [emphasis added] …Reverse engineering occurs when an outside investor applies statistical techniques to data on publicly reported holdings to infer the stock-picking strategies, strategic choices, or even the holdings of specific securities...Increasing the frequency of portfolio disclosure makes this type of inference more feasible as well as more precise."*

At its heart, reverse engineering of an unknown portfolio (i.e. determination of portfolio holdings and weightings with precision) is an exercise in mathematics, often complimented, though not necessarily, by ancillary information disclosed in the fund's prospectus and statement of additional information ("SAI").

The claim by Precidian that an actively managed portfolio using their ETF structure cannot be reverse engineered is their opinion or belief but more accurately, it is Precidian's <u>hopeful conjecture</u>.

It is common knowledge that a conjecture cannot be validated and proved by confirmatory examples. One can provide any number of cases that appear to consistently validate the conjecture but this in itself does NOT make the conjecture a fact. Why? Because the *modus operandi* for disproving a conjecture in the empirical sciences and indeed, across many disciplines, is to provide but a single example that is contrary to the conjecture.[10] Based upon the comments from Messrs. Criscitello and McCabe they appear unaware of this.

Illustrating their lack of knowledge, in his letter to the Commission Mr. McCabe states on page three that to validate their conjecture, *"Precidian has engaged leading economists and mathematicians who have confirmed that it is not possible to determine portfolio holdings and their weightings with any precision, given Precidian's structure."*

Precidian provides the Commission with two studies (Drs. Ricky Cooper and Lawrence Glosten)[11] but frankly, a hundred more affirmative studies from Precidian wouldn't make an additional impact in proving their conjecture. Why? Because as outlined above, confirmatory examples do not prove a conjecture and

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[9] https://www.idc.org/pdf/per07-03.pdf. Note that Dr. Wermers was a panelist at the SEC-NYU Dialogue on Securities Markets Regulation – Exchange Trade Products held at the Commission on September 8, 2017 & hosted by Commissioner Michael Piwowar, demonstrating that he is a trusted resource

[10] https://answers.yahoo.com/question/index?qid=20100713180925AA49HyX

[11] Note too that Mr. McCabe on page three of his October 12, 2017 letter includes Dr. Craig Lewis as providing independent academic evidence that the Precidian ETF structure cannot be reverse engineered with precision. However, Dr. Lewis undertook no quantitative-based analysis of his own and on page 76 of Exhibit D of Precidian's September 29, 2017 filing application for exemptive relief he only summarizes Dr. Cooper's original work and flawed conclusions.

just one piece of contradictory empirical evidence proves that a conjecture is ill-informed and therefore false.

Comment letters the Commission has received from my colleague Terence Norman on July 18, 2017 and October 31, 2017 provide the evidence that the claim an unknown portfolio under the Precidian ETF structure cannot be reverse engineered is false (especially see the reverse engineering examples attached by Dr. Anthony Hayter).

We of course welcome discussion with the Commission, Precidian and their retained consultants and any other independent mathematicians to review the analyses prepared by Terence Norman and Dr. Hayter.

Let me state this another way without using math-like terminology. Pretend there is a contest to climb a mountain that has never been scaled. Two climbers set off and one goes up the north side and the other up the south side. However, both fail to reach the summit and turn back. Once back at base camp they hold a press conference and claim that since both their attempts to climb to the peak have failed, it must be impossible to scale the summit and they list a host of reasons why it was impossible to do so.

Is that where we stand now? That because two instances of failed reverse engineering by consultants hired by Precidian claim to show its 'highly unlikely' or "can do a little bit better than random guessing" then everyone must believe it to be the case?

Now back to the mountain. A third climber emerges who plots a route up the east side and isn't constrained by any instructions, compensation considerations or guidance from the climbing contest organizers. Lo and behold, this climber is able to reach the summit. That is precisely where we find ourselves with the reverse engineering analyses presented by Terence Norman and Dr. Hayter.

Moreover, Mr. McCabe on page two of his October 12, 2017 comment letter states that,

> *"Precidian has requested exemptive relief to allow it to launch, operate and list actively managed exchange-traded funds (each an "ETF") that would not, unlike all currently existing actively managed ETFs, disclose their portfolio holdings every day. The purpose of the proposed Precidian ETF is to allow active managers to manage ETFs without disclosing their proprietary trading strategies.* ***We believe, in many cases, such daily disclosure of portfolio securities could provoke predatory trading practices by third-party investors, such as "front running" and "free riding," and in those cases, could result in the manager of the ETF breaching his fiduciary duty to the ETF and its shareholders.*** *[emphasis added]"*

Based upon Mr. McCabe's statement above and the evidence presented in the recent comment letters from Terence Norman, one wonders just what is the benefit of an actively managed ETF issued using the Precidian structure when it can be readily reverse engineered by a motivated predatory trader.

JPMAM

J.P. Morgan Asset Management ("JPMAM") also has expressed serious concerns to the Commission about reverse engineering. One page one of JMPAM's July 7, 2017 comment letter penned by Mr. Christopher Willcox and submitted directly to Mr. David Grim, then Director of the Division of Investment Management, Mr. Willcox unequivocally outlines JPMAM's concern about predatory front running and free-riding, *"A key impediment holding JPMAM back from offering more actively managed ETFs is concern about the potential negative consequences associated with daily ETF portfolio disclosure…Daily portfolio disclosure presents two potential risks for active strategies that could negatively impact both investors and managers…**Until these risks are effectively addressed and mitigated, it will be difficult for JPMAM, and indeed most active managers** [emphasis added], to deliver actively managed strategies more broadly in an ETF format."*

Mr. Willcox then offers tepid support for the Precidian ETF structure,

*"…We are **hopeful** [emphasis added] that the modifications that have been made to the methodology described…address such concerns…JPMAM believes that it is **highly improbable** [emphasis added] that the portfolios of the proposed funds…could be practically and consistently "reverse-engineered" …The net asset value (NAV) "scaling" methodology…**is expected** [emphasis added] to effectively mask portfolio holdings and weightings…"*

So boiling this down, it is clear that JPMAM relied on Dr. Cooper's assertion that it is 'rather unlikely' that the Precidian ETF structure could be reverse engineered with precision on account of the scaling technique that forms the key component of Precidian's stylized methodology.

And on page three of his October 12, 2017 letter, Mr. McCabe specifically references this support[12],

"…Precidian has confirmed with some of the largest most sophisticated asset managers [and references JPMAM in a footnote] in the world that they believe that the proposed Precidian ETF structure would effectively protect their proprietary trading strategies from being reverse engineered."

But as mathematically demonstrated by Terence Norman and Dr. Anthony Hayter in the July 18, 2017 public comment letter, Dr. Cooper's conclusions are false.

So Mr. McCabe and Precidian played 'osterich' during August and September 2017, unwilling to publicly address through the Commission commenter process the July 2017 letter from Terence Norman documenting the ease it is to reverse engineer a Precidian ETF that used the 'stylized methodology' described by Dr. Cooper. Perhaps their thinking was that if they ignored the issue maybe it would just go away.

But as a hedge, over this period Precidian retained Dr. Lawrence Glosten at the Columbia Graduate School of Business to provide an additional confirmatory study that the Precidian ETF structure could not be reverse engineered with precision.

Additionally, despite the math presented in Terence Norman's July 18, 2017 letter, Precidian continued to privately assure the Commission, JPMAM and others that their structure couldn't be reverse engineered, as well as address other concerns raised by the various commenters. In Mr. McCabe's October 12, 2017 letter, on page three he documents a meeting held at the Commission, where apparently Dr. Glosten was also in attendance,

[12] The JPMAM letter was removed from the Commission's public comment site in October but then reappeared as an appendix to Mr. McCabe's comment letter in November 2017.

"As recently as two months ago, we brought a team of experts from KCG (Virtu), NYSE/Arca, JP Morgan, Legg Mason, State Street Bank, ***Columbia Graduate School of Business*** *[emphasis added], Morgan Lewis and Precidian Investments…while affording both the Staff and Commission the opportunity to verify the opinions of these experts."*

Then with Dr. Glosten's new study in-hand, Precidian double downs on their 'stylized methodology' in their most recent September 29, 2017 filing for exemptive relief[13], where on page 13, footnote 10, they state,

"Applicants intend to engage in share splits and reverse splits in order to keep the price of Shares generally within this range. By keeping the price of a share in this range, it will dampen the impact of volatility in the prices of the underlying portfolio securities in a Fund, which has the ***effect of making it almost impossible to determine, based on changes in market prices, what securities are being held in the Fund's portfolio*** *[emphasis added] …"*

And Precidian includes Dr. Glosten's confirmatory new study as Exhibit F in their September 29, 2017 filing.

On October 31, 2017 the Commission received a letter from my colleague Terence Norman mathematically demonstrating that Dr. Glosten's conclusions are false.[14]

Perhaps coincidentally, JPMAM's letter of support was deleted from the Commission's public comment site around this time.

Are We Seeing a Change in Tactics by Precidian?

On November 3, 2017 a news story was published by Ignites.com (a division of the Financial Times) that referenced JPMAM's support for the Precidian structure,

"Sources close to the approval process say the SEC and its staff are still grappling with to what extent the structure can be reverse engineered, and what, if any, impact it would have on shareholders. More fundamentally, large asset managers including…J.P. Morgan have expressed support for the Precidian structure. If those advisors are ***unconcerned about having their strategies front-run, it raises questions as to whether regulators ought to worry, they say*** *[emphasis added]"* [15]

So what may we glean from the Ignites.com article? The Ignites.com story suggests that JPMAM is signalling the Commission they are unconcerned about predatory front running. So in an apparent change of heart, JPMAM must have concluded that the Precidian ETF structure can be reverese engineered.

Yet Mr. Willcox, the CEO of Asset Management at JPMAM, devotes considerable energy in his July 7, 2017 comment letter telling the Commission and the investing public that JMPMAM is seriously concerned about predatory front running and free-riding, both the result of advantageous asymmetric portfolio disclsoure from reverse engineering. Indeed, Mr. Willcox emphatically states on page two of his letter,

[13] https://www.sec.gov/Archives/edgar/data/1396289/000114420417050779/v476219_40appa.htm#a_022

[14] https://www.sec.gov/comments/sr-nysearca-2017-36/nysearca201736.htm (see Mr. Norman letter)

[15] http://ignites.com/c/1784473/209273/precidian_rivals_again_raise_regulatory_concerns_amid_review?referrer_module=issueHeadline&module_order=4 (Jackie Noblett, Ignites.com)

> *"Given our desire to protect our active strategies (i.e., not offer them in a fully transparent ETF), JPMAM takes the risks associated with portfolio disclosure seriously…"*

But since two letters from my colleague Terence Norman (and exhibits from Dr. Anthony Hayter) on July 18, 2017 and October 31, 2017 mathematically demonstrate that it is in fact readily feasible to reverse engineer the Precidian ETF structure, is it the case now that Precidian's latest strategy is to downplay the reverse engineering concerns by having partners relay to the Commission that they now don't have a concern with front running?

Admittedly, there are some actively managed ETF fund managers who on the surface may be unconcerned with front running, such as Davis Advisors who recently issued transparent actively managed ETFs[16]. But it should be pointed out that firm Chairman and portfolio manager Chris Davis was quoted in a recent Barron's article that, *"If we get a whiff of people trying to exploit the ETF, we will respond."* [17]

But let's be crystal clear on this issue – the vast majority of active fund managers are concerned.

Recall JPMAM's concern about predatory front running and free-riding in their July 7, 2017 letter,

> *"A key impediment holding JPMAM back from offering more actively managed ETFs is concern about the potential negative consequences associated with daily ETF portfolio disclosure…Daily portfolio disclosure presents two potential risks for active strategies that could negatively impact both investors and managers…Until these risks are effectively addressed and mitigated, **it will be difficult for JPMAM, and indeed most active managers** [emphasis added], to deliver actively managed strategies more broadly in an ETF format."*

And Precidian in their September 29, 2017 filing state on page 24,

> *"Applicants have carefully sought to provide a level of access and precision for the VIIV that would both facilitate arbitrage, **yet protect a Fund from "front running" and "free riding" by other investors and/or managers which could otherwise harm, and result in substantial costs to, the Funds** [emphasis added]. Applicants believe it highly unlikely, and have sought to confirm mathematically, that a VIIV calculated as described herein and provided at one second intervals would not allow others to reverse engineer a Fund's investment strategy for purposes of front running or free riding."*

Moreover, the Commission's Office of Investor Education & Advocacy has published reports specifically for retail investors that highlight the concern of front running as a result of portfolio disclosure. In their December 2016 report[18] for retail investors they discuss exchange traded managed funds ("ETMF") issued by NextShares™,

> *"This structure may allow the product to provide certain cost and tax efficiencies of ETFs while maintaining the confidentiality of the current holdings similar to mutual funds. By not having to disclose their holdings on a daily basis as ETFs do, ETMFs may have an advantage in trying to outperform their benchmarks over time because **they are less susceptible to front running** [emphasis added] by other investors who would be able to trade on the holdings' disclosures."*

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[16] http://davisetfs.com/
[17] http://www.barrons.com/articles/davis-funds-unconventional-wisdom-1483767205
[18] https://www.sec.gov/investor/pubs/sec-guide-to-mutual-funds.pdf

And one can even go back over 15 years and see studies and public comments from the Investment Company Institute ("ICI") documenting their extreme concern with enhanced portfolio disclosure for mutual funds that they state in no uncertain terms would lead to front running and free riding. Indeed, in a public comment letter submitted to the Commission in 2001 about this issue the ICI's General Counsel Craig Tyle stated[19],

> *"... there is substantial evidence...that requiring all funds to disclose their portfolio holdings more frequently would harm fund shareholders**. It would facilitate the ability of professional traders and other opportunists to front run trades** [emphasis added] by mutual funds and to exploit fund research and proprietary investment strategies, all **at the expense of fund shareholders** [emphasis added]. Indeed, abusive practices like these occur today."*

But despite this large body of evidence documenting concerns with predatory practices, it is certainly a possibility that Precidian has changed tack with the Commission.

So, if that is indeed the case, why is the Exchange proposing to list and trade the Royce ETF Funds using a purported non-transparent structure? If Precidian is now signalling that their partners are increasingly unconcerned with front running then surely the Royce fund managers are on board. To that end, why doesn't Royce simply issue transparent actively managed ETFs?

Dr. Lewis Suggests that it May Not Matter if a Portfolio can be Reverse Engineered

Perhaps Precidian has directed the Commission's focus to Dr. Lewis' white paper where he floated the notion that at the end of the day, reverse engineering a Precidian ETF might not really matter. On page 77 of Exhibit D in Precidian's September 29, 2017 filing Dr. Lewis muses,

> *"Although this analysis is rigorous and provides an unambiguous conclusion, **what would be the downside if this were not the case and it was feasible to reverse-engineer** [emphasis added] the NAVP [the actual ETF portfolio]?*
>
> *Even in this setting, it would only be a concern to the extent that there are unfilled active positions that an arbitrageur could forecast and potentially front run. Since it would still take time to collect enough observations to estimate the NAVP [the actual ETF portfolio], the ETF portfolio manager **would have a trading window at the start of each day to authorize the closing of any open active positions** [emphasis added].*
>
> *Given the relatively high levels of liquidity in equity markets, it is highly likely that the ETF's trusted agent could finish accumulating these positions before investors could infer which unfilled positions are being traded.*
>
> *The bottom line is that the ETF should be able to complete much of its trading, or adjust its trading strategy, before arbitrageurs can learn enough to free-ride or front run these trades. Since VIIV disclosures are based on the NAVP [the actual ETF portfolio], the **ability to front run trades is limited to the type of open active positions described above** [emphasis added]."*

Could Precidian now be attempting to shift the conversation toward this point of view? If that's the case, best to dig a bit deeper into Dr. Lewis' argument.

[19] https://www.ici.org/policy/comments/01_SEC_PORT_DISCLOSE_LTR

First, as demonstrated by the reverse engineering studies submitted in Terence Norman's two letters that were prepared by Dr. Hayter, the exercise does not require a predatory trader to figure out anew every day the fund portfolio. So, there aren't any overnight timing concerns as Dr. Lewis implies. Reverse engineering is a process in mathematical deduction and as shown with the examples in Dr. Hayter's simulations, after a reasonable number of trading days the portfolio can be 'cracked' with precision. What that means is that now a predatory trader can be confident that they know the positions and weightings and can begin to sort out the manager's strategy to undertake front running.

Second, it is rare that an active fund enters or exits a large position in one day. They put on large trades over many days or even weeks to limit market disruption and keep trading costs down. Even index ETFs will pre-empt index rebalancing announcements by slowly shifting the composition of their fund to thwart predatory front running.[20]

Dr. Lewis however is suggesting on page 77 that the fund would be able to complete its trading in one day, otherwise as he says, front running becomes an issue. In fact, Dr. Lewis himself admitted as much in another part of the Precidian filing, when on page 71 he says,

> *"An ETF structure based on daily disclosure is highly susceptible to reverse engineering because once sufficient information can be obtained about changes in portfolio composition, it may become possible to forecast future portfolio changes.* ***This is a significant issue for actively managed funds because it may take more than one trading day to strategically accumulate shares for an active position*** *[emphasis added]. This allows sophisticated investors to potentially front-run new positions, eroding "alpha" that should have accrued to shareholders."*

Predatory front running doesn't need to happen every time a portfolio manager puts on a trade. The predator will only do so when its profitable so by knowing the full portfolio they can sit back and await the opportune moment(s).

Third, Dr. Lewis focuses his argument on liquid stocks. The ETF Funds to be managed by Royce are small cap funds, and in some instances illiquid, as described by Precidian in April 2017 on page 4 of the preliminary SAI,

> "*It is anticipated that* ***some of the portfolio securities of the fund may not be widely traded*** *[emphasis added], and that the fund's position in such securities may be substantial in relation to the market for such securities."*

And perhaps Dr. Lewis might not be so unconcerned that "it was feasible to reverse-engineer" a Precidian ETF portfolio if he had thought about it from the viewpoint of Mr. McCabe, who stated in his October 12, 2017 comment letter that portfolio disclosure, "*…could result in the* ***manager of the ETF breaching his fiduciary duty*** *[emphasis added] to the ETF and its shareholders".*

Contrasting the Conclusions of Drs. Cooper, Lewis & Glosten

A close read of the conclusions prepared by Drs. Cooper, Lewis and Glosten about reverse engineering show they are out-of-step with each other and illustrate an illogical consensus between the three of them

[20] https://www.investopedia.com/articles/active-trading/083115/how-hedge-funds-frontrun-index-funds-profit.asp

that Precidian is hanging its hat on, as illustrated by the three gentlemen's' statements in the most recent Precidian filing for exemptive relief.

Mr. McCabe and Precidian now put heavy emphasis on Dr. Glosten's very recent work. Dr. Glosten states on page 83 of Exhibit F in Precidian's September 29, 2017 filing that, *"The broad conclusions are, using a sophisticated regression technique…analysts can do a little bit better than* ***random guessing of the portfolio constituents*** *[emphasis added] ..."*

While Dr. Lewis in his white paper concludes on page 76 in Exhibit D that, *"The ability to reverse engineer the underlying portfolio is a function of* ***the granularity and frequency of the disclosure*** *[emphasis added]"*.[21]

And Dr. Cooper's statistical analysis is summarized on page 66 in Exhibit C that, *"The summary conclusion is that it seems* ***rather unlikely*** *[emphasis added] that the Precidian ETF construction methodology will result in a product that can be reverse engineered…"*

Ironically, if Dr. Glosten's conclusion is correct that reverse engineering techniques are essentially 'random guessing of the portfolio constituents', then:

1. The ability to reverse engineer would be **independent** of the '*granularity and frequency of the disclosure*', so clearly contradicting Dr. Lewis; and

2. The ability to reverse engineer would most certainly **not** be '*rather unlikely*'. The only correct answer would be that it was impossible, so clearly contradicting Dr. Cooper.

Finally, there is an important question that Precidian should answer – were these academic consultants retained with instructions to demonstrate that the Precidian ETF structure could be reverse engineered, or were they retained with instructions to demonstrate that the Precidian ETF structure could NOT be reverse engineered? It's of fundamental importance as it colors the way the consultants approached the issue and no doubt led possibly to bias in the parameters and techniques employed.

Front Running Non-Transparent Mutual Funds

I will conclude my remarks by referencing a very interesting piece published last year in Barron's about front running of small cap mutual funds using predatory shorting strategies.[22] The article specifically mention's the Royce Premier Fund as an example of a fund vulnerable to the predatory strategy described.

This fund of course is the template for the Royce Premier ETF that the Exchange wishes to list and trade. Barron's references a study prepared by Drs. Dyakov and Verbeek from the Rotterdam School of Management,

> *"We show that using publicly available information, you can predict the stocks most likely to be sold by funds in distress," says Dyakov. By taking a short position in these stocks, you are also likely to put a downward pressure on prices.*

[21] Note that we agree with Dr. Lewis, as Blue Tractor has amply demonstrated now in two comment letter the ease of reverse engineering with regression techniques dependent upon the NAV level, reporting precision, volatility etc.

[22] http://www.barrons.com/articles/is-your-fund-being-front-run-1463803433

Illiquid assets face the most pressure from distressed selling. Stocks and bonds of big blue-chip companies are widely held and efficiently priced. But a few funds can own a significant percentage of a small company's outstanding stocks or bonds. Both studies found that the advantage short sellers have is greater with such funds.

Actively managed small-company funds have seen $25.4 billion in outflows in the past 12 months, according to Morningstar. That represents 6.5% of the $388 billion that such funds had at the start of that period. But some funds have fared far worse than others. ***The small-company specialists at Royce Funds*** *[emphasis added] lost 33% of its assets to shareholder redemptions in the past year. Investors pulled $1.9 billion from Royce Premier (ticker: RYPRX) alone, amounting to 42% of its assets.*

In an e-mailed response to Barron's, John Davis, Royce's director of communications, stated, "We don't see Premier as a good fit for the story because throughout its history the fund has invested primarily in larger and more-established small-cap stocks, and so has not really faced the issues your piece will be covering".

The problem is that Dyakov and Verbeek's study indicated that "larger and more established" small-caps are even better suited for a short strategy. That's because in order to short a company, investors must first borrow its shares, and the shares of the tiniest companies are harder to borrow."

Conclusion

Precidian emphatically frames the purpose of their ETF structure on page 7 of their September 29, 2017 filing for exemptive relief,

> *"Applicants further believe that the proposed operational structure of the Funds will permit an Adviser to manage the Funds using proprietary investment strategies* ***without being susceptible to "front running" and "free riding" by other investors and/or managers which could otherwise harm, and result in substantial costs to, the Funds****. [emphasis added]"*

Nobody should kid themselves that predatory front running will not take place with an ETF under a purported non-transparent structure that as amply demonstrated, can be readily reverse engineered.

Indeed, the errors documented in the statistical analyses prepared by Drs. Cooper and Glosten and the success seen in both of Dr. Hayter's studies provide a road map for an entity that wishes to engage in reverse engineering of the Royce ETF Funds.

As noted in the recent Barron's article and 2001 ICI comment letter to the Commission, predatory front running using public information currently happens with non-transparent mutual funds.

Combining sophisticated tactics as described in Barron's, along with the proprietary reverse engineering techniques as described by Dr. Hayter, ensures that the Royce ETF Funds the Exchange wishes to list and trade will be highly vulnerable from the opening bell.

For these reasons, the Exchange's rule change application should be disapproved.

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Thank you in advance for your consideration of my commentary. I welcome any questions the Commission may have as a result and can be reached at [redacted].

Sincerely,

Simon P. Goulet
Co-Founder
Blue Tractor Group, LLC

Cc: Honorable W.J. “Jay” Clayton III
Chairman, U.S. Securities and Exchange Commission

Honorable Michael S. Piwowar
Commissioner, U.S. Securities and Exchange Commission

Honorable Kara M. Stein
Commissioner, U.S. Securities and Exchange Commission

Ms. Dalia Blass
Director, Division of Investment Management
U.S. Securities and Exchange Commission