Professional Leave Report Cover Sheet

Name: Vinh Huy Nguyen

Department: Finance & Business Law

College: CSB

Leave taken: ◉ Sabbatical ○ Difference in Pay ○ Professional Leave without Pay

Time Period: ◉ Fall 2023

○ Spring

○ Academic Year

○ Other

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Post-Sabbatical Report

Vinh Huy Nguyen[1]

Executive Summary

During the sabbatical period, I accomplished all the objectives described in the proposal. The special issue of the Journal of Risk and Financial Management (JRFM) in exchange-traded funds (ETFs) that I co-edited published original research articles on cryptocurrency ETFs and the effects of reverse share splits on ETF liquidity. I co-authored an original empirical research article on innovations in ETFs. The paper is currently under a final review by the American Journal of Finance and Accounting.

Keywords*:* special issue, editor, peer-reviewed article, original research, exchange-traded funds

Abbreviated Sabbatical Proposal

The objectives of my sabbatical in the fall of 2023 are to (1) co-edit a special issue of the Journal of Risk and Financial Management and (2) co-author an article about exchange-traded funds to be submitted at an Australian Business Deans Council-rated, peer-review journal or a journal listed in the appropriate Cabell's Directory as blind reviewed (not editorial), with at least two external reviewers per article, and an acceptance rate of no greater than 60%.

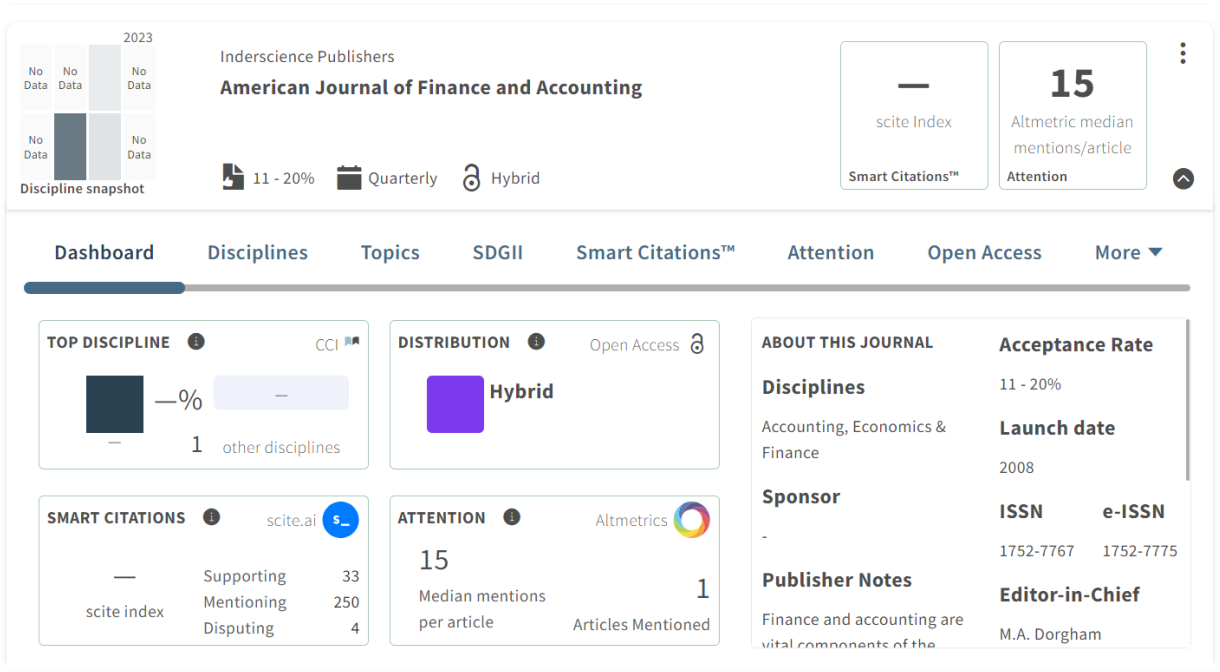
Sabbatical Accomplishments

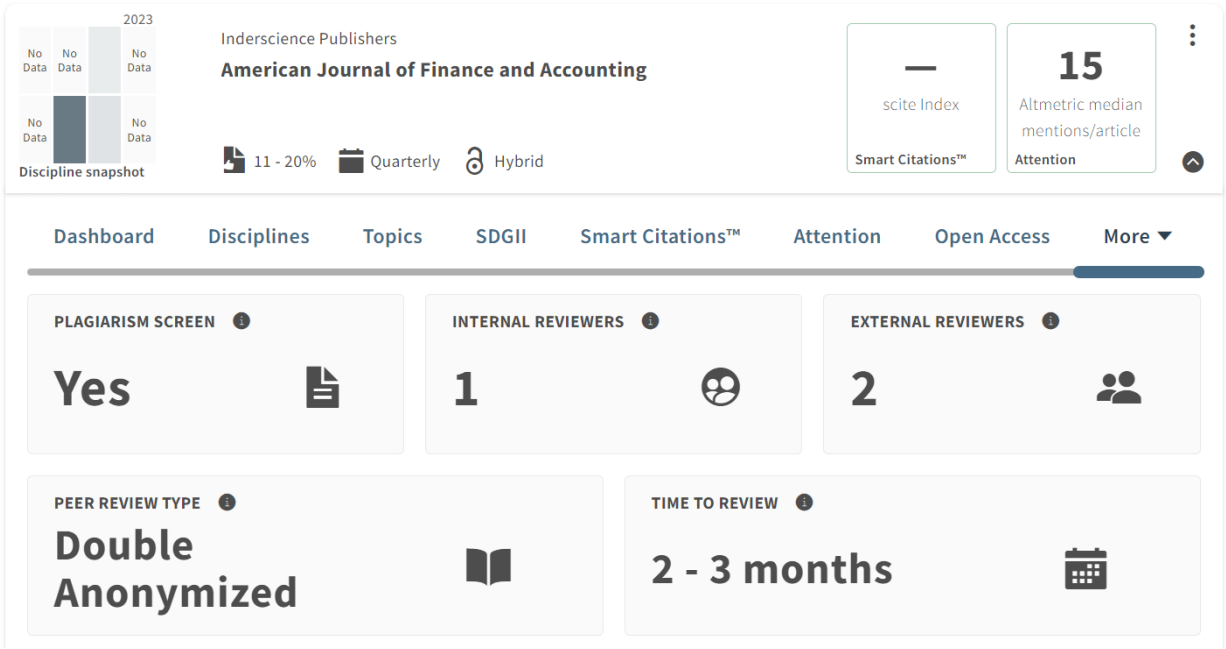
As a professor of investments in the Department of Finance, Real Estate, and Business Law, I am very thankful that I received the time to learn more about exchange-traded funds—an important area of investments and financial planning. My gratitude goes to the department chair, associate dean, dean, and provost for approving my sabbatical.

Exchange-traded funds are one of the fastest-growing assets in the investment world. The total global size grew from $1.7 trillion in 2012 to $9.5 trillion in 2022. New products are created every year, and most recently, as of the summer of 2023, investors can trade ETFs based on a single stock. These single-stock exchange-traded funds (SSETFs) are created using derivatives and are considered high-risk investments. The United States Securities and Exchange Commission has warned investors of their high-risk nature and suggested that these are not for the casual investors. Nevertheless, interest in these SSETFs has grown wildly even though not much is known about them. From the scholarly perspective, even less is known about SSETFs as there are only a couple of peer-reviewed articles written about these products.

[1] Associate Professor, California State University, Fresno, Craig School of Business, 5245 N Backer Ave. M/S PB 7, Fresno, CA 93740, VinhN@csufresno.edu, 559-278-8214

During my sabbatical, I read articles written by practitioners and research papers in a related ETF product published by scholars to lay a solid foundation. From my reading, I developed questions that later became hypotheses for my original research paper. I also spent a significant amount of time collecting qualitative and quantitative data. In September 2023, the paper was submitted to the China Finance Review International, a peer-reviewed journal meeting the quality set by the Craig School of Business. Unfortunately, I did not receive an acceptance from the editor. However, the editor provided thoughtful feedback. Using this feedback, I improved the paper and submitted it to the American Journal of Finance and Accounting in October 2023. The journal has an acceptance rate of 11-20% in the Cabell's Directory and requires reviews from one internal and two external referees. The paper is under the final review as of April 2024.





In addition to an original research paper, I also co-edit a special issue of the *Journal of Risk and Financial Management* in exchange-traded funds. According to the Australian Business Deans Council 2022 (latest) Journal Quality List, the JRFM is rated as a B journal. More information about the list can be found here: https://abdc.edu.au/2022-abdc-journal-quality-list-released/. The Craig School of Business uses the ABDC Journal Quality List in addition to Cabell's Directory to determine the quality of research published by tenured and tenure-track faculty.

In the call for papers, my co-editors and I invited scholars to submit original research on both equity and non-equity exchange-traded funds. We also encouraged submissions related to topics including, but not limited to, the categorization, management, trading, and impact of ETFs. Contributions focusing on the fund inflows, new entrants, innovative products, and distribution opportunities of ETFs were particularly welcomed. Environmental, social, and governance investing studies, especially during the COVID-19 pandemic, were also of strong interest.

To highlight the research brought forward by the special issue, topics in cryptocurrency ETFs and the effects of reverse share splits on ETF liquidity were of special importance. Drs. Marcos Velazquez, Alper Gormus, and Nima Vafai of The University of Texas Permian Basin used daily ETF prices at the market closing to show how cryptocurrency ETFs can impact ETFs of traditional asset classes. They find significant price and volatility spillover effects on ETFs of several currencies and small-cap equities, in particular. In addition to their novel findings, they employed several tests that ensured the robustness of the results. Below is an excerpt from the published paper regarding the tests for volatility transmission:

> We further evaluate the volatility interactions amongst our datasets by employing a revised version of the Lagrange multiplier (LM) volatility transmission test, developed by Hafner and Herwartz (2006) (referred to as HH). HH constructs a GARCH (1,1) model for the i, j series and subsequently defines:
>
> $$\varepsilon_{it} = \xi_{it}\sqrt{\sigma_{it}^2\left(1 + z'_{jt}\pi\right)},\ z_{jt} = \left(\varepsilon_{jt-1}^2, \sigma_{jt-1}^2\right)' \tag{3}$$
>
> where ξ_{it} are the standardized residuals of series i. ε_{jt}^2 and σ_{jt}^2 are squared disturbance terms and volatility for series j, respectively. The null hypothesis of no volatility transmission ($H_0: \ \pi = 0$) is tested against the alternative hypothesis of volatility transmission $H_a: \ \pi \neq 0$). The Lagrange multiplier (LM) component is defined as:
>
> $$\lambda_{LM} = \frac{1}{4T}\left(\sum_{t=1}^{T}\left(\xi_{it}^2 - 1\right)z'_{jt}\right)V(\theta_i)^{-1}\left(\sum_{t=1}^{T}\left(\xi_{it}^2 - 1\right)z_{jt}\right) \tag{4}$$

Drs. Olesya Lobanova and Alexandre Aidov of the University of Houston-Victoria offered insights into the positive impact stock splits have on ETF liquidity. The authors used proven liquidity measures to eliminate any potential problems in methodology. Below is an excerpt describing their test design:

Abdi and Ranaldo (2017) propose a modified (AR) estimator to proxy for liquidity that utilizes a distinct information set comprising daily close, high, and low prices. The AR estimation is characterized by its independence from trade direction and lack of necessity for adjustments during nontrading periods. Consequently, the AR spread proxy offers a more accurate measure of liquidity when compared to the High–Low estimator (Le and Gregoriou 2020). The AR spread estimator is used as a proxy for liquidity in this study and is calculated for ETF i and day t as follows:

$$Spread_{i,t} = \sqrt{max\{4(c_{i,t} - \eta_{i,t})(c_{i,t} - \eta_{i,t+1}), 0\}} \quad (1)$$

where $\eta_{i,t}$ is the average of the high and low log-price, and $c_{i,t}$ is the close log-price.[4] Similarly to Bandyopadhyay et al. (2010), we focus on the percent spread, which is formulated as follows:

$$Percent\ Spread_{i,t} = \frac{Spread_{i,t}}{Close\ Price_{i,t}} \times 100 \quad (2)$$

where $Spread_{i,t}$ is the AR estimated spread and $Close\ Price_{i,t}$ is the close price for ETF i on day t.

Modifications, if Any, to the Original Proposal

No modifications were made during my sabbatical. Associate/Interim Dean David Vera approved a revision before I left for my sabbatical regarding the target journal for my research article.

Original: "(2) co-author an article about exchange-traded funds (ETFs) for the special issue."

Revised: "(2) co-author an article about exchange-traded funds (ETFs) to be submitted at an ABDC-rated, peer-review journal or a journal listed in the appropriate Cabell's Directory as blind reviewed (not editorial), with at least two external reviewers per article, and an acceptance rate of no greater than 60%."

The revision was necessary to avoid a conflict with the Craig School of Business's policy regarding editors publishing in their respective journals while overseeing the review process.

Objectives of the Original Proposal (If Any) That Were Not Accomplished

All objectives described in the proposal were met during the sabbatical period.

Anticipated Outcomes for the Near Future as a Consequence of the Leave's Activities.

Using the knowledge gained from my research paper on ETF innovations, I am now working on another research project on ETFs focusing on the dynamic relationship between volatility and liquidity. The new research is a collaboration between Dr. Le Zhao at Fresno State and Chen Li, a Ph.D. candidate in finance at Florida International University. The research requires data that is not available at Fresno State, but Dr. Zhao and I have the computer science skills to collect novel datasets from the New York Stock Exchange and NASDAQ. So far, we have found that single-stock ETFs have higher volatility and lower liquidity than the underlying stocks, and during periods of higher stock volatility, the liquidity of single-stock ETFs is significantly reduced. We hope to find evidence that traders can mitigate the liquidity problem by using intermarket sweep orders and routing orders to lit exchanges.

In addition to adding more work to my research pipeline, I have incorporated my knowledge in ETFs into my FIN 120 Principles of Finance as a separate asset class for valuation. For FIN 128 Investments and MBA 232 Seminar in Investments and Portfolio Management, I have included

not only the valuation of ETFs but also the actual trading of ETFs on Thinkorswim—an award-winning platform used by investors worldwide.

Vinh Huy L. Nguyen's Sabbatical Proposal for Fall 2023

Section 1. The Proposal

I am requesting a sabbatical in the fall of 2023 to (1) co-edit a special issue of the Journal of Risk and Financial Management (JRFM) and (2) co-author an article about exchange-traded funds (ETFs) for the special issue.

As a co-editor of the special issue, I will be assigning reviewers and reading the submitted manuscripts to ensure that the selected papers meet the high scholarly standards set by the JRFM. My co-editors are Dr. Suchismita Mishra, Professor of Finance and Associate Dean, at Florida International University, and Dr. Le Zhao, Assistant Professor of Finance, at California State University, Fresno. Together, we will review papers after the manuscript submission deadline of August 1, 2023. The journal has a rapid publication schedule of sending out the first decision approximately 18.7 days after the submission and an acceptance decision after 5.8 days since the most recently revised and resubmitted manuscript. If we were to give the authors two months to revise and resubmit their manuscripts and the JRFM one month to publish the accepted papers, the entire process should take about four months. This takes us to December 2023. Hence, I am confident that the special issue can be completed within the sabbatical time frame. I will also work with my co-editors to write an introduction article for the journal. This article will review the previously published work and innovations in ETFs. Since the paper is the first article in the special issue, I am confident that the article will be completed within the time frame described previously. Travel to Miami during the sabbatical is needed to coordinate with the JRFM, select the papers for the special issues, and finalize the post-publication process. I will use my SA and/or PDF accounts to pay for any travel costs.

Section 2. Benefits to Me

The sabbatical will provide time to serve as an editor for a well-ranked, peer-reviewed journal in finance. I have only participated in academic research from the author's perspective. This editorship will be the first time I am taking the lead from the review side. The JRFM has published over 1,600 articles and 147 of these have been cited 10 times or more. The journal has grown significantly over the years with 78,656 article views in 2017 to 1,603,231 in 2021. It is indexed in ESCI and Scopus. The Austrian Business Deans Council rated the journal as a B. Being able to contribute to the JRFM's scholarly impact on business research as an editor is an advancement in my academic career that will open more editorial opportunities.

Section 3. Benefits to the University

One of the co-editors is Dr. Le Zhao, who started her first semester at California State University, Fresno in the fall of 2022. One of the benefits of working together on the special issue is that we will promote scholarly collaboration with our new hires. These joint projects can increase the sense of belongingness and help to retain talented scholars, such as Dr. Zhao. Furthermore, the JRFM has an international readership as well as a domestic one. Along with Dr. Zhao, we will represent Fresno State and reach thousands of readers. Our work will also provide students with recent scholarly research on exchange-traded funds and practical investment knowledge that they can use for wealth management and retirement planning.