International Review of Accounting, Banking and Finance
Vol 15, No. 1, Spring, 2023, Pages 60-69
IRABF
©2023

The Road to Market-beating Returns is Paved with Sustainability Investing

Tyrone Panzer L. Chan Pao [1*]

1. *Department of Financial Management (DFM), De La Salle University (DLSU)*

Accepted April 2023

A B S T R A C T

Monthly performance metrics were computed for the 3 Philippine peso-denominated sustainability-focused Philippine equity UITF's and their stated benchmark index, the Philippine Stock Exchange Index (PSEi), from February 2021 to February 2023. Further, this study also compared the R-squared and the information ratios of the flagship Philippine peso-denominated actively-managed equity UITF's of the top 4 banks in the Philippines to that of the aforementioned sustainability-focused UITF's for the same period. Results show that all funds were closet indexers as all of them had R-squareds of at least 70%. Aside from that, BDO esg fund and ATRAM Y unit class had the 2nd and 4th highest IR's, respectively, among 8 funds that were analyzed. This shows that sustainability investing works in the Philippines. It was also recommended that future research use the PSEi Total Return Index instead of the PSEi to account for the reinvestment of cash dividends.

Keywords: UITF, ESG, Sustainable investing, R-squared, Information Ratio

JEL classification: G11, G23, G51, G53

[*] Department of Financial Management (DFM) 2nd Floor, Faculty Center. De La Salle University 2401 Taft Avenue, 1004 Manila, Philippines. tyrone.chanpao@dlsu.edu.ph

1. Unit Investment Trust Fund

Per the website www.uitf.com.ph, a resource center put up by the Trust Officers Association of the Philippines (TOAP), a UITF or unit investment trust fund is a pooled trust fund operated and managed by a trust entity. This fund is open-ended and is denominated in Philippine pesos, US dollars or any acceptable third currency and is governed by their respective declaration of trust or plan rules (hereafter DOT).

A trust entity, as defined in the Bangko Sentral ng Pilipinas (hereafter BSP) Manual of Regulations for Banks (MORB), is a stock corporation licensed by the BSP to engage in trust business. Thus, this can be a bank or a non-bank financial institution or a trust corporation. As such, it is also regulated by the BSP.

Investing in UITF's is essentially buying units of participation in the fund and thus is priced in terms of net asset value per unit (hereafter NAVPU). This is unlike investing in mutual funds where it is priced in terms of net asset value per share (NAVPS) as the investor is deemed a shareholder thus has all the rights accruing to a shareholder except for pre-emptive rights.

At the broadest level, UITF's are classified either as a. money market fund; b. bond fund; c. equity fund; and d. balanced fund. In turn, each of these classifications would have different objectives, mandates and strategies as articulated in their DOT's and thus would have their own unique set of risks and returns.

Money market funds are invested principally in short-term, fixed income deposits and securities with portfolio duration of one year or less. Bond funds are invested in a portfolio of bonds and other similar fixed-income securities with portfolio duration which may exceed one year. Equity funds are invested mainly in stock issues to achieve a higher long-term appreciation or growth of capital. Finally, balanced funds are invested in both fixed income and equity, to achieve a higher return compared to a purely-fixed income fund.

On top of these general classifications, UITF's can also be classified as feeder funds and fund-of funds. Feeder funds are UITF's that are mandated to invest at least ninety percent of its assets in a single local or foreign collective investment scheme. On the other hand, funds of funds are UITF's that are mandated to invest at least ninety percent of its assets in at least two collective investment schemes.

2.Environmental, Social and Governance

Although there is no official definition, the consensus among industry leaders is that ESG, short for Environmental, Social, and Governance, is a set of broad non-financial factors that the investment community has started to use to assess the sustainability and ethical impact of an investment in a company's securities.

"E" stands for "environmental" and is defined by the CFA Institute as the conservation of the natural world which includes issues such as but not limited to climate change & carbon emissions.

'S" stands for "social" and is defined as consideration for people and relationships. This includes topics such as customer satisfaction, gender & diversity, among others.

While "G" stands for "governance" and is defined as standards for running a company. This includes board composition, bribery & corruption, among others.

Making things complicated is the fact that each of these factors are interconnected and thus it would be difficult to identity an issue as exclusively environmental, social or governance.

The US SEC defines ESG funds as funds that practice ESG investing, also known as sustainable investing, socially responsible investing, and impact investing, and may involve any or all of the following:

1. Investing in companies with a stated commitment to at least one of the ESG factors;

2.Investing in companies that have high ESG scores;

3.Avoiding investing in companies that are not consistent with any one of the ESG factors

3. Review of Related Literature

Das,N., Ruf,B., Chatterjee, S. and Sunder, A. (2018) assessed the monthly risk-adjusted returns of seventy three socially responsible mutual funds (SRMF) for the period 2005-2016. All these funds have a socially responsible mandate, are based in the US and were rated in the upper half of the Morningstar Sustainability Rating.

The overall study period was divided into three sub-periods, namely the period before and during the Great Recession, period of economic recovery, and the period of economic expansion.

The research found that it was during the 1st period sub-period that the highest-rated funds outperformed the low and medium-rated funds as evidenced by the sharpe ratio.

However, Hartzmark, S. and Sussman, A. (2019) analyzed the monthly performance of the funds, numbering at least twenty thousand, in the Morningstar Sustainability Rating, covering the period March 2016 to January 2017. On the basis of sharpe ratio, and excess returns over three benchmarks, the authors discovered that the highly-rated funds did not outperform the returns of the lowest rated funds.

Results from a 2019 white paper by Morgan Stanley Institute for Sustainable Investing dispelled the widely-held belief among individual investors at that time that investing sustainably requires sacrificing returns. Specifically, the performance of 10,723 ESG mutual funds and ETF’s identified using the classification from Morningstar were compared to non-ESG funds for the period 2004 to 2018 using the Wilcoxon statistical test and robustness test. It found that in terms of total returns, there was no statistically significant difference between the ESG funds and the non-ESG funds.

However, in terms of downside deviation, it was found that it was significantly smaller for ESG funds compared to its non-ESG counterparts. Breaking it down by asset class, it was found that the international equity and US equities provided the best downside protection.

Winegarden (2019) of Pacific Research Institute studied the performance of thirty ESG funds that were tagged either as having existed for more than ten years or outperformed the S&P 500 index fund (SPY) in the short-term. These ESG funds were then classified as “broad-based index”, “waste & clean tech”, and “social goals”

The top 10 holdings of said funds were then examined. The share of the top 10 holdings for ESG funds comprise 36.7 percent of its entire portfolio compared to SPY’s 21.3 percent, indicating that the ESG funds are not as diversified as the S&P 500 and thus riskier. Breaking it down further, the ratio is spectacularly high for the “waste & clean tech” classification at 48.7 percent.

In terms of costs to the investor as measured by the expense ratio, the ESG funds had an expense ratio of 0.69 percent and is a far cry from SPY’s 0.09 percent.

It is no wonder then that the ESG funds and its three sub-classifications underperformed the SPY on an annual basis at the end of 25 years. Specifically, the SPY gained 6.15 percent while the ESG funds and its sub classifications recorded losses.

The study went on to compare the performance of the eighteen ESG funds that have a full ten-year track record over a one-year, five-year, and ten-year period and found that very few of them were able to outperform the SPY over the same period. It is on these grounds that Winegarden concluded that it would be very difficult for ESG funds to outperform a broad-based index such as the S&P 500.

Hale (2020), writing for Morningstar, compared the performance of two hundred six sustainable equity funds in the US, which includes both open-end and ETF's, to that of traditional conventional equity funds within the same category at the end of March 2020. A high proportion of the sustainable equity funds finished in the upper half of their respective categories and over forty percent finished in the best quartile of their respective category.

The study also found that twenty-four out of twenty-six sustainable index funds performed better than their traditional conventional index fund equivalents in the 1st quarter of 2020. Out of the twenty-six, twelve are in the US, eleven are in developed markets other than the US, while three are investing in emerging markets. Only the US sustainable index funds had a less than perfect batting rate as only ten of the twelve outperformed their counterparts.

There are a number of reasons why the sustainable cohorts performed better on a relative basis such as the

non-exposure to the energy sector but the most salient reason was that these funds invest in the stocks that scored high on an ESG rating basis and these stocks, usually, are high quality companies. Historically, stocks of high quality companies tend to perform better during times of mass panic.

Milanos, Rompotis, and Moutzouris (2022) examined the risk-adjusted returns of ESG funds and non-ESG funds for the 2017-2021 period. This is broken down into sixty four US funds and eighty European funds. The alpha, sharpe ratio, treynor ratio and excess daily returns were computed for those funds and where it was discovered that the difference between ESG funds and non-ESG funds are not statistically significant.

4. Methodology & Results

There are currently only three Philippine peso-denominated sustainability-focused equity UITF's and they are follows:

Table 1

Count	Fund Name	Month & Year launched
1	BDO ESG Equity Fund	December 2015
2	ATRAM Philippine Sustainable Development and Growth Fund (A Unit Class)	February 2021
3	ATRAM Philippine Sustainable Development and Growth Fund (Y Unit Class)	February 2021

Fund Declaration of Trust

Launched in December 2015, the BDO ESG Fund invests in Philippine-listed companies which its fund manager believes adhere to ESG practices and charges a trust fee of 1 percent per annum. An investor can buy units of participation in the fund for as low as Php 10,000.

Both the A & Y unit class of ATRAM Philippine Sustainable Development and Growth Fund were launched in February 2021. They both invest in Philippine-listed companies whose products and services are considered by their fund managers as contributing to positive environmental or social change, thereby making an impact on the sustainable development and growth of the economy. An investor can participate in the A and Y unit class for a minimum investment of Php 1,000 and Php 200 million respectively.

The monthly returns of these three funds were computed from their month-end NAVPU. The same procedure was applied to compute for the monthly return of the Philippine Stock Exchange Index (hereafter PSEi), the benchmark index as indicated in their respective DOT's. The R-squared of the funds were derived as can be seen in table 2. Also known as the coefficient of determination, R-squared is a statistic that tells investors how strong the relationship between the performance of a fund and a benchmark index. In other words, it measures the percentage of the fund's performance that can be explained by the performance of its benchmark index. (Morningstar). A higher R-squared is desirable for index funds while a lower figure is desirable for actively-managed funds.

Table 2

Fund Name	R-Squared
BDO ESG Equity Fund	97.7383%
ATRAM Y Unit Class	84.7896%
ATRAM A Unit Class	84.1934%

The author's

Table 3 shows the R-squared classification from Morningstar, Inc., an influential investment research and investment management specializing in rating and ranking mutual funds.

Table 3

Morningstar investing glossary

R-squared	Interpretation
70%-100%	High correlation between the portfolio's returns and the benchmark's returns
40%-70%	Average correlation between the portfolio's returns and the benchmark's returns
1%-40%	Low correlation between the portfolio's returns and the benchmark's returns

https://www.morningstar.com/InvGlossary/r_squared_definition_what_is.aspx

Based on the R-squared of the three funds and on the classification from Morningstar, it is clear that all three funds are closet indexers. Among them, ATRAM A unit class has the lowest R-squared at 84.1934 percent while BDO ESG Equity Fund has the highest R-squared at 97.7383 percent.

In a June 2017 CNBC interview, Univeristy of Notre Dame finance professor Martijn Cremers provides two reasons why fund managers of actively-managed funds do closet indexing. Its either they do not want to underperform their benchmark index big time and be fired from their jobs or their funds have gotten so big that the stocks they own have a big overlap with the index (Anderson, 2017).

Then, the information ratios (hereafter IR) of each of the three funds were computed. It is the higher order version of the sharpe ratio and as such is considered by many in the investment industry as the best measure of risk-adjusted performance. (Chan Pao, 2017) (Saravanan, 2019). The ratio measures the active return for every unit of risk taken and is calculated by dividing the active return by the tracking error (Kidd, 2011 as cited in Chan Pao, 2017). A higher figure is preferred as it means an investment manager is efficient in taking risks to generate that active return, and that investment manager is more consistent in outperforming the benchmark index. Informa Investment Solutions of Informa plc, a leading business intelligence and international events group, considers an IR in the range of 0.4 to 0.6 good.

It can be computed in a number of ways. This study follows the method detailed and employed by David Harper of Bionic Turtle, a provider of review materials for the Financial Risk Management (FRM) certification exam. The average monthly active return was calculated by subtracting the monthly return of the benchmark index from the monthly return of the fund and averaging them. Then, this was divided by the tracking error. The annualized IR was also computed.

As can be seen in table 4, BDO ESG equity fund had the highest risk-adjusted return with an IR of 0.9578. This is followed by ATRAM Y unit class with an IR of 0.5625. ATRAM A Unit Class had the lowest at 0.3483 and failed to make the cut.

Table 4

Fund Name	Annualized Information ratio
BDO ESG Equity Fund	0.9578
ATRAM Y Unit Class	0.5625
ATRAM A Unit Class	0.3483

The author's

However, it should be pointed out that benchmarking the funds to the PSEi is not strictly an apples to apples comparison as the cash dividends from the stock portfolio of the funds are reinvested while the PSEi only measures stock price appreciation and depreciation. As a result, the funds generated high IR's even though they were all closet indexers.

The R-squared and the annualized IR of the three UITF's were then compared to that of the flagship Philippine peso-denominated actively-managed equity UITF's of the top four banks in the Philippines for the same period. This is summarized in table 5.

Table 5

UITF	Benchmark	R-squared	UITF	Annualized IR
BDO Equity Fund	PSEi	99.5118%	BDO Equity Fund	1.3152
BPI Invest Equity Value Fund	PSEi	99.5071%	Odyssey Philippine Equity Fund	0.9198
Odyssey Philippine Equity Fund	PSEi	99.3215%	BPI Invest Equity Value Fund	0.3672

Metro Equity Fund	PSEi	98.3998%	Metro Equity Fund	0.2188
Land Bank Equity Fund	PSEi	93.6372%	Land Bank Equity Fund	-0.2043

The author's

Putting all the funds together reveals that BDO equity fund, BDO ESG equity fund, Odyssey Philippine equity fund, and ATRAM Y unit class scored high IR's even though all four of them are closet indexers as can be gleaned from table 6. As was mentioned above, using the PSEi as the benchmark is not technically appropriate as it does not take into account the reinvestment of cash dividends while UITF's do.

Another thing that can be taken from the results is that the two ATRAM funds had the lowest R-squareds indicating that there was at least an attempt not to invest in the component stocks of the PSEi.

Table 6

UITF	R-squared	UITF	Annualized IR
BDO Equity Fund	99.5118%	BDO Equity Fund	1.3152
BPI Invest Equity Value Fund	99.5071%	BDO ESG Equity Fund	0.9578
Odyssey Philippine Equity Fund	99.3215%	Odyssey Philippine Equity Fund	0.9198
Metro Equity Fund	98.3998%	ATRAM Y Unit Class	0.5625
BDO ESG Equity Fund	97.7383%	BPI Invest Equity Value Fund	0.3672
Land Bank Equity Fund	93.6372%	ATRAM A Unit Class	0.3483
ATRAM Y Unit Class	84.7896%	Metro Equity Fund	0.2188
ATRAM A Unit Class	84.1934%	Land Bank Equity Fund	-0.2043

The author's

5. Conclusion

To summarize, the R-squared and the IR of the three Philippine peso-denominated sustainability-focused Philippine equity UITF's were calculated and analyzed. Results show that all three funds are closet indexers and two of them outperformed the PSEi on a risk-adjusted basis as evidenced by an IR of at least 0.5. It can therefore be concluded that it is possible for sustainability-focused funds to outperform the market on a risk-adjusted basis contrary to some previous studies.

These performance metrics were put side by the side with the R-squared and IR of the flagship Philippine peso-denominated actively-managed equity UITF's of the top four banks in the Philippines. Universal in the two rounds of comparisons is the fact that all funds were found to be closet indexers. Be that as it may, the two ATRAM funds had the lowest R-squareds indicates that there was an effort to avoid investing in the component stocks of the PSEi.

Ranking all the funds from the highest to the lowest IR shows that not only sustainable investing works but also traditional active management still works as BDO equity fund and Odyssey Philippine equity fund emerged in the top half.

To make the comparison more accurate, it is highly recommended that future research use the Philippine Stock Exchange Index Total Return Index (hereafter PSEi TRI) as the benchmark index even though it is not the benchmark indicated in the funds' respective DOT's. The PSEi TRI has the same component stocks as the PSEi but considers both price changes and the reinvestment of cash dividends.

References

Anderson, T. (2017). 'Closet indexing' can hurt investors, expert says. Retrieved June 23, 2020, from https://www.cnbc.com/2017/06/13/is-your-fund-manager-actually-a-closet-indexer.html

ATRAM Philippine sustainable development and growth fund a unit class. (2022). Declaration of Trust 2022.

Bangko Sentral ng Pilipinas. (2020). Manual of regulations for banks 2020. Retrieved March 1, 2023, from https://www.bsp.gov.ph/Regulations/MORB/2020MORB.pdf

BDO. (2019). BDO ESG equity fund declaration of trust 2019.

Bionic Turtle. (2017, November 6). Information ratio (FRM T1-11). Retrieved from https://www.youtube.com/watch?v=fZmuJ2A9TC8&t=107s

CFA Institute. (2023). ESG investing and analysis. https://www.cfainstitute.org/en/research/esg-investing

CFA Institute. (2023). The rise of ESG investing. https://interactive.cfainstitute.org/ESG-guide/what-is-sustainable-investing-238UB-188048.html

Chan Pao, T. (2017). Cigar butt investing in the Taiwan stock exchange (TWSE). Academy of Taiwan Business Management Review, Vol 13, Issue 1.

Das, N., Ruf, B., Chatterjee, S. and Sunder, A. (2018). ESG ratings and the performance of socially responsible mutual funds: a panel study. Journal of Finance Issues, ISSN 1932-4251, Vol. 17, Iss. 1, pp. 49-57, http://jofi.aof-mbaa.org/69097-jfi-spring-1.4512063/t-001-1.4512073/f-001-1.4512074/ a-010-1.4512079

Hale,J. (2020). Sustainable funds weather the first quarter better than conventional funds. Sustainability Matters. Morningstar. Retrieved March 1,2023, from https://www.morningstar.com/articles/976361/sustainable-funds-weather-the-first-quarter-better-than-conventional-funds

Hartzmark, S. and Sussman, A. (2019). Do investors value sustainability? A natural experiment examining ranking and fund flows. Journal of Finance 74, 6: 2789–2837.

Informa Investment Solutions. (2016). Information Ratio. Stat FACTS.

Kidd, D. (2011). The Sharpe ratio and the information ratio. Investment Performance Measurement Feature Articles. Volume 2011, No. 1. Retrieved from https://www.cfainstitute.org/learning/products/publications/ipmn/Pages/ipmn.v2011.n1.7.aspx

Milanos, N., Rompotis,G., and Moutzouris, C. (2022). The performance of ESG funds vis-à-vis non-esg funds. The journal of Impact & ESG Investing, Summer 2022.

Morgan Stanley Institute for Sustainable Investing. (2019).Sustainable reality: analyzing risk and returns of sustainable funds.

Morningstar. (2015). Modern portfolio theory (MPT) statistics. Morningstar Methodology Paper. Retrieved from https://morningstardirect.morningstar.com/clientcomm/Morningstar_Methodology_MPT_Statistics.pdf

Morningstar. (2016). Custom calculation data points. Retrieved from http://morningstardirect.morningstar.com/clientcomm/customcalculations.pdf

Philippine Stock Exchange (2019). Philippine stock exchange index total return index fact sheet.

R-squared. (n.d.). In Morningstar Investing Glossary. Retrieved June 23, 2020, from https://www.morningstar.com/InvGlossary/r_squared_definition_what_is.aspx

Saravanan, P. (2019). Mutual funds: what information ratio tells about your fund manager's performance. Financial Express. Retrieved March 1,2023, from https://www.financialexpress.com/money/mutual-funds-what-information-ratio-tells-about-your-fund-managers-performance/1512745/

Trust Officers Association of the Philippines. (2023). Unit investment trust fund FAQ. uitf.com.ph Retrieved March 1,2023, from https://www.uitf.com.ph/faqs.php

US Securities & Exchange Commission. (201). Environmental, social and governance (ESG) funds. Investor Alerts & Bulletin. Retrieved March 1,2023, from https://www.sec.gov/oiea/investor-alerts-and-bulletins/environmental-social-and-governance-esg-funds-investor-bulletin

Winegarden, W. (2019). Environmental, social, and governance (esg) investing: an evaluation of the evidence. Pacific Research Institute.

Appendix A

Monthly returns of PSEi and the 4 equity funds (February 26,2021- February 28,2023)

Date	PSEi	ATRAM Philippine Sustainable Development and Growth Fund (A Unit Class)	ATRAM Philippine Sustainable Development and Growth Fund (Y Unit Class)	BDO ESG Equity Fund	BDO Equity Fund	Land Bank Equity Fund	Odyssey Philippine Equity Fund	BPI Invest Equity Value Fund	Metro Equity Fund
02/26/2021	-5.177%	-3.139%	-3.030%	-3.456%	-4.312%	-2.227%	-4.465%	-4.467%	-4.292%
03/31/2021	-1.121%	0.302%	0.395%	-1.334%	-0.677%	-1.595%	-1.172%	-0.993%	-0.897%
04/03/2021	4.044%	3.190%	3.294%	3.608%	4.065%	2.913%	4.065%	4.105%	3.723%
05/31/2021	4.125%	6.159%	6.248%	4.781%	4.113%	2.636%	4.003%	4.229%	4.510%
06/30/2021	-9.152%	-5.381%	-5.263%	-8.139%	-9.070%	-6.811%	-9.154%	-8.859%	-8.049%
07/30/2021	9.333%	6.066%	6.189%	11.939%	9.859%	3.845%	9.447%	9.456%	10.619%
08/31/2021	1.421%	2.817%	2.922%	1.932%	1.020%	0.606%	0.729%	1.463%	3.251%
09/30/2021	1.464%	5.517%	5.612%	1.429%	1.587%	2.912%	1.735%	1.151%	0.981%
10/29/2021	2.072%	1.601%	1.808%	2.833%	2.559%	1.589%	2.126%	1.890%	2.156%
11/29/2021	-1.087%	2.695%	2.797%	-1.301%	-0.907%	-1.151%	-0.949%	-0.623%	-1.121%
12/31/2021	3.356%	0.389%	0.489%	2.509%	3.242%	1.206%	3.586%	3.397%	3.184%
01/31/2022	-0.688%	-1.547%	-1.457%	0.051%	-0.084%	-0.478%	0.026%	-0.181%	-1.271%

02/28/2022	-1.471%	-3.855%	-3.769%	-1.018%	-0.410%	-1.521%	-0.305%	-0.595%	-1.418%
03/31/2022	-6.555%	-6.710%	-6.633%	-6.009%	-6.781%	-4.704%	-6.987%	-6.812%	-6.690%
04/29/2022	0.645%	-1.307%	-0.632%	0.719%	1.190%	-0.660%	1.190%	0.892%	0.732%
05/31/2022	-9.141%	-6.837%	-6.672%	-7.972%	-9.429%	-6.557%	-9.500%	-9.428%	-9.983%
06/30/2022	2.607%	1.135%	1.674%	1.128%	2.543%	1.870%	2.477%	2.248%	2.684%
07/29/2022	4.239%	4.401%	4.291%	3.977%	4.203%	4.220%	4.489%	4.469%	3.939%
08/31/2022	-12.798%	-8.418%	-8.319%	-12.881%	-12.389%	-10.290%	-11.882%	-11.974%	-11.810%
09/30/2022	7.183%	3.553%	3.656%	7.096%	7.583%	3.613%	7.551%	6.597%	6.189%
10/28/2022	10.195%	8.369%	8.474%	10.440%	9.918%	7.720%	9.911%	9.914%	9.024%
11/29/2022	-3.162%	-2.666%	-2.553%	-3.779%	-3.462%	-1.790%	-2.746%	-3.678%	-3.437%
12/29/2022	3.455%	2.115%	2.264%	2.808%	3.048%	3.815%	2.615%	2.864%	2.887%
1/31/2023	-3.489%	-2.345%	-2.234%	-3.315%	-3.449%	-1.782%	-3.437%	-3.691%	-3.498%
2/28/2023	-5.177%	-3.139%	-3.030%	-3.456%	-4.312%	-2.227%	-4.465%	-4.467%	-4.292%