

# Ecofin Tax-Exempt Private Credit Fund (TSIFX)

## 1Q 2024 QUARTERLY COMMENTARY

### Fund Update

TSIFX had a NAV total return of 2.07% for the first quarter of 2024. Income provided the core component of return generation, with an income stream of 1.47% during the quarter complemented by a NAV increase producing a positive return of 0.60%. The fund ended the quarter with an effective duration of 0.63 years and a gross yield to worst of 6.80%. The distribution rate as of March 31, 2024, was 3.63%.

**Performance data shown is net of fees and reflects fee waivers in effect. In the absence of such waivers, total return would be reduced. Performance data quoted represents past performance; past performance does not guarantee future results. The investment return and principal value of an investment will fluctuate so that an investor's shares, when redeemed, may be worth more or less than their original cost. Current performance of the fund may be lower or higher than the performance quoted. Current performance of the funds may be lower or higher than the performance quoted. Performance data current to the most recent month end may be obtained by calling 855-TCA-FUND (855-822-3863) or visiting [www.ecofininvest.com](http://www.ecofininvest.com).**

The fund is not currently reinvesting into new assets as it raises the liquidity level to manage future liquidity needs for distributions and redemption requests. During the quarter, no new investments were made, and no new realizations occurred. We will continue seeking to create liquidity from the disposition of the non-performing and underperforming assets in the fund. We anticipate one to two more realizations to occur prior to the end of Q2 2024, as two of the properties are under contract that act as collateral for our loans. This is expected to create the liquidity for at least two quarters worth of redemptions and distributions, with more realizations anticipated by end of Q3 2024.

### Market Update

The first quarter of 2024 featured continued economic strength and a pause in inflation progress, resulting in higher Treasury yields and compressed credit spreads. Municipal bonds were able to withstand an increase in the supply of new issuances, outperforming Treasuries during the quarter. The 10-year AAA Municipal/Treasury yield ratio fell to 60% in March from a recent peak of 76% in early November 2023. Investors are now pricing 2.7 cuts to the Federal Funds rate in 2024, down from 6.3 cuts that were priced in at year end 2023.

The Bloomberg U.S. Aggregate, High Yield, Municipal, and High Yield Muni Indices returned -0.78%, 1.48%, -0.39%, and 1.51% for the quarter. Two-year Treasury Note yields finished the quarter up 38 basis points (bps) to 4.63%, and the benchmark ten-year Treasury Note yield rose 34 bps to close the quarter at 4.21%. High yield municipal bond spreads declined 19 bps during the quarter, closing at 185 bps according to Bloomberg data.

After several months of disinflationary data, potential difficulties lie ahead following hot February data, rising commodities, and continued deficit spending at the Federal level. Combining these factors with strong economic growth favors short duration fixed income in our view, which helps mitigate the elevated interest rate risk inherent in long duration assets.

### Investment highlights

- Investment objective is to seek to generate attractive total return with an emphasis on tax-exempt income
- Exposure to social purpose providers in the fields of education, healthcare, and waste transition
- Focus on directly originated credit securities backed by real infrastructure assets
- Seeks to capitalize on market inefficiencies where there is capital dislocation

### Key reasons to invest

- Attractive after-tax return potential, including tax-exempt income
- Diversification through generally uncorrelated alternative assets
- Shorter effective duration in a rising interest rate environment
- Experienced team

### Structure highlights

- Seeks to capture illiquidity premium of private investments
- Provides transparency of registered fund
- Daily mark-to-market valuations
- Low minimum investment
- 1099 tax treatment
- Scalability to clients

## Education

The public market for issuance of new K-12 charter school and private school revenue bonds in Q1 2024 was higher than the same timeframe in 2023. In Q1 2024 there were 19 new issues at a par value of \$601,615,000, a 58% increase over the same period in 2023. That said, there was a single issuance of \$214 million in Q1 2024 which, if absent, would have made Q1 2024 and Q1 2023 nearly identical.

While 2023 was a disappointing year, with a 25% decrease in par value for K-12 charter school and private school revenue bonds from the previous year, Ecofin believes much of the reduction was due to an absence of schools with exceptional credit profiles opting to refinance existing bonds in the midst of a period that saw 11 interest rate increases by the Federal Reserve. We also believe outflows from municipal bond funds had a negative impact on new issuance, as 2023 saw cumulative outflows of \$11 billion with \$9 billion of said outflows occurring in Q4 alone. With inflows of over \$2 billion and a decrease of 89 bps in the 30-year municipal market data (MMD) daily rate benchmark for Q1 2024 as compared to 2023's high, there isn't much reason to believe that K-12 charter school and private school bond issuance will not see a significant increase in volume in 2024.<sup>2</sup>

Noteworthy in the sector, Q1 2024 saw a major new study from the Equitable Facilities Fund. Its report, "2022 Charter School Bond Default Study: Default and Loss Rates Continue to Decline", provided valuable analysis of defaults on every charter school bond issue ever completed as of 12/31/2022. Key findings include:

- Only "94 charter schools (or their affiliates), representing 99 transactions, or 4.3% of the entire portfolio of 2,298 transactions, have experienced a monetary default in which borrowers failed to make full and timely debt service payments promised at the time of issuance."<sup>3</sup>
- "Primary causes for an obligor's inability to make scheduled debt service payments were identified as: subpar academic results; financial stress; lower than expected enrollment; governance"<sup>3</sup>
- A median recovery rate of 69.1% when "you combine the 59 foreclosure property sales with the refundings, bond exchanges, and those obligors which were able to overcome the default and make all debt service payments current again."<sup>3</sup>

Additionally, a trend we believe worthy of watching is the growth in both the number and par value of private school bond issues. While there has always been a market to finance facilities for affluent legacy private schools with significant endowments, we have started to see greater interest from investors in private schools serving lower and middle-income students. For 2023, there were three unrated bond financings with combined par value of \$90,518,000 for schools fitting this profile. As the number of states making private school choice programs (e.g.

vouchers, tax credit scholarships, etc.) available to most or all families expanding, we anticipate seeing increases this portion of the overall K-12 charter school & private school bond market.<sup>1</sup> At Ecofin, we continue to monitor and evaluate new and existing laws and selectively invest in established schools where private school choice programs provide significant credit risk mitigation.

## Senior Living

With each passing quarter senior living occupancy continues to improve since the lows of COVID and our senior population is one quarter closer to outpacing the current bed supply. In fact, we are less than one year away from the first baby boomer turning 80 years old. Given the current pace of new senior living development, our country is projected to supply 40% of the projected demand by 2030. That is an extraordinary shortfall which would require more than \$400 billion of investment over the next few years to close the projected demand gap.<sup>4</sup>

In Q4 2023, the for-profit senior living sector recorded its tenth quarter in a row of occupancy gains. Interestingly, the secondary markets we focus on saw occupancy increase by 2.2% to 87.0% occupied which is higher than the pre-pandemic milestone. Recovery in primary markets is not far behind and based on the past two years of absorption, should reach pre-pandemic levels in the second half of 2024<sup>4</sup>. From the start of Q4 2023 thru year-end, primary market occupancy increased 0.8% to 85.1% occupied.

Non-profit senior living has fared better than their for-profit brethren since the pandemic hit. As of Q4 2023, non-profit entrance fee continuing care retirement communities ("CCRC's") were 90.2% occupied. Additionally, asking rents have increased more in non-profit communities, up 5.8% and 5.7% in the assisted and memory care spaces, respectively.<sup>4</sup> Based on conversations with our operating partners, communities continue to pass along outsized rent increases to catch up with inflation, but are nearing a point of equilibrium.

Occupancy recovery has been fueled by over four years of slowing construction starts. In fact, 2023 recorded the lowest primary market inventory growth since 2005, when the National Investment Center for Seniors Housing & Care (NIC) started recording the data. Rising interest rates, elevated construction costs and tight lending conditions will continue to propel occupancy in the months to come. Based on Q4 2023, primary market units under construction totaled 9,552 down from a high of 21,314 units in 2018. Given the incredibly low number of units under construction, the market is setting up for a severe supply and demand imbalance just as the baby boomer population is knocking on the doorstep.

From now until 2030, an average of 10,000 baby boomers will turn 65 every day.<sup>5</sup> With the combination of increased population and a slower pace of new senior living inventory supply, we remain confident in the senior living industry's resilience and ability to prepare for the upcoming "Silver Tsunami" as our population continues to age.

## Waste Transition

The first quarter of 2024 featured several updates that highlight recent growth in the Waste Transition sector, while setting the stage for potential continued growth.

In March 2024, BloombergNEF released its Sustainable Energy Factbook, reporting that renewable natural gas (known as “RNG”) production capacity in the U.S. grew 13% year-over-year in 2023, and that RNG reached a major milestone in 2023 --- surpassing conventional natural gas in terms of total gas consumed by transportation vehicles.

In February 2024, the American Biogas Council (the “ABC”) indicated that 2023 was the third year of record growth across the U.S. biogas industry, with nearly 100 projects coming online during the year, representing about \$1.8 billion in capital investments. ABC expects this growth to continue in 2024, with more than 100 new projects expected to go into production during the year. Furthermore, ABC estimates that only about 20% of production-feasible RNG production projects in the U.S. have been built, with about 12,750 potential sites remaining to be developed.

Various federal and state fuel credits and tax credits have contributed to the growth prospects of the waste-to-energy sector, particularly for RNG and renewable fuels such as renewable diesel and sustainable aviation fuel. The first quarter of 2024 saw positive updates in the credit-subsidy arena, as well.

First, the Treasury Department and the Internal Revenue Service (IRS) corrected their proposed regulations regarding Section 48 Investment Tax Credits, clarifying that gas upgrade systems are eligible under the definition of Biogas Facilities. This is a significant positive development as gas upgrade systems are a necessary component of biogas projects that inject RNG into transmission pipelines. Gas upgrade systems typically represent 25% or more of the capital cost of an RNG production facility, and many qualifying projects are eligible for tax credits in the 30% to 50% range.

Second, several U.S. states have recently proposed Clean Fuels bills, modeled generally after the dominant program in the market currently, the California Low Carbon Fuels Standard, or “LCFS” program, which has channeled about \$5.8 billion in economic benefits to low carbon fuel producers since its

inception. In general, these Clean Fuels programs promote reductions in greenhouse gas emissions by providing fuel credits to waste-to-energy facilities that produce the low-carbon fuels. During the first quarter of 2024, New Mexico became the fourth state to enact a Clean Fuels standard, following the lead of California, Washington, and Oregon. Pending bills have also been introduced or re-introduced in New York, New Jersey, Illinois, Michigan, Vermont, Hawaii, and Massachusetts. Simply put, more LCFS-style programs provide more low carbon fuel pathways, thereby encouraging the development of additional waste-to-energy projects.

The U.S. Department of Energy (or the “DOE”) also estimates that the potential growth in the waste-to-energy sector is strong. In its 2023 Billion Ton Report, released during the first quarter of 2024, the DOE indicates that the U.S. could nearly double the amount of energy derived from waste in its near-term scenario, with such energy then representing about 15% of the total energy consumed in the U.S. in its intermediate-term scenario.

Finally, in the waste-to-value sector, new legislation continues to be introduced across the U.S. for the implementation of Extended Producer Responsibility (or “EPR”) programs. EPR programs generally require product producers to aid in the post-consumer recycling of their products. Three EPR programs had been approved through 2022. But, during the first quarter of 2024, ten states introduced or re-introduced EPR bills for legislative consideration. Recycling under these programs would impact a variety of products, including plastics packaging, paper, electronics, household batteries, and paint, among many other product types. Lobbying groups are reportedly harmonizing efforts in order to standardize EPR bill-introduction and approval efforts. Any new EPR legislation is expected to provide economic benefit to recycling facilities, thereby promoting the development and growth of these facilities.

## Conclusion

While the negative news in some legacy portfolio assets seems to have subsided, the more recently added assets, added within the last four years, continue to perform nicely and contribute positively to the returns experienced by the fund. We will continue to see opportunities to exit underperforming loans in the portfolio and have a line of sight on the execution of some of these exits over the few quarters. As we do that, we will seek to manage the liquidity in the best interests of the investors.

<sup>1</sup> Electronic Municipal Market Access <https://emma.msrb.org/> & MuniOS <https://www.munios.com/>

<sup>2</sup> Refinitiv Lipper US Fund Flows <https://www.lipperusfundflows.com/>

<sup>3</sup> 2022 Charter School Bond Default Study: Default and Loss Rates Continue to Decline. Wendy Berry, Equitable Facilities Fund <https://bondlink-cdn.com/3224/Charter-School-Bond-Default-Study--Through-Year-End-2022.yP9zUZofx.pdf>

<sup>4</sup> NIC

<sup>5</sup> census.gov

## Net performance (as of 3/31/2024)

	as of 3/31/2024			as of 3/31/2024			
	1 Month	3 Month	Calendar YTD	1 year	3 year	5 year	Since inception <sup>1</sup>
<b>TSIFX</b>   Ecofin Tax-Exempt Private Credit Fund	0.43%	2.07%	0.99%	-2.07%	2.13%	2.02%	2.19%

Note: For periods over one year, performance reflected is for the average annual returns. <sup>1</sup>The fund commenced operations on 3/26/2018. <sup>2</sup>The adviser has contractually agreed to reimburse expenses of the fund so that certain of the fund's expenses will not exceed 0.25% of managed assets (annualized) through Feb. 28, 2025. Under the advisory agreement, the adviser receives compensation of 1.25% of the fund's daily managed assets for the services rendered on an annual basis.

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## Portfolio statistics (as of 3/31/2024)

Effective duration <sup>1</sup>	0.63yrs
Yield to worst <sup>2</sup>	6.80%
Gross current yield <sup>3</sup>	5.45%
30-Day SEC Yield (unsubsidized) <sup>4</sup>	3.08%
30-Day SEC Yield (subsidized) <sup>4</sup>	3.51%

## Distribution (as of 3/31/2024)

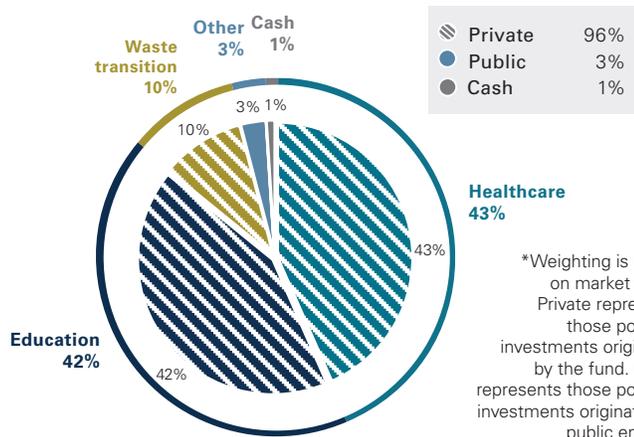
Distribution rate <sup>5</sup>	3.63%
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## Fees (as of 3/31/2024)

Gross expense ratio	1.70%
Net expense ratio <sup>6</sup>	1.50%

Net expense ratio is as of the most recent prospectus and is applicable to investors

## Sector allocation\* as of 3/31/2024



## Top 10 issuers as of 3/31/2024 (unaudited)

1. La Sonora at Dove Mountain	16.9%
2. Athenian Academy	12.8%
3. Vonore Fiber Products LLC	8.7%
4. Montage Senior Living	5.9%
5. Championship Academy of Distinction West Broward	5.0%
6. Championship Charter School I	4.7%
7. Ability Connection Colorado	4.4%
8. The Baldwin Senior Living	4.2%
9. Genesis Christian Academy	4.1%
10. MBS SPV I LLC	3.2%

Fund holdings are subject to change and should not be considered to buy or sell securities. "Top 10 issuers" reflects investments made that are in accordance with the strategy of the fund and do not include cash and/or cash equivalents.

<sup>1</sup> Effective duration is a measure of the price sensitivity of bonds with embedded options (e.g., callable bonds), to changes in benchmark yields. This measure of duration takes into account the fact that expected cash flows will fluctuate as interest rates change. Effective duration can be estimated using modified duration for bonds without option features.

<sup>2</sup> Does not reflect the deduction of management fees and other fund expenses up to the expense cap. If management fees and expenses had been included, returns would be reduced. This calculation includes non-income items such as loan proceeds, borrowings and/or return of capital.

<sup>3</sup> The gross current yield of a bond or other debt instrument is calculated by dividing the annual coupon amount by the current market price. This measure does not reflect fees or expenses

<sup>4</sup> Reflects the deduction of management fees and other fund expenses up to the expense cap. Subsidized yield reflects fee waivers and/or expense reimbursements recorded by the fund during the period. Without waivers and/or reimbursements, yields would be reduced.

<sup>5</sup> Distribution rate is not performance and is calculated by annualizing the daily distribution per share for the preceding 3-month period and dividing it by the net asset value as of the reported date. This calculation does not include any non-income items such as loan proceeds or borrowings or return of capital.

<sup>6</sup> The adviser has contractually agreed to reimburse expenses of the fund so that certain of the fund's expenses will not exceed 0.25% of managed assets (annualized) through Feb. 28, 2025. Under the advisory agreement, the adviser receives compensation of 1.25% of our daily managed assets for the services rendered on an annual basis.

TCA Advisors is the adviser to the fund and Ecofin Advisors, LLC is the sub-adviser.

*Must be preceded or accompanied by a current prospectus.*

**Investing involves risks. Principal loss is possible. The fund is suitable only for investors who can bear the risks associated with the limited liquidity of the fund and should be viewed as a long-term investment. The fund will ordinarily accrue and pay distributions from its net investment income, if any, once a quarter; however, the amount of distributions that the fund may pay, if any, is uncertain. There currently is no secondary market for the fund's shares and the advisor does not expect that a secondary market will develop. Limited liquidity is provided to shareholders only through the fund's quarterly Repurchase Offers for no less than 5% of the fund's shares outstanding at net asset value. There is no guarantee that shareholders will be able to sell all of the shares they desire in a quarterly Repurchase Offer. The fund invests in Municipal-Related Securities. Litigation, legislation or other political events, local business or economic conditions or the bankruptcy of the issuer could have a significant effect on the ability of an issuer of municipal bonds to make payments of principal and/or interest. Changes related to taxation, legislation or the rights of municipal security holders can significantly affect municipal bonds. Because the fund concentrates its investments in Municipal-Related Securities the fund may be subject to increased volatility. Investments in debt securities typically decrease in value when interest rates rise. This risk is usually greater for longer-term debt securities. Investment by the fund in lower-rated and non-rated securities presents a greater risk of loss to principal and interest than higher-rated securities. The fund may invest in derivative securities, which derive their performance from the performance of an underlying asset, index, interest rate or currency exchange rate. Derivatives can be volatile and involve various types and degrees of risks. Depending on the characteristics of the particular derivative, it could become illiquid. The fund may utilize leverage, which is a speculative technique that may adversely affect common shareholders if the return on investments acquired with borrowed fund or other leverage proceeds do not exceed the cost of the leverage, causing the fund to lose money.**

Duration is a commonly used measure of the potential volatility of the price of a debt security, or the aggregate market value of a portfolio of debt securities, prior to maturity. Securities with a longer duration generally have more volatile prices than securities of comparable quality with a shorter duration. The municipal investments in the portfolio may be tax-exempt at the federal level, but taxes may still be applicable at the state and/or local level.

Yield to worst is the lowest yield an investor can expect when investing in a callable bond.

Par value, also known as nominal value, is the face value of a bond or the stock value stated in the corporate charter.

The Bloomberg U.S. Aggregate Bond Index is a broad-based flagship benchmark that measures the investment grade, U.S. dollar-denominated, fixed-rate taxable bond market. The index includes Treasuries, government-related and corporate securities, mortgage-backed securities (agency fixed rate and hybrid adjustable rate mortgage pass-through securities), asset-backed securities and commercial

mortgage-backed securities (agency and non-agency). The Bloomberg US Corporate Option Adjusted Spread Index references the option adjusted spread of the Bloomberg US Corporate High Yield Bond Index. The Bloomberg U.S. Corporate High Yield Bond Index measures the U.S. dollar-denominated, High Yield, fixed-rate corporate bond market. Securities are classified as High Yield if the middle rating of Moody's, Fitch and S&P is Ba1/BB+/BB+ or below. Bonds from issuers with an emerging markets country of risk, based on the indices' EM country definition, are excluded. The Bloomberg US Corporate Bond Index measures the investment grade, fixed-rate, taxable corporate bond market. It includes USD denominated securities publicly issued by US and non-US industrial, utility and financial issuers." The U.S. Corporate High Yield Index is a component of the U.S. Universal and Global High Yield Indices. The Bloomberg U.S. Municipal Bond Index is a broad-based benchmark that measures the investment grade, U.S. dollar-denominated, fixed tax exempt bond market. The index includes state and local general obligation, revenue, insured and pre-refunded bonds. The Bloomberg U.S. Corporate Bond Index measures the investment grade, fixed-rate, taxable corporate bond market. It includes USD-denominated securities publicly issued by U.S. and non-U.S. industrial, utility and financial issuers. The U.S. Corporate Index is a component of the U.S. Credit and U.S. Aggregate Indices, and provided the necessary inclusion rules are met, U.S. Corporate Index securities also contribute to the multi-currency Global Aggregate Index. The S&P 500® Index is an unmanaged, market-value weighted index of stocks that is widely regarded as the standard for measuring large-cap U.S. stock market performance.

A basis point is equal to 1/100th of 1% and is used to denote the change in a financial instrument.

Sharpe ratio measures risk-adjusted performance. It is calculated by subtracting the risk-free rate from the rate of return for a portfolio and dividing the result by the standard deviation of the portfolio returns. The greater a portfolio's Sharpe ratio, the better its risk-adjusted performance has been.

Diversification does not assure a profit nor protect against loss in a declining market.

Fund holdings and sector allocations are subject to change and are not recommendations to buy or sell any security.

Nothing contained on this communication constitutes tax, legal or investment advice. Investors must consult their tax advisor or legal counsel for advice and information concerning their particular situation.

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