

ROBERT F. BUSH, JR.  
SVP, DIRECTOR OF  
CLOSED-END FUND  
PRODUCTS

## Q4 2021 CEF Commentary

- » Despite year-end market volatility that can negatively impact closed-end fund pricing relative to their underlying portfolio values, Calamos CEFs demonstrated strong market dynamics, with six out of seven of closed-end funds trading at premiums as of 12/31/21.
- » Six out of seven Calamos CEFs offered improved price to NAV dynamics during Q4, reflecting strong demand, considering performance.
- » This was evidenced as all Calamos CEFs offered better price to NAV dynamics than their respective peer group averages at quarter-end.
- » Through fiscal year 2021, no Calamos CEF has return of capital as an *estimated* component of distributions as the funds continue to operationally earn their payouts.
- » Relatively low financing costs continue to offer leverage that is accretive to returns in 2021 as the funds' average blended borrowing costs were 1.37% as of 12/31/21, with short-term costs averaging 0.58%.
- » Lower-duration bonds, such as high yield and convertibles, that comprise a sizeable portion of our CEF portfolios, are typically less susceptible to the impacts of rising interest rates compared to longer-duration fixed-income securities.
- » Active management coupled with investment flexibility is a critical feature of the Calamos CEFs, as new and different investment opportunities emerge as the global economy continues to recover from the effects of the global pandemic.
- » For much of Q4 2021, six of seven of our funds traded at premiums to NAV.
- » Market volatility at quarter-end may impact prices disproportionately to their NAVs.
- » Despite such volatility, Calamos CEFs on average traded above their underlying NAVs at quarter and year-end.

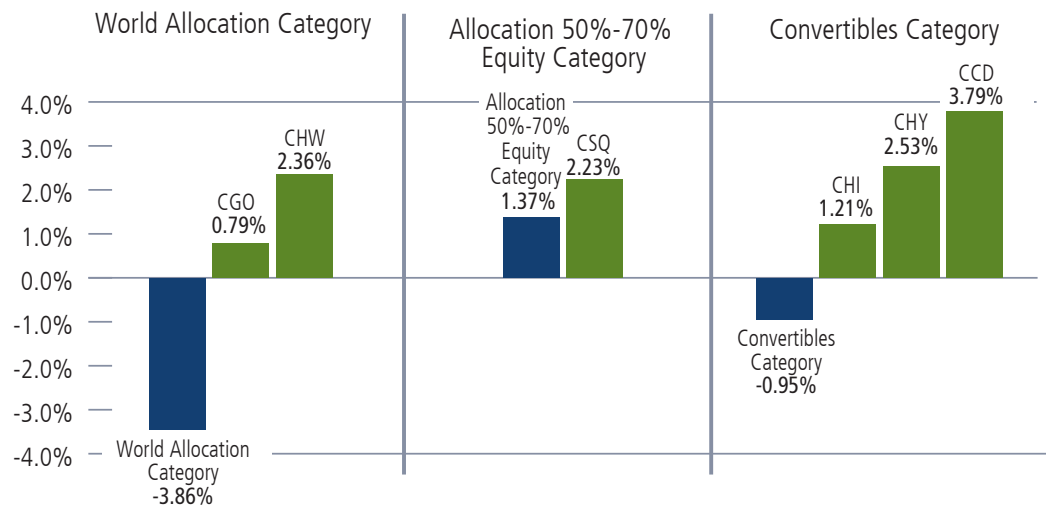
■ Trading at a Discount ■ Trading at a Premium ■ Discount Trading Improved Relative to NAV From Prior Month

CLOSING DATE	CHI DISC./PREM.	CHY DISC./PREM.	CSQ DISC./PREM.	CCD DISC./PREM.	CHW DISC./PREM.	CGO DISC./PREM.	CPZ DISC./PREM.	AVERAGE
9/30/2021	-0.33%	-1.45%	1.72%	-0.23%	-0.73%	6.71%	-6.74%	-0.15%
10/31/2021	1.21%	1.34%	1.93%	2.80%	2.47%	0.25%	-3.86%	0.88%
11/30/2021	0.67%	0.57%	3.18%	-0.03%	2.26%	2.43%	-5.56%	0.50%
12/31/2021	1.21%	2.53%	2.07%	3.79%	2.36%	0.79%	-5.53%	1.03%

**Performance data quoted represents past performance, which is no guarantee of future results.** Current performance may be lower or higher than the performance quoted. You can purchase or sell common shares daily. Like any other stock, market price will fluctuate with the market. Upon sale, your shares may have a market price that is above or below net asset value and may be worth more or less than your original investment. Shares of closed-end funds frequently trade at a market price that is below their net asset value.

## RELATIVE PEER GROUP PERFORMANCE IS REFLECTED IN CALAMOS CEF PRICING AS ALL CALAMOS FUNDS TRADED BETTER COMPARED TO THEIR UNDERLYING NAVS VS THEIR RESPECTIVE PEER GROUP AVERAGES

### CALAMOS CEF PREMIUMS/DISCOUNTS VS. MORNINGSTAR CATEGORY AVERAGE Q4 2021



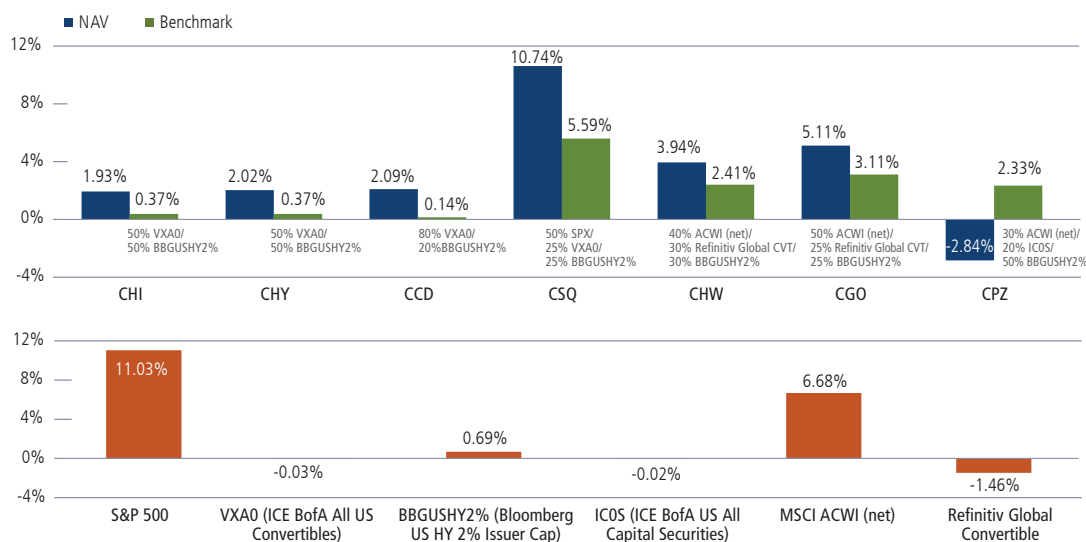
Source: Morningstar.

**Performance data quoted represents past performance, which is no guarantee of future results.** Current performance may be lower or higher than the performance quoted. You can purchase or sell common shares daily. Like any other stock, market price will fluctuate with the market. Upon sale, your shares may have a market price that is above or below net asset value and may be worth more or less than your original investment. Shares of closed-end funds frequently trade at a market price that is below their net asset value.

- » This highlights the benefits of active management and optimal portfolio flexibility, a key feature of the Calamos CEFs in accessing markets, sectors and securities that can optimize portfolio performance over various market cycles.
- » The use of relatively inexpensive leverage continued to be accretive to shareholders as financial markets have improved through 2021.
- » ***In 2021, for distributions for fiscal 2021, ALL Calamos CEFs had no estimated return of capital component associated with their payouts to shareholders.***

## Q4 2021 PERFORMANCE REVIEW

### CALAMOS CLOSED-END FUNDS



Performance data quoted represents past performance, which is no guarantee of future results. Current performance may be lower or higher than the performance quoted. The principal value of an investment will fluctuate so that your shares, when sold, may be worth more or less than their original cost. Returns at NAV reflect the deduction the Fund's management fee, debt leverage costs and other expenses. You can obtain performance data current to the most recent month end by visiting [www.calamos.com](http://www.calamos.com). Index performance represented by: S&P 500 (U.S. equities), ICE BofA All Convertibles Index, ICE BofA HY Index II (high yield), ICE BofA US All Capital Securities Index (IOCS), MSCI World Index (global equities), Refinitiv Global Convertible Bond Index (global convertibles) and ICE BofA Global HY Index (global high yield).

## THE ROLE OF LEVERAGE AND ACTIVE MANAGEMENT

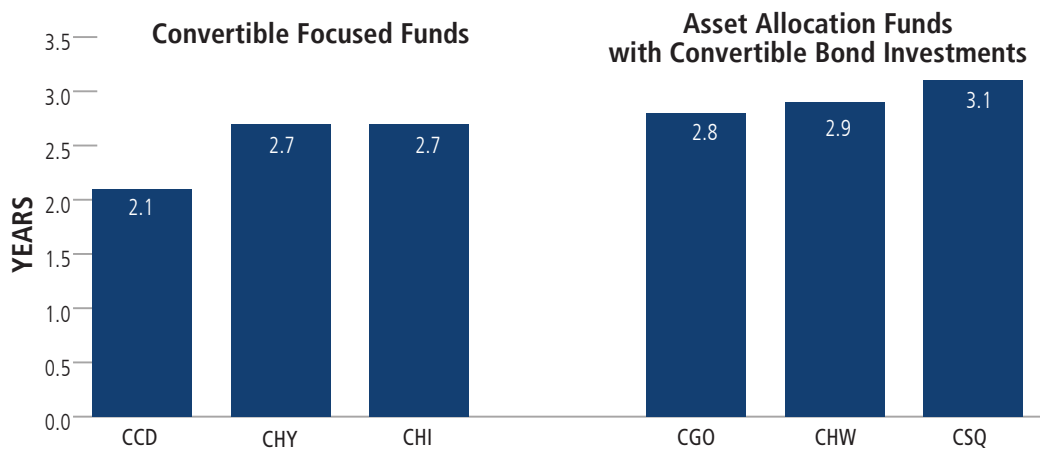
- » Leverage can enhance NAV returns during periods of positive market outcomes; it can also provide a further drag during downward periods. Accordingly, we consistently assess each fund's use of leverage and actively manage that level in the portfolios.
- » As of December 31, 2021, the borrowing costs in Calamos CEFs that employ both fixed and variable lending vehicles were approximately 1.33% on an average annual basis.
- » **The low cost of leverage, coupled with attractive reinvestment returns realized by the CEF portfolios, resulted in accretion to our shareholders in 2021 by use of our borrowing vehicles.**
- » Calamos CEFs all maintained leverage levels on 12/31/21 approximating their respective historical averages.

## LOWER-DURATION FIXED INCOME INVESTMENTS

- » Investors have concerns over rising interest rates, and the impact that may have on investments.
- » Calamos closed-end funds offer varying exposure to both equity and fixed income securities.
- » **Our fixed-income securities, such as high yield and convertible bonds, are typically lower duration assets, meaning that they are generally less susceptible to interest rate changes than longer duration securities such as investment grade corporates or municipal bonds.**
- » Consequently, Calamos CEF portfolios may be less impacted by rising interest rates compared to portfolios with higher duration bonds, such as investment grade corporates or municipals.

## CALAMOS CLOSED-END FUND FIXED INCOME DURATION AVERAGES

as of 12/31/2021



Portfolios are actively managed and subject to change.

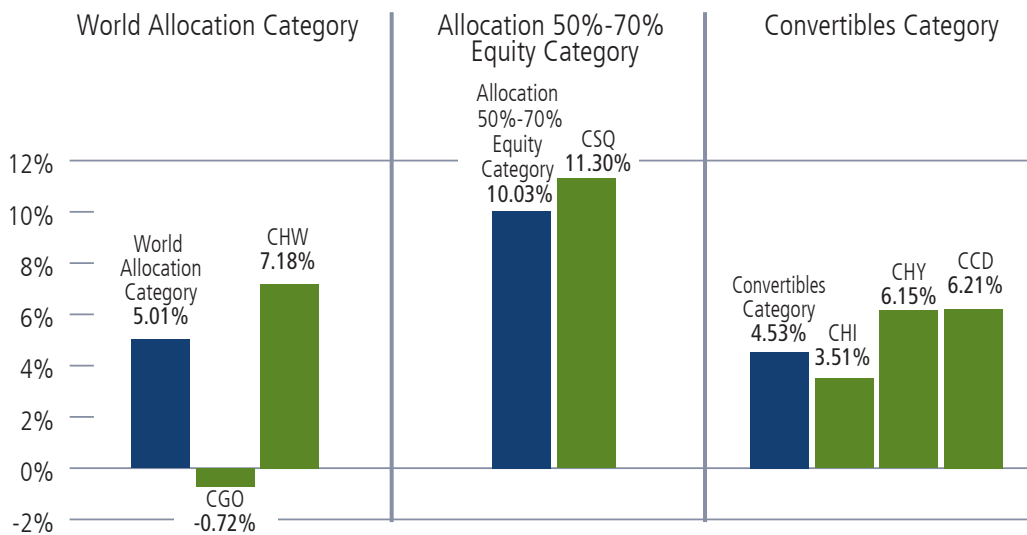
## COMPONENTS TO SUCCESS

- » Performance relative to their peers has fostered Calamos CEFs to trade better relative to their corresponding NAVs when compared to each of their respective category averages.
- » Confidence in future production affords the luxury to increase distribution levels. That encourages price performance, thereby mitigating discounts.
- » The flexibility of Calamos CEFs through active management to invest in multiple types of securities and sectors enables optimization of portfolio positioning over various market cycles.
- » Clients' need for income will likely foster continued demand.
- » Low-cost leverage can enhance returns during periods of market recovery.

- » Investments in lower-duration securities, such as convertibles and high yield bonds, may be helpful to NAV preservation during a rising interest rate environment relative to portfolios with longer duration securities.
- » **Calamos CEF distributions reported 0% return of capital through fiscal 2021, as the funds continue to operationally earn their payouts.**

## MOST CALAMOS CEFS OFFERED BETTER PRICE PERFORMANCE RELATIVE TO THE AVERAGE OF THEIR RESPECTIVE PEER GROUPS IN Q4 2021

### CALAMOS CEF Q4 TOTAL RETURN ON MARKET PRICE VS. MORNINGSTAR CATEGORY AVERAGE

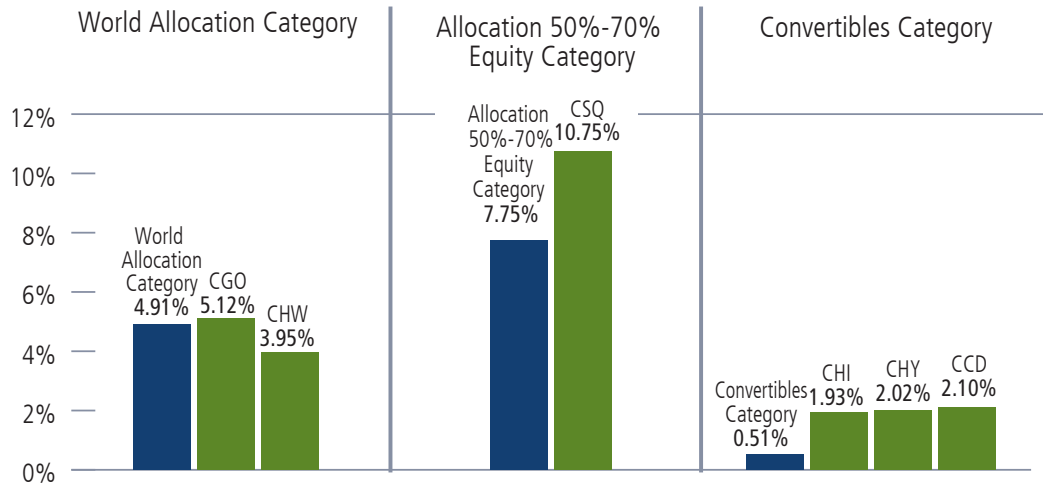


**Performance data quoted represents past performance, which is no guarantee of future results.** Current performance may be lower or higher than the performance quoted. You can purchase or sell common shares daily. Like any other stock, market price will fluctuate with the market. Upon sale, your shares may have a market price that is above or below net asset value and may be worth more or less than your original investment. Shares of closed-end funds frequently trade at a market price that is below their net asset value.

Source: Morningstar.

## CALAMOS CEFS NAV PERFORMANCE GENERALLY OUTPACED THEIR RESPECTIVE PEER GROUP AVERAGES FOR Q4 2021

### CALAMOS CEF Q4 TOTAL RETURN ON NAV VS. MORNINGSTAR CATEGORY AVERAGE



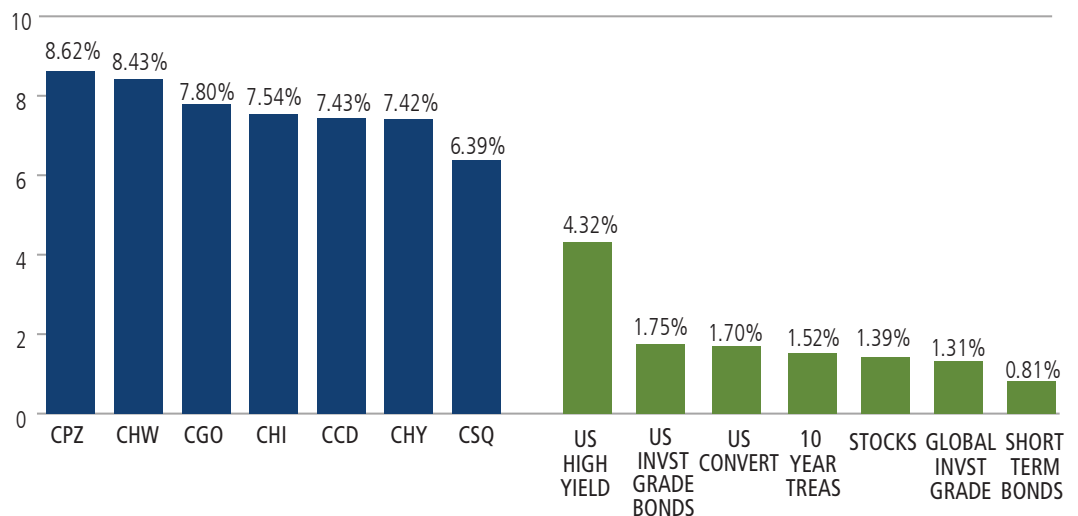
**Performance data quoted represents past performance, which is no guarantee of future results.** Current performance may be lower or higher than the performance quoted. You can purchase or sell common shares daily. Like any other stock, market price will fluctuate with the market. Upon sale, your shares may have a market price that is above or below net asset value and may be worth more or less than your original investment. Shares of closed-end funds frequently trade at a market price that is below their net asset value.

Source: Morningstar.

## CALAMOS CEF DISTRIBUTION RATES RELATIVE TO MARKET INDEXES

### INNOVATION SUPPORTS COMPETITIVE DISTRIBUTIONS

Current annualized distribution rate (funds) versus yields of market benchmarks, as of December 31, 2021



**Performance data quoted represents past performance, which is no guarantee of future results.** Current performance may be lower or higher than the performance quoted. You can purchase or sell common shares daily. Like any other stock, market price will fluctuate with the market. Upon sale, your shares may have a market price that is above or below net asset value and may be worth more or less than your original investment. Shares of closed-end funds frequently trade at a market price that is below their net asset value.

## CALAMOS CLOSED-END FUND CUMULATIVE DISTRIBUTIONS

### MONTHLY DISTRIBUTIONS: DESIGNED TO HELP INVESTORS MEET CASH FLOW NEEDS OVER TIME

Data as of 12/31/21

	INCEPTION	CUMULATIVE DISTRIBUTION SINCE INCEPTION
CHI	6/26/2002	\$27.57
CHY	5/28/2003	\$22.41
CSQ	3/26/2004	\$17.15
CGO	10/27/2005	\$19.38
CHW	6/27/2007	\$12.07
CCD	3/27/2015	\$13.70
CPZ	11/29/2019	\$3.01

**For investors seeking income, we understand that a predictable level of cash is a key priority. With managed rate and level rate distribution policies, Calamos closed-end funds are managed with the goal of providing steady (although not assured) monthly distributions.**

**Past performance is no guarantee of future results.** The Cumulative Distribution is a sum of all monthly ordinary income, capital gains, and return of capital distributions since the Fund's inception. Latest distribution date was payable 1/14/2022. Level Rate Distribution Policy and Managed Distribution Policy are each an investment company's commitment to common shareholders to provide a predictable, but not assured, level of cash flow.

### DISTRIBUTION DETAILS, PAID 1/14/22

	DISTRIBUTION	ORDINARY INCOME	SHORT-TERM CAPITAL GAINS	LONG-TERM CAPITAL GAINS	RETURN OF CAPITAL
CHI	\$0.0950	\$0.0393	\$0.0440	\$0.0117	\$0.0000
CHY	\$0.1000	\$0.0153	\$0.0105	\$0.0742	\$0.0000
CHW	\$0.0700	\$0.0000	\$0.0251	\$0.0449	\$0.0000
CSQ	\$0.1025	\$0.0139	\$0.0271	\$0.0615	\$0.0000
CCD	\$0.1950	\$0.0067	\$0.1111	\$0.0772	\$0.0000
CGO	\$0.1000	\$0.0000	\$0.1000	\$0.0000	\$0.0000
CPZ	\$0.1400	\$0.0417	\$0.0983	\$0.0000	\$0.0000

Ordinary income includes net investment income and short-term capital gains. The distribution tables provided here are for informational purposes only. Estimates are calculated on a tax basis rather than on a generally accepted accounting principles (GAAP) basis but should not be used for tax reporting purposes. Distributions may be subject to re-characterization for tax purposes after the end of the fiscal year. Individual (non-corporate) shareholders with taxable accounts will receive written notification regarding the components and tax treatment for distributions via Form 1099-DIV. If your distributions are reinvested in additional shares, you will receive a statement reflecting the reinvestment of the distribution. This information is not legal or tax advice. Consult a professional regarding your specific legal or tax matters.

## CALAMOS CLOSED-END FUNDS ANNUALIZED RETURNS (%)

AS OF 12/31/21	1-YEAR		3-YEAR		5-YEAR		10-YEAR		SINCE INCEPTION	
	NAV RETURN	MARKET RETURN	NAV RETURN	MARKET RETURN	NAV RETURN	MARKET RETURN	NAV RETURN	MARKET RETURN	NAV RETURN	MARKET RETURN
CHI (6/26/02)	8.17	20.47	26.18	30.12	17.13	18.82	12.35	13.13	11.06	10.87
CHY (5/28/03)	8.30	22.24	26.42	30.53	17.17	19.38	12.28	13.33	10.41	10.29
CSQ (3/26/04)	28.93	30.76	29.81	31.96	19.49	22.78	16.03	18.23	10.47	10.31
CGO (10/27/05)	13.72	13.36	24.53	26.16	15.61	18.48	11.03	11.08	9.81	9.55
CHW (6/27/07)	10.93	13.43	22.09	27.11	14.64	18.66	11.64	13.85	7.55	7.38
CCD (3/27/15)	7.53	20.60	30.40	35.91	20.06	23.46	--	--	13.99	13.84
CPZ (11/29/19)	8.74	21.18	--	--	--	--	--	--	9.97	7.02

**Performance data quoted represents past performance, which is no guarantee of future results. Current performance may be lower or higher than the performance quoted. Portfolios are managed according to their respective strategies which may differ significantly in terms of security holdings, industry weightings, and asset allocation from those of the benchmark(s). Portfolio performance, characteristics and volatility may differ from the benchmark(s) shown.**

Total Return measures net investment income and capital gain or loss from portfolio investments, assuming reinvestment of income and capital gain distributions. Dividends and distributions are assumed to be reinvested at prices obtained under the Fund's dividend reinvestment plan. Total return is not annualized for periods less than one year. Brokerage commissions are not reflected. Total return calculations are net of management fees, leverage fees and other fees. A complete listing of fees and charges can be found in the funds' prospectus by visiting [www.calamos.com](http://www.calamos.com).

Average annual return measures net investment income and capital gain or loss from portfolio investments as an annualized average, assuming reinvestment of income and capital gain distributions.

You can purchase or sell common shares daily. Like any other stock, market price will fluctuate with the market. Upon sale, your shares may have a market price that is above or below net asset value and may be worth more or less than your original investment. Shares of closed-end funds frequently trade at a discount which is a market price that is below their net asset value.

### Index Definitions

**Morningstar Category:** Allocation 50%-70% Equity. Funds in allocation categories seek to provide both income and capital appreciation by investing in multiple asset classes, including stocks, bonds, and cash. These portfolios are dominated by domestic holdings and have equity exposures between 50% and 70%.

**Morningstar Category:** Convertibles. Funds are designed to offer some of the capital appreciation potential of stock portfolios while also supplying some of the safety and yield of bond portfolios. To do so, they focus on convertible bonds and convertible preferred stocks. Convertible bonds allow investors to convert the bonds into shares of stock, usually at a preset price. These securities thus act a bit like stocks and a bit like bonds.

**Morningstar Category:** World Allocation. Funds seek to provide both capital appreciation and income by investing in three major areas: stocks, bonds and cash. While these portfolios do explore the whole world, most of them focus on the US, Canada, Japan and the larger markets in Europe. It is rare for such portfolios to invest more than 10% of their assets in emerging markets. These portfolios typically have at least 10% of assets in bonds, less than 70% of assets in stocks, and at least 40% of assets in non-US stocks or bonds.

**ICE BofA US All Capital Securities Index** tracks the performance of fixed rate, US dollar denominated hybrid corporate and preferred securities publicly issued in the US domestic market. Qualifying securities must be rated by Moody's, S&P or Fitch. Floating rate coupon or dividend securities are excluded, but zero, step and rating-dependent coupons are included.

The **ICE BofA All US Convertibles Index** tracks the performance of US-dollar denominated convertible securities that are not currently in bankruptcy and have total market values of more than \$50 million in issuance. The **MSCI World Index** is a market capitalization weighted index composed of companies representative of the market structure of developed market countries in North America, Europe, and Asia/Pacific region. **ICE BofA US High Yield Master II Index** consists of below investment grade US dollar denominated corporate bonds that are publicly issued in the US domestic and yankee bonds. Issues included in the index have maturities of one year or more and have a credit rating lower than BBB-/Baa3, but are not in default. The index includes domestic high-yield bonds, including deferred interest bonds and payment-in-kind securities. Source: ICE Data Indices, LLC, used with

permission. ICE permits use of the ICE BofA indices and related data on an 'as is' basis, makes no warranties regarding same, does not guarantee the suitability, quality, accuracy, timeliness, and/or completeness of the ICE BofA Indices or data included in, related to, or derived therefrom, assumes no liability in connection with the use of the foregoing and does not sponsor, endorse or recommend Calamos Advisors LLC or any of its products or services.

The **S&P 500 Index** is generally considered representative of the US stock market. The **Refinitiv Global Convertible Bond Index** is designed to broadly represent the global convertible bond market. The **Bloomberg Global High Yield Index** is a multi-currency flagship measure of the global high yield debt market. The index represents the union of the US High Yield, the Pan-European High Yield, and Emerging Markets (EM) Hard Currency High Yield Indices.

### Risks

Information contained herein is for informational purposes only. Opinions, estimates, forecasts, and statements of financial market trends that are based on current market conditions constitute our judgment and are subject to change without notice. We believe the information provided here is reliable. The views and strategies described may not be suitable for all investors. References to specific securities, asset classes and financial markets are for illustrative purposes only and are not intended to be, and should not be interpreted as, recommendations.

Investing in our securities involves certain risks. You could lose some or all of your investment.

Investments by the funds in lower-rated securities involve substantial risk of loss and present greater risks than investments in higher rated securities, including less liquidity and increased price sensitivity to changing interest rates and to a deteriorating economic environment. Fixed income securities are subject to interest rate risk; as interest rates go up, the value of debt securities in the Funds' portfolio generally will decline.

There are certain risks associated with an investment in a convertible bond such as default risk—that the company issuing a convertible security may be unable to repay principal and interest, and interest rate risk—that the convertible may decrease in value if interest rates increase.

Calamos Global Total Return and Calamos Global Dynamic Income funds may invest in

derivative securities. The use of derivatives presents risks different from, and possibly greater than, the risks associated with investing directly in traditional securities. There is no assurance that any derivative strategy used by the Funds will succeed. One of the risks associated with purchasing an option is that the Funds pay a premium whether or not an option is exercised.

Shares of closed-end funds frequently trade at a market price that is below their net asset value.

Leverage creates risks which may adversely affect return, including the likelihood of greater volatility of net asset value and market price of common shares; and fluctuations in dividend rates on any preferred shares.

As a result of political or economic instability in foreign countries, there can be special risks associated with investing in foreign securities, including fluctuations in currency exchange rates, increased price volatility and difficulty obtaining information. In addition, emerging markets may present additional risk due to potential for greater economic and political instability in less developed countries.

Investment policies, management fees and other matters of interest to prospective investors may be found in each closed-end fund prospectus.

Information contained herein is for informational purposes only and should not be considered investment advice. NAV or Net Asset Value refers to the net value of all the assets held in the funds.

**CALAMOS**  
INVESTMENTS

Calamos Financial Services LLC, Distributor  
2020 Calamos Court | Naperville, IL 60563-2787  
800.582.6959 | [www.calamos.com](http://www.calamos.com) | [caminfo@calamos.com](mailto:caminfo@calamos.com)  
© 2022 Calamos Investments LLC. All Rights Reserved.  
Calamos® and Calamos Investments® are registered trademarks of Calamos Investments LLC.

CEFVALCOM 140029 1221Q R