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CLOSED-END FUND  
PRODUCTS

## Calamos CEFs Initiate Turnaround from Q4 2018 Sell-Off

- » Extreme market volatility in Q4 erased both NAV and price gains enjoyed YTD through Q3, finishing both Q4 and the 2018 year with losses.
- » Premiums that were also enjoyed at the end of Q3 were consequently abruptly reduced to discounts as the CEF market activity reflected the price movements and volatility generally experienced in the equity and fixed income markets.
- » CEFs were particularly susceptible to market price declines that exceeded NAV declines for the period:
  - CEFs had generally been trading above their respective historical price/NAV relationship.
  - CEFs had generally enjoyed price returns higher than both NAV returns and comparable indexes.
  - Investors often indiscriminately sell CEFs during extreme market volatility, seeking cash.
  - Investors often reposition accounts at year-end, exacerbating the impact of volatile markets.
  - Fear of rising interest rates provokes investor concerns about leverage costs, portfolio valuation and distribution level maintenance.
  - Leverage exacerbated negative returns for the period.
  - In spite of the timing around the Christmas holiday, the CEF market began to recover during the last week of December as investors found and capitalized on extraordinary value.
  - Recovery continued into January, buoyed by encouraging economic news and compelling valuations.
- » Five of six Calamos CEFs traded better relative to their NAVs than their Morningstar category averages at quarter-end.
- » Calamos exposure and expertise in convertible securities can help in mitigating the volatility experienced in the general equity markets.
- » Consistent with their respective peers, as of 12/31/18, all six Calamos CEFs traded at discounts to NAV.
- » Modest leverage at relatively low borrowing costs can be a favorable strategy when the reinvestment rate exceeds such expense in spite of rising interest rates.
- » Fixed borrowing costs via MRPS leverage provide a hedge on rising short-term interest rates.

- » CEF IPOs remain generally scant in abundance, diversity and yield, limiting investors to focus solely on secondary markets for longer-term funds with higher yields and total return opportunities.
- » We believe this dynamic remains supportive of CEF prices in the secondary market.
- » Investors continue to seek CEFs as a source of income in a prolonged low interest rate/dividend environment, without overweighting in overbought sectors, high duration bonds or riskier credits.
- » Recovery of markets at the end of December into January from earlier lows suggests confidence in the structure to deliver favorable returns and offer sustained income.
- » Allocation to equity-sensitive instruments, like convertibles, has benefited our shareholders by allowing them risk-managed participation and lower volatility vs. equities, while also providing a source of income.
- » Lower-duration portfolios can mitigate exposure to bond market decline as a result of rising interest rates as CEF-diversified portfolios mitigated the risk of investors chasing high risk/high valuations in search of income.
- » Calamos CEFs offer unique flexibility relative to other CEFs in their ability to participate in U.S./ global markets, as well as equity and fixed income disciplines, which is critical to optimize performance in volatile markets as we manage risk.

## CEF TALKING POINTS

**Calamos CEF borrowing costs are being actively managed to optimize returns.** Locking in a portion of our CEF leverage by issuing 3, 5 and 7 year term preferred has proven to serve us well as a defensive hedge in the face of rising short-term interest rates.

**Calamos CEFs have meaningful exposure to equity sensitive investments** that continue to provide income, but are not unduly subject to rising interest rates given their relatively low durations, or to overvalued equity market sectors.

**Calamos exposure and expertise in convertible securities during the period were instrumental in mitigating the volatility experienced in the equity markets as convertibles have generally outperformed bonds, and been comparable to stocks, while exhibiting lower volatility.**

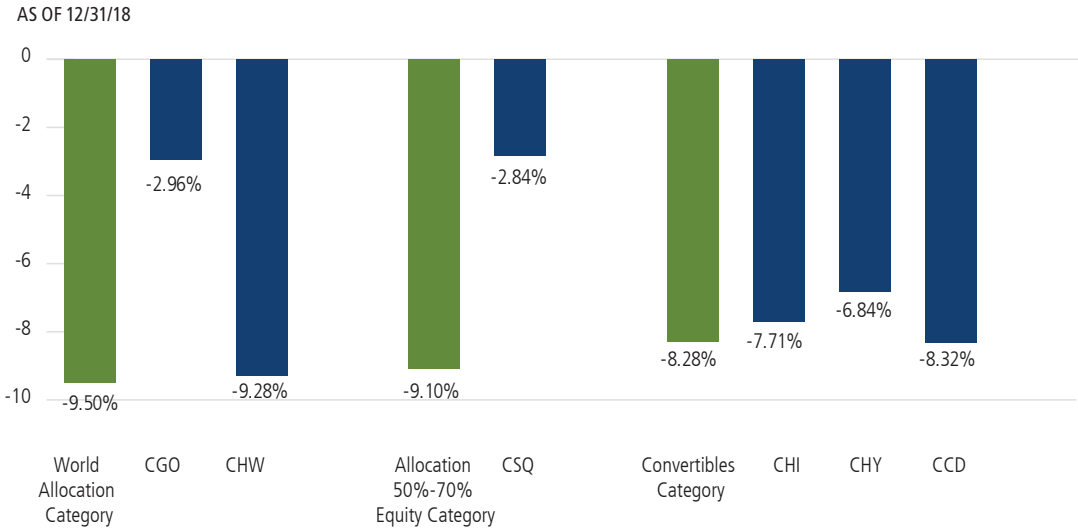
## DYNAMIC ASSET ALLOCATION: MAINTAINING MEANINGFUL CONVERTIBLE EXPOSURE

AS OF 12/31/18

CALAMOS CLOSED-END FUND	CONVERTIBLE EXPOSURE
Dynamic Convertible and Income Fund (CCD)	78.20%
Convertible Opportunities and Income Fund (CHI)	55.90%
Convertible and High Income Fund (CHY)	55.30%
Global Dynamic Income Fund (CHW)	32.80%
Global Total Return Fund (CGO)	30.10%
Strategic Total Return Fund (CSQ)	15.90%

Relative to their respective peer groups, Calamos CEFs traded at least as well as their comparable average:

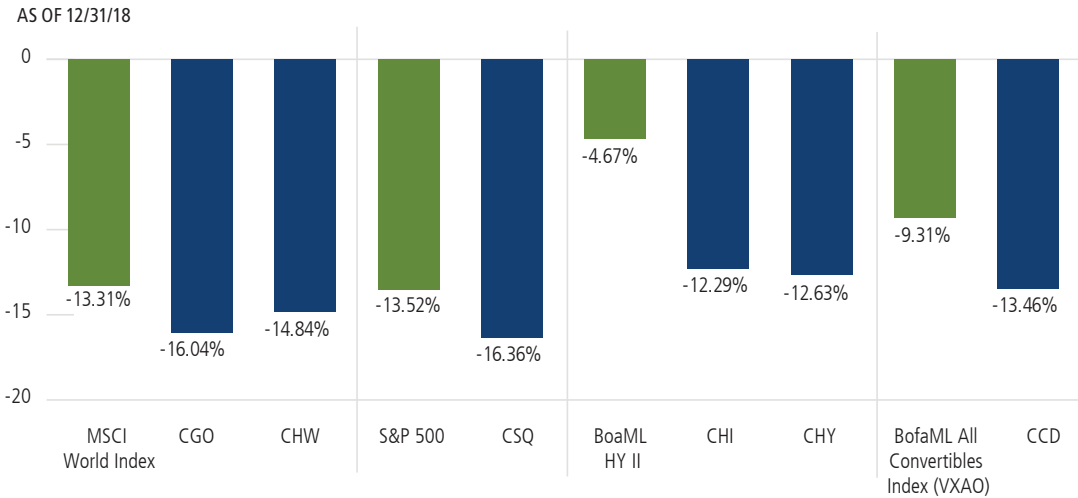
**CALAMOS CEF PREMIUMS/DISCOUNTS VS. MORNINGSTAR CATEGORY AVERAGE**



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: CEF Connect and Morningstar, Past Performance is no guarantee of future results.

Leverage use can be attributable to a large part of the attribution difference relative to related indexes during Q4 2018:

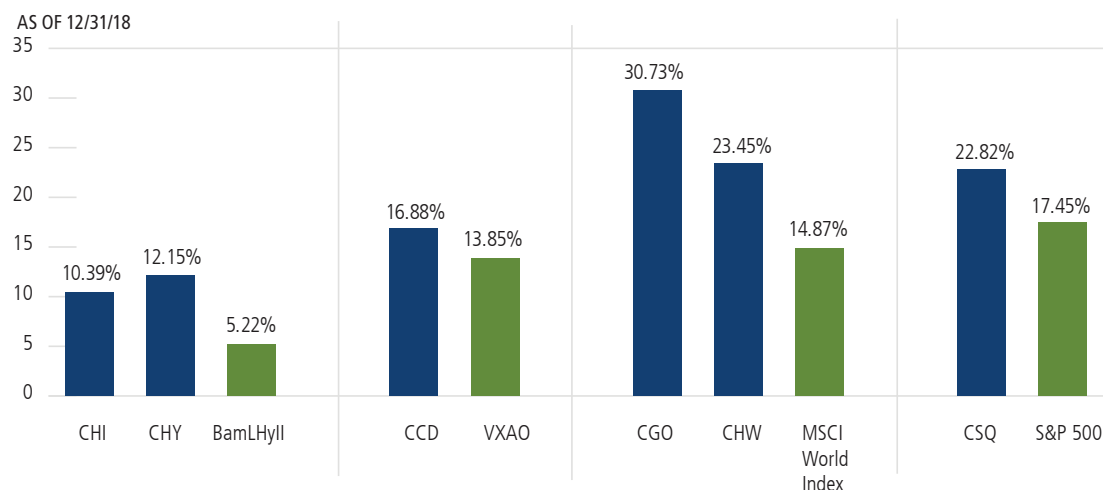
**CALAMOS CEF Q4 TOTAL RETURN ON NAV VS. RELATED INDEX**



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However, in spite of challenging returns in 2018, the benefits of active management and leverage were helpful over the last two years as Calamos CEFs outperformed their respective indexes:

#### CALAMOS CEFS: TWO-YEAR RETURNS (2017-2018) PRICE VS. COMPARABLE INDEX—BENEFITS OF ACTIVE MANAGEMENT



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#### IN ADDITION...

**Although committed to their specific investment mandates**, Calamos CEFs are not unduly bound by narrowly defined parameters that inhibit flexibility.

**Flexibility, employed by active management**, is critical during times of volatility to not only avoid risk, but also to engage it when appropriate.

**Calamos CEFs all enjoy flexible asset allocation strategies**, which are essential to both optimizing portfolio opportunities and capital preservation in periods of market volatility.

**CEFs are well positioned to continue to provide income through NAV appreciation**, while allowing clients to participate in improving equity markets.

**Given their ability to optimize the use of leverage, participate in the upside in multiple and diverse markets and disciplines, while generating high distribution levels not necessarily correlated to fixed income markets, closed-end funds represent a great case for the benefits of active management.**

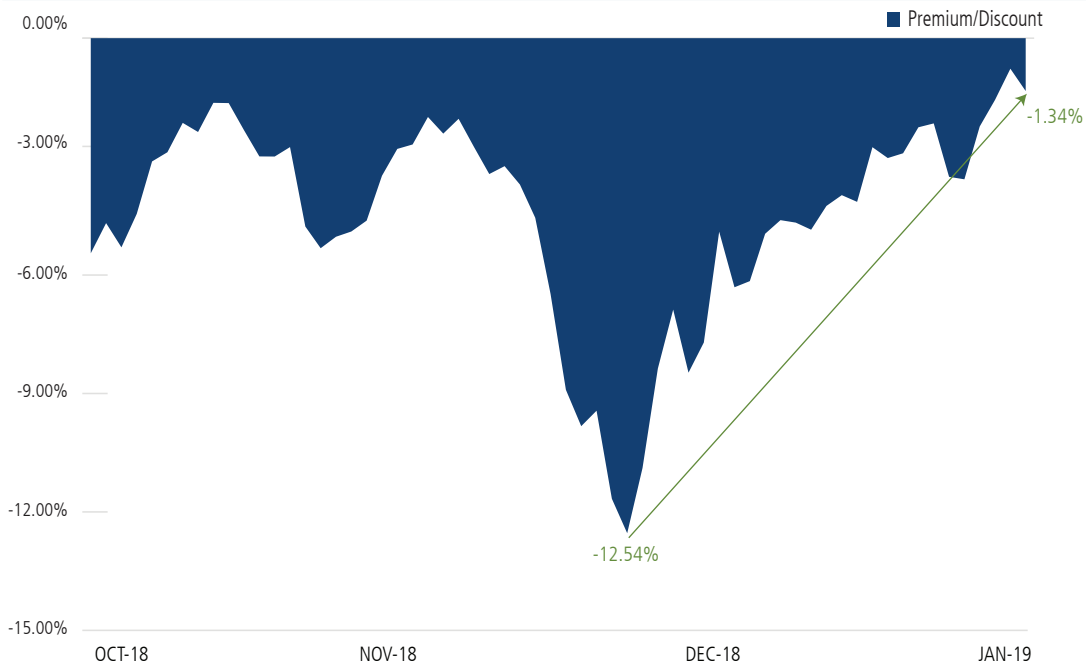
#### STRONG PERFORMANCE IN JANUARY HAS LED TO NARROWING DISCOUNTS FROM YEAR-END.

Funds that trade at abnormally wide discounts relative to their averages can offer great value at a given time. Identifying and acting upon those value opportunities can enhance returns.

Calamos CEFs traded in concert with the general market sell-off in December, and then however rallied prior to the end of the year. The ensuing recovery continued into January, lifting the price/NAV relationship (either premium or discount), above what it was prior to the beginning of Q4.

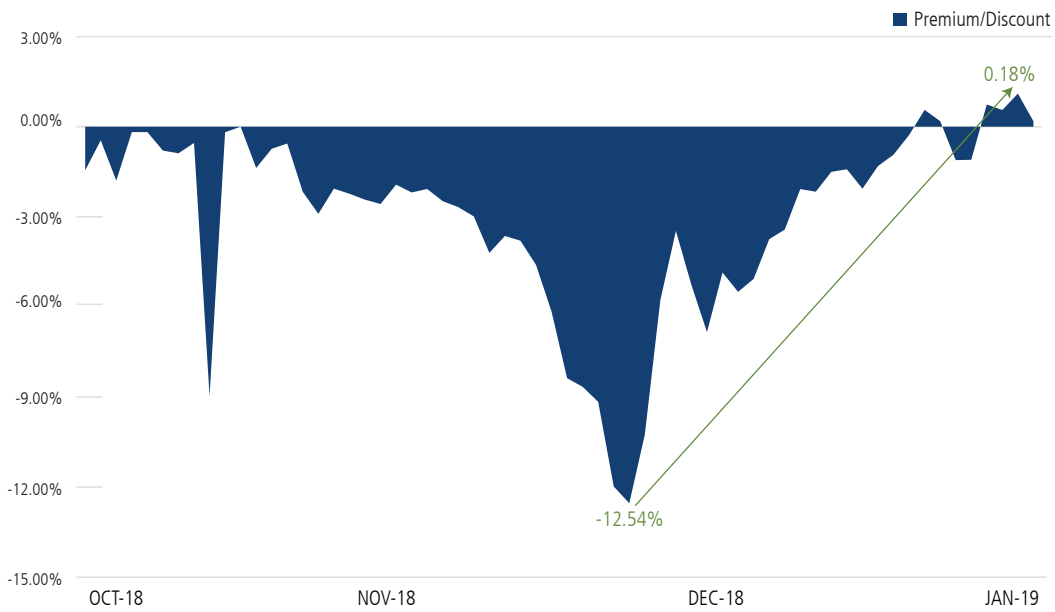
## STRONG PERFORMANCE HAS LED TO NARROWING DISCOUNTS AND SUSTAINED PREMIUMS

### CALAMOS CONVERTIBLE AND HIGH INCOME FUND—CHI PREMIUM/DISCOUNT (10/31/18 - 1/31/19)



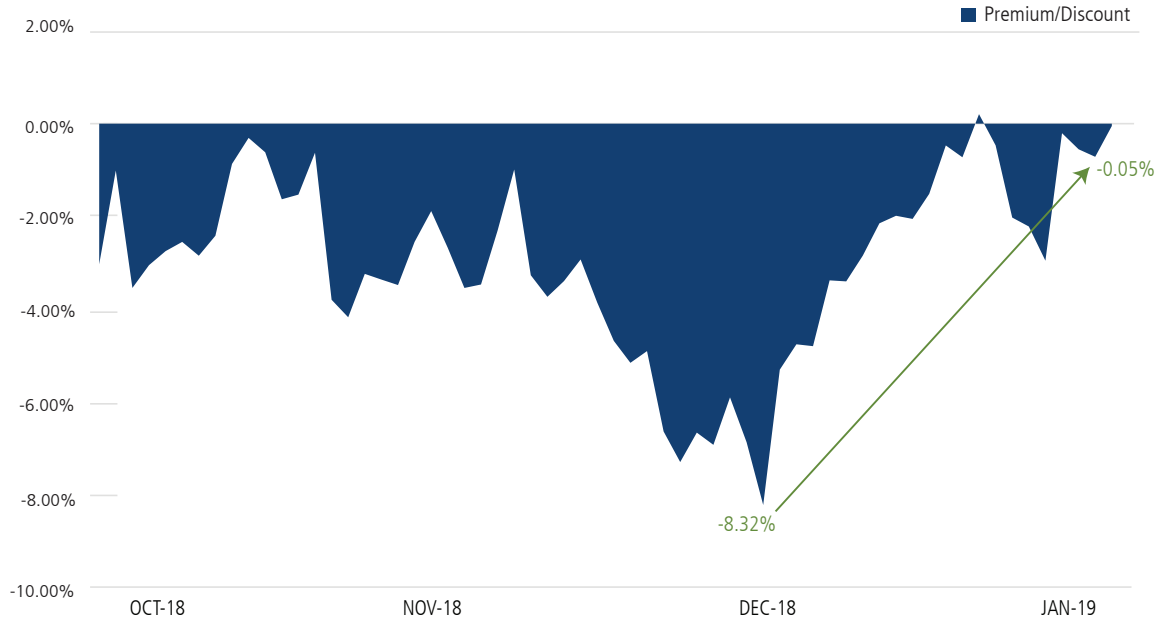
Data as of 1/31/19. Source: CEF Connect.  
Past performance is no guarantee of future results.

### CALAMOS CONVERTIBLE OPPORTUNITIES AND INCOME FUND—CHY PREMIUM/DISCOUNT (10/31/18 - 1/31/19)



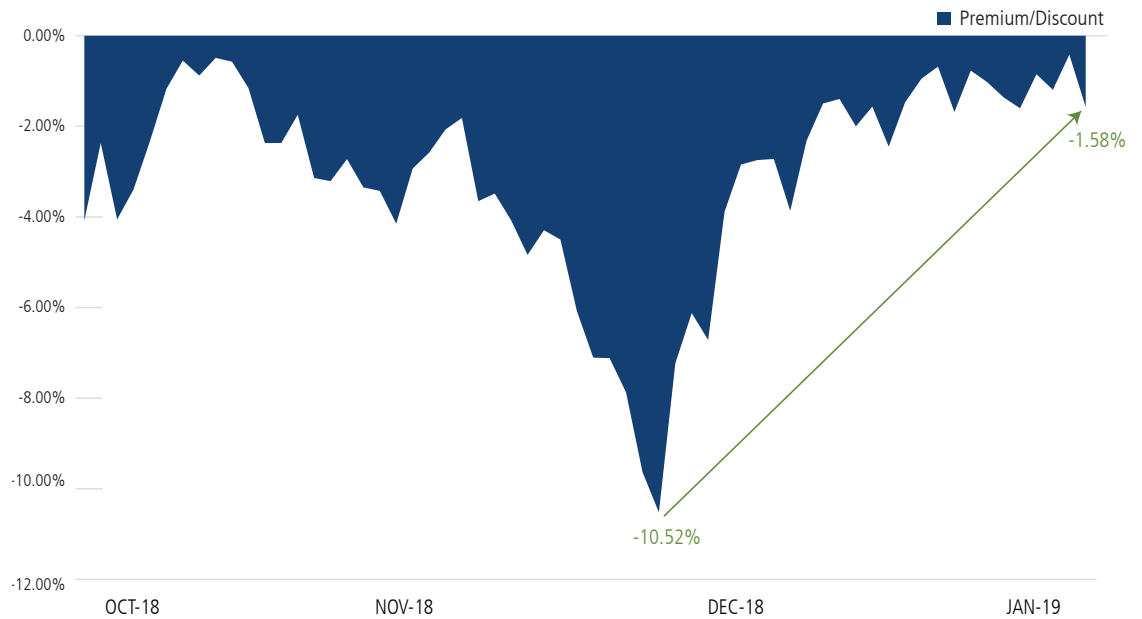
Data as of 1/31/19. Source: CEF Connect.  
Past performance is no guarantee of future results.

**CALAMOS DYNAMIC CONVERTIBLE AND INCOME FUND—CCD PREMIUM/DISCOUNT (10/31/18 - 1/31/19)**



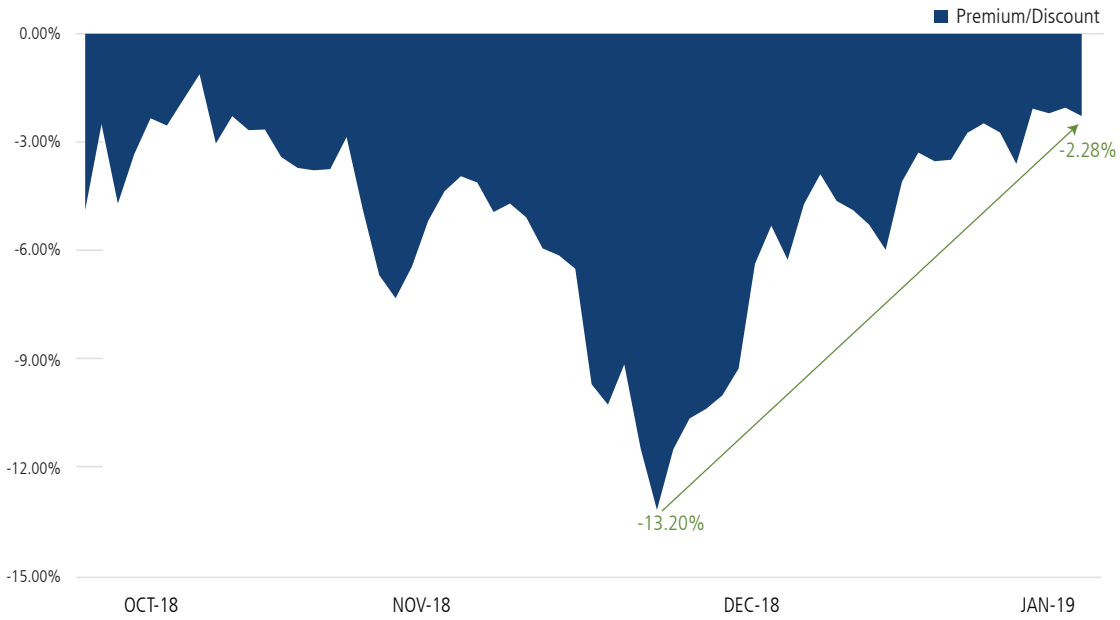
Data as of 1/31/19. Source: CEF Connect.  
Past performance is no guarantee of future results.

**CALAMOS STRATEGIC TOTAL RETURN FUND—CSQ PREMIUM/DISCOUNT (10/31/18 - 1/31/19)**



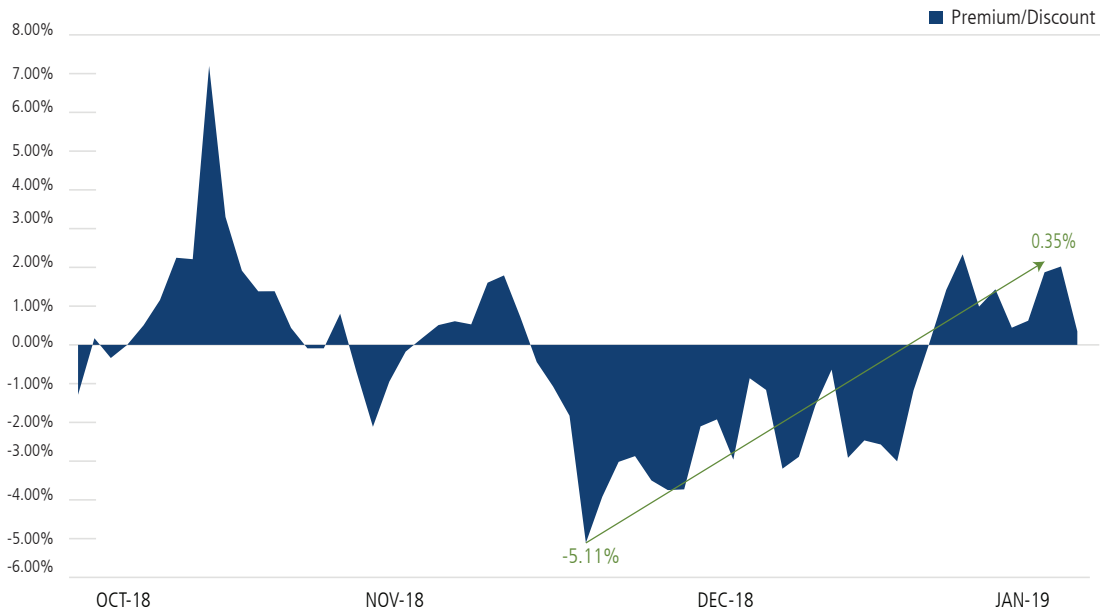
Data as of 1/31/19. Source: CEF Connect.  
Past performance is no guarantee of future results.

**CALAMOS GLOBAL DYNAMIC INCOME FUND—CHW PREMIUM/DISCOUNT (10/31/18 - 1/31/19)**



Data as of 1/31/19. Source: CEF Connect.  
Past performance is no guarantee of future results.

**CALAMOS GLOBAL TOTAL RETURN FUND—CGO PREMIUM/DISCOUNT (10/31/18 - 1/31/19)**



Data as of 1/31/19. Source: CEF Connect.  
Past performance is no guarantee of future results.

## CALAMOS CLOSED-END FUNDS ANNUALIZED RETURNS

AS OF 12/31/18	1-YEAR		3-YEAR		5-YEAR		10-YEAR		SINCE INCEPTION	
	MARKET RETURN	NAV RETURN	MARKET RETURN	NAV RETURN	MARKET RETURN	NAV RETURN	MARKET RETURN	NAV RETURN	MARKET RETURN	NAV RETURN
CHI (6/26/02)	-12.48%	-3.97%	7.11%	6.54%	2.01%	3.57%	11.01%	12.12%	7.69%	8.52%
CHY (5/28/03)	-12.34	-4.21	7.08	6.22	3.66	3.39	10.81	11.93	6.78	7.58
CHW (6/27/07)	-20.22	-12.83	7.89	5.67	4.01	3.28	11.35	9.95	2.77	4.06
CSQ (3/26/04)	-4.91	-8.28	11.68	8.51	8.61	6.63	14.80	12.99	6.38	6.92
CGO (10/27/05)	-25.53	-14.25	6.19	3.75	3.15	2.78	10.33	8.71	6.09	6.72
CCD (3/27/15)	-9.57	-3.61	7.48	6.01	-	-	-	-	-1.12	2.43

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.

*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.*

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. Please refer to back page for important notes.

### 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 U.S., 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-U.S. stocks or bonds.

The **ICE BofA Merrill Lynch All U.S. Convertibles Index** tracks the performance of U.S.-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 BofAML U.S. High Yield Master II Index** consists of below investment grade U.S. dollar denominated corporate bonds that are publicly issued in the U.S. 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 BofAML 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 BofAML 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.

### 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.

Global Total Return and 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**<sup>®</sup>  
INVESTMENTS

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