

Collaring Equity Market Volatility

With decades of experience in convertible bonds and options, the Calamos Hedged Equity Income Fund came in 2014 as a natural extension for Calamos Investments. The fund has two distinct parts – equities and options. While the equity investment represents a low-risk portfolio, closely based on the S&P 500 Index, the alpha generation comes mainly from trading options and constructing the best possible hedge for the specific market environment.

What is the background of the fund and how has it evolved?

John P. Calamos, Sr. founded Calamos Investments in 1977 as an institutional convertible bond manager. The firm has evolved over the years into an equity and fixed-income manager, but about a third of our assets are still invested in convertible bonds.

We have a strong reputation as a convertible manager on the long-only side and at convertible arbitrage. We have a lot of option expertise and the covered call strategy is a natural extension of that experience. It goes back to 1990 and our Market Neutral Income Fund, which is currently a \$5 billion fund, and is half convertible bond arbitrage and half S&P covered call.

The Calamos Hedged Equity Income Fund was launched on December 31, 2014. The fund has two parts - equities and options. The S&P equity portfolio is trying to add alpha to the S&P, while minimizing tracking error. We own 250 to 275 S&P 500 index names at any time. We minimize the tracking error because we trade S&P 500 Index options on top of the equity portfolio and we don't want a lot of basis risk between our hedges and the underlying long book. We do trade the equity book a bit, but the bulk of our alpha over the years has come from the option side.

On the option side, we treat S&P 500 Index options like selling calls and buying puts. It's a collar strategy with a long leaning bias. Our baseline trade is selling 80% notional of the portfolio with calls. So, we sell S&P Index calls zero to 10% out of the money and one to three months in expiry. Then we use the proceeds for income and to buy puts.

Typically, we buy at least 40% notional put protection on the portfolio, 5% to 10% out of the money and one to three months out, but it can be staggered. We always look for the best hedge in the market based on what the option market is. There always has to be a delta that provides downside protection.

What are the total assets under management in the fund and in the strategy?

We have about \$38 million in the fund as of March 27, 2018. We manage an additional \$2.5 billion in covered call assets; almost all of that is in the Calamos Market Neutral Income Fund.

Would you tell us about the core beliefs that drive your investment philosophy?

The most important part of our philosophy is how we construct and optimize the hedge. The key is to construct the best hedge we can based on what the market is giving us. We adjust it based on what's most interesting in the option market, so it tends to be a dynamically traded strategy from the hedge standpoint.

The fund represents a way to have equity exposure with downside protection or hedge to it. Typically, our beta to the S&P 500 is 40% to 60%, so it is a lower-risk equity strategy. Because of the covered call nature, it generates a little more income than a typical equity strategy. That income is not enormous, but still meaningful.

This strategy is a great tool to take some risk off the table while staying in the equity market, or to increase equity exposure in a risk-managed way. We have been in a quite unloved bull market and many people have stayed out



Eli Pars, CFA

Co-CIO, Head of Alternative Strategies & Co-Head of Convertible Strategies, Senior Co-Portfolio Manager

As a Co-Chief Investment Officer, Eli Pars is responsible for oversight of investment team resources, investment processes, performance and risk. As Head of Alternative Strategies and Co-Head of Convertible Strategies, he manages investment team members and has portfolio management responsibilities for those investment verticals. He is a member of the Calamos Investment Committee, which is charged with providing a top-down framework, maintaining oversight of risk and performance metrics, and evaluating investment process. Eli has 30 years of industry experience, including 11 at Calamos. Prior to returning to Calamos in 2013, he was a Portfolio Manager at Chicago Fundamental Investment Partners, where he co-managed a convertible arbitrage portfolio. Previously, he held senior roles at Mulligan Partners LLC, Ritchie Capital and SAM Investments/The Hampshire Company. Earlier in his career, Eli was a Vice President and Assistant Portfolio Manager at Calamos. He received a B.A. in English Literature from the University of Illinois and an M.B.A. with a specialization in Finance from the University of Chicago Graduate School of Business.

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of it. Our product is ideal for somebody who wants to close the underweight in equities, but in a risk managed way, or for people who have been in the market to take some risk off while still maintaining upside exposure.

Why is hedging critical? What do you aim to hedge?

We aim to hedge the equity market volatility. Our hedge has two pieces - a short call piece and a long put piece. The long puts are there mostly to provide protection in cases like the drawdown we had recently, in the first quarter of 2016, or in the third quarter of 2015. The short calls are based on stocks, and the puts are S&P 500 Index options.

Call hedge is helpful, but has its limits. At some point, the hedge starts to go away, so we have put protection for additional downside protection when the market has a pullback.

Could you describe your investment process?

When constructing the long equity portfolio, we add constraints on managing industry, sector and factor exposures. On the option side, we start with the baseline trade which is that 80% call notional sold and 40% put notional purchased. Overall, we try to make that hedge better and we look for opportunities every day.

The main drivers are what we can get in terms of a hedge, what kind of income we can generate from it, and how that hedge looks as the market moves. Sometimes an option trade can give a great hedge through the first 2% up or down in the market, but as the market moves in a bigger direction, it may not perform the way we want. Typically, we have 10 to 15 different call options in terms of strike or expiry, as well as a similar number of put trades. As a result, the hedge is laddered through time and index level.

How do you make decisions on duration, volatility or expiration?

The best way to explain that would be through an example. Our current hedge and the one we've had for the last six months differ from the baseline trade. As we looked at the volatility of the market last summer, we decided that we weren't getting paid enough to sell call options out of the money. But on the put side, we were getting paid a lot more from a volatility perspective for more out of the money puts.

We had our typical 40% notional put protection, but we layered in put spreads on top of that. For example, when we were buying an S&P 500 strike put and selling the same quantity and expiry, our potential profit is the 200 points in the S&P between the upper and lower strike. That's a way to generate more at-the-money protection.

On the call side, because we weren't getting paid a lot for selling 5% out of the money calls, we sold more at the money calls and then bought some 1 to 2 months and 3% or 4% out-of-the-money calls. So, instead of just selling calls, we were selling call spreads. The difference is that we get a little less income; but because the cost of it was relatively low, we got much better upside participation.

In a covered call strategy with puts like ours, as the market goes up, our delta or the size of our hedge goes up, but our beta to the S&P goes down. If the market goes down, our protection from the calls goes away and comes closer to the number of notional puts we have, or about 40%.

In the current trade, with the additional put spreads to the downside and because we are using call spreads instead of calls to the upside, the risk-reward profile is a lot more attractive. As the market goes up, our sensitivity to the market goes up, but the hedge goes down. As the market goes down, our sensitivity goes down and the hedge goes up.

Normally, to get that kind of trade, we have to pay a lot in the option market. That's why it's not our typical baseline trade, but in the current and particularly in the last year's market, we could get it for a reasonable price. Last year the trade did well although it was constrained because there wasn't any volatility to the upside or the downside. In the beginning of this year, however, we saw a lot of upside volatility in the first weeks. Thus, the calls we were long started capturing a lot of delta.

Our sensitivity to the market went down and we were making a lot of money on these long calls. Every time the market moved up, we would pocket some of the cash and use it to either roll up the strike of our puts or buy additional puts or put spreads. By the end of January, we captured a relatively large share of the upside move in the market. When the market reversed, our hedge became quite high, our beta to the market became quite low, and we were able to protect a lot of the downside.

Year to date, the fund is up 4.3%, while the S&P 500 is up 1.3%. You wouldn't normally expect a hedged strategy like ours to outperform the equity market in an upward case, but it happened because we captured a big piece of the upside in January and didn't capture a lot of downside.

It is important to understand that this is not a market timing strategy. It is all about how we construct and trade the hedge. In the case we discussed, we were somewhat forced to sell as the market went up, and that allowed us to deliver that performance.

Would you sketch another scenario that illustrates your hedge strategy?

We had no opinion on Brexit, but we saw a potential major market moving event and the volatility was relatively cheap. We did some incremental hedging both to the upside and the downside and we traded around that event. It worked really well.

Another example is the third quarter of 2015 when there was a scare related to the Chinese currency and the market sold off fast. At that time, our trade was very similar to the baseline trade. We had some put spreads on top of it, but we didn't have any long calls. Going into that period, the index was about 2,100 and we sold calls that were 2100 and 2150 and 2200 strike. Over several days, the market sold off several hundred points, so the calls we had sold for \$20 became \$3. Typically, we would try to buy back a good part of those calls if we've captured more than 75% of the value. In that case, we captured 90% of the value.

Is your main focus volatility, market direction, or price?

We don't have much of an opinion about the market, but we do have an idea where volatility normally trades. The tricky part with option volatility is the realized volatility and where we think it is going. We don't make big bets on the direction, but we are certainly aware of what's cheap or expensive.

Last year is a good example of low absolute volatility in the option market and

even lower realized volatility in the equity market. We are aware of the historical option volatility, but we also focus on reasonable price for the specific environment. Our strategy is more about the best trade we can get based on the volatility regime that we are in.

How do you define and manage risk?

For us, risk management is about dampening volatility and providing downside protection. The challenge is that retail investors tend to chase performance when the market is doing well and to get out of the market when things are doing poorly and after they have realized losses. That’s just human psychology and our goal is to dampen that volatility. **T**

**Calamos Hedged Equity
Income Fund**

Adviser	Calamos Investments LLC
Symbol	CAHEX (Class A) CIHEX (Class I)
Address	2020 Calamos Court Naperville, IL 60563
Phone	800-582-6959
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Source: Company Documents

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Before investing carefully consider the fund's investment objectives, risks, charges and expenses. Please see the prospectus and summary prospectus containing this and other information or call 1-800-582-6959. Read it carefully before investing.

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Alternative investments are not suitable for all investors.

The principal risks of investing in the **Calamos Hedged Equity Income Fund** include: covered call writing risk, options risk, equity securities risk, correlation risk, mid-sized company risk, interest rate risk, credit risk, liquidity risk, portfolio turnover risk, portfolio selection risk, foreign securities risk, American depository receipts, and REITs risks.

Options Risk: The Fund's ability to close out its position as a purchaser or seller of an over-the-counter or exchange-listed put or call option is dependent, in part, upon the liquidity of the option market. There are significant differences between the securities and options markets that could result in an imperfect correlation among these markets, causing a given transaction not to achieve its objectives. The Fund's ability to utilize options successfully will depend on the ability of the Fund's investment adviser to predict pertinent market movements, which cannot be assured.

Data as of 3/31/2018

AVERAGE ANNUAL RETURNS	1-YEAR	3-YEAR	SINCE A SHARE INCEPTION	SINCE I SHARE INCEPTION
Calamos Hedged Equity Income Fund				
I Shares - at NAV (Inception-12/31/14)	8.82%	6.20%	N/A	5.55%
A Shares - at NAV (Inception-12/31/14)	8.33	5.90	5.24	N/A
A Shares - Load adjusted	3.23	4.19	3.68	N/A
S&P 500 Index	13.99	10.78	10.23	10.23
Bloomberg Barclays U.S. Aggregate Bond Index	1.20	1.20	1.60	

Performance data quoted represents past performance, which is not guarantee of future results. Current performance may be lower or high than the performance quoted. The Principal value and return of an investment will fluctuate so that your shares when redeemed, may be worth more or less than their original cost. Performance reflected at NAV does not include the Fund's maximum front-end sales load of 4.75%. Had it been included, the Fund's return would have been lower. For most recent fund month-end performance information visit www.calamos.com

S&P 500 Index is generally considered representative of the U.S. stock market.

Bloomberg Barclays U.S. Aggregate Bond Index is a broad-based flagship benchmark that measures the investment grade, US dollar-denominated, fixed-rate taxable bond market. The index includes Treasuries, government-related and corporate securities, MBS (agency fixed-rate and hybrid ARM pass-throughs), ABS and CMBS (agency and non-agency).



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