



## Monthly Report December 2017

### **Brandywine Wraps Up Strong 2017 with Profits Across the Board**

Led by a +56% annual gain in our Brandywine Symphony Preferred Fund, Brandywine extended its 2017 profits with further gains in December.

Since the launch of the Brandywine Symphony program in 2011, Brandywine has significantly outperformed all the major CTA (managed futures) indexes. And due to Brandywine’s unique investment methodology — which is evidenced by our non-correlation of -0.06 to the BTOP 50 managed futures index — Brandywine provides exceptional diversification value when included in managed futures portfolios. Brandywine’s strong performances in both 2016 & 2017 further highlight this non-correlation.

Brandywine’s non-correlation is the result of our multi-strategy Return Driver based approach. It is NOT the result of trading a specialized portfolio concentrated in specific markets or strategies. *This makes us unique among non-correlated CTAs.* Our performance continues to demonstrate the benefits that come from including Brandywine as a core holding in a portfolio that contains stocks, CTAs or hedge funds. This is evidenced by the chart on page 2, which shows how Brandywine can increase portfolio Sharpe Ratios.

We encourage you to call or email us to learn more and to see how Brandywine can serve as an excellent core diversifier for both your managed futures and equity portfolios.

### **Why “Investors” Lose**

Over the 35 years since our founding in 1982, Brandywine and our principals have witnessed a variety of behaviors that have been detrimental to investment performance. As was shown in *Myth #3* in Mr. Dever’s best seller, *Jackass Investing: Don’t do it. Profit from it.*, the average person’s portfolio consistently underperforms the returns of the funds into which they invest by 5% or more *per year*. This is due to the inability of each of us to overcome our inherent emotional biases.

As we have not only faced these emotional demons ourselves, but also witnessed perhaps hundreds of examples contributed by our investors over the years, we thought we’d provide a few cases (no names of course!) with the goal of preventing others from doing the same. You may recognize some of these behaviors in your own actions. Because of this, at the end of this report we’ll present a new product being offered by Brandywine that is intended to constrain these emotional behaviors and bolster the opportunity for you to accrue the long-term potential benefits of investing with Brandywine.

#### **Fear/greed**

This is probably the most well-documented and insidious emotion that negatively affects people’s investing behavior. People regularly panic to get into funds near the top (FOMO—Fear of Missing Out) and then panic again to sell out at the bottom (FOWO—Fear of Wiping Out).

The past month has presented us with one of the best

examples of FOMO: Bitcoin. As investment professionals, we received daily inquiries from friends and acquaintances about buying Bitcoin, culminating in this great example. Mike Dever’s son Charley is a high school pole vaulter. Near the end of December Mike received a call from the mother of one of Charley’s competitors/ friends saying that her son wanted to buy a cryptocurrency. Not only were they way late to the Bitcoin party, but since in their minds they had missed that, they wanted to buy Ripple, a “lower-priced” alt-cryptocurrency. After totally

*Continued on next page*

### **Performance Summaries of Brandywine's Programs<sup>(1)</sup>**

Brandywine Program	December Return	2017 Return	Annual Return	Annual Volatility	Maximum Drawdown	Sharpe Ratio
<b>Symphony</b>	+2.29%	10.92%	2.54%	9.57%	-25.57%	0.18
<b>Classic</b>	+0.77%	11.38%	4.94%	8.96%	-14.90%	0.52
<b>Monetary</b>	-0.06%	9.29%	7.64%	9.95%	-14.50%	0.75
<b>Alpha Hedge</b>	+0.22%	1.29%	4.69%	11.51%	-17.39%	0.39
<b>Brandywine CPU</b>	+0.56%	8.61%	5.75%	8.37%	-13.26%	0.65

(1) All Footnotes and required disclosures are on the last page of this report

PAST PERFORMANCE IS NOT NECESSARILY INDICATIVE OF FUTURE RESULTS. THERE IS THE RISK OF LOSS AS WELL AS THE OPPORTUNITY FOR GAIN WHEN INVESTING WITH BRANDYWINE. BRANDYWINE’S INVESTMENT PROGRAMS ARE ONLY AVAILABLE TO INVESTORS THAT QUALIFY AS “QUALIFIED ELIGIBLE PARTICIPANTS” AS THAT TERM IS DEFINED IN CFTC REG. SECTION 4.7(a)(2) PROMULGATED UNDER THE COMMODITY EXCHANGE ACT, WHICH ARE QUALIFIED TO INVEST IN THE PROGRAMS BY (a) THEIR KNOWLEDGE AND ACCEPTANCE OF THE RISKS ASSOCIATED WITH HIGHLY LEVERAGED SECURITIES AND FUTURES TRADING AND (b) THEIR FINANCIAL ABILITY TO ACCEPT SUCH RISK.

---

*Continued from page 1*

missing the move in the market leader—Bitcoin, they opted for what they considered to be the next big mover. But when everyone is talking up a market and are eager to buy anything that looks like it, it's time to sell, not buy. We definitely walk the talk on this point. Brandywine has developed and employs numerous sentiment-based investment strategies that use Return Drivers designed to exploit this crowd behavior.

In contrast to FOMO, FOWO asserts itself at performance lows. One of our past investors was a highly experienced futures trader who had also read Mr. Dever's book multiple times. He called us in 2013 out of concern that his actions were following some of the negative behaviors written about in the book. He was interested in investing with Brandywine. After watching our performance for about a year and a half (see "Analysis Paralysis"), he made his investment in November 2014. This was just after the strong performance run Brandywine achieved over the first three years of trading in our Brandywine Symphony program.

By mid-2015, despite his account having initially declined in value as our 16-month drawdown began, his account moved into new high ground. He was quite pleased, as we were the only CTA in his portfolio that had produced positive performance in the first half of 2015. But as our drawdown reasserted itself in the second half of 2015, he became increasingly concerned with our performance, we were now dragging down the performance of his other CTAs. This culminated in him calling us just six months later — on the *exact morning* of the bottom of our drawdown — requesting the closure of his account. He was extremely fearful that our trading would continue to deplete his balance sheet.

We understand these emotions. We have experienced, and succumbed to them, multiple times ourselves (one such time is described in the "Gambling with Leverage" section in [Myth #11](#) of Mr. Dever's book). But what we've learned over the past few decades, and as Mr. Dever stresses throughout his book, is that successful investing requires a rational approach. Emotions turn investing into gambling. A rational approach would have consisted of evaluating the Return Drivers that had contributed to the loss and determining if they remained valid. In the case of Brandywine, we stressed how they did, and in fact we felt that those Return Drivers were likely even better positioned to profit than they had been prior to the drawdown. But the emotional fear of even greater losses dominated our investor's decision process. In that situation, waves of panic and regret at not having gotten out sooner overwhelmed all rational evaluation.

#### **Analysis Paralysis:**

There are various versions of this behavior that we have observed over the years. The first is where it is common for investors to "watch" the performance of a prospective investment before entering. In actuality, there is no positive result that comes from this. If the performance during the watch period is negative, the person will back off and not invest, congratulating themselves on having saved money by not investing in the first place. If the performance is good, it will confirm their belief that the manager/investment is a good one and finally make the investment—often at a short-term peak in performance. Bottom line, if you have done your research and have a reasonable level of confidence that the investment you are considering is based on sound, logical Return Drivers, then you should just make the decision to invest. Here is an actual email we sent to a prior investor who got out at the trough of our drawdown and in 2016 was considering re-investing with Brandywine. We had just wrapped up our best month on record, and he was concerned he would be getting in at the wrong time, so wanted to watch us before investing. Our email to him read (emphasis added);

"Rather than trying to time your re-entry on a discretionary basis (such as waiting for a pull-back, or conversely, waiting for a performance uptrend to be established), I would recommend just picking a date and re-starting at that time. There is such randomness on a month-to-month basis that it really is a coin toss as to whether one entry approach is better than another, and in my experience adding discretion to the process only serves to ramp up the emotional component (which almost always seems to result in the wrong decision). **If you are comfortable that our Return Driver based approach is sound over the long-term (the only reason to invest), then the shorter-term performance fluctuations are meaningless.**

Just my 2 cents."

The person chose not to invest at that time, and has continued to not invest as we accrued positive performance over the past 18 months.

#### **Analysis Paralysis (Misguided IQ):**

One potential institutional investor, led by some very high IQ research people, has repeatedly led their research requests with two data sets that have no bearing on our future performance and little bearing on the value we will

*Continued on next page*

---

PAST PERFORMANCE IS NOT NECESSARILY INDICATIVE OF FUTURE RESULTS. THERE IS THE RISK OF LOSS AS WELL AS THE OPPORTUNITY FOR GAIN WHEN INVESTING WITH BRANDYWINE. BRANDYWINE'S INVESTMENT PROGRAMS ARE ONLY AVAILABLE TO INVESTORS THAT QUALIFY AS "QUALIFIED ELIGIBLE PARTICIPANTS" AS THAT TERM IS DEFINED IN CFTC REG. SECTION 4.7(a)(2) PROMULGATED UNDER THE COMMODITY EXCHANGE ACT, WHICH ARE QUALIFIED TO INVEST IN THE PROGRAMS BY (a) THEIR KNOWLEDGE AND ACCEPTANCE OF THE RISKS ASSOCIATED WITH HIGHLY LEVERAGED SECURITIES AND FUTURES TRADING AND (b) THEIR FINANCIAL ABILITY TO ACCEPT SUCH RISK.

---

*Continued from page 2*

bring to their portfolio: Sharpe Ratio and the daily correlation of our returns to their portfolio. We understand that they want to identify managers that can produce solid returns without exposing them to undo risk, and that they want uncorrelated managers to diversify their portfolio returns. But all they need to do is 1) understand the validity of our Return Drivers, and 2) plug our performance into a spreadsheet with their returns and see how we improve their risk-adjusted returns (we do). Where smart people become misguided is in failing to understand that correlation is merely a proxy they can use to determine whether that diversification will be achieved.

But they are set on using these metrics as a key filter for selecting managers to add to their portfolio. Based on Sharpe Ratio, they would have loved Brandywine at our peak, when Symphony's Sharpe Ratio was over 1.0. Looking back, this turns out to have been the worst time to have invested with us over the past seven years. But they thoroughly disliked us at the bottom of our drawdown. Which was the best time to have invested with us over the past seven years. But we have not changed. Our expectation for long-term future returns (we are targeting 10% at our standard risk level, but of course PAST PERFORMANCE IS NOT INDICATIVE OF FUTURE PERFORMANCE) was virtually identical at both times (and remains so today). If you believe in the validity of our Return Drivers, invest. If you don't, stay away. It really is as simple as that. Strictly avoid being "too clever by half."

#### **Performance Paralysis:**

More than once we have had people place money with us with the stated intention of adding to it on some regular basis. One of those people first allocated to our Brandywine Symphony Preferred Fund in 2014 and actually added after the first month or two. But as soon as the Fund entered into its drawdown at the end of the summer that year, those additions stopped. They started with a sound plan to systematically add to their account. But as soon as losses started to mount, their emotions drove them to abandon that plan. There was nothing that had changed with Brandywine (other than a few down months) that would have led to a reevaluation of the validity of our investment approach, yet it led to a complete change in their personal investment approach. And it led to a significantly lower investment value for the investor than if they had followed their original plan.

#### **Recency Bias:**

In 1985 we were running a fund we had set up the year before and which was being managed by Paul Tudor Jones of Tudor investment. At the time Paul Tudor Jones was just getting started managing people's money and was not yet the famous trader he became a few years later. But his performance was exceptional, upwards of 100% per year. We had one investor who excitedly invested after the fund had posted a nice run-up. But the next three months proved troublesome and her investment dropped by more than 30% (we had instructed Tudor to trade the fund at an aggressive level). She called us extremely upset and demanded to redeem her money immediately. Of course we did, and of course the fund immediately resumed its prior torrid positive performance. Nothing had changed in the management of the fund. What had changed was her emotional state. She extrapolated out her first three months of negative performance and panicked. Unfortunately, those emotions led her to sidestep multiple years of high double digit percentage gains.

#### **"Do Something":**

In 2012, a new investor put money into our Brandywine Symphony Preferred Fund, which aggressively (cash efficiently) trades at 3x to 5x the standard risk level of our Brandywine Symphony program. After a year of solid performance, the investor called with an interest in adding an investment from his IRA account. We discussed the volatility of the fund, but he had a 20-year investment viewpoint and felt comfortable with the fluctuations he would experience prior to his need for the money two decades later. Or so he thought. Within a few months of that conversation Brandywine's Symphony program entered into our 16-month, 25% drawdown. The aggressively-traded Brandywine Symphony Preferred Fund gave up two-thirds of its value over that period. The investor started calling or texting more and more frequently, requesting performance updates. It was not uncommon for him to call or text two or three times *per day*! Not only did he never make the IRA investment, but he withdrew his entire initial investment. Losses have a curious way of turning long-term investors into short-term gamblers. Was there any value in him contacting us multiple times per day as his investment lost money? No. But once he became that actively involved, he had to "do something."

---

*Continued on next page*

---

PAST PERFORMANCE IS NOT NECESSARILY INDICATIVE OF FUTURE RESULTS. THERE IS THE RISK OF LOSS AS WELL AS THE OPPORTUNITY FOR GAIN WHEN INVESTING WITH BRANDYWINE. BRANDYWINE'S INVESTMENT PROGRAMS ARE ONLY AVAILABLE TO INVESTORS THAT QUALIFY AS "QUALIFIED ELIGIBLE PARTICIPANTS" AS THAT TERM IS DEFINED IN CFTC REG. SECTION 4.7(a)(2) PROMULGATED UNDER THE COMMODITY EXCHANGE ACT, WHICH ARE QUALIFIED TO INVEST IN THE PROGRAMS BY (a) THEIR KNOWLEDGE AND ACCEPTANCE OF THE RISKS ASSOCIATED WITH HIGHLY LEVERAGED SECURITIES AND FUTURES TRADING AND (b) THEIR FINANCIAL ABILITY TO ACCEPT SUCH RISK.

*Continued from page 3*

#### **Fatigue:**

We first met with one of our most experienced professional investors in early 2012, when he was evaluating us for an investment by the large institutional investor that employed him. While the organization he represented did not immediately invest, he soon became an investor in our Brandywine Symphony Preferred Fund. He enjoyed a year and a half of solid performance prior to us entering into our drawdown. He was patient and handled the drawdown quite professionally. But the recovery proved too slow, and despite two years of double digit gains in Brandywine's Symphony program, he had not yet fully recovered to a new peak level. At that time he essentially just "gave up" and redeemed his investment. Putting this into perspective; a new investor who came in at the start of that recovery would have had an entirely different emotional response to two years of steady double-digit gains. It's quite possible — as their account reached new high performance levels — they would have been interested in adding to their position. But the existing investor, with an account value that was still recovering and below its peak level, lost patience. To paraphrase Joe Walsh (*Life's Been Good*), "Everybody's so different. Brandywine's the same." Investments should be evaluated on merit—not emotion.

#### ***Brandywine's Solution***

First, we'd like to make clear that as traders we welcome the emotional behaviors exhibited by others. If all people made rational investment decisions it would greatly curtail the opportunity to profit from market activity. Over the decades, we have put in place safeguards to enable us to be able to exploit this behavior without succumbing to it ourselves. The most important of these policies is to follow a systematic research and investment process. This process is described in the four page [introduction](#) to Mr. Dever's book.

Through [this link](#) we present the Brandywine Principal-protected Notes. These Notes are structured to allow investors to take full advantage of Brandywine's long-term potential, while enabling them to avoid the emotional traps that turn winning investments into losers.

While we recognize that there is a shift towards providing people with more and more liquidity, Brandywine feels strongly this is detrimental to both investors and their investment managers. While it "feels good," it serves as an enabler that exacerbates the negative behaviors presented in this report. Over the past 35 years we have repeatedly seen how people are able to take winning investments and turn

#### **Shiny Object:**

I'll wrap up this discussion of with what I call the "Shiny Object" syndrome. In the early/mid 2000s we engaged a third-party marketer who introduced a number of new investors to Brandywine. After a couple of years of reasonably calm, steady performance, we entered into a more volatile period. It wasn't a dramatic drawdown, but it did deviate from the prior few years. During that period we started to hear from our marketer about a new manager he had found who had solid returns and exceptional risk control. So exceptional in fact that he had never suffered a down month. Indeed, he was so steady he sported a Sharpe Ratio in excess of 40! (Yes, you read that correctly. The decimal is not out of place). We would (solemnly) joke in the office about how that manager must just sit down each month and come up with a number to report as their performance (which was always between 90bp and 100bp). Well, unfortunately, that is exactly what they had been doing.

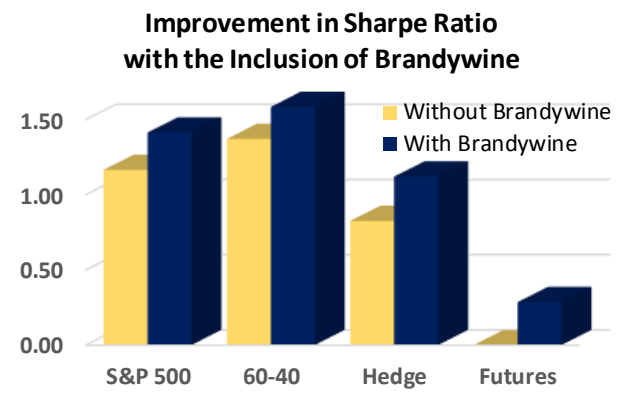
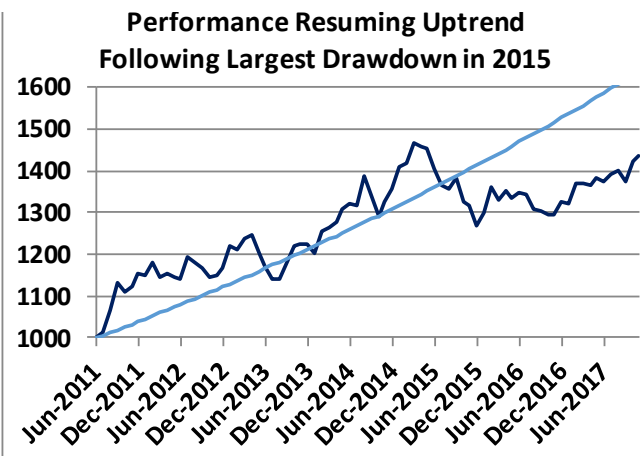
Within a year of our marketer pulling ALL of his investors out of our fund and putting them with the new manager, the fraud news broke. I don't know how many of you remember the Petters fraud. But that's what it was. The fund they went into was never real. All its documentation was made up. It was troublesome to us to have lost those clients, but it was damaging to those investors to have jumped from us to grab the shiny new object. They, and their advisor, wanted badly to believe those numbers could be true, when in fact they were truly absurd. Free market capitalism and the competitive investment environment do not allow for a 40+ Sharpe Ratio. But the object shined so bright they were blinded by its light.

them into losing gambles by abandoning a rational process and caving in to the short-term emotions. The examples above are just a very limited subset of what we have personally experienced.

[The Brandywine Notes](#) can be structured with terms of 7 to 20 years and provide for the return of principal at the end of the term. Returns are variable and based on Brandywine's performance. And of course PAST PERFORMANCE IS NOT INDICATIVE OF FUTURE PERFORMANCE, but as the term sheet shows, based on Brandywine's actual performance over the past 6 1/2 years, the median projected return on a 20-year note is more than 10% annualized.

Contact us to discuss how we can customize a solution that will provide a long-term benefit to you and/or your clients.

**Additional Reasons to Invest Now With Brandywine**  
*(Performance of the Brandywine CPU)<sup>(2)</sup>*



**(Non) Correlation (highlighted in table at right) of Brandywine’s Investment Programs to Other Investment Indexes<sup>3</sup>**

It is this non-correlation - combined with Brandywine’s repeatable investment process and broad strategy and market diversification - that makes Brandywine such a positive addition to most investment portfolios.

Index	Symphony	Classic	Monetary	Alpha Hedge
S&P 500	0.14	0.02	0.06	-0.43
Bonds	0.25	0.25	0.45	0.38
Hedge Funds	0.23	0.07	0.11	-0.40
Mgd. Futures	-0.06	0.31	0.42	0.66

**Descriptions of the Brandywine Investment Programs<sup>(1)</sup>**

Brandywine trades pursuant to a fully-systematic model that incorporates a wide range of both fundamental and technical trading strategies. Brandywine’s Symphony Program began trading in July 2011 and the performance of the other programs is extracted from the actual performance of trades executed within the Brandywine Symphony Program. “Brandywine CPU” is the composite performance that could have been achieved by allocating across all four Brandywine programs.

<p><b>Symphony<sup>(3)</sup></b> Most broadly diversified program:</p> <ul style="list-style-type: none"> <li>• Trades in all liquid global futures markets (100+)</li> <li>• Systematically employs both fundamental and technical strategies</li> </ul>	<p><b>Classic<sup>(3)</sup></b> Similar to Symphony:</p> <ul style="list-style-type: none"> <li>• but excludes trading in fundamental value strategies (but includes numerous other fundamental strategies)</li> </ul>	<p><b>Monetary<sup>(3)</sup></b> Trades financial markets only:</p> <ul style="list-style-type: none"> <li>• Trades in all liquid global currency, interest rate and stock index futures markets (60+)</li> </ul>	<p><b>Alpha Hedge<sup>(3)</sup></b> Competes with trend following CTAs:</p> <ul style="list-style-type: none"> <li>• Solely employs momentum strategies.</li> <li>• Out-performed Trend-followers by more than 4% / yr.</li> </ul>	<p><b>Brandywine CPU<sup>(3)</sup></b> Composite Performance Unit maintains investment across Brandywine’s four Programs</p>
---	--	---	--	--

PAST PERFORMANCE IS NOT NECESSARILY INDICATIVE OF FUTURE RESULTS. THERE IS THE RISK OF LOSS AS WELL AS THE OPPORTUNITY FOR GAIN WHEN INVESTING WITH BRANDYWINE. BRANDYWINE’S INVESTMENT PROGRAMS ARE ONLY AVAILABLE TO INVESTORS THAT QUALIFY AS “QUALIFIED ELIGIBLE PARTICIPANTS” AS THAT TERM IS DEFINED IN CFTC REG. SECTION 4.7(a)(2) PROMULGATED UNDER THE COMMODITY EXCHANGE ACT, WHICH ARE QUALIFIED TO INVEST IN THE PROGRAMS BY (a) THEIR KNOWLEDGE AND ACCEPTANCE OF THE RISKS ASSOCIATED WITH HIGHLY LEVERAGED SECURITIES AND FUTURES TRADING AND (b) THEIR FINANCIAL ABILITY TO ACCEPT SUCH RISK.

**Monthly Performances of Brandywine's Investment Programs<sup>1,4</sup>**

Monthly Performance - Brandywine Symphony Program													
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	YEAR
2017	2.23%	2.98%	-1.41%	-1.31%	0.29%	-1.18%	0.91%	2.40%	-1.73%	2.85%	2.27%	2.29%	10.92%
2016	1.07%	0.18%	2.14%	10.46%	-1.22%	1.88%	-1.06%	-4.47%	0.04%	-0.92%	-0.27%	4.40%	12.14%
2015	-0.74%	3.55%	-0.60%	3.20%	0.01%	-1.82%	-6.72%	0.33%	-1.48%	-0.30%	-7.80%	-2.18%	-14.16%
2014	0.10%	5.68%	1.71%	1.18%	1.14%	0.05%	-1.71%	4.65%	-6.46%	-3.05%	-2.26%	-2.18%	-1.75%
2013	3.46%	-1.10%	2.55%	-0.08%	-3.03%	-1.54%	-3.09%	0.16%	3.57%	2.95%	0.32%	-0.16%	3.77%
2012	0.41%	2.17%	-3.31%	0.00%	-2.28%	0.79%	3.85%	-0.61%	-0.48%	-1.45%	0.11%	1.20%	0.20%
2011							0.92%	2.47%	2.83%	-0.45%	0.65%	1.27%	7.90%

Extracted Monthly Performance - Brandywine Classic Program													
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	YEAR
2017	-0.09%	3.04%	-0.63%	-0.50%	1.91%	1.22%	-0.71%	2.31%	-1.12%	4.37%	0.41%	0.77%	11.38%
2016	2.98%	4.43%	-2.44%	1.07%	-0.46%	-1.22%	-1.88%	-2.61%	-3.76%	0.07%	0.51%	3.91%	0.23%
2015	-1.14%	3.77%	1.54%	1.84%	0.71%	-3.35%	-1.58%	-0.22%	2.10%	-5.15%	0.05%	-2.60%	-4.29%
2014	0.08%	7.25%	2.25%	1.54%	1.49%	0.02%	-0.27%	5.78%	-2.60%	-4.90%	1.01%	-0.89%	7.32%
2013	4.63%	-1.56%	3.41%	-0.13%	-4.09%	-2.11%	-4.20%	0.20%	4.80%	3.97%	0.42%	-0.26%	4.63%
2012	0.47%	2.98%	-3.41%	-0.12%	-3.38%	0.41%	4.97%	-0.80%	-0.62%	-1.94%	0.15%	1.53%	-0.08%
2011							1.21%	3.34%	3.82%	-0.58%	0.84%	1.70%	10.70%

Extracted Monthly Performance - Brandywine Monetary Program													
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	YEAR
2017	-0.88%	5.42%	1.12%	-1.70%	1.75%	-1.43%	2.91%	0.56%	-2.24%	3.15%	0.58%	-0.06%	9.29%
2016	2.62%	5.57%	-0.09%	-0.46%	-1.86%	0.51%	0.28%	-1.87%	0.70%	0.91%	-0.18%	2.22%	8.42%
2015	3.58%	1.51%	4.78%	-0.69%	-0.58%	-3.32%	-2.05%	-0.62%	1.39%	-3.06%	-0.41%	-6.00%	-5.80%
2014	-3.85%	5.29%	1.04%	-0.11%	4.74%	1.47%	-1.41%	6.58%	-7.20%	-3.81%	2.53%	1.87%	6.38%
2013	4.65%	-0.07%	2.98%	2.28%	-4.52%	-3.28%	-2.50%	0.61%	6.31%	3.49%	-0.66%	-1.51%	7.39%
2012	1.03%	3.57%	-2.65%	1.41%	-1.86%	1.12%	5.53%	-0.67%	-0.21%	-1.39%	0.75%	1.48%	8.12%
2011							1.68%	5.65%	5.15%	1.09%	-0.16%	2.68%	17.07%

Extracted Monthly Performance - Brandywine Alpha Hedge Program													
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	YEAR
2017	-1.07%	1.56%	-1.22%	1.35%	0.86%	-0.57%	-0.62%	-1.28%	-2.24%	4.02%	0.42%	0.22%	1.29%
2016	2.00%	6.07%	-5.85%	-0.76%	-1.24%	2.55%	-0.19%	-1.91%	0.53%	-2.49%	-0.53%	0.71%	-1.57%
2015	9.55%	-2.61%	4.34%	-3.19%	-1.00%	-3.89%	-1.99%	-1.85%	4.40%	-6.48%	2.21%	-1.92%	-3.44%
2014	-2.00%	1.36%	-1.77%	2.19%	1.29%	1.02%	1.33%	4.19%	1.65%	-3.35%	6.11%	6.96%	20.11%
2013	5.91%	-1.23%	0.59%	-0.53%	-2.68%	-1.75%	-2.12%	-0.71%	-0.46%	2.23%	2.46%	1.82%	3.26%
2012	-2.48%	1.66%	-3.61%	0.65%	3.57%	-3.92%	4.80%	-2.62%	-2.62%	-2.35%	-0.04%	1.64%	-5.63%
2011							0.44%	8.59%	9.54%	-5.94%	2.56%	3.77%	19.60%

Extracted Monthly Performance - Brandywine CPU													
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	YEAR
2017	-0.31%	3.67%	-0.14%	-0.43%	1.31%	-0.68%	1.13%	0.65%	-2.00%	3.79%	0.91%	0.56%	8.61%
2016	2.20%	4.67%	-2.08%	1.51%	-1.33%	1.12%	-0.47%	-2.45%	-0.22%	-0.68%	-0.21%	2.35%	4.24%
2015	3.89%	0.74%	3.13%	-0.36%	-0.39%	-3.41%	-2.75%	-0.82%	2.03%	-4.10%	-0.70%	-3.45%	-6.38%
2014	-1.93%	4.61%	0.56%	1.04%	2.47%	0.84%	-0.31%	5.28%	-3.30%	-3.72%	2.77%	2.39%	10.76%
2013	4.69%	-0.86%	2.26%	0.61%	-3.66%	-2.29%	-2.76%	0.02%	3.34%	3.32%	0.66%	-0.09%	4.98%
2012	-0.21%	2.63%	-3.17%	0.78%	-0.48%	-0.68%	4.82%	-1.24%	-0.99%	-1.81%	0.28%	1.56%	1.26%
2011							1.09%	5.62%	5.88%	-1.70%	1.05%	2.63%	15.26%

Combined Actual Performance of Symphony plus extracted performance for Classic, Monetary & Alpha Hedge

Monthly Performance - Brandywine Symphony Preferred Fund													
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	YEAR
2017	10.91%	14.70%	-7.49%	-6.94%	1.54%	-6.25%	4.31%	11.72%	-8.85%	13.90%	10.93%	12.12%	56.88%
2016	2.88%	0.24%	9.25%	45.45%	-5.64%	7.99%	-4.92%	-21.89%	0.19%	-4.87%	-1.63%	21.72%	41.55%
2015	-1.92%	10.91%	-1.83%	10.29%	-0.32%	-6.18%	-20.14%	0.67%	-5.48%	-1.87%	-33.59%	-11.14%	-51.52%
2014	0.12%	20.09%	5.13%	3.36%	3.22%	-0.04%	-5.35%	13.85%	-19.76%	-9.65%	-7.02%	-6.25%	-8.20%
2013	13.32%	-4.02%	9.26%	-0.35%	-10.56%	-5.85%	-12.22%	0.57%	15.39%	11.27%	1.03%	-0.67%	13.44%
2012	1.48%	8.27%	-12.14%	-0.07%	-9.20%	3.32%	16.13%	-2.36%	-1.91%	-5.69%	0.55%	4.85%	0.08%
2011							4.34%	11.72%	12.33%	-2.01%	2.47%	4.86%	37.88%

Aggressive: Trades at 3x - 5x standard leverage of Brandywine's Symphony Program

PAST PERFORMANCE IS NOT NECESSARILY INDICATIVE OF FUTURE RESULTS. THERE IS THE RISK OF LOSS AS WELL AS THE OPPORTUNITY FOR GAIN WHEN INVESTING WITH BRANDYWINE. BRANDYWINE'S INVESTMENT PROGRAMS ARE ONLY AVAILABLE TO INVESTORS THAT QUALIFY AS "QUALIFIED ELIGIBLE PARTICIPANTS" AS THAT TERM IS DEFINED IN CFTC REG. SECTION 4.7(a)(2) PROMULGATED UNDER THE COMMODITY EXCHANGE ACT, WHICH ARE QUALIFIED TO INVEST IN THE PROGRAMS BY (a) THEIR KNOWLEDGE AND ACCEPTANCE OF THE RISKS ASSOCIATED WITH HIGHLY LEVERAGED SECURITIES AND FUTURES TRADING AND (b) THEIR FINANCIAL ABILITY TO ACCEPT SUCH RISK.

## Footnotes & Disclaimers

**(1) "Performance Summaries..." table on Front Page and monthly performance tables on prior page:**

- Performance since the start of actual trading in July 2011. Most recent month may be an estimate.
- Symphony performance is the composite performance of all accounts managed pursuant to Brandywine's Symphony Program.
- Classic, Monetary and Alpha Hedge performances are extracted using the performance of actual trades executed in Brandywine's Symphony Program.
- "Brandywine CPU" is the composite of allocating 1/3 to Brandywine's Diversified Programs (split equally between Symphony and Classic) and 1/3 each to Monetary and Alpha Hedge, reallocating monthly.
- Brandywine Symphony Program is also offered through Brandywine Symphony Preferred Fund, which trades at an aggressive 3x-5x standard risk. Brandywine Classic, Brandywine Monetary and Brandywine Alpha Hedge Programs are also offered through investments into funds that each trade at 2x the standard risk of each Program.

**(2) "Additional Reasons" charts on Page 2:**

- "Brandywine" is the composite of allocating 1/3 to Brandywine's Diversified Programs (split equally between Symphony and Classic) and 1/3 each to Monetary and Alpha Hedge.
- "With Brandywine" means, respectively, allocating 100% to each of the indexes and an additional 50% to Brandywine.
- Trendline is 8% target return for Brandywine CPU.

**(3) Correlation Table on Page 2:**

- \* "S&P 500" is the S&P 500 Total Return Index
- \* "Hedge" or "Hedge Funds" is the Barclay Hedge Fund Index
- \* "Bonds" is the Barclays U.S. Aggregate Bond Index
- \* "Mgd. Futures" is the BTOP 50 Index

**(4) Material assumptions used in creating the extracted past performance of Brandywine's Classic, Monetary and Alpha Hedge Programs:** The performance of Brandywine's Classic, Monetary and Alpha Hedge Programs are each derived from actual trades made in Brandywine's Symphony Program. Brandywine's Symphony Program trades pursuant to a systematic trading model and every trade in every market is triggered by, and automatically allocated to, one of Brandywine's specific trading strategies. Brandywine employs an account management program to calculate the number of contracts to be traded in each market and the resultant performance for each market and trading strategy in the portfolio. Because of this automated process, Brandywine is able to create the extracted performance record for the Brandywine Classic, Monetary and Alpha Hedge Programs, pursuant to the following steps:

- The gross percentage returns are calculated for each trade made in Brandywine's Symphony Program and these returns are allocated to each Program pursuant to the strategies and markets relevant to each Program.
- The percentage returns on those trades are then translated into each applicable Program based on the percentage allocation of that Program within Brandywine's Symphony Program, as disclosed in Brandywine's July 2011 disclosure document.
- The performance is then reduced for the commissions charged on the trades.
- The performance of each Program is charged a monthly management fee and quarterly incentive fee at the following rates:  
  - Classic: 1/6 of 1% (approximately 2% annually) management fee & 20% incentive fee
  - Monetary: 1/6 of 1% (approximately 2% annually) management fee & 20% incentive fee
  - Alpha Hedge: 1/12 of 1% (approximately 1% annually) management fee & 10% incentive fee
- Performance of Brandywine's Alpha Hedge Program is then adjusted by multiplying the monthly performances by a percentage in order to represent the actual trading level employed in client accounts in that Program. The Brandywine Classic and Brandywine Monetary Programs require no further adjustment.

The past performance of Brandywine's Classic, Monetary and Alpha Hedge Programs assumes the reallocation of profits and losses.

Because no single account traded pursuant to the extracted performance displayed for the Brandywine Classic, Monetary and Alpha Hedge Programs the following disclaimer is required and relevant to the track records displayed for those Programs:

**HYPOTHETICAL PERFORMANCE RESULTS HAVE MANY INHERENT LIMITATIONS, SOME OF WHICH ARE DESCRIBED BELOW. NO REPRESENTATION IS BEING MADE THAT ANY ACCOUNT WILL OR IS LIKELY TO ACHIEVE PROFITS OR LOSSES SIMILAR TO THOSE SHOWN. IN FACT, THERE ARE FREQUENTLY SHARP DIFFERENCES BETWEEN HYPOTHETICAL PERFORMANCE RESULTS AND THE ACTUAL RESULTS SUBSEQUENTLY ACHIEVED BY ANY PARTICULAR TRADING PROGRAM.**

**ONE OF THE LIMITATIONS OF HYPOTHETICAL PERFORMANCE RESULTS IS THAT THEY ARE GENERALLY PREPARED WITH THE BENEFIT OF HINDSIGHT. IN ADDITION, HYPOTHETICAL TRADING DOES NOT INVOLVE FINANCIAL RISK, AND NO HYPOTHETICAL TRADING RECORD CAN COMPLETELY ACCOUNT FOR THE IMPACT OF FINANCIAL RISK IN ACTUAL TRADING. FOR EXAMPLE, THE ABILITY TO WITHSTAND LOSSES OR TO ADHERE TO A PARTICULAR TRADING PROGRAM IN SPITE OF TRADING LOSSES ARE MATERIAL POINTS WHICH CAN ALSO ADVERSELY AFFECT ACTUAL TRADING RESULTS. THERE ARE NUMEROUS OTHER FACTORS RELATED TO THE MARKETS IN GENERAL OR TO THE IMPLEMENTATION OF ANY SPECIFIC TRADING PROGRAM WHICH CANNOT BE FULLY ACCOUNTED FOR IN THE PREPARATION OF HYPOTHETICAL PERFORMANCE RESULTS AND ALL OF WHICH CAN ADVERSELY AFFECT ACTUAL TRADING RESULTS.**

PAST PERFORMANCE IS NOT NECESSARILY INDICATIVE OF FUTURE RESULTS. THERE IS THE RISK OF LOSS AS WELL AS THE OPPORTUNITY FOR GAIN WHEN INVESTING WITH BRANDYWINE. BRANDYWINE'S INVESTMENT PROGRAMS ARE ONLY AVAILABLE TO INVESTORS THAT QUALIFY AS "QUALIFIED ELIGIBLE PARTICIPANTS" AS THAT TERM IS DEFINED IN CFTC REG. SECTION 4.7(a)(2) PROMULGATED UNDER THE COMMODITY EXCHANGE ACT, WHICH ARE QUALIFIED TO INVEST IN THE PROGRAMS BY (a) THEIR KNOWLEDGE AND ACCEPTANCE OF THE RISKS ASSOCIATED WITH HIGHLY LEVERAGED SECURITIES AND FUTURES TRADING AND (b) THEIR FINANCIAL ABILITY TO ACCEPT SUCH RISK.