



OCTOBER 2019

Quarterly Newsletter

IN THIS ISSUE

- PAGE 2 [Firm Update](#)
- PAGE 3 [Spotlight \(cont'd\)](#)
- PAGE 4-5 [Quarterly Investment Update \(cont'd\)](#)
- PAGE 6-7 [Performance](#)
- PAGE 8 [Disclosures](#)

IN THE NEWS

- Portfolio Manager John Tobin was featured in Investment Week, where he gave the bull and bear cases for U.S. equities.
— July 30, 2019
- The Financial Times ran a letter authored by Portfolio Manager Kera Van Valen. The letter, a response to an article disparaging the performance of high dividend equities, explained the virtues of investing in companies with sustainably high dividends.
— July 19, 2019
- CEO and Co-CIO Bill Priest appeared in [Barron's](#) to discuss the trade war with China, which he terms a new “Cold War,” plus his outlook on the health care and global gaming industries.
— July 12, 2019

Spotlight — What is Quality?

A conversation with Steven D. Bleiberg — Managing Director, Portfolio Manager



QUESTION. *How does the market define quality?*

ANSWER. Traditionally, “quality stocks” have been defined as companies that have three characteristics: high return on equity (ROE), a low debt-to-equity ratio and relatively stable earnings growth. The low debt-to-equity matters because you can always raise your ROE by issuing debt to buy back stock; that way you have less equity, so your ROE goes up. But loading up the balance sheet with too much debt can leave you vulnerable in a downturn if you don’t generate enough income to service all that debt, so to be considered a “quality” stock you have to achieve that high ROE without a lot of leverage.

Article continued on [page 3](#)

Quarterly Investment Update — Cold War 2.0: The Platform, the Players and the Stakes

By William W. Priest, CFA — CEO, Co-CIO and Portfolio Manager



Last week’s trade negotiations between the U.S. and China produced a welcome truce, coupled with expressions of goodwill to tackle the tougher issues later. However, most of the big disputes are unlikely to be resolved before November 2020 or, for that matter, the 2024 election.

The contentious issue of intellectual property (IP) theft helps illustrate why this is the case. According to the U.S. Trade Representative, Robert Lighthizer, China is close to agreeing to adopt normal best practices for IP, including criminal enforcement of violations with sufficiently stiff penalties. Apparently he believes this is the case because China has produced enough sophisticated technology on its own that safeguarding IP is now in its national interests.

Article continued on [page 4](#)

Firm Update

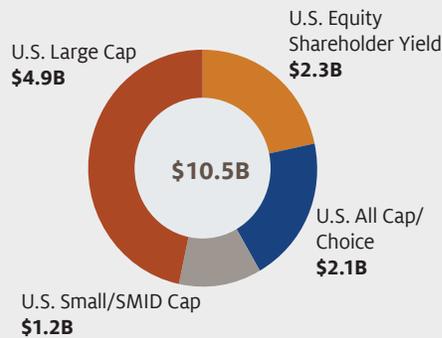
ASSETS UNDER MANAGEMENT \$33.1B As of September 30, 2019 in U.S. Dollars

GLOBAL STRATEGIES



Totals may not add due to rounding.

U.S. STRATEGIES



RECENT INSIGHTS



Dividend-Paying Equities as a Consistent Source of Income for Pension Plans

The search for yield has arguably become harder this year with interest rates globally either low or negative, and an inverted yield curve now commonplace for many major developed economies. In many cases, its been a struggle for plans to satisfy their requirement for yield without increasing the plan's risk profile. In this paper, we look at the Shareholder Yield approach as a potential solution. [Read More.](#)

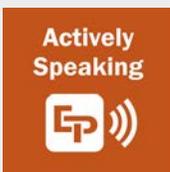


Capital Markets Outlook Webinar

Co-CIO Bill Priest was joined by Investment Strategist Kevin Hebner and Portfolio Manager John Tobin to discuss:

- Lower for longer rates in a late-cycle economy with trade friction
- A backdrop where trade is the battle, but tech is the war
- The appeal of dividends in a world of yield starvation

[Listen to the Replay](#)

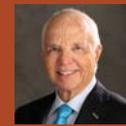


Actively Speaking Podcast

This quarter host and Portfolio Manager Steven Bleiberg and his guests covered topics including:

- The Limits of Modern Portfolio Theory
- Active Management Measurement
- Autonomous Vehicles
- Understanding Growth and Value
- Unicorns and IPOs
- Negative Interest Rates

ANNOUNCEMENTS



On September 19, Epoch announced that Philipp Hensler will become CEO of Epoch on April 1, 2020, with responsibility for all business functions. Bill Priest will become executive chairman and continue leading the investment team



in his role as co-chief investment officer. These changes will allow Bill to spend more time on client portfolios, thought leadership and interaction with our clients and partners:



On August 7, Epoch announced that it would establish a permanent presence in Australia with

the opening of a client service office in Melbourne. In conjunction, Eddy Schipper has joined Epoch with responsibility for leading client relations and business development in Australia and New Zealand. This presence enables Epoch to provide our clients in the region with a local point of service. GSFM Pty., which has partnered with Epoch since 2007, will continue to be responsible for the retail distribution of Epoch managed funds in the region.

For our latest Insights, follow Epoch on social media



LinkedIn
www.linkedin.com/company/epochinvest



Twitter
[@epochinvest](https://twitter.com/epochinvest)

Actively Speaking is available on:



Apple Podcast
[Click to Listen](#)



Google Play
[Click to Listen](#)



Spotify
[Click to Listen](#)



Epoch's Website
[Click to Listen](#)

Spotlight: *What is Quality?* (continued)

QUESTION. *Is there another/better way to define it?*

ANSWER. The traditional definition is a perfectly good starting point, but it is incomplete. In terms of the three characteristics specifically, we would argue that return on invested capital (ROIC) is a better measure of quality than ROE. The “invested capital” in ROIC is the company’s equity plus its debt. Two companies might have the same ROE while having very different levels of ROIC, depending on how much debt each has taken on and how wisely each has invested the proceeds of that debt to generate income. ROIC gives you a more complete picture of how well the company is generating profit from all the capital it has deployed, rather than just the equity. More broadly, we also think that you need to consider a company’s skill at capital allocation. Management should be reinvesting in the business when they have the chance to earn a high ROIC, and returning capital to shareholders when they run out of such opportunities. Part of being a “quality” company is getting that allocation process right.

QUESTION. *Why are quality companies attractive?*

ANSWER. The answer comes back to the question of “what is the purpose of a firm?” At the most basic level, the primary goal of any company is to earn a good return on the capital that the owners and lenders have invested in the business. Otherwise, why would those investors put up the money when they could always go elsewhere? So in a sense, quality companies are just companies that are good at doing what it is companies are supposed to do. That may seem simplistic, but earning a good return on capital is in fact not simple, and many companies fail to do it. All things considered, it’s better to be a company that earns a good return on capital than one that doesn’t.

QUESTION. *How have these companies performed?*

ANSWER. Quality companies have outperformed the broad market over the long term, whether you look at the MSCI World Quality Index or whether you focus more narrowly on companies with high ROIC. What is even more appealing, though, is the fact that quality companies have outperformed both in up and down markets. In other words, they have captured more than 100% of the upside while experiencing less than 100% of the downside. The fact that they outperform on the downside is perhaps not surprising, given their higher-than-average profitability and the fact that their profits are more stable. What is perhaps surprising is that they have also outperformed on the upside. We tend to assume that quality companies are kind of boring, and that when markets are rising it is the companies with the most extreme growth that outperform. It’s true that growth has done well in rising markets, but unlike quality it has tended to underperform in down markets.

QUESTION. *How do you find quality companies?*

ANSWER. As it turns out that there is a persistence to ROIC. Companies that have earned high ROIC in the recent past are likely to continue to earn high ROIC in the near future, and companies that have earned poor returns on capital are likely to continue to earn poor returns. The reason for this can be traced to what Michael Porter referred to 40 years ago as the “five forces” that shape industry structures, which in some industries create natural barriers to entry, and in others make such barriers difficult to erect. Some companies can keep competition at bay with intellectual property protection, such as patents, or by creating strong brand loyalty. Others might have infrastructure that is costly or even impossible to replicate. Ultimately, what barriers to entry do is to create either a sustainable cost advantage and/or greater pricing power, two important factors that drive ROIC. Of course, the world is never static, so you always have to be on the lookout for the forces that might erode those barriers. But in general, the best way to find companies that are going to earn high ROIC is to start with the companies that are already doing so.

Steven is a portfolio manager and is involved with the design and development of investment strategies. He is also a contributor to Epoch’s thought leadership.

*Prior to joining Epoch in 2014, Steven served as a portfolio manager at Legg Mason responsible for managing \$7.5B in various asset allocation-based funds, including Target Risk, Target Date and Dynamic Risk Management. Prior to that, he was the head of investment strategy at Citigroup Asset Management and a portfolio manager at Credit Suisse Asset Management. Steven is an author (with co-authors Bill Priest and Michael Welhoelter) of *Winning at Active Management: The Essential Roles of Culture, Philosophy and Technology*. Steven holds an AB from Harvard and an MS from the Sloan School of Management at MIT with a concentration in Finance.*

Actively
Speaking



Catch Steven as he hosts Epoch’s
Actively Speaking podcast .

Quarterly Investment Update — Cold War 2.0: The Platform, the Players and the Stakes (continued)

The problem is that Lighthizer himself has repeatedly lamented that China has made false promises to respect IP on countless occasions. Moreover, China's own government is highly active in stealing IP and industrial espionage. In fact, economic espionage has become a prime directive of the Ministry of State Security, and the FBI has estimated that 3,000 Chinese companies in the U.S. are covers for MSS activity. It strikes us as somewhat naïve to believe that China's pledge to tighten IP protection will amount to anything more than window dressing.

IT SHOULD BE CLEAR TO EVERYONE BY NOW THAT THIS IS NOT JUST A TRADE WAR

Moreover, several recent disputes have made it manifestly clear that the clashes between the U.S. and China are much bigger than trade or even tech. On October 5, Daryl Morey, the general manager of the NBA's Houston Rockets, ignited a furor in China with a seven-word tweet: "Fight for freedom. Stand with Hong Kong." Chinese nationalists angrily asserted that Morey was challenging China's sovereignty over Hong Kong. Chinese broadcasters quickly announced they would not air Rockets games and retail outlets stopped selling Rockets gear. Because China is by far the NBA's most important international market, NBA executives quickly distanced themselves from the perceived offense.

As *The Economist* has emphasized, self-censoring to make money in China is a long-standing business practice. The most obvious example is Hollywood, where studios steer clear of any topics that might offend the Chinese Communist Party (CCP). But virtually all foreign businesses operating in China have long self-censored in a more subtle, pernicious way: by never speaking publicly about any issue the CCP deems off-limits (including the three Ts — Taiwan, Tibet and Tiananmen). China's fierce reaction to Morey's tweet is certain to induce more self-censorship by executives in the future.

ARE WE EXPORTING OUR VALUES TO CHINA, OR IMPORTING THEIRS?

Luckily liberal democracies have the creators of "South Park" to defend their principles against despotic leviathans. Their recent episode "Band in China" satirizes the movie, music and sports industries' willingness to comply with the implicit and explicit demands of Chinese censors in order to access its enormous market. After the excruciatingly profane episode was banned in China, the show released a sarcastic apology: "Like the NBA, we welcome the Chinese censors into our homes and into our hearts. We too love money more than freedom and democracy."

Since the fall of the Berlin Wall, America's approach to China has been founded on a belief in convergence. The prevailing view was that integration into the global economy would not just make China wealthier, it would also make it more open, tolerant, democratic and market-oriented. Today, however, dreams of convergence are dead. America has come to see China as a strategic rival—a malevolent actor and duplicitous rule-breaker. How did that happen?

One key catalyst was President Xi's ascension in 2012. During "the new era" he has exalted and entrenched the state's leading role in the command economy. He has also developed a sophisticated surveillance state to stifle dissent and tighten the authoritarian screws, squashing delusions of China morphing into a free and open society. Further, its Belt and Road Initiative made it plain that China has no interest in embracing the American-led global order. Rather, it is seeking to radically overhaul it.

"China has used an arsenal of policies inconsistent with free and fair trade, including tariffs, quotas, currency manipulation, forced technology transfer, intellectual property theft, and industrial subsidies that are handed out like candy."

- Vice President Pence, October 2018

AN EARLY BUGLE CALL IN A NEW COLD WAR

Many American commentators date the beginning of Cold War 2.0 to Vice President Pence's speech on October 4, 2018, which warned that China was engaged in a "whole-of-government" offensive against the U.S. The vice president articulated the new consensus that China has a deliberate strategy to push America back and that there needs to be a strong U.S. response. Pence accused the CCP of obtaining "American intellectual property — the foundation of our economic leadership — by any means necessary." He was particularly critical of its "Made in China 2025" plans to dominate advanced industries such as robotics, biotechnology and AI.

This speech marked a deep shift in America's thinking about China, on both the right and left alike, and was a *de facto* declaration of cold war. Since then, Democrats and Republicans have been vying to outdo each other in bashing China. Not since the late 1940s has the country's mood swung so rapidly behind the idea that the U.S. faces a new ideological and strategic rival.

THE TRUMAN DOCTRINE OF CONTAINMENT

Perhaps the closest analogy to Pence's Cold War 2.0 speech is a renowned 5,500-word telegram sent in 1946 by George Kennan, who was then charge d'affaires in Moscow. His "Long Telegram" outlined the reasons why the U.S. needed to develop a policy to contain Soviet influence, concluding that the U.S. must "regard the Soviet Union as a rival, not a partner" (even though it had just helped to defeat Nazi Germany). Kennan's subsequent 1947 article, "The Sources of Soviet Conduct," was published in *Foreign Affairs* (pseudonymously by "X") and expanded on his argument that the Soviet regime was inherently expansionist and that its influence had to be "contained" in areas of vital strategic importance to the U.S.

To a considerable extent Keenan's themes were anticipated by the Atlantic Charter, a one-page statement issued in August 1941 by President Roosevelt and Prime Minister Churchill that set out goals for the period following the end of World War II. The joint declaration's key themes included freedom and the right to self-determination, as well as the importance of global cooperation to secure economic and social conditions for all. Naturally, disarmament and the abandonment of the use of force were also key objectives. The Allied nations quickly and widely endorsed the Charter and in early 1942 issued a joint Declaration by United Nations which proved to be one of the first steps toward the modern United Nations.

Given that background, one can see how Kennan's texts provided the *raison d'être* for the Truman administration's anti-Soviet policy and Cold War programs, including the Marshall Plan, which was passed in 1948, and the formation of NATO in 1949. The Truman Doctrine remained the foundation of American foreign policy until the Berlin Wall fell in 1989, marking the end of the first Cold War.

"I now see the prospect of an Economic Iron Curtain — one that throws up new walls on each side and unmakes the global economy, as we have known it."

- Hank Paulson, November 2018

TRADE IS THE BATTLE, TECH IS THE WAR

In addition to the cascading collapse of the Soviet state, something else happened in 1989, and that was Tiananmen Square. With that tragedy a different kind of threat emerged, although its true extent has only become fully appreciated during the last couple years. This realization has marked the beginning of a new Cold War, one that requires quite a different type of containment policy than Truman envisioned.

Although Cold War 2.0 is not likely to become a hot war, the stakes are just as important. And the stakes are values, as represented by our Bill of Rights, which guarantees civil rights and individual liberties — including freedom of speech, press, and religion. It also sets rules for the due process of law, and places clear limitations on the government's power in judicial and other proceedings. In addition, democratic institutions and comparatively free markets have been key to the vibrancy and success of the U.S. experiment.

However, these values are anathema to China's autocrats. The CCP under President Xi wields power that is unbounded and unchallenged, without the checks and balances provided by an independent judiciary, autonomous media, free and fair elections, and constitutionally guaranteed rights for individuals and society. In China, the law is best viewed as a spear, rather than a shield. And not only has state and bureaucratic power become even more centralized since 2012, but markets are increasingly taking a secondary role to the whims and commands of the CCP.

While China's political system is for it to choose, it is conspicuously evident that the two superpowers possess vastly different values, economic systems and visions for the global economy. This is why Cold War 2.0 has become a defining reality, and not just for the next couple years, but likely for decades to come. And, at least initially, trade is the platform on which this war will be waged. Moreover, almost all measures of global integration (including merchandise trade, foreign direct investment and the activities of multinational corporations) are already in retreat or stagnating. In fact, these metrics have been in trouble for the good part of a decade now. This regrettable trend is negative for overall economic efficiency and growth, as well as margins and profits, which raises several challenges for investors.

INVESTMENT IMPLICATIONS: COLD WAR 2.0 AND THE REVERSAL OF GLOBALIZATION

With the advent of Cold War 2.0, global economic policy uncertainty has skyrocketed to a record high (the data-series inception was 1997). This has led to slower global growth, which has resulted in today's hyperactive central banks riding fast and furious to the rescue. The confluence of these developments, plus the inherently deflationary nature of tech, helps to explain why we find ourselves entrenched in a "lower for longer" interest rate environment. In addition, pervasive digital technologies and their associated economies of scale imply that we are living in a disinflationary, capital-light world. This implies that, with less cash flow being directed to fund capex, payout ratios are likely to remain high and may even rise further from here. That is, even as bond yields have plummeted, stranding us in a world of yield starvation, we expect dividends and buybacks to remain robust. As a result, the yield available from equities can be far superior to that available in fixed income markets.

Strategy Performance as of September 30, 2019

U.S. STRATEGIES IN USD	Annualized Returns							Risk Statistics — Since Inception						
	QTR	YTD	1 Year	3 Years	5 Years	10 Years	Since Incept.	Std Dev.	Sharpe Ratio	Inform. Ratio	Alpha	Beta	R ²	
U.S. VALUE <i>Inception date: 7/31/2001</i>	Epoch Gross Return	0.36	21.63	3.05	11.73	8.85	11.80	8.46	13.73%	0.52				
	Epoch Net Return	0.29	21.36	2.73	11.39	8.50	11.44	7.96						
	Russell 1000	1.42	20.53	3.87	13.19	10.62	13.23	7.43	14.39%	0.42	0.24	1.60	0.91	0.91
	Russell 1000 Value	1.36	17.81	4.00	9.43	7.79	11.46	7.04	14.57%	0.39	0.27	2.19	0.88	0.87
	S&P 500	1.70	20.55	4.25	13.39	10.84	13.24	7.21	14.21%	0.41	0.28	1.78	0.92	0.90
U.S. ALL CAP VALUE <i>Inception date: 7/31/1994</i>	Epoch Gross Return	0.77	22.75	3.87	12.92	9.66	12.59	11.69	13.49%	0.69				
	Epoch Net Return	0.64	22.27	3.33	12.33	9.10	12.02	10.93						
	Russell 3000	1.16	20.09	2.92	12.83	10.44	13.08	9.83	14.80%	0.50	0.29	3.46	0.82	0.81
	Russell 3000 Value	1.23	17.47	3.10	9.24	7.76	11.36	9.57	14.46%	0.49	0.32	3.57	0.83	0.80
U.S. SMALL CAP VALUE <i>Inception date: 12/31/2002</i>	Epoch Gross Return	0.26	15.32	(5.16)	7.22	7.20	11.14	9.94	16.50%	0.52				
	Epoch Net Return	0.18	15.03	(5.49)	6.83	6.79	10.70	9.31						
	Russell 2000	(2.40)	14.18	(8.89)	8.23	8.19	11.19	10.05	18.34%	0.48	-0.02	1.16	0.86	0.92
	Russell 2000 Value	(0.57)	12.82	(8.24)	6.54	7.17	10.06	9.38	18.23%	0.44	0.09	1.81	0.85	0.89
U.S. SMID CAP VALUE <i>Inception date: 8/31/2006</i>	Epoch Gross Return	(0.31)	16.45	(4.12)	7.00	7.15	11.21	8.07	17.39%	0.41				
	Epoch Net Return	(0.39)	16.17	(4.45)	6.60	6.73	10.79	7.62						
	Russell 2500	(1.28)	17.72	(4.04)	9.51	8.57	12.22	8.35	17.99%	0.41	-0.07	0.16	0.95	0.96
	Russell 2500 Value	0.13	15.41	(4.35)	6.87	6.98	11.00	6.95	17.84%	0.33	0.23	1.50	0.94	0.93
U.S. CHOICE <i>Inception date: 4/30/2005</i>	Epoch Gross Return	0.18	20.85	1.38	11.64	8.36	12.27	9.36	15.14%	0.53				
	Epoch Net Return	0.13	20.67	1.15	11.27	7.97	11.89	8.90						
	Russell 3000	1.16	20.09	2.92	12.83	10.44	13.08	9.09	14.43%	0.54	0.07	0.23	1.01	0.93
U.S. EQUITY SHAREHOLDER YIELD <i>Inception date: 6/30/2012</i>	Epoch Gross Return	3.84	19.34	10.28	11.20	10.27	-	12.96	9.29%	1.32				
	Epoch Net Return	3.75	19.05	9.92	10.86	9.95	-	12.60						
	Russell 1000 Value	1.36	17.81	4.00	9.43	7.79	-	11.86	11.03%	1.01	0.22	3.82	0.75	0.80
U.S. EQUITY CAPITAL REINVESTMENT <i>Inception date: 1/1/2018</i>	Epoch Gross Return	1.37	23.14	4.41	-	-	-	9.27	16.56%	0.43				
	Epoch Net Return	1.22	22.59	3.79	-	-	-	8.62						
	Russell 3000	1.16	20.09	2.92	-	-	-	7.67	15.42%	0.36	0.59	1.16	1.06	0.98

GLOBAL & INTERNATIONAL STRATEGIES IN USD

	Annualized Returns							Risk Statistics — Since Inception				
	QTD	YTD	1 Year	3 Years	5 Years	10 Years	Since Incept.	Std Dev.	Sharpe Ratio	Inform. Ratio	Alpha	Beta

GLOBAL EQUITY SHAREHOLDER YIELD

Inception date: 12/31/2005

Epoch Gross Return	1.81	14.59	5.61	7.06	5.29	9.62	7.73	12.17%	0.54				
Epoch Net Return	1.71	14.26	5.19	6.64	4.88	9.21	7.25						
MSCI World (Net)	0.53	17.61	1.83	10.21	7.18	9.01	6.23	15.09%	0.33	0.26	2.81	0.75	0.87

GLOBAL CHOICE

Inception date: 9/30/2005

Epoch Gross Return	(1.52)	16.89	2.19	11.20	7.51	9.81	9.01	14.18%	0.55				
Epoch Net Return	(1.68)	16.36	1.56	10.53	6.88	9.21	8.29						
MSCI World (Net)	0.53	17.61	1.83	10.21	7.18	9.01	6.35	15.00%	0.34	0.51	3.23	0.89	0.88

GLOBAL EQUITY CAPITAL REINVESTMENT

Inception date: 6/30/2013

Epoch Gross Return	0.42	20.28	4.01	12.16	9.67	-	10.54	11.43%	0.85				
Epoch Net Return	0.30	19.90	3.57	11.71	9.10	-	9.89						
MSCI World (Net)	0.53	17.61	1.83	10.21	7.18	-	9.03	11.21%	0.74	0.50	1.57	0.98	0.93

GLOBAL ABSOLUTE RETURN

Inception date: 12/31/2001

Epoch Gross Return	0.09	12.91	1.96	12.13	6.72	9.08	9.88	12.08%	0.71				
Epoch Net Return	(0.14)	12.13	1.01	11.00	5.53	7.78	8.48						
MSCI World (Net)	0.53	17.61	1.83	10.21	7.18	9.01	6.54	14.72%	0.35	0.44	5.05	0.71	0.74
BarCap U.S. Aggregate	2.27	8.52	10.30	2.92	3.38	3.75	4.54	3.40%	0.95	0.42	11.50	-0.16	0.00

NON-U.S. EQUITY

Inception date: 8/31/2008

Epoch Gross Return	(0.60)	14.07	(2.45)	4.63	2.55	4.88	3.75	16.80%	0.19				
Epoch Net Return	(0.71)	13.69	(2.89)	4.19	2.12	4.54	3.42						
MSCI EAFE (Net)	(1.07)	12.80	(1.34)	6.48	3.27	4.90	3.25	17.68%	0.15	0.18	0.62	0.94	0.98

NON-U.S. EQUITY CHOICE

Inception date: 10/1/2015

Epoch Gross Return	(2.50)	13.35	(2.42)	6.54	-	-	6.39	12.91%	0.40				
Epoch Net Return	(2.60)	13.01	(2.83)	6.09	-	-	5.95						
MSCI EAFE (Net)	(1.07)	12.80	(1.34)	6.48	-	-	6.49	11.87%	0.45	-0.03	-0.33	1.05	0.93

DISCLOSURES

1. Presentation of the Firm — Epoch Investment Partners, Inc. is a wholly owned subsidiary of The Toronto Dominion Bank. Epoch Investment Partners, Inc. (“Epoch”) became a registered investment adviser under the Investment Advisers Act of 1940 in June 2004. Performance from April 2001 through May 2004 is for Epoch’s investment team and accounts while at a prior firm. Performance from July 1994 through March 2001 is for Bill Priest and the accounts while at a different prior firm. For both time periods, Bill or the investment team were the only individuals responsible for selecting the securities to buy and sell. Epoch has the books and records supporting the performance of this track record and will provide these records upon request. Epoch Investment Partners, Inc. claims compliance with the Global Investment Performance Standards (GIPS®)

2. Epoch’s composites include all tax-exempt and taxable portfolios above \$500,000 in size and are generally managed relative to an applicable market index. Results are based on fully discretionary accounts under management, including those accounts no longer with the firm. Where indicated, the changes to benchmarks or composites, noted below, were made to present a more representative and insightful comparison to the investment strategies. Also noted below, are the composite descriptions for each strategy offered at Epoch Investment Partners, Inc.

COMPOSITE	CREATION DATE	CURRENT BENCHMARK	COMPOSITE DESCRIPTION	
U.S. Value	June 2004	Russell 1000; Russell 1000 Value; S&P 500	U.S. Value pursues long-term capital appreciation by investing in 40-60 large capitalization U.S. companies. As fundamental investors with a long-term orientation, we select companies based on their ability to generate free cash flow and allocate it intelligently for the benefit of shareholders. Our bottom-up security selection process is balanced with diversification and risk control measures that should result in below-average portfolio volatility.	
U.S. All Cap Value	June 2004	Russell 3000; Russell 3000 Value	U.S. All Cap Value pursues long-term capital appreciation by investing in a portfolio of 50-60 stocks across a broad range of market capitalizations. As fundamental investors with a long-term orientation, we select companies based on their ability to generate free cash flow and allocate it intelligently for the benefit of shareholders. Our bottom-up security selection process is balanced with diversification and risk control measures that should result in below-average portfolio volatility. Effective 7/1/06, the U.S. All Cap Value Composite has been redefined to reflect only those discretionary accounts managed by the All Cap Value Team and following the respective All Cap Value model. As a result, all accounts which are not managed by the All Cap Value Team and have specified client risk preferences have been removed.	
U.S. Small Cap Value	June 2004	Russell 2000; Russell 2000 Value	U.S. Small Cap Value pursues long-term capital appreciation by investing in a portfolio of 60-90 small- and mid-capitalization U.S. companies. As fundamental investors with a long-term orientation, we select companies based on their ability to generate free cash flow and allocate it intelligently for the benefit of shareholders. Our bottom-up security selection process balances investing in our convictions with diversification and rigorous risk control. We limit the market capitalization of the securities in the portfolio to that of the Russell 2000 Index at time of purchase.	
U.S. SMID Cap Value	September 2006	Russell 2500; Russell 2500 Value	U.S. SMID Cap Value pursues long-term capital appreciation by investing in a portfolio of 60-90 small- and mid-capitalization U.S. companies. As fundamental investors with a long-term orientation, we select companies based on their ability to generate free cash flow and allocate it intelligently for the benefit of shareholders. Our bottom-up security selection process is balanced with diversification and risk control measures that should result in below-average portfolio volatility. We limit the market capitalization of the securities in the portfolio to that of the Russell 2500 Index at time of purchase.	
U.S. Choice	May 2005	Russell 3000	U.S. Choice pursues long-term capital appreciation by investing in a concentrated portfolio of leading U.S. companies we believe have superior risk-reward profiles. Our bottom-up security selection and risk management process leads to a portfolio of 20-35 stocks. The portfolio reflects the highest-conviction ideas of our investment team as appropriate for a concentrated portfolio. Companies are selected based on their ability to generate free cash flow and allocate it intelligently to benefit shareholders.	
U.S. Equity Shareholder Yield	July 2012	Russell 1000 Value	U.S. Equity Shareholder Yield pursues attractive total returns with an above-average level of income by investing in a diversified portfolio of U.S. companies with strong and growing free cash flow. Companies in the portfolio possess managements that focus on creating value for shareholders through consistent and rational capital allocation policies with an emphasis on cash dividends, share repurchases and debt reduction — the key components of shareholder yield. The portfolio generally holds between 75 and 120 stocks, with risk controls to diversify the sources of shareholder yield and minimize volatility.	
U.S. Equity Capital Reinvestment	December 2017	Russell 3000	U.S. Equity Capital Reinvestment focuses on companies that reinvest in their businesses to grow free cash flow. We seek companies that are good capital allocators, and that use capital effectively to fund internal projects or to make acquisitions. Our research indicates that companies that make investments, internally or externally, that generate a marginal return on invested capital that exceeds their marginal cost of capital will increase in value. U.S. Equity Capital Reinvestment pursues attractive total returns by investing in a diversified portfolio of these companies with persistent, high return on invested capital (ROIC) which is achieved through their allocation to the growth-oriented uses of free cash flow, namely investment in internal projects and acquisitions. The portfolio generally holds between 90 and 130 stocks, with risk controls to diversify the sources of growth and reduce volatility.	
Non-U.S. Equity	August 2008	MSCI EAFE Index (Net)	Non-U.S. Equity strategy pursues long-term capital appreciation by investing in a diversified portfolio of 60-80 stocks outside the U.S. As fundamental investors with a long-term orientation, we select companies based on their ability to generate free cash flow and allocate it intelligently for the benefit of shareholders. Our bottom-up security selection process is balanced with diversification and risk control measures that should result in below-average portfolio volatility.	
Non-U.S. Equity Choice	January 2017	MSCI EAFE Index (Net)	Non-U.S. Equity Choice pursues long-term capital appreciation by investing in a concentrated portfolio of 30-50 stocks outside the U.S. that possess superior risk-return profiles. Companies are selected for their ability to generate free cash flow and allocate it intelligently to benefit shareholders. The strategy employs a portfolio construction process designed to reduce the volatility of returns. The portfolio management team has latitude to invest across geographies and market capitalizations regardless of the composition of its benchmark, the MSCI EAFE Index.	
Global Equity Capital Reinvestment	June 2013	MSCI World Index (Net)	Global Equity Capital Reinvestment focuses on companies that reinvest in their businesses to grow free cash flow. We seek companies that are good capital allocators, and that use capital effectively to fund internal projects or to make acquisitions. Our research indicates that companies that make investments, internally or externally, that generate a marginal return on invested capital that exceeds their marginal cost of capital will increase in value. Global Equity Capital Reinvestment pursues attractive total returns by investing in a diversified portfolio of these companies with persistent, high return on invested capital (ROIC) which is achieved through their allocation to the growth-oriented uses of free cash flow, namely investment in internal projects and acquisitions. The portfolio generally holds between 90 and 130 stocks from equity markets worldwide, with risk controls to diversify the sources of growth and reduce volatility.	
COMPOSITE	CREATION DATE	CURRENT BENCHMARK	PREVIOUS BENCHMARK HISTORY	COMPOSITE DESCRIPTION
Global Equity Shareholder Yield	January 2006	MSCI World (Net)	Effective 7/1/2009, performance information for these composites is shown comparative to the MSCI World (Net) indices, respectively, on a current and retrospective basis. The benchmark previous to 7/1/2009 was the S&P Developed BMI Index.	Global Equity Shareholder Yield pursues attractive total returns with an above-average level of income by investing in a diversified portfolio of global companies with strong and growing free cash flow. Companies in the portfolio possess managements that focus on creating value for shareholders through consistent and rational capital allocation policies with an emphasis on cash dividends, share repurchases and debt reduction — the key components of shareholder yield. The portfolio generally holds between 90 and 120 stocks from equity markets worldwide, with risk controls to diversify the sources of shareholder yield and minimize volatility.
Global Choice	October 2005	MSCI World (Net)	Effective 1/2009, the benchmark was changed for the Global Absolute Return and Global Choice composites from the MSCI World (Gross) Index to the MSCI World (Net) Index because it is more representative of the firm’s accounting methodology with regards to foreign withholding tax treatment.	Global Choice pursues long-term capital appreciation by investing in a concentrated portfolio of global businesses we believe have superior risk-reward profiles. Our bottom-up security selection and risk management process leads to a portfolio of 25-35 stocks. The portfolio reflects the highest-conviction ideas of our investment team as appropriate for a concentrated portfolio. Companies are selected based on their ability to generate free cash flow and allocate it intelligently to benefit shareholders.
Global Absolute Return	June 2004	Barclays Capital U.S. Aggregate and MSCI World (Net)	Effective 5/2015, the S&P 500 Index has been removed as a benchmark as it is no longer being used for comparative purposes. Effective 1/2009, the benchmark was changed for the Global Absolute Return and Global Choice composites from the MSCI World (Gross) Index to the MSCI World (Net) Index because it is more representative of the firm’s accounting methodology with regards to foreign withholding tax treatment.	Global Absolute Return targets attractive returns over time without assuming a high degree of capital risk by constructing a concentrated portfolio of global businesses we believe have superior risk-reward profiles. The portfolio consists of 25-35 securities reflecting the highest-conviction ideas of our investment team as appropriate for a concentrated portfolio. Companies are selected based on their ability to generate free cash flow and allocate it intelligently to benefit shareholders. Portfolio risk exposure is managed through the ability to allocate to cash using quantitative and qualitative asset allocation inputs to lessen the likelihood of loss of capital.

3. Risk Statistics Source — The composite dispersion presented is an asset-weighted standard deviation calculated for the accounts in the composite the entire period. Sharpe ratio is a measure of absolute risk adjusted return developed by Professor William Sharpe. It divides the excess return of an account above cash returns by the Standard Deviation of the excess return to determine the reward per unit of risk. Information Ratio is a measure of relative risk-adjusted return. It is determined by dividing excess return by Tracking Error. Alpha is a measurement of the expected residual return adjusted for the account Beta. Beta is a quantitative measure of the volatility of the account relative to the account benchmark. R-squared is a measure of how closely an account’s performance correlates with the performance of the account benchmark, ranging from 0, indicating no correlation, to 1, indicating perfect correlation. Composite-level risk statistics are calculated using monthly rates-of-return. Statistics calculated using a sample of less than 36 months can be considered a less reliable estimate of the characteristic’s true value.

4. Benchmark Source — Russell Investments; MSCI Inc.; Standard & Poor’s; and Barclays Capital are the source and owners of the index data contained herein (and all trademarks related thereto), which may not be redistributed. Reference to an index does not imply that the portfolio will achieve returns, volatility or other results similar to the index. The composition of the indices are provided for your information only and may not reflect the manner in which a portfolio is constructed in relation to expected or achieved returns, portfolio guidelines, restrictions, sectors, correlations, concentrations, volatility or tracking error targets, all of which are subject to change over time. Indices are unmanaged. The figures for each index reflects the reinvestment of dividends but do not reflect the deduction of any fees or expenses which would reduce returns except for the MSCI (Net) indices where net total return indices reinvest dividends after the deduction of withholding taxes, using (for international indices) a tax rate applicable to non-resident institutional investors who do not benefit from double taxation treaties. Investors cannot invest directly in indices.

5. Total Return Methodology — Valuations are computed and performance is reported in U.S. dollars. Composite returns are presented gross and net of management fees and include the reinvestment of all income. Gross-of-fees returns are presented before management fees but after all trading expenses. Net performance reflects the gross-of-fees return reduced by the investment management fee and performance-based fee (where applicable) incurred. Effective 1/2008, net performance is calculated by deducting the actual investment management fee incurred by each portfolio in the composite. Prior to 1/2008, net-of-fee returns reflect the deduction of the highest annual management fee, calculated on a monthly basis. Returns include the effect of foreign currency exchange rates. Composite and benchmark (international indices) returns are presented net of non-reclaimable withholding taxes. Periods over one year are annualized. Internal dispersion is calculated using an asset-weighted standard deviation of annual gross returns of those accounts that were included in the composite for the entire year. Internal dispersion figures that are not meaningful due to the limited number of accounts in the composite are annotated by N/A. The three-year annualized standard deviation measures the variability of the composite and the benchmark returns over the preceding 36-month period. Policies for valuing portfolios, calculating performance, and preparing compliant presentations are available upon request. Past performance is not indicative of future results. An account could incur losses as well as gains.

6. Significant Cash Flow Policy — Effective January 1, 2008, Epoch does not apply a significant cash flow policy as all accounts are valued daily. From January 1, 2006 to December 31, 2007, Epoch defined a significant cash flow as one in excess of 25% of the portfolio market value. Prior to January 1, 2006 Epoch’s policy required the temporary removal of any portfolio incurring a client initiated significant cash flow of 10% or greater of portfolio market value. Additional information regarding the Epoch’s historical treatment of significant cash flows is available upon request.

7. To receive a complete list and description of Epoch’s composites, GIPS® firm-wide verification or composite examination reports by ACA Compliance Group from June 21, 2004 through June 30, 2019 and/or other presentations that adhere to the GIPS® standards, contact us at 212-303-7200, write to Epoch Investment Partners Inc., 399 Park Avenue, New York, NY 10022, or send an email to info@eipny.com.