



JANUARY 2022

# Quarterly Newsletter

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## EVENTS

- Epoch's Quarterly Capital Markets webcast was held on January 19, 2022. Bill Priest and Investment Strategist Kevin Hebner were joined by Portfolio Manager Steve Bleiberg to discuss:
  - The three biggest risks for markets in 2022
  - China's "Common Prosperity" and what it means for investors
  - Fed tightening and the implication for market multiples
  - How our Capital Reinvestment strategies are positioned and what the team has been seeing in recent markets

[Listen to the Replay](#)

## Spotlight: *Understanding Equity Duration*



*A conversation with Tom Callahan, Managing Director, Global Portfolio Management*

**QUESTION.** *We've been hearing a lot about "equity duration" in the news. Is that similar to fixed-income duration?*

**ANSWER.** Yes. Like bonds, stocks vary in their sensitivity to interest rates. Growth stocks tend to have longer equity duration. They have cash flows and earnings that are out in the more distant future. Therefore, those cash flows will be more sensitive to changes in the discount rate that's used to value them. On the other hand, stocks that have substantial present-day cash flows and are paying dividends have shorter duration. They should be less affected by changes in interest rates.

*Article continued on [page 3](#)*

## Quarterly Investment Update — *The Fed's First Step Toward a Digital Dollar?*

*William W. Priest, CFA — Executive Chairman, Co-CIO and Portfolio Manager  
Kevin Hebner, PhD — Managing Director, Global Investment Strategist*



**"Bitcoin grabs the headlines, but the real action on digital currencies is at central banks." — The Economist**



The Fed has finally released its long-awaited report on the prospects for a Central Bank Digital Currency (CBDC).<sup>1</sup> The analysis was initially scheduled to be released last summer, suggesting just getting it out the door involved considerable debate and controversy. However, the accelerated digitization of the economy and financial markets over the last two years has forced the Fed's hand. Ultimately, the fundamental rationale for the issuance of

*Article continued on [page 4](#)*

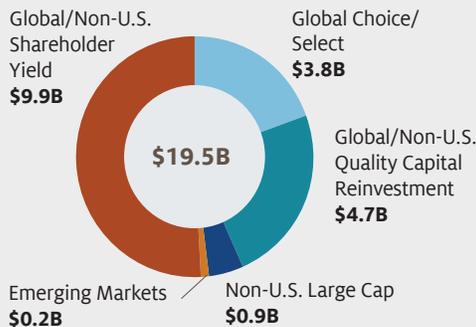
<sup>1</sup> "Money and Payments: The U.S. Dollar in the Age of Digital Transformation," January 20, 2022.

# Firm Update

## ASSETS UNDER MANAGEMENT \$33.7B

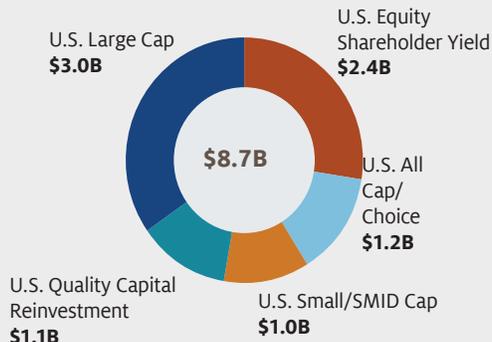
Total AUM includes approximately \$1.9 billion in Non-U.S. Large Cap assets and \$3.6 billion of U.S. Fixed Income assets of TDAM USA, which was merged into Epoch Investment Partners, Inc. on December 31, 2021. Client domicile and strategy breakdowns do not include this additional AUM. May not total due to rounding. As of December 31, 2021.

### GLOBAL STRATEGIES



Totals may not add due to rounding.

### U.S. STRATEGIES



## ESG NOTES

- Completed 21 engagements in 2021, across a broad range of industries beyond our traditional focus of utilities and energy companies
- Launched a new engagement focus on tobacco companies and will look to further develop our thinking on the industry in 2022
- Participated in more than 75 client interactions in 2021, including RFPs, DDQs and client meetings
- 1Q22 initiatives include:
  - Considering carbon trajectories more systematically
  - Working with investment teams to provide rigorous feedback on analysts' ESG notes
  - Releasing 2021 Sustainable Investing Report

## Our Refreshed ESG Page [www.eipny.com/esg-main](http://www.eipny.com/esg-main)

In 2021, we refreshed our ESG webpage to provide more information on our philosophy, process and capabilities

## ANNOUNCEMENTS

In 2021, Epoch Investment Partners, Inc. (“Epoch”) and TD Asset Management Inc. (“TDAM”) conducted a strategic review regarding legal entities. To simplify our structure and reduce our regulatory footprint, the decision was made to merge the TDAM USA Inc. (“TDAM USA”) legal entity into the Epoch Investment Partners, Inc. legal entity effective December 31, 2021. This enables us to have Epoch as the one registered investment advisor in the United States. This approach is being reviewed and implemented in other jurisdictions. This is one step of a broader initiative to allow for the global distribution of both TDAM and Epoch strategies in North America, Europe and Asia.

Importantly, this change does not impact the investment management of any portfolios. TDAM investment professionals will continue to provide management services to U.S. clients as Epoch investment professionals. Portfolio managers and investment teams will remain the same, as will the trading team and processes.

# Spotlight: *Understanding Equity Duration* (cont'd)

**QUESTION.** *Why has this become such a prominent topic in such a short period of time?*

**ANSWER.** The market has suddenly become focused on it, and that's because interest rates have hit an inflection point; the trend from here appears to be up. Three forces are coming into play. First, across the developed world, growth is above trend. That's likely to persist for at least the next couple of years.

Second, inflation is less transitory than initially thought. The early view was that the price pressures in commodities and freight costs reflected supply-chain bottlenecks associated with the resumption of economic activity. It was assumed these pressures would dissipate quickly as inventory channels refilled. We are now seeing that it is taking longer than expected to relieve these pressures. At the same time, we are also seeing wage pressure build as employers struggle to find workers.

Third, in response to these two phenomena, central banks are setting the stage for rate normalization. They are looking at inflation with a greater sense of urgency and adjusting policy accordingly. While this has been a long time coming, it was really in the second half of 2021 that the major central banks turned a corner together. While their monetary policies remain exceptionally accommodative, they changed direction from easing to tightening. They are proceeding in different ways and at different speeds, but the direction is the same.

We are not anticipating a sharp move higher in benchmark rates. We expect central banks to move cautiously, making adjustments gradually with a close eye on the pace of economic activity. Their goal is to address inflationary pressures before they get out of hand without derailing the economic recovery.

**QUESTION.** *What does that mean for equity investors?*

**ANSWER.** An environment of continuing economic expansion with modestly higher inflation (after all, this has been a goal of central banks in recent years) and modestly higher interest rates is a healthy one. It should allow businesses to continue to experience growing revenues, earnings and cash flows.

What is changing is how those cash flows are valued. Their present value is being influenced by the anticipation of a higher discount rate. So, while a growing economy should foster growing cash flows, the value placed on those cash flows is being diminished. This has two important implications.

Surging equity prices that we've seen since the pandemic owe a lot to expanding valuation multiples that followed a collapse in interest rates. We know that over the long term valuations expand and contract, and ultimately are a wash. As we look out over the coming years, it seems unlikely that expanding valuation multiples can contribute much to returns. In fact, we may be in for a period of contraction. That means earnings growth and dividends (along with other forms of shareholder distributions) will likely become the dominant drivers of equity returns.

What's more, the pressure on valuations we are starting to see is not being applied evenly. That pressure is being felt most acutely by long-duration growth stocks with earnings that are anticipated to ramp up years from now. On the other hand, companies that generate cash today and pay dividends have shorter duration. That's how the math works. Cash up front — whether from a dividend or a coupon — becomes more valuable than cash down the road as the discount rate rises.

**QUESTION.** *If dividends and other forms of shareholder yield will represent a greater portion of total return, what is the outlook for dividends?*

**ANSWER.** We believe it's quite good. In addition to the positive economic outlook cited earlier, companies have accumulated a lot of cash during the pandemic. U.S. companies alone now have over \$7 trillion in cash on their balance sheets (according to Bank of America). That is a staggering sum. These companies do not have unlimited opportunities to earn above their cost of capital. Therefore, a sizeable portion of that cash will find its way back to shareholders in the form of cash dividends, share buybacks and debt reduction.

*Tom is a client portfolio manager for Shareholder Yield strategies. Prior to joining Epoch in 2019, Tom was a senior client portfolio manager at TIAA Investments where he was responsible for covering domestic, global and international equity strategies. Before TIAA Investments, Tom held product specialist, consultant relations, sales, product management and client service positions at Deutsche Asset Management, AllianceBernstein, Prudential and Putnam Investments. He holds a BA from Purdue University and an MBA from Cornell University.*

# Quarterly Investment Update — *The Fed’s First Step Toward a Digital Dollar?* (cont’d)

a digital dollar is to preserve the role of public money in an increasingly digital economy.<sup>2</sup>

A U.S. CBDC appears inevitable, with 2025 being the earliest feasible date for a small-scale pilot, and 2028 probably the latest. Specific catalysts driving the project forward include the success of China’s digital yuan and the ascendancy of private digital money, including stablecoins that are fast entering the mainstream. Given this backdrop, the Fed is under increasing pressure to present a positive vision for the digital dollar’s future, including its implications for banks, innovation and privacy.<sup>3</sup>

## UPGRADING MONEY: THE INEVITABILITY OF A CBDC

***“We are the world’s reserve currency, and we have the responsibility to get this right. We don’t need to be the first. We need to get it right.” —Jerome Powell, Fed Chair***

A digital dollar raises profound questions regarding privacy, innovation and the role of government in financial markets. There is also much debate concerning the impact on commercial banks, especially since, unlike today’s private digital money, a CBDC would have neither credit nor liquidity risk. Over the last three years most major central banks have weighed in on these controversies, and a consensus on how to address the thorniest issues is emerging.

However, the PBoC is an exception, as it possesses radically different views on key issues, particularly privacy and the role of the private sector. This is critical because China is leading the charge and its approach will heavily influence choices made elsewhere, especially in developing markets. Its “pilot” program is huge and is widely viewed as a technocratic success. More than 260 mn people have already downloaded the wallet app, which provides access to more than 8 mn merchants and has been used in transactions totaling 87.6 bn yuan (US\$13.8 bn). Further, the PBoC wants an even broader rollout to coincide with the Winter Olympic Games, which begin in early February.

***“E-yuan enable complete surveillance of transactions and also cut out any potential challenge to the regime’s authority by electronic payment giants like Ant Group and Tencent.” — Adam Tooze, Columbia University***

One reason the e-yuan’s rollout has been so contentious is that it is mission critical for the Fed and Treasury to preserve the dominant international role of the greenback. There is a fear that the global use of the dollar would decline, possibly precipitously, if China and others successfully introduce CBDCs while the U.S. dithers. Keeping the USD as the world’s reserve currency is one of the key factors ensuring forward momentum for the digital dollar project. A second reason to introduce public digital money is the marginalization of cash and surging dominance of private digital money, including stablecoins.

## STABLECOINS: DIGITAL DOLLARS, BUT WITH LIQUIDITY AND CREDIT RISK

Over the last two years the market cap of cryptocurrencies has risen over 8x and currently stands at \$1.6 tn. Stablecoins are a more recent incarnation that peg their value to assets such as the USD. Their market value has increased over 20x since early 2020 and this worries central bankers as stablecoins possess a number of moneylike characteristics. In particular, their use as a means of payment is accelerating and they underpin DeFi, as the funding currency for digital asset purchases.

***“I regard [crypto as] first and foremost not so much a technical or commercial proposition but a conservative/libertarian effort to escape the shadow of the political order of money...” — Adam Tooze, Columbia University***

As DeFi expands, stablecoin adoption is likely to soar, especially in the absence of an official digital dollar. The Fed’s CBDC report explicitly discusses this threat and calls on Congress to promptly enact legislation that would ensure “payment stablecoin arrangements are subject to a consistent and comprehensive federal regulatory framework” (i.e., regulate them like banks).

***“I’m genuinely undecided whether there is a legitimate need for a CBDC when we have stablecoins, and I look forward to working with Chair Powell and Governor Brainard to figure this out.” — Senator Cynthia Lummis (R-WY)***

The growing acceptance of stablecoins and the successful e-yuan pilot are two key factors motivating the Fed to actively champion a CBDC. However, there are three consequential issues — the potentially negative impact on banks, innovation and privacy — that need to be resolved before Congress can begin drafting legislation for the digital dollar. We’ll now briefly discuss each of the three concerns.

## THE RISKS OF INTRODUCING A CBDC: POTENTIAL IMPACT ON BANKS

***“There are circumstances in which the very existence of an account-based CBDC could trigger a flight of deposits out of the banking system.” — Eswar Prasad, Cornell University***

The Fed report emphasizes that a digital dollar could fundamentally change the structure of the U.S. financial system: “While Americans have long held money predominantly in digital form ... a CBDC would differ ... because it would be a liability of the Federal Reserve, not of a commercial bank.” A chief concern is that a digital dollar, which possesses neither credit nor liquidity risk, would draw funds away from bank deposits, impairing banks’ ability to extend credit. Moreover, outflows could accelerate during times of stress, exacerbating liquidity and financial stability risks.

<sup>2</sup> The Fed currently issues two forms of money: physical notes (the dollar bills in your wallet) and digital dollars (which can only be held by select financial institutions). Before the former vanishes entirely, the Fed wants the latter available to individuals.

<sup>3</sup> Please see our paper, “Money 3.0: Central Bank Digital Currencies,” March 2021. We also recommend “The Future of Money: How the Digital Revolution Is Transforming Currencies and Finance,” by Eswar Prasad (Cornell University), Harvard University Press, 2021.

One way the digital dollar's design could mitigate these substitution risks is for it to be non interest-bearing, which would make it less attractive as a substitute for bank deposits. Reflecting this, one question the Fed is seeking public comments on is: "Should a CBDC pay interest?" While some pundits answer with an emphatic "No," most economists accentuate how powerful a policy tool this would be (including the possibility of negative rates during a financial crisis). Consequently, we suspect a digital dollar will ultimately pay interest, even if that is not the case initially.

### **INTERMEDIATION: THE FED WILL NOT DIRECTLY OFFER CBDC ACCOUNTS**

The banking sector faces these substitution risks even though, as the report highlights, the Federal Reserve Act does not authorize the Fed opening accounts for individuals. This means households and businesses would gain access to the CBDC indirectly, through an account or digital wallet offered by a bank or other institution that has an account at the Fed.

Since the digital dollar is to be offered via intermediaries, a second question the Fed has requested public comments on is: "What types of firms should serve as intermediaries for CBDC?" In addition to commercial banks, potential intermediaries include a variety of regulated nonbanks (including fintechs). As we'll now discuss, a key reason for using private intermediaries is their existing identity management and privacy systems.

### **PROTECTING PRIVACY: BUT WITHOUT FACILITATING ILLICIT ACTIVITY**

*"... a potential U.S. CBDC ... would best serve the needs of the U.S. by being privacy-protected, intermediated, widely transferable, and identity-verified." — Money and Payments: The U.S. Dollar in the Age of Digital Transformation, FRB, January 20, 2022*

The next issue to be resolved is privacy, which is the subject of a third question the Fed is seeking public comments on: "How could a CBDC provide privacy to consumers without providing complete anonymity and facilitating illicit financial activity?" From the Fed's perspective, "a CBDC intermediary would need to verify the identity of a person accessing CBDC, just as banks and other financial institutions currently verify the identities of their customers."

The Fed report also emphasizes that today's system consists of anonymous cash plus private digital money, with the Fed stressing its commitment to the continued availability of both. That is, the Fed is "considering a CBDC as a means to expand safe payment options, not to reduce or replace them."

### **ENSURING THE DIGITAL DOLLAR DOESN'T SQUELCH INNOVATION**

*"What this report really clarifies? The Fed seeks to fit the future of financial transactions in the US into the box of the legacy financial structure." — Tom Emmer, Representative (R-MN 6th District)*

<sup>4</sup> For example, see "Responses to the Bank of England's March 2020 Discussion Paper on CBDC," June 2021.

<sup>5</sup> [atlanticcouncil.org/cbdctracker/](https://atlanticcouncil.org/cbdctracker/)

A third outstanding issue is the potentially negative impact a digital dollar could have on financial sector innovation. The broad concern is that an expanded role for the government and an even more intrusive regulatory environment would suppress, and possibly quash, private sector innovation. The challenge for policymakers is to assure incumbent banks, fintechs and the DeFi community that the CBDC and associated digital guardrails will provide an efficient platform on which they can create new financial products and services. Given an awkward history, it is unlikely their pledges will be well-received by everyone.

### **PUBLIC CONSULTATION PERIOD: UNTIL MAY 20**

With these issues and more to be resolved, the Fed report stresses it is only "the first step in a public discussion between the Federal Reserve and stakeholders about CBDC." For the next step, the Fed is soliciting feedback through May 20 from "a wide range of stakeholders that might use a CBDC or be affected by its introduction." Clearly, the way the Fed frames the public's input will be critical to the second stage of this process.

Most major central banks have already sought comments and typically sort the feedback into five categories: privacy, the role of innovation, competition, the efficacy of monetary policy and financial inclusion.<sup>4</sup> While the Fed will likely use a similar classification, we expect innovation and competition to be featured even more prominently in the feedback they receive.

### **CBDC LEGISLATION: CAN CONGRESS DELIVER?**

*"The Federal Reserve does not intend to proceed with issuance of a CBDC without clear support from the executive branch and from Congress, ideally in the form of a specific authorizing law." — Money and Payments: The U.S. Dollar in the Age of Digital Transformation, FRB, January 20, 2022*

The Fed is clear that it will only issue a CBDC after legislation has been passed. However, in the current political environment, that seems like a long shot.

### **THE US WILL BE A LAGGARD RATHER THAN A LEADER**

The U.S. has long been the global leader when it comes to financial innovation. However, with CBDCs, which will soon be a core feature of the world's financial ecosystem, America has so far chosen to stay on the sidelines. Globally, CBDCs have been launched by nine countries (all EMs), while pilots have been launched by a further 14 (including South Korea, Singapore, Malaysia, Israel and Sweden), with China's digital renminbi being the most contentious.<sup>5</sup>

For the U.S., 2025 is likely the earliest date feasible for even a small-scale pilot. Before then, the Fed needs to promote a compelling vision for the dollar's future, including its implications for banks, innovation and privacy. On the other hand, we see 2028 as the latest date for a digital dollar trial. Maintaining the USD as the world's reserve currency is one of the key factors ensuring forward momentum for the digital dollar project. A second is to preserve the role of public money in an increasingly digital economy.

# Epoch and Its Employees Are Proud to Support:

Throughout the year, Epoch’s Charitable Giving Group coordinates opportunities for our employees to volunteer their time and money to give back to our community.

 <p><b>Food Pantry</b> <a href="http://sanctuaryforfamilies.org">sanctuaryforfamilies.org</a></p>	<p>Sanctuary for Families is dedicated to the safety, healing and self-determination of victims of domestic violence and related forms of gender violence. Epoch employees donated money with a goal of stocking their pantry for a month for the benefit of survivors of domestic violence, sex trafficking and gender violence, and we exceeded our goals.</p>	 <p><b>Coat Drive</b> <a href="http://newyorkcares.org">newyorkcares.org</a></p>	<p>New York Cares, the largest volunteer organization in New York, meets pressing community needs by mobilizing caring New Yorkers in volunteer service. Epoch employees participated in the organization’s annual coat drive, which aims to collect over 100,000 coats each year and distribute them to New Yorkers who need them most in the colder months.</p>
 <p><b>Toy Drive</b> <a href="http://toysfortots.org">toysfortots.org</a></p>	<p>The basic mission of the Marine Toys for Tots Program is to collect new unwrapped toys and distribute those toys to less fortunate children at Christmas. Epoch’s employees participated in the organization’s virtual toy drive, exceeding our goal by nearly 50%.</p>	 <p><b>Matching Gift Program</b></p>	<p>Epoch matches employee donations to eligible organizations of their choice. These organizations can include nonprofit charitable health care, educational, civic and cultural organizations.</p>

## Epoch is honored to make additional donations to:

<p><b>Chosen by the Operating Committee</b></p>		<p>The Orchid Foundation’s mission is to mentor underserved high school girls. It chooses girls that are excelling in their academic and/or extracurricular pursuits and helps fill the resource gap presented by their socioeconomic backgrounds. The “Orchids” are 14-22 year old star athletes, honor students, poets, humanitarians and feminists. <a href="http://www.theorchidfdn.org">www.theorchidfdn.org</a></p>
<p><b>Chosen by Vote of Epoch’s Employees</b></p>		<p>The world’s first food rescue organization, dedicated to feeding the city’s hungry men, women and children. City Harvest collects excess food from all segments of the food industry and delivers it free of charge to some 400 community food programs throughout New York City, helping feed more than 1 million New Yorkers that face hunger each year. <a href="http://www.cityharvest.org">www.cityharvest.org</a></p>
		<p>Dedicated to the safety, healing and self-determination of victims of domestic violence and related forms of gender violence. Through comprehensive services for their clients and their clients’ children, and through outreach, education and advocacy, Sanctuary for Families strive to create a world in which freedom from gender violence is a basic human right. <a href="http://www.sanctuaryforfamilies.org">www.sanctuaryforfamilies.org</a></p>
		<p>Citymeals on Wheels provides a continuous lifeline of nourishing meals and vital companionship to our homebound elderly neighbors. The organization was founded in 1981 to supplement the government’s meal delivery program. The majority of the organization’s funding comes from donations from private individuals. <a href="http://www.citymeals.org">www.citymeals.org</a></p>
		<p>663 million people in the world live without clean water. Charity Water is a nonprofit organization bringing clean and safe drinking water to people in developing nations. Private donors cover operating costs so 100% of donations go to fund water projects. <a href="http://www.charitywater.org">www.charitywater.org</a></p>

# Epoch in the News: 2021 Year in Review

## DECEMBER



### **BNN Bloomberg Money Talk**

John Tobin talks about “equity duration” and what that means for dividend payers versus non dividend payers in a rising rate environment. [Watch](#)

## APRIL



### **Barron's**

John Tobin spoke about the current state of dividends and capital allocation decisions. [Read](#)

## JULY



### **Bloomberg Radio**

Bill Booth discussed inflation, the attractiveness of quality growth companies and the debate on stocks versus bonds. [Watch](#)

## FEBRUARY



### **BNN Bloomberg Money Talk**

Bill Priest detailed his outlook for 2021, the wealth inequality created by the virus and consumers' longing to return to a “normal” lifestyle. [Watch](#)



### **Barron's and Fox Business**

Bill Priest joined the Midyear Roundtable to update the outlook he shared at the beginning of the year and discuss why he believes demand will be strong. He then joined Fox Business to continue the discussion. [Watch](#)

## JANUARY



### **Barron's**

Bill Priest joined the Roundtable to discuss public health, political turmoil and how the pandemic might accelerate change in the areas of social justice, climate change and innovation.



### **Yahoo! Finance**

Kera Van Valen discussed inflation, shareholder yield, and companies resuming and increasing dividends and buybacks. [Read](#)

## MAY



### **Bloomberg Surveillance**

Bill Priest talked about shareholder yield and central bank digital currencies. [Watch](#)

# Epoch Insights: 2021 Year in Review



DECEMBER

## China's "Common Prosperity": What Does It Mean for Investors?

China's new policy framework escalates government steerage of the economy, particularly real estate and tech-related sectors. We examine the implications for investors of the pendulum swinging ever further in favor of the state. [Read More](#)



MARCH

## Money 3.0: Central Bank Digital Currencies (CBDC)

CBDC has progressed from a bold speculative concept to a seeming inevitability that will further accelerate the digitization of the economy. We look at the implications for monetary policy, the fintech, payments and commercial banking sectors. [Read More](#)



SEPTEMBER

## The Epoch Core Model: An Evolving Tool

This update to our 2020 white paper explores recent updates made to our proprietary stock model, including the development of three machine learning versions and a new securities lending related signal. [Read More](#)



FEBRUARY

## Moore's Law & The Race for the Rest of the Chessboard

Breakthroughs in AI, autonomous driving, 5G and cloud computing will drive double-digit growth in semiconductor revenues. Valuations are reasonable, and we have a constructive view on the semiconductor sector and believe it possesses considerable upside. [Read More](#)



SEPTEMBER

## The Pandemic Accelerant Part II: Turbo Charging the Digital Economy

The pandemic has accelerated the digitization of the economy. We expect digital platforms to represent the majority of market cap by 2025, with tech, health care and communications the most promising sectors. [Read More](#)



JANUARY

## Will Biden Take On the Tech Barons?

Both sides of the political spectrum have been increasing their calls for regulatory action on the Big Tech companies. We explain why tech will continue to be the most dynamic sector of the economy, and why we expect greater breadth in tech market leadership and the emergence of entirely new sub sectors. [Read More](#)



JUNE

## America's Risky Experiment: Will the Inflation Genie Escape?

Inflation risks are at a four-decade high. While our base-case assumes only a brief period of above-target inflation, investors should brace themselves for more inflation scares, which will likely remain a key driver of equity markets well into 2022. [Read More](#)



On Epoch's Actively Speaking podcast we discuss a broad range of investment-related topics. The podcast is the latest step in our commitment to generating and sharing thought leadership with our clients and partners. Among the topics covered this year by host Steve Bleiberg and his guests:

### China: What Is Common Prosperity and What Does It Mean for Investors?

With Global Investment Strategist Kevin Hebner and Portfolio Manager Tim Sledge

### Managing a Portfolio Through a Pandemic

With Portfolio Manager David Siino

### Early Innings for the Post-Pandemic Recovery in U.S. Small Cap Equities

With Client Portfolio Manager Rick Vandale

### Will the Inflation Genie Escape?

With Global Investment Strategist Kevin Hebner

### Money 3.0: Central Bank Digital Currencies

With Global Investment Strategist Kevin Hebner

### Curing Corporate Short-Termism

With Gregory Milano, Managing Partner, Founder & CEO of Fortuna Advisors

### Semiconductors: The Eyes, Ears and Brains of the Digital World

With Senior Research Analyst Matthew Chan

Actively Speaking is available on:



Apple Podcast  
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Spotify  
[Click to Listen](#)



Google Play  
[Click to Listen](#)



Epoch's Website  
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# Epoch's Reading List

Epoch aspires to be a thought leader in the global investment industry and share knowledge with our clients. Our employees read an array of books and publications on a variety of subjects while developing our views. Below are some selected titles we read in 2021.

## TECHNOLOGY, SCIENCE & COMMUNICATIONS



- ***The Age of AI: And Our Human Future***  
by Henry A. Kissinger, Eric Schmidt, Daniel Huttenlocher
- ***The Age of Surveillance Capitalism: The Fight for a Human Future at the New Frontier of Power***  
by Shoshana Zuboff
- ***The Premonition: A Pandemic Story***  
by Michael Lewis
- ***Rule of the Robots: How Artificial Intelligence Will Transform Everything***  
by Martin Ford
- ***An Ugly Truth: Inside Facebook's Battle for Domination***  
by Sheera Frenkel & Cecilia Kang

## SOCIAL RESPONSIBILITY & ESG ELEMENTS



- ***How to Avoid a Climate Disaster: The Solutions We Have and the Breakthroughs We Need***  
by Bill Gates
- ***On Board: The Insider's Guide to Surviving Life in the Boardroom***  
by John Tusa

## STRATEGIC THINKING



- ***Noise: A Flaw in Human Judgement***  
by Daniel Kahneman, Olivier Sibony & Cass R. Sunstein
- ***Nudge: The Final Edition***  
by Richard H. Thaler and Cass R. Sunstein
- ***Think Again: The Power of Knowing What You Don't Know***  
by Adam Grant

## BUSINESS, ECONOMICS AND POLICY



- ***Antitrust: Taking on Monopoly Power from the Gilded Age to the Digital Age***  
by Amy Klobuchar
- ***The Future of Money: How the Digital Revolution Is Transforming Currencies and Finance***  
by Eswar Prasad
- ***Mission Capitalism: A Moonshot Guide to Changing Capitalism***  
by Mariana Mazzucato
- ***Only the Best Will Do: The compelling case for investing in quality growth businesses***  
by Peter Seilern

## EPOCH LIBRARY



- ***The Financial Reality of Pension Funding Under ERISA***  
by Jack L. Treynor, Patrick J. Regan & William W. Priest, CFA
- ***Free Cash Flow and Shareholder Yield: New Priorities for the Global Investor***  
by William W. Priest, CFA & Lindsay H. McClelland
- ***Winning at Active Management: The Essential Roles of Culture, Philosophy, and Technology***  
by William W. Priest, CFA, Steven D. Bleiberg & Michael A. Welhoelter, CFA, with John Keefe

# Strategy Performance as of December 31, 2021

U.S. STRATEGIES IN USD	Annualized Returns							Statistics — Three Year						
	QTR	YTD	1 Year	3 Years	5 Years	10 Years	Since Incept.	Std Dev.	Sharpe Ratio	Inform. Ratio	Alpha	Beta	R <sup>2</sup>	
<b>U.S. VALUE</b> <i>Inception date: 7/31/2001</i>	<b>Epoch Gross Return</b>	<b>8.0</b>	<b>29.2</b>	<b>29.2</b>	<b>24.0</b>	<b>16.0</b>	<b>14.5</b>	<b>9.9</b>	<b>20.19%</b>	<b>1.14</b>				
	<b>Epoch Net Return</b>	<b>7.9</b>	<b>28.9</b>	<b>28.9</b>	<b>23.7</b>	<b>15.6</b>	<b>14.2</b>	<b>9.4</b>						
	Russell 1000	9.8	26.5	26.5	26.2	18.4	16.5	9.3	17.71%	1.43	-0.41	-3.8%	1.10	0.94
	Russell 1000 Value	7.8	25.2	25.2	17.6	11.2	13.0	7.9	19.06%	0.88	1.44	5.1%	1.04	0.96
	S&P 500	11.0	28.7	28.7	26.1	18.5	16.6	9.1	17.17%	1.46	-0.35	-4.3%	1.13	0.93
<b>U.S. ALL CAP VALUE</b> <i>Inception date: 7/31/1994</i>	<b>Epoch Gross Return</b>	<b>8.8</b>	<b>31.5</b>	<b>31.5</b>	<b>24.8</b>	<b>16.7</b>	<b>15.2</b>	<b>12.6</b>	<b>20.56%</b>	<b>1.16</b>				
	<b>Epoch Net Return</b>	<b>8.6</b>	<b>30.6</b>	<b>30.6</b>	<b>24.1</b>	<b>16.1</b>	<b>14.6</b>	<b>11.8</b>						
	Russell 3000	9.3	25.7	25.7	25.8	18.0	16.3	11.0	17.94%	1.38	-0.18	-2.9%	1.11	0.94
	Russell 3000 Value	7.5	25.4	25.4	17.6	11.0	12.9	10.1	19.34%	0.86	1.55	5.8%	1.04	0.95
<b>U.S. SMALL CAP QUALITY VALUE</b> <i>Inception date: 12/31/2002</i>	<b>Epoch Gross Return</b>	<b>6.2</b>	<b>31.0</b>	<b>31.0</b>	<b>24.7</b>	<b>14.0</b>	<b>14.0</b>	<b>11.7</b>	<b>24.41%</b>	<b>0.97</b>				
	<b>Epoch Net Return</b>	<b>6.2</b>	<b>30.8</b>	<b>30.8</b>	<b>24.4</b>	<b>13.6</b>	<b>13.6</b>	<b>11.1</b>						
	Russell 2000 Value	4.4	28.3	28.3	18.0	9.1	12.0	10.4	25.00%	0.68	1.01	6.8%	0.94	0.93
<b>U.S. SMID CAP QUALITY VALUE</b> <i>Inception date: 8/31/2006</i>	<b>Epoch Gross Return</b>	<b>6.5</b>	<b>31.6</b>	<b>31.6</b>	<b>24.7</b>	<b>13.8</b>	<b>14.0</b>	<b>10.5</b>	<b>23.45%</b>	<b>1.01</b>				
	<b>Epoch Net Return</b>	<b>6.4</b>	<b>31.3</b>	<b>31.3</b>	<b>24.3</b>	<b>13.4</b>	<b>13.6</b>	<b>10.0</b>						
	Russell 2500 Value	6.4	27.8	27.8	18.3	9.9	12.4	8.4	24.15%	0.72	1.38	6.2%	0.95	0.96
<b>U.S. CHOICE</b> <i>Inception date: 4/30/2005</i>	<b>Epoch Gross Return</b>	<b>14.1</b>	<b>33.7</b>	<b>33.7</b>	<b>25.3</b>	<b>16.8</b>	<b>15.1</b>	<b>11.2</b>	<b>20.46%</b>	<b>1.19</b>				
	<b>Epoch Net Return</b>	<b>14.1</b>	<b>33.5</b>	<b>33.5</b>	<b>25.1</b>	<b>16.5</b>	<b>14.7</b>	<b>10.8</b>						
	Russell 3000	9.3	25.7	25.7	25.8	18.0	16.3	11.1	17.94%	1.38	-0.11	-2.7%	1.11	0.95
<b>U.S. EQUITY SHAREHOLDER YIELD</b> <i>Inception date: 6/30/2012</i>	<b>Epoch Gross Return</b>	<b>9.3</b>	<b>23.7</b>	<b>23.7</b>	<b>16.0</b>	<b>11.9</b>	-	<b>12.9</b>	<b>16.63%</b>	<b>0.90</b>				
	<b>Epoch Net Return</b>	<b>9.2</b>	<b>23.3</b>	<b>23.3</b>	<b>15.6</b>	<b>11.5</b>	-	<b>12.5</b>						
	Russell 1000 Value	7.8	25.2	25.2	17.6	11.2	-	12.7	19.06%	0.88	-0.39	0.7%	0.86	0.96
<b>U.S. QUALITY CAPITAL REINVESTMENT</b> <i>Inception date: 12/31/2017</i>	<b>Epoch Gross Return</b>	<b>10.5</b>	<b>29.3</b>	<b>29.3</b>	<b>32.0</b>	-	-	<b>21.5</b>	<b>17.85%</b>	<b>1.74</b>				
	<b>Epoch Net Return</b>	<b>10.4</b>	<b>28.8</b>	<b>28.8</b>	<b>31.4</b>	-	-	<b>20.9</b>						
	Russell 3000	9.3	25.7	25.7	25.8	-	-	17.2	17.94%	1.38	1.50	5.8%	0.97	0.95

## GLOBAL & INTERNATIONAL STRATEGIES IN USD

### Annualized Returns

### Statistics — Three Year

	QTD	YTD	1 Year	3 Years	5 Years	10 Years	Since Incept.	Std Dev.	Sharpe Ratio	Inform. Ratio	Alpha	Beta	R <sup>2</sup>
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#### GLOBAL EQUITY SHAREHOLDER YIELD

Inception date: 12/31/2005

Epoch Gross Return	7.0	18.7	18.7	12.9	9.2	9.2	8.1	16.70%	0.72				
Epoch Net Return	6.9	18.2	18.2	12.5	8.8	8.8	7.7						
MSCI World (Net)	7.8	21.8	21.8	21.7	15.0	12.7	8.2	17.06%	1.22	-1.68	-6.0%	0.93	0.91

#### GLOBAL CHOICE

Inception date: 9/30/2005

Epoch Gross Return	8.3	18.2	18.2	18.8	14.9	12.1	10.1	17.61%	1.01				
Epoch Net Return	8.1	17.5	17.5	18.1	14.2	11.5	9.4						
MSCI World (Net)	7.8	21.8	21.8	21.7	15.0	12.7	8.3	17.06%	1.22	-0.68	-2.4%	1.00	0.94

#### GLOBAL SELECT

Inception date: 4/30/2012

Epoch Gross Return	3.1	8.6	8.6	21.7	18.0	-	10.8	14.95%	1.39				
Epoch Net Return	3.1	8.3	8.3	21.1	17.6	-	10.4						
MSCI ACWI (Net)	6.7	18.5	18.5	20.4	14.4	-	11.1	16.84%	1.15	0.21	4.5%	0.82	0.86

#### GLOBAL QUALITY CAPITAL REINVESTMENT

Inception date: 6/30/2013

Epoch Gross Return	9.0	26.5	26.5	28.8	20.3	-	15.2	15.45%	1.80				
Epoch Net Return	8.8	25.9	25.9	28.3	19.8	-	14.6						
MSCI World (Net)	7.8	21.8	21.8	21.7	15.0	-	12.1	17.06%	1.22	1.58	8.4%	0.88	0.94

#### GLOBAL ABSOLUTE RETURN

Inception date: 12/31/2001

Epoch Gross Return	2.7	15.3	15.3	15.7	14.2	11.0	10.4	11.16%	1.32				
Epoch Net Return	2.4	14.3	14.3	14.5	13.1	9.7	9.1						
MSCI World (Net)	7.8	21.8	21.8	21.7	15.0	12.7	8.1	17.06%	1.22	-0.77	2.3%	0.61	0.88
BarCap U.S. Aggregate	0.0	(1.5)	(1.5)	4.8	3.6	2.9	4.3	3.35%	1.14	0.96	13.6%	0.52	0.02

#### EMERGING MARKETS EQUITY

Inception date: 12/31/2017

Epoch Gross Return	(0.6)	(5.6)	(5.6)	10.9	-	-	4.5	16.86%	0.59				
Epoch Net Return	(0.7)	(6.0)	(6.0)	10.4	-	-	4.1						
MSCI EM Index (Net)	(1.3)	(2.5)	(2.5)	10.9	-	-	3.9	18.33%	0.54	-0.01	0.9%	0.90	0.97

#### NON-U.S. EQUITY CHOICE

Inception date: 9/30/2015

Epoch Gross Return	2.4	7.2	7.2	13.4	9.8	-	8.3	16.74%	0.74				
Epoch Net Return	2.3	6.7	6.7	12.9	9.3	-	7.9						
MSCI EAFE (Net)	2.7	11.3	11.3	13.5	9.5	-	8.5	16.92%	0.74	-0.03	0.4%	0.96	0.95

#### NON-U.S. QUALITY CAPITAL REINVESTMENT

Inception date: 12/31/2019

Epoch Gross Return	4.1	12.6	12.6	-	-	-	20.1	-	-				
Epoch Net Return	4.0	12.1	12.1	-	-	-	19.6						
MSCI ACWI ex-USA (Net)	1.8	7.8	7.8	-	-	-	9.2	-	-	-	-	-	-

**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. **Composite Structure** — 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. A complete list of composite descriptions, broad distribution pooled funds and limited distribution pooled funds are available upon request.

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 Quality Value	June 2004	Russell 2000 Value	U.S. Small Cap Value pursues long-term capital appreciation by investing in a portfolio of approximately 60-90 small 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 designed to achieve below-average portfolio volatility.
U.S. SMID Cap Quality Value	September 2006	Russell 2500 Value	U.S. SMID Cap Value pursues long-term capital appreciation by investing in a portfolio of approximately 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 designed to achieve below-average portfolio volatility.
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. Quality Capital Reinvestment	December 2017	Russell 3000	U.S. Quality Capital Reinvestment seeks to provide an attractive total return with market-like volatility by investing in U.S. companies with strong free cash flow and which provide long-term capital appreciation. The strategy will invest primarily in equity and equity-related instruments of companies. The portfolio will invest in companies that generate growing free cash flow and possess management with consistent and successful capital allocation policies with a focus on generating returns for shareholders. The portfolio generally will hold the securities of approximately 75 – 100 U.S. domiciled issuers.
Global Select	March 2012	MSCI All Country World (Net)	Global Select composite is a concentrated global strategy of companies selected based on their ability to generate free cash flow and allocate it intelligently to create shareholder value. Our portfolio construction framework and stock selection process incorporates a blend of bottom-up opportunities with top-down macroeconomic insights, leading to a portfolio of up to 15 high-conviction holdings while minimizing unintended risk and reducing volatility.
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.
Emerging Markets Equity	December 2017	MSCI Emerging Markets (Net)	Emerging Markets Equity pursues long-term capital appreciation by investing in a portfolio of 60-80 securities of companies located in emerging and frontier markets. Our strategy offers investors access to companies with high return potential in the world’s fastest growing markets. We select companies based on their ability to generate free cash flow and allocate it intelligently for the benefit of shareholders. Our 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.
Non-U.S. Quality Capital Reinvestment	December 2019	MSCI All Country World (ex-USA) (Net)	Non-U.S. Quality Capital Reinvestment pursues attractive total returns by investing in a diversified portfolio of companies that reinvest to drive future growth and have a high return on invested capital (ROIC). Companies in the portfolio are those that the investment team believes will have high and persistent ROIC, driven by sustainable competitive advantages or effective barriers to entry. The portfolio generally holds between 75 and 100 stocks from equity markets outside the U.S., with risk controls to diversify the sources of growth and reduce volatility.
Global Equity Shareholder Yield	January 2006	MSCI World (Net)	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)	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)	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** — 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. Standard Deviation is a statistical measure of the degree to which an individual value in a probability distribution tends to vary from the mean of the distribution. The greater degree of dispersion, the greater degree of risk. Sharpe Ratio is risk-adjusted measure that measures reward per unit of risk. The higher the Sharpe Ratio, the better. The numerator is the difference between the portfolio’s annualized return and the annualized return of a risk-free instrument. The denominator is the portfolio’s annualized standard deviation (population). Information Ratio is a measure of consistency in excess return. The annualized excess return over a benchmark divided by the annualized standard deviation (population) of excess return. Alpha is a risk (beta-adjusted) return measurement. It measures the fund’s value added relative to a benchmark. It is the Y intercept of the regression line. Beta is the systematic risk of a portfolio. The beta of a portfolio is its sensitivity to a benchmark. The linear relationship between two return series. R-squared is the correlation squared. Correlation shows the strength of the relationship between two return series. The higher the correlation, the more similar the returns..

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, applied 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 gross returns and the benchmark returns over the preceding 36-month period. Policies for valuing investments, calculating performance, and preparing GIPS Reports 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 September 30, 2021 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.

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