EPOCH | Epoch Investment Partners, Inc.
Advantage from Perspective

JANUARY 2019

Quarterly Newsletter

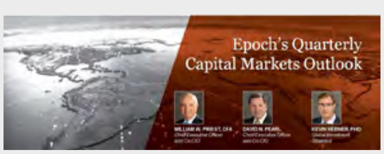
IN THIS ISSUE

EVENTS

Epoch's Co-Chief Investment Officers Bill Priest and David Pearl, and Global Investment Strategist Kevin Hebner kicked off our new format quarterly webinar, discussing:

- **Global Macro:** deceleration or recession?
- **China Trade War:** winners and losers, mostly losers
- **From QE to QT:** influence on equities and other assets

Tuesday, January 15, 2019
Replay and presentation available on *www.eipny.com*



Spotlight: *Utilities and Growth: Contradictory? We don't think so.*

A conversation with Michael Jin, CFA, Managing Director, Senior Research Analyst

QUESTION. *Some investors consider utilities a low-growth industry. Do you agree with that?*

ANSWER. That perception is based on the fact that electricity demand has been mostly flat since the global financial crisis (GFC), even as the economy grew. This was due, mainly, to energy conservation efforts, such as the adoption of LED and CFL light bulbs and efficiency improvements in home appliances. As such, it appears logical to conclude that utility companies' earnings and/or cash flow growth must have been nonexistent or very low at best. On the contrary, many utility companies have delivered

Article continued on page 2

Quarterly Investment Update: *Outlook for 2019: On Margins, Multiples and Macron*

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

While equity markets experienced a challenging and choppy 2018, this year has responded with a buoyant leap off the blocks. Although the ranks of optimists are gradually dwindling, those remaining assert that the U.S. economy is in rude health, with the consensus forecasting GDP growth of 2.2% this year and 1.7% in 2020. Further, wage growth is currently running at a 3% nominal pace that, even though it is a lagging indicator, suggests a positive outlook for consumption over coming

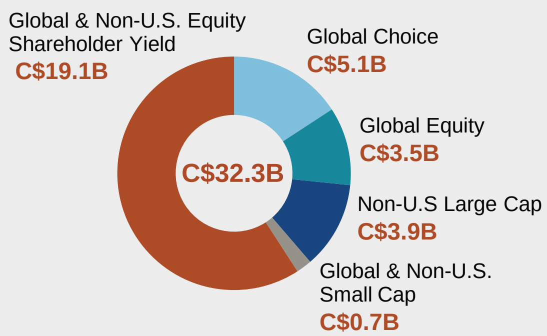
Article continued on page 4

Firm Update

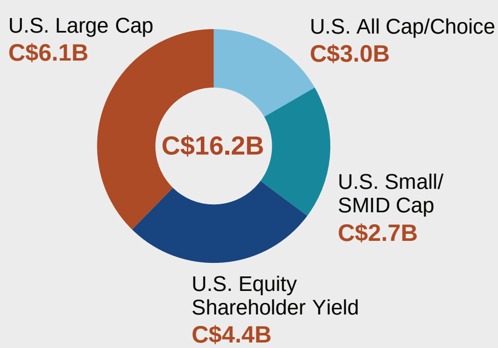
ASSETS UNDER MANAGEMENT C$48.5B

(USD, As of December 31, 2018)

GLOBAL STRATEGIES



U.S. STRATEGIES



ORGANIZATIONAL UPDATES

Timothy Taussig

As previously announced, Epoch co-founder, President and COO Tim Taussig retired at the end of 2018. Tim helped transform a startup with high ideals into a world-class firm that continues to deliver on its founding principles of free-cash-flow investing and meeting client needs. He began transitioning his responsibilities to Epoch's new President and COO Philipp Hensler in August and served as a senior advisor until December 31. We wish Tim the best of luck in retirement.

Spotlight *(continued)*

attractive and consistent earnings and cash flow growth, often in the range of middle to high single digits. These growth rates, particularly in the years post-GFC, have often been higher than the nominal GDP growth rates achieved by the countries in which the companies operate.

QUESTION. *How did these companies generate that growth without selling more kilowatt-hours of electricity?*

ANSWER. The utilities industry is partly regulated and partly unregulated. Due to the monopolistic nature of certain utility assets, such as electric transmission grids and natural gas pipelines, these assets are highly regulated for price control. The unregulated side of the industry has been highly competitive and, thus, growth has been challenging for the companies in those markets. We have been focusing our investments on the regulated side of the industry, where several secular factors have been driving the growth of utility rate bases, earnings and cash flow. These factors are aging infrastructure, the emergence of renewables, the shale revolution and digitization.

QUESTION. *How can aging infrastructure be a positive driver?*

ANSWER. Aging energy infrastructures are less reliable and often cause severe social, economic or environmental impact when they fail. A blackout in New York City, for example, could cause billions of dollars of economic damage. As a result, regulators, who are responsible for reliability, have required the utility companies to upgrade their aging infrastructures. As these upgrades are capital intensive, regulators are obliged to grant the companies favorable terms, such as allowed rates of return and other incentives that will allow them to attract investments, while at the same time mitigating the impact on the consumer's utility bills. This balancing act has led to lasting capital programs that contribute to the growth of rate bases, which the utility companies use to drive earnings and cash flow growth.

QUESTION. *How are renewables beneficial for utilities?*

ANSWER. Non-hydro renewable sources of energy, such as wind and solar, grew significantly in the last 10 years and have become an integral part of the energy resource mix. Their growth was driven by country or state environmental targets, government incentives and a drastic fall in component costs in recent years. To support the development of renewables, utility companies are tasked with building new transmission lines to connect the new energy sources to the power grids. Capital spending on the new transmission lines, together with the required system upgrades to accommodate and optimize flows on the grid, are added to the rate bases, driving additional earnings and cash flow growth.

QUESTION. *What about the shale revolution?*

ANSWER. The advancement of oil and gas production technology, notably horizontal drilling and hydraulic fracturing, has led to a great abundance of natural gas in North America. As a result, natural gas prices have been in a steady decline over the last 10 years. Cheap natural gas has stimulated demand. Residential customers have been switching from oil to natural gas for home heating during the winter. More and more power generation has switched from coal to natural gas. Utility companies, during this energy transition, benefited in multiple ways, such as building long-haul pipelines to gas producing shale, constructing new gas distribution lines to homes, and adding new gas power plants to their generation mix. Capital spending associated with these activities is added to their rate bases and again contributes to growth.

QUESTION. *Epoch has spoken often about tech being the new macro, but how does that affect utilities?*

ANSWER. Digitization has had a large impact on the industry. Digitization of energy consumption starts with smart meters, for both electricity and gas transmission and distribution networks. Smart meters not only automate the meter reading, significantly reducing the costs of dispatching human readers, but also improve the speed of emergency responses by quickly identifying the location and scale of outages. Smart meters can also detect and measure the two-way flow of electricity, making the distributed generation by rooftop solar feasible. Time-of-use rates that allow consumers to pay less at off-peak hours will only be possible with smart meters. Utility companies are rolling out smart meters and getting incremental growth from the investments.

QUESTION. *Is the growth expected to continue?*

ANSWER. We believe that the growth will continue, as the aforementioned drivers will still be valid for many years to come. Tens of thousands of miles of transmission and distribution lines still need to be replaced or upgraded. Renewables are still in the early innings of development. Natural gas abundance continues to benefit consumers and industries. Finally, while smart meters will eventually saturate, digitization is still ongoing.

In addition, new growth drivers are emerging. Utility companies are just starting to get approvals to put wind and solar power facilities into their rate bases. As technology advances and costs come down, renewables are becoming more competitive even without government incentives. As this trend continues, it will drive further rate-based renewables growth by the utility companies. Also, as battery costs keep coming down, we view the mass adoption of electric vehicles as a question of when, not if. Electric vehicles will switch transportation fuel from carbon-emitting hydrocarbons to electrons. This inevitably leads to a significant growth in power consumption. New power generation facilities will need to be built and added to the rate bases, hopefully with an even higher mix of renewables. This will also require the expansion of transmission and distribution capacities to handle higher charging throughput. Time-of-use rates may become mainstream.

QUESTION. *What are the implications for investors?*

ANSWER. The characteristics of the utilities' growth are unique. They are independent of electricity consumption, have multi year visibility from the rate-making process, and offer low correlation with, yet often higher rates than, GDP growth. The utilities sector also has low beta, providing a risk-reduction benefit to portfolios. For our shareholder yield strategies in particular, we favor those utility companies that operate in constructive regulatory environments, where regulators understand the need for investment and offer attractive allowed returns to properly compensate capital providers. We also look for management teams that have the operational track record of consistently delivering the projects and the associated growth.

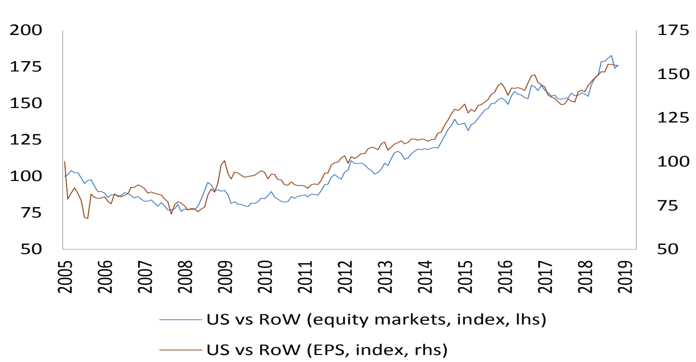
Michael's primary focus is on Epoch's Equity Shareholder Yield strategies. Prior to joining Epoch in 2010, Michael was a research analyst at AllianceBernstein. Prior to Bernstein, Michael worked as a corporate finance consultant at McKinsey and a process engineer at Praxair. He received his MBA from the University of Chicago, an MS from SUNY Buffalo and Notre Dame, and completed his undergraduate study at the University of Science and Technology of China.

quarters. Moreover, Factset anticipates S&P 500 earnings growth of just under 7% in 2019. This implies a promising backdrop, especially given that the U.S. equity market is trading close to fair value (for example, on a FCF yield of 5.3%, marginally above its historical mean of 5.2%) and total shareholder yield is expected to end 2019 about 150 bps above the 10-year bond yield.

An additional, more tactical factor bolsters the optimistic case. At the beginning of the year, a 50-60% probability of a U.S. recession was being implied by a trio of market variables (the flattening yield curve, widening corporate spreads and Q4's equity market plunge). While we believe a mild recession is more likely than not over the next three years, it is utterly impossible to predict the timing with any level of precision. That is to say, while economic and earnings momentum have certainly deteriorated, equity markets appear to have overreacted last quarter. Such behavior reminds us of Professor Samuelson's quip that "The stock market has forecast nine of the last five recessions."

Further, during recent quarters the market has increased its focus on risks around the outlook for Europe, China and elsewhere. While the U.S. is certainly not without its vulnerabilities, it is worth stressing that for most of the last decade the S&P 500 has outperformed the rest of the world. This is principally due to the superior EPS record of U.S. companies (figure 1), which in turn reflects two driving influences: first, the country's superior macro performance (since the beginning of the decade, nominal U.S. GDP has expanded by 50% more than the eurozone's and by four times as much as Japan's), and second, its much higher weighting in technology. We have written extensively on our "tech is the new macro" theme, which emphasizes that the ability of companies to generate FCF is increasingly dependent on how they adapt their business models to the digital age. These two factors are likely to remain key drivers so, even as U.S. momentum decelerates, we expect it to outperform other markets globally.

FIGURE 1: U.S. MARKET OUTPERFORMANCE REFLECTS SUPERIOR EPS GROWTH



Source: Bloomberg, Epoch Investment Partners
Note: Both series indexed to 100 on 3/2005

Quantitative Frightening

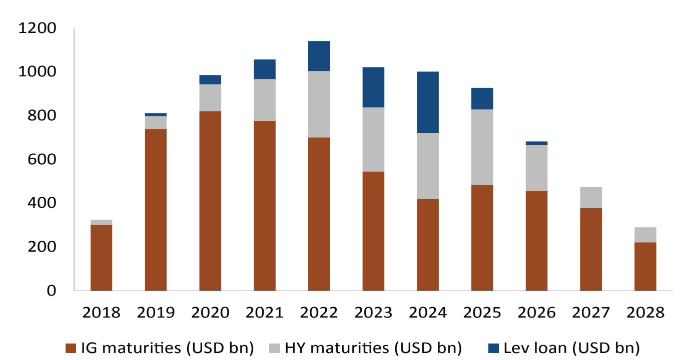
However, the rosy perspective outlined above is counterbalanced by four worrisome developments, each of which came to the fore last year and will likely remain in play through 2019 and beyond. The first is the impact of the transition from QE to QT. Although QT is not a new theme, it finally started to have a real impact on markets last year, partially because the ECB joined in and finally completed its QE program. Since most studies, including those undertaken by the Fed, have found that QE reduced yields on 10-year Treasurys by about 100 bps, there is much concern about the Fed's stated plan to unwind the program on autopilot. In particular, if the impact of QT is symmetrical, it could pose a major negative for equity markets, especially for long-duration stocks.

The second concern is the huge Treasury funding required to finance both the fiscal deficit (likely to break through $1 trillion this year, and then keep rising) and to absorb the securities being sold through QT (up to $600 billion annually). The Treasury has only previously faced funding needs on this scale during wartime or recession as, at this late stage of the cycle, the Treasury's financing needs are typically dwindling, rather than being ramped up. Given this anomalous dynamic, we are worried about the impact on interest rates and the possibility of a sharp tightening in USD liquidity.

Corporate Issuance Soared During the Fed's QE Experiment

Third, over the last decade there has been a massive increase in U.S. corporate issuance, with such debt hitting a record high. However, now the bill is coming due, with 62% of existing IG debt maturing within the next five years (figure 2). Further, the average riskiness of outstanding corporate bonds has risen sharply and covenant-lite debt has become the new normal. Credit will likely constitute the epicenter of the next market crisis, with particular concern regarding CLOs and fallen angels (which are likely to overwhelm the liquidity available in HY, given the enormity of today's BBB market).

FIGURE 2: U.S. MATURITY WALL: CORPORATE BONDS



Source: Goldman Sachs

Taken together, the first three risk factors suggest a strong possibility of higher interest rates, tighter financial conditions and rising volatility in coming quarters. Further, while QE was associated with dramatic multiple expansion, the transition to QT, especially when compounded by the unprecedented issuance of Treasurys and the maturity wall facing corporate bonds, suggests that equity multiples are highly unlikely to rise any further.

The fourth development is the recognition that no one wins a trade war (a subject we have written much about). The Trump administration has taken a particularly hard line toward China, with the soft deadline of March 1 quickly approaching. The new "trade architecture" will almost certainly involve greater exports of agriculture and energy commodities. Additionally, China has already passed legislation to improve IP protection, although we are skeptical that it will be enforced effectively. Equally importantly, China will promise to scale back subsidies and improve market access for U.S. firms, although these are likely to be empty promises, made to buy time. As a result, a tentative agreement may be reached, but that it will satisfy few. Consequently the deadline is likely to be extended, as negotiations continue, on a sporadic basis, with conflict re-escalating, possibly in early-2020.

The "Grand Débat": From the Quotidian to the Existential

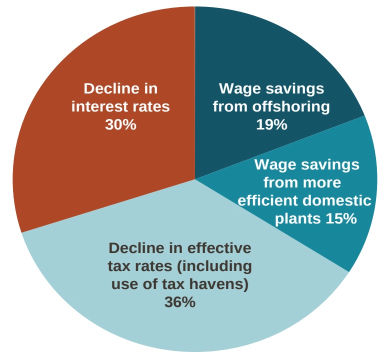
An additional concern, albeit one that is difficult to express in terms of probabilities and specific market impact, is that the global liberal order is coming apart. When you simultaneously challenge social norms and many of the values that anchor people — a sense of home, job security and the prospects for growth — and amp it up with social media networks, you get serious blowback, as we are seeing in France with the "gilets jaunes" and Britain with Brexit.

Since WWII, the liberal global order has spread more freedom and prosperity around the world than during any other period in history, but is now under duress. The pillars of this order are being shaken by insurgencies of the working poor and anxious middle classes that have benefited little from the surges in globalization, immigration and technology that have served places such as London, Paris, San Francisco and New York so profoundly well. The high-wage, middle-skilled jobs often held by this group are giving way to robotics, AI, outsourcing and Chinese imports. It is hard to see how this can end in a constructive way.

Margins, Like Multiples, Have Almost Certainly Peaked

Manufacturing margins were flat for decades at around 6%, but they have doubled since 2000, with four factors explaining most of the expansion (figure 3): labor arbitrage derived from China entering the WTO, the evolution of complex and highly efficient global supply chains, lower corporate tax rates and declining interest rates. While lower taxes may be here to stay, the other three are reversing direction, in large part due to rising trade tensions and the transition to QT. When the movie The Law of Comparative Advantage is run backward, the outcome is a lose/lose relationship for everyone. Thus, we expect profit margins to struggle and market multiples to fall or at best remain flat.

FIGURE 3: THE DOUBLING OF MANUFACTURERS' MARGINS SINCE 2000 CAN BE ATTRIBUTED TO FOUR FACTORS



Source: Empirical Research Partners

We began this note discussing three factors that suggest a more optimistic outlook on equity markets in 2019. However, as we enter the new year we are mindful that the QE experiment and plentiful liquidity that supported valuations and suppressed volatility for most of the last decade has now reversed and is moving resolutely in the other direction. Declining liquidity implies less support for equity multiples and a higher level of volatility, making a company's ability to generate consistent FCF increasingly important. We believe our investment approach is well-suited to this environment, where investment returns are more closely linked to company fundamentals. As always, we seek companies that can generate a growing stream of FCF and can allocate that cash effectively for the benefit of shareholders.

EPOCH
Advantage from Perspective

Epoch and Its Employees Are Proud to Support:

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

Food Drive and Adopt a Family

sanctuaryforfamilies.org

Sanctuary for Families is New York's leading service provider for survivors of domestic violence, sex trafficking and gender violence. Epoch employee donations exceeded our goals and will stock the organization's pantry for more than a full month.

Coat Drive and Operation Backpack

newyorkcares.org

New York Cares is an organization that meets pressing community needs by mobilizing caring New Yorkers in volunteer service. Among the programs in which Epoch employees participated in 2018 were the Annual Coat Drive and Operation Backpack. For Operation Backpack employees stuffed over 100 backpacks for needy children with school supplies purchased by Epoch.

EPOCH Matching Gift Program

Epoch matches employee donations to eligible organizations of their choice. These organizations can include nonprofit charitable health care, educational, civic and cultural organizations.

Epoch is honored to make additional donations to:

Chosen by the Charitable Giving Committee	FIVER Children's Foundation	A comprehensive youth development organization that makes a 10-year commitment to children from underserved communities throughout New York City and central New York. Through character-building summer and year-round out-of-school time programs, Fiver empowers children to make ethical and healthy decisions, to become engaged citizens, and to succeed in school, careers and life. www.fiver.org
	The Humane Society of New York	Caring for animals in need when illness, injury or homelessness strikes. On any day the Humane Society of New York is responsible for hundreds of animals with diverse needs. For many, the Society is the only place they will find help. www.humanesocietyny.org
	Polaris	A leader in the global fight to eradicate modern slavery. Polaris systemically disrupts the human trafficking networks utilizing data and technology, and helps survivors restore their freedom. www.polarisproject.org
Chosen by Vote of Epoch's Employees	Médecins Sans Frontières / Doctors Without Borders	Group that delivers emergency medical aid to people affected by conflict, epidemics, disasters or exclusion from health care. www.doctorswithoutborders.org
	Partnership with Children	Works to strengthen the emotional, social and academic skills of at-risk children to help them succeed in school, society and life. Partnership with Children provides trauma-informed counseling, crisis intervention, schoolwide services, and family and community outreach to New York City's public school students who are at the highest risk of academic failure and dropout. www.partnershipwithchildren.org

Epoch in the News: 2018 Year in Review

DECEMBER

Money Talk
Bill Priest discussed the shift from QE to QT, trade wars, technology and expectations for markets in 2019. Part I | Part II

TD Ameritrade "Morning Trade Live"
David Pearl spoke about trade wars, positive economic indicators and where we see value in the sell-off. Watch

Bloomberg Surveillance
Bill Priest explained the shift from an economy of atoms to one of bits, where technology is being substituted for labor and physical assets. Watch

NOVEMBER

Barron's
David Pearl discussed the U.S. midterm elections and Epoch's free-cash-flow philosophy. Read

Reuters
Boring is amazing for steady returns says Portfolio Manager Kera Van Valen at Reuters Global Investment 2019 Outlook Summit. Read

OCTOBER

Bloomberg Surveillance
David Pearl discussed of the U.S. midterm elections and Epoch's free cash flow philosophy. Watch | Listen

AUGUST

Money Talk
David Pearl weighed in on the U.S. Fed rate hike, trade with China and capex and buybacks in the tech sector. Watch

JUNE

Money Talk
Portfolio Manager John Tobin talks about Fed policy, global trade, diversification and stocks that provide shareholder yield.
Part I | Part II

APRIL

Grant's Podcast
Portfolio Manager Steve Bleiberg participated in a discussion of modern portfolio theory and its limitations. Listen

Bloomberg Surveillance
David Pearl talks about a capital-light world where free cash flow creates value.
Watch | Listen

Barron's
Steve Bleiberg's paper "The Limits of Modern Portfolio Theory" featured in Barron's "Other Voices" section. Read

Money Talk
Bill Priest discussed the looming trade war and developments in the technology sector. Part I | Part II

MARCH

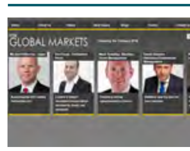
Money Talk
David Pearl explored the sectors that stand to benefit from global growth, interest rates and low inflation. Part I | Part II

FEBRUARY

Asset TV
Kera Van Valen and John Tobin discussed how macro factors will impact company cash flows and payouts. Watch

Asset TV
Bill Priest detailed why shareholder yield is relevant in today's environment and how inflation, interest rates, fiscal policy and technology will effect the strategy. Watch

JANUARY



FTSE Global Markets
Bill Priest discussed the impact of quantitative tightening, higher interest rates and waning liquidity. Read

Barron's
Bill Priest participated in the Barron's Roundtable, speaking about market volatility, global growth, quantitative tightening and technology.

Epoch Insights: 2018 Year in Review


Trump, Tech and Trade

DECEMBER

Trump, Trade and Tech

China's mercantilist behavior, underscored by its "Made in China 2025 initiative," is in conflict with U.S. demands for greater IP protection, a level playing field and improved market access. Left unresolved, free trade and globalization will be in retreat, with broad economic implications beginning with manufacturers. Read More


The Bull vs. Bear Case for Emerging Markets

APRIL

The Bull vs. Bear Case for Emerging Markets

Kevin Hebner, Epoch's investment strategist, lays out the positive case along with the attendant risks of investing in emerging markets over the coming several years. Read More


Global Equity Shareholder Yield: A Solution-Oriented Strategy

OCTOBER

Global Equity Shareholder Yield: A Solution-Oriented Strategy

The Shareholder Yield strategy offers three distinct benefits

- Consistency of income, the most stable driver of long-term returns
- Active management, to determine whether a company's payouts have the ability to grow
- Lower volatility, which in the end leads to greater wealth for the investor Read More


The Limits of Theory

APRIL

The Limits of Theory

Modern Portfolio Theory (MPT) dominates investment thinking today, but the pre-MPT view of the world still holds valuable insights. Our white paper explores the limits of MPT in aiding successful investing. Read More


Is e-Commerce a Bubble?

SEPTEMBER

Is e-Commerce a Bubble?

While the e-Commerce index as a whole appears frothy, many companies in the sector possess promising business models. For investors, the key to success is understanding how these business models should be valued. We examine the reasons e-Commerce may be a bubble, the reasons it may not and a free-cash-flow based methodology for valuing e-commerce companies. Read More


When "Bits" Meet "Atoms"

JANUARY

When "Bits" Meet "Atoms"

The digital age and the transition from "atoms" to "bits" implies a capital-light economy in which technology is being substituted for labor and physical assets. Its impact is widespread and stretches beyond the technology sector. Read More


The Return of Price Discovery

JULY

The Return of Price Discovery

Three developments (the unwinding of QE, the soaring US budget deficit and the impending wall of maturities, especially of corporate bonds) will engender higher volatility and wider credit spreads. There is also a risk that interest rates will start rising for "bad" reasons (that is, an increase in fixed income supply). Each of these outcomes would be a headwind for high duration strategies. Read More

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@epochinvest

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 2018.

ECONOMICS AND FINANCE

- ***Capitalism without Capital: The Rise of the Intangible Economy***
  by Jonathan Haskel and Stian Westlake
- ***The Four: The Hidden DNA of Amazon, Apple, Facebook, and Google***
  by Scott Galloway
- ***Misbehaving: The Making of Behavioral Economics***
  by Richard H. Thaler

MANAGEMENT AND LEADERSHIP

- ***The Culture Code: The Secrets of Highly Successful Groups***
  by Daniel Coyle
- ***Nudge: Improving Decisions About Health, Wealth, and Happiness***
  by Richard H. Thaler and Cass R. Sunstein
- ***Superforecasting: The Art and Science of Prediction***
  by Philip E. Tetlock and Dan Gardner

GLOBAL AFFAIRS

- ***Destined for War: Can America and China Escape Thucydides's Trap***
  by Graham Allison

TECHNOLOGY

- ***Prediction Machines: The Simple Economics of Artificial Intelligence***
  by Ajay Agrawal, Avi Goldfarb and Joshua Gans

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- ***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

Canadian Disclosures:

The statements contained herein are based on material believed to be reliable. Where such statements are based in whole or in part on information provided by third parties, they are not guaranteed to be accurate or complete. The information does not provide individual financial, legal, tax or investment advice and is for information purposes only. Graphs and charts are used for illustrative purposes only and do not reflect future values or changes. Past performance is not indicative of future returns.

Certain statements in this document may contain forward-looking statements ("FLS") that are predictive in nature and may include words such as "expects", "anticipates", "intends", "believes", "estimates" and similar forward-looking expressions or negative versions thereof. FLS are based on current expectations and projections about future general economic, political and relevant market factors, such as interest and foreign exchange rates, equity and capital markets, the general business environment, assuming no changes to tax or other laws or government regulation or catastrophic events. Expectations and projections about future events are inherently subject to risks and uncertainties, which may be unforeseeable. Such expectations and projections may be incorrect in the future. FLS are not guarantees of future performance. Actual events could differ materially from those expressed or implied in any FLS. A number of important factors including those factors set out above can contribute to these digressions. You should avoid placing any reliance on FLS. Epoch Investment Partners, Inc. is a wholly-owned subsidiary of The Toronto-Dominion Bank and an affiliate of TD Asset Management, Inc.