the 9:05 Bailard's Quarterly Review of Economic and Market Developments* Q4 2022

Chat with the CIO: After a headline-grabbing year, 2023 calls for patience and discipline

Chief Executive Officer, Sonya Mughal, CFA, chats with Chief Investment Officer, Eric Leve, CFA, about 2022's steep challenges and prospects for the economy and the markets in the new year.

Inside this Edition:

1 Chat with the CIO: After a headline-grabbing year, 2023 calls for patience and discipline

4 COP 15: The Historic United Nations Biodiversity Conference

7 Rising Interest Rates and Impacts on the Real Estate Markets

10 Closing Brief - Bailard's View on the Economy: Everybody Act Normal

Eric Leve, CFA: Sonya, a year ago at this time we had a conversation that turned out to be rather prescient. We shared our frustration at the backward-looking nature of our industry and lamented the impact laser-focused market watchers had on economics at the expense of geopolitics. We even spent a little time discussing Russia's increasingly militaristic tone with Ukraine. 2022 turned out to be a painful year for investors, driven by markets previously priced for perfection and the actions of geopolitical forces in Ukraine and beyond. Let's risk talking big picture again and then turn our focus to the markets.

Sonya Mughal, CFA: That works for me. Starting at the top, 2022 brought the largest land war in Europe since World War II, the most significant nuclear risk since the Cuban Missile Crisis, and the unsettling recognition that our modernity doesn't make borders sacrosanct. Europe was brutally forced to face the folly of its energy dependence on a well-endowed, but mercurial, neighbor. At times during the year, the future of industrial Europe seemed at risk.

But Europe pivoted quickly, building its first floating liquid natural gas terminal in under 200 days, enabling it to import natural gas from a

> continued on page 2

*Please see important disclosures on page 15.

> [T]he metrics of success for the Fed will unfortunately be those associated with an economic downturn, like higher unemployment, weaker consumer demand, and slower economic growth.

broader range of suppliers. Energy continues to create strange bedfellows… at this point, Europe and the U.S. are reaching out to a variety of African nations and restarting conversations with Venezuela on getting access to energy. The evidence from 2022 also suggests that Saudi Arabia is aligning itself closer to Russia's interests than the West's. We will definitely be talking about this for the next few years as Europe falls back on dirtier solutions to fill the energy gap while, at the same time, accelerating its transition to alternative energy sources and building a broader portfolio of import partners.

Eric: No doubt Europe will remain top of mind, but China could be the 'Russia of 2023'. Even before the 20th National Congress of the Communist Party of China in October, President Xi Jinping demonstrated a clear pivot away from the markets and the economy toward nationalism and party orthodoxy. It was a bitter symbol of his narrowing group of confidants to see former President Hu Jintao's forceful removal from the stage at the 20th Party Congress. Isolated, paranoid leaders can be dangerous.

Then, toward the end of the year, the nation dramatically unwound much of its zero-COVID policy. The action may have been due to growing street protests, but more likely it was a recognition that economic sustenance is vital to party allegiance. If it was the latter, it should bode well for increased fiscal stimulus from the Chinese government in 2023. This stimulus will be a critical piece of stronger global economic activity next year.

In contrast, most Western governments have nearly exhausted their ability to stimulate their economies, as outstanding debt has become more expensive to finance and budgets are stretched. Stimulus from China could be the critical piece that drives revenues for a broad range of global companies and partially offsets economic recessions expected in Europe, the U.S., and elsewhere. In a perverse struggle between fears of global recession and ongoing inflation, the growth benefits from China's reopening may get chalked up as a net negative if it generates price pressures (especially on commodities) through the year.

Sonya: For me the big question is, "How does China deal with its failure to be #1?" Based on demographics and expectations of economic growth, China may never overtake the U.S.'s position as the world's largest economy. China's rapidly aging population will become an increasing burden to a nation that has never really escaped the "middle income trap." If this is something of a peak for China in terms of global economic clout, could that embolden its military to be more aggressive in the short-term? Here, I'm obviously thinking of Xi's desire for "reunification" with Taiwan and continued building of islands in the South China Sea.

Eric: I think the aggressive offshoring by Taiwanese chipmakers says that your fears are well-founded. And the powerful codependent relationship between China and Russia clarifies a new arrangement of the post-Cold War geopolitical landscape.

Now that we've poured out a bit of our geopolitical anxiety closet, let's turn to economics and the markets. After almost two years of inflation spiking in various ways across the globe, central bankers recognized that they weren't facing just a post-pandemic boom. Starting in the first quarter of 2022, a more entrenched inflationary environment began to bring back painful memories of the 1970s.

Sonya: Exactly. After facing inflation driven by the supply chain, prices continued to rise even as consumers reduced their demand for goods. In 2022, services drove consumer demand, wage pressures accelerated and, due to the Ukrainian invasion, commodities added an unsettling inflationary tailwind. The Fed is clearly going all-in on beating down inflation and, in doing so, accepting a deeper recession. The job market continues to be too strong to rein in wages and inflation. Which means, the metrics of success for the Fed will unfortunately be those associated with an economic downturn, like higher unemployment, weaker consumer demand, and slower economic growth.

The picture in Europe and the UK is, if anything, more challenging. Inflation remains higher and economic weakness persists, yet both central banks also bias their actions toward controlling inflation at the expense of growth. Quite simply, 2023 may bring us the most anticipated global recession in memory.

Eric: On the surface, such a bleak economic outlook doesn't sound like a constructive environment for investment markets, but I'd say there are potentially a number of bright spots for investors in 2023.

With the hindsight of looking at the financial picture at year-end 2021, one has to admit that markets were priced to perfection. The S&P 500 was priced at 22.7x 2022 earnings. Three-month U.S. Treasurys were yielding essentially 0% and, even 10-year bonds only provided a yield of 1.5%. Equity investors had enjoyed years of a tailwind fueled by low interest rates. And that quickly broke down under the building inflation pressures of 2022 and demonstrated that bonds with no yield provide little to no diversification relative to stocks.

Sonya: Yes. The contrast is quite remarkable. As of the last trading day of 2022, 10-year Treasurys were yielding 3.9% and much of the equity market was very cheap compared to the history of the past 20 years. Quite simply, the long-term forecasts for market returns are dramatically improved, and the value of asset allocation is likely stronger now.

Even so, the near-term is much harder to forecast and there are no guarantees for 2023. A deep recession could lead to disappointing earnings and even lower stock valuations. Alternatively, with most observers expecting a recession, there is significant upside potential if that doesn't occur, both in companies' earnings and how investors value them. The middle ground between these outcomes might be my base case: earnings won't grow much, or at all (especially in inflation-adjusted terms), but lower interest rates could drive valuations higher, pointing to a neutral outlook for equities over the next year.

Eric: Getting a little granular, we're seeing valuations across smaller companies beginning to look more compelling versus their large cap brethren. After nine months of remarkable strength, the U.S. dollar has declined precipitously over the last quarter, but still looks overvalued to me relative to most major currencies. Differences in central bank policies around the globe could point to further dollar weakness in 2023, leading to a good backdrop for both developed and emerging market equities. So, yes, I concur. While the challenges are considerable, stocks in 2023 could perform pretty well, even without an earnings tailwind!

> "I believe in the discipline of a balanced portfolio and that its fundamental importance will see us through this market."

Sonya: Indeed. I believe in the discipline of a balanced portfolio and that its fundamental importance will see us through this market. The cheapening of stocks, the variation in valuations among them, higher interest rates, and the prospect of lower inflation all point to a return to the efficacy of broad asset allocation. Phrases such as "cash is trash" have been the norm for the past decade. With the prospect of further Fed rate hikes early in 2023, we may see cash yields above 5%, a far cry from the zero yields offered for much of the last several years. Significantly, for investors who expect lower correlations between stocks and bonds in the short term and for those looking out a decade or more, the markets provide a much more constructive starting point than they did at the end of 2021.

COP 15: The Historic United Nations Biodiversity Conference

McKenzie Fulkerson-Jones, ESG Analyst, explains the key facets of the landmark agreement that emerged from the United Nations Biodiversity Conference.

This past December, political leaders from 195 countries achieved consensus on the most far-reaching goals to preserve and protect the Earth's biodiversity in history. The effort is seen as critical to stave off a mass extinction of plants and animals and to preserve food and water supplies for the planet. Over 700 corporations were also present, a clear indication that the effort to halt the degradation of natural systems is critical for global economic stability. This agreement—made at the United Nations Biodiversity Conference (formally referred to as the 15th meeting of the Conference of the Parties, COP 15, to the Convention on Biological Diversity) in Montreal—is being heralded as biodiversity's equivalent to the UN's landmark Paris Agreement on climate change.[1]

The COP 15 agreement—officially, the Kunming-Montreal Global Biodiversity Framework—includes 23 environmental targets that, as a whole, seek to: 1) conserve biodiversity, 2) sustainably use biodiversity, and 3) ensure that the use of genetic resources gives benefits that are equitably shared around the planet. This agreement is meant to serve as a guide to governments in the crafting of their national biodiversity strategies and action plans. If executed, this agreement would halt and could even begin to reverse the biodiversity crisis by 2030.

The most consequential target included in the COP 15 agreement, referred to as 30x30, would place 30% of Earth's land and seas under protection by 2030. Currently, only about 17% of Earth's land and approximately 8% of its oceans are protected,[2] through restrictions on activities like fishing, farming, mining, hunting, and logging.

Another key provision of the COP 15 agreement is that it will increase biodiversity financing to $200 billion, doubling current annual expenditures. Thirty billion of this annual total will flow to poor countries from wealthy countries. Given that wealthier countries have historically drawn on developing nations for natural resources, the $30 billion aid provision was essential to bring developing countries on board with the ambitious new agreement.

A key difference between the COP 15 agreement and past agreements is its provisions to make targets measurable and to monitor countries' progress. Goals from past agreements, which did not include such provisions, have gone unmet. The hope is that between the larger financial commitments and the tracking of progress against targets, the goals this time will be reached.

Importantly, the COP 15 agreement also speaks to the business community. Although the negotiators and signatories of the agreement are governments, they know that the business world is where the rubber hits the road. So, the COP 15 agreement includes a target that asks national governments to take legal, administrative, or policy measures to encourage and enable business (in particular, large and transnational companies and financial institutions) to "regularly monitor, assess, and transparently disclose their risks, dependencies, and impacts on biodiversity." This target is not mandated (although a mandate approach was pushed by the 330 companies and investors of the Business for Nature corporate coalition[3]), but the idea is that all the signatory countries will enact such a policy, leading to broad disclosure of biodiversity impact.

Why Biodiversity?

Biodiversity refers to the variety of all forms of life on our planet, including ecosystems, species diversity, and genetic diversity. Biodiversity is the basis for human wellbeing as well as the basis for all life on Earth,

1 *https://www.cbd.int/conferences/2021-2022*
2 *https://livereport.protectedplanet.net/*
3 *https://www.businessfornature.org/*

> According to a study by The Nature Conservancy, 37% of the emissions reductions needed to stabilize global temperatures can be trapped by nature.[5]

providing food, clean water, shelter, medicine, clean air, and more.

Currently, biodiversity is declining worldwide at rates never seen before in human history. Wildlife populations have declined by an average of 69% since 1970, and an estimated one million plant and animal species are at risk of extinction by 2050—this amounts to approximately 25% of all species on Earth. By 2100, more than 50% of species are at risk of extinction.[4] The last extinction event of this magnitude occurred 65 million years ago.[5]

Also important to note is that the biodiversity crisis and climate change are inextricably linked. Forests, wetlands, and grasslands trap carbon; which means, when we develop these ecosystems, carbon is released into the atmosphere, contributing to climate change. But when we leave these ecosystems intact, or even restore and expand them, they store massive amounts of carbon, keeping global temperatures down. According to a study by The Nature Conservancy, 37% of the emissions reductions needed to stabilize global temperatures can be trapped by nature.[6]

In terms of resilience to climate change that's already happening, nature plays a big role there too. Coral reefs, mangrove forests, dunes, wetlands, and kelp forests protect communities from storms and rising sea levels.

Which Countries Have Signed on to COP 15?

The Convention on Biological Diversity (CBD) is a multilateral treaty that was signed in 1992 at the Earth Summit in Rio de Janeiro and launched the following year. Only parties to CBD may sign onto its agreements, such as the recently ratified COP 15 agreement.

CBD's current 196 parties include the national governments of all the world's major countries and the European Union. The only two notable national governments that are not parties to CBD are the United States and the Vatican. The U.S. is not a party to CBD because Congress has continually blocked the signing of the treaty to protect U.S. sovereign and commercial interests.

As a result, the U.S. was not at the table at COP 15 in Montreal and unable to sign the agreement. Instead, the American delegation participated from the sidelines, and President Biden signed a series of executive orders aimed at alignment with COP 15's goals. Most notably, an executive order placed 30% of U.S. land and waters under protection. It is highly unlikely, however, that the current makeup of the House of Representatives will provide legislative support for these efforts. This leaves U.S. compliance with COP 15 muddied, just as it has been with the Paris Agreement on climate.

Implications for Investors

Even without the U.S. signed on, the COP 15 agreement has the potential for a huge positive impact on the planet as well as on the people, plants, and animals that call it home. And the new agreement is already looking like it will have global ramifications on business and finance, whether it's fully implemented or not. Like the Paris Agreement did for climate, the COP 15 agreement is putting biodiversity on the radar of corporations and investors.

Between 700 and 1,000 companies attended COP 15. This is the first time a large group of corporations have attended a Biodiversity COP. And with good reason. Going into the conference, companies were aware of the COP 15 agreement's proposed provision that would compel signatory countries to ask companies to disclose their nature impacts in their corporate reporting.

The participation of business in COP 15 was and is critical. Not only does nature need business to be on board to survive, business needs nature. The World Economic Forum estimates that more than half of the

4 *https://wwflpr.awsassets.panda.org/downloads/lpr_2022_full_report.pdf*
5 *https://www.nytimes.com/2022/12/19/climate/biodiversity-cop15-montreal-30x30.html*
6 *https://www.pnas.org/doi/10.1073/pnas.1710465114*

world's GDP ($44 trillion of economic value generation) is either moderately or highly reliant on nature's services.[7] According to the World Bank, collapsing ecosystems could take 2.3%, or about $2.7 trillion, off global GDP in 2030.[8] Others estimate that tens of billions of dollars in assets could be at risk of stranding over the next five to 10 years if companies continue to produce deforestation-linked commodities.

Take the pharmaceutical industry for example – many prominent prescription drugs are derived from plants and microbes found in tropical forests and coral reefs. When these ecosystems are gone, so are the drugs that rely on them.

"Wall Street has realized that it's been pricing a natural asset for the last 150 years at zero," said David Craig, co-chair of the Taskforce on Nature-related Financial Disclosures. "That doesn't work anymore. You can price something at zero when it's a commodity and it's plentiful. But when it starts running out, it starts getting expensive."

If business learns to harmonize with nature, business can benefit greatly from it. Estimates by the World Economic Forum suggest that protecting nature and increasing biodiversity could generate business opportunities worth $10 trillion a year and create nearly 395 million new jobs by 2030.[9]

Some companies have caught onto this idea already. At COP 15, Kering and L'Occitane launched the Climate Fund for Nature. The Fund will mobilize resources from the fashion and beauty industries to protect and restore nature. The Fund launched with $300 million and is open to new partner companies to grow the fund and its impact.[10]

Investors are getting on board as well. A group of institutional investors—with a combined $3 trillion in assets—announced a new campaign from the COP 15 main stage: Nature Action 100.[11] The campaign will seek to bring the business world into alignment with the COP 15 agreement by driving greater corporate ambition and action on tackling nature loss and biodiversity decline. Nature Action 100 will use a model resembling that of the climate campaign by a similar name, Climate Action 100+, seeking to catalyze corporate action via investor-company engagements.

Some investors are even getting out ahead of this biodiversity boom by beginning to incorporate biodiversity into their investment strategies. Although biodiversity- and nature-focused strategies are vastly outnumbered by those focused on climate (roughly 1,100 funds holding over $350 billion in global assets, Morningstar estimates[12]), signs point toward biodiversity-focused funds following suit. And, as noted above, biodiversity decline and climate change are inextricably linked, so it seems likely that fund strategies may be grouped as well.

The COP 15 agreement is a signal the financial community cannot ignore. It is critical for the sake of business and nature alike.

---

7 https://www3.weforum.org/docs/WEF_New_Nature_Economy_Report_2020.pdf
8 https://openknowledge.worldbank.org/bitstream/handle/10986/35882/A-Global-Earth-Economy-Model-to-Assess-Development-Policy-Pathways.pdf
9 https://www3.weforum.org/docs/WEF_Scaling_Investments_in_Nature_2022.pdf
10 https://www.kering.com/en/news/kering-and-loccitane-group-join-forces-to-finance-nature-protection-at-scale-with-the-climate-fund-for-nature
11 https://www.natureaction100.org
12 https://www.morningstar.com/articles/1128271/asset-managers-start-adopting-policies-around-biodiversity

Rising Interest Rates and Impacts on the Real Estate Markets

Jamil Harkness, Research and Performance Associate - Real Estate, digs into the ways in which 2022's aggressive interest rates hikes are affecting lending in commercial real estate.

One year after commercial real estate lending volume peaked, the robust recovery coming out of the short but painful pandemic-induced recession has come to a halt. Intensifying inflation during 2022—which the Federal Reserve (the "Fed") insisted would be "transitory"—has turned out to be more persistent and systemically rooted in the U.S. economy than previously thought. This prompted the Fed to embark on an aggressive rate-hiking strategy to stanch demand and cool the economy. The dramatic shift to monetary policy tightening took the form of seven rate hikes in 2022. The rapid movement brought the Federal Funds target rate to a range of 4.25% to 4.50% by year-end, capping the fastest one-year increase since the early 1980s. Undoubtedly, these rate increases affected both the debt markets and investor sentiment and, as a result, the conversation around continuing impacts to commercial real estate (CRE) debt and equity markets, as well as valuations, has become a focal point.

The Tie that Binds

While the Federal Funds rate itself is not used as an index in CRE mortgage lending, it does influence the index rates that are, both directly and indirectly. The Secured Overnight Financing Rate (SOFR), which replaced LIBOR in 2022 as the benchmark rate for the floating-rate debt market, moves nearly in lockstep with the Fed Funds Rate. Shorter-term government debt (i.e., 2-year treasuries) also tends to closely track the Federal Funds Rate, and longer-dated government bonds (5 to 30 years) are directionally impacted, to a lesser degree. These rate movements have been the primary driver for dramatic increases in the overall borrowing costs in CRE in just the past six months.

As an example, just twelve months ago, a creditworthy borrower seeking a mortgage loan (up to 65% loan-to-value) secured by a high-quality commercial property could secure 5 to 10-year fixed-rate financing at an all-in annual rate between 2.75% and 3.25%. Now, that same financing is likely to have an interest rate in the range of 5.75% to 6.50% (an increase of 300 to 375 basis points[1]). Similarly, floating rate debt has seen all-in interest rates rise between 350 to 400 basis points.[2]

Stricter Underwriting from Lenders

On top of the rate increases hitting real estate borrowers, lenders are also shrinking loan proceeds available to borrowers in two ways: limiting mortgages to 55% to 60% loan-to-value, and more conservative loan appraisals leading to a lower "value" against which a lender will lend. In a nutshell, financing has become more challenging and expensive for borrowers, forcing all real estate investors who utilize debt to adjust their underwriting. Given the Federal Reserve's stated intention to continue hiking rates and to keep them elevated until inflation is definitively slayed, the cost of financing real estate transactions is likely to remain higher for the foreseeable future.

Tighter credit standards imposed by lenders, along with wider spreads and moderated liquidity, have caused lending activity to drop considerably. According to CBRE Research, the U.S. Lending Momentum Index registered a value of 359 at the close of Q3 2022, down 18.0% from its peak in Q1.[3] Increased borrowing costs are leading lenders to focus on Debt-Service-Coverage-Ratios (ratio of property net operating income over the annual cost for a borrower to service the debt) and Debt Yields (ratio of property net operating income over total loan balance) as limiting factors. The combination of higher costs and lower

1 A basis point (bp) is 0.01%
2 https://www.cushmanwakefield.com/en/united-states/services/capital-markets/equity-debt-and-structured-finance, 10/11/2022
3 CBRE U.S. Lending Figures Q3 2022 - https://www.cbre.com/insights/figures/q3-2022-us-lending-figures

proceeds is putting pressure on buyers, especially those that rely on debt to drive investment returns.

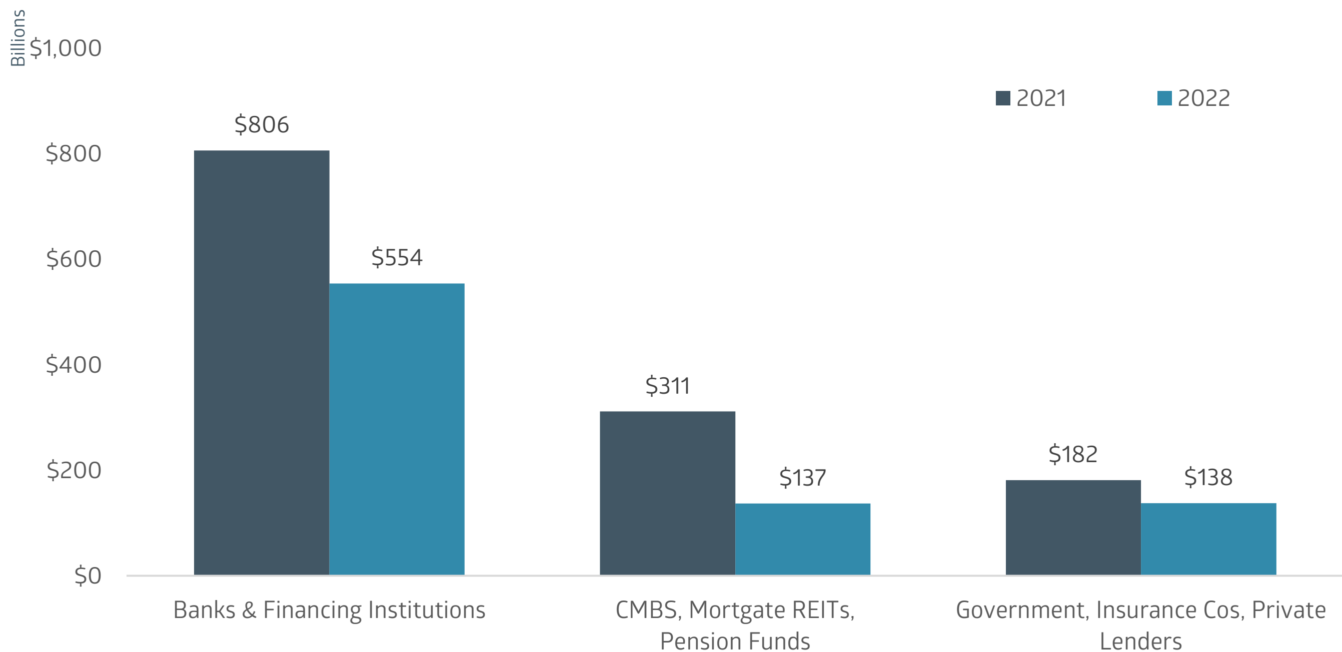
Though final 2022 lending statistics are several weeks out, anecdotal evidence from lenders, mortgage bankers/brokers, and peers described lending volume in the final quarter of the year as having "fallen off a cliff." Based on preliminary data from Real Capital Analytics (RCA), banks and financing institutions dominated the landscape in 2022, lending an aggregated $554 billion, a 31.0% decline over 2021. The lending groups with the most significant drop year-over-year were issuers of Commercial Mortgage-Backed Securities (CMBS), Mortgage REITs, and pension funds, down 56% compared to 2021. All other debt capital sources (government, insurance companies, and other private lenders) dished out a combined $138 billion in 2022, down 24.0% compared to the prior year.[4]

Impacts on Pricing and Transaction Activity

Beyond concerns around rates and proceeds in the debt markets, there are nascent signs of pricing issues as the "bid/ask" spread between sellers and buyers is creating stand-offs and impacting transaction volume. Many investors headed to the sidelines during the summer of 2022 and, over the last six months of the year, there was a perceptible "shallowing" of buyer pools and a corresponding increase in deals that were either re-traded, didn't close, or were pulled from the market by an unsatisfied seller. Many industry participants are pointing to the evolving debt landscape as the critical factor, as prospective buyers find it more challenging and/or impossible to achieve targeted return thresholds given the lower leverage at higher rates. Although investment sales activity in the first two quarters of 2022 was robust, the latest data from RCA reflects a national slowdown during the third quarter, with transactions off 23.0% year-over-year.[5] Bailard believes that Q4 statistics will show an even more precipitous drop in investments.

No property type is immune from movement in interest rates and, in the absence of a compelling property-specific story, most lenders remain very selective on weaker sectors such as hotels, office, and retail. As a result, lenders have divided the CRE market into the "haves" and "have-nots" by deal profile, property-type, borrower, and sub-market. Most lenders prefer

A Comparison of Lending Volume from 2021 to 2022[4]



4 Real Capital Analytics (RCA) Investors Universe - https://app.rcanalytics.com/#/investorUniverse
5 Real Capital Analytics (Trend Tracker) - https://app.rcanalytics.com/trendtracker/Default.aspx

multifamily and industrial, followed by the alternative asset sectors such as life science, data centers, and self-storage. With lenders taking a more cautious approach than in recent years, many industry participants expect that traditional lenders (i.e., banks and insurance companies) will continue to emphasize lower leverage, first mortgage loans on high-quality properties with the most credit-worthy borrowers.

Outlook for 2023

Looking ahead, it is still unclear how high interest rates will go… and how long they will stay there. The combination of stubbornly-sticky inflation and the continued upward trajectory for interest rates with the macro-outlook for economic growth to trend down (or contract) means it's unlikely that the cost of debt for real estate investors will improve in early 2023.

For things to change course, it will take a meaningful, perceptible, and durable drop in inflation. When that happens, the Fed should feel the pressure to take its foot off the brake and begin easing monetary policy. Even with the current headwinds of higher interest rates and lower loan proceeds, debt liquidity should show a modest improvement in early 2023, as lenders who hit "pause" at year-end 2022 begin to look for debt investing opportunities again.

Despite the challenges currently facing the debt markets, real estate fundamentals have remained stable for most property types. However, a deep recession caused by inflation, higher interest rates, and a drop in economic activity and demand would certainly hurt CRE fundamentals and further complicate the commercial real estate lending landscape.

Closing Brief - Bailard's View on the Economy: Everybody Act Normal

In this quarter's closing brief, Jon Manchester, CFA, CFP® (Senior Vice President, Chief Strategist – Wealth Management, and Portfolio Manager – Sustainable, Responsible and Impact Investing) takes a look at the difficulties of defining, and returning to, normal.

In the 1920 United States presidential election, 55-year-old Ohio Republican Senator Warren G. Harding handily defeated Ohio's Democratic Governor James Cox, winning 37 states and amassing 60.4% of the popular vote. Two-term incumbent Woodrow Wilson—eligible to run again—had been brushed aside by the Democratic party after suffering a severe stroke and amidst tepid enthusiasm for his foreign policies in the wake of World War I. The election was notable for many reasons. It closely followed the passage of the Nineteenth Amendment to the U.S. Constitution, giving women the right to vote in all 48 states (at the time). That greatly helped in boosting the total number of voters by over eight million, or nearly 45%, compared to the 1916 election. The 1920 ballot also featured two future presidents as vice presidential candidates in Republican Calvin Coolidge and Democrat Franklin D. Roosevelt.

When voters went to the polls in November 1920, the U.S. was mired in a recession marked by sharp deflation, an overcorrection from high wartime inflation. The nascent Federal Reserve, founded seven years prior to stabilize the banking system, had hiked its lending rate as high as 7% in mid-1920 in an attempt to temper what had been rising prices. Nobel-prize winning economist Milton Friedman and colleague Anna Schwartz later argued in a landmark 1963 book titled *A Monetary History of the United States* that the Fed miscalculated the lag times associated with monetary policy changes, resulting in the central bank still raising rates during the early stages of the recession.[1] Unemployment jumped higher, and the Dow Jones Industrial Average sank nearly 30% over the twelve months leading up to the election. Tensions ran high seemingly everywhere: labor strife, race riots, plus a bombing on Wall Street that killed 40 and injured hundreds.

Meanwhile, the world was still reeling from the Great Influenza pandemic. An estimated 500 million people worldwide were infected by the virus in the 1918 to 1920 timeframe, or roughly one-third of the world's population.[2] A staggering 50 million or more died, including approximately 675,000 in the United States. In comparison, the World Health Organization (WHO) currently estimates 6.67 million have died globally from COVID-19.[3] Needless to say, it was a challenging time.

In retrospect, then, it doesn't seem particularly surprising that Harding's main campaign slogan was "return to normalcy." It had a simple, timeless appeal. Malleable and open to interpretation, normalcy is somewhat in the eye of the beholder. A main facet of Harding's pitch was to put America first, a phrase which ironically Wilson had used to justify staying out of World War I in its initial years. In a May 1920 speech in Boston, Harding suggested America's present need was "not submergence in internationality, but sustainment in triumphant nationality."[4] For a nation weary from battles both home and abroad, the message resonated sufficiently to carry Harding and Coolidge to the White House.

Back to the Future

A century later, with the COVID-19 pandemic hopefully on the wane and the Fed again in inflation-battling mode, there appears to be some clear parallels to that time. One interesting link from a societal standpoint—although certainly not unique to either time

1 *"In the Shadow of the Slump: The Depression of 1920-1921," www.econreview.berkeley.edu, 3/18/2021*
2 *"History of the 1918 Flu Pandemic," www.cdc.gov*
3 *"WHO Coronavirus (COVID-19) Dashboard," www.covid19.who.int, 1/4/2023*
4 *"Warren G. Harding's pledge to 'return to normalcy'," www.britannica.com*

period—is the collective yearning to see things get back to some version of normal (however defined). We've been through this before, whether it was the aftermath of 9/11 or the credit crisis. In each instance, what follows seems to be a race to declare a "new normal" has arrived. There is some truth to this, of course. The COVID-19 pandemic has likely indelibly altered the way we work, for instance. Other behaviors, such as returning to crowded arenas or airports, quickly revert.

Each crisis alters the landscape in its own way. Roughly three years past the onset of the COVID-19 pandemic, the global economy is still trying to find its footing. In a November 2022 outlook piece, the Organization for Economic Co-Operation and Development (OECD) projected global real GDP (gross domestic product) growth of just 2.2% in 2023. Per the OECD: "Tighter monetary policy and higher real interest rates, elevated energy prices, weak household income growth, and declining confidence are all expected to take a toll on growth, especially in 2023."[5] For the U.S., they estimate scant 0.5% growth this year, followed by still negligible 1.0% growth in 2024.

Any economic growth in the U.S. for 2023 might be viewed as a minor victory. The consensus view seems to be coalescing around a shallow recession at some point this year. The Bloomberg Economics team foresees a 0.9% GDP contraction in the second half of 2023, driven by an investment downturn as companies reduce inventories amidst slower consumer spending.[6] They also expect a decline in residential investment due to higher interest rates, and note that U.S. home prices would need to fall around 15% to restore the housing market to equilibrium. This is not 2008, Bloomberg assures us: a structural undersupply of houses and higher credit quality of mortgage borrowers limit the downside and the spillover risks to the wider economy. After 124 consecutive months of growth for the Case-Shiller U.S. National Home Price Index, October 2022 marked four straight months of declines. Before we hit the panic button, the Index was still up 9.2% on a year-over-year basis.

The big question remains whether the Fed's rate hiking campaign will tip the U.S. economy into recession,

Any economic growth in the U.S. for 2023 might be viewed as a minor victory.

as it did in 1920. Faced with inflation not seen since the early 1980s, the Fed was forced last year to rapidly raise the Fed Funds target rate from 0.25% all the way to 4.5%. In December, the Fed's projections indicated a peak rate in the 5% to 5.25% range. That is well above the 2.5% level that the Fed considers neutral—meaning neither accommodative or restrictive—when inflation is at 2%. With the Consumer Price Index (CPI) running at +7.1% year-over-year in November, though, the Fed has to play bad cop until prices cool further. Attempting to define what is "normal" for the Fed Funds rate is highly dependent on the time frame. Over the last 50 years, the average Fed Funds rate has been approximately 4.9%. Shortening the time horizon to the last 20 years, however, the average rate was just 1.4%. Tricky word, normal.

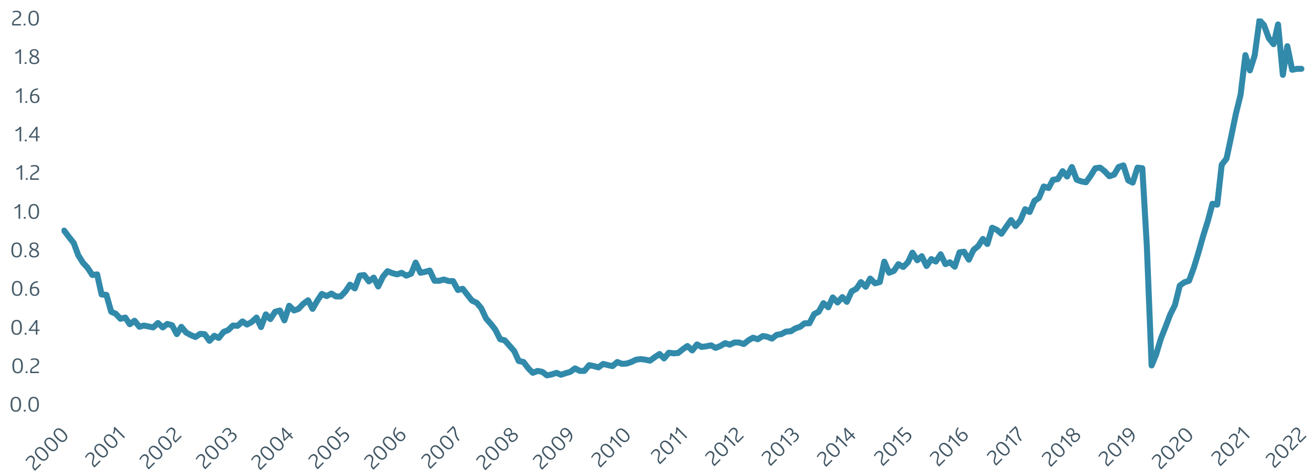
Too Much of a Good Thing?

Keeping inflation in check remains the Fed's primary focus, but its other mandate is to maximize sustainable employment. With the unemployment rate at just 3.5% nationally as of December, matching a five-decade low, you'd have to say that box is checked. However, Fed Chair Powell has been clear that the labor market is too tight. Job openings have slowed, but remain elevated at roughly 10.5 million as of November. The Fed's favored gauge for labor market tightness—shown on the next page—is the vacancy-to-unemployed ratio, which was 1.74 versus 1.15 at the end of 2019.[7] This excess demand for workers puts upward pressure on wages, and makes the Fed's inflation-fighting job more difficult.

The December jobs report provided some good news. Average hourly earnings rose 4.6% year-over-year, a deceleration from +4.8% in November and a continuation of a slowing trend that saw this metric hit a 2022 high

5 *"OECD Economic Outlook, Volume 2022 Issue 2," www.oecd-ilibrary.org, 11/22/2022*
6 *"US Growth Outlook 2023," Bloomberg Intelligence, 12/29/2022*
7 *"US REACT: Quitters Make It Hard for Fed to Cool Wages," www.bloomberg.com, 1/4/2023*

A Look at Labor Market Tightness Using the Vacancy-to-Unemployed Ratio



Source: US Job Openings By Industry Total SA compared to US Unemployment Unemployed Workers Total in Labor Force SA for the period 12/31/2000 to 11/30/2022; data retrieved from Bloomberg 1/9/2023.

point at +5.6% last March. If sustained, this is the formula that could potentially deliver a "soft landing" for the economy: unemployment remains low, but wage growth and inflation moderate. As former Fed governor Randall Kroszner said: "It's not that the Fed wants fewer jobs. What they want is lower wage growth more because they're worried about persistent inflation."[8]

If employment stays strong and housing prices remain resilient, it's hard to imagine a near-term recession. Layoffs have picked up, but at a reasonable clip. According to the data firm Challenger, U.S. companies announced 320,173 layoffs over the first eleven months of 2022, a six percent increase. Just over 25% of those occurred in the tech sector where Amazon, Facebook, and others are attempting to right-size their operations. Despite the pressure on tech companies, California's unemployment rate declined 1.7 points over the twelve months ending with November 2022 to 4.1%. The lowest state unemployment rates were in Utah (2.2%), Minnesota (2.3%), and North Dakota (2.3%).

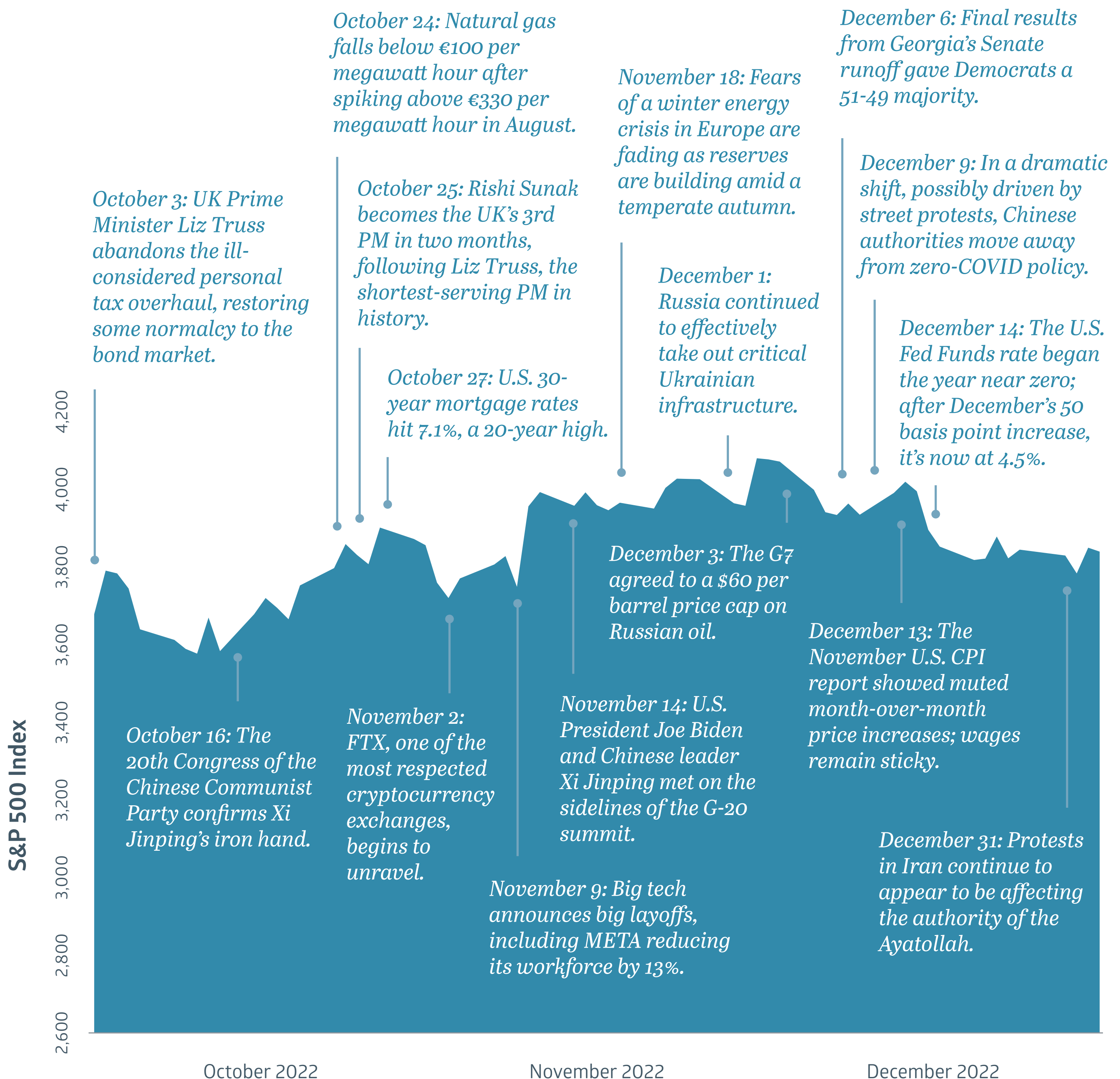
Transitioning away from ultra-low interest rates never promised to be an easy road. This process of normalization took some prisoners in 2022. The tech-heavy Nasdaq Composite Index sank 33% on a price-only basis as investors repriced high growth, high valuation stocks. Some of the biggest winners in 2021 dropped to the bottom of the 2022 scoreboard, including California-based chipmaker Nvidia, which soared 125% two years ago before a 50% plunge in 2022. The lone S&P 500 Index sector that posted a positive price-only return in 2022 was Energy. The closing price of West Texas Intermediate (WTI) crude oil jumped as high as $123/barrel last March, up 64% from its year-end 2021 level, before fading to $80/barrel when 2022 came to a close. Nevertheless, the S&P 500 Energy sector returned 59% price-only last year, helped by attractive dividends and low valuations. It was an abnormal year, as usual.

A couple years after that 1920 presidential election, poet Robert Frost composed "Stopping by Woods on a Snowy Evening" at his home in Vermont. It contained the famous concluding (and repeated) line "And miles to go before I sleep." That is a pretty apt saying for the markets in 2023. Many challenges remain for corporate America: higher interest rates, higher input costs, and likely lower margins. The easy money era is over.

8 *"Fed Gets 'Goldilocks' Report: Slower Wage Growth, Solid Hiring," www.bloomberg.com, 1/6/2023*

Q4 2022 World Events

WITH THE S&P 500 INDEX AS THE BACKDROP



Source: Bloomberg, Bailard. Past performance is no indication of future results. All investments involve the risk of loss.

Market Performance
As of December 31, 2022

U.S. Interest Rates	3/31/2022	6/30/2022	9/30/2022	12/31/2022
Cash Equivalents				
90-Day Treasury Bills	0.50%	1.67%	3.27%	4.37%
Federal Funds Target	0.50%	1.75%	3.25%	4.50%
Bank Prime Rate	3.50%	4.75%	6.25%	7.50%
Money Market Funds	0.17%	1.37%	2.80%	4.24%
Bonds				
10-Year U.S. Treasury	2.34%	3.02%	3.83%	3.88%
10-Year AA Municipal	2.49%	2.85%	3.67%	2.45%

Source: Bloomberg, L.P.

U.S. Bond Market Total Returns (US$) through 12/31/2022	QUARTER	SIX MONTHS	YEAR TO DATE	ONE YEAR
U.S. Bonds				
Bloomberg Barclays U.S. Treasury Index	0.72%	-3.66%	-12.46%	-12.46%
Bloomberg Barclays U.S. Corporate Index	3.63%	-1.61%	-15.76%	-15.76%
Bloomberg Barclays U.S. Aggregate Index	1.87%	-2.97%	-13.01%	-13.01%
Bloomberg Barclays U.S. 1-15 Municipal Blend Index	3.59%	0.92%	-5.95%	-5.95%

Source: Bloomberg, L.P.

Global Stock Market Total Returns (US$) through 12/31/2022	QUARTER	SIX MONTHS	YEAR TO DATE	ONE YEAR
U.S. Stocks				
S&P 500 Index	7.55%	2.30%	-18.13%	-18.13%
Morningstar U.S. Small Value Index	10.88%	5.18%	-6.60%	-6.60%
Morningstar U.S. Small Growth Index	1.75%	-0.78%	-33.31%	-33.31%
Morningstar U.S. Large Growth Index	1.06%	-1.71%	-40.36%	-40.36%
Morningstar U.S. Large Value Index	15.61%	7.41%	0.26%	0.26%
International Stocks				
MSCI EAFE (Europe, Australasia, Far East) Index, net dividends	17.34%	6.36%	-14.45%	-14.45%
MSCI Emerging Markets, net dividends	9.70%	-2.99%	-20.09%	-20.09%

Sources: Bloomberg, L.P. and Morningstar Direct

Alternatives (US$) through 12/31/2022	QUARTER	SIX MONTHS	YEAR TO DATE	ONE YEAR
NFI-ODCE Index*	0.52%	1.04%	5.86%	13.66%
Gold Spot	9.84%	0.93%	-0.28%	-0.28%
WTI (West Texas Intermediate) Crude Oil	0.97%	-24.11%	4.25%	4.25%

Sources: Bloomberg, the National Council of Real Estate Investment Fiduciaries
**Q4 2022 data not yet released. The fourth quarter return assumed to be same as the Q3 2022 return.*

Past performance is no indication of future results. All investments have the risk of loss.

DISCLOSURES

the 9:05 is produced by the Asset Management Group of Bailard, Inc. The information in this publication is based primarily on data available as of December 31, 2022 and has been obtained from sources believed to be reliable, but its accuracy, completeness, and interpretation are not guaranteed. We do not think it should necessarily be relied on as a sole source of information and opinion.

This publication has been distributed for informational purposes only and is not a recommendation of, or an offer to sell or solicitation of an offer to buy any particular security, strategy, or investment product. It does not take into account the particular investment objectives, financial situations, or needs of individual clients. Any references to specific securities are included solely as general market commentary and were selected based on criteria unrelated to Bailard's portfolio recommendations or the past performance of any security held in any Bailard account. All investments have risks, including the risks that they can lose money and that the market value will fluctuate as the stock and bond markets fluctuate. Asset class specific risks include but are not limited to: 1) interest rate, credit, and liquidity risks (bonds); 2) style, size, and sector risks (U.S. stocks); 3) increased risk relative to U.S. stocks due to economic or political instability, differences in accounting principles, and fluctuating exchange rates – with heightened risk for emerging markets and even higher risks for frontier markets (international stocks); and 4) fluctuations in supply and demand, inexact valuations, and illiquidity (real estate). Biotech stocks are not suitable for all investors and are significantly riskier than the stock market for reasons including the higher risks of investing in newer, less well-financed companies as well as the potential for clinical failures, regulatory approval setbacks, commercialization problems, and loss of exclusivity/patent expiration. Certain countries (particularly emerging and frontier markets) can have higher transaction costs and greater illiquidity than the U.S. The volatility of real estate may be understated due to inexact and infrequent valuations. Real estate has significant risks and is not suitable for all investors. There is no guarantee that any investment strategy will achieve its objectives. Charts and performance information portrayed in this newsletter are not indicative of the past or future performance of any Bailard product, strategy, or account unless otherwise noted. Market index performance is presented on a total return basis (assuming reinvestment of dividends) unless otherwise noted. **Past performance is no guarantee of future results. All investments have the risk of loss.** This publication contains the current opinions of the authors and such opinions are subject to change without notice. Bailard cannot provide investment advice in any jurisdiction where it is prohibited from doing so.

the 9:05 is published four times a year by Bailard, Inc., 950 Tower Lane, Suite 1900, Foster City, California 94404-2131. (650) 571-5800. www.bailard.com. Publication dates vary depending upon the availability of critical data, but usually fall in the first month of each new quarter.

ABOUT *THE 9:05*

Since 1978, we've held a weekly company-wide meeting during which we talk about the prior week's activities and those anticipated in the week to come. We refer to this meeting, which begins just after nine each Monday morning, as "the 9:05." Just as the 9:05 enables us to share our knowledge and insights with each other, this newsletter provides us with a valuable means of communicating with our clients. Hence its title: *the 9:05*.

BAILARD, INC. ASSET MANAGEMENT GROUP

Chief Investment Officer

Eric Leve, CFA

Global Economics and Fixed Income

Linda Beck, CFA
Senior Vice President
Director, Fixed Income

Jeremy Wager-Smith
Fixed Income Portfolio Associate

Domestic Equities

Sonya Mughal, CFA
Chief Executive Officer

Osman Akgun, PhD, CFA
Vice President, Domestic Equities

Eric Greco
Portfolio Associate

Joanne Howard, CFA
Senior Vice President

Chris Moshy
Senior Vice President, Equity Research

Thomas Mudge, III, CFA
Senior Vice President
Director, Domestic Equity Research

Dave Harrison Smith, CFA
Executive Vice President, Domestic Equities

Ryan Vasilik, CFA
Equity Analyst

International Equities

Peter Hill
Executive Chairman

Anthony Craddock
Senior Vice President
International Equity Research

Eric Leve, CFA
Executive Vice President
Chief Investment Officer

Dan McKellar, CFA
Senior Vice President, International Equities

Real Estate

Preston Sargent
Executive Vice President, Real Estate

David Abramson
Real Estate Analyst

Geoff Esmail
Real Estate Associate

Tess Gruenstein
Senior Vice President,
Acquisitions and Portfolio Management

Jamil Harkness
Research & Performance Associate

Daniel Merhi
Real Estate Analyst

James Pinkerton
Senior Vice President,
Acquisitions and Portfolio Management

Juan Rascon-Borgia
Real Estate Analyst

Alex Spotswood
Vice President,
Acquisitions and Portfolio Management

Sustainable, Responsible and Impact Investing

Blaine Townsend, CIMA®
Portfolio Manager
Director, Sustainable, Responsible and Impact Investing Group

McKenzie Fulkerson-Jones
ESG Analyst

Jon Manchester, CFA, CFP®
Chief Strategist, Wealth Management
Senior Vice President

Frank Marcoux, CFA
Portfolio Manager
Senior Vice President

Equity Analysis

Raj Dutta
Senior Data Engineer

Amit Valia, CFA
Vice President, Financial Data Management

Trading

Glenn Davis, CFA
Senior Vice President
Head Trader

Tom Sikora
Trader

Performance Analysis

Yuji Miwa
Performance Analyst

NEWSLETTER PRODUCTION

Eric Leve, CFA
Executive Vice President
Chief Investment Officer

Erin Randolph
Vice President
Marketing, Communications & Client Services

Debbie Tanguay
Senior Marketing Program Manager

Bailard © 2023 BAILARD, INC. FOSTER CITY, CALIFORNIA

Printed on 100% postconsumer waste (pcw) fiber