

Chat with the CIO: Hindsight Is Not a Strategy



With the backdrop of her first year as CEO, Sonya Mughal, CFA chats with Chief Investment Officer, Eric P. Leve, CFA, about how geopolitics has overlayed on the look forward at the investment landscape.

Inside this Edition:

- 1 Chat with the CIO: Hindsight Is Not a Strategy
- 4 Themes for ESG Investing in 2022
- 6 The Current Supply Chain Crisis and its Impact on Real Estate
- 9 Closing Brief - Bailard's View on the Economy: Thanks for the Memes

Eric P. Leve, CFA: I'm sure you'll recall when Peter [Hill] became Bailard's CEO about 13 years ago, the GFC [Global Financial Crisis] landed in our laps almost immediately. And for you, when you took over the role in the Spring of 2021, we thought were on the cusp of being able to speak of COVID in the past tense and that 2021 promised a return to normalcy. Instead, we've experienced the highest inflation in 39 years and are on the verge of COVID's fifth wave. What did you learn from Peter's trial by fire in the GFC and what you're managing through thus far?

Sonya Mughal, CFA: Peter and I both had three elements that made these transitions easier: the presence of our predecessor to help guide us, a stable senior management team to work with, and a lot of personal leadership experiences to build upon. These once-in-several-generations events are, by definition, unusual, but the same thoughtful long-term management we employ every day in the organization and in our clients' portfolios remains critical regardless of external events. That said, in both cases, I'm proud of how Bailard has found thoughtful ways to move forward in very positive ways.

Eric: You and I have been in the game a long time. One too-often-fair criticism is that professional investors tend to look back at recent events

> continued on page 2

and predict how they will impact the economy and financial markets in the future. Alternatively, they are much less willing to “look over the horizon” to envision the events, and potential implications, that could be lurking in the future.

Sonya: Yes, you’re spot on. Our industry seems to live on giving context to history rather than working to peer around the next corner. We spent years interpreting the GFC, but didn’t see the wave of nationalism that was coming across the globe or the endemic low economic growth that accompanied it. It challenges me to consider what is it that we’re too focused on now and what might be missing, especially as we end two unprecedented years in modern history and look forward to COVID having less impact on the economy and markets.

Eric: In the first category of things that have received too much focus, I’d definitely put inflation, and I’m embarrassed to admit that I got it wrong. It isn’t “transient.” Inflation has reached levels that I underestimated and has lasted much longer than I forecasted. But at the same time, it is the most discussed and analyzed element of the investing landscape currently. In early December we got the CPI [Consumer Price Index, a measure of the weighted average of prices of a basket of consumer goods and services] for the year-over-year period ending in November 2021. The year’s change in CPI was 6.8%, the highest since March 1982. The broad market proceeded to rise by almost 1% on the day of the announcement, capping the strongest week for U.S. equities in ten months. Clearly investors are now “pricing in” higher inflation for longer. There is no question that if inflation remains high, it increases the risk of the action that precedes virtually all recessions, a misstep by the Federal Reserve [the “Fed”].

Sonya: Agreed. This is a time when central bankers around the world need to navigate a minefield. The initial inflation from last Fall resulted from huge demand by consumers whose coffers were filled with transfers from the government combined with a failure to get the right goods to them in a timely way because of manufacturing and shipping problems. But as inflation lingers, and employers continue to struggle to find people to fill vacant jobs, inflation could become entrenched in a more fundamental way.

We have the unemployment rate at 3.9% [as of year-end], lower than anytime between 2002 and 2017 and,

“...as the world has focused on COVID, economics and the financial markets, the ‘unknown unknowns’ have continued to fester and grow.”

at the same time, a near-record 11 million jobs that employers can’t fill. A tight labor market is a fertile environment for inflation. The only way I see us escaping this is something to reverse the “Great Resignation,” effectively drawing back into the workforce some of the more than 3 million people who have retired since the COVID outbreak. Barring that, even with consumer demand moderating and supply lines improving in 2022, I think we should expect a higher baseline inflation.

Eric: And so, you’re implying that the Fed could be on the right track by reacting assertively to inflation fears. I suspect you’re right here, but 2021 served to humble a lot of macro thinkers. After years of striving to reach their 2% inflation goal, the Fed has more than they can handle now. As we know, a yield curve inversion [where short-term interest rates rise above longer-term ones] has generally led to recessions. The Fed’s new aggressive stance, combined with what could be a weaker economic picture in 2022, could easily produce that unwanted outcome.

Sonya: OK, so there we have a “known unknown.” We know inflation is an issue and we’re watching it carefully, but it is hard to assess its impact. What really concerns me is that, as the world has focused on COVID, economics and the financial markets, the “unknown unknowns” have continued to fester and grow. Here I’m thinking about geopolitics and that some hotspots could become a major focus for markets in 2022.

First off, is China. The nation’s usurpation of rights and autonomy in Hong Kong brought umbrage but little external action. That move was simply an acceleration of the timeline between the UK and China in the 1997 handover. Current saber-rattling over Taiwan is a completely different story. Chinese leader Xi Jinping seems intent on reintegrating the island nation, which,

I'm a firm believer that you have two choices: you either fold, or you stand together.

by no coincidence, is home to the world's largest dedicated semiconductor company. And Taiwan is just one piece of the escalating risk emanating from China. The nation's hypersonic missile program is a warning shot against the U.S.'s world-leading military power. China's willingness to use military and economic force within the nation and globally is, for me, one of the defining issues of 2022. Vis-à-vis the U.S., the most hopeful outcome would be that both nations focus more on internal matters, relieving pressures that have been building between them.

Eric: In a similar vein, Russia is flexing its military and economic muscles across Europe. In an eerie echo of 2014, Russia is again massing troops at the Ukrainian border, seemingly intent on annexing further territory from the embattled nation. The U.S. and NATO are drawing a pretty strong line there, with their own eye-popping troop levels; this could easily become a larger and uglier coup than 2014. At the same time, Russia wants to increase its leverage over Western Europe by beginning deliveries of natural gas from its Nord Stream 2 pipeline. Europe's need is dire, but pipeline approval won't occur as long as Russia threatens the European Union's eastern flank in Ukraine.

Sonya: And, as always, the Middle East is a confounding mélange. Quietly, multilateral and bilateral relationships have been forged by historic rivals, primarily prompted by the threat of Iran. In 2020, the Abraham Accords normalized relations between Bahrain, the UAE, and Israel. This led to further such agreements between Israel and Morocco, Jordan and, most recently, indications that Saudi Arabia is ready to lead the 57 nations in the Organization of Islamic Cooperation in the same direction. Here, "the enemy of my enemy is my friend" is quickly breaking down long-standing animosities. The downside is that Iran is increasingly isolated, along with its proxy militias in Lebanon and Yemen. Its missile program has evolved greatly and its nuclear enrichment program

puts it perilously close to becoming the world's newest nuclear power. Iran's well-armed leadership is also more belligerent than it's been in decades. Whether it is traditional or cyber warfare, the Middle East has the potential to flare up dramatically.

Eric: Wow, I'm almost breathless after picking through our communal anxiety closet! I'm sure you'll agree that it is often hard to know how markets will react to geopolitical instabilities, but most of those we mentioned could easily lead the dollar higher, and others keep oil and gas prices at historic levels. As we look ahead this year, it seems prudent to be considering these undercurrents that could affect our normal calculus of earnings, interest rates, and valuations.

Sonya: Agreed. While they say in hindsight everything is much clearer, I think it behooves us all to remain vigilant about what could influence our future. And when facing adversity, I'm a firm believer that you have two choices: you either fold, or you stand together. At Bailard, our spirit and strength and flexibility become—not only a shield against hardship—but a common bond. And when we choose to stand together, we more readily see the silver linings and the paths towards perseverance and progress. Now, let's get to work on 2022!

Themes for ESG Investing in 2022

Blaine Townsend, CIMA®, Director of Bailard's Sustainable, Responsible, and Impact Investing Group, highlights decarbonization as a crucial ESG investing focus for the coming year.

Climate was the central ESG theme in 2021, and it's near impossible that it won't be again in 2022. In fact, it will remain so in the decades ahead. To riff off of Frank Sinatra: It is a Net Zero world and we are just living (and investing) in it.

The term “Net Zero”—awash in the headlines and political platforms worldwide—describes the balance between the amount of greenhouse gas emissions versus the amount removed from the atmosphere. The goal is to reach Net Zero in these emissions by 2050 to avoid the most catastrophic effects of climate change. Greenhouse gas concentrations are at their highest levels in two million years and, currently, the earth is roughly 1.1° Celsius warmer than it was in the 1800s and on track to increase by as much as 4.4 degrees by the end of the century.¹ Committing to Net Zero emissions is the path to curbing global temperature rise.

The commitment of nearly 200 countries

Using this relative comparison to the pre-industrial period, scientists and governments agreed that holding the global temperature rise to 1.5 degrees Celsius would limit the worst climate impacts (as part of the 2015 UN Climate Change Conference, COP21, in Paris²).

Known as COP26, the five-year follow-up to the Paris Agreement was held this past fall in Glasgow. Progress was made in Scotland, particularly around the framework for pricing carbon, but the global community is moving too slowly and is not on track for Net Zero by 2050. The key to Net Zero is cutting emissions as soon as possible to reduce the absolute amount of the carbon budget being spent along the way. The Intergovernmental Panel on Climate Change (IPCC) reports that emissions must be halved by 2030 in order to even have the possibility of limiting warming to 1.5 degrees by 2050.³

Getting on the 1.5-degree path as quickly as possible matters. And this is where the potential for ESG investing comes in. The race to “Net Zero” will have a transformative effect on the investment landscape and capital markets, as well as the way in which companies themselves operate.

The race to “Net Zero” will have a transformative effect on the investment landscape and capital markets, as well as the way in which companies themselves operate.

Investment opportunities based on Net Zero

While helpful as a strategic commitment, pledges from political jurisdictions are only words and the work of reducing net emissions is done on the ground. With carbon as the primary greenhouse gas, it garners much of the focus. Decarbonization—which is the road to carbon-neutrality—will be led by rethinking the sectors that generate the bulk of the emissions, including electricity generation, transportation, buildings, and agriculture among others.

Decarbonization is expected to be a vital area for new capital investment and an important ESG theme ahead. Already, the investment opportunities for sequestering carbon (pulling already-emitted carbon out of the atmosphere), offsetting carbon elsewhere (through land restoration or planting of trees), and new

¹ <https://www.un.org/sites/un2.un.org/files/fastfacts-what-is-climate-change.pdf>

² <https://www.un.org/en/climatechange/paris-agreement>

³ <https://www.nature.com/articles/d41586-018-06876-2>

technologies (to reduce emissions in the first place) are growing rapidly. It will just take a massive amount of investment of capital before it really takes off.

Pledges at the company level

In addition to commitments from countries and municipalities around the world, numerous companies have made Net Zero pledges. Right now, big business is internalizing and communicating its path to Net Zero to investors based on largely voluntary disclosures and voluntary reporting. ESG investors would definitely like to understand where companies are with respect to these pledges. Once regulators agree on which disclosures should be required and standardized, companies will be better able to produce interim targets for the markets. Interim targets are extremely important because they force the decisions makers to stay accountable, particularly as CEOs typically operate with five to seven-year time frames.

Additionally, the slow progress is vexing for ESG investors still in search of the best data possible to track portfolio alignment with Net Zero goals. ESG investors are eager for true science-based targets (SBTs) to better understand the risks in investment portfolios.

The financing gap

There is a well-discussed gap between necessary infrastructure capital investment and new innovation required to decarbonize the global economy. This gap needs to close. The financial services industry has been slowly investing in decarbonization (by way of instruments like “green bonds”), but the pace needs to quicken and the commitment needs to grow or alternative funding schemes will emerge to meet demand.

Predictably, the banking sector is still adding to the short-term part of its balance sheet: traditional energy and traditional tech. There is incredible demand for capital for transformative energy projects or new technologies. For this energy transition to reach scale, the capital must come from somewhere. Filling that gap is in itself an investment theme. Does the green bond market continue to grow? Do FinTech, crowd-sourcing, or other new tools take market share from the banks in the decarbonization transition? Do regulators change anything to help make this investment more feasible? What would it take for this to

become a catalyst for financial services? These are all big questions right now. Strides were made in 2021 by an alliance of the world’s 33 largest institutional investors,⁴ but time will tell whether the plans being put in place are effective.

The growth of ESG investing has proven to the industry that investors want climate risk at least to be taken seriously in their portfolios. Right now, in the early days of this transformation, it is the ESG investors that are pulling the lever they have available: directing their capital. Getting on a path to limit temperature rise to 1.5 degrees Celsius by mid-century won’t happen without total engagement by all market participants... regulators, big business, consumers, big and small investors alike. If these players in the capital markets truly internalize this goal of decarbonization, it will transform the investment landscape.

⁴ <https://www.un.org/en/climate-action/sg-institutional-investors-crucial-net-zero>

The Current Supply Chain Crisis and its Impact on Real Estate

Jamil Harkness, Research and Performance Associate - Real Estate, explores the spectrum of impacts the persistent supply chain bottlenecks have bestowed upon the real estate sector.

Until approximately 18 months ago, very few people outside of logistics providers, manufacturers, and retailers gave much thought to the supply chain. Since the start of the post-WWII consumption boom in the U.S., whenever consumers wanted something (a car, clothing, electronics, whatever), they would go to the store (or online), buy it, and take it home (or have it delivered), never giving much thought to its source or how it got to the store. This all changed with COVID, the recession it triggered, the government's response to the pandemic and recession, and the ongoing recovery. The aftermath of the pandemic-induced recession has resulted in a snarled global supply chain causing delays in the delivery of raw materials, components, and finished goods from all over the world to the U.S.

Goods in global transit

According to the U.S. Census Bureau, approximately 33% of United States imports come from five Asian countries: China, Japan, South Korea, Taiwan, and Vietnam. Of these, China is by far the largest, accounting for 18% of all imports into the U.S. and a disproportionate share (55%) of imports from Asia. In addition, 90% of all items exported to the U.S. from the Far East travel by sea.¹ So, when there are problems at Asian ports and/or holdups at domestic ports, this strains the ability of U.S. manufacturers to produce products and U.S. retailers purchasing finished products from Asia to satisfy consumer demand for everything from toys to appliances to computers.

In a recent article by *The Wall Street Journal*, Phil Levy (chief economist at Flexport, a San Francisco-based tech company providing logistics services) was quoted saying that “The typical transit time for a container pre-pandemic was 71 days. That’s how long it took for the container to depart from Shanghai; discharge in Los Angeles; proceed to a warehouse near,

say, Chicago; get trucked empty back to California; and then return to Shanghai. The current transit time is 117 days or more. The greatest delays are in the U.S., owing to port bottlenecks and trucking shortages.”

The aftermath of the pandemic-induced recession has resulted in a snarled global supply chain causing delays in the delivery of raw materials, components, and finished goods from all over the world to the U.S.

Ports are built to meet peak demand. The peak season is usually August through November as retailers seek to stock their shelves for the Thanksgiving through Christmas holidays. The pandemic was the catalyst for supply chain bottlenecks at Asian and domestic ports alike, disrupting the smooth flow of products into and around the U.S. So, what’s going on?

First of all, excessive fiscal and monetary stimulus, provided by both the U.S. government and the Federal Reserve, catalyzed extraordinary liquidity for U.S. consumers. Secondly, lock-downs stimulated significant pent-up demand for “stuff” and created a tilt in U.S. consumer behavior to buying more goods (from 31% of total consumption expenditures to 35%) and less services (from 69% of expenditures to 65%).¹ Third, work-place restrictions, generous unemployment benefits, and mandates have disrupted the delicate employment balance at ports and in transportation

¹ “An Insider Explains the Supply-Chain Crisis”, *The Wall Street Journal*, 12/18/2021

networks, fueling a labor shortage. Finally, as Phil Levy says, “a system that can barely handle a normal peak season has seen above peak demand for about an entire year and a half, placing it under a cumulative strain that it wasn’t really built for.” All of these factors are interrelated and exacerbated by each other: a perfect storm of elements rippling through the U.S. economy provoking frustration, concern, anger, and higher prices.

What does this all mean for real estate?

Each of the four main property types has been, and will continue to be, severely impacted until the kinks in the pipeline have been ironed out.

The most obviously “disrupted” property category is industrial.

Consumers’ voracious appetite for goods at a time when those goods (durables and non-durables) are not readily available is driving unprecedented demand for industrial space for both in-store and e-commerce retailers. As a result, the industrial vacancy rate hit a record low (4.6%) at the end of Q3 2021 at the same time that rents increased 7.1%, year-over-year, to a record high, according to CoStar. The increase in demand has caused companies to build more flexibility and resilience into their supply chains. The goal seems to be to move from a “just-in-time” to a “just-in-case” inventory supply strategy. Industrial user appetite for space remained insatiable, which triggered record construction of space: 164 million square feet (SF) in the third quarter, with speculative development representing the lion’s share of that activity. In addition, supply chain logjams are impacting delivery of space; according to Prologis, development project timelines are likely to increase by four to eight months over the next two to three years.

Another issue caused by the current supply chain mess is rising transportation costs to move goods from ports to warehouses inland. According to the CBRE Supply Chain Advisory group, transportation costs are increasing faster than rents. Companies are combatting the rise in transportation costs by renting more space in “convenient” locations to try to minimize long-distance transport. Many of these warehouses are close to ports exacerbating a supply/demand imbalance and driving sky-high rents even higher.

The impact of supply chain backups on the retail real estate sector overlaps with industrial as most retailers aggregate inventory in warehouses before distributing it to stores. Retailers are acting across multiple fronts to control volatility and guarantee that products are accessible to meet consumer demand. For example, major retailers such as Walmart, American Eagle, Home Depot, and others have invested in direct shipping strategies (via chartering ships). In addition, these retailers are diversifying the U.S. ports receiving their products. Retailers are also transporting goods on planes to get them to stores in order to satisfy consumer demand... an expensive, yet necessary, strategy for higher-value goods. In Q3 2021, retail space demand surged to 32 million SF, the highest quarterly net absorption in the last four years. And, over the first three quarters of 2021, net absorption was a positive 54 million SF, more than making up for the losses in 2020. Rents reacted accordingly, increasing to an average of \$22.30/SF... 10% higher than the ten-year average.

Supply chain gridlock is negatively impacting multifamily developers and operators alike as construction timelines get extended because the delivery of building materials, appliances, furniture, and supplies is delayed. At the same time, the cost of everything from lumber to concrete, copper pipes, carpeting, and paint is increasing at the fastest pace in 40 years as demand swamps supply. According to the U.S. Bureau of Labor Statistics (BLS), water heaters, major appliances, and plumbing fixtures cost 12.0% more than they did a year ago. Inflationary pressures on critical input items to multifamily residential construction have increased development costs (including labor) by ~17.0%, year-over-year.² The effects of higher development costs are impacting developers’ ability to produce adequate new supply. According to CoStar, as of Q3 2021, the number of under-construction multifamily units was 655,000, down 4.3% year-over-year. The fall-off in development activity—combined with a surge in demand—resulted in average rental rate increases of 10.3% during the year, while the vacancy rate fell to a record low of 4.6%. Higher construction costs will make it increasingly difficult for multifamily developers to keep pace with demand.

Office properties are going through a generational reckoning the likes of which investors haven’t seen

² <https://fred.stlouisfed.org/series/WPUIP231120>

in 30 years. The twin body-blows of anemic demand (driven by a fundamental “re-think” of office space utilization) and soaring tenant improvement costs (resulting from supply chain logjams) have put immense financial pressure on building owners. Higher build-out costs—especially for “MEP systems” (Mechanical, Electrical, and Plumbing)—due to the increased cost of copper, aluminum, plastic pipes, and valves are making lease economics ever more challenging for landlords. Copper and aluminum prices are up 28.0% and 39.0%, respectively, year-over-year. In addition, plastic pipe and valve prices are also up 70.0% and 6.0%, respectively.³ MEP systems usually account for 40% to 45% of a tenant improvement project’s cost.⁴ Office property owners are engaged in “hand-to-hand combat” to keep existing tenants and attract new ones at the same time that lease economics are being squeezed by higher construction costs. For the near term, all office markets will be groping for a semblance of supply/demand equilibrium. Depending upon specific market economic drivers, that balance could come in the next 12 to 18 months or it could take several years. One thing for sure, tenants should enjoy negotiating leverage with landlords until there is a discernable shift in that equation.

The continued influence of inflation

The elephant in the room in the current supply chain crisis is inflation. President Biden believes that current inflation (the highest since the early 1980s) is primarily attributable to supply chain bottlenecks, temporary price spikes on cars, and price-gauging by businesses. Economist and *The New York Times* columnist Paul Krugman cites a recent report from the Bank for International Settlements, which estimates that price rises caused by supply chain kinks have contributed 2.8% (of the 6.8% inflation rate) to the overall increased cost of goods during the past year. Regardless, the impact of supply chain snarls is real in terms of its impact on prices, extended development/construction timeframes, and overall increased “friction” to the process of buying and selling raw materials, parts/components, and finished goods. And the impact on all property types has been, is, and will remain material. However, as long as the economy roars ahead and the demand

Office property owners are engaged in “hand-to-hand combat” to keep existing tenants and attract new ones at the same time that lease economics are being squeezed by higher construction costs.

by consumers for goods and services remains robust, any negative fall-out for property owners should be manageable.

Wrinkles in the supply chain won’t be ironed out anytime soon. In many ways, the supply chain crisis has revealed nuances and information vital to each property sector’s long-term success. The lessons will be valuable for all real estate owners if they are open to learning from them. The current challenges can be a catalyst for companies to establish new relationships and implement new processes to better hedge against future disruptions. As is usually the case, property owners that have a learning culture and thrive on change because of their adaptability will weather the current crisis better than their less-nimble peers.

³ <https://tradingeconomics.com/commodity/aluminum>, <https://tradingeconomics.com/commodity/copper>, <https://fred.stlouisfed.org/series/PCU32612232612213>

⁴ <https://www.cushmanwakefield.com/en/united-states/insights/office-tenant-improvement-cost-guide-north-america>

Closing Brief - Bailard's View on the Economy: Thanks for the Meme-ories

As we tread into the new year, Jon Manchester, CFA, CFP® (Senior Vice President, Chief Strategist - Wealth Management, and Portfolio Manager - Sustainable, Responsible and Impact Investing) delves into the current trends with a caution to 'expect the unexpected.'

If history rhymes, but doesn't repeat, there were some distinct notes of the 1980s in last year's manic markets. For one, a central figure of the 1980s—disgraced junk bond king Michael Milken—was back on the scene, at least indirectly. Pardoned by former President Trump, Milken remains banned from working in the securities industry, but according to Forbes magazine is a “whale” among SPAC (Special Purpose Acquisition Company) investors with interests in 125 separate SPACs.¹ Milken's former family office, now Silver Rock Financial, is reportedly a key member of the “SPAC Mafia,” a group of hedge funds who have thirstily embraced what Forbes reports are “no risk returns” of between 10% and 20%.

In financing SPAC deals—because they have the option to withdraw—the hedge funds are guaranteed to at least get their money back, plus interest, as well as a kicker in the form of low-cost stock warrants. SPACs are set up as a shell company, with the intent to acquire a business down the road. They are therefore referred to as blank check companies. For the fat cat hedge funds, it's a “heads I win, tails you lose” proposition. For the average investor who gets in following the SPAC's initial public offering (IPO), it's a much rockier road to riches. Short-seller Carson Block of Muddy Waters Research laid it bare: “A business model that incentivizes promoters to do something – anything – with other people's money is bound to lead to significant value destruction on occasion.”²

A gush of cash poured into SPAC offerings last year, generating roughly \$162 billion in gross proceeds, nearly double the 2020 level, which had quintupled

versus 2019.³ With the Federal Reserve continuing to push the easy button on monetary policy, the Milken-era “greed is good” ethos seemed to seep into numerous markets. Cryptocurrencies continued their erratic behavior, yet the trend remained higher as inflation fears, blockchain fervor, non-fungible tokens, and good old-fashioned speculation drove the total market capitalization for digital assets north of \$3 trillion. Philippe van der Beck, a researcher at the Swiss Finance Institute, noted that without cash flows to forecast, “People are just betting on how they think demand for the asset will change in the future.”⁴ In other words, it's a momentum trade.

“A gush of cash poured into SPAC offerings last year... nearly double the 2020 level, which had quintupled versus 2019.”

More traditional asset classes were not forgotten: a staggering amount of cash went into equity funds in 2021. Bank of America noted that the more than \$1 trillion added to equity funds globally exceeded the cumulative net inflows from the prior two decades!⁵ Milken's old playground, the high yield or junk bond market,

¹ “From Junk Bond King to SPAC Whale: How Michael Milken Became A Big Investor In The SPAC Boom,” www.forbes.com, 5/26/2021

² “What is a SPAC? Explaining one of Wall Street's hottest trends,” www.cnn.com, 1/30/2021

³ SPAC Statistics, www.spacinsider.com, 12/31/2021

⁴ “Behold the Paranoid Style in American Investing,” www.bloomberg.com, 12/22/2021

⁵ “The \$1 trillion that has flowed to global stocks in 2021 is bigger than the last 20 years combined,” www.marketwatch.com, 9/10/2021

showed no lack of resolve. The Bloomberg U.S. Corporate High Yield Bond Index returned 5.3% in 2021, and its yield-to-maturity (YTM) remained comfortably numb to inflation or credit concerns at 4.8%, well below the Index's 6.6% average YTM over the trailing decade. High yield bonds have been more of a coincident indicator in the past, but at present there is "What, me worry?" aspect to junk spreads. In fact, by late November, the U.S. junk bond market had already set a record for annual issuance at more than \$455 billion, topping 2020's record.⁶ When you include leveraged loans, more than \$1 trillion of high yield debt hit the market, also a high-water mark.

Investors who piled into risky assets were largely rewarded in 2021, although it wasn't all caviar dreams. IPOs averaged a 10% decline following their trading debut, worst in over a decade.⁷ Half of the 28 companies that raised at least \$1 billion via an IPO last year traded below their offer price by year-end. Nonetheless, speculation was clearly on the boil with an exceedingly ample supply of money floating around. This fever may extend into 2022 with Fed tightening on a glacial

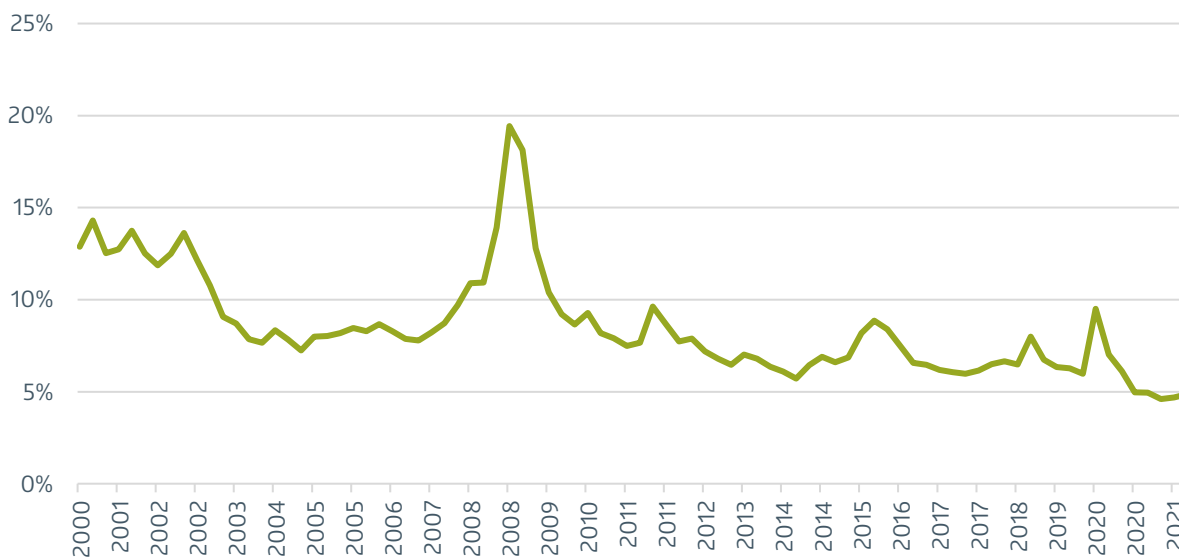
pace, but some caution is warranted, keeping in mind the Warren Buffett adage to be fearful when others are greedy.

Calling all bulls

The rise of the retail investor was well-documented last year with Reddit and Robinhood, and the roller coaster rides of meme-stocks such as GameStop and AMC Entertainment after years of torpor. Perhaps an underappreciated part of the story is the method behind the madness: options. Long a domain occupied primarily by professional traders, the options markets has attracted a bevy of retail investors during the pandemic. In 2021, a record (there's that word again) 39 million options contracts traded daily, on average, up 35% versus 2020.⁸ Over 25% of the trading was done by retail investors, and they exhibited a clear preference for buying call options.

Owning a call gives you the right to buy a stock at a stated price within a specific timeframe. For example, if a stock is trading at \$50 per share, and you feel it's worth significantly more, you might buy calls on that

High Yield Bonds Ended 2021 with Yield-to-Maturity Lower than Trailing Ten-Year Average (Bloomberg U.S. Corporate High Yield Bond Index Yield-to-Maturity, 9/30/2000-12/31/2021)



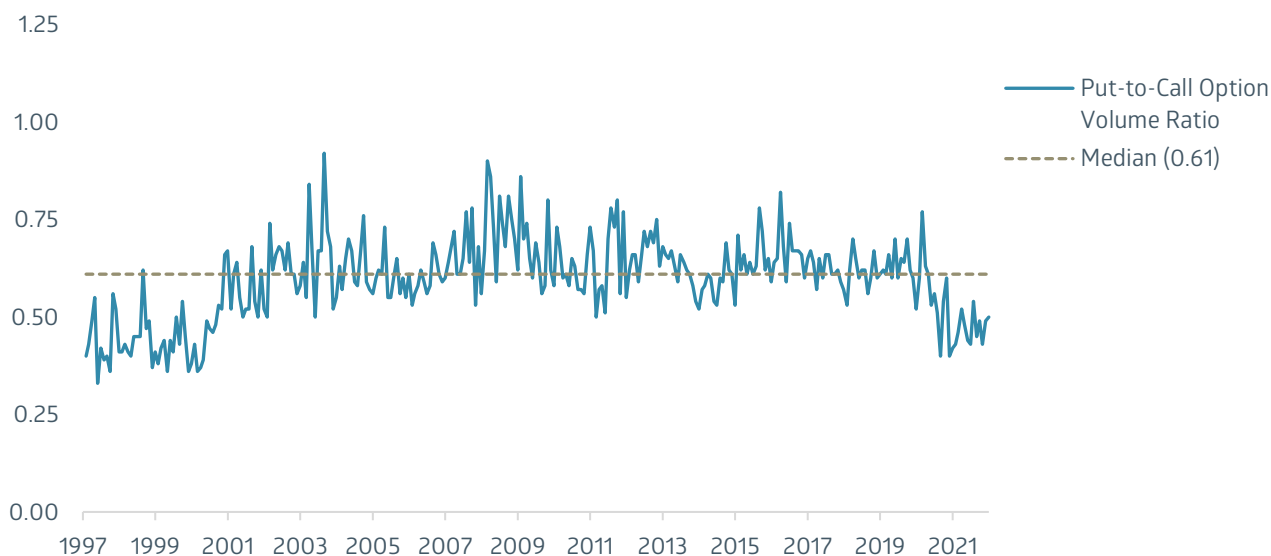
Source: Bloomberg US Corporate High Yield Bond Index, Bloomberg, 9/30/2000 to 12/31/2021.

6 "High-Yield Bond Sales Soar to Record as Investors Have Few Other Places to Go," www.wsj.com, 11/26/2021

7 "More Than 1,000 Companies Went Public in 2021, But Returns Are Worst in a Decade," www.barrons.com, 12/27/2021

8 "Options trading activity hits record powered by retail investors, but most are playing a losing game," www.cnn.com, 12/22/2021

Examining the U.S. Monthly Equity Put-to-Call Volume Ratio, 1997-2021



Source: CBOE US Monthly Equity Put Option to Call Option Volume Ratio, Bloomberg, 1/1/1997 to 12/31/2021.

company's shares at \$55/share, with the expectation that the stock price will pop prior to the expiration of the options contract. Options are a relatively low-cost way to provide access to a company's shares and potentially capture upside. Although success requires some luck with timing – unless you happen to coordinate via social media with a lot of other bulls on that same stock (GameStop, e.g.) and end up pushing the price higher unnaturally. Nomura analyst Charlie McEligott commented on this phenomenon: “The fundamentals aren't the driver. That's not what matters anymore. It's the scale and the growth of the options market as this lottery ticket vehicle, which is especially magnified right now because of the retail frenzy.”⁹

By the end of 2021, the U.S. Monthly Equity Put-to-Call Volume ratio—as reported by the Chicago Board Options Exchange (CBOE)—stood at 0.50, up from a 0.38 low in January 2021. Readings below 0.50 hadn't been seen since the tail end of the Tech bubble in the late 1990s, suggesting a high level of optimism. This will likely prove a contrarian indicator, although timing is uncertain, as evidenced by the stock market's very strong 2021 following that January low point for the Put-to-Call ratio. Steven Sears of Options Solutions wrote a piece for *Barron's* in which he said the options

market has become the biggest casino in the country and warned that “these gambling sideshows tend to end poorly.”¹⁰

Thread the needle

Markets face a difficult task in 2022 following the exuberance of the past 21 months. There are some clear positives, however. Economic growth remains strong, despite the ongoing COVID-19 headwinds and the struggle to stabilize supply chains. The Atlanta Fed's current estimate of U.S. fourth quarter 2021 real gross domestic product (GDP) growth is 7.4%, driven by robust consumer spending and higher inventories. For the whole of 2021, the Conference Board estimates 5.6% real GDP growth, which would be the fastest rate since 1984. Looking forward, they peg U.S. real GDP growth at 3.5%, weighed down a bit by another COVID-19 wave, plus persistently high inflation and a more hawkish Federal Reserve.

The outlook for consumer spending is positive, underpinned by gains in both financial and real assets. The S&P CoreLogic Case-Shiller U.S. Home Price Index rose 19% in October on a year-over-year basis. Amazingly, the Index recorded its four-highest readings in its 34-year history during the July-to-October

⁹ “How Options Trading Could Be Fueling a Stock Market Bubble,” *www.nytimes.com*, 1/25/2021

¹⁰ “The Options Market Is Now a Casino. Here's How to Bet Wisely,” *www.barrons.com*, 12/22/2021

2021 stretch. Warm-weather cities Phoenix, Tampa, and Miami led the way in October amongst the 20-City Composite, with Phoenix atop the charts for 29 straight months! In the press release, S&P reiterated their belief that the housing market's strength is partly a function of "locational preferences" as households react to the pandemic. The catch for home buyers is that affordability continues to worsen, tempered only marginally by low mortgage rates.

Valuations remain stretched across most markets. Earnings growth for the S&P 500 Index was a bright spot in 2021, with operating profits now projected to have jumped ~65% per-share versus 2020. That takes the S&P 500's trailing price/earnings multiple down to 23.6x, roughly seven points lower than a year ago. Profitability has been impressive in a challenging environment, but the S&P 500 remains historically rich, elevated by lofty prices for growth companies. Strategas Securities calculated that approximately 18% of the Russell 3000 Index was trading at more than 10x sales near year-end, higher than the 14% level of the tech bubble.¹¹ Earnings will need to meet or preferably exceed expectations for valuations to hold up, particularly if interest rates move higher as projected.

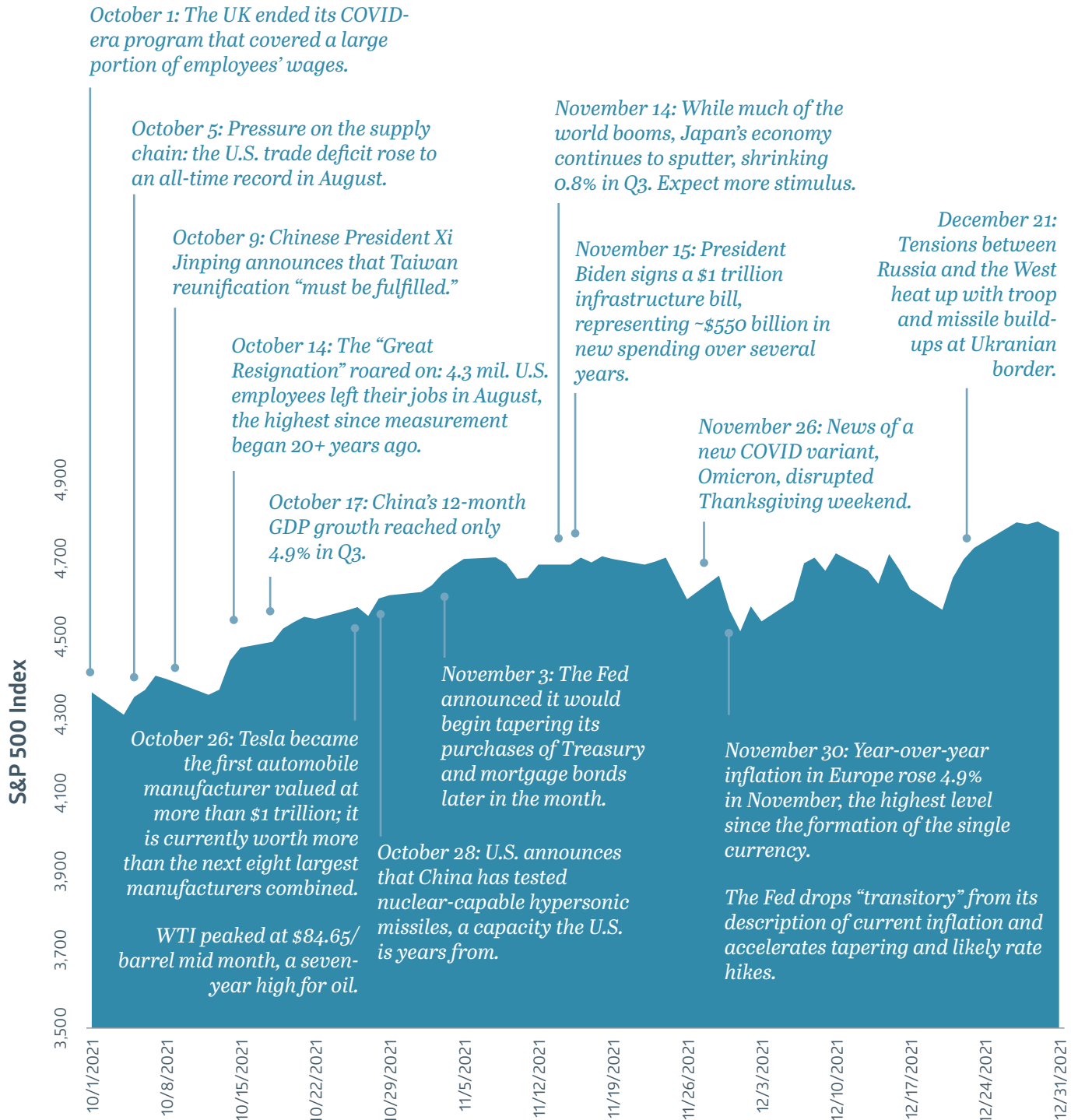
Fiscal and monetary policymakers will attempt a soft landing for the economy and markets amidst a host of inflationary pressures and an unrelenting pandemic. This seems like a big ask, but perhaps taking steps towards normalizing interest rates will tamp down enough inflation and speculation to keep this bull market on track. If the last two years are any indication, expect the unexpected, and hold onto those Miami Vice Ray-Ban sunglasses in case an 80's party breaks out.

Markets face a difficult task in 2022 following the exuberance of the past 21 months.

¹¹ "Daily Macro Brief," Strategas Securities, 12/17/2021

Q4 2021 World Events

WITH THE S&P 500 Index AS THE BACKDROP



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

Market Performance

As of December 31, 2021

U.S. Interest Rates	3/31/2021	6/30/2021	9/30/2021	12/31/2021
Cash Equivalents				
90-Day Treasury Bills	0.02%	0.04%	0.04%	0.04%
Federal Funds Target	0.25%	0.25%	0.25%	0.25%
Bank Prime Rate	3.25%	3.25%	3.25%	3.25%
Money Market Funds	0.01%	0.01%	0.01%	0.01%
Bonds				
10-Year U.S. Treasury	1.74%	1.47%	1.49%	1.51%
10-Year AA Municipal	1.30%	1.20%	1.24%	1.14%

Source: Bloomberg, L.P.

U.S. Bond Market Total Returns (US\$) through 12/31/2021	QUARTER	SIX MONTHS	YEAR TO DATE	ONE YEAR
U.S. Bonds				
Bloomberg Barclays U.S. Treasury Index	0.18%	0.26%	-2.32%	-2.32%
Bloomberg Barclays U.S. Corporate Index	0.23%	0.23%	-1.04%	-1.04%
Bloomberg Barclays U.S. Aggregate Index	0.01%	0.06%	-1.54%	-1.54%
Bloomberg Barclays U.S. 1-15 Municipal Blend Index	0.38%	0.29%	0.86%	0.86%

Source: Bloomberg, L.P.

Global Stock Market Total Returns (US\$) through 12/31/2021	QUARTER	SIX MONTHS	YEAR TO DATE	ONE YEAR
U.S. Stocks				
S&P 500 Index	11.02%	11.66%	28.68%	28.68%
Morningstar U.S. Small Value Index	5.44%	3.53%	33.12%	33.12%
Morningstar U.S. Small Growth Index	-0.65%	-5.12%	-1.00%	-1.00%
Morningstar U.S. Large Growth Index	3.59%	6.02%	21.47%	21.47%
Morningstar U.S. Large Value Index	7.97%	6.97%	23.13%	23.13%
International Stocks				
MSCI EAFE (Europe, Australasia, Far East) Index, net dividends	2.69%	2.24%	11.26%	11.26%
MSCI Emerging Markets, net dividends	-1.31%	-9.30%	-2.54%	-2.54%

Sources: Bloomberg, L.P. and Morningstar Direct

Alternatives (US\$) through 12/31/2021	QUARTER	SIX MONTHS	YEAR TO DATE	ONE YEAR
NFI-ODCE Index*	6.63%	13.70%	20.66%	20.66%
Gold Spot	4.11%	3.34%	-3.64%	-3.64%
WTI (West Texas Intermediate) Crude Oil	2.61%	4.79%	58.68%	58.68%

Sources: Bloomberg, the National Council of Real Estate Investment Fiduciaries
 *Q4 data not yet released. The fourth quarter return assumed to be same as the third quarter 2021 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, 2021 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 P. Leve, CFA

Global Economics and Fixed Income

Linda M. Beck, CFA

Senior Vice President
Director, Fixed Income

Elijah Reeder

Fixed Income Analyst

Domestic Equities

Sonya Thadhani Mughal, CFA

Chief Executive Officer

Eric Greco

Portfolio Associate

Joanne Howard, CFA

Senior Vice President

Chris Moshy

Senior Vice President, Equity Research

Thomas J. Mudge, III, CFA

Senior Vice President
Director, Domestic Equity Research

Osman Akgun, PhD, CFA

Vice President, Domestic Equities

David H. Smith, CFA

Executive Vice President, Domestic Equities

International Equities

Peter M. Hill

Executive Chairman

Anthony R. Craddock

Senior Vice President
International Equity Research

Eric P. 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 P. Abramson

Real Estate Analyst

Geoff Esmail

Real Estate Associate

Tess Gruenstein

Senior Vice President,
Acquisitions and Portfolio Management

Jamil Harkness

Research & Performance Associate

Ronald W. Kaiser, CRE

Consultant and Director, Real Estate
Research

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

Annalise Durante

Senior ESG Analyst, Portfolio Associate

Jon Manchester, CFA, CFP®

Chief Strategist, Wealth Management
Senior Vice President

Frank Marcoux, CFA

Portfolio Manager
Senior Vice President

Equity Analysis

Raj Dutta

Data Engineer

Amit Valia, CFA

Vice President, Financial Data Management

Trading

Glenn A. Davis, CFA

Senior Vice President
Head Trader

Tom Sikora

Trader

NEWSLETTER PRODUCTION

Eric P. Leve, CFA

Executive Vice President
Chief Investment Officer

Erin Randolph

Vice President
Marketing, Communications & Client Services

Debbie Tanguay

Senior Marketing Program Manager

Bailard

© 2022 BAILARD, INC. FOSTER CITY, CALIFORNIA



Printed on 100% postconsumer
waste (pcw) fiber