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Chat with the CIO A Reckoning of Global Priorities: The Changing Calculus of Climate Change and Geopolitics





Bailard's Director of Sustainable, Responsible and Impact Investing Blaine Townsend, CIMC®, CIMA® chats with Chief Investment Officer, Eric P. Leve, CFA.

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Closing Brief - Bailard's View on the Economy: We Didn't Start the Fire **Eric P. Leve, CFA:** Blaine, you and I share a deep passion for understanding how fundamental, long-term issues affect changes in human behavior and investment markets. Sometimes these bigger themes can cause major changes in the short term, and this certainly feels like one of those times. There has been a profound reckoning in the last decade, that the sources of energy that we use to power our world matter. Today, we face a challenge that most of us have tried to ignore: the fine balance between our clean energy aspirations with our economic, technological, and resource endowments amid the geopolitical reality of the dynamics between energy producing and consuming nations.

Blaine Townsend, CIMC®, CIMA: You're hitting upon an "inconvenient truth." In an ideal world, investors wouldn't support an energy company that derives its revenue from nations without democratic institutions. But what does one do when your allies with deep democratic values (Germany would be my prime example here) desperately need those resources not just to "keep the lights on" but, more critically, to keep its people from freezing in winter? The recent actions of Russia in Ukraine will have profound effects on how the world thinks about its energy transition and a heightened appreciation of the need for energy independence.

Transitioning from unsavory suppliers is one step, but doing it quickly probably means a greater use of "dirty" energy sources. That said, in the long run, the conflict is likely to accelerate innovation and adoption of cleaner alternative solutions.

Eric: For Germany to decrease its energy dependence on Russia, it needs to wean itself from the Nord Stream I gas pipeline, which for the past ten years has supplied 30% of the nation's natural gas. Russia also provides more than 50% of Germany's coal. What we're currently hearing is that Germany's ambitious goal is to end imports of Russian oil and coal this year, and natural gas by 2024. The key here is that nations can't simply flip a switch and change their energy infrastructure. If their systems are geared toward natural gas usage, it is hard to quickly transition to new sources, so generally this means finding new sources of natural gas. But, some power plants can make the switch of their fuel source from natural gas to coal. Since coal is found in many places, and is easier to transport than natural gas, we will likely see increased use of coal burning to generate needed power in Europe in the short term.

Indeed, the immediate solutions to this puzzle will likely have offsetting effects from an environmental perspective. Governments should, and may, push their populations to decrease energy use in the near term. For those old enough to remember 1973, they'll recall gasoline rationing and lower speed limits, along with raising thermostats in the summer and lowering them in winter. But so far this hasn't happened. European leaders have simply reduced government duties on fossil fuels to lessen the pain on consumers. It may be that, in this time of populism in Europe, leaders may not have the gumption to burden their peoples. With many consumers at wits end after two years of pandemic constraints, asking for more sacrifices may be politically toxic.

The more obvious near-term solution is that governments across Western Europe will likely seek oil, gas, and coal supplies from any sources they can. An uncomfortable silver lining is that the world's biggest energy consumer is currently using a lot less. China was already expecting sharply lower economic growth this year than last, but with the huge spike in COVID across the country and the virtual lockdown of the world's third most populous city (Shanghai), China's energy consumption will be much lower than normal.

It is seminal events in history that propel rapid change. Russia's hopes of restoring a Greater Russia may lead nations seeking energy security to forge new alliances.

This leaves more resources for the rest of the world, putting a (small) damper on price increases.

Blaine: It is seminal events in history that propel rapid change. Russia's hopes of restoring a Greater Russia may lead nations seeking energy security to forge new alliances. Neighbors, allies, and frenemies will quickly react to the heightened risk of an unpredictable and militaristic supplier.

In quick order, Germany has pivoted to a potential new gas deal with the world's largest exporter of liquefied natural gas, Qatar. For now, this seems like a relatively healthy move away from dependency on a dangerous autocratic government toward a nation looking to build bridges with the west, and one becoming a global, rapidly-modernizing autocracy. A broader, multinational sourcing of fuels will provide Germany, and Europe in general, a more dependable flow of natural gas as they transition to next-generation solutions. Indeed, we may look back upon this era as one that helped created a broader array of multilateral relationships among countries that previously shared few bonds.

Eric: Looking beyond Germany, the needs and resources of the countries of Europe vary dramatically. Nations such as France and Sweden generate much of their domestic energy from nuclear power, more than 40% and 30%, respectively. Sweden generates almost one-half of its electricity from hydroelectric sources and about 17% from wind. Denmark generates 45% of its energy from wind. But 45% of Poland's energy comes from coal and much of the rest from natural gas, both primarily imported from Russia.

As a transitional solution to even more sustainable solutions, nuclear could play a key role across much of the European continent. But instead of the large-scale

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plants that take years and decades for approval and construction, a new generation of nuclear plants called small modular reactors (SMRs) can be constructed in as little as 500 days. These plants have much smaller physical footprints and use their nuclear fuel more effectively, leading to much less spent fuel needing to be sequestered. A single one of these SMRs can provide energy for more than 300,000 homes. Still, we are seeing countries such as the United Kingdom push for the newer-generation large scale nuclear plants as a step to wean themselves off imported natural gas.

But Blaine, I'd argue that the more exciting potential outcome of this crisis is the potential for an accelerated path to truly local and sustainable forms of energy generation.

Blaine: And so we get to a critical point. As the "trade cold war" with China over the past few years motivates countries and companies to depend less on foreign suppliers and bring manufacturing closer to home, Russia's aggressions will likely accelerate the transition to renewable energy sources, many of which can be produced domestically, depending on one's geography and geology. This will not be easy. It will require multitrillion-dollar global investments. The acceleration of this transition is one reason we continue to be supportive of companies that benefit from this broad infrastructure transition.

And it is this longer-term scenario that is exciting for me. In the same manner that World War II led to the formation of the United Nations and to historic capital spending globally, or how increased globalization and increased trade did the same in the early 2000s, we are on the brink of an historic, secular investment in alternative fuels that now has a critical catalyst. Primary capital expenditures for energy have been falling globally for eight years since the previous oil price spike above \$100 per barrel. But now we have dual needs: increasing natural gas and other carbon-based energy infrastructure in the intermediate term, while at the same time developing next-generation energy sources that support longer-term goals of net zero emissions. These efforts can create energy independence for a broader range of countries.

Global expenditures for these two efforts may quickly surpass the previous peak of energy infrastructure spending of about \$2 trillion annually in order to supply the world's *still growing* energy needs. Goldman Sachs estimates that it will take \$56 trillion of investment through 2050 to build a credible, global clean energy infrastructure. It is a tragedy that the invasion of a sovereign nation has been required to jumpstart this, but it isn't all that dissimilar to the revolution in automobile gas efficiency spurred by the 1973 Arab-Israeli War and OPEC's oil embargo against the United States. History books 30 years from now may see this as the moment that resource-rich autocratic nations began to lose their stranglehold over the world and the moment that the net-zero movement got teeth.

Eric: Blaine, thanks so much for sharing your insights. As Winston Churchill said, "never let a good crisis go to waste."

Redrawing the Emerging Markets Map

Anthony R. Craddock, Senior Vice President of International Equity Research, highlights the changing Emerging Markets landscape amid geopolitical and economic volatility related to Russia and China.

For all its potential, emerging markets (EM) as an asset class has been more a source of risk than reward over the past year. Russia and China are the two EM countries creating the most uncertainty for stock investors, as their actions have added significantly to geopolitical and economic tensions worldwide. Russia's swift relegation to global pariah has brought—among many other consequences—exclusion from the standard stock market indices. Meanwhile, China remains the EM index heavyweight, even after its recent dramatic share declines that were spurred in part by the government's heavy-handed regulation of the corporate sector.

In navigating this shifting landscape, an active investment manager can't simply choose countries and companies based on attractive valuations and growth prospects, or trust the metrics used and the efficient allocation of global capital to produce a successful result. Instead, it seems prudent to place primary importance on politics and governance, removing certain firms (and possibly entire markets) from consideration and tailoring a unique policy for China as the dominant constituent.

Evaluating "Countries First" takes on a new meaning

Russia's wholesale invasion of Ukraine surprised many Western analysts—those expecting a limited eastern incursion—in its brute force, and has surprised again with its incompetence. For President Vladimir Putin, war has delivered coordinated sanctions from a rejuvenated U.S.-European alliance as well as more Russian casualties in one month than were suffered during a decade in Afghanistan. For the rest of the world: a humanitarian crisis as millions of refugees flee for Poland and parts West; rising energy prices feeding alreadyhigh inflation and threatening recession; and the revived specter of a nuclear standoff between the old Cold War superpowers, largely absent for a generation.

As a destination of interest to equity investors, Russia was already greatly diminished, having seen its weight in the MSCI Emerging Markets Index drop from a high of 11% in mid-2008 to just over 3% pre-invasion. The Russian stock market and ruble collapsed in late February, leading the MSCI Russia Index to lose more than half its value in U.S. dollar terms over the month. The country was then removed from the overall EM Index in March as sanctions made share trading virtually impossible.

With Russia becoming increasingly cut off from the rest of the world, one looming question is how far China will go in providing an economic lifeline or even military support to the country it had earlier declared a "no limits" strategic partner. China-watchers already had plenty to worry about prior to this. Following the Hong Kong protests of 2019-2020, Beijing imposed a national security law that effectively ended the "one country, two systems" principle a quarter-century ahead of schedule. Although he did not provide a timetable, President Xi Jinping vowed last year that China will achieve "reunification" with Taiwan. China's military has been probing airspace over the island and testing the waters of the South China Sea; one hopes that Russia's experience underlines the difficulties that motivated and well-supplied homeland defenders can cause for a large, but largely untested, aggressor. On the economic front, China's maintenance of its (ultimately untenable) zero-COVID policy, requiring lockdowns of cities as important to the global supply chain as Shenzhen and Shanghai, kept upward pressure on consumer prices and put a brake on trade and commerce.

The shifting sands of the EM Index

China's importance in the EM Index has grown dramatically over the last 15 years. In fact, back in late 2006, Russia was the larger index component. Stretches of outperformance and, more to the point, a stream

of new and newly-included equity listings brought China's weighting to 30% by the end of 2017. Then, in 2018, MSCI began tapping into the huge pool of mainland A-shares, including them in indices alongside the country's Hong Kong and U.S. listings. China's weight peaked at 43% late in 2020, helped by strong returns out of the pandemic by its internet and ecommerce giants, as steady growers that fit into the "stay at home" investment thesis were much in favor globally. Intensifying government regulation—across technology as well as many other sectors of the economy—helped bring about the recent period's sharp market decline, taking country weight back down to 30% by the end of Q1 2022.

With its combination of size and volatility, China has a huge influence on overall EM Index moves, making "China policy" arguably the most critical and difficult decision to make. At its high point in 2020, managers could factor in further A-share inclusion and extrapolate a near-future weight above 60% for the China juggernaut. It was then fair to ask if the EM Index would continue to behave as a diversified group at all, or become more akin to a single-country vehicle.

Currently the worry is in the opposite direction: how much further downside risk does the country embody, starting at nearly one-third of the total Index? Chinese leadership appears willing to put economics and financial interests to one side when it feels the need to reinforce the primacy of the Party over business and society. The lack of legal protection for private property (including foreign firms' intellectual property) has been an ongoing source of tension with other nations, not least America. The U.S. government has delisted or restricted investment in shares deemed linked to "Chinese military companies" and regulators have been increasing their scrutiny of Chinese listings in New York. There has been very recent (early April) progress on sharing of company audit data that could break the stalemate on listings. And plans announced in March to ease the regulatory crackdown, support the real estate sector, and relax COVID restrictions sparked a historic one-day rally. In the EM context, China is too big to ignore, but outright bullishness should be underpinned by more such indications of "market-friendly" improvements.

Now that Russia is out, the weight of MSCI's Emerging Europe region stands at less than 2%, in "safe to ignore" territory even for managers with a dedicated EM

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mandate. It is therefore possible to squint at the bigpicture view and see two super-regions, each with a distinct investment theme. For the first, combine Latin America with Middle East & Africa and Southeast Asia (mainly Indonesia and Thailand) to get the "old school" EM mix of commodity exposure and sensitivity to U.S. dollar strength. For the other, the rest of Emerging Asia (think China, Korea, Taiwan, and India) offers an emphasis on technology and innovation that has held greater relevance in recent years.

Questions and choices ahead

Given that energy-led inflation is on the rise with pressures likely to persist, investors might ask if we are about to witness a replay of the mid-2000's "peak oil" and commodity super-cycle. Will the old school become new again, as resource producers become the next EM darlings and index drivers? Or will growth and tech regain and retain the bulletproof armor worn over much of recent history? The savvy EM manager will probably highlight to clients the benefits of owning a piece of both high-potential outcomes, and this is also the case to make for passive index or ETF investments.

For an active manager, whichever of the super-regions proves ascendant, by now it should be clear that individual country choices matter a great deal. Seeking out cheap and profitable companies wherever they are found—"holding your nose" to ignore reckless or unsavory or unaccountable leadership—is an approach that puts a false veneer of sophistication over a fundamental naivete.

When Tech and Environmental, Social, Governance (ESG) Investing Intersect

Dave Harrison Smith, CFA, Executive Vice President, Domestic Equities and lead Portfolio Manager of Bailard's technology strategies, explores the subtleties and depth required to uncover tech companies that are both high quality and responsible.

Build fast and break things is a common mantra among technology leaders. It speaks to the rapid pace of innovation and the fearless embrace of failure as a mere step in the overall process. Like the laws of physics, change is one of the few constants in tech. The last decade has illustrated how quickly the sector can evolve, as well as how massive the implications can be for our society. The scope and scale of today's technology companies means that policies created, as well as actions taken, can have enormous global repercussions. Whether these implications are for the betterment of society is a rather complicated topic, making the unwritten contract between society and technology more crucial than it's ever been.

Investors often believe there is a trade-off between companies that "do good" and stocks that outperform. We couldn't disagree more. In our investment approach, we look for high-quality companies with responsible management teams and a history of strong execution. Within tech specifically, we believe that firms that "do good" have a structural advantage that extends to business results: an ability to build better brands, attract a superior workforce, and less frequently encounter regulatory scrutiny. We maintain that building a responsible investment portfolio in technology can lead to better long-term investment returns via reduced risk and better operating results.

Yet the rapid pace of innovation that we love about the tech sector means responsible investing can be incredibly nuanced and complex. Perhaps the formative example of this occurred in the early days of the semiconductor boom that transformed California's Silicon Valley. Firms that are household names today and technology that is pervasive in our lives was rapidly emerging, and in many cases moving too quickly

We can trace many of the luxuries of modern life to these early scientific developments, but the breakneck pace of innovation meant regulatory bodies were caught playing catch up.

for regulatory bodies to keep up. In 1981, leaks in underground storage tanks were discovered at IBM and Fairchild Semiconductor, which resulted in significant and dangerous water contamination in San Jose and neighboring areas. While the link has never been proven, there have been allegations of a causal connection between these leaks and higher levels of birth defects in San Jose at that time. The discovery prompted not only massive lawsuits, clean-up efforts, and environmental stewardship improvements by the subject firms, but also the development of local and federal regulations to require tech firms to store toxic chemicals in double-walled containers and monitor for leaks.1 We can trace many of the luxuries of modern life to these early scientific developments, but the breakneck pace of innovation meant regulatory bodies were caught playing catch up.

The complexities of rapidly-developing industries mean that one cannot be dogmatic in approach as an investor. Determining whether a company is "doing good" is not straightforward. Let's take the rideshare industry as a modern-day example of this multifaceted

¹ https://www.sfgate.com/bayarea/article/The-valley-s-toxic-history-IBM-trial-is-latest-2826844.php

issue. Rideshare has exploded into our economy on the back of the ubiquitous availability of mobile phone connectivity and, with that explosive growth, regulators and labor groups have struggled to respond with new guidelines. Often the business model of rideshare companies (the "gig economy" as it is known) generates intense scrutiny from regulators and media, with proponents praising the flexibility it offers and detractors claiming worker exploitation. Yet, studies have shown that the positive societal impact of rideshare is enormous. A recent study from the University of California, Berkeley estimated that the introduction of Uber in major cities reduced traffic fatalities by 4.0% overall and reduced alcohol related fatalities by a remarkable 6.1%.²

How do you reconcile an evolving regulatory environment in a nascent disruptive industry with the long-term potential benefits to society? We believe that the combination of deep sector and ESG expertise can provide crucial industry intelligence and help define what a leader looks like in this space, while helping clearly identify which companies are improving their trajectory and working to define good behavior. The rideshare industry has the potential to provide great benefits to society and shareholders, while also creating a fair and safe working environment for its drivers and passengers. These outcomes are not mutually exclusive. In fact, achieving them all will be the key to long-term growth and profitability. Investors and managers cannot rigidly apply backward-looking metrics to the industry, but instead must 'look under the hood' to understand company and industry nuances and trajectory.

This is no easy feat. At Bailard, we combine our deep technology sector expertise and robust history of ESG management to go above and beyond basic screens and scores. We stand confident that our approach is differentiated in three important ways:

 Non-Standard Data (ESG Capture®). The ESG field has come a long way toward standardization over the last decade. Vendors like MSCI and Sustainalytics provide broad and deep datasets.
 Yet, as we discussed above, traditional ESG data can be lacking, particularly in small or newly public companies or in industries undergoing rapid transformation. This underscores the importance of augmenting analysis with non-standard datasets. We have identified several areas within our ESG Capture® process that work well in the technology sector, particularly around workplace sentiment, corporate governance, and real-time controversy monitoring. We believe these alternative indicators of responsible management are highly relevant to the tech sector and provide important complementary perspectives on individual companies. Bailard's work here is always ongoing and we continue to find new ways to innovate and improve our process.

- Transitional Assessments. Subtleties are often not captured in standardized ESG screens. We have noted particular issues with evolving industries and relatively new companies. Our practice is to utilize transitional assessments of technology firms, where we attempt to identify and understand relevant societal, environmental, and governance issues in rapidly changing or nascent industries. For newly-public companies in particular, we have found transitional assessments to be critical, as traditional ESG vendors can have significant gaps in data due to lack of standardized reporting.
- · Engagement. We believe investors can influence companies to behave more responsibly, and we are active members of several investor groups including As You Sow, the Ceres Investor Network, the Interfaith Center on Corporate Responsibility, and CDP (formerly known as the Carbon Disclosure Project). In addition to traditional ESG engagement opportunities, Bailard has begun a program to work with public companies where we observe discrepancies between the company's sustainability track record and the stock's vended ESG scores from major providers. Our teams conduct a gap analysis on vendor score discrepancies and discuss our findings with both the vendor and leaders at the target company. We believe this shareholder activism has the potential to positively influence the company's stock price as ESG data is made current, the vended scores rise, and the shareholder base broadens.

"Build fast and break things" can be a powerful guiding principal that results in rapid code and product development. As we've seen, the global influence and power of the technology sector has never been greater, and actions taken by technology firms can reverberate with global ramifications. We believe that technology firms behaving in a responsible manner will not only exhibit lower risk but have increased potential to outperform in the long run. We also believe that investors can express their values and preference for responsibly-run companies through their investment portfolios while achieving competitive returns.

Given the nuance and rapid evolution of industries within technology, a thorough and thoughtful approach is necessary with collaboration between companies, investors, activists, and stakeholders. We are excited to continue our efforts on measuring, evaluating, and engaging with companies to encourage long term, responsible corporate strategies that encompass and benefit all stakeholders. Done right, investors can express their values via their portfolios, engage to influence companies in a positive direction, and achieve competitive returns in a responsible, principled way.

We believe that technology firms behaving in a responsible manner will not only exhibit lower risk but have increased potential to outperform in the long run.

Closing Brief - Bailard's View on the Economy: We Didn't Start the Fire

Jon Manchester, CFA, CFP® (Senior Vice President, Chief Strategist - Wealth Management, and Portfolio Manager - Sustainable, Responsible and Impact Investing) shares his perspective on the changing economic landscape both at home and abroad.

Billy Joel's Grammy-nominated hit "We Didn't Start the Fire" was released in September 1989, months after the Soviet Union ended a nearly decade-long occupation of Afghanistan and amidst the steady crumbling of the once formidable USSR empire. At a staccato pace, the song journeys through a historical period that happened to roughly cover the Cold War era, a little over four decades of tumult and strife interwoven with great strides for humanity. Over 30 years later, watching Russian tanks roll into Ukraine—a former Soviet republic—one could imagine the song's timeline stretching forward to encompass a new set of globally momentous events. The fire is clearly still burning, as another Cold War (or worse) seemingly gets underway.

Geopolitical risk is nothing new to the markets, but to see a brutal, unsparing ground war unfold in the digital era is nonetheless highly disconcerting and a shock to the interconnected global economy. It has the potential for long-lasting ramifications: generationaltype economic setbacks for Russia and perhaps even enabler countries. Larry Fink, BlackRock's long-tenured CEO, put it simply in his 2022 letter to shareholders: "...the Russian invasion of Ukraine has put an end to the globalization we have experienced over the last three decades." Whether permanent shifts occur in cross-border economic activity remains to be seen. In the short-term, companies and nations are scrambling to distance themselves from Russia. Importantly, the European Union pledged to cut natural gas imports from Russia by two-thirds over the course of 2022, and phase out entirely by 2027.2

We have been through a lot over the past 24 months, yet largely we've been here before in some form, whether it's Russia invading or Afghanistan changing

We didn't start the fire

It was always burning, since the world's been turning

We didn't start the fire

No, we didn't light it, but we tried to fight it

— Billy Joel, 1989

hands or even the flu pandemic a century ago. Today's particular mixture of unstable elements may be new, but Billy Joel's lyrics are in a sense timeless, a reminder that progress is at best a rocky road. The financial markets seemed to recognize this in the first quarter, reacting more negatively to news of higher inflation and interest rates than bombs and bloodshed. In fact, the major U.S. equity indices traded higher from the point Russia invaded on February 24 until the quarter ended. The S&P 500 Index gained 5.6% price-only in that timeframe, trimming its Q1 loss after a techdriven selloff to begin 2022, and adding a data point in favor of the old "buy on the cannon" adage.

Markets are sending largely cautionary signals as geopolitical turmoil swirls and investors attempt to divine the future for inflation and interest rates. The U.S. Treasury yield curve – which is more of a straight line

^{1 &}quot;Larry Fink's 2022 Chairman's Letter," www.blackrock.com, 3/24/2022

^{2 &}quot;Will the Ukraine War Spell the End of Globalization?", www.nytimes.com, 3/30/2022

Flattening Out: Comparing the U.S. Treasury Bond Yield Curve to One Year Ago



Source: Federal Reserve, as of 3/31/2022.

at present from two years out – had just 0.11% separating the 30-year and 2-year notes when Q1 finished. Some parts of the curve have inverted recently, meaning the yield offered for the shorter maturity (2-year, e.g.) was higher than the longer maturity (10-year, e.g.). Historically, an inverted yield curve is a recession warning sign, albeit an imperfect one. Investors who fled to the relative safety of bonds suffered historically-poor returns in the first quarter as rates moved higher: the Bloomberg U.S. Aggregate Bond Index declined 5.9%, its largest quarterly loss since 1980.³

Equity investors were more ambivalent, but ultimately all the major equity indices declined, with international markets faring modestly worse than domestic ones. Value easily outperformed Growth, a continuation of a trend we saw in 2021 within the U.S. mid-cap and small-cap categories, but a reversal for large-cap. Only two S&P 500 sectors rose in the first quarter: Energy and Utilities. West Texas Intermediate (WTI) crude oil jumped 33% to \$100 per barrel, taking the Energy sector along for the ride, after reaching a closing high of

Historically, an inverted yield curve is a recession warning sign, albeit an imperfect one.

almost \$124 earlier in March. Higher crude oil prices translate into elevated input costs across the economy, a headwind for other sectors. Utilities are typically viewed as steady businesses that hold up relatively well in economic slowdowns. Therefore, it wasn't particularly encouraging to see either of those sectors atop the Q1 leaderboard. In addition, the S&P 500 Banks industry group sank 8.1% on a price-only basis, a sign that investors may be assigning a higher probability to a more severe economic slowdown. The Conference Board estimates that U.S. Real GDP (Gross Domestic Product) growth will slow to 3.0% in 2022 from 5.7% last year.⁴

^{3 &}quot;Bond Market Suffers Worst Quarter in Decades," www.wsj.com, 3/31/2022

^{4 &}quot;The Conference Board Economic Forecast for the US Economy," www.conference-board.org, 3/10/2022

Although not a new phenomenon, shrinkflation tends to increase with cost pressures.

Shrinkflation

The Consumer Price Index (CPI) rose 7.9% in February relative to one year earlier, with Core CPI (ex-food & energy) not far behind at an increase of 6.4%. Inflation hadn't run this hot since January 1982, and higher gasoline prices accounted for about one-third of February's increase. Global supply chain struggles persist, complicated further by war in Ukraine. One bit of good news, at least to economists, is that April 2021 marked the last month of less than 5% year-over-year CPI growth readings, setting up for at least tougher comparisons as 2022 unfolds. That will be of little consolation, however, if inflation continues to become entrenched across the economy.

Of chief concern is wage inflation, which grew at 5.6% year-over-year in February, according to the Bureau of Labor Statistics. Fed Chairman Jerome Powell admitted in March that the job market is "tight to an unhealthy level," with more than 1.7 job openings for every unemployed person. The March 2022 unemployment rate was just 3.6%, nearly identical to the pre-pandemic February 2020 rate of 3.5%. There are encouraging signs regarding labor force participation. The participation rate for the key 25 to 54 years-old demographic continued to edge higher, hitting 82.5 in March, just below the 83.0 level from February 2020. For the 55+ years old cohort, the labor participation rate is likewise heading north, easing some of the "great resignation" worries. If these trends continue, wage inflation should moderate and avoid the dreaded wage-price spiral.

In the meantime, companies continue to find ways to combat rising costs. Last year, Frito-Lay reduced

its standard-size Doritos bag by half an ounce, or the equivalent of five chips. The price of the bag remained \$4.29, however. The term for this is shrinkflation, referred to as inflation's "devious cousin" by NPR.5 This practice of package downsizing is common in the food industry, and has been for a long time. Nabisco dropped two ounces from its family size Wheat Thins box, a loss of 28 crackers, and akin to a 14% price increase. Although not a new phenomenon, shrinkflation tends to increase with cost pressures. When online news organization Quartz reached out to Frito-Lay about the scaled-down Doritos bag, a representative said: "Inflation is hitting everyone...we took just a little bit out of the bag so we can give you the same price and you can keep enjoying your chips."6 That sounds like a win-win proposition, until you get to the bottom of the bag and find yourself five chips short of satisfied.

Finally Fed Up

We have liftoff, at last. In March, the Federal Reserve took its first step toward normalizing monetary policy by increasing the target Fed Funds rate to the 0.25% to 0.50% range. This came two years after the Fed slashed the lower end of the target range to 0% in response to the pandemic onset. Prior to the pandemic, the Fed had cut three times in 2019 despite acknowledging at the time that the "labor market remains strong" and with inflation stable – although arguably too low given the Fed's 2% inflation objective. The bias has clearly been to support economic growth and allow inflation to move higher, the latter of which was formalized in 2020 via the Fed's new "average inflation targeting" policy.

With inflation now at a 40-year high, naturally there are questions. To be fair to the Fed, they couldn't anticipate the pandemic and the supply chain issues that have resulted. However, it does seem as though the Fed could have moved off their "zero interest rate policy" (ZIRP) last year, with the economy in recovery mode and vaccine adoption reasonably widespread. Maintaining the Fed Funds rate at zero is really meant for emergency periods, economically speaking, and the Fed has perhaps been too cavalier about using this

^{5 &}quot;Beware of 'Shrinkflation,' Inflation's Devious Cousin," www.npr.org, 7/6/2021

^{6 &}quot;How companies are hiding inflation without charging you more," www.qz.com, 3/10/2022

^{7 &}quot;Federal Reserve issues FOMC statement," www.federalreserve.gov, 10/30/2019

approach. They now run the risk of policy error with inflation running ahead of their ability to tame it.

The current expectation is that the Fed raises aggressively over the remainder of 2022, at all six remaining meetings, taking the target range up to 2.25% to 2.50%. Will this be enough to cool down inflation? The bond market thinks so: current rates for inflation-linked U.S. Treasuries imply annual inflation of 3.4% over five years compared to 5.6% over the next year.8 Chairman Powell pointed to several "soft landings" of the past, instances where rates were raised without tipping the economy into recession. Raymond James economist Scott Brown noted that tighter monetary policy won't do much to help the supply chain, but demand should be slowed, and with aggressive Fed action required the economy may slow more than intended.9

A high inflation, slow growth economic environment would likely prove challenging for equity and bond investors alike. Corporate earnings have been resilient thus far, with S&P 500 Index operating earnings projected to climb 8% this year to \$225 per share. Based on that estimate, the Index traded at a still lofty 20x forward earnings when Q1 wrapped up. With inflation running hot and interest rates presumably heading higher, we should see U.S. large-cap valuations go lower, leaving it up to corporate profits to maintain pace. Equity valuations in other categories remain more favorable, with the S&P MidCap 400 Index, S&P SmallCap 600 Index, and MSCI EAFE Index all clustered around 14x forward earnings. The MSCI Emerging Markets Index trades at closer to 12x earnings.

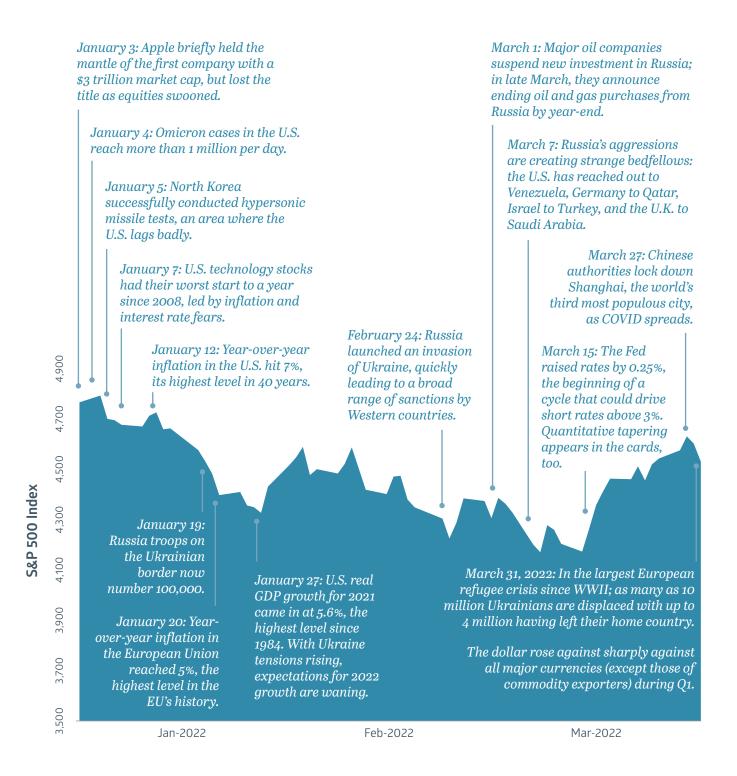
Following three straight years of strong returns, equities may need a breather in 2022. The odds of a recession are on the rise yet remain low in the short-term. New fires will break out as the world is turning, testing the altered global economy's resilience and the tools we have to fight them.

A high inflation, slow growth economic environment would likely prove challenging for equity and bond investors alike.

⁸ Source: Bloomberg, US Breakeven 1 Year and the US Breakeven 5 Year indices, as of 3/31/2022

^{9 &}quot;Weekly Economic Monitor - Soft Landings Are Hard," www.raymondjames.com, 3/25/2022

Q1 2022 World Events WITH THE S&P 500 Index AS THE BACKDROP



Market Performance As of March 31, 2022

U.S. Interest Rates	6/30/2021	9/30/2021	12/31/2021	3/31/2022
Cash Equivalents				
90-Day Treasury Bills	0.04%	0.04%	0.04%	0.50%
Federal Funds Target	0.25%	0.25%	0.25%	0.50%
Bank Prime Rate	3.25%	3.25%	3.25%	3.50%
Money Market Funds	0.01%	0.01%	0.01%	0.17%
Bonds				
10-Year U.S. Treasury	1.47%	1.49%	1.51%	2.34%
10-Year AA Municipal	1.20%	1.24%	1.14%	2.49%
Source: Bloomberg, L.P.				
U.S. Bond Market Total Returns (US\$) through 3/31/2022	QUARTER	SIX MONTHS	YEAR TO DATE	ONE YEAR
U.S. Bonds				
Bloomberg Barclays U.S. Treasury Index	-5.58%	-5.41%	-5.58%	-3.67%
Bloomberg Barclays U.S. Corporate Index	-7.69%	-7.48%	-7.69%	-4.20%
Bloomberg Barclays U.S. Aggregate Index	-5.93%	-5.92%	-5.93%	-4.15%
Bloomberg Barclays U.S. 1-15 Municipal Blend Index	-5.33%	-4.97%	-5.33%	-4.21%
Source: Bloomberg, L.P.	ı	ı	ı	
Global Stock Market Total Returns (US\$) through 3/31/2022	QUARTER	SIX MONTHS	YEAR TO DATE	ONE YEAR
U.S. Stocks				
S&P 500 Index	-5.21%	5.91%	-5.21%	15.63%
Morningstar U.S. Small Value Index	0.85%	7.64%	0.85%	11.67%
Morningstar U.S. Small Growth Index	-14.22%	-13.93%	-14.22%	-13.87%
Morningstar U.S. Large Growth Index	-13.73%	-10.44%	-13.73%	5.79%
Morningstar U.S. Large Value Index	1.19%	10.10%	1.19%	13.61%
International Stocks				
MSCI EAFE (Europe, Australasia, Far East) Index, net dividends	-5.91%	-3.38%	-5.91%	1.16%
MSCI Emerging Markets, net dividends	-6.97%	-8.20%	-6.97%	-11.37%
Sources: Bloomberg, L.P. and Morningstar Direct				
Alternatives (US\$) through 3/31/2022	QUARTER	SIX MONTHS	YEAR TO DATE	ONE YEAR
NFI-ODCE Index*	7.97%	16.58%	7.97%	29.19%
Gold Spot	5.92%	10.27%	5.92%	13.45%
WTI (West Texas Intermediate) Crude Oil	31.81%	33.65%	31.81%	69.51%
	1	1		

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

*Q1 2022 data not yet released. The first quarter return assumed to be same as the Q4 2021 return.

Sources: Bloomberg, the National Council of Real Estate Investment Fiduciaries

DISCLOSURES

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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*.

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