WINTER 2023

SACRS

STATE ASSOCIATION *of* COUNTY RETIREMENT SYSTEMS

INFLATION UNCERTAINTY IS LIKELY TO CONTINUE

Page 14

REGISTER TODAY

SACRS

SPRING CONFERENCE

MAY 9-12, 2023

PARADISE POINT RESORT & SPA • SAN DIEGO, CA

For more Spring Conference information visit sacrs.org/Events/Spring-Conference

CONTENT

WINTER 2023

The opinions expressed herein represent the current, good faith views of the author(s) at the time of publication. All SACRS Magazine articles are for general information only and should not be construed as investment advice or considered a recommendation to buy, sell, or hold any particular security.

SACRS

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SACRS.ORG

EXPLORE THE POSSIBILITIES

Is 2023 flying by for you too? I actually don't mind too much, because it means we'll be together again soon in San Diego for our Annual Spring Conference May 9-12. If you haven't attended before, I hope you'll consider joining us this year. If you're a frequent attendee, I'm looking forward to your return! We are working on an incredible program for you and this one is not to be missed. These are difficult days to navigate for pension administrators and now more than ever SACRS stands ready to share information, help build your network, and provide resources.

Our Spring Conference registration portal for both the conference and hotel rooms at the Paradise Point Resort & Spa are open and space is filling up. Be sure to make plans to attend and visit sacrs.org/Events/Spring-Conference to claim your spot.

Speaking of our conferences, do you have an idea for a speaker or a breakout session? We are always open to hearing suggestions. There is a speaker solicitation form under the SACRS Event tab on our sacrs.org website ready for you to submit your thoughts. We'd love to hear from you.

While you have your calendar out, flip over to July 16-19. Why? Because these are the 2023 dates for our highly-rated Public Pension Investment Management Program, Modern Investment Practice for Retirement Systems, that we host jointly with the world-renowned faculty of UC Berkeley Haas School of Business Executive Education. This is a great course that qualifies for continuing education credits. For more information and to register, go to sacrs.org/Events and select SACRS/ UC Berkeley Program in the dropdown menu.

These are just a few of the activities and events that we have planned for 2023. Make this your year to really explore the possibilities of your SACRS membership and take advantage of all it can do for you!

Hope to see you soon,

Sulema H. Peterson

P.S. This edition of SACRS magazine continues the tradition of articles shared by members. If you have ideas for a story, consider submitting an article! You can do that by contacting me at sulema@sacrs.org.

Sulema H. Peterson, SACRS Executive Director, State Association of County Retirement Systems

SACRS SPRING CONFERENCE
DRAFT AGENDA

TUESDAY, MAY 9

3:00 PM - 5:00 PM

PRE-CONFERENCE TRAININGS

Ethics Training for Trustees and Staff: More Than A Concept

Sexual Harassment Prevention Training for Local Agency Officials

4:00 PM - 5:00 PM

In Solidarity – Labor and Labor Allies Networking

5:30 PM - 6:30 PM

SACRS Welcome Reception

WEDNESDAY, MAY 10

7:00 AM - 8:00 AM

SACRS Wellness Session - Yoga

8:45 AM - 9:00 AM

General Session Welcome

9:00 AM - 12:30 PM

KEYNOTE & GENERAL SESSION

KraneShares Managing Director and General Counsel Ambassador (Ret.) David Adelman

2:00 PM - 4:30 PM

SACRS BREAKOUTS

Administrators, Affiliate, Attorney, Internal Auditors, Investment, Ops/Benefits, Safety, and Trustee

6:30 PM - 9:30 PM

SACRS Annual Wednesday Night Event at Paradise Point Resort

THURSDAY, MAY 11

7:00 AM - 8:00 AM

SACRS Wellness Session - Fun Run/Walk

8:45 AM - 9:00 AM

General Session Welcome, Volunteer Awards

9:00 AM - 12:30 PM

KEYNOTES & GENERAL SESSIONS

Oaktree Co-Founder and Co-Chairman Howard Marks, CFA

Author and Brookings Institution Senior Fellow and Director of Research in Foreign Policy Michael E. O'Hanlon

2:00 PM - 4:30 PM

SACRS Concurrent Sessions

4:30 PM - 5:30 PM

SACRS Education Committee Meeting

4:30 PM - 5:30 PM

SACRS Nominating Committee Meeting

5:30 PM - 6:30 PM

SACRS Reception

FRIDAY, MAY 12

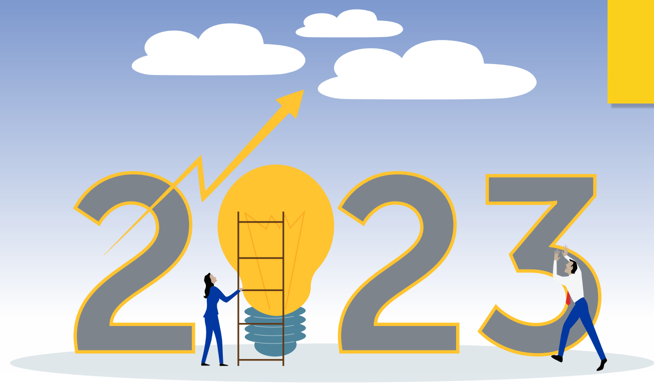
9:00 AM - 10:00 AM

GENERAL SESSION - The Legacy of Public Pensions and the Great Recession

Tyler Bond, NIRS and Todd Tauzer, Segal

10:15 AM - 11:30 AM

SACRS Annual Business Meeting



"Our members are bright, articulate, experienced, and willing to share their knowledge with each other."

MARKETS CHANGE, BUT GOOD PEOPLE ARE CONSTANT

Uncertainty. As we head into the New Year, we are hearing that a U.S. recession is likely before the end of 2023. Things can change quickly in our economy; we could see a slight or major market correction; we could encounter world scenarios or domestic issues that create obstacles resulting in trouble meeting our pension goals.

But I know of one certainty that we can always count on: the people that make up our SACRS organization.

Our members are bright, articulate, experienced, and willing to share their knowledge with each other. And we are growing. Take a look at the list of new affiliates below. Please join me in welcoming them and look for them at our conferences. Get to know them, because networking is a key benefit of being a part of SACRS.

We are fortunate to have an incredible Executive Director in Sulema Peterson. She brings us 20 years and a passion for events, people, and education. Not only does she provide us with leadership, but also did you know she is a leader in her local chapter of Meeting Professionals International (MPI)? Currently, she sits on the MPI Sacramento/Sierra Nevada Chapter's Board as the Immediate Past President, and was President of the chapter during the pandemic, an extremely difficult time for the event industry. She is such an asset to SACRS!

Do you feel as connected to the people of SACRS as you wish to be?

If you don't, I have a recommendation for you. A New Year goal for 2023. Attend both of SACRS' conferences this year and get involved. Consider committing yourself to working with one of our committees. We're always in need of volunteers to help with each of SACRS' committees: Program, Affiliate, Audit, Bylaws, Education, Legislative and Nominating. Have you attended SACRS/UC Berkeley Program? Presented by the world-renowned faculty of UC Berkeley's Haas School of Business, our *Modern Investment Theory & Practice for Retirement Systems* course offers SACRS' members in-depth knowledge on today's successful investment models and strategies. It will be held this year July 16-19.

You have a promise to keep that was made to public employees in retirement, and in times like the one we are in now, where uncertainty is likely to continue, I hope you use ALL that SACRS can offer and lean on the wonderful people that make our Association special.

My best to you in 2023!

Vivian Gray, President of SACRS & LACERA Trustee

List of new affiliate firms *at the time of print;

IFM Investors
TriLinc Global LLC
Sole Source Capital
RBC Global Asset Management
Westwood Holdings Group, Inc
Sagitec Solutions LLC

REIGNITING A SPIRIT OF SERVICE IN A POST COVID WORLD

One of the aspects I enjoy most about serving as San Diego County's Treasurer-Tax Collector, is living a life of service that keeps me connected to the constituents, communities, and organizations I serve. On any given week, I attend and participate in numerous civic and community service organizations. For SACRS, I proudly serve on the board, am chair SACRS' Nominating Committee, and was the immediate past president. SACRS and other volunteer organizations are made up of people dedicated to bolstering the efforts and lives of those in the community, and I love hearing about what issues are top of mind or what projects are being worked on. These valuable human connections keep me on my toes and abreast of important issues.

Recently, however, I've seen firsthand how volunteer-driven organizations have been hit hard by the COVID-19 pandemic. Attendance has plummeted and engagement waned. While many groups moved their meetings to occur virtually, others were halted altogether for a time, and almost all have voiced concern that engagement has been negatively impacted.

There's no doubt that COVID has impacted our social interactions drastically; probably more than any of us have experienced in a lifetime. Curious, I did some research on social trends in recent years. What I discovered was that social interactions were on the decline since before the pandemic hit. With the near-universal adoption of internet use, smartphones, and other technology, this isn't a surprise. People can conduct business, schedule appointments, do banking, and quickly communicate with the device in their hands. Before 2014, people typically spent six and half hours engaged in face-to-face social interactions a week (beyond normal work and home life interactions). In 2014, this started to decline. Then the pandemic hit, and the time people spend "totally alone" shot through the roof. SACRS has certainly been affected by the shift in how people are spending their time. Specifically, the active participation of our 220 Trustee Board members is lower than we'd like. Of our 220-strong Trustee Board membership group, we typically see about 100 Trustees attendees at our events. I think we can do better.

So, as we continue to emerge from the pandemic and recalibrate how we conduct ourselves socially, I'm challenging my SACRS peers to recommit themselves to a spirit of service that gets you out the front door, saying hello to friendly faces, and doing good work together.

“SACRS and other volunteer organizations are made up of people dedicated to bolstering the efforts and lives of those in the community.”

WHY VOLUNTEERING IS GOOD FOR YOU

Volunteering is like anything else: you get out of it what you put into it. The more engaged you are, the more you will reap the benefits in other areas of your life. Here are my top reasons why volunteering is important, and some suggestions on how to do it effectively.

CONNECT WITH OTHERS

Connecting with others is my top reason to get more involved, because COVID-induced isolation is rampant and deserves our time and attention to address and overcome. If the pandemic put a kink in your social interactions and community involvement, becoming more involved with SACRS is a great way to build meaningful connections with your professional peers.

Getting more involved with SACRS will enable you to be in regular contact with other members and will help you develop a solid professional support system. Working on projects together and focusing on shared goals is one of the best ways to make connections and strengthen meaningful relationships.

GET A BRAIN BOOST

Doing good for others feels good. By stepping outside of your usual comfort zone to work with others on a common goal, you'll benefit from a boost of pride, identity, and self-confidence. Volunteering can help you to feel better about yourself, hopefully creating a brighter view of your life and future goals.

IMPROVE YOUR PHYSICAL HEALTH

In addition to brain benefits, volunteering is good for our physical health as well. Research suggests that people who give their time to others might benefit from lower blood pressure and a longer lifespan. A 2013 Carnegie Mellon University study found that adults over 50 who volunteered regularly were less likely to develop hypertension compared to non-volunteers.

Carrying out volunteer work can increase physical activity among those who aren't normally active. Committing to activities provides opportunities to get out of the house and make important social connections; things that are linked to positive health outcomes.

CREATE A SENSE OF PURPOSE

Because volunteering means choosing to work without compensation, people often give their time to issues they feel are important or have a special connection to. Volunteering to address an issue that is meaningful to you can help build a sense of purpose, which further boosts your own happiness. Whatever your reason, volunteering can be an important technique to help give your life new meaning and direction.

ADVANCES YOUR CAREER

In an ever-changing job market, volunteering experience can be incredibly useful. Not only does it show potential employers that you take initiative and are willing to give your time to improve the world, but it also puts you in direct networking proximity to a myriad of other like-minded professionals.

TIPS FOR EFFECTIVE INVOLVEMENT

PITCH IN WITH PASSION & POSITIVITY

When it comes to volunteering, passion, positivity, and a willingness to pitch in are key requirements. Volunteering gives you an opportunity to change people's lives, including your own, and brings you satisfaction of playing a role in something important and needed. By committing to service, you're living your principals. By being proud of what you're working on, sharing ideas, and celebrating milestones, you can create a chain reaction of that same mentality in those around you. Which brings me to our next tip...

BUILD IT INTO YOUR ORGANIZATION

You can influence and encourage a spirit of community service and volunteering in several ways. It can be built into your mission statement, accommodations for time off to volunteer can be given, and volunteer projects and accomplishments can be promoted in your organization's blog, newsletter, social media, and more.

It is important that those working in your organization understand the importance of this core value. If there is a group of people who promote the spirit of service, that sentiment will ripple outwards to others.

“Volunteering gives you an opportunity to change people's lives, including your own, and brings you satisfaction of playing a role in something important and needed.”

"Look for a role, position, or tasks that you would enjoy and can do. Think about the skills you can offer or the skills you'd like to grow. Then see if there's a need you can fulfill."

LEVERAGE YOUR SKILLSETS, WHILE BUILDING NEW ONES

Look for a role, position, or tasks that you would enjoy and can do. Think about the skills you can offer or the skills you'd like to grow. Then see if there's a need you can fulfill. It's important to make sure that your commitment matches to the needs of the organization you'd like to help. For instance, if you're an accountant, you may be able to help with the organization's finances and revenue bookkeeping. If you're a writer or a graphic designer, you might be able to help with marketing and communications. If your strength is administrative work, you might be a good fit to help with the organization's backend operations. If you're not sure how you can help, just ask! Start small and build from there. Working on a myriad of projects, with specific requirements, goals and desired outcomes, will naturally expand and build upon the skills you already have.

SACRS-SPECIFIC INVOLVEMENT IDEAS

Now that you have the why and how, I encourage you to get more involved with SACRS. Here are some ideas:

EVENTS & CONFERENCES

SACRS hosts conferences in the spring and the fall. In addition to attending, seek opportunities to assist with specific events-related efforts. This could be a good opportunity for those who have the time to help with a one-time event, as opposed to a recurring commitment.

LEADERSHIP & COMMITTEES

Check out the Leadership and Committees pages at sacrs.org and see what interests you. The committees are always seeking members who can help now or in the future.

NEWS & PUBLICATIONS

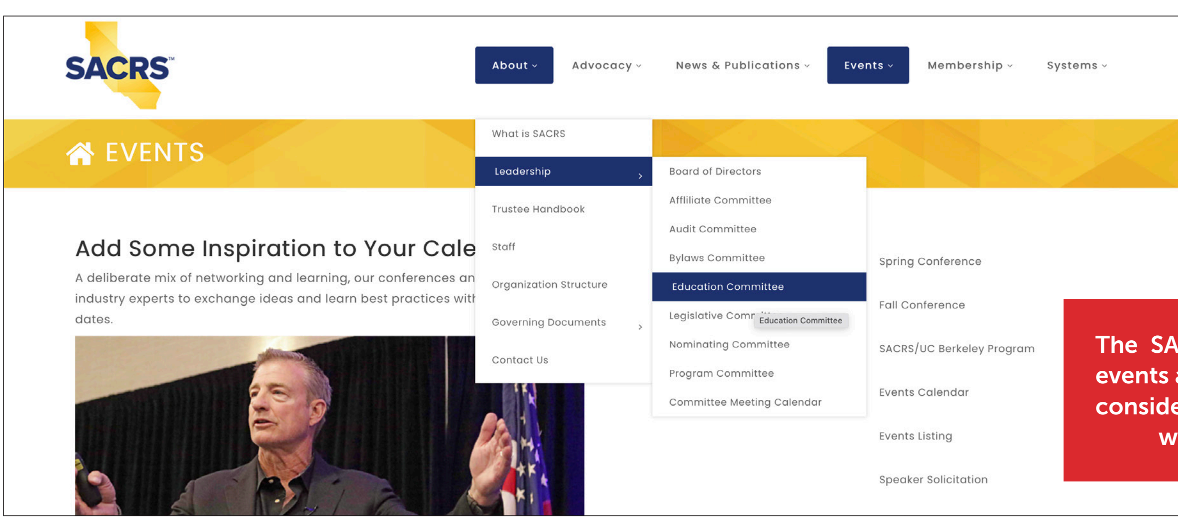
Get more involved and raise your profile by authoring and submitting articles for the SACRS magazine publication.

WILL YOU GET MORE INVOLVED?

SACRS is excited for the future, and we're inviting you to become more involved today. Our work provides valuable education and insight, resources that enable members to be more effective stewards of their systems' pension plans, and we can't do it without the active participation of our members. So, as we move into a post-pandemic world and make positive and lasting changes for the future, please join me in recommitting to a spirit of service in 2023. If you're looking for specific ways to get more involved in upcoming efforts and events, contact SACRS' Executive Director, Sulema H. Peterson at sulema@sacrs.org.

SACRS needs you.

***Dan McAllister**, San Diego County Treasurer-Tax Collector, SACRS' Immediate Past President and Nominating Committee Chair*



The SACRS' website lists events and committees to consider getting involved with. www.sacrs.org

STEPPING BEYOND SACRS

VOLUNTEER OPPORTUNITIES AT SACRS' EVENT CITIES

Hopefully you've gotten the bug to volunteer this year. There are countless ways to be of service, beyond only SACRS opportunities. For those that want to go the extra mile, check out these volunteer opportunities in cities where upcoming SACRS events are being held.

SPRING CONFERENCE

MAY 9-12, 2023

SAN DIEGO VOLUNTEER OPPORTUNITIES

- **Jacobs and Cushman San Diego Food Bank**

  The Jacobs & Cushman San Diego Food Bank and our North County Food Bank chapter provide nutritious food to people in need, advocate for the hungry, and educate the public about hunger-related issues.

  sandiegofoodbank.org/volunteer/

- **Father Joe's Villages**

  Established in 1950, Father Joe's Villages has been a trusted name in San Diego. Father Joe's serves San Diegans experiencing homelessness and poverty, Father Joe's Villages has grown to include a comprehensive campus and scattered-site programs that house over 2,000 people nightly.

  my.neighbor.org/take-action/volunteer/

- **Mama's Kitchen**

  Mama's Kitchen strives to provide nutritional support to San Diego residents at risk of malnutrition due to critical illnesses such as HIV, cancer, congestive heart failure, type 2 diabetes, and chronic kidney disease.

  mamaskitchen.org/volunteer/opportunities/

FALL CONFERENCE

NOVEMBER 7-10, 2023

RANCHO MIRAGE VOLUNTEER OPPORTUNITIES

- **Friends of the Mountains**

  The mission of the Friends of the Desert Mountains is to preserve land, to support education, conservation and research in the Coachella Valley, and to act as the support organization for the Santa Rosa & San Jacinto Mountains National Monument.

  desertmountains.org/volunteer

- **United Way of the Desert**

  To break the cycle of poverty in the Coachella Valley through mobilizing the caring power of community. We envision a healthy and vibrant community, where individuals and families have access to the opportunities to reach their potential through health, education, and financial stability.

  unitedwayofthedesert.org/volunteer-opportunities

- **Barbara Sinatra Children's Center**

  Founded in 1986 by Barbara and Frank Sinatra, the Barbara Sinatra Children's Center, located on the internationally acclaimed Eisenhower Medical Center campus in Rancho Mirage, California, is dedicated to ensuring every child's right to a normal, healthy and secure childhood.

  barbarasinatrachildrenscenter.org/ways-to-help/volunteer/

Nobody Ever Got Fired for **Buying Senior Credit**

> *"In the three years that followed the 2004 to 2006 and 2016 to 2018 rate hike periods, default rates averaged 3.2% and 1.9%, nowhere near the 20-year peak of 8.2%."*

"Nobody ever got fired for buying IBM," is a saying that's been floating around investor circles for decades. The now-legendary catchphrase has been used to imply that IBM was the ultimate safe bet for investors. Likewise, if private markets had a catchy sound bite today, it would have to be, "Nobody ever got fired for buying senior credit." And there are several reasons for this, including:

- Due to its floating rate nature, yields on senior credit increase as interest rates rise.
- Private credit has historically demonstrated resilience and consistent performance through up and down markets.
- The strategy has become more accessible than ever – and it could be just the answer many investors are looking for today.

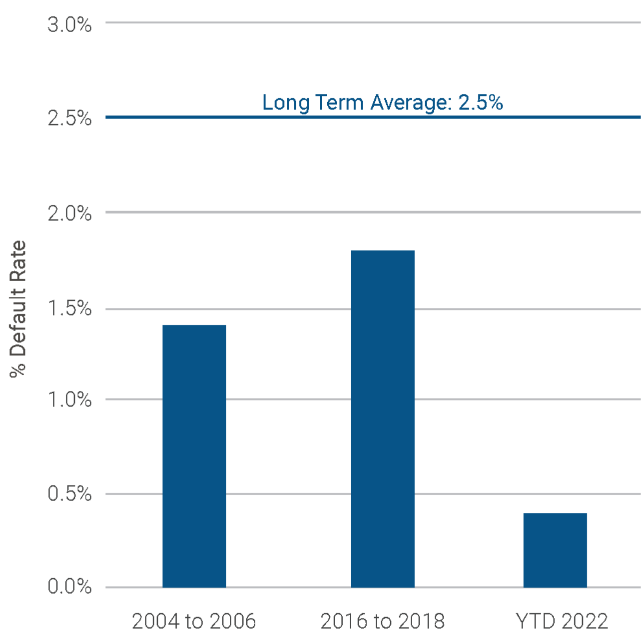
Senior private credit may be that port in the storm for investors

The Federal Reserve's crusade against inflation continues to result in interest rate hikes, which is generally encouraging news for senior private credit investors. For perspective, the industry's reference rate, known as SOFR (or Secured Overnight Financing Rate), began 2022 at 0.05%. This left lenders largely dependent on SOFR floors – which typically ranged from 50-100 basis points (bps) – for pricing protection. In simple terms, a first lien term loan priced at S+500 with a 100bps floor opened 2022 with a 6% annualized yield – i.e., 100bps floor + 500bps. By September 30, 2022, meanwhile, SOFR's 30-day average increased to approximately 2.5% and the forward curve suggests SOFR could peak to ~4.9% by early 2023. The same S+500 deal will see its annualized yield increase to 9.9% – i.e., 490 bps + 500 bps – in roughly a year. Downside pricing protection and no ceiling are some of the many benefits of floating rate senior private credit and investors are currently experiencing increased yield.

We have all heard the expression, "Nothing in life comes free," and yields are no exception. The reality is that increased interest expense could trigger rising defaults, which is an issue of concern for investors. Fortunately, the data suggests that credit quality has historically stayed strong during rate hike periods, which leaves private credit investors with plenty of reasons to remain optimistic.

Looking back over the last 20 years, we have experienced three rising interest rate environments 1) 2004 to 2006, 2) 2016 to 2018, and 3) 2022. By deal count, leveraged loans averaged default rates of 1.4%, 1.8% and 0.4%, respectively, which in all cases was below the 20-year average of 2.5%. In the three years that followed the 2004 to 2006 and 2016 to 2018 rate hike periods, default rates averaged 3.2% and 1.9%, nowhere near the 20-year peak of 8.2%. Recognizing that history does not necessarily repeat itself, manager selection is critical to mitigating performance risk. And, as we mentioned previously, GPs with scale, deal access and investment discipline may be better positioned to prevail.

Average LLI Default Rates



[1] Long-term average period from January 2002 to September 2022

[2] Default rates calculated by the last twelve months (or LTM) number of defaults by total issuers

Source: Pitchbook LCD (September 2022)

Mind the gap: Four ways senior credit can offer downside protection beyond a floating rate hedge

For investors seeking downside protection, risk-adjusted returns and attractive floating cash yield, there are four reasons why senior credit may be the right solution:

1. First lien position. Aside from the advantages of largely floating rate instruments, senior credit also has a lot to offer in terms of structural features that can provide stability and enhance the attractiveness of the asset class as an all-weather strategy. Some of these aspects are relatively intuitive: Senior credit sits at the top of the capital structure in a first lien, dollar one position. While equity and junior debt may offer more upside and return potential, this priority means that senior credit is the last security to be impaired if a company underperforms. And with long-term recovery rates on first lien bank term loans averaging 75%, even in a worst-case scenario, the high potential for capital preservation remains strong.
2. Cash flow. From a cash flow standpoint, senior credit may offer quarterly cash payments and typically provides some level of principal amortization. In addition, as a company pays interest and principal, not only does the company pay down its debt balance – and, by extension, helps reduce its risk exposure – but also the lender's at-risk capital can decrease as it receives cash distributions.
3. Governance. While considerable ink has been spilled over the shift in recent years to covenant-lite structures, senior credit still offers a reasonable amount of controls on the business and sponsor's activities. Financial reporting, distributions out of the business, transfer of assets and incurrence of additional debt are all areas that may be covered under the affirmative and negative covenants in a credit agreement. Granted, even though the devil is still in the details, lenders are nonetheless afforded these important protections.
4. Sponsor capital. Senior credit, especially within the private debt landscape, often sits alongside investments from a private equity sponsor. In addition to providing a cash equity infusion into the business, sponsors typically offer a level of oversight, resources and direction that may otherwise be lacking in a non-sponsored, middle-market business. And while it's challenging to lump sponsor activity into a universally consistent approach, very frequently fresh sponsor capital will be the first line of defense if a company needs additional liquidity.

"There's good news: Senior credit has historically shown a considerable degree of outperformance over the last eight years relative to the leveraged loan index."

Show me the money — and returns

The downside protection notwithstanding, we're commonly asked, "How do the returns of senior credit stack up?" There's good news: Senior credit has historically shown a considerable degree of outperformance over the last eight years relative to the leveraged loan index.

Senior Credit pooled IRR vs PME

Vintage	Senior Credit IRR	Credit Suisse Leveraged Loan Index PME
2014 - 2015	6.9%	4.2%
2016	8.6%	4.6%
2017	8.5%	4.2%
2018	8.7%	4.2%
2019	9.4%	4.8%
2020	16.8%	7.0%
2021	9.0%	3.3%

Source: Hamilton Lane Date via Cobalt, Bloomberg (September 2022)

Note: Please see definitions in ebdnotes

Even measured against the broader index of private credit, senior credit can offer a favorable level of volatility and risk/return measurement as well.

Seven-Year Credit Risk Adjustment Returns

As of 3/31/2022

Asset Class	Annualized Total Return	Annualized Volatility	Sharpe Ratio
All Private Credit	8.1%	6.0%	1.03
Senior Debt	8.4%	4.0%	1.63
Bloomberg Aggregate Bond Index	3.3%	7.9%	0.18
Credit Suisse Leveraged Loan Index	4.1%	7.2%	0.30
Credit Suisse High Yield Index	4.9%	9.1%	0.32

Outperform Public Mkts > 300 bps

Source: Hamilton Lane Data via Cobalt, Bloomberg. Indices used: Hamilton Lane Private Credit with volatility de-smoothed; Hamilton Lane Private Senior Debt with volatility de-smoothed; Credit Suisse High Yield Index; Barclays Aggregate Bond Index; Credit Suisse Leveraged Loan Index. Geometric mean returns in USD. Assumes risk free rate of 1.9%, representing the average yield of the ten-year treasury over the last seven years. (September 2022)

With these return and structural features in mind, you can see why there is increased investor demand for senior credit investment products.

> *"The introduction of the private credit evergreen fund can best be characterized as the democratization of private credit."*

Evergreen funds allow investors greater access to senior private credit — and the potential for safety — than ever before

The introduction of the private credit evergreen fund can best be characterized as the democratization of private credit. Up until recently, private credit was largely accessed through closed-end funds, which were primarily designed for institutional investors due to their larger minimum investment requirements, among other factors. Structurally, closed-end funds differ from evergreen structures as investors or LPs are required to make a capital commitment, which typically gets called over a three- to five-year period. Timing of liquidity for closed-end structures is typically outside of the LP's control and dictated by exit activity, distributions and the GP's decision to recycle capital.

The evergreen structure changed the structural and access paradigm, and has now opened the door to a broader investor base. Structurally, these vehicles are often designed as private, non-traded business development companies (BDCs) with investment minimums as low as $25,000. Upon subscription to the fund (often through a financial advisor), capital is fully deployed. Bear in mind, this is quite different from a traditional fund structure, which draws capital over the commitment period. Further, from a liquidity standpoint, evergreen structures typically offer investors the ability to redeem up to 5% of their net asset value per quarter, giving investors greater control over liquidity as compared to traditional fund structures. Additionally, these vehicles aim to distribute income on a regular basis.

Retail access to credit, however, is not an entirely new construct. While private BDCs are credited with democratizing access, public BDCs have been available on exchanges such as the NYSE or NASDAQ dating as far back as the 1990s. The key differentiators between the private and public BDCs are two-fold: 1) use of leverage and 2) exposure to public markets fluctuations. Private BDCs, or evergreen funds, typically target up to 1.0x leverage, whereas publicly traded BDCs are permitted up to 2.0x leverage based on the Small Business Credit Availability Act. This higher threshold for leverage creates the perception that publicly traded BDCs are riskier. As an example, one dollar lent to a company from a private BDC with 1.0x leverage will include $0.50 of investor equity and $0.50 of leverage. By contrast, a public BDC with 2.0x leverage lending the same dollar will be made up of approximately $0.33 of investor equity and $0.67of leverage.

Market volatility tends to have a greater impact on public BDCs versus private ones, as market downturns can impact public BDC share prices. This can lead to challenges in raising capital, particularly in environments where a BDC's price is trading below book value. Non-traded evergreen funds, on the other hand, are not as susceptible to public markets volatility. As a result, raising capital involves less volatility – assuming both portfolios are equal. One of the investor trade-offs between a public versus non-public BDC is the ability to seek full and immediate liquidity through a public structure as public BDCs can be sold almost immediately, much like any over-the-counter stock.

Ultimately, each structure (i.e., traditional closed-end fund, evergreen structure or public BDC) is designed to accommodate different investor types and considerations. What is consistent across vehicles is their ability to create access to middle-market, senior lending transactions. The bottom line is that investors have more choice than ever with lower access friction, which encourages greater participation and growth opportunities for senior private lending.

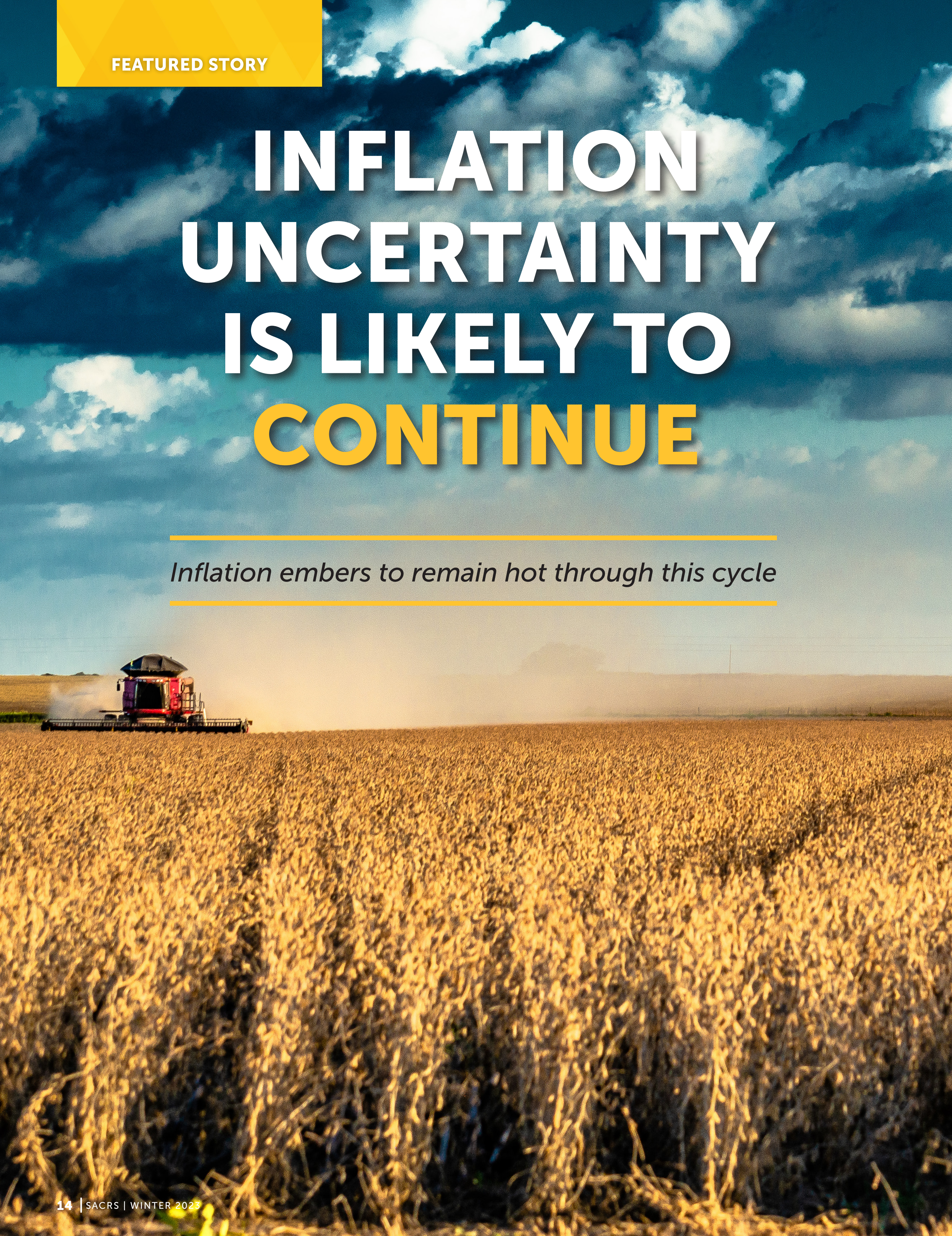
The Wrap: Amid the recent market volatility, investors deserve a break

So where does that leave us? Investors already had a challenging job navigating the increasingly complex assortment of investment strategies and vehicles, even before the macroeconomic uncertainties of the last several months. The volatility concerns and rising interest rates, notwithstanding, investors may find a friend in private credit because of its floating rate nature and the potential for consistency of performance through up and down markets. And if your personal risk tolerance is to avoid getting fired, senior credit may be the right choice for you as well.

***Trevor Messerly** is a Managing Director on Hamilton Lane's Direct Credit Team, where he is responsible for leading the evaluation and due diligence of direct credit investment opportunities. Prior to joining Hamilton Lane in 2015, he was a Principal with Ares Management, where he evaluated and executed private debt transactions in middle market companies. Trevor received an M.B.A. from Northwestern University's J.L. Kellogg Graduate School of Management and a B.B.A. in Finance from the College of William and Mary.*

***Nayef Perry** is a Managing Director and Global Co-Head of Direct Credit based in the firm's Miami office. He is an Investment Committee member and jointly responsible for leading all aspects of the firm's credit platform. Prior to joining Hamilton Lane in 2013, he was a Vice President at GE Capital where he focused on middle-market sponsor-backed leveraged finance transactions. Nayef received an M.B.A. from the Thunderbird School of Global Management and a B.A. in International Affairs from The George Washington University.*

As of October 26, 2022



FEATURED STORY

INFLATION UNCERTAINTY IS LIKELY TO CONTINUE

Inflation embers to remain hot through this cycle

In March 2021 we took a nonconsensus view of inflation, arguing that aggressive stimulus, rapid labor market tightening and past underinvestment in commodities meant that going forward, inflation was likely to accelerate. We firmly rejected the view—widely held at the time—that the emerging inflation in 2021 would prove transitory, the result of temporary COVID-related supply chain disruption.

"The peak in headline inflation has arrived, but core inflation continues to rise and spread."

In this article, we provide an update to our inflation views in which we argue that underlying inflation pressures remain and are likely to feature throughout the current business cycle.

NEAR-TERM INFLATION OUTLOOK

The peak in headline inflation has arrived, but core inflation continues to rise and spread (Figure 1 next page). Recent data suggest that headline inflation has topped out, especially as commodity prices have rolled over. Higher frequency indicators confirm that this trend continued in September. Underlying core inflation pressures remain, however. Recent evidence seems to suggest that for the United States, as headline inflation has cooled with the recent drop in the oil price, non-energy demand picked up thanks to the boost to real incomes from cheaper gasoline prices. In particular, as gasoline prices trend down from their summer peak, this has acted as a "tax cut" for households, and they seem to be using these savings to maintain and boost consumption. This dynamic risks spreading inflation pressures from the initial boost to food and energy to core prices.

The coordinated sell-off across all assets in the first half of this year in our view largely reflects the market's uncertainty about the implications of stubbornly high core inflation. Central banks seem set to continue to tighten financial conditions and drain the COVID-related emergency liquidity until inflation returns close to target (around 2% for most developed markets). This ongoing monetary tightening program has caused bond yields to sell off at the same time as risk assets, leaving investors with nowhere to hide. Either this process continues until a recession happens, or the economy trundles through to a mid-cycle slowdown. In either case, concerns about the nexus between tighter liquidity and higher inflation is causing financial assets to discount significantly higher risk premia.

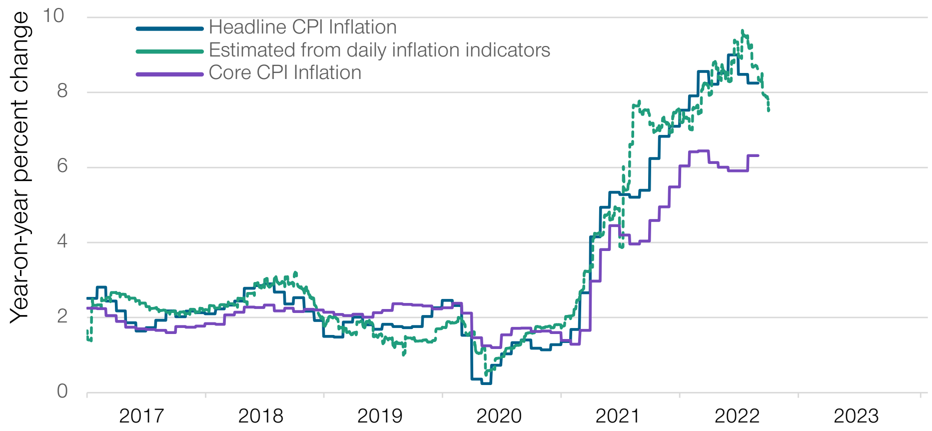
> *Surprisingly, recent estimates from State Street's PriceStats research group suggest that supply disruptions still remain widespread, with a rising number of goods disappearing from supermarket shelves.*

Near-term price relief is coming from parts of the goods sector. Energy prices—along with other commodities— continue to trend lower, and in some cases have returned to beginning of 2022 levels (Figure 2). We have yet to see signs of broad-based discounting in the retail sector, although reportedly retailers are taking steps to help clear inventories ahead of the Christmas shopping season. Finally, at some point the stronger U.S. dollar—which is approaching levels last seen in the early 2000s—should feed into noticeably lower tradable goods prices.

However, despite this relief, we believe that supply conditions are much worse than is generally assumed, with many items disappearing from shelves (Figure 3). Surprisingly, recent estimates from State Street's PriceStats research group suggest that supply disruptions still remain widespread, with a rising number of goods disappearing from supermarket shelves. Research has shown that this reduction in the number of goods available helps to lift inflation in subsequent months. This story of worsening supply conditions is at odds with the popular narrative of oversupplied U.S. retailers. Here, detailed data do confirm a glut of household goods and rising inventories in electronics items. However, those indications of oversupply are masked by the huge decline in available grocery items and medical goods. In our view, this helps to explain why food and other goods inflation remains so stubbornly high.

Headline Inflation Peaked, But Core Ticked Back Up

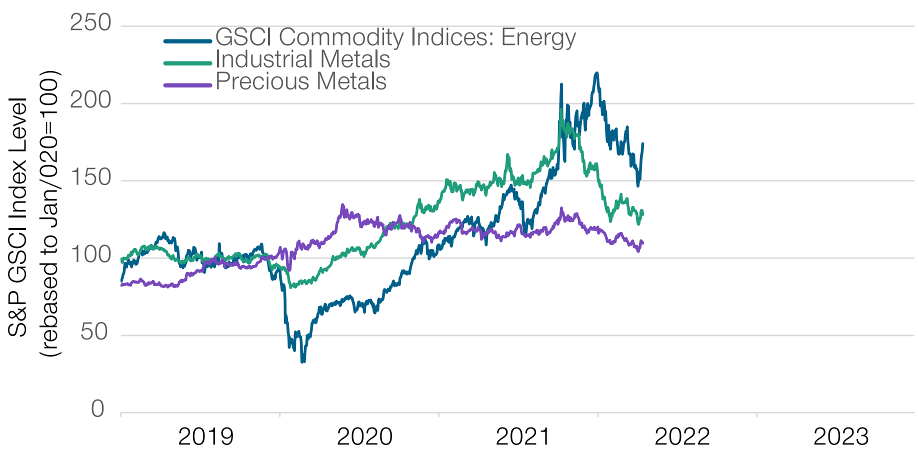
(Fig. 1) U.S. CPI inflation Year-on-Year %



Source: Bureau of Labor Statistics, Haver Analytics, Deep Macro LLC, T. Rowe Price calculations. As of 4 October 2022.

Reflecting A Rollover in Energy and Metals Prices

(Fig. 2) Commodity prices (Jan 2020 = 100)



Sources: Standard & Poor's, Haver Analytics.
As of 7 October 2022.

Additionally, we think agricultural commodity prices are going to remain a wild card into late 2022. Poor weather in Europe threatens the region's agricultural output, particularly in France where the government expects markedly lower field crop production. In the United States, extreme weather has also delayed corn and soybean crops—with middling quality. Moreover, pasture conditions are worsening, which, if it continues, will eventually pressure cattle production. In any event, many of the high frequency indicators that we follow suggest ongoing problems with food supply, reflecting the emergence of many bottlenecks in the sector.

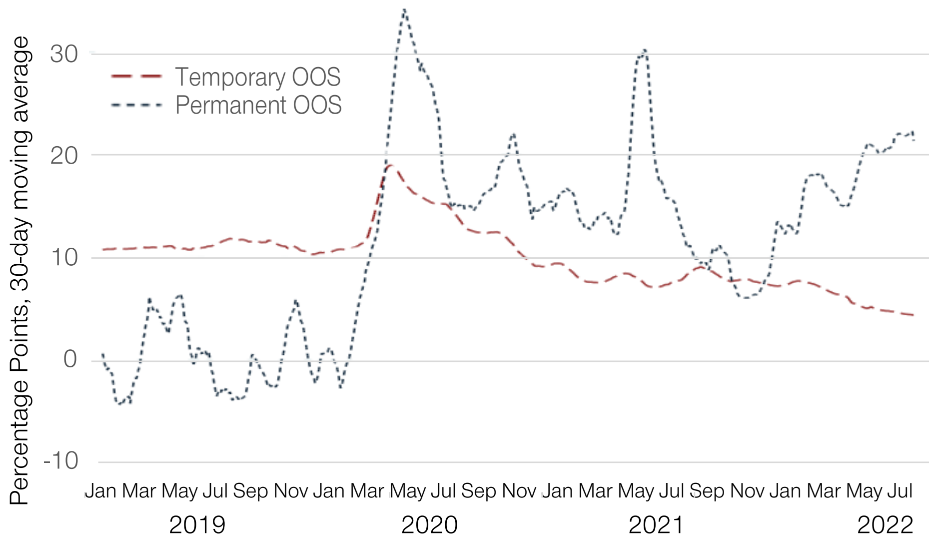
Given the very high level of inflation uncertainty, firms have an easier time maintaining pricing power. Rather than focus on the median point estimate for inflation expectations, a better measure of inflation risk is the volatility of responses around that median. Across a variety of surveys, the dispersion of inflation forecasts is currently extremely wide (Figure 4). This heightened volatility is a worrying sign of inflation expectations possibly becoming unanchored. Already, there are signs in Europe that inflation expectations are becoming unmoored, especially in Britain.

Finally, many forecasters still seem overly optimistic to us regarding the likelihood of a rapid bout of disinflation. Headline inflation forecasts are modestly more realistic, but turning to core inflation, the forecasts still assume a rapid (160 basis point) decline in core PCE inflation from end-2022 to end-2023. A disinflation of this magnitude has only happened three times in the past 60 years. Two of those episodes occurred during or after a recession while the third was during the wage-price controls of the Nixon Administration. Unless the U.S. economy slows very rapidly from this point, it is more likely that we will experience a more muted pace of price declines in 2023.

> *"As core inflation shocks dominate, there is effectively 'nowhere to hide' for investors, as core inflation erodes the value of all assets—stocks and bonds alike."*

Share of Goods That Go Out Of Stock (OOS) Per Month

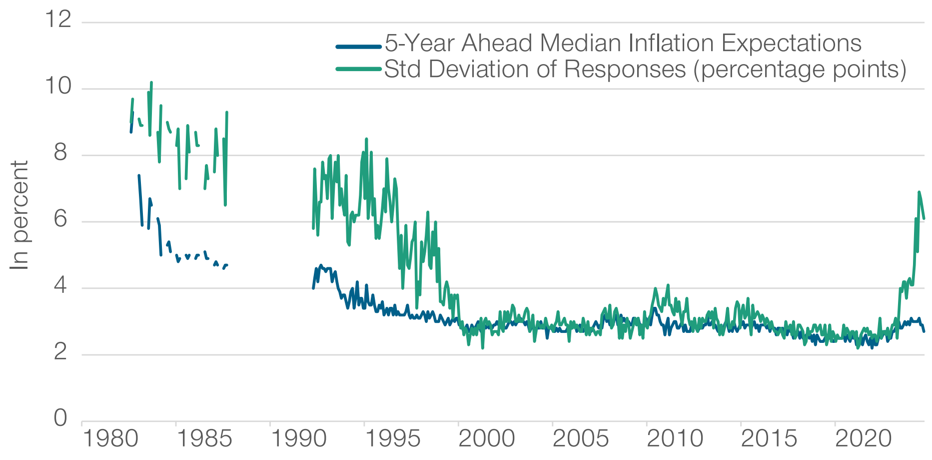
(Fig. 3) Number of goods gone from shelves



Source: Cavallo, Alberto and Oleksiy Kryvtsov, "What Can Stockouts Tell Us About Inflation? Evidence from Online Micro Data." NBER Working Paper Series, No. 29209, September 2021.

Surveys Confirm High Levels Of Inflation Uncertainty

(Fig. 4) Median and standard deviation of expected inflation



Sources: University of Michigan, Haver Analytics. T. Rowe Price calculations. As of 30 Sept 2022.

LONGER-TERM VIEW ON INFLATION

The recent weakness of real assets relative to global equities suggests that the market has largely priced in the inflation shock. Asset markets overall, however, are still grappling with the implications of higher inflation; namely, interest rates that are likely to be higher for longer, implying tighter liquidity and lower valuations. There is an inverse relationship between valuations and inflation, particularly in the current environment. As core inflation shocks dominate, there is effectively "nowhere to hide" for investors, as core inflation erodes the value of all assets—stocks and bonds alike. The current response of asset markets we feel has been more consistent with this interpretation than with pricing in a recession—as longer dated duration has sold off more in the past three months than equities.

The valuation shock has yet to affect most of the U.S. real economy, as employment and income growth has until now remained strong enough to support consumption. A decline in manufacturing employment tends to precede recessions by six months or more. Yet, job growth in this sector remains solid. Additionally, forward looking indicators of investment

"COVID drove an acceleration of retirements for older workers, and once retired they are unlikely to reenter the workforce meaningfully—and certainly not at the same jobs as they once had."

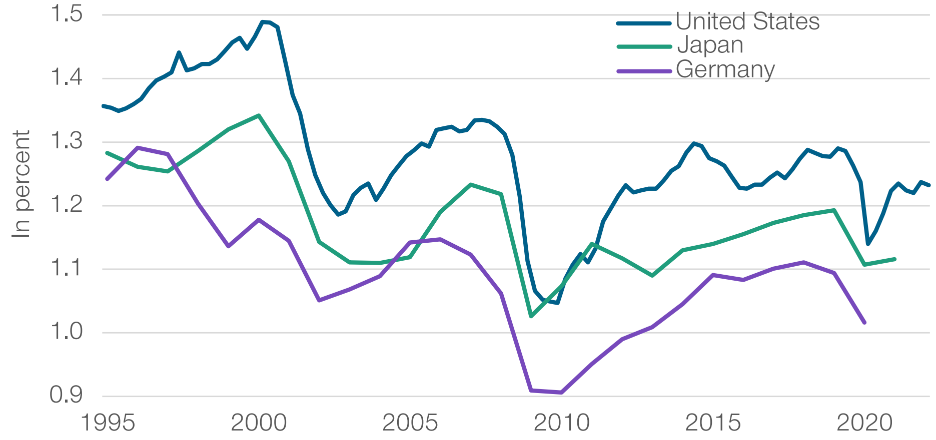
point to continued, albeit modest, levels of capex spending. Importantly, moderating inflation should lift both survey expectations of economic activity and real incomes, helping to self-correct the slowdown. This suggests that core inflation could also remain higher.

Longer-term, because the global economy has not had a proper investment cycle, broad swathes of the supply side remain underinvested. Roughly speaking, most developed economies appear to have underinvested over the past two decades. In the real assets sectors, we believe there is still a shortage of U.S. housing, which may keep shelter inflation structurally higher into the medium-term. On the industrial side, mining and energy companies have only recently increased investment—reluctantly—despite near record high prices for their commodities. According to company reports, many firms today appear to want proof that high prices are durable before they commit to large-scale, multi-year investment projects. At the national level, capex spending has been weak, with capex/DDA (dividends, depletion, amortization) trending lower across most developed economies (Figure 5). Even in China, which had been a source of global capital spending, has seen a marked decline in the business investment, removing a source of global disinflation.

The labor market also remains undersupplied, with an aging workforce and lack of immigration. By all measures, the labor market has already hit its limit, with little spare capacity. COVID drove an acceleration of retirements for older workers, and once retired they are unlikely to reenter the workforce meaningfully—and certainly not at the same jobs as they once had. Younger workers have already largely re-entered, with only men in the 25-44 age group seeing slightly lower participation rates (Figure 6). Yet, this group is also experiencing a long-run, unexplained decline in employment participation compared to that which existed before the pandemic. Thus, unless immigration were to suddenly and surprisingly open up in

20-Year Plus Slide In Global Capital Spending

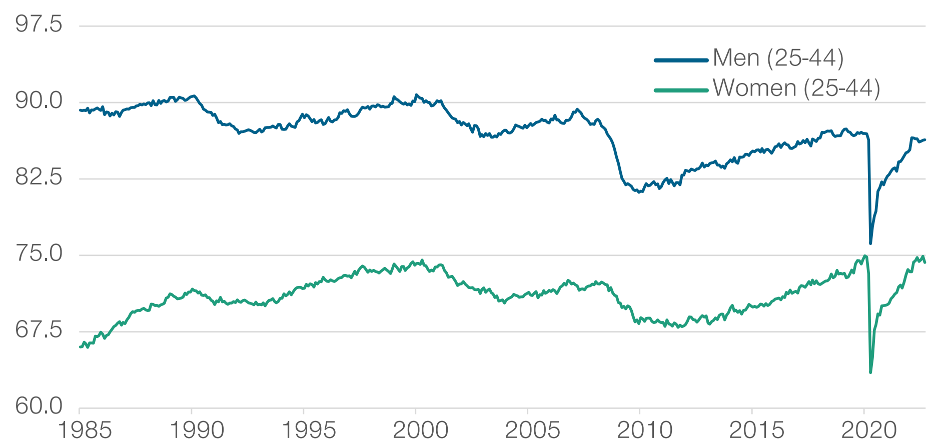
(Fig. 5) Business capex/depreciation, depletion & amortization



Sources: Haver Analytics.
As of 30 June 2022.

Labor Supply Constrained By Long-Run Decline In Prime Age Males

(Fig. 6) Employment as share of population: Males aged 25-44



Sources: Haver Analytics.
As of 30 Sept 2022.

"During downturns, investment typically falls much more than consumption; it would be reasonable to expect the same in any upcoming recession."

the next few years, the U.S. labor market looks set to remain structurally tight, putting upward pressure on wages.

With a constrained supply-side, any growth weakness would likely depress investment spending, further damaging the supply side of the economy. During downturns, investment typically falls much more than consumption; it would be reasonable to expect the same in any upcoming recession. Of course, with business capital spending already not enough to fix capacity issues, so any further cuts to spending worsens the problem in three ways. First, any fall in demand would see only a temporary reprieve in inflation, because as the economy exits the recession, the economy would quickly hit supply constraints. Second, during a downturn, maintenance gets deferred, and the existing capital stock would continue to age and depreciate, creating an even bigger supply problem and need for investment. Finally, the ongoing labor shortage would put an even greater pressure on the physical capital stock as firms would need to scramble to replace workers with machines.

Richard Coghlan is a global solutions portfolio manager within the Multi-Asset Division of T. Rowe Price. He is co-president and a member of the Investment Advisory Committee of the Real Assets Fund. He also is a member of the Multi-Asset Steering Committee.

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AS I SEE IT

Vivian Lin Thurston
William Blair

CHINA: 5 QUESTIONS

China's future growth is uncertain amid risks stemming from domestic issues (structural, economic, and societal), increased tensions with the United States, and deglobalization. And that has investors wondering about the outlook for Chinese equities. What follows are the top five questions investors ask us at William Blair and how we respond.

1

How does China's COVID response affect your investment thesis?

In the near term, China's COVID response is negative for our investment thesis because it has adversely affected consumer and business sentiment, as well as economic activity across segments (including retail, property, manufacturing, and supply chain). I estimate that nearly 70% of China's recent slowdown is attributable to its COVID management.

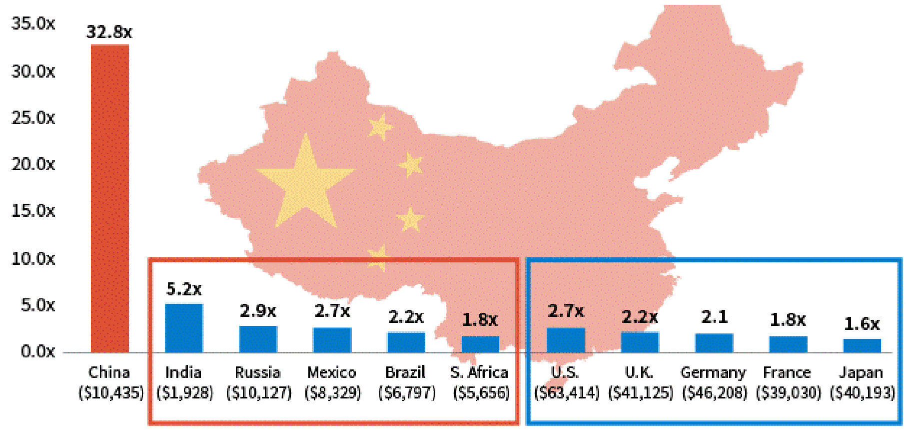
The unemployment rate—particularly among younger people—has increased. This is partly due to the impact of COVID lockdowns on the overall economy (in particular the service industry) and partly due to reduced employment opportunities in the internet industry amid recently increased regulations.

The lockdowns obviously limit consumers' physical ability to get to stores and restaurants and to travel, but the psychological impact from uncertainty around lockdowns is even more severe and likely to be long-lasting. No one knows which city will be locked down next and for how long, and when people have no confidence around the near future, they tend to hunker down and wait. It's therefore not surprising that the household savings rate in China surged to as high as 40% this year from an average of 25% to 30% in prior years (which is high to start with).

> *"China's gross domestic product (GDP) growth will probably be down around 3% this year, and in China, that's the equivalent of a recession."*

Pre-Capital GDP Changes, 1990-2020

China's per-capita GDP (measured in current U.S. dollars) has risen 32.8 times in the past three decades, the highest among the top 70 economies in the world.



Sources: World Bank, Bloomberg, and William Blair, as of February 2022.

China's gross domestic product (GDP) growth will probably be down around 3% this year, and in China, that's the equivalent of a recession. To address the material slowdown of the economy, the Chinese government may have to seek a more effective balance between its COVID policies and economic growth.

We expect China to continue pursuing its "dynamic zero-COVID" policy in the near term, with increased focus on targeted and shorter lockdowns, if needed to reduce the adverse impact on the economy. We may get a clearer understanding of the COVID policy outlook now that the 20th National Congress of the Chinese Communist Party (CCP) has ended. Before an event like this, the CCP tends to take a very conservative approach to managing society; after, there could be more likelihood of change.

China has also gradually relaxed the quarantine requirements for international entries to the mainland to 7+3, which refers to seven days of mandatory quarantine in designated hotels plus three days of self-quarantine at home (previously, it was 14+7).

Hong Kong, meanwhile, has recently removed mandatory hotel quarantine requirements completely (previously seven days), and now only requires three days of at-home self-quarantine. The success of Hong Kong's new quarantine policy could pave the way for China's further relaxation of entry requirement for the mainland.

My Conclusion

China's COVID situation and related policies have negatively impacted the Chinese economy and equities, but we expect a marginally and gradually improved policy going forward. This could help Chinese equities, in my opinion.

2

Is China experiencing a real-estate crisis?

The Chinese property market has been going through a structural deceleration-to-decline phase since the mid-2010s, and in 2022, it experienced an even larger-than-expected decline, exacerbated by COVID lockdowns.

China's property market bubble became acutely evident nearly 10 years ago, reflecting inflated property prices, excessive investments, and low affordability. The Chinese government has since taken measures to address the problem by constraining both supply and demand. For example, land sales by local governments and new home developments have been limited. First-time homebuyers must generally make a 40% down payment, and other homebuyers are not allowed mortgage financing. These measures have effectively cooled China's property market in recent years, resulting in an overall flat to slightly down market.

"Among first-time homeowners, the only eligible mortgage applicants, mortgage penetration is also quite low, at less than 30% (and an average 40% down payment)."

COVID lockdowns exacerbated the property market decline this year, halting purchase and construction activities and materially reducing confidence among homebuyers. As a result, new home sales in many major cities were down 40% to 50% year-over-year in recent years. This is concerning, as it led to a material slowdown of the overall economy (because the property market directly and indirectly impacts 20% to 25% of the Chinese economy.)

As dire as that sounds, this may not lead to a credit crisis like the one that occurred in the United States in 2007 and 2008, because the Chinese housing market is mostly cash-based. Among first-time homeowners, the only eligible mortgage applicants, mortgage penetration is also quite low, at less than 30% (and an average 40% down payment).

In response to the situation, the Chinese government is engaged in a balancing act. The property market is at the epicenter of many industries in China, from construction to infrastructure to consumer spending (because there's a wealth effect). As a result, the Chinese government recently announced measures to support property markets, though it does not want to boost the market too much and risk exacerbating the structural issues.

For example, local governments of more than 20 cities recently enacted a stimulus policy that allows mortgages for all homebuyers (and 20% down payments for first-time homebuyers). The People's Bank of China (PBoC) has also lowered the five-year prime loan rate (which drives mortgage rates) three times in the last 12 months—by 5 basis points (bps), then 15 bps, then 15 bps again.

My Conclusion

China is taking measures to support its property market, so declines are likely to ease—and even if they don't, we're not looking at a subprime crisis.

"From China's perspective, the costs of invading Taiwan could be economically catastrophic, with potential global sanctions and isolation setting China back a couple of decades."

3

What geopolitical concerns should investors consider regarding China (including Taiwan)?

In my opinion, the No. 1 geopolitical concern regarding China is U.S.-China relations, which are entering a new phase—one in which the nations are strategic competitors. Everything else stems from that.

As background, there is the People's Republic of China (PRC), which we all know as China, and the Republic of China (ROC), which we all know as Taiwan. The two separate China regimes, and the current China-Taiwan issue, were a legacy issue resulting from the Chinese civil war, which ended in 1949. At that time, the ROC lost control of mainland China to the PRC, but Taiwan remained under the ROC's governance. However, in China's view, there is only one China, and the PRC is the legitimate representative of China.

However, there has been significant ambiguity when it comes to U.S. relations with both China and Taiwan over the decades. For example, in 1979, the United States established diplomatic relations with the PRC, recognizing it as the sole legitimate government of China. At the same time, U.S. Congress passed the Taiwan Relations Act, which does not guarantee that the United States will intervene militarily if the PRC attacks or invades Taiwan. However, the United States has continued selling weapons to Taiwan.

For China, Taiwan remains the biggest unresolved sovereignty issue. Its official stance toward Taiwan has been that Taiwan is a part of China; China will pursue peaceful reunification and "one country, two systems" with Taiwan; but China does not commit to abandoning the military option, if Taiwan declares independence or foreign forces meddle with the situation.

China, Taiwan, and the United States have maintained the status quo over the past few decades, but it gets challenged from time to time, particularly when U.S.-China relations get tense (as they did when Nancy Pelosi visited Taiwan recently). China usually responds with military drills in public waters around Taiwan (because going into Taiwanese waters would be an invasion).

Further supporting the status quo is the enormous cost of a potential military conflict to all parties involved.

From China's perspective, the costs of invading Taiwan could be economically catastrophic, with potential global sanctions and isolation setting China back a couple of decades. Such an invasion could also be devastating to China's image and stance in the global community (China places considerable cultural importance on "face" and aspires to leadership in the global community). Lastly, an invasion could also threaten China's own societal stability, because a potentially unsuccessful military campaign combined with global sanctions and isolation could easily lead to social unrest.

In summary, I believe the probability of China proactively invading Taiwan is low, especially in the near to medium term, given the high costs mentioned above. However, China could react to provocations that threaten and disrupt the status quo.

From the United States' and Taiwan's perspective, the costs of upsetting the status quo could have a material impact on Taiwanese and related global semiconductor supply chain. It could also lead to potential instability across the Asia-Pacific region.

My Conclusion

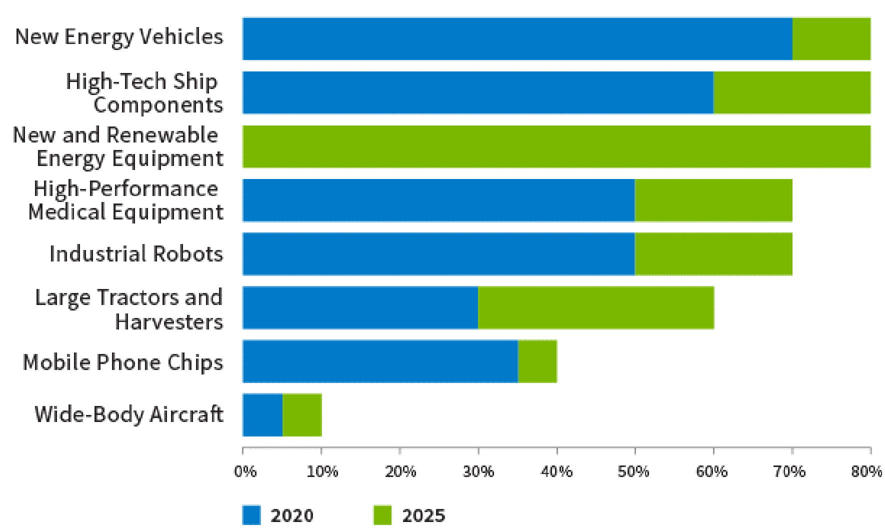
A proactive Chinese invasion of Taiwan is a low-probability event in our view, at least in the near to medium term. But should it happen, the impact would be high, so we need to closely monitor the development.

4

How is the move toward deglobalization affecting China? How do you see it playing out?

Some supply chains left China before the current deglobalization trend began. China used to be the global textile manufacturing center, with major retailers such as Walmart and Target sourcing from the country. But that supply chain started moving to Vietnam and Bangladesh nearly

Chinese Companies' Domestic Market-Share Targets



Source: OECD, as of February 2022.

10 years ago—partly because China was no longer the cheapest producer, partly because China's currency strengthened, and partly because China began focusing on higher-tech industries with less environmental impact.

However, in response to increased deglobalization trends, rising geopolitical risks, and recent COVID disruptions, global companies have started to diversify their supply chains and reduce their dependence on one country (such as China). Even Chinese companies have started to expand their capacity and supply outside of the mainland—in Indonesia, Vietnam, Mexico, and Eastern Europe—in order to better serve overseas demand.

For example, Apple (including its suppliers in China) started to develop new supply chain and manufacturing capacity outside of its key supply country, China, by building capacity in Vietnam and India. However, China remains Apple's largest supplier, with 60% to 90% of Apple components and final products manufactured in China.

China's large and skilled labor force; competitive cost structure; large-scale, advanced infrastructure and technology capabilities; and supportive business environment remain attractive to global companies from a fundamental perspective. Therefore, I believe deglobalization's impact on the supply chain shift could be moderate in the near term, and the long-term evolution could be gradual

My Conclusion

China's role in supply chains is changing, in part because of a natural evolution and in part because of geopolitical considerations. This will affect China, because 20% of its GDP comes from gross exports. This will also affect global supply chains and related global industries that still heavily rely on China. However, I think the trend and effect will both evolve gradually over time. And I don't believe China's goal of further opening up to the world and moving up the value chain changes.

5

Should investors be concerned that Chinese companies' U.S.-listed shares will be delisted from exchanges?

At the end of 2020, with U.S.-China relations worsening, the United States passed a law stating that any company listed in the United States must be auditable by the Public Company Accounting Oversight Board (PCAOB).

China was one of a few countries with large American depository receipts (ADR) listings that could not do so (because of different jurisdictions and laws). Many market participants thought China wouldn't yield, but I had a different view, and was right—China decided to let the PCAOB come and audit those companies.

Following a series of negotiations between regulators and delays driven by COVID travel restrictions, there is a prospective solution currently being tested by U.S. auditors in Hong Kong. Thus far, China has complied with requests for sample data including some of its largest U.S.-listed companies. A determination from the PCAOB is expected by the end of the year, and China has three years from the passing of the 2020 law to be fully compliant.

My Conclusion

China has demonstrated its pragmatic stance to the ADR issue, with the goal of keeping those companies listed globally. I therefore expect it will allow PCAOB auditing to move forward—and with that will come less risk of delisting.

> *"Despite China's uncertain future growth, I think there is reason to be cautiously optimistic."*

Final Thoughts

Despite China's uncertain future growth, I think there is reason to be cautiously optimistic. To recap, here are five key takeaways:

- China's zero-COVID policy has been bad for Chinese equities but could marginally improve.
- China is taking measures to support its property market, so declines are likely to ease—and even if they don't, we're not looking at a subprime crisis.
- A Chinese invasion of Taiwan is a low-probability, high-impact event.
- China's role in global supply chains is changing, and this may hurt in the near term, but China's goal of further opening up to the world and moving up the value chain likely doesn't change.
- China wants its companies listed globally, so will allow auditing to move forward, and with that should come less risk of delisting.

__Vivian Lin Thurston__, CFA, partner, is a portfolio manager for William Blair's Emerging Markets Growth, China A-Shares Growth, China Growth, and Emerging Markets ex China Growth strategies. Previously, she was a global equity research analyst covering the China A-shares market and large-cap consumer companies. Before joining William Blair, she was vice president and consumer sector head at Calamos Investments. Before that, she was an executive director and senior investment analyst at UBS Global Asset Management/Brinson Partners, where she was responsible for stock selection and research for consumer sectors in the United States and emerging markets.

SACRS

FALL CONFERENCE

PHOTO GALLERY

The SACRS 2022 Fall Conference took place at the Hyatt Regency Long Beach in Long Beach from November 8-11. Here's a visual look back at this premier SACRS gathering full of inspiration, education, and networking.


HYATT
REGENCY


Peter Mixon
Ashley Dunning


SACRS
2023
SPRING CONFERENCE


John Kennedy
Pavneet Mac


SACRS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FALL CONFERENCE
NOVEMBER 8-11
TEAMWORK
INTEGRITY
EDUCATION
SERVICE AND SUPPORT


S A C R S
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FALL CONFERENCE
NOVEMBER 8-11
TEAMWORK
INTEGRITY
EDUCATION
SERVICE AND SUPPORT


HYATT REGENCY
FLOOR PLAN


S A C R S


KEEP GOING
KEEP GOING















SACRS
TEAMWORK
INTEGRITY






SHORT TAKES

Conversations with Fall Conference Keynotes

SACRS Fall Conference 2022 featured an incredible lineup of insightful and inspirational speakers. If you missed the presentations, here are a few highlights and key takeaways.

Vikram Mansharamani

> "Two schools that want to lead the world with two different sets of values is not something we have seen before."
> *Vikram Mansharamani*

VIKRAM MANSHARAMANI

In *Navigating Uncertainty: Identifying Opportunities & Spotting Risks*, **Vikram Mansharamani**, a global trend-watcher who shows people how to anticipate the future, manage risk, and spot opportunities, discussed inflation, geopolitics, technology, energy and China with session moderator and SACRS Affiliate Member **Scott Draper**, Partner and Director of Marketing for Algert Global.

SACRS Magazine: In your session, you spoke about how the ability to see across areas of specialization allows you to navigate uncertainty with greater success. Why do you believe that a generalist is better equipped?

VM: Breadth is undervalued relative to depth. I think we have gone too far in our devotion to expertise – we know a lot about very little. We have to stop outsourcing our thinking to experts and we need to reclaim control. We need to know when to rely on an expert and when to rely on ourselves. You need specialists to generate dots, but you need generalists to connect the dots. When facing massive uncertainty, it is better to be a generalist.

I like to say we should keep our experts on tap, but not on top. We need to triangulate through multiple expert opinions, not just one. Because every lens is biased and incomplete, so let's use multiple lenses. And that means tapping into multiple experts, but ultimately, it's about trying to think for yourself to connect the dots, to look for signals amongst the noise. When it looks like chaos, filled with uncertainty, look for deep signals within the noise. Look for trends and things that are changing. If you don't know what your problem is: you need a generalist. If you do know, get an expert in that domain.

SACRS Magazine: In your opinion, how are we doing with our approach to climate change?

VM: We have made wonderful progress in alternative energy and it's happening rapidly. But I have an issue with energy policy. There is a problem with our thinking of climate change. We have gone too far with climate change in the way we have implemented policy. The political agenda we have today is causing complications.

While I believe climate change is real, I think technology, innovation, and creative thinking will address the issue in a forward-future planet. Beating up reliable energy is not the solution. California is ground zero for energy innovation.

SACRS Magazine: Why did you say China is the biggest elephant in the room?

VM: The US – China relationship is going to impact everything. What we have is a great power rivalry. Two schools that want to lead the world with two different sets of values is not something we have seen before. This is a trade war, this is a currency war, this is an economic war, this is a space race, this is an arms race, and this is a geopolitical influence race. This is ultimately a competition of values. And that suggests to me that we are on the path towards a cold or cool or warm war, however you want to define it. One hopes it stays peaceful. But it seems destined for issues and conflict in this rivalry.

With the emergence of two global ecosystems, a Chinese-led ecosystem and then a US- or Western-led ecosystem, there is a risk of trade with countries not in our global economic ecosystem. This is a pattern we have not thought enough about.

And China fully believes that Taiwan is part of China and putting it back is on the agenda. I spend a lot of time thinking about China.

I believe that China is the biggest threat to the American way of life.

Vikram Mansharamani
and session moderator Scott Draper, Algert Global

From left: Sam Spencer, Margaret McKnight and Emi Adachi

> "Global clients care about ESG and it's a growing part of the conversation."
> *Margaret McKnight, StepStone Group*

EMI ADACHI, MARGARET McKNIGHT, AND SAM SPENCER

Three real estate specialists, **Emi Adachi**, Director, Heitman; **Margaret McKnight**, Partner and Head of Portfolio Solutions, StepStone Group; and **Sam Spencer**, CAIA, Investment Division, Oregon State Treasury came together to explore *What's Next for Real Estate?* A variety of topics were covered including how are rising interest rates and global geopolitics likely to impact portfolios and opportunities? What are investors leaning into or avoiding and why?

SACRS Magazine: Is ESG, particularly climate change policy and legislation, affecting real estate investments?

MM: Global clients care about ESG and it's a growing part of the conversation. Looking at social good and economic value, for instance in rental housing, to provide better existence and a more green approach to building. We are also seeing more public-private partnerships (PPP). Make no mistake, for most global clients ESG criteria is included in the decision-making.

SS: There is a focus on diversity and equity through affordable housing too. There is risk, but also we can't ignore the growth markets previously left out to date. We are seeing an explosion in the affordable apartment space. There is pressure to properly align GP and residents. One strategy happening is lower rents – which seems counter-intuitive – but the use of tax abatements make it competitive with the market – and with an amazing yield – it's a win-win solution to preserve rents. It's a better way to do affordable housing.

SACRS Magazine: What are some of the evolving marketplace trends for real estate?

EA: Self-storage remains in demand and there are new specialty sectors emerging. What's next: life sciences, medical, and truck terminals. The aging population will push medical needs and senior housing demand. On the other side, there has been so much talk of Millennials being asset light, but it's a lifestyle out of necessity. The economic reality is Millennials actually are having kids and buying houses, they are adopting these things, it's just happening later.

SS: Going into 2023, I would not bet against traditional office space, although demand is going down. It just needs to be the appropriate footprint. I would swap out for more specialty office and re-examine retail – the trend is toward necessity retail like grocery stores.

I agree demographics will play an increasing role. Besides senior housing, life science, and R & D segment has exploded– but it's more expensive to build. We are starting to see a secondary market growing – it has legs – the demand we see will outgrow the supply.

Debby Cherney

Nashat Moin

Heather Beatty

> “Demand is accelerating for water and a short fall of 40% is anticipated by 2030.”
>
> *Heather Beatty, ScopeFour Capital*

HEATHER BEATTY AND NASHAT MOIN

Debby Cherney, Chief Executive Officer, San Bernardino County Employees' Association, led an eye opening discussion in the session, *Water Resources and the Impact on the Economy* with panelists **Heather Beatty**, Founder, Chief Executive Officer, ScopeFour Capital and **Nashat Moin**, Senior ESG Analyst, Sustainable Investments, Global Fixed Income, Allspring Global Investments

SACRS Magazine: Moderator Debby Cherney opened the session by sharing statistics and a list of headwinds. She cited that according to the World Health Organization, one in three people (2.2 billion) do not have access to safe drinking water and roughly double that (4.2 billion) lack access to safely managed sanitation. Today one-quarter of the world faces extremely high-water stress (>80% of the available supply is withdrawn every year) and over 800,000 people in low- and middle-income countries die each year as a result of inadequate water, sanitation, and hygiene. Headwinds in particular for California include conservation seen as a negative word, climate change, storage problems, changing historical laws with the Colorado River, urban vs. agriculture, and Northern California vs. Southern.

Given this background information, how does water and water concerns show up in investment portfolios?

NM: Water is very important for Allspring investment portfolios to help them achieve their investment goals. ESG is an increasingly important part of how you manage risk. We know water is important and we can see how it turns up in returns. We can't produce energy, apparel, agriculture, etc. without it. There are a lot of ways water affects other areas.

Agriculture is such a big part of California and it's the main use of water. Municipality use is a smaller percentage; in fact urban water use has not increased due to efforts like lo-flow, and no green lawns, even as the population has increased. Some farmers are focusing on lower water intense crops "better crop per drop" whereas some crops, like almonds, are a higher margin per drop.

HB: It's impossible to not be concerned. Of the earth's water, 0.5% is available as fresh water for drinking. Industrial uses have tripled over the last 50 years. Demand is accelerating for water and a short fall of 40% is anticipated by 2030. That's not that far away.

SACRS Magazine: What are some of the issues asset managers should be aware of and learn more about?

NM: There're different types of risks including: physical (like climate events or water contamination); social (like rate setting and affordability); and regulatory, which ties in physical and social, for example: sharing rights between states or countries.

HB: Climate change will be experienced through water. California shares its water with six other states and they are engaged in high-stakes negotiations over the future of the 100-year-old Colorado River Compact ahead of the 2026 expiration of its current Drought Contingency Plan. Severe drought is being experienced every seven years – it used to be about every 50 years. Every state has to think about how to reduce 20-40% of water use or the federal government can step in and impose cuts.

And this isn't unique to us, globally the Rhine, Western Europe's most important waterway, is at a record low, making it too shallow for many ships to pass.

There is work being done to address the water crisis. Water patents have doubled since 1990 and this is promising. In the agriculture industry, innovations in high tech soil moisture, drip irrigation, seed innovation to improve crop yields, and transitions to organic farming, which is better for human health and uses less irrigation, is on the rise.

NM: Yes, we are definitely seeing innovation in California agriculture and a move toward new use of land, as more and more land is being fallowed and reused for things like solar energy.

There are lots of opportunities for infrastructure spend, like sanitation and investment in water solutions. There are also junction points to other things that might be scraped because of water scarcity, like in the semi conductor space and beer manufacturing.

SACRS Magazine: Is there a close tie between stewardship and sustainable investing as investors consider global water threats and financial risks?

NM: ESG integration can help as asset managers look at water use and water risks in investments that may not show up on investment statements. This can lead to high impact stewardship. Is water coming up in the conversation? Do you know what the usage is? What will be the improvements over time? You can make a difference by screening out any company with high water usage. And screen in portfolios devoted to water efficiency, conservation, sanitation, wastewater recycling, and desalination.

HB: World Bank says for every $1 invested in water there is $6.80 in return. For pension plans, of all the companies you're invested in: how many are monitoring and collecting data on water usage? As a pension system, you can make a difference by holding organizations accountable for use of water.

A great resource to learn more is Ceres Investor Water Toolkit, ceres.org/water, the first-ever comprehensive resource to evaluate and act on water risks in investment portfolios.

Admiral Bill McRaven (Ret)

> “As a leader, you have to be strong enough to say: we’re going to reverse course.”
>
> *Retired Four-Star Admiral Bill McRaven, Lazard Asset Management*

RETIRED FOUR-STAR ADMIRAL BILL McRAVEN

Retired Four-Star Admiral Bill McRaven provided *Lessons in Leadership and Geopolitical Insights* as he shared observations from his 37 years of service covering BUDS Training to organizing the raid that killed Osama bin Laden.

SACRS Magazine: In your opinion, are we on a track for a conflict with China?

AM: Yes, if we don’t do anything. Our best hope is for status quo (China as a competitor) but steps need to be taken to tone things down. We are seeing the rise of autocrats in a way that we haven’t seen in quite some time.

SACRS Magazine: Is China acting rationally?

AM: Yes, but not smart. President of the People's Republic of China Xi Jinping sees himself as Mao – he doesn’t view democracy as good. In an autocratic system like China’s, if you look at innovation, unlike Western countries that have freedom of thought, people must stay within lines and they sacrifice innovation.

Those of us that experience freedom of speech know there is no more powerful a quality.

SACRS Magazine: What’s your assessment of the Ukraine invasion by Russia?

AM: I am surprised at how poorly Russia is doing. They are not doing as well as we expected them to be. They are literally taking convicts out of prison and putting them on the battlefield. We overestimated Russian modernization and people and underestimated Russia’s willingness to fight their Ukrainian brothers.

Unfortunately, Russia-Ukraine will be a long war. After less than one year, there were 75,000 killed in action and 25,000 wounded. To put this in perspective, in the 10-year span in Vietnam 58,000 American lives were lost.

In Russia, Putin is seen as protecting Mother Russia, defending her against Western values. Ukrainians are fighting for their homeland. For us in the West, it’s about democratic ideals. Post World War II, nations agreed to play by a set of rules. These rules affect how we nations interact. We are seeing these rules not being followed with the invasion of Ukraine. This is an existential fight, which at some point in time Ukraine, with enough loss of life, will be ready to come to the negotiation table. But we aren’t there yet.

SACRS Magazine: What are a few of the most important qualities in a leader?

AM: Leaders need to allow for dissent. There are times when you need to admit you’re wrong and you have to acknowledge it and retreat. If I am wrong, I expect you to tell me – if I find out later, then you and I will have a conversation. You have an obligation to speak up.

To create this environment – where subordinates challenge decisions – you have to draw them out. And you cannot beat them up in public – if you do, you will have lost them and the others that could provide you advice and counsel.

I always had a Counsel of Colonels – people that had peaked out and had no reason not to speak their minds. Putin has no Counsel of Colonels. You can’t only have yes people around you – you want people to speak the truth, listen to advice, and in some cases it may be the last thing you want to hear. As a leader, you have to be strong enough to say: we’re going to reverse course.

A great leader is a servant leader, where you focus on the needs of others before you consider your own. My job is to make you successful. To make the team successful. To make sure the team has the tools and resources to do the job and give them the latitude to do the job better. If you constrain them, you will miss a lot of opportunities.

SACRS Magazine: Are great leaders born or made?

AM: You have to have servant leadership traits; I think great leaders are born. They know how to inspire. Have tough love. Have compassion. There is a science to leadership. You have to be prepared to work hard, be early in/late out, and not be looking for your own gratification, but to make the team better.

President Volodymyr Zelenskyy, a former actor and comedian with no prior political experience become the sixth President of Ukraine. As a leader, he has all three wartime leadership qualities:

1. Courage
2. Stamina
3. And the ability to communicate to rank and file to tell them why they are doing what they are doing.

These qualities are in his DNA. He knows he has to do these things. He is a natural born leader.

SACRS Magazine: Much has been said about Millennial and Gen Z aversion to authoritative management. What’s been your experience?

AM: I am the biggest fan of Millennial and Gen Z. I know they are thought of as soft, entitled snowflakes, but then you probably have never seen them in Afghanistan. They are just as patriotic and they all volunteered to go to war. They definitely have some traits better than earlier generations. They are entrepreneurial and think they can do anything. For the most part, they are colorblind – they are okay with race and gender differences. If they see something they don’t like, they mobilize. I have tremendous faith in the next generation.

From left: Molly Murphy, Jonathan Grabel and Steve Davis

> “You won’t get it all in one day; each year learn more and take it slow.”
>
> *Steve Davis, Sacramento County Employees’ Retirement System*

STEVE DAVIS, JONATHAN GRABEL, AND MOLLY MURPHY

In the session *CIO Panel: Investment Leadership Through Changing and Unpredictable Markets*, **Molly Murphy**, Chief Investment Officer, Orange County Employees’ Retirement System; **Jonathan Grabel**, Chief Investment Officer, Los Angeles County Employees’ Retirement System; and **Steve Davis**, CFA, CAIA, Chief Investment Officer, Sacramento County Employees’ Retirement System, spoke with moderator **John D’Agostino**, Senior Director, Institutional Sales, Coinbase about the past three extraordinary years. Together they talked about what lessons have been learned and what, if anything, will be different going forward.

SACRS Magazine: Anyone that has less than 15 years experience in managing money may never have seen anything like what we are headed into – are we in unprecedented times?

MM: I don’t think we’re in unprecedented times. For any investment professional that was around for the 2001 tech bubble or the 1970s recession, we aren’t feeling as surprised as someone more junior might.

JG: Not unprecedented, but different. There is the rising cost of capital and a greater thought of asset allocation, when it comes to ESG and the environment. I think the post-war times were the anomaly. I think the new risk is complacency – lack of experience. I think we have to recognize capital markets are changing. We need to spend time to focus on how we implement and how we monitor. We need to look at risk more wholistically.

SACRS Magazine: What advice do you have for trustees?

MM: I’d say, hire great staff. My staff is my filter, even if the board makes the decisions. I include my Millennials and Gen Zs in decision-making.

JG: A cohort younger than I am brings pure energy and the motivation is not only financial. I’ve experienced some of the best teamwork of my career.

Also, a lot of people give advice, be sure you know the motivation behind the advice.

SD: There is a lot to learn. You won’t get it all in one day; each year learn more and take it slow.

Mark Scharenbroich

> "It's more important to be interested than be interesting."
>
> *Mark Scharenbroich, NiceBike.com*

MARK SCHARENBROICH

Human connection is the heartbeat of the business world. Meaningful connections motivate, build trust and inspire change. In *Nice Bike: Creating Authentic Connections*, Mark Scharenbroich of NiceBike.com shared how in a business culture where team members feel connected and valued, retention improves, sales increase, customer loyalty soars, and business grows.

SACRS Magazine: Your Nice Bike motivational concept is all about the importance of "Connections" and how our relationships can help us do a better job. To illustrate this concept, you spoke of a specific company that you have worked with in the past.

MS: There are so many fascinating companies out there, but I highlighted a company called PCA out of Chicago – Packaging Corporation of America – they make boxes. They prefer to call them containers, but it's a box. This company during the Great Recession grew from 7% market share to 9% market share. Although that might not seem like much, it's actually 2.8 billion dollars in sales! That's a lot of boxes.

And here's the cool part: their boxes cost more than their competitor's boxes!

SACRS Magazine: You went on to explain why you highlighted PCA and the importance of core values.

MS: That's right, I asked their national sales manager: How do you take a simple commodity, charge more than your competitor, take market share away, and instead of going down, you grow? Here is what he said: We have three core values.

1. We believe in the golden rule: Treat people the way you want to be treated. People want to work with people who are nice. Always remember, it doesn't take that much more to be nice!
2. We over deliver. We beat deadlines, and we ask the right questions.
3. We are connected. As a team, we are very connected. This box company provides solutions before customers even know they need it. The company is so connected from driver up to CEO. It makes no difference what a worker's title is – they help each other grow and support each other.

This is what we can learn from a box company: Integrity, decency, serve those around you, and over deliver.

SACRS Magazine: You talked about a baker's dozen, which is 13. What does a baker's dozen have to do with relationships?

MS: I challenge people to ask themselves – what is MY 13th donut? What makes you different that people remember you? I believe it is the connections that we make. Once core needs are met, we need to belong to a family, a tribe. Somewhere you don't feel like an outsider.

This is something that can make all the difference. Employees want more than money. They want to be acknowledged. They want to know who I am and what I do matters.

SACRS Magazine: How does someone make a genuine connection?

MS: One way is you "must be present to win." What do I mean by that? Put it this way: It's more important to be interested than be interesting. You must be present to make a real connection. If I ask 10 people a question, typically only one will ask ME a question. Only one wants to hear my story. My suggestion is: Be that one out of 10. Everybody has a story. When you know your people's stories, they'll be with you forever, but you must be present to win.

And always give more than you take, it's that 13th donut. You can make a difference by honoring other people – that is what service and support is. Honoring by creating memorable experiences for others.

How do you connect?

Make it personal. "Nice Bike" is what we want to hear. Who you are and what you do matter. Connect by making it personal. Acknowledge and be fully present. If you can do this, it will transform you and your team into a positive, productive, and cohesive unit.

CONGRATULATIONS!

During the Fall Conference, the SACRS Volunteer Award was presented to SACRS Affiliate Member Scott Draper, Partner and Director of Marketing for Algert Global. Scott was recognized for 25 years of service to SACRS including:

- Affiliate Committee
- Program Committee
- SACRS Member
- UC Berkeley Volunteer

Thank you Scott for sharing your time, efforts, and talents!

A FEW FUNDAMENTALS OF THE FOREIGN EXCHANGE MARKET

The Global Currency Market & the Behavior of Currencies

Institutional investors are progressively increasing their exposure to foreign assets in order to diversify their portfolios and gain access to new opportunities for higher returns. Currency exposures are an unavoidable part of that process. Today, for most institutional portfolios, currencies are the second highest contributor to risk in the total portfolio behind equities.

Currency risk matters and its impact is too big to be ignored.

It is a market quite different in size and scope to traditional asset classes and has a terminology all of its own, which can be indecipherable to investors without daily familiarity. Most particularly, it exhibits behavioral traits altogether different from traditional equity and fixed income markets. The purpose of this article is to help demystify a few aspects of the global currency market.

> **“Though there are ‘electronic communications networks’ (ECNs), the currency market remains more human and less electronic than most other financial markets.”**

THE GLOBAL CURRENCY MARKET

The foreign exchange market is a decentralised, global, predominantly over-the-counter market* for the trading of currencies. It is active almost 24 hours a day in which prices are offered principally by large international banks to facilitate trade between buyers and sellers of currencies.

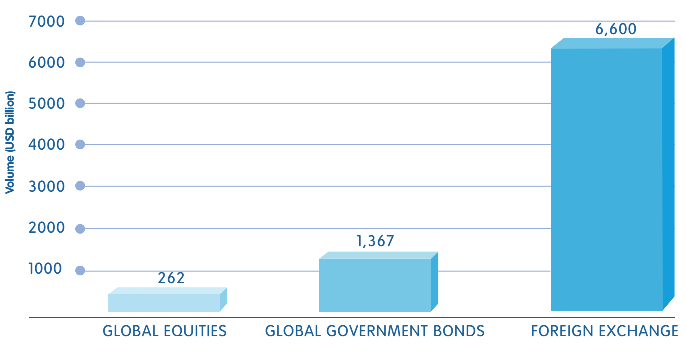
Though there are “electronic communications networks” (ECNs), the currency market remains more human and less electronic than most other financial markets. Many trades are still placed via telephone dialogue.

The market “moves with the sun” throughout the trading day commencing each week on Monday morning in Wellington, New Zealand and finishing on Friday evening in New York, USA.

It is the largest and most liquid financial market in the world and has the cheapest transaction costs of any financial market. Daily annual turnover in global currency markets dwarfs that of global equity and government fixed income markets.

The Bank of International Settlements Triennial Central Bank Survey is the most comprehensive source of information on the size and structure of the global foreign exchange market. (The survey takes place every 3 years and volume statistics were first gathered in 1989).

COMPARISON OF AVERAGE DAILY TRADING VOLUME IN GLOBAL FINANCIAL MARKETS



Source: Foreign Exchange turnover - Bank for International Settlements Triennial Central Bank Survey (April 2019) . Global Equities turnover - World Federation of Exchanges (2018) divided by 260 days. Global Bonds turnover - Securities Industry and Financial Markets Association (2018) and Millennium Global

*As opposed to an exchange traded market

> **"There are approximately 180 recognized currencies in the world although the major currencies make up the vast majority of daily turnover."**

KEY FACTS (April 2019)

DAILY TURNOVER - USD 6.6 TRILLION

TURNOVER ROSE BY ALMOST 30% IN 3 YEARS FROM USD 5.1 TRILLION IN 2016.

THE US DOLLAR IS THE WORLD'S DOMINANT CURRENCY BEING ON ONE SIDE OF 88% OF ALL TRADES*

THE NEXT 3 LARGEST CURRENCIES BY TURNOVER ARE: EURO 32% - JAPANESE YEN 17% - BRITISH POUND 13%

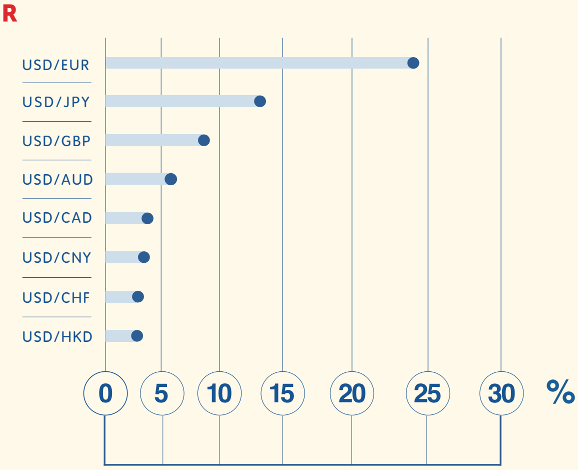
EMERGING MARKET CURRENCIES IN AGGREGATE SUM TO 25% OF TOTAL TURNOVER

THE CHINESE RENMINBI IS THE 8TH MOST TRADED CURRENCY INVOLVED IN 4% OF ALL TRADES

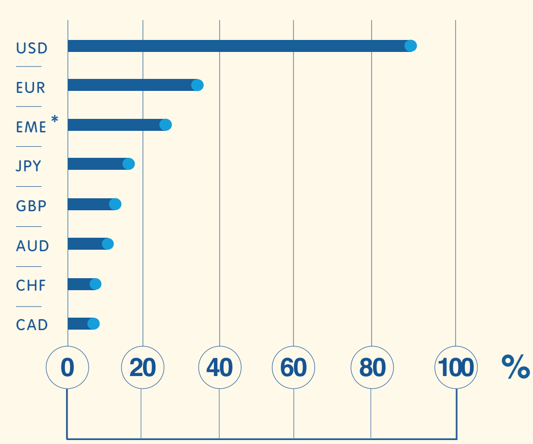
DAILY FX TRADING VOLUME

There are approximately 180 recognized currencies in the world although the major currencies make up the vast majority of daily turnover.

OTC FOREIGN EXCHANGE TURNOVER BY CURRENCY PAIR

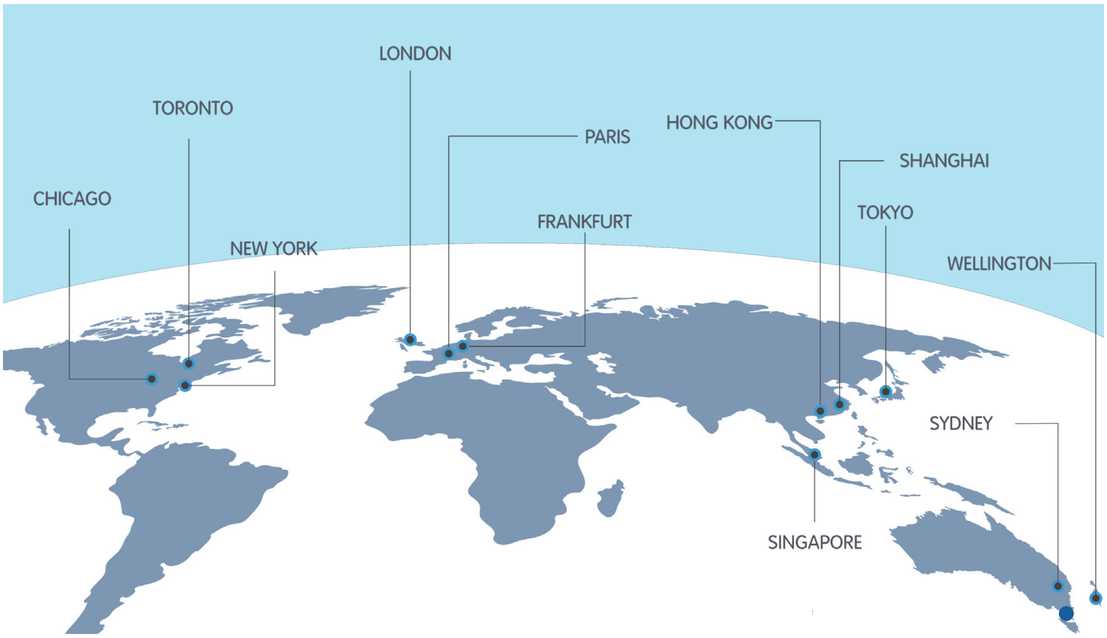


CURRENCY DISTRIBUTION OF OTC FOREIGN EXCHANGE TURNOVER



Source: BIS Triennial Central Bank Survey Foreign exchange turnover in April 2019.

MAJOR GLOBAL TRADING CENTRES OF THE FOREIGN EXCHANGE MARKET



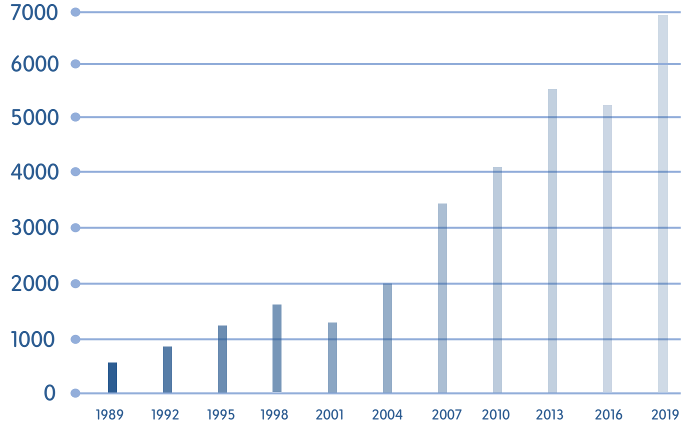
> "London is the center of the foreign exchange market as 43% of all transactions take place there."

Source: Millennium Global, 31 March 2020.

GROWTH IN DAILY FX TURNOVER

The global currency market is not only the biggest but is also among the fastest growing having risen over 12 times since the first BIS volume survey statistics were produced in 1989.

DAILY TURNOVER AT APRIL 2019 EXCHANGE RATES (USD BILLION)



Source: BIS Triennial Central Bank Survey Foreign exchange turnover in April 1989 to April 2019.

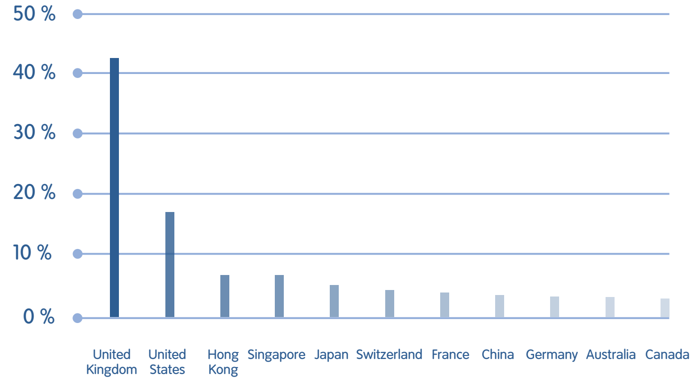
MARKET LIQUIDITY

Given the market's gargantuan size, trading costs are very low for institutional users who are able to achieve "Best Execution". In a normal trading day at the most liquid time, a USD 10 million trade exchanging US dollars for Euros will involve a spread of approximately 0.5 of a basis point or 0.005%. If traded at the official WM Reuters "fix" at 4pm London, the cost is approximately 0.003%.

(In times of financial crisis, these spreads have historically widened significantly as in the case for all financial assets).

GEOGRAPHICAL DISTRIBUTION OF FOREIGN EXCHANGE TURNOVER (% OF TOTAL)

London is the center of the foreign exchange market as 43% of all transactions take place there. Given the market's global dimension and London's time zone position in the middle of the global trading day, it benefits from connections to both the end of the Asian trading session and the start of the North and South American trading day.



Source: BIS Triennial Central Bank Survey Foreign exchange turnover in April 1989 to April 2019.

> “Formally, referred to as the Foreign Exchange Market it is often shortened to ‘Forex Market’, ‘FX Market’ or simply the ‘Global Currency Market’.”

WHO ARE THE PARTICIPANTS IN THE GLOBAL CURRENCY MARKET?

Anyone who makes a cross-border transaction is involved in the global currency market including:

- CORPORATIONS MANAGING THEIR TRADE FLOWS
- PENSION FUNDS AND INSURANCE COMPANIES INVESTING
- THEIR ASSETS OVERSEAS
- FOUNDATIONS AND ENDOWMENTS MAKING FOREIGN INVESTMENTS
- CENTRAL BANKS AND FINANCE MINISTRIES MANAGING ECONOMIC POLICY
- COMMERCIAL AND INVESTMENT BANKS MANAGING THEIR
- GLOBAL OPERATIONS
- HEDGE FUNDS AND PRIVATE EQUITY COMPANIES SEEKING FOREIGN INVESTMENT OPPORTUNITIES
- MIGRANT WORKERS REMITTING WAGES TO THEIR HOME COUNTRY
- TOURISTS VACATIONING OVERSEAS

As global trade has grown and cross border investment has expanded everywhere, the size and importance of the market has increased and continues to do so at a rapid rate. Formally, referred to as the Foreign Exchange Market it is often shortened to “Forex Market”, “FX Market” or simply the “Global Currency Market”.

THE BEHAVIOR OF CURRENCIES

In order to gain a perspective on the options for the effective management of currency exposure, it is useful to first understand how currencies tend to behave in comparison with the traditional asset classes of global equity and government fixed income markets.

Having identified this contrast, some key elements of the various approaches to managing this exposure will emerge.

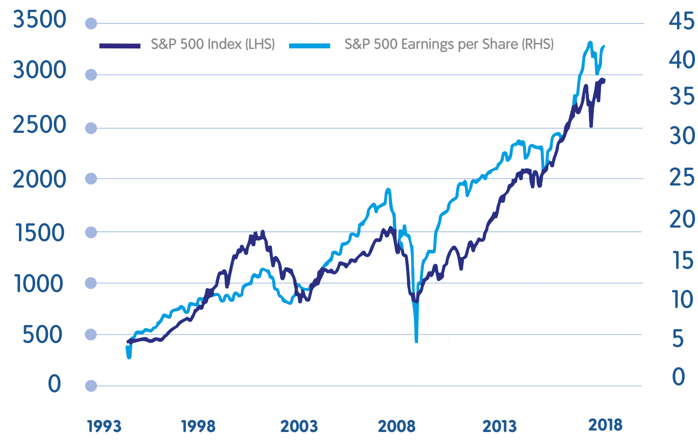
GLOBAL EQUITY MARKETS

Equity markets are essentially a growth process related to the macro economy – GDP growth – and micro economy – corporate earnings – along with a valuation mechanism.

A stake in a publicly traded corporation is an ownership of the future earnings stream and dividend potential of the business which is valued according to its earnings sustainability, volatility and growth prospects.

This growth process can be seen clearly in the chart below which shows the relationship between US corporate earnings and stock prices over the past 25+ years.

S&P 500 vs S&P 500 EARNINGS PER SHARE



Source: Millennium Global and Bloomberg, 1993 to 2019. Sourced on 31 March 2020.

GOVERNMENT FIXED INCOME MARKETS

Behaviourally, these markets are principally tied to the inflation cycle as this is the key driver in the setting of short-term interest rates by central banks upon which the government yield curve is anchored.

Longer term yields on the coupon curve e.g. US Treasury Notes and Bonds, also include adjustments for:

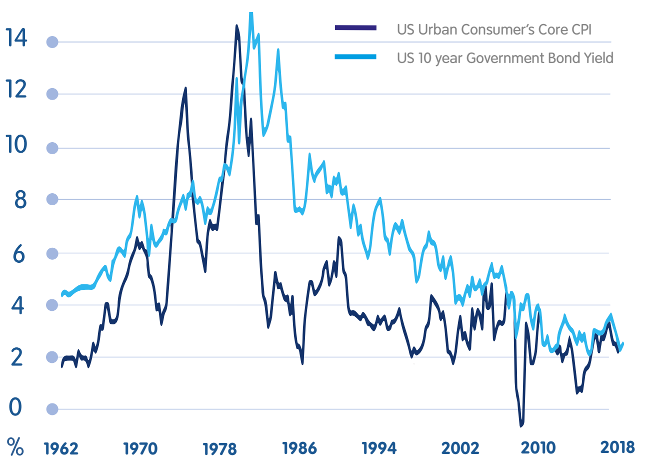
1 - FUTURE CENTRAL BANK INTEREST RATE EXPECTATIONS

2 - TERM PREMIUM FOR TIME TO MATURITY

As most central banks have a legal mandate to manage inflation as part of or as the sole focus of their responsibility, future inflation expectations are a fundamental driver of both the expected path of short-term rates and the degree of term premium built into longer term yields.

The relationship between US inflation and US Treasury Note yields can be seen in the chart below over the past 50+ years.

US 10 YEAR NOTE YIELDS VS. INFLATION

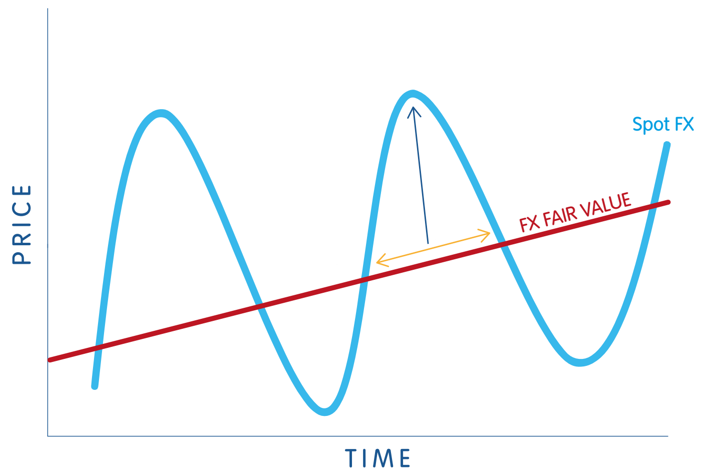


Source: Millennium Global and Bloomberg, 1962 to 2019. Sourced on 31 March 2020.

> **"The movement of currency prices around fair value can be large and long lasting, due to the interaction of the economic cycle in each country or region versus its trading partners."**

THE FOREIGN EXCHANGE MARKET

The essential nature of currency market behaviour is quite different from either equity of fixed income markets and is illustrated by the stylised chart below



Source: Millennium Global.

There are two key driving forces in medium and long term currency market behaviour, namely:

1) COMPETITIVENESS FAIR VALUE.
2) CYCLICAL ECONOMIC FACTORS.

1 **COMPETITIVENESS FAIR VALUE** provides an anchor to currency prices around which spot prices tend to oscillate. Levels of competitiveness change over time driven by the relative change in two primary variables.

A. INFLATION

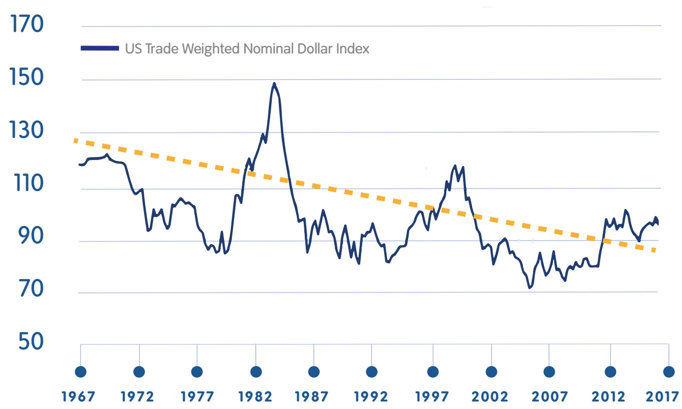
B. PRODUCTIVITY

2 The movement of currency prices around fair value can be large and long lasting, due to the interaction of the economic cycle in each country or region versus its trading partners.

CYCLICAL ECONOMIC FACTORS such as the level of interest rates and bond yields (both real and nominal), trade balances, fiscal policy and economic growth, all interact to drive the currency towards or away from its competitive fair value level.

The chart below of the Trade Weighted US dollar since the early 1970s bears out this behaviour as it is strikingly similar in its essential shape and pattern to the stylised chart above. The cycles are large in length and amplitude, moving by as much as 40% from high to low and spanning over multi-year timeframes.

LONG TERM PERFORMANCE OF TRADE WEIGHTED US DOLLAR INDEX (DXY)



Source: Millennium Global and Bloomberg, 1967 to 2019. Sourced on 31 March 2020.

CASE STUDY

HOW DO CURRENCY MOVEMENTS IMPACT THE TOTAL RETURNS OF INTERNATIONAL ASSETS IN US DOLLAR TERMS

When investing in domestic financial markets, an investor is subject to one source of risk and return – the volatility and change in price of the domestic asset.

When investing in international financial markets, an investor is subject to two sources of risk and return – the volatility and change in price of the foreign asset and the volatility and change in price of the foreign currency.

The total return of the foreign asset in US dollar terms is an aggregation of the return on the foreign asset in local currency terms and the change in the currency value versus the US dollar.

EXAMPLE 1:

A US investor wishes to buy the UK equity market seeing it as a good value investment opportunity.

The following table shows the impact of investing USD 1,500,000 into the UK equity market by separating the two sources of return to a US dollar investor.

NEGATIVE CURRENCY IMPACT ON AN EQUITY PURCHASE

US Investor BUYS UK Equities	Start Date: Purchase of UK Equities	*Value Change*	End Date: Sale of UK Equities	Summary
USD Investement Amount: $1,500,000	UK Equities Value: £1,000,000	+15%	UK Equities Value: £1,150,000	UK Equities Appreciate 15%
Exchange Rate: GBP/USD 1.50				
GBP Investment Amount: £1,000,000	GBP/USD Rate 1.5000	-20%	GBP/USD Rate 1.2000	GBP/USD Depreciates 20%
USD Portfolio Valutation	USD 1,500,000	-8%	USD 1,380,000	USD Investment Return -8%

Source: Millennium Global.

RESULT 1:

While buying the UK equity market was a good decision in British pound terms, it was a loss-making investment in US dollar terms due to the currency weakness.

When making an overseas investment, it is very important to make an assessment of the currency outlook as well as the outlook for the international asset. To make an effective decision, these should be analyzed separately.

Continue →

CASE STUDY

EXAMPLE 2:

A US investor wishes to invest in the German stock market believing that it is a growth opportunity.

The following table shows the impact of investing USD 1,500,000 into the German equity market by separating the sources of return to a US dollar investor.

POSITIVE CURRENCY IMPACT ON AN EQUITY PURCHASE

US Investor BUYS German Equities	Start Date: Purchase of German Equities	*Value Change*	End Date: Sale of German Equities	Summary
USD Investment Amount: $1,500,000	German Equities Value: € 1,250,000	+12%	German Equities Value: € 1,400,000	German Equities Appreciate 12%
Exchange Rate: EUR/USD 1.20				
USD Investment Amount: € 1,250,000	EUR/USD Rate 1.2000	+10%	EUR/USD Rate 1.3200	EUR/USD Appreciates 10%
USD Portfolio Valutation	USD 1,500,000	+23.2%	USD 1,848,000	USD Investment Return 23.2%

Source: Millennium Global.

RESULT 2:

While buying the German equity market was a good decision in Euro terms as it rose 12% in value, it was an even better investment in US dollar terms as the Euro currency appreciated as well.

SUMMARY

In both cases, the international equity markets rose in value in local currency terms. In this example, the UK market performed better than the German market, in local currency terms.

However, the British pound fell while the Euro appreciated versus the US dollar and so the returns in US dollar terms were much more favorable in the case of the German market.

The currency impact was a major determinant in the success of the choice of investment as the currency movements mattered greatly in the calculation of US dollar returns.

In conclusion, when making an international investment decision, the currency implications ought to be carefully analyzed and addressed.

Mark Astley, Co-CEO, Millennium Global Investments is a member of the Board of Directors of Millennium Global Investments. His role includes responsibility for product development, marketing and the growth of the firm. Astley has extensive experience in currency management and has written extensively on this subject and is the author of the recently published 'A Comprehensive Guide to Currency Issues for Institutional Investors'. He regularly participates in media discussion of currency issues and has been a frequent contributor to CNBC coverage of foreign exchange.

KEY TAKEAWAYS

- **THE GLOBAL CURRENCY MARKET IS IS LARGE, LIQUID AND TRANSPARENT AND DWARFS THE SIZE OF TRADITIONAL ASSET CLASSES.**
- **THE US DOLLAR CONTINUES TO DOMINATE TRANSACTION TURNOVER.**
- **AS A RESULT OF THE DEPTH IN LIQUIDITY, TRANSACTION COSTS ARE LOW.**
- **IT IS A MARKET CENTRED IN LONDON BUT IS OPEN THROUGHOUT THE GLOBAL TRADING DAY.**
- **THE BEHAVIORAL NATURE OF CURRENCY MARKETS IS FUNDAMENTALLY DIFFERENT FROM BOTH EQUITY AND GOVERNMENT FIXED INCOME MARKETS.**
- **THE LONG TERM COMPETITIVENESS FAIR VALUE OF COUNTRIES EVOLVES WITH INFLATION AND PRODUCTIVITY DIFFERENTIALS AND HENCE, CURRENCY "FAIR VALUE" CHANGES OVER TIME.**
- **CURRENCIES TEND TO EXHIBIT CYCLICAL BEHAVIOUR AND THESE CYCLES CAN BE LARGE AND LONG LASTING OVER MULTI-YEAR PERIODS.**

State Association of County Retirement Systems

LEGISLATIVE REPORT

Much has already been made about the number of new people elected to the Legislature, with 9 new members in the Senate and 22 in the Assembly from the November election. Combined with those who served only a portion of the 2022 legislative session, we then inch closer to a third of the Legislature being new. This has already had an impact on legislative leadership, with the Assembly Democrats convening two days after the election to hammer out a transition plan for Speaker. The current Speaker, Anthony Rendon will continue to serve as Speaker until June 30, 2023, at which time the new Speaker will be Robert Rivas from the Salinas area. How this plan plays out remains to be seen. Will the current Speaker appoint committee chairs only to be replaced in June? Or will Chairs be appointed based on consultation with Rivas? How will staff be allocated? Will the existing staff of the Speaker stay on board for the new Speaker?

2023-24 LEGISLATIVE SESSION BEGINS

The Legislature reconvened for their Organizational Session on December 5, marking the beginning of the 2023-24 Legislative Session. It is worth noting that legislators for two districts were not present at the swearing in ceremony. That is because the races in Assembly District 47 and Senate District 16 were too close to call. Given that the swearing in ceremony occurred before election results are finalized, no member was officially sworn in for these two districts. At the time of writing, Greg Wallis (R) leads Christy Holstege (D) by 35 votes in AD 47 and Senator Melissa Hurtado (D) has a 12-vote lead over David Shepard (R) in SD 16. Once the results are finalized in these two races, the two new legislators can then be sworn in.

Along with swearing in the new members, the organizational session included formal votes for Caucus leadership and other positions like the Chief Clerk and Sergeant. Legislators also introduced the first bills of session before returning back to their districts for the remainder of the year. One proposal in particular has received significant press attention after the Governor declared a special session regarding high gas prices in California. Senator Skinner introduced the Governor's proposal on the matter, which seeks to deter high gas prices by imposing a civil penalty on excessive margins. The penalty and margin thresholds are to be established by the Legislature when they reconvene. The money collected would then be deposited into a fund that would be redistributed back to Californians.

The Legislature reconvened for 2023 on January 4 and was busy introducing new legislation until the bill introduction deadline on February 17. By this date, we will see upwards of thousand bills introduced from each house.

On January 10, Governor Newsom presented his 2023-24 January Budget proposal. His budget presentation emphasized the somber fiscal outlook the state is facing, including the updated deficit figure of $22.5 billion.

In response to the deficit, the Governor proposed reductions and other cost saving measures in various areas, primarily concentrated in the climate and transportation sectors. Many of the cuts are "trigger reductions" that would be restored if the state's budget situation improves by January of next year.

His proposed budget includes the statutorily required contributions for CalPERS and CalSTRS. This year, that includes $8.5 billion for CalPERS and $3.9 billion for CalSTRS

Since the budget release, the Legislative Analyst's Office (LAO) released a report on the 2023-24 Budget and an updated revenue outlook that anticipates a good chance that the revenue estimates will come in lower than the Governor's estimates, forecasting a deeper budget deficit than the Administration's $22.5 billion. Given this, the LAO recommends that the Legislature plan for a larger deficit by further reducing one-time and temporary spending.

The Legislature will begin holding Budget committee and Subcommittee hearings in the coming weeks.

LEGISLATION OF INTEREST

SB 252 (Gonzalez) – PERS and STRS Fossil Fuel Divestment. Senator Gonzalez reintroduced her SB 1173 from last session. Like last year, this bill applies to CalPERS and CalSTRS and prohibits the retirement systems from renewing or making new investments in fossil fuel companies as well as requiring them to liquidate existing investments by July 1, 2030, among other requirements. The bill was introduced as part of a package of climate legislation..

Michael R. Robson *has worked since 1990 in California politics and has been lobbying since 2001 when he joined Edelstein, Gilbert, Robson & Smith LLC. Prior to joining the firm, he began a successful career with Senator Dede Alpert as a legislative aide soon after she was elected to the Assembly in 1990. He became staff director/chief of staff in 1998, while the Senator served in the position of Chair of the Senate Appropriations Committee. He is experienced in all public policy areas with particular expertise in environmental safety, utilities, revenue and taxation, local government finance, education, and the budget.*

Trent E. Smith *worked for over 12 years in the State Capitol prior to joining the Edelstein, Gilbert, Robson & Smith LLC. He started his career in 1990 working for the well-respected late Senate Republican Leader Ken Maddy. He was later awarded one of 16 positions in the prestigious Senate Fellowship Program. Upon completion, he started working in various positions in the State Assembly. He worked as a Chief of Staff to Assembly Member Tom Woods of Redding and later to Orange County Assembly Member, Patricia Bates, who served as Vice Chair of the Assembly Appropriations Committee. In this position, he gained a unique and valuable knowledge of the State budget and related fiscal policy matters. In addition, he has extensive experience in numerous policy areas.*

Bridget McGowan *joined Edelstein Gilbert Robson & Smith in 2018. Prior to joining the firm, she gained policy experience in the California State Assembly. Through internships in the district office of her local Assemblymember and later, in the office of the Chief Clerk, McGowan developed her knowledge of California's legislative process, rules and procedures. A graduate from UC Davis in 2018 with a Bachelor of Arts in International Relations, she is currently pursing a Master of Public Administration from the University of Southern California Price School of Public Policy.*

HIGH YIELD

IS WORTHY OF ITS NAME AGAIN

Yields are currently approaching 10% pa in high yield credit, which potentially offers ample compensation for default risks even if defaults were to rise to crisis levels. Insight Investment believes it is time for investors to seriously consider high yield investing.

TIME TO GRAB HIGH YIELD NOW WHILE SPREADS LAST?

The high yield market has become impossible to ignore, with index yields now approaching 10% per annum, as an aggressive Federal Reserve (Fed) hiking cycle has pushed up yields (Figure 1).

Even if defaults were to pile up, say to 2008 levels, (we do not think that will happen, instead we expect defaults to revert closer to historical averages), high yield may still deliver at least an equal return to BBB credit (assuming a conservative 35% recovery rate on defaults) (Figure 2).

This may come as a surprise, because historically, high yield index default rates have only averaged 1.5% over the last 15 years (Figure 3), and only ever exceeded 5% once since the 2008 crisis. Most people think default rates are higher because ratings agencies typically report 3%-5% default rates. This estimate is based on the entire universe of entities that have paid for a rating, but most of these are not actually included in popular high yield indices.

Figure 1: Yields on high yield credit are becoming difficult to ignore [1]

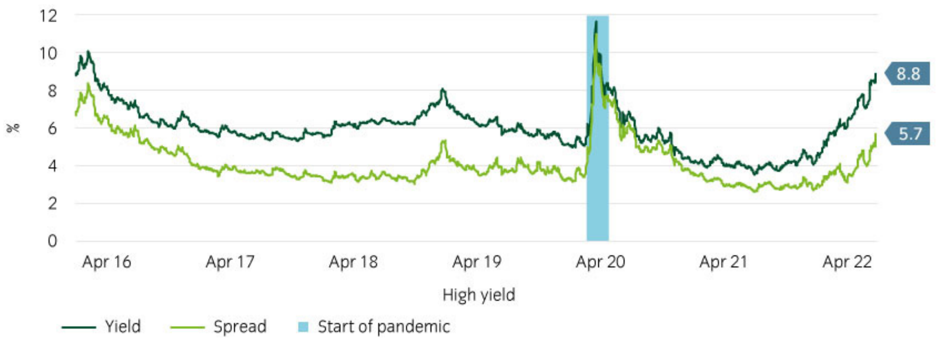
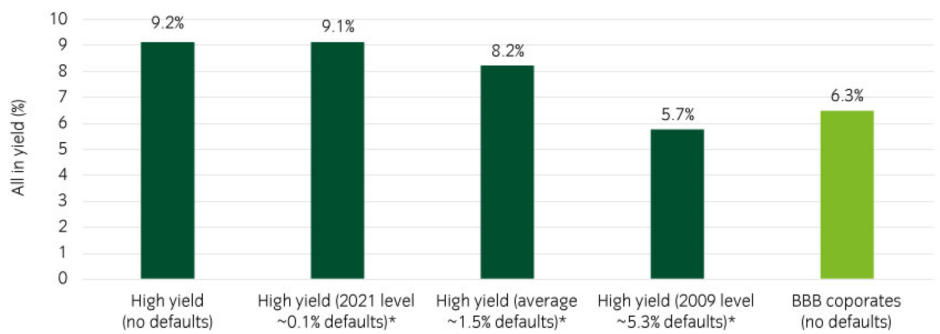


Figure 2: It would potentially take 2008-level defaults for high yield to deliver the same returns as BBB corporates [2]



BOTTOM-UP HIGH YIELD FUNDAMENTALS LOOK RESILIENT, EVEN IF THE TOP-DOWN ENVIRONMENT DOES NOT

Even as the Federal Reserve aggressively raises rates, corporates are shielded to an extent. Few have had to raise new debt since interest rates spiked (high yield issuance is down 73% year-to-date).

Most issuers took the opportunity to lock in fixed rate debt and longer maturities during 2020 and 2021, when yields were at record lows. In fact, almost 60% of bonds in the high yield index were issued in those two years (Figure 4). Further, the average duration has risen from three years just before the pandemic to four and a half years.

This has helped corporates keep their leverage metrics historically low (Figure 5 next page). Inflation, in some cases, has only helped by "inflating away" debt in the cases that corporates are able to pass inflation on to consumers and grow their top lines.

Figure 3: Default rates in high yield are historically lower than you might think [3]

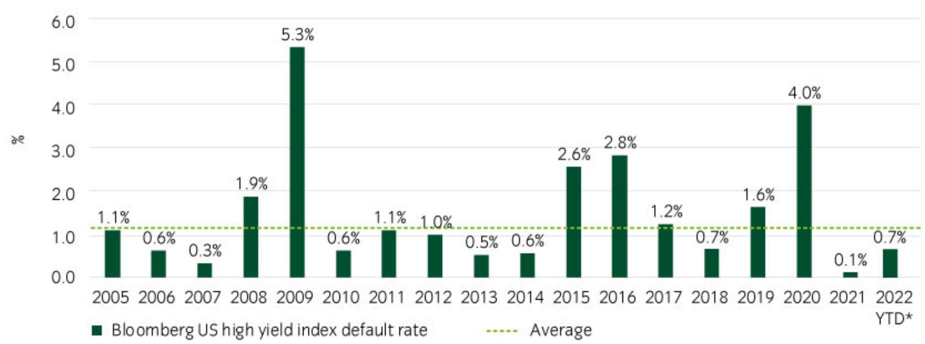
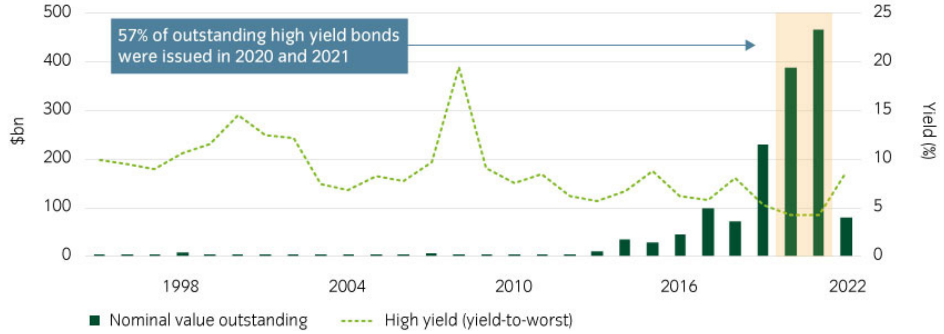


Figure 4: Most high yield debt outstanding was fixed at record low rates [4]



CROSSOVER CREDITS COULD BE AN EXCITING "OVERWEIGHT" WITHIN HIGH YIELD

While investors consider a high yield allocation, we believe they should also consider a structural "overweight" to crossover credits, given inefficient trading patterns.

"Fallen Angels" (bonds downgraded from investment grade to high yield) suffer forced selling from investment grade accounts when downgraded. This creates opportunities to purchase them cheap relative to their BB peers.

"Rising Stars" (high yield bonds upgraded from high yield to investment grade), can conversely enjoy "forced buying" as they enter the investment grade index. Owning them in advance may allow an investor to benefit.

Historically, Rising Stars have been almost twice as likely to be former Fallen Angels [6]. In our view, this creates an opportunity in allocating a high yield overweight to the sector.

We do not expect Rising Stars to run out of fuel anytime soon. Even as economic concerns have risen, Rising Stars have still been outpacing Fallen Angels 2022 (Figure 6).

Figure 5: Corporate fundamentals are starting from a strong position [5]

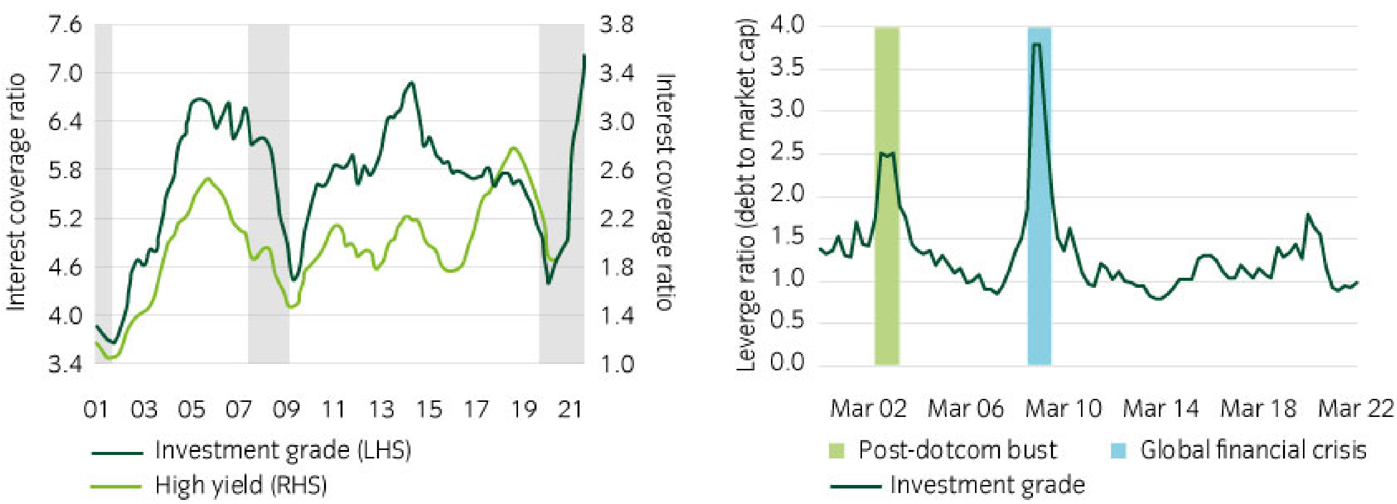
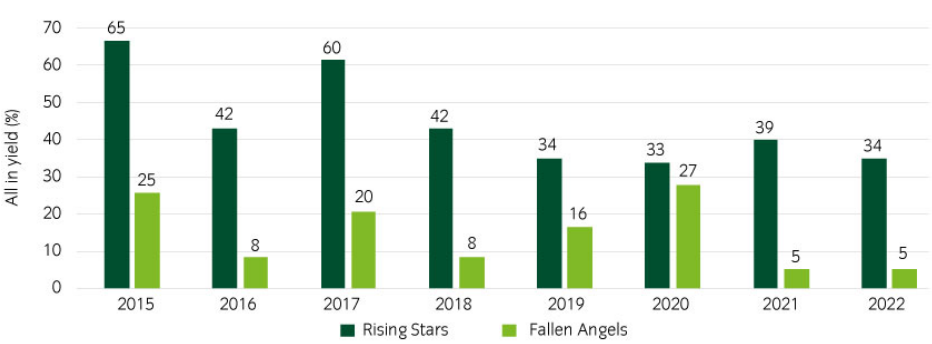


Figure 6: Rising stars have not run out of steam over 2022 [7]



> "As extraordinary monetary policy normalizes, high yield may look more attractive than equities, given returns are mostly based on predictable income, rather than price moves."

We expect to see more of a balance in the upcoming 12 months, which would be ideal for high yield and Fallen Angel strategies looking to exploit pricing inefficiencies in the crossover credits.

HIGH YIELD COULD SUPPLANT EQUITIES AS THE RISK ASSET CLASS OF CHOICE

Monetary policy lifted all boats over the last decade, and equity markets were a major beneficiary (Figure 7, left chart).

However, it is worth noting that in the previous decade (a mostly "pre-QE" era), high yield returns were not too different, at ~9% pa. Equity returns, however, were 2% pa rather than 16% pa (Figure 7, right chart).

As extraordinary monetary policy normalizes, high yield may look more attractive than equities, given returns are mostly based on predictable income, rather than price moves.

FULLY REALIZING THE YIELD AVAILABLE IS TRICKY – CONSIDER AN EFFICIENT BETA APPROACH

Active and passive strategies have historically struggled to match high yield index returns, primarily due to low liquidity when trading over-the-counter (OTC) resulting in a punitive drag from transaction costs.

This has been the case since new banking sector regulations took effect after the 2008 crisis. During difficult market conditions,

Figure 7: High yield returns in the last two decades have been consistent, but equity returns have not [8]

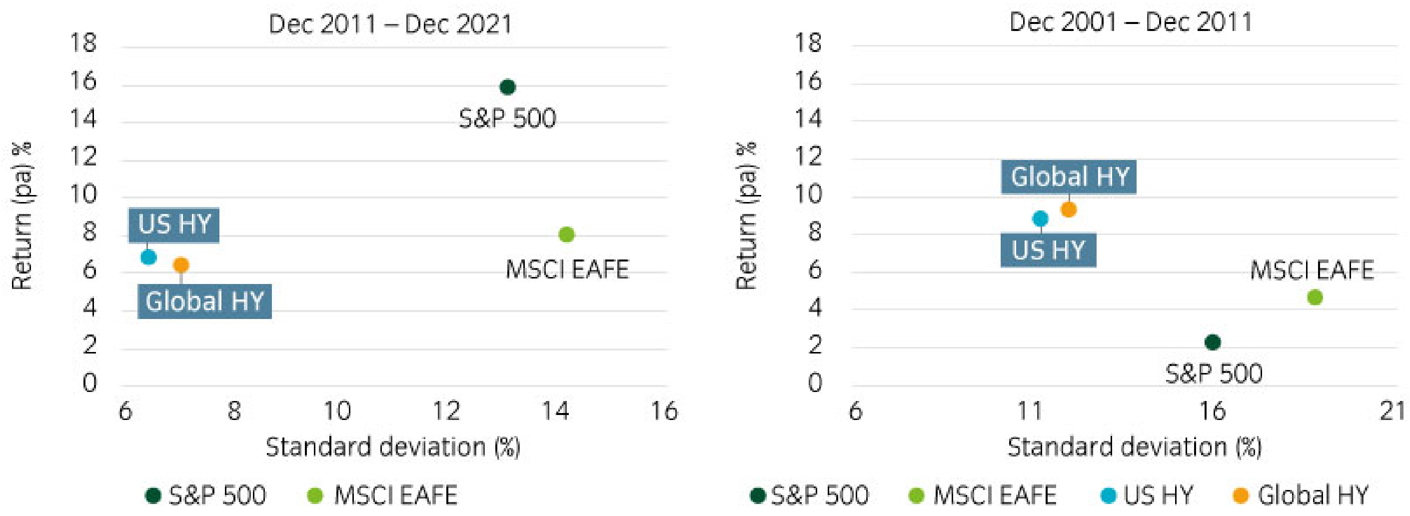


Figure 8: **The share of high yield ETF trading is rising, and has been particularly high during difficult markets**[9]

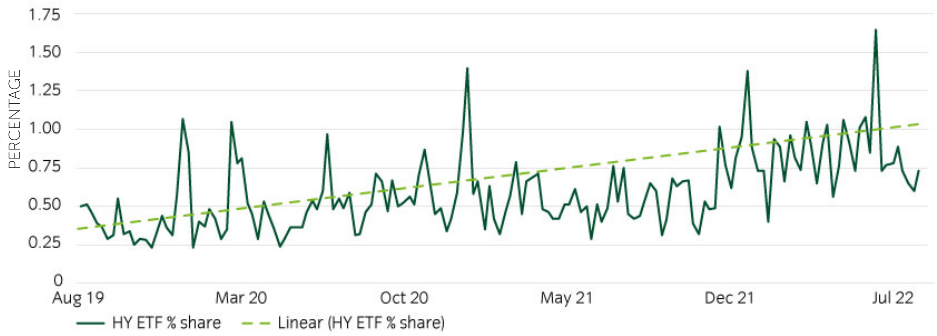
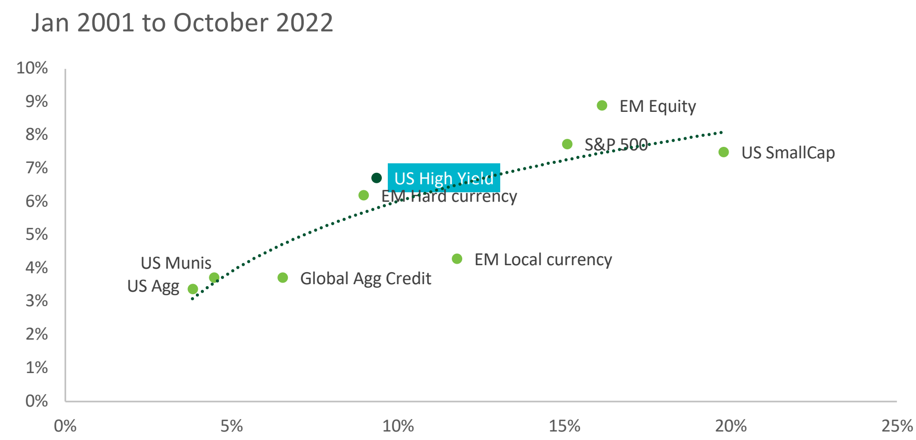


Figure 9: **Many investors do not include high yield in their asset allocation mix, potentially ignoring the "belly" of the efficient frontier**[10]



bid/ask spreads have tended to rise from 65bp-75bp to over 200bp and two-way liquidity all but evaporates.

A potential solution we have seen strong results from is utilizing credit portfolio trading techniques that leverage the fixed income ETF infrastructure. Fixed income ETFs have grown rapidly since 2008. In normal markets, ~40% of all HY trades are executed through ETFs.

However, in stressed markets the figure is closer to ~75%. As such, ETFs have actually become more liquid when markets have become stressed (Figure 8).

Those with experience and in-depth knowledge of the inner-workings of ETFs, can work with ETF deals to trade customized bond baskets (typically of up to ~400 bonds at a time) executing within hours rather than days or weeks.

This "hidden liquidity" reduces transaction costs to 25bp to 35bp, providing a lower hurdle to claw back through alpha generation. Trading large volume also makes it possible to build fully diversified portfolios to minimize idiosyncratic credit risk, as opposed to the more concentrated portfolios typically found among most active strategies.

BUY HIGH YIELD WHILE SPREADS LAST?

Investors, such as pension plans, often bifurcate their strategic investments between equities and investment grade bond strategies. However, we believe ignoring high yield means missing the "belly" of the efficient frontier (Figure 9).

Although investors will understandably be cautious of investing in high yield given rising rates and economic weakness, we believe the bottom-up fundamentals, compensation for default risk, potentially exploitable pricing inefficiencies in crossover credits, and (finally) compelling contractual income possibilities make the proposition impossible to ignore.

We believe investors should consider starting to lock in the yields available in a diversified, highly liquid approach that leverages the ETF ecosystem. We believe investors should also consider an allocation to Fallen Angels as a strategic "overweight."

With great care, comes potentially compelling reward.

__Paul Benson__, CFA, CAIA is the Head of Fixed Income Efficient Beta, responsible for managing Insight Investment's quantitative, factor-based fixed income strategies, including the high yield beta strategy. He joined Insight in September 2021 following the transition of Mellon Investments' fixed income strategies to Insight and has been in the investment industry since 1994. Previously at Mellon Investments, he was a senior portfolio manager responsible for the yield curve arbitrage strategy within global asset allocation portfolios. Additionally, he engineered and built the process to automate fixed income portfolio rebalancing and improve operational risk control.

__Angela Ruane__ joined Insight Investment in 2020 and is responsible for institutional business development in North America across Insight's entire suite of strategies. Prior to Insight, she spent nine years at Rogge Global Partners, a global fixed income boutique investment manager, as Head of North American Business Development then most recently spent four years at Allianz Global Investors (the firm acquired Rogge Global Partners in 2016) focusing on both consultant relations and institutional sales.

INDEX

1. *Bloomberg US Corporate High Yield Index, September 30 2022.* ***Past performance is not indicative of future results. Investment in any strategy involves a risk of loss, which may partly be due to exchange rate fluctuations.***
2. *Bloomberg, Insight calculations. Indices: Bloomberg US Corporate High Yield Index, Bloomberg US Corporate BBB Index. *Assumes average recovery rate of 35%.*
3. *Bloomberg, Insight calculations, August 2022.* ***Past performance is not indicative of future results. Investment in any strategy involves a risk of loss which may partly be due to exchange rate fluctuations.***
4. *Bloomberg, Insight calculations, October 2022*
5. *Bloomberg, Factset, Goldman Sachs, July 2022*
6. *Bloomberg, Insight calculations, October 2022*
7. *Bloomberg, October 2022*
8. *Bloomberg, July 2022.* ***Past performance is not indicative of future results. Investment in any strategy involves a risk of loss which may partly be due to exchange rate fluctuations.***
9. *Insight, September 2022.* ***Past performance is not indicative of future results.***
10. *Bloomberg, July 2022. Insight Investment, as of December 31, 2021.* ***Past performance is no assurance of future returns. Investment in any strategy involves a risk of loss.*** *Emerging Market Debt (LC) = GBI-EM Global Diversified Index, Emerging Market Debt (HC) = JP Morgan EM Bond Index (EMBI Global Diversified Index) US Fallen Angels = Bloomberg Fallen Angel 3% Cap Index, US Agg=Bloomberg US Agg Total Return Index, US Munis = Bloomberg Municipal Bond Index, US High Yield = Bloomberg US Corporate High Yield Index, Global Agg Credit = Bloomberg Global Aggregate Bond Index, EM Equity = MSCI Emerging Markets Index, US Large Cap = S&P 500, US Small Cap = Russell 2000 Index. The quoted benchmarks do not reflect deductions for fees, expenses or taxes. The benchmarks are unmanaged and does not reflect actual trading. There could be material factors relevant to any such comparison such as differences in the volatility, and regulatory and legal restrictions between the index shown and the strategy. Investors cannot invest directly in any index.*

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UPCOMING CONFERENCE SCHEDULE

SPRING 2023

May 9-12
Paradise Point Resort & Spa
San Diego, CA

FALL 2023

November 7-10
Omni Rancho Las Palmas Resort & Spa
Rancho Mirage, CA

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