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The **Wealth** Issue



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COVER ARTWORK BY
VICTORIA TENTLER-KRYLOV

*Corrections
to the February/
March issue:*

"Fresh Paint"
(page 15) should
have said the
documentary has
been submitted
for consideration
for the Tribeca
Festival.

"Royal Pain"
(page 56)
incorrectly
reported several
statements
as facts that
are in dispute.
Radziwill says his
family invested
€25 million;
Jarzabek maintains
the figure
was €17 million.
The two parties
also disagree
about whether
Jarzabek informed
the Radziwills
about the bond

financings and
on why a deal to
sell to another
company fell apart.
"The American
Homeowner"
(page 74) failed to
make clear that
the questions
about the
Minnesota lawsuit
and Minneapolis
settlement were
included after the
initial interview.

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RICHARD MILLE / 

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On The Wrist

The Wealth Issue

What does it mean to be rich? Is wealth a number in a ledger or a state of mind?

These questions are more relevant than ever as new technologies redefine our values and our relationship with money and markets. A meme stock rally might serve as a massive windfall for some; a social-media-fueled bank run may threaten the wealth of others. In crypto, a billionaire's fortune can evaporate in days.

Private markets, previously inaccessible to the merely affluent, opened their doors just as the tide was starting to turn for the worse. For wealth managers, navigating online disinformation is a new challenge, while political upheaval in developing countries is a long-standing source of disruption to potentially lucrative investments.

Real estate, the cornerstone of wealth creation for centuries, is increasingly out of reach for younger generations—with repercussions the

world over. Office towers, once the crown jewels of institutional portfolios and corporate empires, risk a reckoning post Covid.

Meanwhile, some of the world's great dynasties endure, positioned to withstand a sustained bout of global inflation that's added fuel to widening wealth inequality.

In this issue of *Bloomberg Markets*, we aim to see wealth as more than just dollar figures—though you can find those for the top 500 billionaires at [{RICH <GO>}](#). By digging into the shifting trends across markets, politics and the economy, we hope to help you better understand what it means to build wealth today and in the years ahead.

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Buzzword

By HEMA PARMAR

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THE DOWN ROUND IS BACK, and for Silicon Valley entrepreneurs it's about as welcome as a pandemic. Tech startups aim to attract a higher price every time they call on investors for fresh money, known as a funding round, because it helps stoke confidence that the startup is getting somewhere. Unlike publicly traded companies, which have stocks that fluctuate daily without necessarily raising alarms, a startup has a valuation that's virtually set in stone until the next funding round. That means it's painful when investors pull back and a young cash-strapped company is forced to take money at a lower valuation—a down round. Beginning in 2022, a growing number of Silicon Valley startups confronted this predicament. As

the share prices of big publicly traded tech companies fell sharply and higher interest rates made borrowing more expensive, venture capitalists became cautious and scaled back their investments. Startups that can't afford to fund their operations for more than a year are particularly vulnerable. To avoid down rounds, some private companies and investors have devised inventive workarounds. One is to offer new investors confidential perks such as discounted shares in a potential public offering. Another is to give them "anti-dilution" rights that preserve their ownership percentage even when new shares are created. But ultimately the only way to end down rounds is to reignite investor excitement. ●

D

When the Fundamentals Are Unclear ...

Bitcoin

August 2022 - March 2023

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By BLAKE SCHMIDT and AMANDA ALBRIGHT

ARTIFICIAL INTELLIGENCE is making remarkable progress in a wide array of tasks, as demonstrated by the rollout of OpenAI's GPT-4 and Alphabet Inc.'s Bard. We asked experts how this technology will affect wealth management. Their responses are edited for length and clarity.

How will AI change wealth management?



Susan C. Kaplan

President at
Kaplan Financial Services

AI will be a staggering aid in amassing data about markets and trends and relationships between varying forces. In fact, one may drown in the numbers for a time. Eventually, however, one will develop a hierarchy for the **quantitative information** that is most important. AI will also be essential to capture the varying minutiae of a client's family connections and financial responsibilities versus goals.

The personal relationship between a wealth adviser and the client is critical, and that's not easily replicated by AI. Often the "right answer" is not mysterious, but convincing the client that it is necessary for the future of the family is the trick. That is the moment that the psychological connection with the client and the family is the linchpin of success in the financial planning process. Most major decisions are made after extensive discussion of the implications of those decisions. Communication and an emotional connection are critical to persuading the client to make the best move.



Jimmy Chang

Chief investment officer at
Rockefeller Global Family Office

I posed the question of how AI will change wealth management to one of the leading chatbots, and it replied that AI will have a significant impact by providing more personalized, data-driven advice in specific areas such as portfolio optimization, risk management, fraud detection, tax analysis and even relationship management. I believe, however, that the adoption of AI is easier said than done. Unlike traditional software that generates predictable outputs, AI's

ability to learn and adapt means that its responses will evolve over time and may be unpredictable.

Training wealth management bots and incorporating their outputs will be **more of an art than science** as they require nuanced insights, reasoning and judgment across many areas. In time the pupils will outshine the teachers; but for now, don't let them contact your clients directly.



David Bailin

Chief investment officer and
global head of investments at
Citi Global Wealth

AI will allow the client to access an incredible amount of information and ask questions in a language that the client is comfortable with and receive answers. For practitioners, the limitation it will have will be in researching what is happening today with that company, that security, that market—it will have real limitations on contemporaneous action. Footwork will always be necessary in making investment decisions.

It will absolutely improve client education, and it will absolutely improve the repetitive tasks of a practitioner—it will be an incredible **efficiency generator**.



Sarah Hoffman

Vice president, AI and
machine-learning research at
Fidelity Investments

Artificial intelligence is on the verge of being fully democratized, and we need to prepare for how this could potentially change every interface that employees and customers rely on.

There will be new opportunities to integrate access to these apps into work experiences and fold these AIs into customer-facing tools. With more potent and democratized AIs, it's

entirely possible that new divisions of labor will emerge as formerly arcane areas of specialization become more accessible to a broader audience. More sophisticated AI could also be a silo breaker. There are many efforts to share knowledge within large companies; a more powerful AI model could potentially work across multiple business units, leading to more collaboration and greater efficiency.

AI will impact our lives in the not-too-distant future not by replacing us, but by helping us with a range of cognitive tasks. Already, I can imagine a tool like ChatGPT assisting with upgrading our approach to financial literacy and corporate training. As the financial world gets even more complicated—with new assets, new currencies and new frameworks—it's time to think differently about **financial education**. While we may not want these tools to advise customers directly, perhaps they can help educate employees, and even help customers prepare before they meet with representatives, so they can ask better questions.

Chatbots can also be very useful as a brainstorming tool, whether it's for new product ideas, marketing campaigns, companies to invest in or ways to use emerging technology.



Nitin Tandon

Chief information officer
at Vanguard

AI/ML [artificial intelligence/machine learning] models are a tremendous enabler to unearth better insights into what our clients are looking to achieve, their investment behaviors and timelines—often better than clients can themselves. Every investor has different and unique goals, so a personalized approach to their needs can make a large impact on their outcomes.

We're harnessing the power of AI/ML to fuel our two core advice engines—Digital Advisor and Personal

Advisor—beginning with the digital onboarding process. In real time our advice engines leverage insights like retirement age, savings and spending, investment behaviors and goal parameters, to **create customized financial plans** that help clients meet their short-term and long-term financial goals. The outcomes of using this technology in a client-centric way aren't just in numbers—these insights help families save for their dream homes, workers enjoy the retirement they've saved for and give children access to life-changing education. Further, machine-learning techniques enable us to rerun personalized, forward-looking projections anytime a client changes their inputs, which enables real-time suggestions such as increased savings or modifying goal amounts. We're also using AI/ML within our financial intermediary business to provide data-driven insights that drive in-the-moment client experiences and next best action for clients.



Kevin Levitt

Director of global business development for financial services at Nvidia Corp.

AI will influence every aspect of wealth management from client service to compliance. Generative AI will produce hyperpersonalized content, from advertising copy to email newsletters, increasing the success of campaigns across the entire customer journey from acquisition to retention.

Deep-learning models from computer vision to natural language processing will analyze thousands of data streams in real time to glean market intelligence, delivering signals to wealth managers that improve investment returns. **Recommendation systems** will produce next best actions, tailored to the goals of the client, that enable financial advisers to best serve customers regardless of the market conditions. Ultimately, these

recommenders will fuel self-driving financial applications that will rebalance portfolios, establish new accounts like 529s for college savings, refinance loans and more automatically.

AI-enabled applications will lead to financial advisers serving customers more expertly, increasing their share of assets under management at the expense of wealth management firms that don't transform their business with AI.



Jon Stein

Co-founder of Betterment

I've spent the past 15 years working to democratize wealth management. When I set out, I would've expected to have "self-driving money" by now. Real-world challenges, such as inconsistent access to clean, permissioned data across institutions, make this a hard vision to bring to life. But the playing field and the goal continue to change, and today I think of the ideal consumer financial technology as a great co-pilot, and we're making strides toward that vision, aided by AI.

Generative AI and language models will be integral to the future of our industry. Just as lawyers use AI to simplify case law or draft agreements, financial advisers will use AI to quickly assess client circumstances and articulate goals and plans more effectively. The potential of these tools is immense, and their capabilities are expanding quickly. After creating a plan, AI could be used to **monitor client circumstances** and recommend corrections along life's economic path.

Combining language models and other AI models will produce game-changing interfaces and insights. Some innovations I'd like to see: 1) From a "shoebox" of account statements, a model tells me whether my financial life is in order (and whether my adviser is doing a

good job). 2) Probabilistic forecasts of outcomes for any investment, based on the data I share with a model. 3) If I share the documentation of two investments, a model simply contrasts and compares them for me.

Disclosure: I used GPT models to help me refine my points.



Andrew Salesky

Chief digital officer at Charles Schwab Corp.

Newer disciplines like predictive analytics and AI are allowing advisers to increase the scale at which they can effectively deliver a customized client experience and powering the solutions that can help them do it. Schwab's **thematic stock lists** are a great example—leveraging natural language processing (NLP) to mine terabytes of data and millions of public documents to objectively identify publicly traded companies based on their relevance to a particular investment theme. Schwab Assistant is another—with NLP enabling us to refine our automated service channel that offers 24/7 self-service assistance, creating more ways for clients to interact with us in their channel of choice.

In the near term, I expect we'll see the most rapid progress focused on the ways in which AI can be used to assist the people whose direct relationships with their clients will continue to be a key competitive advantage in the industry—identifying opportunities to improve the efficiency and effectiveness of everything from completing routine tasks to engaging clients with meaningful, tailored insights. These advancements will come in areas like knowledge management, content generation and enhanced search capabilities that take advantage of generative AI.

Longer term, I anticipate the industry will begin to explore more client-facing applications—things like AI-derived advice.

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UBS Can Afford to Take an Ax to Credit Suisse

By PAUL J. DAVIES

ILLUSTRATION BY MATT CHASE

THE KEY NUMBER for UBS Group AG shareholders in the bank's takeover of Credit Suisse Group AG wasn't the \$3.25 billion price or the \$17 billion of junior bonds being wiped out but a data point much easier to miss.

The number that showed just how good a bargain UBS got was the 74% jump in tangible book value per share it will record on the day the deal completes. If that sounds obscure, try this: Based on UBS's valuation of 1.051 times tangible

book value before the deal, its share price ought to be almost 30 francs (\$32.86) with the addition of Credit Suisse. Instead, it was 18.77 francs as of April 4.

UBS is trading at a huge and uncharacteristic discount to its prospective value for a string of reasons. All banks have been hit by an inchoate fear of looming disaster. UBS has also lost its main attraction: Investors owned it as a relatively low-risk wealth manager that offered steady stock buybacks and ▶



dividends, as Flora Bocahut, analyst at Jefferies, puts it. It won't be that again for several years—at least.

But the really tricky question is how much of this cheaply bought book value will be lost by selling assets, cutting staff and settling litigation from Credit Suisse's past bad behavior. By analyzing UBS's likely plans and estimating costs and losses, I reckon more than half could get burned up. But that still leaves the bank with a huge gain on the deal.

First question: What will UBS keep? Wealth and asset management are set to stay mostly intact, though with some likely risk reduction and changes in how they are run. Iqbal Khan, UBS's head of global wealth, has already gone to Asia to sweet-talk the local Credit Suisse teams,

which have been shedding senior bankers for months. Risk could be cut because Credit Suisse was more aggressive in lending to rich clients than UBS was. That shows up in higher risk-weighted assets compared with Credit Suisse's total assets: It uses more capital per dollar on its balance sheet.

UBS will also keep the domestic universal bank, Credit Suisse's most profitable and valuable business. In terms of risk, it looks similar to UBS's domestic bank. The Swiss government has said it's unconcerned about the consolidation's effect on local competition. That attitude might not last—more than half of the population doesn't like the tie-up—but for now changes should be minimal.

It's the investment bank where all

the action—and the losses—will be. The early indications are that UBS will keep many dealmakers and bankers focused on raising equity, especially in the US and in trendy industries like technology, pharmaceuticals and telecommunications. It could also keep much of the American research division. Bankers in Asia and those who advise private equity firms could also be retained.

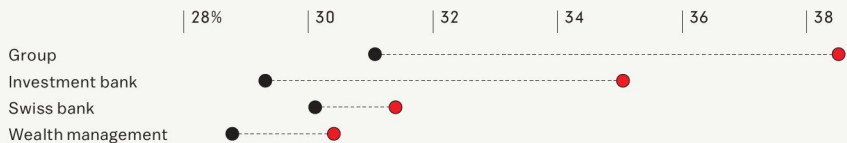
On the markets side, UBS could find much of the equity-trading business attractive, especially Credit Suisse's electronic and algorithmic capabilities. It will have work to do to make up lost ground, however. If these businesses had merged in 2019, the combined group would have been No. 4 in the world by revenue, behind Morgan Stanley, Goldman Sachs and JPMorgan Chase. Credit Suisse's share has been almost halved, partly because it ditched its business dealing with hedge funds in the wake of the Archegos disaster. Last year's combined equity-trading revenue put them fifth, some way behind fourth-place Bank of America Corp. UBS will need to get to the people involved in these areas and persuade them as quickly as possible to stay—much as Khan is doing in Asia.

Fixed-income trading, which covers bonds, currencies and interest rates, will

A Risky Acquisition

Risk-weighted assets as a share of total assets used for leverage ratios at the end of 2022

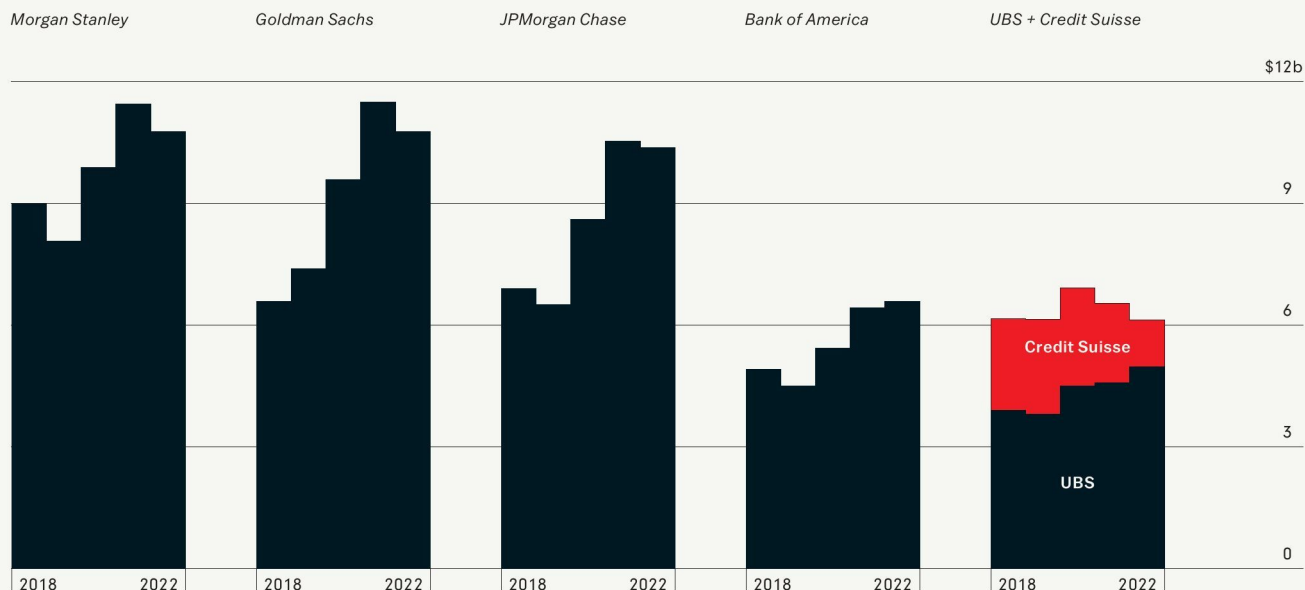
● UBS ● Credit Suisse



Sources: Credit Suisse, UBS

Lagging Behind

Equities trading revenue at selected dealers



Source: Bloomberg

face the biggest cuts. UBS decimated its own fixed-income desks after the 2008 financial crisis as the main thrust of its move to a less risky, lower-capital strategy, and UBS Chairman Colm Kelleher made clear when the deal with Credit Suisse was announced that this kind of risk reduction was what UBS would pursue.

The surprising thing I hear that UBS might want to keep is part of Credit Suisse's leveraged-finance department, which raises debt funding for private equity deals. It's a high-risk, higher-return business in which Credit Suisse long punched above its weight. The question is whether UBS can keep this unit given its target to cut risky assets from Credit Suisse's balance sheet. Likely cuts elsewhere mean it could easily fit within UBS's desired balance sheet size.

When the deal closes, UBS wants its combined investment bank and trading arm to make up 25% of group risk-weighted assets and capital needs. Everything it doesn't want will be sold as quickly as possible. To hit that target, it needs to ditch at least \$27 billion of risk-weighted assets, based on accounts for the end of 2022.

Credit Suisse already agreed to sell most of its mortgage bond business to Apollo Global Management. If UBS gets

Apollo to take the rest, the sale will clear \$22 billion. The remaining markets business has \$22 billion of risk-weighted assets: If all the bond and rates-related trading is also excluded, that should easily get UBS to its target. Credit Suisse also has \$25 billion in its own noncore assets, including a lot of hard-to-sell long-term derivatives contracts that UBS said it wants to offload quickly.

Selling these unwanted assets quickly is where losses could come. We don't have a detailed breakdown of Credit Suisse's investment bank and trading positions. But if we assume based on the above that it sells 60% of assets at a 10% discount to their plain value (not risk-weighted), that could mean about \$14 billion of losses.

Litigation is the other potential source of losses. Credit Suisse has a likely exposure of \$1.2 billion from known lawsuits it hasn't provisioned for, estimates Elliot Stein of Bloomberg Intelligence. Let's be conservative and put that at \$3 billion. Lastly, UBS wants to slash about \$8 billion of costs from Credit Suisse, mainly with huge staff cuts. If we assume it has to spend a dollar to save a dollar, not an unusual ratio, that's an additional \$8 billion of upfront losses.

That all adds up to \$25 billion of

losses to take away from the 74% boost to tangible book value we started with, which was equivalent to \$42.4 billion. As a rough-and-ready calculation, UBS book value per share would still increase by more than 27%. There are capital ratios to consider, too, of course. Cut all these assets and take all these losses on Day 1, and the combined bank's common equity Tier 1 capital ratio would drop from just over 14% to 11%. That would be uncomfortably low for management but still ahead of UBS's current minimum requirement of 10.3%.

There will be challenges and unforeseen costs along the way, no doubt. Kelleher told shareholders at the bank's annual meeting on April 5 that the integration was risky and would take up to four years. But there will also be continued strong profits and organic growth from the UBS side at least, so long as the integration doesn't distract management too much. But the size of the gains UBS gets from this deal still looks huge. Expect UBS to swing the ax brutally and quickly. It can afford to do so. ●

Davies writes about banking and finance for Bloomberg Opinion in London. This column doesn't necessarily reflect the opinions of Bloomberg LP and its owners.



Distressed Chic

PHOTOGRAPH BY JOANNA McCLURE



MARCH WAS A ROUGH month for bank investors and employees: California's Silicon Valley Bank collapsed, and the Swiss government arranged an emergency takeover of Credit Suisse Group AG by its biggest local rival. Both beleaguered institutions once had brands that connoted wealth and an elite status; now they're bywords for hubris and management failures. For a certain type of consumer, that infamy lends a new ironic appeal to a company's branded swag, such as the SVB wine cooler tote, the Credit Suisse gym bag, and the Lehman Brothers carryall seen here. On online marketplaces such as EBay, one-time freebies can now generate bidding wars if they're designated as "preowned" (to differentiate them from new knockoff items manufactured to take advantage of demand—often with tongue-in-cheek "risk management department" added). Unsuccessful bidders can always wait for the next corporate disaster. To track bankruptcy filings, go to [{BCY <GO>}](#). —Christine Harper

The Disinformation Detectives

By MARGI MURPHY

ILLUSTRATION BY CAROLINA MOSCOSO

SHAWN EIB WAS ON THE CASE as soon as customers started pulling billions of dollars from Silicon Valley Bank. At home in Virginia, he began scrolling on his laptop through the internet's dark corners. Dubious sources, including a website the US military accuses of promoting Russian propaganda, fanned the panic.

Another posting, which prosecutors have tied to a Chinese business executive facing US fraud charges, blamed the bank's failure on the Communist Party of China's "unrestricted financial warfare." Many others paired comments with come-ons for cryptocurrency get-rich-quick schemes. "I could have made a fortune like this guy!" one read.

Eib, a 38-year-old former IT administrator at Loyola University New Orleans, is an online disinformation detective for hire. He works for Alethea Group Inc., one of a handful of cybersecurity startups that wade through the online muck on behalf of companies, non-profits and governments that want to protect themselves from internet lies and social media manipulation.

Venture capital firms and private investors committed more than \$300 million to these kinds of startups from 2018 to 2022, according to data company PitchBook. Last year alone, Microsoft bought Miburo, founded by counter-extremism researcher Clint Watts, who now leads its Digital Threat Analysis Center; Spotify purchased another extremism monitor, Kinzen; and Amazon.com was among those that invested a combined \$24 million in Logically, which tracks digital hate speech, foreign propaganda and crypto scams.

The SVB crisis illustrates why there's such interest. Built over years or decades, an organization's reputation represents intangible wealth that can make up much of its value. In the internet era, it can be destroyed overnight. The broader issue would be outright lies, not just posts that fan panic, that undermine the world's financial system. The European Banking Authority has warned that banks are "vulnerable" to runs because of "campaigns that spread inaccurate information."

To address this risk, the anti-disinformation startups typically have artificial intelligence software that scours the web for suspicious content. They then issue reports or alert corporate victims about online lies. The companies make money in a variety of ways. Some charge consulting fees or work on retainer. Alethea declined to discuss pricing. One of its main competitors, Graphika Inc., says

typical arrangements are subscriptions starting at roughly \$100,000 a year.

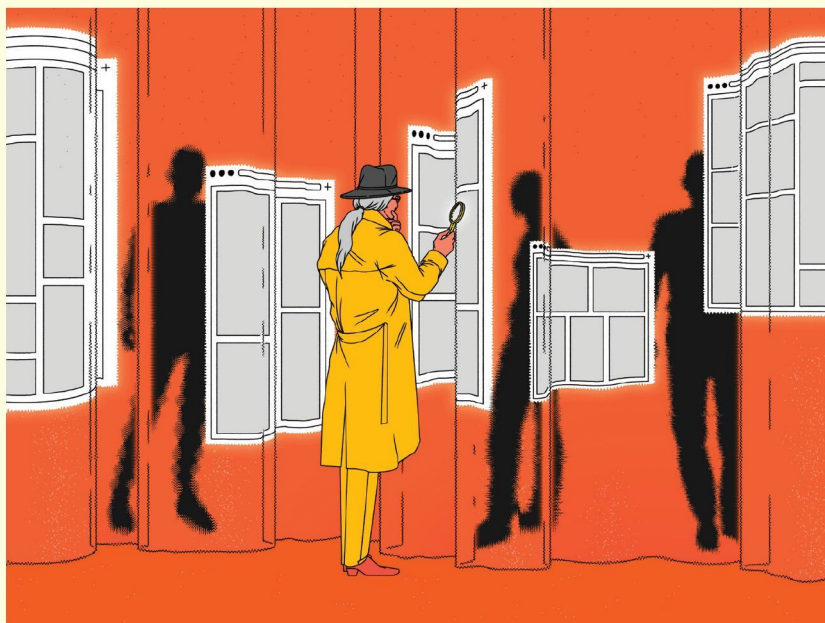
The bank run also shows the challenges and limitations of what's come to be known as the disinformation mitigation industry. After all, SVB couldn't be protected, and it was difficult to separate malefactors from those legitimately pointing out the true risk of the bank's poor management decisions.

It's also hard for outsiders to verify claims about the industry's effectiveness. Samuel Woolley, who researches propaganda at the University of Texas at Austin, says these companies are "thin on details" when discussing their methods. "It's easy to be technologically deterministic," says Woolley, an assistant professor who says he's declined offers to create his own disinformation detection company. "But you have to take into account social and cultural context—like the management of a bank."

Washington-based Alethea and others acknowledge their shortcomings and say they must shield their methods from wrongdoers. They say their services can be a hard sell. Companies don't tend to have "disinformation budgets," says Ted Schlein, general partner and chairman of Ballistic Ventures, which backs Alethea. Lisa Kaplan, Alethea's founder and chief executive officer, recalls how pitching her services has felt more like "selling health insurance to smokers in the '70s."

In 2022, four-year-old Alethea raised \$10 million from Ballistic, whose partners have worked in cybersecurity for the military, US intelligence agencies and AT&T Inc., as well as at VC giant Kleiner Perkins. Alethea is a woman's name derived from the Greek word for truth. Along with Kaplan, a former digital director for Maine Senator Angus King's 2018 reelection campaign, the rest of its top leadership comprises women.

Alethea issues free reports about threats to journalists and other targets; that helps it win over paying customers. Clues that posts could be fakes or controlled by someone else might be a Twitter account with 50,000 followers consistently getting 15,000 likes, a tweet retweeted more than it's been liked, or websites sharing the same domain address. Alethea recently warned an American telecom company, which it declined to name, about "Spamouflage Dragon." Posing as customers, the network of China-linked accounts was spreading disinformation.



Graphika in New York has a longer track record. John Kelly, a computational social scientist with a doctorate from Columbia University, founded the company in 2013. Graphika says its clients include Facebook parent Meta Platforms and Google, and it's also worked with the US Senate Select Committee on Intelligence.

In the 2022 US midterm elections, Graphika linked the Russian Internet Research Agency—which the US has charged with meddling in the 2016 elections—to accounts impersonating the singer Kid Rock to promote conspiracy theories. It's also uncovered an Egyptian company running fake news pages aimed at Ethiopia, Sudan and Turkey and ersatz clusters of accounts promoting Chinese telecommunications giant Huawei Technologies Co., which faces US sanctions.

In the case of the recent banking chaos, Graphika's Santiago Lakatos, who tracks finance and markets, used the company's software to examine what he calls the "extensive map of conspiratorial finance communities." Like Alethea, he suspected adversaries would use the crisis to destabilize the US. He also found cryptocurrency advocates fueling bank runs not only at SVB but also at New York-based Signature Bank and San Francisco-based First Republic. Along with "piling in on SVB," Russian state actors over the past 24 months have been sparking discontent over inflation and the cost of living in the US and Europe, says Jack Stubbs, Graphika's lead analyst.

Of course, one person's disinformation can be another's statement of political views, so the companies have to walk a fine

line. Graphika provides intelligence to organizations that, the company says, can make their own strategic decisions. "We aren't trying to be the arbiters of what is true or false," says Guyte McCord, Graphika's chief operating officer.

Red flags can be misleading, too. Michael Robinson, Alethea's lead analyst, investigated some Japanese users when he worked at Twitter Inc. They had a suspiciously large number of accounts, suggesting a fake network. The users, it turned out, were using them as different personas in online role-playing games.

There's also the question of what can be done. David Simons, a partner at law firm Boies Schiller Flexner, says it's often hard to take legal action because internet platforms aren't liable for their content and the malefactors are difficult to pinpoint. Mitigating lies can be too costly for some organizations. "It's much harder for smaller companies to fight back," he says.

McCord compares the SVB bank run to the meme stock craze of 2021, when retail investors bid up the stocks of companies such as GameStop Corp. and AMC Entertainment Holdings Inc. to absurd levels, in part to squeeze Wall Street investors who'd bet against the shares. The latter led to devastating investment losses, ultimately for those on both sides; the former destabilized the banking system. The two examples sum up the thorny problem. On the web, posts can start out true (or close to it), morph into lies and panic, and have consequences few could anticipate. ●

Murphy covers cybersecurity for Bloomberg News in San Francisco.

Paying £1 for an Obscure English Football Club Is Just the Start

By DAVID HELLIER

MATT UGGLA, a longtime supporter of English Premier League team Arsenal FC, wanted to own a football club. The 29-year-old had tried to buy a couple, but the deals fell apart. Then a friend suggested Yeovil Town FC.

Yeovil, based in Somerset, in the southwest of England, is in the fifth tier of the country's football pyramid—the bottom segment of the nationwide leagues. The club attracts little attention. It expects to make media revenue of just £14,539 (\$18,115) in the current season—little more than half of its catering budget. But the price was right: Uggla agreed to buy the team for £1 in March.

In a sport known for multibillion-dollar acquisitions of top franchises such as Arsenal and Manchester United FC, Uggla is part of an emerging cadre of bargain hunters scouting lower-league opportunities. The challenge for clubs that are often losing money is to build a higher media profile and new revenue streams, which give a team a shot at bringing on better players and winning promotion to a higher league. To do this, owners need to get creative.

In 2021, American actors Ryan Reynolds and Rob McElhenney purchased Wrexham AFC, which is in the same tier as Yeovil—the National League. Since then, Wrexham has churned out a Disney+ documentary, boosted its reach on social media and struck a sponsorship deal with TikTok. Ticket and merchandise sales climbed. Now, Wrexham is a contender for promotion to League Two.

Uggla, of course, lacks the Hollywood power of Reynolds and McElhenney, so he's pursuing a different strategy. Off the field, he aims to update the club's infrastructure, making its Huish

Park stadium more attractive both to fans and as a venue for concerts and other events. On the field, Uggla says he'll use big data to identify the hidden playing talent that can help draw crowds.

He points to the examples of Brentford FC and Brighton & Hove Albion FC, two football clubs that climbed to the Premier League in recent years after languishing in the lower tiers. "They're looking in places for players or using data in ways that other people have not been looking," he says.

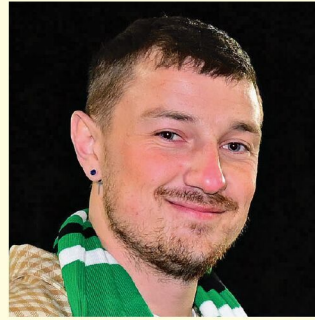
Data is in Uggla's DNA. He's the son of Lance Uggla, the Canadian founder of financial data company IHS Markit Ltd., who

England's Football League System

Top five tiers, in order. League winners get promoted. Laggards are relegated.

<i>Name</i>	<i>Most recent champion</i>
Premier League	Manchester City FC
Championship	Fulham FC
League One	Wigan Athletic FC
League Two	Forest Green Rovers FC
National League	Stockport County FC

Source: worldfootball.net



Uggla



Sackey

sold it to S&P Global Inc. for \$39 billion in 2020. Father and son share a love of football and Arsenal—but Yeovil is very much in the hands of Uggla Jr. “I am just the dad here,” Lance said in an email.

Rebuilding a football club can be difficult and costly for even the super rich at the top of the game. US businessman Todd Boehly and private equity firm Clearlake Capital have spent more than half a billion dollars on Chelsea FC since taking over the Premier League club last year. So far it’s brought little success and plenty of fan ire.

At Yeovil, Uggla will have to build the club and keep supporters happy with just a fraction of the funds available to Premier League owners. Yeovil is projecting revenue of about £1.4 million for next season, compared with about \$600 million generated by Chelsea in 2021-22. The situation could get worse: As of early April, Yeovil was at risk of being relegated to one of the regional leagues.

“We have inherited a bare-bones club,” Uggla says. “The previous regime left nothing, not even a physio[therapist].”

While the National League has a media contract in place with the broadcaster BT Sport, the money this generates for teams in the division is hardly enough to cover the basics of running a club, let alone player wages.

“National League teams are running an annual loss of around £700,000,” says Kieran Maguire, a lecturer in football finance at the University of Liverpool. “They don’t have the benefit of a lucrative TV deal.”

Uggla bought Yeovil through holding company SU Glovers, which lists him and his mother, Julie-Anne Uggla, as officers. He

runs the club’s day-to-day operations with Paul Sackey, a retired English rugby player and family friend who initially suggested Yeovil as an investment. For advice, Uggla is tapping the likes of renowned ex-football coach Harry Redknapp and Tripp Smith, an investor in Premier League team West Ham United FC.

“He needs to surround himself with some old football hands,” says Peter Moore, former chief financial officer at Liverpool FC who previously advised Wrexham. “The Uggla family need to be figures in the community and adopt a long-term strategy for success.”

Soon after he agreed to purchase the team, Uggla bought a round of beers for the roughly 200 die-hard Yeovil supporters in the stands at an away-day match. But football is littered with stories about former owners—such as Stewart Donald at Sunderland AFC and Mike Ashley at Newcastle United FC—who start out drinking with the fans and later get cast as villains in their own stadiums when things start going wrong. Yeovil suffered a string of defeats in March and April, diminishing some of the early optimism that accompanied Uggla’s arrival at the club.

Uggla acknowledges it’s the nature of modern football supporters to want success immediately, and he says he’s already noticed discontent that things aren’t changing quickly enough. As such, Uggla is also seeking the most precious commodity: time.

“The aim is to get out of this league, but we’re not going to be silly about it,” he says. ●

Hellier covers sports deals for Bloomberg News in London.

Chinese Millennials Hunt for New Routes to Wealth

By BLOOMBERG NEWS

PHOTOGRAPHS BY RAUL ARIANO

LIKE MILLIONS OF other young Chinese, Byron Zhang thinks he's missed out. For his parents' generation, investing in real estate was the surefire route to prosperity and security. Now, as prices slump, the population shrinks and unfinished and unsold apartments stack up, the dream of riding that boom has crumbled.

"If you still count on investing in property as a means of growing your fortune, you're not quite right in the head," says Zhang, 37, who co-founded a pharmaceutical startup in the tech hub Shenzhen.

Zhang and his peers aren't giving up on building wealth. They've seen that a well-paid job can take them only so far, while the right investment can be transformative. Household savings have jumped to a record, official data show. Meanwhile, more than 90% of university-educated Chinese citizens from age 22 to 32 say investing is a key part of their life plan, according to a February survey of 3,000 people by Invesco Ltd.

But where to invest their savings? Capital controls and regulations limit purchases of shares on overseas stock exchanges. Cryptocurrencies are banned. Bonds don't yield enough. Returns from bank-issued wealth management products have slumped. And the Chinese government has essentially shuttered once-hot alternatives such as peer-to-peer lending that had attracted more than 50 million investors. Then there's the domestic stock market, which older Chinese dismiss as a form of gambling after two epic boom-and-bust cycles in as many decades.

For years top US and European financial firms have viewed Chinese consumers as their next big opportunity. Young Chinese—the nation's best-educated and highest-paid cohort ever—have changed retail in China. Already the biggest buyers for items including cosmetics and travel, they're likely to boost their spending fourfold to 16 trillion yuan (\$2.3 trillion) by 2035, according to estimates by advisory firm China Renaissance.

Many companies expected that these young consumers would start pouring their money into the financial markets, leading a nationwide shift away from property as a source of wealth. Hans Fan, the head of China financial research at brokerage CLSA Ltd.,



Jiahui Wang in
Beijing in March



estimates that cumulative flows into financial markets from all Chinese households will exceed \$18 trillion between 2021 and 2030.

“The household balance sheet is a gold mine,” Fan told clients at the company’s flagship investors forum late last year. “A huge pie of new money will go toward professional managed products.”

Still Underwater

But almost everyone in China has a family member or friend still smarting from stock market losses. From 2006 to late 2007, the benchmark Shanghai Composite gauge rose as much as 425%, before losing more than two-thirds of those gains in the next year. The pattern repeated itself in 2015. While the scale was slightly smaller, the crash still wiped out more than \$5 trillion of value.

In both cases a kind of frenzy swept the nation. Stories of rapidly made fortunes spread widely and drew in inexperienced retail investors, who rushed to chase a rally. Many of those who bought near either of the peaks are still underwater.

Frank Dong, 42, is one of them. His first foray into stocks was right at the top of the 2015 bubble. Then, in 2019, he thought he’d give the market another chance. Instead of buying an investment property in Shenzhen, Dong put his money into a mutual fund that focused on baijiu—a popular Chinese white liquor. The fund is now down 30%. The apartment he could have purchased instead is up about 20%.

“This experience has made me quite exhausted,” says Dong, a hydropower engineer in Beijing. “I do want to invest, but my experience with equities has been rather unpleasant.”

If Dong is feeling burned and wary, 25-year-old Beijing-based Frank Lee is outright dismissive. He points to the three years of Covid-induced turbulence and the government’s often sudden crackdowns on entire sectors of the market, such as technology, which crushed the value of once high-flying companies.

“The Chinese stock market is more speculative than crypto,” says Lee, who was educated at a US university and recently co-founded an investment advisory firm.

Cryptocurrency is banned in China, but investors find ways ►

“People just don’t trust the stock market, as it is notorious for being speculative. Also, late last year there was a crash in the wealth management market. So people learned a very hard lesson”



around the ban, such as buying directly from friends or using an overseas driver’s license to open an offshore account.

Although about a third of Lee’s personal crypto holdings were stuck on the FTX platform when it collapsed last year, he says he still believes the best road to building wealth is through investing in alternative assets like crypto, venture capital or direct stakes in small and medium-size enterprises. He recently put money into an electric-car battery swapping station, for example. “The biggest investment opportunity of our lifetime is our time,” Lee says. “That means investing in what we love.”

Money Managers Become Stars

The wariness about stockpicking could benefit the global investment industry. Back in 2018, individual traders accounted for 82% of all trades. By 2022, after some extreme market turbulence, that had fallen to around 60%, according to China’s securities regulator.

Instead, interest in professionally managed funds has surged. Since 2015 there’s been a fivefold increase in the number of funds in the market. Today there are 13,000 different mutual funds for sale, well above the investable universe (for most retail investors) of about 5,000 mainland-listed companies. In this crowded market, individual fund managers sometimes emerge as stars—or villains. In the good times, fan groups on social media site Weibo shower the high-performing managers with pet names, emoji and cheers. In bad times, insults fly.

During the pandemic, investors flocked to livestreams by mutual fund managers who would explain their credentials and returns before giving their views on the market. Interest in these livestreams has remained high, especially among younger Chinese. In 2022 almost 60% of viewers were under 39, according to Huanju Tech, a platform that provides marketing services for financial institutions.

Jiahui Wang, 29, who goes by the alias Senior Sister Hui, is a major figure in this industry. As a host for China Asset Management Co., she’s run more than 100 livestreams, drawing 45 million views and 1.1 million likes over the past year. She says the division between generations is striking. On Xiaohongshu, which has an older user demographic, property-themed programming is popular. On Bilibili, videos about the downsides of real estate investing draw more viewers.

Young investors also want choice. Where the older generation predominantly bought products recommended by banks, the

younger set “almost never buys in the traditional way—it’s almost entirely through internet platforms,” Wang says. Tools such as the ubiquitous app Alipay allow users to purchase funds with a click.

Taking Risks

Younger investors also seem hungry to maximize their returns. “They are eager to take on risk,” Wang says. “They want those funds that are heavy in one particular sector, rather than ones that are balanced. They want to be all-in.”

That doesn’t surprise Wei Li, a freelance writer based in

Shanghai Stock Exchange Composite Index

Change in value since Jan. 31, 2000, monthly



Source: {SHCOMP <Index> GP <GO>}



Byron Zhang in Shenzhen in early April

Kunming, a subtropical city in southwest China. He cites a Chinese saying: Those with a lot of money can speculate, but those with no money must speculate.

That's what he's doing. In 2020, fearing a market collapse, he decided it was time to get out of real estate and sell his investment property. He put his profit, about 20%, into an array of assets: stocks, cash and collectibles such as Lego sets and gaming figurines. The latter aren't very liquid, but he enjoys them.

Like an increasing number of Chinese retail investors, Li also put money into convertible bonds, which offer the security of coupon income and principal repayment along with an option to convert the bonds into stocks if share prices go up. China is now the second-largest convertible bond market in the world, according to Swiss wealth manager Union Bancaire Privée. Issuers range from big commercial banks to small-cap companies attracted to the market because it's typically a cheaper place to raise money than traditional debt markets. The bonds are all rated and exchange-traded. Li, 31, is determined to get in early on the winning sectors of the future. "The biggest opportunities for our generation lie in tech and culture and entertainment-related businesses," he says. "Property and fixed assets, that cycle is done. We cannot repeat the success of our parents."

Housing Support

Millennials increasingly share the view of Chinese President Xi

Jinping: Houses are to live in, not to speculate on. In many sectors of Chinese society, owning a house is still considered a prerequisite for marriage. Renting can feel like a waste of money.

"For me, buying a house is a rigid need," says Lexi Huang, a 27-year-old human resources employee who lives in Shanghai. "I don't want to keep paying rent and help the landlord to repay his mortgage." Currently sitting on losses in her stock portfolio, Huang is considering investing in gold—or just holding money in the bank. "I think it is better to hold cash and wait for market conditions to stabilize first before piling in," she says.

Much of the recent surge in household savings was driven by a 3.8 trillion-yuan (\$547 billion) increase in fixed-term bank deposits, according to an analysis from think tank China Finance 40 Forum. That's despite a benchmark savings rate that's been flat for years.

"There's really just a lack of good investment options in China right now," says Hao Hong, chief economist at Grow Investment Group. "People just don't trust the stock market, as it is notorious for being speculative. Also, late last year there was a crash in the wealth management market. So people learned a very hard lesson."

Meanwhile, back in Shenzhen, Zhang says he's constantly looking for new opportunities, particularly high-tech startups. "I think if we grab on to one major opportunity in our lifetime, we can turn our fates around," he says. ● — *With assistance from April Ma, John Cheng, Selina Xu, Lisa Du and Yuling Yang*

Functions for the Market Wealth



BQNT <GO>

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CCRV <GO>

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RRG <GO>

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BI ACT <GO>

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The screenshot shows the 'BI ACT' tool interface, which includes an 'ESG Dashboard (BI BESGG) Global' and a table of activism campaigns. The table lists various companies and activists, along with their start and end dates, objectives, and returns.

Company	Activist	Start	Stake End	Objectives	Return	MktC	Stake
Salesforce Inc.	Starboard Value LP	18-Oct-2022	--	1: Other (Improv...	33.6%	147B	3%
Splunk Inc.	Starboard Value LP	16-Oct-2022	--	2: Sale of Compa...	34.6%	11B	4.9%
Terminus AG	Petrus Advisers L...	07-Oct-2022	--	3: Strategic Revi...	3.2%	5B	
Wikicom Ltd	Starboard Value LP	16-Sep-2022	--	1: Discussions onl...	32.4%	4B	9.0%
Blackbaud Inc	Clearlake Capital	03-Oct-2022	--	3: Acquire Compa...	54.1%	2B	18.4%
TeamViewer AG	Petrus Advisers L...	17-Nov-2022	--	1: Other (Calls o...	52.2%	2B	3.0%
OneSpan Inc.	Altai Capital Mana...	21-Nov-2022	--	1: Discussions onl...	31.8%	536M	5.8%
Cognyte Software	Edenbrook Capital...	16-May-2022	--	1: Discussions onl...	-52.0%	452M	5.2%
Cognyte Software	Neuberger Berma...	08-Aug-2022	--	2: Other (raise a...	-36.4%	349M	3.6%
Culture Inc	KI Investment Ma...	28-Jul-2022	--	1: Acquire Compa...	-22.5%	302M	6.9%
Biginçan Holding	SON Investors LP	08-Dec-2022	--	5: Acquire Compa...	-41.5%	269M	12.4%
MIX Telematics Ltd	Akeladden Capit...	31-Oct-2022	--	3: Strategic Revi...	1%	194M	2.5%
Talospace Inc.	Firsttime Venture...	29-Sep-2022	--	2: Sale of Compa...	-30.9%	161M	4.9%
Grievx Informatio...	Inter Act Venture...	02-Nov-2022	--	2: Other (Promote...	17.7%	45M	

SO YOU'VE BUILT some wealth, and maybe you're looking for a bond fund to help preserve that hard-earned money. Do you know which funds hold Additional Tier 1s, the type of securities that were zeroed out for Credit Suisse Group AG's investors? Turn to page 48 to find out. AT1s, of course, were still at near-record high yields in early April. Opportunity, meet risk. To really get under the hood, you can dig into whether the bonds held by an exchange-traded fund have been trading rich or cheap. That's on page 42. For more FFM stories, go to **{FFM <GO>}**.

A chart of Bitcoin suggests the crypto asset could have room to rise before hitting resistance.

ETF <GO>

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Name	Assets	Cost	Performance	Allocations	Regulatory Structures	YTD Flow (M USD)	1Y Flow (M USD)	3Y Flow (M USD)
Median	.00	.00				+2.72	+26.24	
Vanguard Total Stock Market ETF	+3,137.04		+3,461.19			+23,459.47	+101,001.80	
Vanguard S&P 500 ETF	+2,137.69		+2,545.27			+21,627.83	+97,487.26	
JPMorgan Equity Premium Income ETF	+1,854.60		+4,652.83			+16,165.20	+23,172.03	
Schwab US Dividend Equity ETF	+1,115.10		+2,891.43			+13,792.81	+30,901.25	
Fidelity US Cash Cons 300 ETF	+633.78		+2,103.68			+9,583.44	+22,286.76	
Vanguard Growth ETF	+400.28		+1,206.31			+9,595.58	+15,413.26	
Vanguard FTSE Developed Markets ETF	+487.85		+1,136.70			+8,450.55	+26,774.10	
iShares Core S&P 500 ETF	+2,092.57		+2,743.70			+8,262.41	+43,468.45	
iShares Core MSCI Emerging Markets L	+250.94		+3,988.50			+7,584.33	+18,321.88	
Vanguard High Dividend Yield ETF	+158.70		+361.78			+7,037.19	+13,838.68	
Vanguard Total International Stock ETF	+133.73		+1,055.01			+6,838.08	+35,102.77	
Vanguard Value ETF	+84.03		+3,484.26			+6,096.04	+31,002.93	
Health Care Select Sector SPDR Fund	+503.96		+1,084.79			+5,369.18	+12,304.63	
iShares Core S&P Mid-Cap ETF	+699.51		+953.58			+5,327.89	+4,853.99	
iShares S&P 500 Equal Weight ETF	+381.26		+1,874.20			+4,937.21	+16,100.28	
ProShares UltraPro QQQ	+91.03		+2,024.04			+4,765.56	+8,724.52	
Vanguard FTSE Emerging Markets ETF	+87.75		+1,242.79			+4,516.68	+14,773.04	
Investment Grade 100 ETF	+380.95		+1,137.75			+4,283.52	+7,019.19	
S&P 500 Portfolio S&P 500 Growth ETF	+493.32		+923.64			+4,223.85	+7,261.91	
Vanguard Russell 1000 Growth ETF	+103.07		+558.29			+3,952.80	+5,789.20	
Dimensional US Core Equity 2 ETF	+332.68		+777.80			+3,763.70	+5,257.65	
Schwab International Equity ETF	+85.10		+321.19			+3,685.26	+8,776.27	

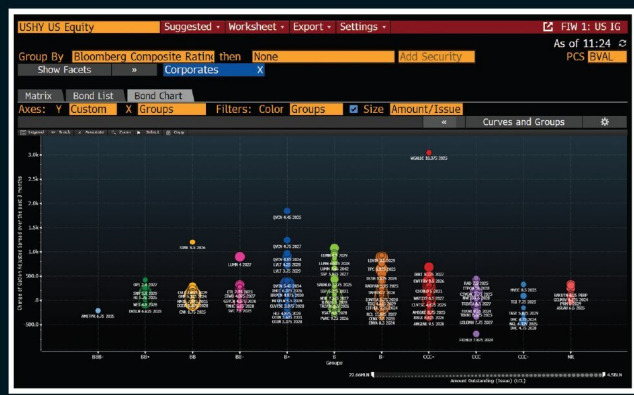
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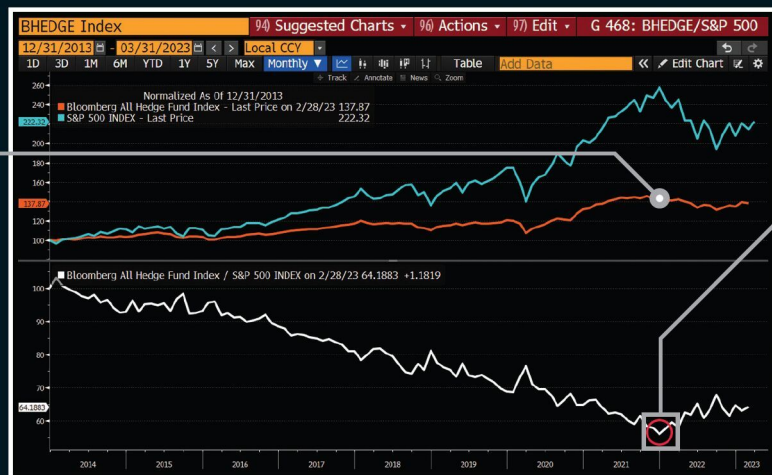
p45



Are Hedge Funds at an Inflection Point? A Look at the Data

By MICHAEL BOYLE and NICHOLAS HOLTZMAN

Fig. 1 The Bloomberg All Hedge Fund Index underperformed the S&P 500 over the past 10 years, but relative performance changed at the beginning of last year.



The broad hedge fund benchmark rose 38% from 2013 through March, well behind the S&P 500's 122% gain.

Charting the ratio of the two benchmarks' performance suggests an inflection point at the beginning of last year, when the hedge fund index started to outperform the stock benchmark.

ECONOMIC UNCERTAINTY has historically been good for hedge funds. Today's environment—featuring inflation, currency and commodity headwinds, persistent supply chain issues and a drastic shift in interest-rate policies—should be supportive to an industry that can thrive amid volatility.

Just how supportive and for how long are key questions as markets move into the post-Covid era. Data derived from Bloomberg's hedge fund database suggest an inflection point: With macro managers leading the pack, the hedge fund industry appears to be picking up momentum after years of underwhelming performance (**FIG. 1**). Bloomberg data tell the story.

Methodology

Before we dive in, a quick note on the methodology used to extract these findings: Data displayed in the charts accompanying this story come from Bloomberg's proprietary hedge fund database, which includes performance metrics that thousands of managers contribute to Bloomberg each month as well as data derived from public sources such as pension system reports. For more information, go to [{HFND <GO>}](#). Click on Database Snapshot for a quarterly summary of the database, which includes 18,000 hedge funds overall.

Fig. 2

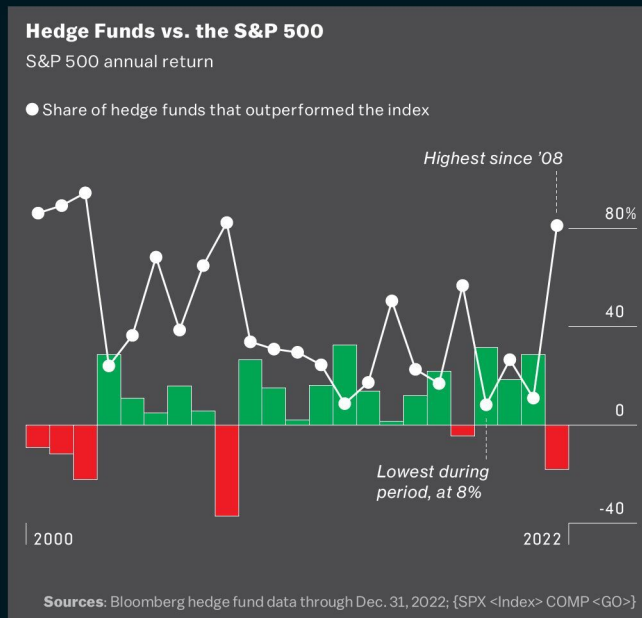


Fig. 3



For this analysis, we used Bloomberg Query Language (BQL) to retrieve data from the database, focusing on 2022. (The analysis thus doesn't cover this year's market turmoil.) You can also use BQuant, an interactive development tool built on the JupyterLab computing platform, to perform in-depth analysis of hedge fund data and create custom visualizations. For more information, go to [{BQIQ <GO>}](#) or run [{BQNT <GO>}](#).

Comparative Performance

To start, we grabbed hedge fund performance data beginning in 2000. We then compared those returns with the performance of the S&P 500 to calculate the percentage of hedge funds that outperformed the broad US equity benchmark each year from 2000 through 2022. A chart of the data shows that last year, when the S&P 500 dropped almost 20%, the percentage of hedge funds that outperformed was the highest since 2008 (Fig. 2). A low point of sorts came in 2019, when only 8% of hedge funds beat the S&P's return. Indeed, during the era of near-zero interest rates following the global financial crisis, from 2009 through 2021, an average of less than one-quarter of hedge funds beat the stock benchmark.

Strategy Is Key

When it comes to understanding hedge fund performance, dispersion is a crucial component. While the number of hedge funds outperforming the S&P 500 was way up last year, the alpha wasn't evenly distributed.

Macro—which includes energy commodity funds and commodity trading advisers (CTAs)—was the top-performing category overall last year (Fig. 3). If you look at the top decile of all hedge funds, macro funds accounted for almost 49% of the top performers. Interestingly, equity strategies made up the second-largest slice of the top decile, though as a whole equity was the worst-performing category. Macro was overrepresented in the top decile, given its proportion in the database overall, while equity was underrepresented.

Gaurav Patankar at Bloomberg Intelligence notes that

momentum in macro, which has been a major theme with investors over the past 12 to 18 months, is sustained this year. "Large macro managers have learned their lessons from the long winter of under-performance and have focused on 'platformification,'" or building out capacities for different strategies under one roof, he says. "They have added heft to their deployment toolkit and are well-positioned to perform at scale."

Even with uncertainty favoring macro, there's optimism for other areas. Lilly Knight, head of investment management at K2 Advisors LLC, says it "isn't one strategy takes all" in the current environment. "We've been pretty defensive on equity hedge, but we're getting a bit more constructive," she says. "Macro managers had a great year last year and could still do quite well through the next 6 to 12 months—but what happens afterwards?"

Higher interest rates, for one thing, could bring on scenarios that favor credit and distressed debt managers. Kate Holleran, Barclays Plc's head of capital solutions, Americas, has seen renewed interest in these managers. "Overwhelmingly there's interest in distress—credit in particular," she says. "There's a lot of pent-up demand for a long-overdue distress cycle, and a lot of people are trying to understand what the opportunity set is."

Cautious Optimism

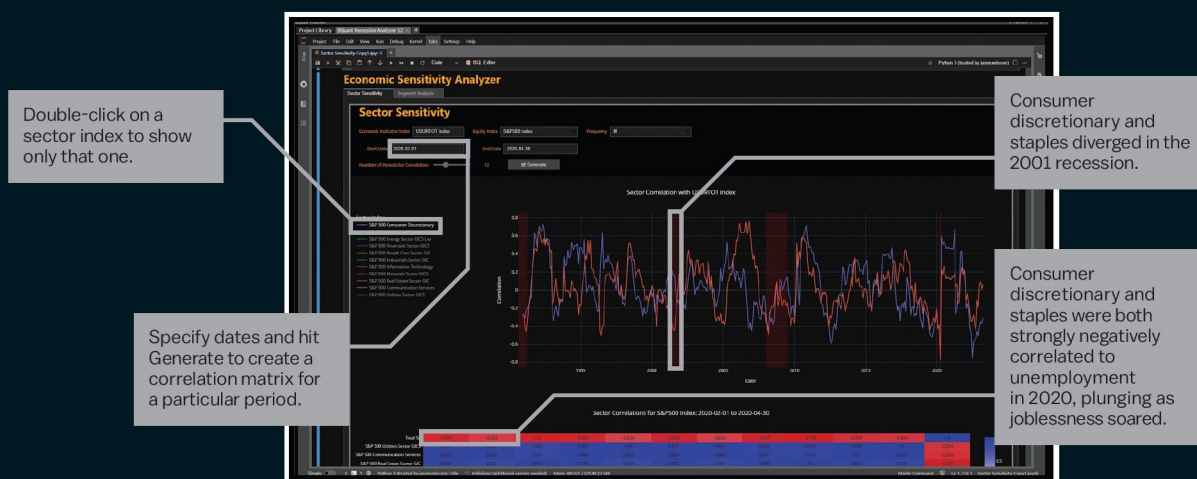
Timing allocations to the right strategy, of course, is always a challenge for investors. Macro managers were out of favor for years before market conditions brought the strategy back into fashion. Another consideration facing investors is capacity, especially when the industry performs well. Everyone wants exposure to the best managers, but the door isn't always open. K2's Knight, however, sees positive signs for those seeking access. "A lot of really talented managers whose strategies have been out of favor or who have faced a challenging return environment are opening up to new money," she says. "It's a great time to get in." ●

Boyle and Holtzman are on the hedge fund data team at Bloomberg in New York.

Examine How Companies' Revenue From Watches and Other Luxury Goods Has Fared in Recessions

By NATALY AZOULY and JACK SEWELL

Fig. 1 Open the BQuant Recession Analyzer, hit run all and scroll down to the cell headlined Economic Sensitivity Analyzer.



ECONOMISTS PEGGED the probability of a US recession at 65% as of early April, according to forecasts contributed to **{ECFC US <GO>}**. If a downturn happens, how would your investments fare?

The BQuant Recession Analyzer application allows you to examine how stock market sectors and business segments have performed in previous downturns so you can understand what may happen if the US economy slumps. To request a copy of the app, send a message to bqnt_amer@bloomberg.net.

BQuant is the interactive development platform that integrates with the terminal, Bloomberg's data and services and open-source Python libraries.

How to Use

To open the app, click on the link in the message you receive, or run **{BQNT <GO>}** and click on the app in the Received Projects folder. The project opens in a Jupyter Notebook. Hit the run all button—the two triangles pointing to the right—in the toolbar to

run the code, which is in a series of cells. That will load a cell headlined Economic Sensitivity Analyzer. Scroll down to it. The cell has two tabs: Sector Sensitivity and Segment Analysis.

The Sector Sensitivity tab calculates a rolling correlation of sectors of a selected stock index to an economic data series. To see the sensitivity of S&P 500 sectors to the US unemployment rate, for instance, use the tickers already loaded in the cell: USURTOT Index in the Economic Indicator Index field and S&P 500 Index as the Equity Index. Hit the Generate button. In the graph that appears, you can focus on particular sectors. Double-click on S&P 500 Consumer Discretionary in the legend to the left to show only that sector. Then click on Consumer Staples to add a comparison (**FIG. 1**).

The sectors have behaved differently in each of the past three recessions. During the downturn in 2001, following the dot-com crash, consumer discretionary was negatively correlated with unemployment: As job losses rose, the sector declined.

Fig. 2 Click on the Segment Analysis tab to see segment data from MODL for leading luxury goods makers.



Consumer staples, however, was positively correlated.

The picture was different during the global financial crisis. In the year-and-a-half-long recession, both consumer discretionary and staples were weakly negatively correlated to unemployment.

Then, in the sharp Covid-19 downturn from February through April 2020, both sectors were strongly negatively correlated—stocks plunged as unemployment soared. (By running **{USURTOT <Index> GP <GO>}**, you can see the three peaks in unemployment since 2000, which correspond to the recessions.)

For a correlation matrix covering a specific period, select start and end dates. Specify 2020-02-01 and 2020-04-30, for example, to cover the Covid recession. Scroll down to the Sector Correlations matrix. The top line shows unemployment versus each sector individually. Both consumer discretionary and staples had a strongly negative correlation over the period, as did other sectors.

Luxury Segments

To examine how luxury goods segments performed in recessions, click on the Segment Analysis tab. Use the Segment drop-down to select Watches/Jewelry, for instance, and hit the Generate button (**FIG. 2**).

What is this data showing? First, we identified key companies in areas such as watches/jewelry and perfumes/makeup from the Bloomberg Intelligence luxury goods dashboard at **{BILUXGG <GO>}**. Then we aggregated segment data for those companies from the Company Financials (MODL) function. Queried through Bloomberg Query Language, or BQL, we used the BQNT platform to create custom indexes and charts using Bloomberg's visualization package, BQPlot. Revenue from the watches/jewelry segment dropped by about half in 2020 after the onset of Covid. ●

Azouly is a senior equity specialist for BQL/BQuant and Sewell is a quant developer in the Desktop Build Group at Bloomberg in New York.

Use Swaps Data and ‘Nowcasts’ To Understand Inflation Expectations

By DIANA FONTE

THE FEDERAL RESERVE hasn’t eased up on inflation yet. After raising the target for its benchmark rate by 25 basis points on March 22, though, the Fed downshifted the language in its statement to say “some additional policy firming may be appropriate.”

To gain insight into market expectations about the consumer price index from inflation swaps data, use Bloomberg tools and data. Then use the World Economic Analyzer to see dynamic data visualizations, determine how the inflation curve is likely to look and compare the track record of swaps-implied projections to those of “nowcasts.”

Inflation Swaps Data

To hedge against rising prices, investors typically turn to inflation-linked instruments. Inflation swaps, for instance, are derivatives in which one party pays a fixed rate on a notional amount in return for receiving a floating rate tied to an inflation gauge such as the CPI. Prices of inflation swaps thus reflect market participants’ expectations of inflation.

For transparency into the inflation swaps market, run **{SDR <GO>}** for the Swap Data Repository Trade Activity function. The US’s Dodd-Frank Act requires dealers to report trade data to swap data repositories; the SDR function aggregates such data from the Depository Trust & Clearing Corp. and other sources.

To see all reported inflation swap trades, click the Rates tab and then the Inflation subtab. You can filter trades in SDR to see what investors have priced in as of a certain date. Use the Period drop-down to select Custom, and you can specify dates to see all reported swaps across various maturities within that range. You can then filter by maturity by entering a date in the amber field in the Maturity column (**FIG. 1**).

Inflation swaps are typically lagged such that the floating leg is tied to an index level as of three months before the maturity date. In SDR, the most recent trade for a particular maturity represents the latest market-implied CPI for three months before that maturity.

Consider an example. On Feb. 14 the Bureau of Labor Statistics reported that the CPI in January was 6.4% higher than it had been a year earlier. The next day, if you went to SDR and filtered for the May 1 maturity, the function showed that the most recently executed rate for that maturity was 5.97%. That means that, as of Feb. 15, the market projection for the February CPI number was 5.97%. (The February CPI, reported on March 14, came in at 6%.)

This is a point-in-time example showing the one-month-forward projection as of Feb. 15. To analyze these market-implied rates on a rolling basis, you can use ready-made tickers for forward-looking monthly tenors, from 1 to 12 months out. Run **{ALLX MNDE <GO>}**. These tenors, in effect, make up a forward curve of inflation expectations that rolls each day to reflect the most recent value for each maturity. (The screen also lists fixed-month tickers, which, by contrast, look at a static month for the maturity and track the rate as we approach it.) To display the curve, run **{MNDERM1 <Index> CCRV <GO>}**. To see how the curve has evolved between specific dates, click on the Curves button and select past dates (**FIG. 2**). Bear in mind that the index rolls from one month to the next month after each CPI release is published.

World Economic Analyzer

For further insights into inflation expectations, run **{ECAN <GO>}** for the World Economic Analyzer, an application developed by Bloomberg’s economics team in BQuant. (To be enabled for ECAN, send a message to ecan2@bloomberg.net.) In ECAN, select World Economic Analyzer. Use the Country drop-down to select U.S. and the Analysis menu to choose Consumer Price Index (CPI). Hit Update. ECAN will display a series of sections.

Swap Implied Versus Actual

Click on Inflation Swap Implied CPI vs. Actual to expand the section. The first chart graphs CPI curves implied by inflation swaps (**FIG. 3**).

To watch an animation of the inflation curve over time, press the play button. To freeze it at a point in the past, hit the Stop button. The orange lines are the inflation curves historically, the white line is the actual CPI. You can gauge market accuracy by comparing point-in-time values of the inflation forward curve to the actual CPI. Scroll down for a heat map that measures market expectations.

The section also lets you track inflation expectations beyond one year. Scroll back up and click on the Annually, Next 5 Years button (**FIG. 4**). This chart is based on the zero-coupon inflation swaps data on the Inflation Bonds/Swap Settings (SWIL) function. The curves here derive from zero-coupon mid rates—shown in the ZC Mid column in SWIL—with less-liquid points interpolated from more-traded tenors. The series are then transformed to show implied average one-year forward inflation beginning at the end of each 12-month period over the five years. ▶

Fig. 1 For inflation swaps data, go to **{SDR <GO>}**, click the Rates tab and then the Inflation subtab.

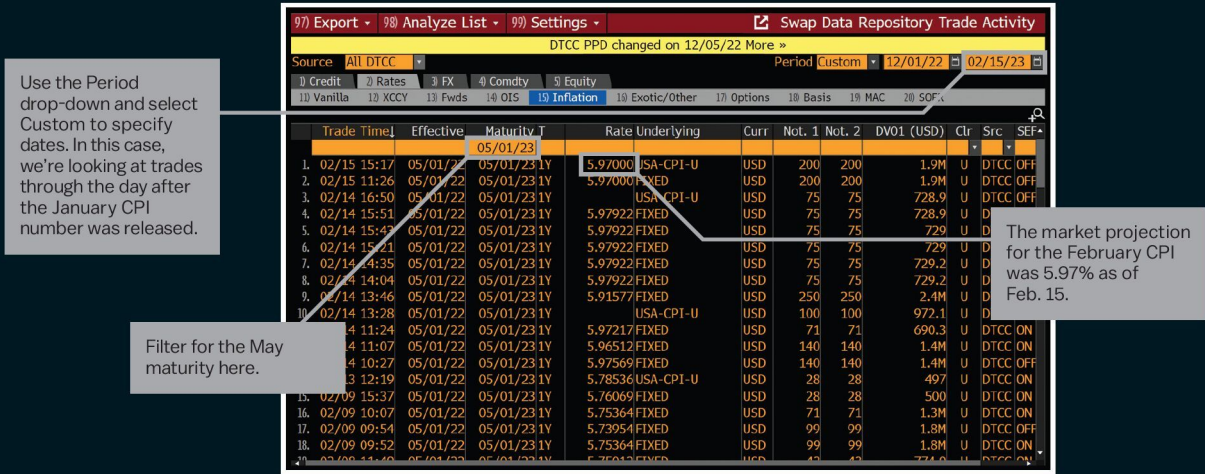


Fig. 2 To see the swaps-implied inflation curve, run **{MNDERM1 <Index> CCRV <GO>}**.



Fig. 3 Go to **{ECAN <GO>}** and click on World Economic Analyzer. Then use the Country drop-down to select US and the Analysis menu to choose Consumer Price Index (CPI).

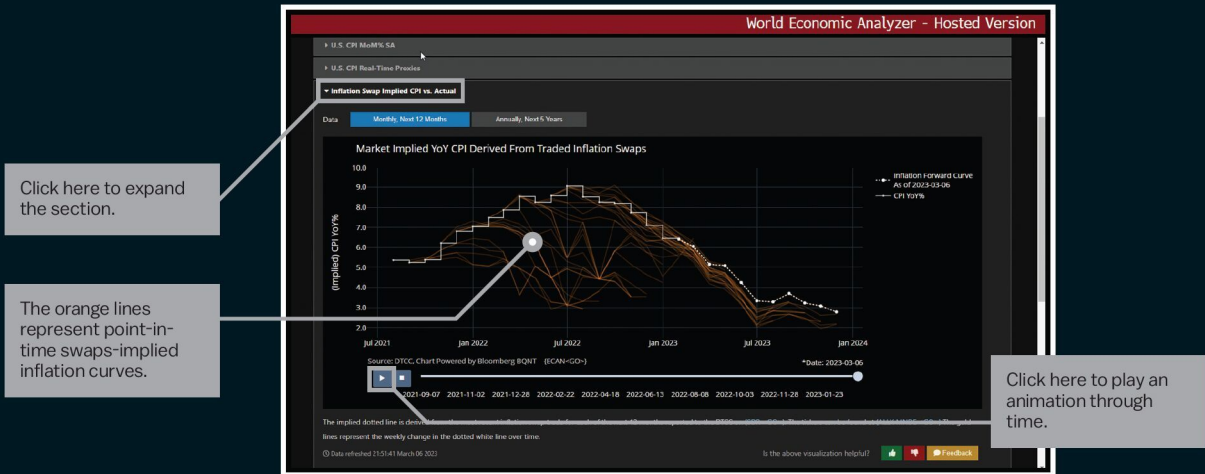


Fig. 4 To look further out, click the Annually, Next 5 Years button.

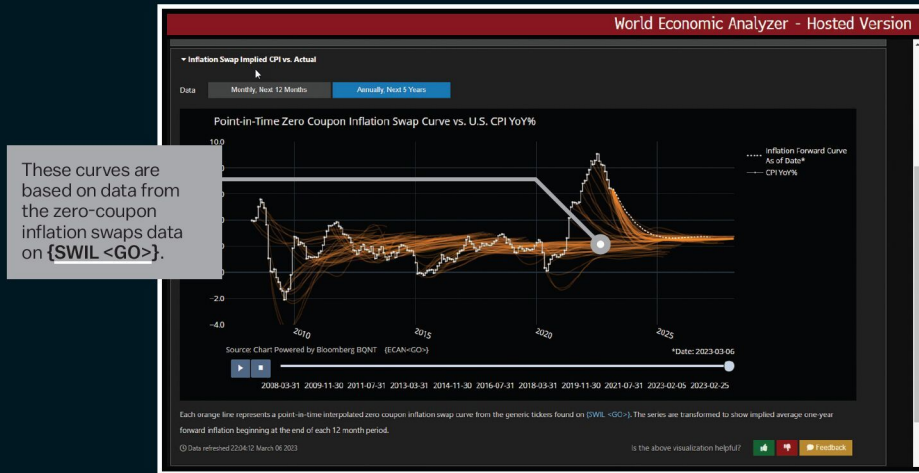


Fig. 5 In ECAN, click on U.S. CPI Real-Time Proxies to expand the section.



Real-Time Proxies

ECAN also has a section dedicated to analyzing accuracy across three types of nowcasts. Click on U.S. CPI Real-Time Proxies in ECAN to expand the section. Here, you can compare CPI levels implied by inflation swaps with predicted levels from the Kalshi Inc. betting markets and the Cleveland Fed nowcast.

Kalshi, which registered with the Commodity Futures Trading Commission as an exchange in 2020, lets investors bet on so-called event contracts. A Kalshi contract, for example, enabled investors to wager on whether US Inflation YOY would be above 5.6% in March: “Yes” traded at 46¢, while “no” fetched 63¢ on March 6. The winning side will collect \$1. The Cleveland Fed, meanwhile, provides daily nowcasts of inflation. For more on its model, run [{CLEVCPMC <Index> DES <GO>}](#).

Click All at the top to overlay the three indicators (**Fig. 5**). Orange dots in the top chart denote the actual CPI releases. The Proxy Performance chart tracks the residual error of each projected data series to gauge its accuracy. Below that, a table displays calculations including the root mean squared error (RMSE), the number of times the forecast was spot on, the number of overestimates and underestimates and the median for the over- and underestimates.

Based on the metrics, the swaps-implied data topped the other projections, with an RMSE of 0.16 and five correct estimates over the past 20 CPI releases as of March 6. ●

Fonte is an economics and FX advanced specialist at Bloomberg in New York.

ETF Flows Show the Rotation Into Defensive Sectors and Dividend Payers

By KAI BLATNICKY, JOSHUA MOORE and ALEX WISCH

Fig. 1 Go to **{ETF <GO>}** to screen for equity sector ETFs that trade on US exchanges.

Fund Type	Assets	Cost	Performance	Flow	Liquidity	Allocations	Regulatory Structure	YTD Flow (M USD)	1Y Flow (M USD)
Equity Communications (14)									
Sum	823.30			+149.53				+227.95	-224.12
Equity Consumer Discretionary (34)									
Sum				+210.36				+1,052.95	+1,056.71
Equity Consumer Staples (14)									
Sum				+169.21				+549.19	-59.09
Equity Energy (64)									
Sum				-135.46				-59.09	-5,291.39
Equity Financial (37)									
Sum				+62.15				-2,340.91	-5,343.09
Equity Health (55)									
Sum				-113.20				-1,132.25	-1,213.73
Equity Industrials (34)									
Sum				+99.20				-572.23	-1,058.90
Equity Materials (40)									
Sum				+31.57				-196.45	+999.23
Equity Technology (118)									
Sum				-201.06				-328.39	+1,094.70
Equity Thematic (126)									
Sum				-324.85				+526.12	+2,327.26
Equity Utilities (17)									
Sum				+70.06				-70.14	-331.24
Equity Utilities (17)									
Sum								+523.21	-51.88

To group the funds by sector, click here and use the Group By drop-down to select BFCs category.

Defensive sector consumer staples had the biggest inflows over the past year, followed by health.

Tech saw outflows over the period.

WITH INFLATION STILL running hot and a recession possibly looming, investors are focusing on preserving wealth. They've been voting with their feet, moving into defensive sectors. What's more, over the past 12 months, they've piled into funds that deliver high-dividend yields from holdings of cash-flow-heavy companies.

That doesn't mean so-called growth stocks are completely out of the equation. Fund flows into technology sector funds turned positive in March. Perhaps some investors want an option on economic recovery once the full Federal Reserve tightening cycle abates.

To examine exchange-traded funds data showing this shift in allocations, use the Exchange Traded Funds function on the Bloomberg terminal. ETFs, in contrast to other types of investment vehicles, come with a helpful feature: Most of them provide daily inflow and outflow data. Moreover, the large quantity of ETFs across diverse trading venues worldwide allows you to get a granular perspective on capital movements, seeing precisely where money is going.

RUN {ETF <GO>}. The function lets you filter the universe of exchange-traded products to drill down to those that interest you.

You can tick boxes in the filters panel at left or simply type a keyword in the amber field at the top and click on the match you want.

To focus on funds that track equity sectors, tick the box for Sector Equity under BFCs Asset Group. Filtering for such ETFs and exchange-traded notes that trade on US exchanges winnowed the list to 553 funds in early April. The tabs let you analyze these funds' cost, performance, liquidity, allocations and other metrics. To see funds that have attracted the most investment over the past 12 months, click the Flow tab.

First, let's look at these funds grouped by industry. Click the Settings button on the red toolbar. Use the Group By drop-down to select BFCs Category. Then tick the box to select Sum and any other statistics you want. Hit Update. Collapse the industry groupings in the display, and you can see which ones attracted the most total inflows over the past year (**FIG. 1**).

Here you can see that the leading industry was consumer staples, with \$5.3 billion in inflows. That was followed by health, with \$4.1 billion. Conversely, investors fled from financials, with \$13 billion of outflows, and consumer discretionary, with \$2.3 billion. ▶

Fig. 2 To see individual funds with the largest inflows, remove the industry grouping and click twice on the 1Y Flow column heading.



Fig. 3 To examine the Schwab ETF's sector weightings, run {SCHD US <Equity> CCB <GO>}.



Fig. 4 To compare the performance of two funds, go to {HFA <GO>}.

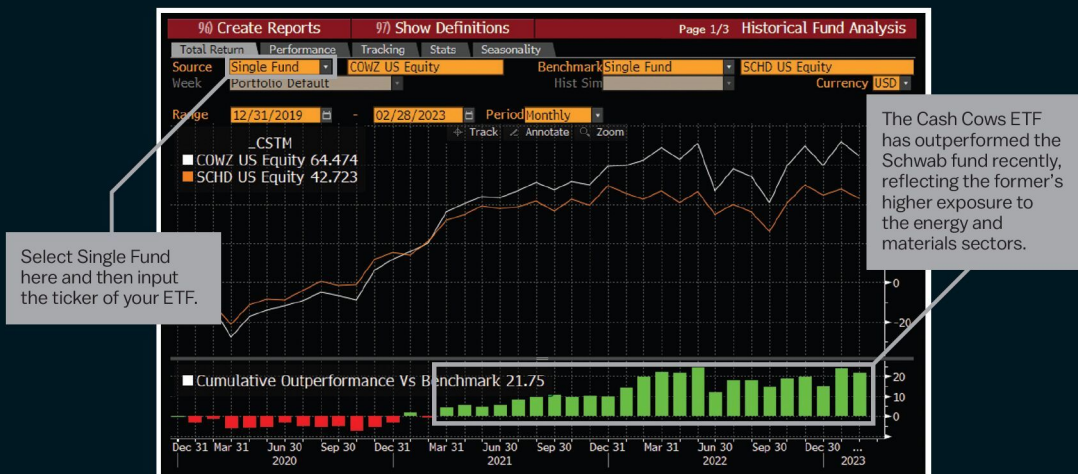
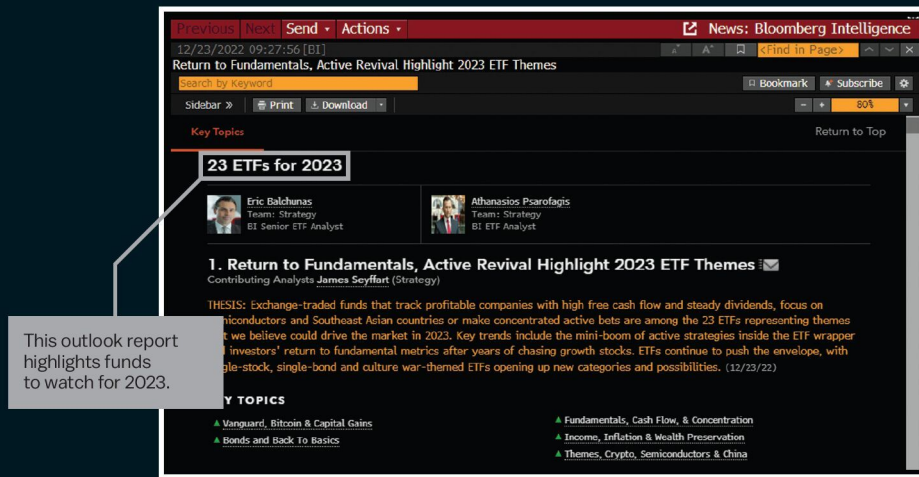


Fig. 5 For further analysis of ETFs, run **{BI ETFS <GO>}** for the Bloomberg Intelligence dashboard.



This outlook report highlights funds to watch for 2023.

Next, let's look at the funds that attracted the most inflows overall. Click Settings again. Hit Restore Defaults and Close to get rid of the industry groupings. Next, delete the BFCS Asset Group: Sector Equity filter by clicking on the x. Type "equity" in the amber field and click on the Asset Class match to select it. Click twice on the 1Y Flow column heading to sort from the largest inflows to biggest outflows (**FIG. 2**).

Although ETFs that track the total stock market or indexes lead the list, the top 10 also includes funds whose focus is on cash flow and dividends: JPMorgan Equity Premium Income ETF, Schwab US Dividend Equity ETF, Pacer US Cash Cows 100 ETF and Vanguard High Dividend Yield ETF. Also among the top 10 is the Vanguard Growth ETF, a fund whose biggest holdings include tech favorites such as Alphabet, Amazon.com, Apple and Microsoft.

Of the income-focused funds, the largest inflows were at the JPMorgan ETF, which generates income from selling options as well as collecting stock dividends. The next biggest was the Schwab fund, which seeks to replicate the Dow Jones Dividend 100 Index. To examine the fund's sector and stock weightings, go to **{SCHD US <Equity> CCB <GO>}** and click the Revenue Breakdown button (**FIG. 3**). CCB lets you see how much of the revenue of the stocks held by the fund derives from different sectors. Financials accounted for the largest exposure in the Schwab ETF, with 21% of the revenue of its holdings coming in the sector. Technology, consumer staples and health care, all sectors with positive flows over the past year, make up the next three largest weights.

That might be the right sector mix for the current and

longer-term economic environment, given your risk/return profile. To dig into which ETFs and exposures are best for you, use this analysis to compare other funds. Run **{COWZ US <Equity> CCB <GO>}** to load the Pacer US Cash Cows ETF, for instance, and you can quickly see that it has a much higher exposure to the energy and materials sectors. Together, the two industries represented almost 50% of the revenue of the fund's holdings.

To compare the performance of the funds, use the Historical Fund Analysis function. Run **{COWZ US <Equity> HFA <GO>}** to load the Pacer Cash Cows fund. Then use the Benchmark drop-down to select Single Fund. Type SCHD US in the field to the right and click on the match to load the Schwab ETF (**FIG. 4**). Here you can see that the Cash Cows ETF has outperformed the Schwab fund recently, beating the latter by 21 percentage points from the end of 2019 through February. That's not surprising, given the strong performance of energy over the past two years.

FURTHER ANALYSIS OF ETFs is available on the Bloomberg Intelligence ETFs dashboard. Go to **{BIETFs <GO>}**. For an outlook article in which BI's Eric Balchunas and other ETF analysts highlight 23 ETFs for 2023, click Outlook at the top of the home page and then on the headline "Return to Fundamentals, Active Revival Highlight 2023 ETF Themes" (**FIG. 5**). ●

Blatnick is an equity market specialist, Moore is an equity advanced specialist, and Wisch is a news product application specialist at Bloomberg in New York.

Three Charts to Help Identify Crypto Trends

By MICHAEL BRIODY, ADRIANA BRUNO and BRIAN COLE

LAST YEAR MAY GO DOWN in history as one of the toughest for the crypto industry. The collapse of FTX Trading Ltd. and other firms sent investors running and sidelined venture capital. Yet the industry's builders—programmers and protocol creators—are still hard at work, and some analysts say the recent turmoil could help clear the way for better regulation and stronger adoption.

The question now is which trends in digital assets will pre-empt this year. The market has bounced back, with Bitcoin gaining 72% through March 31. As those gains attract attention, investors are looking to visualizations and technical analysis for direction. Here are some Bloomberg charts that can help you spot trends and potential opportunities in crypto.

Economic Correlations

A chart showing the price of Bitcoin, US personal savings and inflation suggests a relationship between crypto prices and how comfortable consumers feel (**FIG. 1**). The pandemic brought two big bumps in personal savings—first a spike to a record \$6.4 trillion in April 2020, as people hunkered down early in the pandemic, and then another jump in March 2021. Those buildups were followed—with lags—by rises in the price of Bitcoin. Then, as the consumer price index climbed in 2022, eroding consumers' purchasing power, Bitcoin trended down.

Pattern Identification

Run **{G <GO>}** to create custom charts you can save and share. A logarithmic chart graphing Bitcoin shows a pattern that may repeat over the next 12 months or so (**FIG. 2**). The white trend channel, aligned with peaks and troughs beginning in 2018, captures almost all the price action through this March. The two purple triangle patterns annotate Bitcoin's 2018 bear market and recovery and its 2022 decline and rebound.

White arrows mark points at which prices breached below the triangles but held around the trend channel's support. If you align the point at which prices broke up through the lower leg of the triangle, indicated with red arrows, to where Bitcoin was trading as of late March, marked by yellow, you can get a sense of the projected change to the top of the triangle, a potential scenario for this year.

Relative Rotation Graph

With so many cryptocurrencies out there, which coins should you keep an eye on? One way to get a quick read on how different assets

are performing is to use the Relative Rotation Graph function.

To start, you need a list of crypto assets. For a sample worksheet, go to **{WSL <GO>}**. In the amber field, type "crypto assets" and click on the Crypto Assets Worksheet that appears. Click on Save a Copy to Edit, give the sheet a name and hit Update.

Next, run **{RRG <GO>}**. Use the Source drop-down to select Security Worksheets. Then use the Name field to select the crypto worksheet you just saved. To benchmark the assets in the worksheet against the Bloomberg Galaxy Crypto Index, type "BGCI" in the Base field and click on the match (**FIG. 3**).

How do you interpret this chart? The RRG chart—which was created by Julius de Kempnaer, founder of Amsterdam-based RRG Research—is built around two axes centered on a value of 100.

The x-axis shows the JdK RS-Ratio, a proprietary gauge of the ratio of the relative strength of a security to its benchmark. Readings above 100 indicate that the security is outperforming, and those below 100 are underperforming.

The y-axis similarly displays a proprietary measure of momentum. As you climb this scale, think of the ratio as building up positive momentum. Move down, and you're losing momentum.

The axes form four quadrants. The top right section, labeled Leading, contains securities that are outperforming at an increasing rate. The one labeled Weakening shows those that are outperforming but losing momentum. The Lagging quadrant denotes those that are underperforming with low or negative relative momentum. The Improving section holds those that are underperforming but building steam. A square icon shows where a security currently sits; the arrows represent its path over previous periods.

Standing out in the Leading quadrant as of late March was Stacks—Bloomberg ticker: **{XST <Currency>}**. The native coin of the Stacks network, which enables smart contracts on the Bitcoin blockchain, was up almost 350% this year through March 30. Fantom—**{XFN <Currency>}**, a native token of a smart-contract platform—was also in the Leading section but starting to drift down on the momentum scale. A number of coins, including Solana, **{XSO <Currency>}**, were in the Improving quadrant but declining on the momentum axis. ●

Briody is an FX/crypto market specialist, Bruno is a data visualization product specialist, and Cole is an advanced equity specialist at Bloomberg in New York.

Fig. 1 A chart of Bitcoin, US personal savings and inflation suggests a relationship between crypto prices and how well-off consumers feel.



Fig. 2 A logarithmic chart of Bitcoin reveals a pattern that could repeat over the coming 12 months.



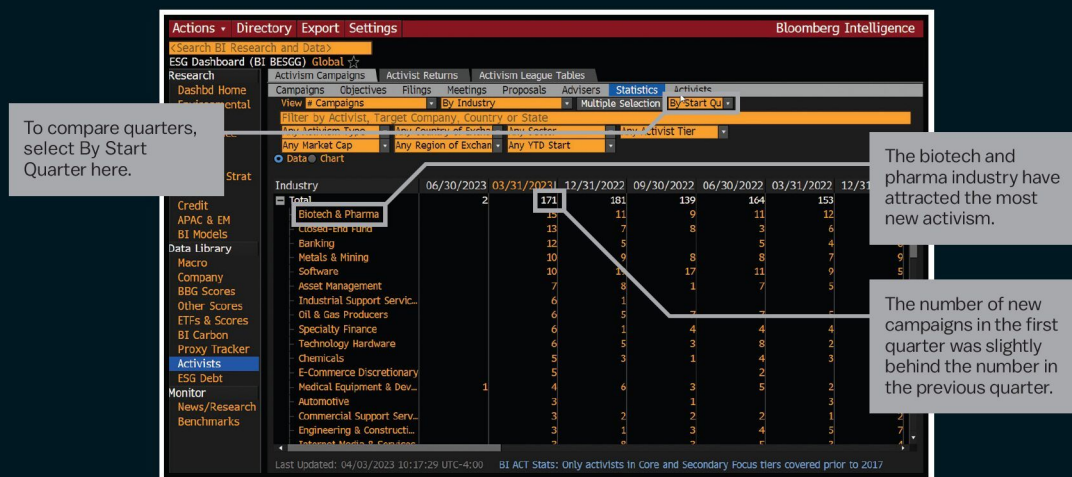
Fig. 3 Go to `{RRG <GO>}` to analyze crypto assets in the Relative Rotation Graph.



Activist Campaigns Kick Off 2023 on Pace For Another Annual Record

By BASSEL MAHMOUD

Fig. 1 For an overview of historical data on activist campaigns, go to **{BI ACT <GO>}**, click the Activism Campaigns tab and then hit the Statistics subtab.



ACTIVIST INVESTORS continue to be busy this year.

The 171 campaigns announced in the first quarter of 2023 were slightly behind the 181 in the fourth quarter of 2022, which was the most in any three-month period since 2018. The first quarter's campaigns included 15 targeting biotech and pharma companies such as Bayer AG. After the meltdown of Silicon Valley Bank in March, two other banking businesses topped the list of most likely targets for campaigns in the coming 12 months, Bloomberg's Activism Screening Model showed.

USE THE BLOOMBERG INTELLIGENCE activism dashboard to track statistics on activist campaigns and EQS to identify companies likely to be the next targets.

For an overview of historical activist data, type "BI activism" in the command line and choose the BI ACT match from autocomplete.

The shortcut is **{BI ACT <GO>}**. Click the gray Activism Campaigns tab and the Statistics subtab. Set the View amber boxes to # Campaigns, By Industry and By Start Quarter. Click the 3/31/2023 heading to rank them (**FIG. 1**). In the first quarter, biotech and pharmaceuticals targets attracted the most new activism campaigns.

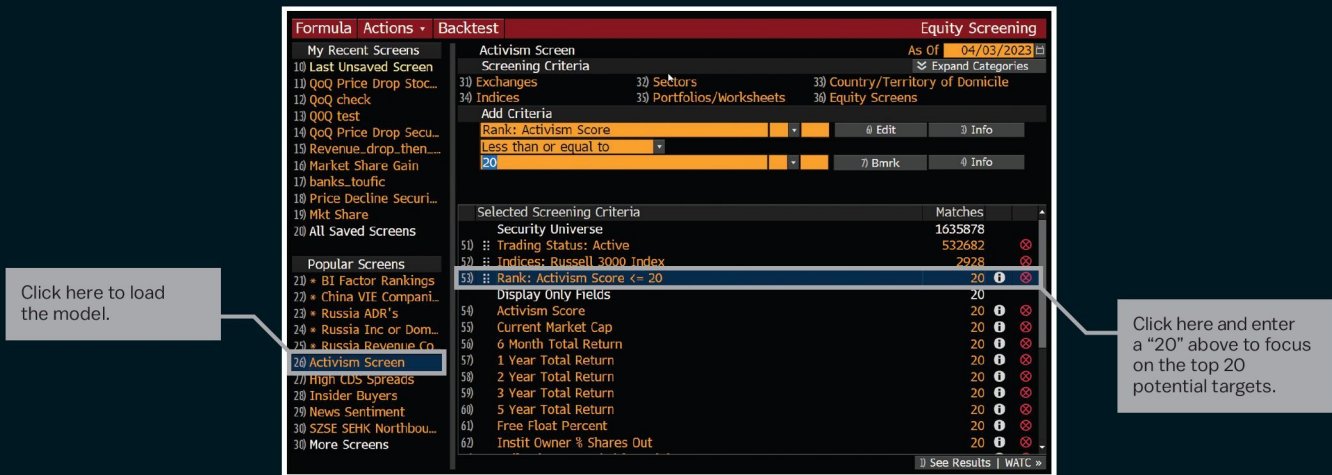
The first-quarter pace puts 2023 on track to top last year. In 2022 new campaigns rose 8%, to a total of 637, for the full year. "Activists largely targeted opportunities for cost cutting and/or share buybacks given the uncertainty ahead, particularly within the flagging technology sector," wrote Rob Du Boff, senior ESG analyst at Bloomberg Intelligence.

To track last year's software activism campaigns: Click the Campaigns subtab. Change the Any Industry amber box to Software. Change the Any Campaign Status box to Open – Hostilities Ongoing. Change the Any Start Year box to 2022.

Fig. 2 Click the Campaigns subtab to dig into last year's tech campaigns.



Fig. 3 For the Bloomberg Activism Screening Model, run `{EQS <GO>}`.



Click the MktCap heading to rank from biggest to smallest (**FIG. 2**).

Starboard Value LP announced its stake in Salesforce Inc. in October, seeking to improve its margins. The San Francisco-based customer relations management software maker has since committed to cutting 8,000 jobs. In the first quarter, other activists piled in, including Elliott Investment Management. Yet Salesforce avoided a proxy fight with Elliott after its shares soared 51% in the first quarter.

THE BLOOMBERG ACTIVISM Screening Model aims to identify which companies are most likely to face campaigns in the next 12 months. As of March 31, the top two for the Russell 3000 were in the banking business: First Republic Bank and Green Dot Corp.

To see the model: Type "equity screen" in the command line and select EQS. Click Activism Screen in the Popular Screens

section. To trim the list to the 20 top targets, click Rank: Activism Score <= 500. Type "20" instead of 500 and hit <GO> (**FIG. 3**).

Click See Results | WATC. Type "BICS level 3 industry name" in the Add Column box, select the match and hit <GO>. Repeat to add a column for YTD Total Return.

The Activism Screen proved its worth last year, according to the Bloomberg FY 2022 Global Activism Review. In 2022, 17% of the Russell 3000 companies identified in the screening's top 1% faced campaigns, compared with 5% of the entire index. Companies highlighted and eventually targeted included Bed Bath & Beyond Inc. and Neuronetics Inc. Similar figures for the Stoxx Europe 600 were 25%, versus 3.5%. Companies targeted included Fresenius SE and Bayer. ●

Mahmoud is on Bloomberg's activism data team in London.

Track the Performance of Bonds In High-Yield ETFs

By REANNA NOTARANTONIO and STEVEN GEE

FIXED-INCOME exchange-traded funds pulled in \$19.5 billion in January, the strongest start of a year for the category, according to Bloomberg Intelligence research.

For investors there were plenty of attractions: high yields, lower costs and more actively managed ETFs offering distinctive strategies entering the market. Last year issuers started 90 fixed-income ETFs, bringing the total to 593 US-traded bond ETFs as of mid-March.

Bond market turmoil in March, however, has made the outlook for fixed-income ETFs murkier—potentially also creating more opportunities for investors. Here are some tools you can use to delve into the funds.

FIRST, FOR BLOOMBERG Intelligence’s ETF research, go to **{BI ETFS <GO>}**.

To find and compare ETFs, run **{ETF <GO>}**. The function lets you use filters to find funds that meet your specific investment criteria. For US-traded ETFs that focus on domestic high yield, tick the ETF box under Fund Type if it isn’t already selected. Clear any other criteria in the amber field at the top of the screen. In the BFCS Asset Group section of the filter panel, select Domestic Fixed Income. Under BFCS Category, choose High Yield. Finally, under Exchange, select United States. As of mid-March, that winnowed the universe to 71 ETFs.

For a snapshot of historical inflows and outflows, click on the Flow tab. Click the 1M Flow column heading to sort by the biggest outflows over the past month (**FIG. 1**). The largest outflows, as of mid-March, came from some of the biggest high-yield funds: HYG, JNK and USHY—respectively, the iShares iBoxx High Yield Corporate Bond ETF, the SPDR Bloomberg High Yield Bond ETF and the iShares Broad USD High Yield Corporate Bond ETF. Click the column heading again to sort by the biggest inflows over the past month.

To compare costs, click on the Cost tab and then on the Expense Ratio column heading to sort from low to high (**FIG. 2**). The average of the 71 ETFs was 42 basis points as of mid-March, and the lowest was IMTB: the iShares Core 5-10 Year USD Bond ETF. (According to Bloomberg Intelligence, a new fund then still in registration was expected to shake up the category: The Schwab High

Yield Bond ETF was slated to list in April, with an expense ratio of only five basis points.)

To further narrow the universe, click the Advanced Screening | FSRC button at the bottom of the screen. That will load your list of 71 ETFs into the Fund Screening function. To filter for ETFs that use an optimized replication strategy (that is, those that track benchmarks by holding less than 90% of the members of the index), type “replication strategy” in the amber field under Screening Criteria and click on the match. Select = Equal to. Then, using the drop-down that appears, choose Optimized and press <GO>. That winnowed the list to 50 ETFs.

To drill down to funds focused on 3- to 10-year maturities, type “maturity band focus (holdings based)” and click on the match. Select Include/Exclude. Then type “intermediate” in the field below and click on the match. Press <GO>.

For funds with expense ratios of less than 25 basis points, type “expense ratio” in the field and select the match. Choose < Less than. Type “0.25” in the field that appears and press <GO>.

Finally, to focus on funds that have generated a positive return during the past three months, type “total return 3M” in the field and click on the match. Click on > Greater than. Then type “0” in the field and press <GO>. As of March 21, that trimmed the list to five ETFs (**FIG. 3**). To see them, hit the Results button.

TO GET UNDER the hood of one of these funds, use Bloomberg’s Fixed Income Worksheet (FIW) function. FIW enables you to analyze the performance of the holdings of a fixed-income ETF, so you can get insight into what’s driving its performance. (This article is the 15th in a continuing series on FIW. For links to the others, go to **{NSN RM6ICMDWX2PT <GO>}**.)

Run **{FIW <GO>}**. To examine the iShares Broad USD High Yield fund, type its ticker—“USHY US Equity”—into the field in the upper left corner of the screen and click on the match.

Is the ETF holding bonds that are trading at a significant discount to par? Click on the Bond List tab, then on the Relative Value subtab. Use the first drop-down at the top of the table to select Price (BVAL), then choose 3 Months using the next drop-down. The Range bars will now let you quickly see which ►

Fig. 1 To screen for fixed-income exchange-traded funds, go to {ETF <GO>}.

Use the filters to drill down to ETFs that match your criteria.

As of mid-March, there were 71 US-traded high-yield ETFs.

Three of the largest high-yield funds saw the biggest one-month outflows.

Median	1D Flow (M USD)	1W Flow (M USD)	1M Flow 1 (M USD)	YTD Flow (M USD)
.00	-181.39	-653.78	-6,418.22	-7,700.35
1) HYG US	+7.34	-442.39	-3,191.49	-3,846.04
2) JNK US	-180.38	-544.89	-2,664.51	-2,652.10
3) USHY US	.00	+34.68	-433.61	-794.24

Fig. 2 In {ETF <GO>}, click on the Cost tab to compare the expense ratios of the funds.

Click here to sort the list.

This iShares fund had the lowest expense ratio as of mid-March.

Click here to load your list of ETFs into the Fund Screening function.

Expense Ratio	Fund Mgr	Stated Fee	Avg Bid Ask Spread	1 Yr NAV Trk Error	Premi
Minimum		0.06%	0%	0.1038%	-0.6
Maximum		1.18%	5.18%	7.1666%	+0.5
Average		0.42%	0.45%	1.0214%	-0.1
Median		0.40%	0.18%	0.4558%	-0.0
1) IMTB US		0.06%	2.81%	0.3649%	-0.1
2) SPHY US		0.10%	0.10%	0.5011%	-0.1
3) BBHY US		0.15%	0.07%	1.1459%	+0.0

Fig. 3 In {FSRC <GO>}, you can add criteria to winnow the list to those funds that match your specifications.

Limiting your search to funds with optimized replication strategies trims the list to 50.

Click here to see the ETFs that match your criteria.

Results sorted by Total Return Ytd

Results: 50

Fig. 4 To analyze the bonds held by a particular fund, run **{FIW <GO>}**, type its ticker in the amber field in the upper left and click on the match.



Fig. 5 Click on the Bond Chart tab to analyze how option-adjusted spreads of the fund's bonds have changed during the past three months.



bonds are currently trading rich or cheap. To filter down to bonds trading at less than 60¢ on the dollar, enter “< 60” in the amber box in the P BVAL column and press <GO> (Fig. 4).

To easily spot individual bond outliers in recent trading, first delete the < 60 filter, then click the Bond Chart tab for a visual representation of the fund's holdings. In the upper left corner of the screen, adjust the two amber boxes to the right of Group By to Bloomberg Composite Rating then None. Next, click into the amber box to the right of Axes: Y and select Browse... Tick the box next to Select Custom Spread. Use the drop-down below to select Option Adjusted Spread. Select Change and then the past 3 months. Hit Close.

Click into the X-axis field and select Groups. That will arrange the bonds on the X-axis by Bloomberg Composite Rating (Fig. 5).

Here, as of March 21, you could see that the OASs—spreads to the benchmark curve adjusted for any embedded options—of securities held by the ETF had largely widened over the preceding three months amid volatility in the Treasury market.

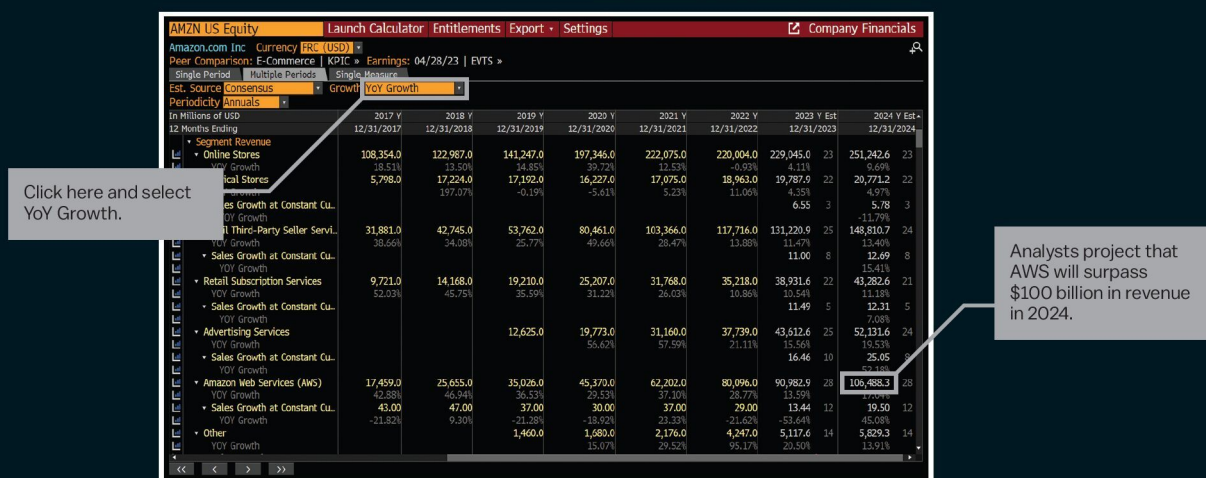
FIW showed an outlier bond issued by Western Global Airlines LLC, an Estero, Florida-based cargo airline. The OAS on its 10.375% senior unsecured private placement had blown out by 3,000 basis points. To get a better understanding of the larger pool, you can remove an outlier such as this from your analysis. Click on the bond to select it. Then right-click and select Hide selected point.

Notarantonio is on the New York hedge fund sales team, and Gee is a credit market specialist at Bloomberg in New York.

Tech Remains a Fount of Global Megawealth, While IPOs Shift to Asia

By KEITH GERSTEIN, WILLIAM COLLINS and BRIAN ROONEY

Fig. 1 To see segment revenue growth for Amazon, run {AMZN US <Equity> MODL SOURCE <GO>}.



SEVEN OF THE 10 richest people in the Bloomberg Billionaires Index in April owed most of their fortunes to equity holdings in technology companies that have listed in the past 40 years: Elon Musk and Tesla, Jeff Bezos and Amazon, Bill Gates and Microsoft and on down the list.

After the downturn in 2022, tech looks set to generate more riches for owners this year. Meanwhile, the center of gravity for wealth-generating initial public offerings has shifted over the past decade from North America to Asia. Here are some Bloomberg tools you can use to dig into these trends.

Cloud

Tech companies continue to use profits from their core businesses to fund the growth of profitable new segments. Consider

Alphabet Inc. The company's revenue from Google ads was \$224 billion in 2022. The search engine's parent has put billions of dollars into developing high-profile businesses through both acquisitions and internal development. Ads on YouTube, which the company acquired in 2006, generated \$29 billion in revenue last year, while Google Cloud earned revenue of \$26 billion. The consensus analyst forecast calls for Google Cloud revenue to outpace that of YouTube ads this year.

Similar stories are developing at Amazon.com Inc. and Microsoft Inc. Analysts expect growth in Microsoft's Intelligent Cloud segment to continue to outpace that of its other revenue streams. Amazon keeps expanding its reach in Amazon Web Services (AWS), e-commerce, physical stores and more. Analysts project cloud services to continue double-digit growth over the

Fig. 2 To compare the cloud computing giants, run {KPIC <GO>} for the KPI Comparison function.



Fig. 3 To chart key news and events for Meta, run {META US <Equity> GPCA <GO>}.

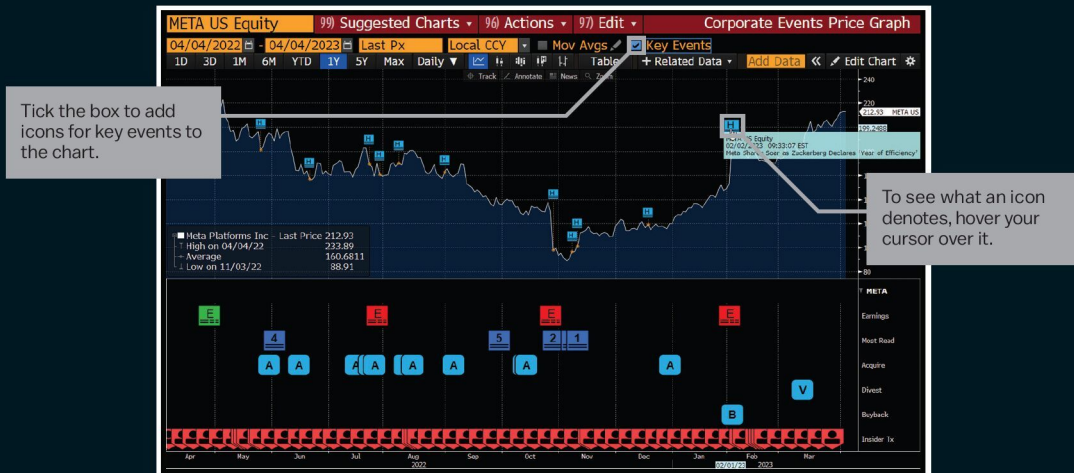


Fig. 4 To track trends in stock offerings, go to {IPO <GO>}.

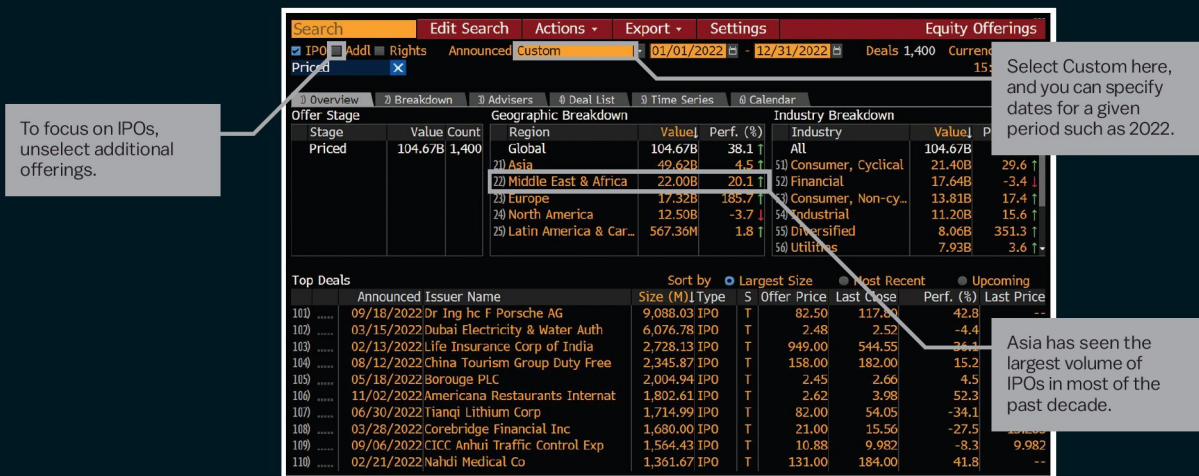


Fig. 5 To evaluate trends in equity offerings, go to **{LEAG <GO>}** and click on All Official Equity Tables.

Name	Volume (B) Curr	% Chg	Top Ranked	Share	% Chg	Rank	Chg	Share
Global								
11) Global Equity & Equity Linked	144.50 USD	+2.29	Goldman Sachs	8.54%	+0.68	347	1290	0.00%
12) Global Equity IPO	29.62 USD	-18.82	China Securities	10.75%	+5.28	215	59	0.01%
13) Global Equity IPO - SPAC	1.04 USD	-90.85	EF Hutton	27.21%	+20.09			0.00%
14) Global Equity Linked	33.11 USD	+49.37	BoFA Securities	14.44%	+11.03			0.00%
19) Global Equity Offerings	111.38 USD	-6.47	Goldman Sachs	8.83%	+1.07	336	93	0.00%
16) Global Equity, Equity Linked & ...	154.18 USD	+6.02	Morgan Stanley	8.01%	+1.35	347	1297	0.00%
17) SEC Registered Equity Linked ...	3.57 USD	-97.50	UBS	93.97%	+56.03			0.00%
Americas								
18) Brazil Equity Offerings	4.06 BRL	-74.28	Banco Safra SA	10.00%	+6.89			0.00%
19) Canada Equity & Equity Linked	2.77 CAD	-62.48	Canaccord Genui...	14.40%	+10.05			0.00%
20) Canada Equity IPO	0.17 CAD	+61.78	Canaccord Genui...	43.78%	+33.70			0.00%
21) Canada Equity IPO - SPAC	0.00 CAD	-85.05	Pacific Internati...	37.78%	+33.34			0.00%
22) Canada Equity Offerings	2.25 CAD	-68.39	Canaccord Genui...	16.42%	+11.77			0.00%
23) Canada Equity, Equity Linked ...	3.58 CAD	-64.76	Scotiabank	13.72%	+7.65			0.00%
24) Canada Retail Structured Prod...	0.10 CAD	-84.90	National Bank FI...	55.94%	+30.39			0.00%
25) Latin America Equity Offerings	0.77 USD	-75.49	Banco Safra SA	10.00%	+7.05			0.00%
20) SEC Registered Structured Not...	3.99 USD	-97.58	UBS	93.19%	+60.14			0.00%
27) US Equity & Equity Linked	36.05 USD	+16.83	BoFA Securities	11.21%	+3.44			0.00%
28) US Equity IPO	2.53 USD	-77.45	Credit Suisse	6.90%	+6.90			0.00%
29) US Equity IPO - SPAC	0.71 USD	-91.92	EF Hutton	23.77%	+17.15			0.00%

next few years, surpassing \$100 billion in revenue in 2024. To see the future growth of AWS compared with Amazon’s other businesses, run **{AMZN US <Equity> MODL SOURCE <GO>}**. Use the Growth drop-down to select YoY Growth and press <GO>. Scroll down to the Segment Revenue section (**FIG. 1**).

Even as analysts expect cloud growth to slow overall, the tech giants are poised to increase revenue from the business. To compare key performance indicators for these companies, type “KPI” in the command line of a terminal screen and click on the KPIC match. The shortcut is **{KPIC <GO>}**. Click on Browse Dashboards, on Technology and then on Cloud to select it (**FIG. 2**). KPIC shows that cloud revenue is expected to increase at Alphabet, Amazon and Microsoft by double digits through 2025. Amazon, whose cloud computing segment is the largest and most mature, is expected to rake in almost half of the market share among the three companies.

Layoffs

Job cuts have also been prevalent as tech companies rein in spending. Amazon planned layoffs according to reports in November and is expected to slow hiring. Alphabet trimmed its costs with layoffs starting in January—consensus estimates project its head count will increase only 0.31% in 2023. At Meta Platforms Inc., analysts see operating margins increasing 9.7% year over year to 27% for 2023, following two rounds of layoffs. MODL enables you to see consensus estimates change as layoffs are announced.

Stock buybacks have also helped raise stock prices for some major tech firms. To see the amount of stock buybacks and other key events for Meta, run **{META US <Equity> GPCA <GO>}**. Select

Key Events to see how events and news affected trading in the shares. To see what an icon denotes, hover your cursor over it (**FIG. 3**).

IPOs

A decade ago, in 2013, North America was the region with the largest volume of IPOs. Asia took the lead the next year, and the region has held it every year since then, with the exception of 2021, when a frenzy of listings of special purpose acquisition companies, or SPACs, put North America back on top. For seven of the past 10 years, China priced more IPO volume than the US.

To track IPO trends, type “IPO” on the command line of a terminal screen and click on the IPO match. The shortcut is **{IPO <GO>}**. To focus on initial listings, uncheck the box for Addl in the upper left of the screen. Use the Announced drop-down to select Custom. Then enter “01/01/2022” and “12/31/2022” in the date fields that appear and press <GO>. In the Offer Stage section of the screen, click on Priced, for example, to see offerings that have priced (**FIG. 4**).

You can also use the League Tables function to track trends in stock sales. Type “league tables” and click on the LEAG match. The shortcut is **{LEAG <GO>}**. Click on All Official Equity Tables to display a list of league tables covering regions and countries (**FIG. 5**). This year through April 4, US equity IPO offerings were down 77%. By contrast, China equity IPOs were off only 16%. ● —With Jess McConaghie

Gerstein, Collins and Rooney are on the data team at Bloomberg in Princeton, New Jersey.

Investigate Exposure to Risky Investments in Fund Holdings

By DENISE COCHRAN and MATT MANCUSO

Fig. 1 To find funds that reported holding AT1s, the type of bonds zeroed out in Credit Suisse's spiral, use the Bond Search function by running **{SRCH <GO>}**.

Issuer Name	Security Description	Amount Held	Position Chg	Pct Held	Ticker	Amt Issued
Cooperatieve Rabobank	RABDBK 3 1/2 PERP	428.64M	428.64M	0.03	RABDBK	1.35MMM
Cooperatieve Rabobank	RABDBK 3.1 PERP	9.64MM	1.07MM	1.20	RABDBK	812.07MM
Credit Agricole SA	ACAFP 8 1/4 PERP	9.30MM	--	0.74	ACAFP	1.25MMM
Credit Suisse Group AG	CS 7 1/2 PERP	--	-7.30MM	-99999.00	CS	2.25MMM
Credit Suisse Group AG	CS 5 1/2 PERP	16.60MM	--	-99999.00	CS	1.50MMM
Credit Suisse Group AG	CS 6 1/2 PERP	22.50MM	--	-99999.00	CS	1.75MMM
Credit Suisse Group AG	CS 9 1/2 PERP	21.35MM	-250.00M	-99999.00	CS	1.65MMM
Deutsche Bank AG	DB 10 PERP	9.00MM	9.00MM	0.67	DB	1.35MMM
Deutsche Bank AG	DB 7.89 PERP	6.20MM	--	0.50	DB	1.25MMM
Deutsche Bank AG	DB 4 1/2 PERP	1.50MM	--	0.11	DB	31
Deutsche Bank AG	DB 6 1/2 PERP	6.43MM	-2.14MM	0.80	DB	81
Erste Group Bank AG	ERSTBK 6 1/2 PERP	9.00MM	--	1.00	ERSTBK	75
Erste Group Bank AG	ERSTBK 4 1/2 PERP	13.93MM	--	1.73	ERSTBK	81
Goldman Sachs Group Inc.	GS Float PERP	18.40MM	-13.50MM	1.23	GS	1
Goldman Sachs Group Inc.	GS 4.4 PERP	4.30MM	--	1.23	GS	35
HSBC Bank Capital Fundl.	HSBC 5.844 PERP	4.80MM	--	0.56	HSBC	86
HSBC Holdings PLC	HSBC 6 1/2 PERP	17.80MM	--	0.99	HSBC	1
ING Groep NV	INTNED 3 1/2 PERP	2.00MM	--	0.20	INTNED	1.00MMH
ING Groep NV	INTNED 6 1/2 PERP	29.05MM	--	2.32	INTNED	1.25MMH
ING Groep NV	INTNED 4 1/2 PERP	8.40MM	--	0.84	INTNED	1.00MMH
ING Groep NV	INTNED 4 1/2 PERP	6.00MM	--	0.80	INTNED	750.00MM
Intesa Sanpaolo SPA	ISPIM 7 3/4 PERP	1.98MM	-5.68MM	0.15	ISPIM	1.35MMM

Click here, on an asset management firm and then on a particular fund to see its reported holdings.

This Pimco fund reported positions in four of the Credit Suisse AT1s.

CORPORATE DEFAULTS ARE likely to rise as higher interest rates pressure companies, putting investors at risk. How can you evaluate a fund's exposure to possible defaults? Here are some Bloomberg tools that can help.

Credit Suisse Group AG's takeover by UBS Group AG wiped out about \$17 billion of contingent convertible bonds in March. Which funds hold this type of Additional Tier 1, or AT1, bonds?

Use the Bond Search function to find out. Run **{SRCH <GO>}**. Type "AT1" in the amber search field and click on the Basel III Designation match. That trimmed the list to 1,454 bonds in late March.

Next, click on the Fields button. In the window that appears, scroll down to Holders: Funds and click the plus sign to expand the list. Click on Fund Ticker, then hit Select. You can enter specific tickers of funds you're interested in here or leave it blank to pull in all funds that reported holding such securities. Hit Close. Then click on Results.

Click on the Holders tab to display a list of fund management companies that held AT1s. At the top of the list was Allianz SE. Click on the Munich-based financial giant to display individual funds. To see the AT1s held by the Pimco Preferred and Capital Security fund, for example, click on its name (**FIG. 1**). Among the 96 AT1s the fund held were four of the Credit Suisse AT1s that were zeroed out in March.

ANOTHER WAY TO analyze the credit quality of a fund's holdings is to use the Portfolio & Risk Analytics function. To load the Pimco fund, run **{PFANX US <Equity> PORT <GO>}**. (If you have a default portfolio set in PORT, you can use the drop-down to navigate to the fund.)

Click the Holdings tab and the Main View subtab. Then use the "by" drop-down to select Bloomberg Issuer Default Risk (**FIG. 2**).

Fig. 2 Load the ticker and then run **{PORT <GO>}** to examine a selected fund in the Portfolio & Risk Analytics function.

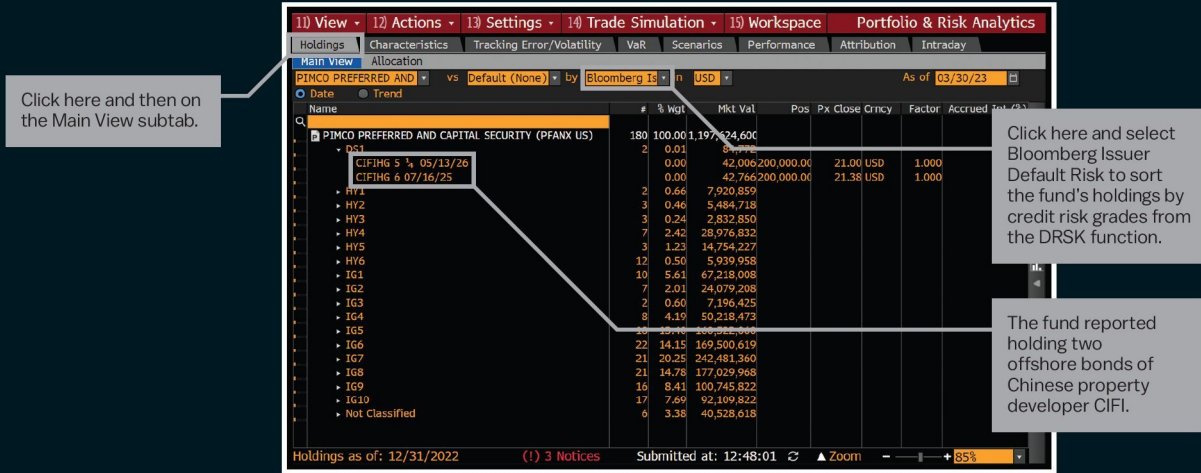
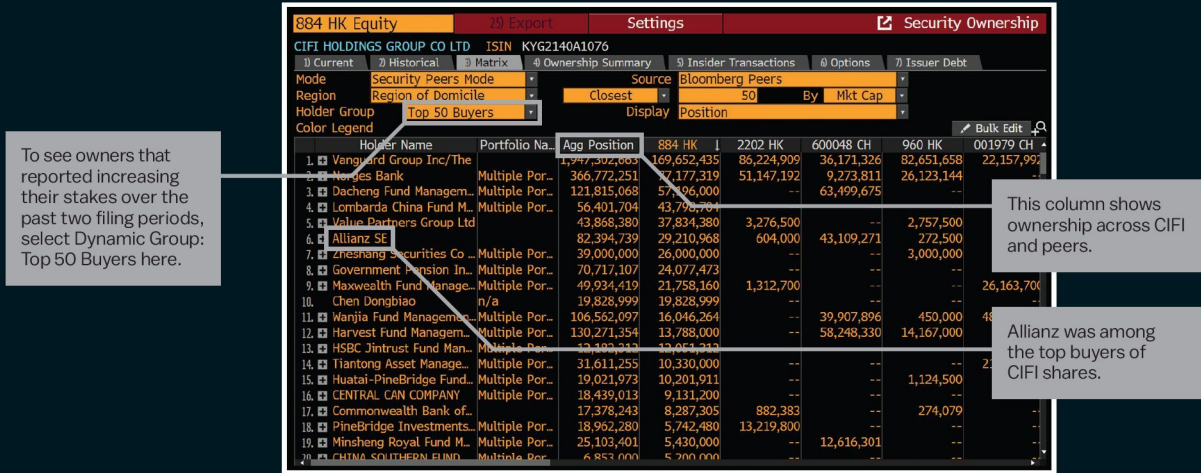


Fig. 3 To dig into ownership of shares of CIFI and peer companies, run **{884 HK <Equity> HDSM <GO>}**.



That will sort the fund's holdings by credit risk grade from the Bloomberg Default Risk (DRSK) function.

DRSK provides standardized and transparent estimates of an issuer's probability of default, which are updated each day based on fundamental and market data. The DS1 category, for example, identifies bonds with an estimated one-year probability of default in the 10% to 15% range. As of late March, that category included two offshore bonds issued by CIFI Holdings Group Co.

The Shanghai-based property developer, it turns out, was in technical default on the bonds after failing to make coupon payments in October. Trading in CIFI's stock was suspended in Hong Kong on March 31 after the company said it was unable to publish 2022 results by a deadline that day.

To identify asset managers that had been accumulating shares of CIFI and peer companies, you can use the Security

Ownership Matrix function. Run **{884 HK <Equity> HDSM <GO>}** and use the Mode drop-down to select Security Peers Mode. To show the position of holders that had reported a bigger position in the most recent filing than in the previous one, select Dynamic Group: Top 50 Buyers as the Holder Group. Then use the Display drop-down to select Position (FIG. 3). The function showed Vanguard Group as the largest buyer of CIFI stock, followed by Norges Bank. Allianz appears at No. 6 in the list.

To see firms that hold the largest positions across the set of peer companies, click on the Agg Position column heading. For default risk analytics for a particular company on the list, such as Zhesang Securities Co., type **{601878 CH <Equity> DRSK <GO>}**.

Cochran and Mancuso are on the ownership data team at Bloomberg in Princeton, New Jersey.

Bloomberg Markets



ILLUSTRATION BY GOLDEN COSMOS



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Wealth

THE LUXE

HOME PROBLEM

The 74-floor Waterline tower rises in Austin

Freeing up developers to build more housing was supposed to ease the affordability crisis. What happens when they cater to the rich?

By PRASHANT GOPAL
and PATRICK CLARK

PHOTOGRAPHS
BY MATTHEW JOHNSON





Emily Young throws open the shades of the three-bedroom penthouse.

“This is amazing,” she says, walking past the wine fridge and wet-dry bar. “Look at that fireplace.” Young, a real estate agent with a Marc Jacobs handbag on her hip, is giving a tour of one of the most luxurious apartment buildings in Austin.

At the Hanover Republic Square, there’s a “vinyl parlor” with a DJ-quality turntable; a movie theater; a dog-grooming spa; and a rooftop pool on the 44th floor. There, you can gaze at sunsets—and a neighboring skyscraper. Nearly complete, it rises 66 stories and will have a pool to rival the Hanover’s. Actually, that’s not quite right—it’s “pools,” plural. There will be three of them.

Austin is experiencing an unrivaled apartment boom. In 2021 the region including the Texas capital issued nearly 26,000 multifamily housing permits, about 11 units per 1,000 residents. That’s more per capita than any large US metro area since 1996, when Las Vegas OK’d new apartments at only a slightly higher level, according to rental marketing firm Apartment List. By the same measure, which is based on an analysis of US census data, Austin topped the 50 largest US metropolitan areas in 9 of the last 10 years.

Many, if not most, of these apartments are classified as luxury, depending on how you define it. (Some developments are likely using a bit of real estate puffery.) Buildings such as the Hanover have become a flashpoint in a fierce, often bitter debate raging in Texas, the US and around the world. It’s about the best way to shelter this generation and the next, particularly in the most sought-after and expensive cities.

Academics, developers and people in their 20s and 30s—particularly those most active on social media—have reached an unusual level of consensus. Their solution, supported by a wealth of scholarly research, is simple and elegant: Loosen regulations, such as zoning, and build more homes of any kind, cheap, modest and palatial.

The shorthand for the movement has become “Build, build, build” or “Yes, in my backyard”—Yimby, for short. It’s a rejoinder to the “Not in my backyard,” or Nimby, crowd, the hidebound folks who typically thwart construction.

Texas is famous for its business-friendly ways, and David Ott is one of many embracing the Yimby approach. He’s a partner at Houston-based Hanover Co., which developed the building Young was showing on a recent March afternoon. He says Austin is getting overbuilt, so rents will indeed come down, especially in the suburbs. “It’s simple supply and demand,” he says.

Inconveniently for the Yimbys, Austin, like other cities, is still way more expensive than it was years ago, even though it’s built so many apartments. As a result, a small group of academics is starting to question the free-market path. These critics note that the market leads developers to build luxury housing on scarce and sought-after property to maximize the return on their investment. “Yimbys say, ‘We have to let the market build,’” says Benjamin Teresa, an urban planning

scholar at Virginia Commonwealth University. “But what kind of housing are you building, and for whom?”

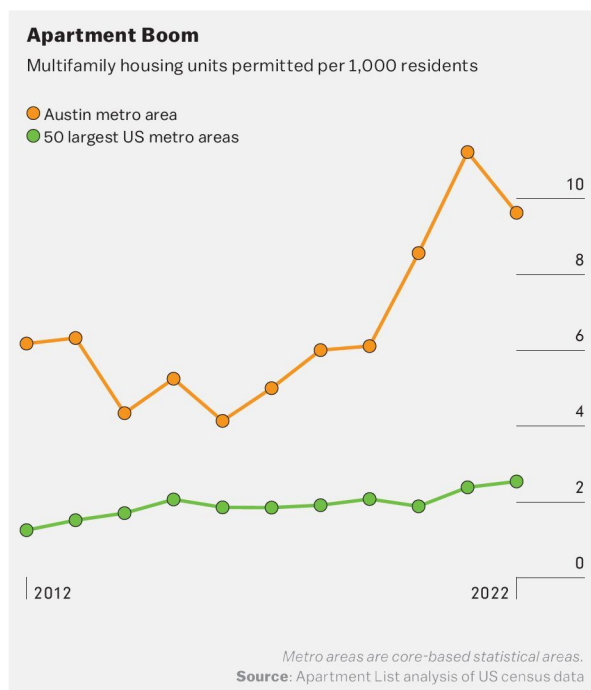
Even Austin’s well-off can find themselves caught up in a world where builders keep upping the stakes. Young’s customer at the Hanover was Enrique Mendez, the founder of a staffing agency. He lives in a \$4,000-a-month apartment in the Quincy, which was considered top-of-the-line when he became one of its first tenants in October 2021.

Still, his king-size bed barely fits in his bedroom, and the Waterline tower is rising outside his window. Ultimately, that building will be 74 floors, marring his lovely view of the city, as the construction cranes already do. Cement trucks, jackhammers and nail guns wake him at 6 a.m. Although he expected some construction, he says, “I didn’t know it was going to be the biggest tower in Texas.”

Mendez wants to escape, and he’s considering an apartment that costs \$5,800 a month, 45% more than what he’s paying now. But on a lark, he’s looking at the three-bedroom penthouse. He can’t afford it. The monthly rent: \$18,558.

DESIRABLE CITIES AROUND the world have all, one way or another, tried the Austin-style solution to their own housing crises. And they’ve all ended up in a similar bind: urban centers packed with luxury properties that regular folks can’t afford.

London has its Opportunity Areas, where eased red tape encourages development. They include the Nine Elms district, where 20,000 apartments are rising along what ►



Mendez on his balcony



Leading the Pack

Large US metro areas* where multifamily housing is growing fastest

	Units as of 2021	Change in units from 2012 to 2021
Austin-Round Rock-Georgetown, Texas	280k	51%
Grand Rapids-Kentwood, Mich.	62	44
Charlotte-Concord-Gastonia, N.C.-S.C.	204	41
Nashville-Davidson-Murfreesboro-Franklin, Tenn.	169	36
San Antonio-New Braunfels, Texas	203	34
Raleigh-Cary, N.C.	114	29
Seattle-Tacoma-Bellevue, Wash.	480	24
Salt Lake City, Utah	101	22
Denver-Aurora-Lakewood, Colo.	353	22
Dallas-Fort Worth-Arlington, Texas	773	21

*Core-based statistical areas with a population of at least 1 million.

Source: Apartment List analysis of US census data

was once an industrial neighborhood on the south bank of the River Thames. While the development includes affordable units, most are expensive and some truly grand. The Embassy Gardens residences feature a gawkworthy “sky pool,” which looks like a giant aquarium suspended between two buildings.

Back in the US, California, Massachusetts, New York and Washington are all trying to make it easier to develop apartments on land previously reserved for single-family homes or other uses. So have New Zealand and Sydney, Australia. A common change involves reducing the zoning restrictions near mass transit to encourage apartments, instead of single-family homes.

The idea is to promote “density,” or more people living on prized real estate, which increases the supply of housing. There’s another potential benefit: promoting clusters of highly paid, educated workers in fields such as finance and tech, which can lead to outsize productivity gains, according to many economists.

But the very popularity of these places with the affluent drives up housing costs, making it harder for companies to find workers and pushing firms to relocate elsewhere. The Austin metro area, one of the fastest-growing in the US, with a population exceeding 2 million, has benefited from corporations fleeing the high cost of housing elsewhere, particularly on the east and west coasts of the US. Home of the University of Texas’ flagship campus, it’s lured Elon Musk’s Tesla, as well as Oracle, from Silicon Valley. JPMorgan Chase and Charles Schwab are expanding there, too.

Now rising housing costs in Austin and other more affordable cities threaten them, too. “Build, build, build” is supposed to help. Academics cite a process they call filtering; richer renters trade up into new luxe units, starting a chain of move-ins and move-outs that lower prices for modest homes. Think trickle-down economics but for apartments.

A growing body of research focusing on cities such as San Francisco and Helsinki has offered support for the filtering effect. Building more apartments, even luxury ones, does

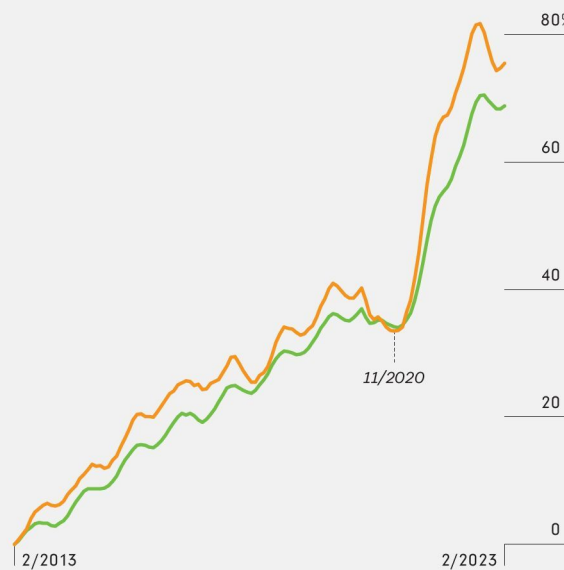
indeed moderate prices in surrounding neighborhoods. Older buildings become less attractive; other tenants move in and pay less. In 2019, Brian Asquith and Evan Mast, economists at the W.E. Upjohn Institute for Employment Research in Kalamazoo, Michigan, concluded that new buildings in low-income areas slow rent growth nearby.

Using similar methods, Anthony Damiano and Chris Frenier, Yimby-skeptical University of Minnesota researchers, also found that new construction reduces rents nearby—but only in upscale buildings and not in a significant way. More important, though, a gentrifying neighborhood drives up the

Soaring Prices

Change in average monthly rent since February 2013

Austin US (150 largest markets)



Source: RealPage



Austin's Rainey Street district in 2011, before skyscrapers began to dominate the neighborhood

prices of more ordinary units. Overall, they determined in their study of Minneapolis from 2000 to 2018, the new units actually pushed prices up, validating the displacement fears of low-income residents.

Frustration over rising rents has led cities to consider government interventions that were once considered discredited. Boston, Orlando and Kingston, New York, have taken fresh looks at rent control, which had been blamed for distorting the market and raising the cost of other apartments.

Others, including Austin, are turning to publicly subsidized housing. Singapore, one of Asia's most expensive housing markets, is one model. Half a century ago, the government started to build affordable apartments, where much of the population now lives.

In London, Mayor Sadiq Khan aims to make half of all new homes in the city "genuinely affordable" and is pushing for the construction of more "council" flats, the UK version of public housing. In Los Angeles, voters approved a \$1.2 billion bond to build apartments for homeless people.

But critics in the UK and the US complain about the often glacial progress of such efforts as well as the costs. In Los Angeles, a government watchdog said the price of the apartments for homeless people is approaching \$600,000 a unit.

These challenges help make Yimbyism attractive. In the US, advocates point out that zoning has long had the effect—and, historically, the explicit intention—of excluding poor and minority families from the best housing, while raising costs for everyone.

At times, the debate can inspire the ugliest rhetoric of US elections. On Twitter, people have called each other frauds, segregationists, even Nazis. "I've been told that I shouldn't have been allowed to get a Ph.D., that I don't know how to control for inflation, that I'm a moron," says Damiano, the Yimby skeptic who's been accused, he says, of "cooking the data to fit my anti-housing agenda."

Rich Heyman, a geographer who teaches at the architecture school of the University of Texas at Austin, says the problem is wage inequality, not housing, and government intervention is needed to fix it. "Somehow, the real estate industry has gotten a lot of self-styled progressives to buy into the idea that deregulating land use is the one key to unlocking affordability in housing," he says.

The debate over the impact of new housing hinges on obscure methods of analyzing imperfect rental data, so it isn't settled. One possibility is that both sides are right, up to a point. Building more does lower prices, just not enough, at least in the short run. And everyone knows what the economist John Maynard Keynes said about the long run: We're all dead.

THE RAINEY STREET district in Austin was once a neighborhood of ramshackle bungalows, a Mexican American community that also attracted ex-hippies and musicians. Perhaps its most famous resident was Geraldine the guinea fowl, a black-spotted bird who liked to ramble under the neighborhood's lush canopy of trees. ▶

Today, a restaurant bears her name at the swank Hotel Van Zandt. So does a plaque outside the entrance to the luxury SkyHouse tower, the kind of housing that now dominates the district. “In Loving Memory of Geraldine,” it reads. (Geraldine died in 2014, a victim of the neighborhood’s increased auto traffic.) One of the area’s last privately owned single-family houses, 940 square feet and built in 1945, is for sale. The asking price: \$10 million. Rainey Street’s ongoing transformation, following an easing of zoning to permit denser development, demonstrates why some are skeptical of Yimbyism.

The Yimby-oriented say it would have been far worse without the increased supply. In addition, an effort to promote density throughout the city is now tied up in court because



Reyes outside her apartment

of community opposition. If it had moved forward, Yimbys say, increases may have been more moderate.

João Paulo Connolly, organizing director for the Austin Justice Coalition, which advocates for racial equity, says zoning codes still make it difficult to build multifamily housing in much of the city. “For me, blocking or resisting market-rate units or constraining supply only makes things much, much worse,” says Connolly, 34, who’s on the Austin Planning Commission. “We could create housing in other ways, but we have a capitalist system so that’s how we do it.”

For now, downtown apartments can approach New York sizes as well as prices. At the Shoal, which offers “luxury living in a scaled-down footprint,” a seventh-floor studio with a Murphy bed rents for \$1,895 a month. It measures all of 347 square feet, the size of two parking spaces.

Foundation Communities, a nonprofit developer of

affordable housing, has a waitlist of more than 2,000 at two of its most recent projects. “We absolutely need more housing supply—people keep moving here, and we don’t want to stop that,” says Walter Moreau, its executive director. “The market left to its own devices will never build enough for folks at the lowest income level. Those folks are just priced out of town.”

Karen Reyes, an Austin elementary school teacher, paid \$850 in monthly rent when she first moved from San Antonio in 2014. Last spring, her landlord raised the price by about \$300, to \$1,500 a month. She calculated that rent consumes more than 40% of her take-home pay. She’s looked at moving 22 miles away to rural Kyle, but it wasn’t much cheaper after commuting costs.

“I make good money and should be able to afford a one-bedroom apartment in the city I work in,” she says. “But, honestly, I’m barely making it—I also help out my mom with her rent, and we all have bills to pay.” She found a place last summer for \$1,400 a month but worries that she’s one car repair away from not being able to afford it.

The school district teamed up with the housing charity Habitat for Humanity to build 30 inexpensive homes for employees. Within five days, 1,200 people applied. On land that it owns, the district plans to build 500 more homes for employees and parents of schoolchildren who fall below certain income levels, according to Jeremy Striffler, the director of real estate. The city has earmarked \$300 million to counter the displacement of low-income and minority families throughout Austin. Voters authorized \$600 million in affordable housing bonds in the last five years.

Young, the real estate agent showing the luxurious Hanover penthouse, understands the needs of regular residents. The child of a single mother who grew up in a small town in New Hampshire, she struggled to make ends meet until a couple of years ago. After moving to Austin in 2018 when she was in her early 20s, she worked briefly as a receptionist at a spa, as a server at an Italian restaurant and at a food-related tech startup, where she topped out at \$55,000. Her first apartment, about 500 square feet, cost \$950 a month. She and her partner now pay \$2,350 a month for a one-bedroom.

After earning her real estate license, Young stepped into a world she’d barely imagined. She built up her business with a social media feed that features a glamorous life of vacationing in Costa Rica and an appearance at an electronic dance music concert in glowing spandex, oversize glasses and green braids. Young, now 28, calls herself the “Real Estate Raver” on social media and meets high-end clients at nightclubs and through Instagram, where she has 10,000 followers. “I’m not just selling the apartments, I’m selling the Austin lifestyle—to live in a trendy young city that’s growing quickly,” she says.

This year, Young expects to help customers sign contracts on more than 100 apartments. Commissions can range from \$200 to \$4,000, depending on the building. Even with the market slowing, she says she could earn \$175,000 this year. It’s more than enough for her to live in Austin. At least for now. ●

Gopal, based in Boston, and Clark, in New York, cover real estate for Bloomberg News.

Young at the
Hanover Republic
Square



The New

Finance

From the Medicis to the Morgans, the business of lending, trading or investing money has long been a path to astonishing riches. The largest fortunes go to the risk-takers and innovators who are comfortable at the cutting edge of mainstream finance. To learn how such wealth is built today, *Bloomberg Markets* identified 25 financial titans* who've ascended to the top of the list within the past decade.

This generation of megarich is being powered by computer-driven trading companies, led by Ken Griffin's Citadel Securities and Jeff Yass's Susquehanna International Group. Alex Gerko was the UK's biggest taxpayer last year after his quantitative trading firm XTX Markets paid out a dividend of more than £1.3 billion (\$1.6 billion).

Although none of the billionaires on this list have yet surpassed Warren Buffett, the 92-year-old known for his savvy in managing conglomerate Berkshire Hathaway Inc., they represent a new era of financial wealth accumulation. Buffett and private equity moguls such as Blackstone Inc.'s Steve Schwarzman built their fortunes through long-term investments; Griffin, Yass and Gerko have leveraged technology to make superfast decisions about where prices are going, moving in and out of positions in fractions of a

second. If you need to worry about where prices are going long term, you're not doing it right.

Some hedge fund and private equity investors made the list, though they tend to share an interest in buying emerging technology companies. These include Tiger Global Management's Chase Coleman and Vista Equity Partners' Robert Smith. (Griffin also founded a hedge fund, Citadel.) Startup founders such as Guillaume Pousaz of Checkout.com and Stripe's Patrick and John Collison also made the cut. One group that's absent from the list: women.

The following is derived from Bloomberg's daily ranking of the world's billionaires as of March 23.

To maintain a focus on the new builders of wealth, the list excludes people who (1) were already among the 300 richest at the end of 2013, (2) inherited a significant portion of their fortune, (3) are age 70 or older or (4) have retired from their businesses.

*Actually 26, to include both Collison brothers.

R

Rich List

By
TOM MALONEY

1

Ken Griffin

Age **54**
Wealth **\$35 billion**
Company **Citadel/Citadel Securities**
Headquarters **Miami**
Business type **Hedge funds, trading**

Griffin is founder and chief executive officer of Citadel, a hedge fund management company with \$59 billion in equities, fixed income and macro, commodities, credit and quantitative strategies. He also founded Citadel Securities, a global market-making business that handles about 40% of all US retail trading volume and was valued at \$22 billion in a January 2022 fundraising round. Griffin earned \$4.1 billion from his hedge fund last year after Citadel's flagship Wellington fund returned 38%.

FACTOID

Griffin moved Citadel's headquarters to Miami from Chicago in 2022. The Daytona Beach native is now Florida's richest resident.

MILESTONES

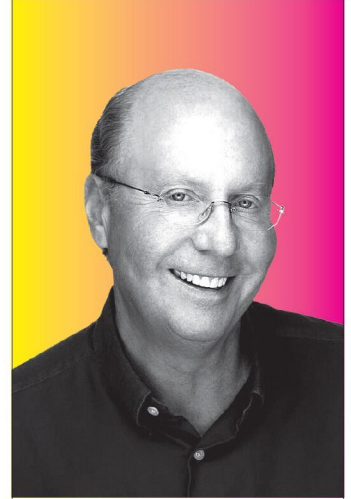
- 1987** Begins trading with \$265,000 in capital out of his Harvard University dorm room.
- 1990** Introduces Wellington Financial Group, which eventually becomes Citadel.
- 2002** Forms Citadel Securities.
- 2022** Citadel makes record \$16 billion in profit for clients.



2

Jeff Yass

Age **67**
Wealth **\$33.1 billion**
Company **Susquehanna International Group**
Headquarters **Bala Cynwyd, Pennsylvania**
Business type **Trading**



Yass is the founder of Susquehanna, one of the world's most successful proprietary trading firms, meaning it trades its own capital rather than relying on investors. The firm is active in a variety of asset classes, with a focus on derivatives. Susquehanna also makes private equity and venture capital investments worldwide and operates a sports-betting business. It owns a minority stake in TikTok developer ByteDance.

FACTOID

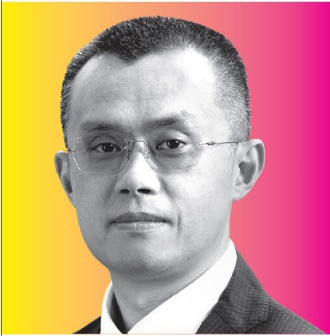
Yass moved to Las Vegas after college to gamble professionally.

MILESTONES

- 1987** Starts Susquehanna with friends from his university, SUNY Binghamton.
- 1988** Susquehanna makes about \$30 million in its debut year.
- 2012** The company makes an early investment in ByteDance via its venture capital arm, SIG China.
- 2022** Susquehanna invests \$65 million in sports-betting company PointsBet Holdings Ltd.

3

Changpeng Zhao



Age **46**
Wealth **\$28.2 billion**
Company **Binance**
Headquarters **None**
Business type **Crypto**

Zhao is CEO of Binance, the world's largest crypto exchange, which has said it has more than 120 million users. Born in China and raised in Canada, Zhao worked on trading systems before founding Binance, which Bloomberg estimated on April 5 has annual revenue exceeding \$12 billion. Scrutiny from regulators intensified after the collapse of rival exchange FTX. In March the US Commodity Futures Trading Commission sued Binance and Zhao for allegedly helping clients mask their locations to evade trading restrictions and failing to implement effective compliance policies. In response, Zhao wrote in a blog post that "we do not agree with the characterization of many of the issues alleged in the complaint."

FACTOID

Zhao was introduced to Bitcoin by crypto entrepreneur Bobby Lee at a poker game in Shanghai.

MILESTONES

- 2001** Starts working at Bloomberg Tradebook.
- 2005** Moves to Shanghai to join Fusion Systems, a trading systems developer.
- 2017** Founds Binance.
- 2021** Buys an apartment in "very pro-crypto" Dubai.

4

Dan Gilbert

Age **61**
Wealth **\$19.4 billion**
Company **Rocket Cos.**
Headquarters **Detroit**
Business type **Mortgages**

Gilbert is the founder and majority owner of Rocket, a pioneer in online home lending in the US, which closed \$133 billion in mortgages in 2022. He's invested in downtown Detroit real estate and is the majority owner of the NBA's Cleveland Cavaliers. Through his ROCK family office, Gilbert has backed online marketplace StockX, e-sports company 100 Thieves, watchmaker Shinola and other startups.

FACTOID

Gilbert is a co-founder of e-commerce site StockX, known for its sneaker resale market.

MILESTONES

- 1985** Sets up mortgage lender Rock Financial.
- 1999** Sells Rock Financial to Intuit Inc. for \$370 million in stock. Buys it back three years later for \$64 million.
- 2020** Rocket Cos. begins trading on the NYSE at \$18 a share.



5

Uday Kotak

Age **64**
Wealth **\$13 billion**
Company **Kotak Mahindra Bank Ltd.**
Headquarters **Mumbai**
Business type **Banking**



Born into a family of cotton traders, Kotak borrowed money from friends and family to found his company when he was 26. It's now Kotak Mahindra Bank, a publicly traded provider of commercial and investment banking, insurance and brokerage services. As of Dec. 31 it had a network of 1,752 branches and \$56.2 billion in assets. The bank is searching for a CEO to replace Kotak after India's central bank introduced guidelines capping the tenure of business leaders.

FACTOID

A keen cricket player in his youth, Kotak almost died after a ball hit his head.

MILESTONES

- 1985** Sets up Kotak Capital Management with money raised from friends and family.
- 2003** The expanded business, Kotak Mahindra Finance, receives its banking license and is renamed Kotak Mahindra Bank.
- 2023** Acquires micro-finance firm Sonata Finance.

6

Robert Smith

Age **60**
Wealth **\$12 billion**
Company **Vista Equity Partners**
Headquarters **Austin**
Business type **Private equity**

Smith started his career on the technology team at Goldman Sachs Group Inc. before founding Vista Equity Partners in 2000. The private equity firm, which has about \$95 billion in assets under management, invests in enterprise software companies including Datto and Aptean. In 2021, Vista bought back some of its shares from a private equity backer in a deal that valued the company at \$10 billion to \$15 billion.



FACTOID

In 2019, Smith promised graduating students at Morehouse College that he'd pay off their student debt.

MILESTONES

- 1994** Joins Goldman Sachs in New York.
- 2016** Vista acquires insurance software company Solera for \$6.5 billion.
- 2020** Pays a \$139 million fine after admitting to US tax evasion.
- 2023** Vista seeks to raise \$20 billion for a new fund.

7

Michael Platt

Age **54**
 Wealth **\$11.4 billion**
 Company **BlueCrest Capital Management**
 Headquarters **London**
 Business type **Hedge funds**

Platt started his career trading derivatives at JPMorgan Chase & Co. before co-founding BlueCrest, which invests across asset classes such as rates, emerging markets and equities. In 2016 the hedge fund returned client money to focus on managing money for Platt, his partners and staff. The company generated returns of 50% in 2019, 95% in 2020, 30% in 2021 and 153% in 2022. BlueCrest managed \$3.9 billion at the beginning of 2022, the most recent figures available.



FACTOID
 Platt is selling his 246-foot superyacht, *Arrow*, built in 2020. He's working with a boat builder on a new 361-foot vessel.

MILESTONES
2000 Forms BlueCrest with fellow trader William Reeves.
2013 Reaches peak assets under management of \$37 billion.
2015 Returns outside capital after assets fall to \$8 billion.
2022 Platt earns about \$3 billion after BlueCrest returns 153%.

8

Stan Druckenmiller

Age **69**
 Wealth **\$9.9 billion**
 Company **Duquesne Family Office**
 Headquarters **New York**
 Business type **Hedge funds**

Druckenmiller is chairman and chief investment officer of Duquesne Family Office. He started hedge fund Duquesne Capital Management in 1981, simultaneously running it as he worked for other investors, including billionaire George Soros, for more than a decade. He left Soros's company in 2000 after suffering large losses in technology stocks. Duquesne delivered a 30% annualized return from 1986 to 2010, when it returned outside capital.

FACTOID
 Druckenmiller withdrew an offer to buy the NFL's Pittsburgh Steelers in 2008.

MILESTONES
1988 Takes reins at Soros Fund Management's Quantum fund.
1992 Druckenmiller and Soros earn \$1 billion in profit from a bet that the British pound would be forced to devalue.
2000 Leaves Soros after taking large losses in tech stocks.
2010 Duquesne returns money to clients and converts to a family office.



9

Qi Shi

Age **52**
 Wealth **\$8.8 billion**
 Company **East Money Information Co.**
 Headquarters **Shanghai**
 Business type **Financial services**



Qi is the founder and chairman of East Money Information, an online broker and financial information provider. Its website offers financial news, stock information and transaction assistance to investors in China. It also runs Guba, an investment chat forum. Brokerage fees were the largest contributor to East Money's \$1.85 billion in revenue in 2022.

FACTOID
 In a rare interview with *China Business News* in 2014, Qi said his push to create an online communication and information platform stemmed from being an "introvert."

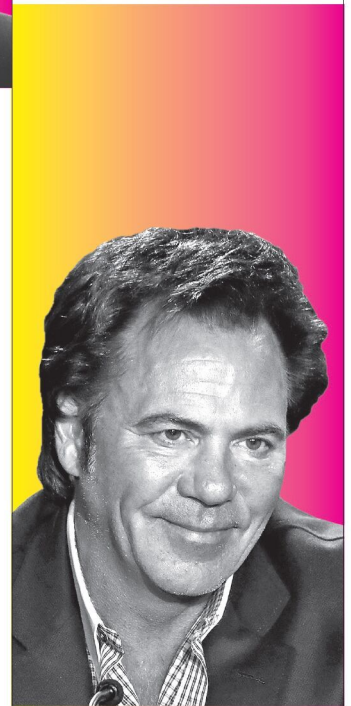
MILESTONES
2005 Establishes Shanghai Dong Cai Information Technology, the predecessor to East Money Information.
2010 East Money begins trading on the Shenzhen Stock Exchange.
2015 East Money buys brokerage Tongxin East Fortune Securities Co.
2018 Secures a license allowing East Money to manage its own mutual funds.

10

Tom Gores

Age **58**
 Wealth **\$8.2 billion**
 Company **Platinum Equity**
 Headquarters **Beverly Hills**
 Business type **Private equity**

Gores is the founder and CEO of Platinum Equity, a global private equity firm that manages about \$36 billion. Investments include technology distributor Ingram Micro Inc., publisher McGraw Hill, and golf and utility vehicle maker Club Car. Gores, who founded the firm in 1995, also owns the NBA's Detroit Pistons. He was born into a Catholic family in Israel that moved to Flint, Michigan, when he was 4 years old.



FACTOID
 Brother Alec is the founder of the Gores Group, a rival private equity firm.

MILESTONES
1995 Founds Platinum Equity.
2020 Raises \$10 billion for the latest fund.
2021 Buys technology services company Ingram Micro for \$7.2 billion.

11

Mat Ishbia

Age **43**
Wealth **\$7.6 billion**
Company **United Wholesale Mortgage**
Headquarters **Pontiac, Michigan**
Business type **Mortgages**



Ishbia is the CEO of United Wholesale Mortgage, a wholesale lender in the US mortgage market. The company underwrites loans and provides closing documentation services. Its publicly traded parent company, UWM Holdings Inc., is worth more than \$8 billion. Ishbia is also the majority owner of the NBA's Phoenix Suns and the WNBA's Phoenix Mercury.

FACTOID
Ishbia was a walk-on player for the Michigan State Spartans basketball team.

MILESTONES
2013 Named CEO of United Wholesale Mortgage.
2020 UWM goes public via a special purpose acquisition transaction valuing it at \$16.1 billion.
2022 UWM's \$33.5 billion in loans originated in the third quarter make it the largest residential mortgage lender in the US.
2023 Ishbia buys majority stake in the Phoenix Suns and Mercury basketball teams in a transaction valuing them together at more than \$4 billion.



12

Josh Harris

Age **58**
Wealth **\$7.3 billion**
Company **26North Partners**
Headquarters **New York**
Business type **Private equity**

Harris co-founded Apollo Global Management Inc. He left the firm in 2021 and last year founded 26North, an asset manager with more than \$10 billion under management that focuses on private equity, credit and insurance. He also co-founded Harris Blitzer Sports & Entertainment, which owns the NBA's Philadelphia 76ers and the NHL's New Jersey Devils.

FACTOID
Harris is leading a group that includes businessman Mitchell Rales and NBA legend Magic Johnson to bid on the NFL's Washington Commanders.

MILESTONES
1990 Co-founds Apollo.
2011 Heads group that buys the Philadelphia 76ers.
2015 Buys 18% stake in the English Premier League's Crystal Palace FC.
2022 26North recruits Mark Weinberg, who led Brookfield Asset Management's US private equity business.

13

Tony Ressler

Age **62**
Wealth **\$6.7 billion**
Company **Ares Management Corp.**
Headquarters **Los Angeles**
Business type **Private equity**



Ressler is a co-founder and the executive chairman of Ares Management, which has about \$352 billion of assets under management and more than 2,500 employees. The company specializes in credit investments and is involved in leveraged buyouts and real estate; it's also one of the world's largest direct lenders. Ressler is the majority owner of the NBA's Atlanta Hawks.

FACTOID
Ressler's sister is married to Apollo co-founder Leon Black.

MILESTONES
1997 Co-founds Ares Management.
2013 Ares teams up with the Canadian Pension Plan Investment Board to buy luxury retailer Neiman Marcus for \$6 billion.
2015 Ressler buys a majority stake in the Atlanta Hawks.
2022 Ares deploys about \$80 billion in investments.

14

Alex Gerko

Age **43**
Wealth **\$6.4 billion**
Company **XTX Markets**
Headquarters **London**
Business type **Trading**

Gerko is the founder of XTX Markets, an algorithmic trading firm active in foreign exchange, futures, equity, fixed-income and commodity markets. The company, which also has offices in Mumbai, New York, Paris, Singapore and Yerevan, Armenia, had revenue of more than \$1.7 billion at its UK entities in 2021, the most recent data available. Before starting XTX, Gerko ran market-making at hedge fund GSA Capital Partners and worked at Deutsche Bank AG.



FACTOID
XTX's London headquarters has a replica of the Apollo 11 landing capsule.

MILESTONES
2004 Joins Deutsche Bank, where he trades equities before switching to foreign exchange.
2009 Moves to hedge fund GSA Capital.
2015 Founds XTX Markets.
2021 Revenue at XTX's UK entities more than quadruples from 2019.

Todd Boehly

Age **49**
Wealth **\$6.4 billion**
Company **Eldridge**
Headquarters **Greenwich, Connecticut**
Business type **Insurance, asset management**

Boehly is the co-founder, chairman and CEO of Eldridge, a holding company with interests in insurance, media, sports, real estate, asset management and other companies such as Security Benefit Life Insurance, Penske Media and Stonebriar Commercial Finance. He's a co-owner of the NBA's Los Angeles Lakers, the WNBA's Los Angeles Sparks and MLB's Los Angeles Dodgers. Boehly is also chairman and co-controlling owner of Chelsea Football Club in London. He purchased assets that formed Eldridge's initial portfolio from Guggenheim Partners, the investment firm he worked at previously.



FACTOID

Eldridge owns a stake in A24, producer of 2023's Academy Award winner for best picture, *Everything Everywhere All at Once*.

MILESTONES

- 2010** Guggenheim Partners buys insurer Security Benefit in a transaction Boehly orchestrated.
- 2015** Boehly leaves Guggenheim, buys portfolio of assets from it that becomes core of Eldridge's holdings.
- 2022** Leads a group that buys Chelsea Football Club for £4.25 billion.
- 2023** Eldridge is biggest backer of \$1 billion music startup Gamma.

Chris Hohn

Age **56**
Wealth **\$6.3 billion**
Company **TCI Fund Management**
Headquarters **London**
Business type **Hedge funds**

Hohn is the CEO and managing partner of TCI, which was the world's best-performing large hedge fund in 2019. Founded by Hohn in 2003, TCI invests in a limited number of long-term, owner-oriented assets. The hedge fund has about \$44 billion in assets under management. Earlier in his career, Hohn worked for private equity firm Apax Partners and hedge fund manager Perry Capital.

FACTOID

Hohn gave climate justice group Extinction Rebellion £50,000, its largest individual donation.

MILESTONES

- 1997** Joins asset manager Perry Capital.
- 2003** Establishes TCI.
- 2019** TCI's \$8.4 billion gain makes it the world's best-performing large hedge fund.
- 2022** Fund tumbles 18%, breaking a streak of 13 straight profitable years.



Guillaume Pousaz

Age **41**
Wealth **\$6.3 billion**
Company **Checkout.com**
Headquarters **London**
Business type **Fintech**



Swiss-born Pousaz is the founder and CEO of Checkout, a financial technology startup that provides payment processing in more than 150 currencies. Founded in 2012, it has 1,700 employees across about 19 offices worldwide. Checkout raised \$1 billion at a \$40 billion valuation in January 2022, but in December it slashed its internal valuation to only \$11 billion after a plunge in technology markets.

FACTOID

Pousaz, a highly rated amateur snowboarder in his youth, was featured in sports magazines.

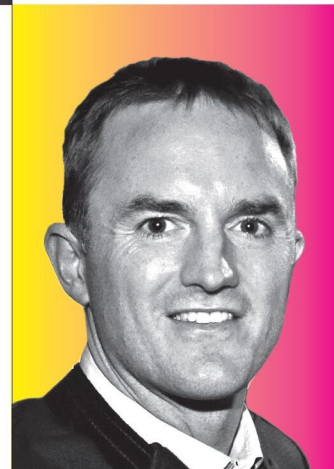
MILESTONES

- 2005** Leaves his final year of university at HEC Lausanne to go surfing in California, where he later begins working in the payments industry.
- 2009** Founds Opus Payments in Singapore, which later becomes Checkout.
- 2019** Checkout takes first outside investment, valuing the firm at \$2 billion.
- 2022** Checkout valued at \$40 billion in a January fundraising round. Investors include Tiger Global Management and the Qatar Investment Authority.

Chase Coleman

Age **47**
Wealth **\$6 billion**
Company **Tiger Global Management**
Headquarters **New York**
Business type **Hedge funds**

Coleman is the founder of Tiger Global, an alternative-asset manager known for its tech investments, including early bets on Facebook and Spotify Technology SA. Losses on its tech portfolio cut the company's managed assets to about \$51 billion as of January, from about \$100 billion in 2021. The majority of Tiger Global's assets are now tied to its venture funds.



FACTOID

Coleman was boyhood friends with Julian Robertson's son Spencer, leading him to land a job at the elder Robertson's hedge fund, Tiger Management.

MILESTONES

- 2001** Founds Tiger Global Management with a \$25 million investment from Julian Robertson.
- 2020** Coleman tops Bloomberg's list of best-paid hedge fund managers with \$3 billion. Tiger Global earns \$10.4 billion for its investors, according to LCH Investments.
- 2021** Tiger Global's assets under management top \$100 billion.
- 2022** Tiger Global's flagship fund tumbles 56% after a tech stock wipeout.

John Overdeck

Age **53**
 Wealth **\$5.8 billion**
 Company **Two Sigma Investments**
 Headquarters **New York**
 Business type **Hedge funds, trading**

Overdeck is a co-founder of Two Sigma Investments, an asset manager with about \$60 billion deployed in quantitative analysis investment strategies. He started the company with David Siegel after working at Amazon.com Inc. and D.E. Shaw. He also founded Two Sigma Securities, a trading firm that operates in equities, futures, ETFs and options globally, trading more than 300 million shares a day.



FACTOID

Overdeck was the captain of the West all-star team for the College Bowl National Championships academic quiz show in 1992.

MILESTONES

- 1986** Earns silver medal at International Mathematics Olympiad.
- 2001** Co-founds Two Sigma with backing of hedge fund Tudor Investment Corp.
- 2009** Introduces Two Sigma Securities, a market-making unit.
- 2019** Co-founds Sightway Capital to manage group's private equity investments.

David Siegel

Age **62**
 Wealth **\$5.8 billion**
 Company **Two Sigma Investments**
 Headquarters **New York**
 Business type **Hedge funds, trading**

Siegel is a co-founder of Two Sigma Investments, an asset manager with about \$60 billion deployed in quantitative analysis investment strategies. Siegel founded the firm with John Overdeck after working at Tudor Investment and D.E. Shaw. The Two Sigma Group also runs venture capital and private equity businesses whose investments have included Great Rock Capital, an asset-based lender, and bio-manufacturer Zymergen Inc.

FACTOID

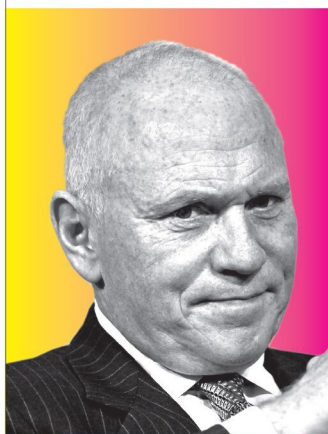
By the age of 12, Siegel had learned to program a supercomputer at the NYU Courant Institute of Mathematical Sciences.

MILESTONES

- 1992** Joins hedge fund D.E. Shaw, where he became the firm's first chief information officer.
- 1999** Founds Blink.com, a site for collating web bookmarks.
- 2001** Co-founds Two Sigma.
- 2017** Two Sigma Securities buys Interactive Broker Inc.'s Timber Hill options unit.



John Grayken



Age **66**
 Wealth **\$5.8 billion**
 Company **Lone Star Funds**
 Headquarters **Dallas**
 Business type **Private equity**

Grayken is the founder of Lone Star, a group of closely held private equity funds. Lone Star, which has raised about \$86 billion since its 1995 founding, invests in distressed loans, real estate, consumer debt products, financial services and other sectors. Grayken is also the founder of asset management company Hudson Advisors. He started his career in real estate at Morgan Stanley before joining Texas billionaire Robert Bass and working on troubled mortgages from the savings and loan crisis.

FACTOID

In 2008, Grayken was detained for questioning in South Korea for two weeks after traveling to the country to testify in a Lone Star executive's court case. He wasn't accused of any wrongdoing.

MILESTONES

- 1995** Founds Lone Star.
- 1999** Renounces his US citizenship, becomes an Irish citizen and moves to London.
- 2022** Lone Star acquires SPX Flow Inc. for \$3.8 billion.
- 2023** Lone Star agrees to buy ship repair company Titan Acquisition Holdings.

Andreas Halvorsen

Age **62**
 Wealth **\$5.6 billion**
 Company **Viking Global Investors**
 Headquarters **Greenwich, Connecticut**
 Business type **Hedge funds**

Halvorsen is the co-founder and CEO of Viking, a closely held hedge fund that has offices in Greenwich, Hong Kong, London, New York and San Francisco. It has about \$37 billion in assets under management and mainly invests in public and private equity. Halvorsen worked in Morgan Stanley's investment bank before joining Julian Robertson's Tiger Management, where he rose to become a senior managing director and a member of the management committee.

FACTOID

Halvorsen served in the MJK, a Norwegian naval special forces group.

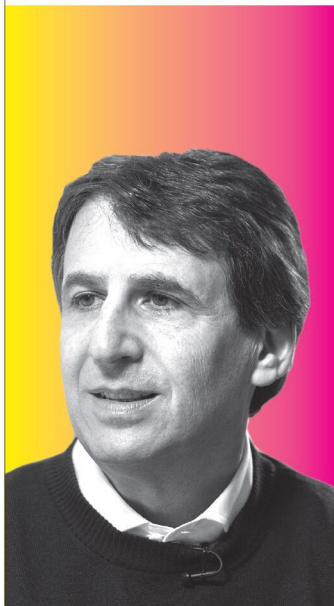


MILESTONES

- 1999** Introduces Viking.
- 2017** Viking returns \$8 billion of its \$32 billion in capital to investors, saying it needs to get more "operating flexibility."
- 2023** Opens up to new cash for first time in a decade.

Marc Rowan

Age **60**
Wealth **\$5.6 billion**
Company **Apollo Global Management Inc.**
Headquarters **New York**
Business type **Private equity**



Rowan is CEO of Apollo, which he co-founded. The firm has about \$548 billion in assets under management. Rowan previously worked as an investment banker for Drexel Burnham Lambert. His family office, RWN Management, has invested in real estate in New York and Miami as well as in credit, agriculture and energy.

FACTOID

Rowan's real estate portfolio includes restaurants in the Hamptons and North Fork areas of Long Island.

MILESTONES

- 1990** Co-founds Apollo.
- 2020** Steps back from day-to-day operations to take a "semisabbatical."
- 2021** Becomes Apollo's CEO.
- 2022** Apollo completes its acquisition of insurer Athene Holding Ltd., an important contributor to Apollo's assets under management.

André Esteves

Age **54**
Wealth **\$5.2 billion**
Company **Banco BTG Pactual SA**
Headquarters **São Paulo**
Business type **Banking**

Esteves is the chairman and controlling shareholder of Banco BTG Pactual, Latin America's largest investment bank and top manager of stock offerings in 2022. He began his career as a computer technician for Pactual while still a college student, and he was promoted to fixed-income trading the same year he graduated.

FACTOID

Esteves spent three weeks in Rio de Janeiro's Bangu prison in late 2015 after being charged with witness tampering in Brazil's "Operation Car Wash" corruption scandal. He denied any wrongdoing and was exonerated in 2018.

MILESTONES

- 1989** Joins Banco Pactual while still a college student.
- 1999** Buys Pactual founder's stake with other partners.
- 2006** Sells Pactual to UBS Group AG for as much as \$2.5 billion, then buys it back with his partners three years later.
- 2022** Is among the few executives to have lunch with Elon Musk during Musk's brief visit to Brazil.



Patrick Collison



Age **34**
Wealth **\$5.1 billion**
Company **Stripe**
Headquarters **Dublin and San Francisco**
Business type **Fintech**

Collison is co-founder and CEO of Stripe, a mobile payment startup used by companies such as Twitter, Salesforce.com and Lyft. Stripe says 90% of adults in the US have made purchases from businesses that use its services, which support more than 135 currencies and payment methods.

FACTOID

Collison took his first computer course at the University of Limerick when he was 8 years old.

MILESTONES

- 1988** Born in Dromineer, Ireland.
- 2005** Wins BT Young Scientist and Technology Exhibition.
- 2010** Co-founds Stripe.
- 2022** Stripe enters into a five-year partnership with Ford Motor Co. to handle transactions for customer vehicle orders and reservations.

John Collison

Age **32**
Wealth **\$5.1 billion**
Company **Stripe**
Headquarters **Dublin and San Francisco**
Business type **Fintech**

Collison is co-founder and president of Stripe, a mobile payment startup used by companies such as Spotify, Ford and Amazon.com. The company raised \$6.5 billion in March at a valuation of \$50 billion, down from \$95 billion two years earlier.



FACTOID

John is a licensed multi-engine pilot who sometimes flies himself between Stripe's headquarters in San Francisco and Dublin.

MILESTONES

- 1990** Born in Dromineer.
- 2007** Co-founds grocery delivery company Shuppa with Patrick.
- 2018** Stripe introduces Terminal, its point-of-sale service.
- 2021** Stripe raises \$600 million at a \$95 billion valuation.

Maloney covers global wealth for Bloomberg News in New York.

ANDY SAPERSTEIN'S LONG-STANDING commitment to the steady fees of wealth management has made him a key executive at Morgan Stanley and in the industry. Does he have what it takes for the top job at the best-performing Wall Street bank?

The Contender



By SRIDHAR NATARAJAN
PHOTOGRAPHS BY BENEDICT EVANS



WHAT IS AVAXHOME?

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All languages

Brand new content

One site



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ANDY SAPERSTEIN'S FIRST STINT on Wall Street didn't last long. He landed at Salomon Brothers at the end of the 1980s with all the right credentials—degrees in finance and economics from the Wharton School of the University of Pennsylvania. Standing among the newbies, he watched queasily as senior leaders played liar's poker on the trading floor, betting serious money on a bluffing game that became the title of Michael Lewis's 1989 book on the firm. When his bosses took issue with his loose mop of hair, urging him to cut it for client meetings, he refused. He didn't see why he should.

Saperstein would soon leave Wall Street only to end up coming back through a side door—then transforming it from within. Today the Salomons are gone, and trading-heavy companies such as Goldman Sachs Group Inc. are trying to build out “boring” businesses with more predictable profits, the kind that Saperstein now runs at Morgan Stanley.

Saperstein oversees a \$4.5 trillion wealth management juggernaut that's catapulted Morgan Stanley's market value above archrival Goldman. His success is largely because of a revolution in Wall Street culture that he and James Gorman, his boss across three companies, led in the wake of the 2008 financial crisis. Morgan Stanley's move toward the steady, fee-generating business of wealth management—and away from cowboy-style risk-takers, such as the traders he encountered at Salomon Brothers—has made the company the darling of investors and the envy of peers. “There were a lot of doubters at the beginning, but we were confident it was the right strategy over the long term,” Saperstein, 56, says. “It's also fundamentally a great business.”

SAPERSTEIN IS NOW ONE OF THREE leading contenders to succeed Gorman as Morgan Stanley's chief executive officer. The outcome will depend on his ability to prove he can emerge from his longtime mentor's shadow and win acceptance across a company that still relies on bankers and traders willing to take risks to earn their multimillion-dollar bonuses. Will those merchants of high finance embrace a leader who loves Disney World and owns a pontoon boat at his vacation home in New York's Finger Lakes instead of a yacht in the Hamptons? Can a business that caters to rich dentists as well as billionaires really drive the industry's future?

Fortunes on Wall Street can change quickly; a division that turbocharges profits one year can find itself saddled with scandals and losses the next. Those forces could determine who leads Morgan Stanley whenever Gorman, after more than 13 years at the top, decides to step down.

For now, Saperstein's primary competition is his co-president, investment bank boss Ted Pick, as well as asset management head Dan Simkowitz. Saperstein still lacks experience overseas, and he hasn't managed the kinds of acute risks endemic to trading and dealmaking. But colleagues who saw him as a long shot only a few years ago say his odds have improved.

As the company nears the potential end of Gorman's leadership, it's a different place from the cutthroat bank of two decades ago. In some ways the transformation resembles the *Hunger Games* parody that the wealth management team

once put together for a gathering of branch managers. The titular battle royal, featuring a cameo by Saperstein, was instead a goofy home video peppered with inside jokes.

The son of a US inspection officer, Saperstein grew up in the working-class New York City borough of Staten Island. (His parents still live there.) Once an aspiring pianist, he did well enough academically at Port Richmond High School to be chosen for an exchange program to Japan. In his rush to pick up the language, he was pranked by his exchange buddy.

“I thought I was learning to say ‘Hello, I'm happy to be here,’” Saperstein recalls. “But it turned out what he taught me was ‘Hello, I'm very hungry.’”

His stint at Salomon ended when he took off for Harvard Law School. There, swayed by a campus recruitment drive, Saperstein abandoned dreams of a legal career in favor of McKinsey & Co. Back then “it was very rare to split the summer internship, and I did that between a law firm and McKinsey,” he says. “There was something about trying to solve problems for companies that appealed to me.”

In the mid-1990s the consulting giant was a launchpad for many of the executives who'd go on to run swaths of the financial industry almost 30 years later.

“We all grew up together,” says Citigroup Inc. CEO Jane Fraser, who made partner at McKinsey the same year as Saperstein. “And even in that group, he always stood out.”

Vik Malhotra, now a senior partner at McKinsey, says Saperstein had one thing that most recruits didn't: “RQ. The relationship quotient has been Andy's secret weapon—innate ability to have great interpersonal skills.”

Although Saperstein was early in gravitating toward



wealth management, he wasn't always prescient. In the '90s, as email was gaining popularity, he confidently predicted it was a fad. People would always prefer the convenience of using phone booths to leave urgent messages by voicemail.

It was at McKinsey that Gorman became his mentor, and the pair have been tied together ever since. As the decade ended, they jumped to Merrill Lynch, where Gorman helped bring back the brokerage's Thundering Herd bull logo and almost doubled the unit's profit margins. Then, in 2006, they landed at Morgan Stanley, where they'd eventually transform the white-shoe investment bank into something very different.

Under then-CEO John Mack, fixed-income trading and derivatives were pushing Wall Street profits and bonuses to ever-greater heights, leaving wealth management in the back seat. But in 2007, Morgan Stanley had to take an emergency capital infusion after a huge fixed-income trading loss; a year later the whole industry needed a rescue from the credit collapse.

Soon, new US rules reined in risk-taking, and once-hot businesses such as underwriting and trading complex structured products virtually evaporated. Morgan Stanley pivoted to wealth management before it came into vogue.

CITIGROUP, WHICH HAD PIONEERED the "universal bank" concept of offering clients virtually every financial service, ended up particularly dependent on US taxpayers. Desperate to raise cash, the company started shrinking fast, unloading assets and business units. Morgan Stanley agreed to take over Citigroup's Smith Barney brokerage and its division tending to wealthy clients. (Citigroup's Fraser was part of the team that negotiated the deal with Gorman and Saperstein.) As that business became more essential to Morgan Stanley, Gorman was tapped to lead the company. He promised to boost profitability by scaling up wealth management.

Saperstein was put in charge of US wealth management, starting with the delicate integration of Smith Barney into Morgan Stanley. As he was getting to know that business's advisers, he shared a tale of how he once accidentally took someone else's car from a parking attendant. He sped away, realizing far down the road what he'd done. For some people from Citigroup, that hit close to home: Gorman and Saperstein's company had made off with one of their best franchises.

Still, Morgan Stanley insiders weren't so sure about the deal and had to be won over.

"Hard to see in the fog of integration, but he made the picture come to life. I wanted to be part of it," says Jed Finn, who joined from McKinsey and is now chief operating officer for wealth management at Morgan Stanley.

In 2019, Finn and Saperstein sealed a deal at a Calgary steakhouse to buy a company called Solium Capital, a software venture that manages employee stock options. The acquisition, initially viewed with skepticism for its high price, is now seen inside the bank as a knockout success, helping keep entrepreneurs in private companies and executives in public companies within Morgan Stanley's wealth management ecosystem.

At the start of 2020, the company paid \$13 billion for

"I had him come to Goldman and talk to all of our people about what he was building"



retail brokerage ETrade Financial Corp., the biggest acquisition by a major bank since the 2008 financial crisis. The timing was lucky: Weeks later the pandemic hit the US, and people stuck at home turned to trading online. Last year wealth management and asset management accounted for more than half of Morgan Stanley's earnings. The company has returned well more than 350% in the past decade, comfortably outpacing its biggest US banking peers. Its market cap now exceeds that of Goldman Sachs after having lagged for most of the years since the financial crisis.

"The most impressive thing is the aggressiveness with which they've executed," says Shawn Trudeau, a portfolio manager at Neuberger Berman Group, which owns stock in Morgan Stanley. "Morgan Stanley has managed to execute this grand strategy, without having acquired additional tail risks."

Eric Lane, who helped oversee wealth management at Goldman Sachs before joining Tiger Global Management in 2021, says he was also impressed by how his rival managed the business. "I had so much respect for Andy," he says. "I had him come to Goldman and talk to all of our people about what he was building."

Saperstein is part of a cohort of Morgan Stanley leaders who've helped defuse a culture of infighting that existed when he joined the bank in 2006, right after then-CEO Philip Purcell—another McKinsey alum who also preached the value of wealth management—was ousted in a coup led by the company's bankers and traders. Saperstein's aw-shucks demeanor and his disregard for Wall Street's usual status symbols disarm potential rivals and lead people to underestimate him, people who work with him say.

Finn does have one unresolvable dispute with his boss: Disney World. "I am like, 'This is the worst place on Earth,'" Finn says. "But he continues to go back year after year."

Saperstein defends his everyman vacation. "I love going there," he says, gushing over his favorite attraction, a simulated tour across the mythical landscape of *Avatar*. "It's the best ride. You have to try it."

Avatar Flight of Passage could be a metaphor for a career seeking a less perilous kind of Wall Street. Riding a mountain banshee over the Valley of Mo'ara, he rises through treetops, down to a river, curving through a flock of birds, into a crashing wave, over a herd of beasts and finally out over the water at sunset. ●

Natarajan is a senior reporter for Bloomberg News covering finance in New York.

Latin America's rich,
fleeing
are sending more money



By EZRA FIESER and ANDREA JARAMILLO

PHOTOGRAPHS BY
ROSE MARIE CROMWELL AND
FABIOLA FERRERO

socialism,
elsewhere than they have
in over a decade

*Take the Money
and Run*



A

At the four-star Hotel Estelar la Fontana in Bogotá, a hundred wealthy Colombians are learning how to send their money to the US—and fast. Crammed shoulder to shoulder on leather chairs, the crowd admires slides of waterfront properties in Miami. The real estate could be an investment, a second home or the start of a new life. A one-bedroom sells for \$1 million, more than 300 times the annual minimum wage in Colombia. Some gasp at the price; others, it turns out, can afford it.

On this morning in March, a real estate agent walks his prospects through the nitty-gritty of visas. “It’s sad we’ve come to this,” a man whispers. He’s referring to the dash for an exit after Colombia elected Gustavo Petro, a leftist former guerrilla who quickly moved to raise taxes on the rich. Maikol Di Prieto, a lawyer with Colombian and Italian citizenship, is looking for an apartment for his mother and, eventually, one for himself. “Things are changing,” he says, “and not in a good way.”

As every major country in Latin America shifts to the left in reaction to widening inequality, capital is flying out of the region. Wealthy and, increasingly, middle-class investors are looking for a Plan B in case of more economic and political upheaval. People and corporations in the region’s five largest economies pulled roughly \$137 billion out of their countries in 2022. That number—preliminary data from the Institute of International Finance, a group of banking institutions—is 41% higher than the 2021 figure and the most since 2010.

Although no one tracks where the money is going, popular destinations include the Dominican Republic, Panama, Spain and the US. Since 2020, Mexican investors have spent more than €700 million (\$774 million) on Spanish real estate and construction. Colombians have bought as many as 500 Panamanian properties in the past few months alone, estimates Samuel Urrutia, who heads real estate company Colliers International Group Inc.’s unit for the region. The superwealthy buy property in New York or Madrid, the “rich rich” go for Miami and the “just rich” look to Panama or the Dominican Republic, he says.

Still, no place has felt the impact more than Miami, a city whose history and development are so interwoven with its neighbors to the south that it’s often referred to as the capital of Latin America. ▶



Colombians eager to buy property in Miami gather at Bogotá's Hotel Estelar la Fontana in March





Juan Eduardo Vaamonde and Yelitza Avendaño

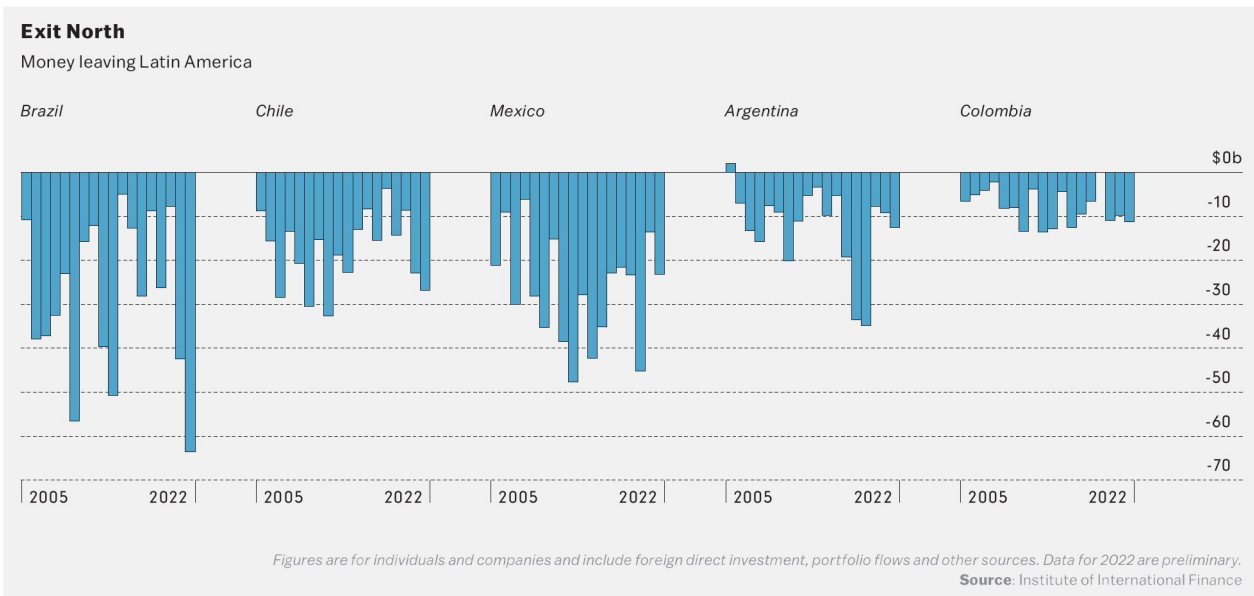
Maikol Di Prieto

At Related Group, one of Miami’s largest developers, foreign buyers, most from Colombia and Mexico, have purchased \$600 million in real estate since late 2021. Last year, Colombians alone bought 1,222 Miami-area properties, a 30% increase from the year before and the most since the Miami Association of Realtors started tracking foreign buyers in 2019.

Each time a leftist gets elected, money pours into South Florida, according to Raul Henriquez, chairman of Insigneo Financial Group LLC, a wealth manager in Miami. Over the past five years, his firm’s assets under management have swelled roughly sixfold, to \$18 billion. About 40% of Chile’s 180 or so family offices have a foothold in the US, almost all in South Florida, says José Luis de Dios Crispi, managing director of Kaiross Corp., a Chilean financial consulting company; each is investing \$30 million to \$40 million a year stateside, mostly in real estate.

Often called a “pink tide,” this shift toward socialism dates to 2018, when Andrés Manuel López Obrador swept into power in Mexico. Leftists prevailed in Argentina in 2019, Chile and Peru in 2021, and Brazil and Colombia last year. “This is a historic event we’ve never before seen—the entire region has gone pink on us,” says Talbert Navia, co-head of the Latin America practice at law firm Winston & Strawn, who’s advised corporations and private equity firms since the late 1980s. But José Roberto Acosta, a senior Colombian finance official, says it’s simplistic to tie his country’s money outflows to the left’s rise. His government “defends a free-market economy and is respectful of private property,” he says. In his view, money is leaving because of higher interest rates on relatively safe US government securities, as well as a search for lower taxes.

The International Monetary Fund is forecasting growth



of 1.7% in Latin America this year, slower than in other emerging markets. Mauricio Cárdenas, a former Colombian finance minister, says capital flight is playing a role and could make it difficult to enact socialist policies. The rich leave, the economy suffers, inflation rises and unrest intensifies, he says: “It’s a vicious cycle.”

Almost every major currency, aside from the Mexican peso, has plummeted in value against the US dollar—which has added to inflation, leading central banks to raise interest rates and making it harder for businesses to borrow. In Argentina, the peso has lost more than 70% of its value since early 2020, and inflation is rising at a 100% annual rate. In Chile, the shift by wealthy families toward investing in the US has made it more difficult to find funding for startups, says Dios Crispi, the consultant. “They’ll tell me, ‘José, I love the business, but unfortunately, we’re investing only overseas,’” he says. “For us it’s so sad.”

EVER SINCE CUBANS started fleeing Fidel Castro’s communist regime in the 1950s, Miami has attracted wealth from the south, along with northern retirees and businesses drawn by Florida’s warm weather and lack of income and estate taxes. But the latest diaspora of Latin Americans originates from many more countries, adding to an influx of US wealth that accelerated in the pandemic. Miami has become a kind of Wall Street South, luring hedge fund managers such as billionaire Ken Griffin, who relocated the headquarters of his company, Citadel, from Chicago. Apollo Global Management, Blackstone and Goldman Sachs have moved staff from New York.

Now, Miami is courting Latin America’s elite in high-end restaurants and at sporting events. Alex Horn, managing partner at commercial and residential real estate lender BridgeInvest, says he organized its annual investor day at the Miami Open tennis tournament, sponsored by Itaú Unibanco Holding SA, Latin America’s largest bank. “A lot of our investors, both from South America as well as New York, were going to be here to watch it,” says Horn, who moved to Miami from Brazil as a child.

The latest émigrés flock to places such as Elcielo, a hushed 13-table Colombian restaurant on the banks of the Miami River. For \$258 per person, it serves 20-course meals over three hours. Elcielo won a Michelin star last year.

For most of the eight years since its opening, business was sparse, says chef-owner Juan Manuel Barrientos, who also has restaurants in Bogotá, his native Medellín and Washington, DC. Now tables are booked days in advance.

Like many longtime South Florida residents, Peter Bermont, managing partner of a Raymond James & Associates wealth advisory unit in Coral Gables, has stories of strangers showing up at his door, asking to buy his home. Not long ago, Bermont’s golf club had to run promotions to recruit members. These days it has a waitlist 11 years long.

Mariano Borges fled Argentina in 2013. He chafed against restrictions on his property development company, as well as the inflation eroding his wealth. Borges began a business in Mexico, buying land in touristy Playa del Carmen, just south of Cancún. Last year he moved to Miami, joining a cohort of Latin American real estate businesses now prospering in the city. Muscular and covered in tattoos, ►

Michelin-starred restaurant Elcielo



Jorge Pérez
(standing) and sons,
Jon Paul and Nick



Mariano Borges



Borges, 51, lives in a \$10 million home steps from the ocean and drives a Lamborghini.

Borges's company, Menesse International, is building a 400-unit apartment tower, as well as a smaller high-end condominium project, in the city's desirable Brickell neighborhood. "In the US, the laws and requirements are clear," he says. "You want a permit? OK, I need to see this, this and this. You want a loan? OK, show me this. You want to be in a place where the risk is less. So if a crisis comes, you'll know, OK, it might slow down for a while, but you're not going to lose everything."

Two miles away from Borges's home a sign advertises Ora by Casa Tua, now a parking garage but soon to be 460 luxury apartments. A local developer, Edgardo Defortuna, will market it heavily to Latin Americans. Over the past year, his sales force has been traveling regularly to Colombia and Mexico. The company has also scheduled four trips to Brazil, where the tax-the-rich plans of newly elected President Luiz Inácio Lula da Silva are creating customers for the developer. It's the most interest he's seen from the

"You want to be in a place where the risk is less. So if a crisis comes, you'll know, OK, it might slow down for a while, but you're not going to lose everything"

region in four decades of business. "There are only two types of people, the ones that move to Miami and the ones that want to move to Miami," Defortuna says.

The Monday after Petro, the former guerrilla, won Colombia's presidency in June of last year, "you see Colombia, Colombia on our sales report, and we immediately put together a sales trip," says Nick Pérez, a senior vice president at Related Group, which has built or rehabbed more than 100,000 apartments in the Miami area. Pérez's father, Jorge, born to Cuban refugees and raised in Argentina and Colombia, founded Related and is often referred to as the city's "condo king." Within weeks, Related sales associates flew to Bogotá, pitching projects during lunches at the city's Four Seasons hotel.

One of those developments, the St. Regis, a 150-unit condo project in Brickell, is just off scenic Biscayne Bay. Designed by the prominent architect Robert A.M. Stern, the apartments feature \$15,000 refrigerators and come with white-gloved butlers. A two-bedroom starts at \$3.5 million. Years from opening, it's already attracting interest from the south.

In March a buyer from Mexico tours a model apartment

with Catalina Martínez, a real estate agent from One Sotheby's International Realty. Her customer, Cristina, who asked to be identified only by her first name for security reasons, owns apartments across Miami. Now she's putting down a deposit on a four-bedroom. It will be a refuge for her family if they no longer want to be in Mexico under the López Obrador regime. "You never know," she says. "It could be like what happened in Venezuela."

BACK IN THE FOUR-STAR HOTEL in Bogotá, Carolina Pacheco, a Miami real estate agent, introduces the crowd to the joys of her city. Born in Colombia, she's there with a team of two

Colombia. Now they're seeing signs of history repeating itself. "The currency weakens, inflation is on the rise," Avendaño says. "We already lived through something similar once, and we know we don't want it happening to us again."

They still own apartments in Venezuela that they want to sell. They'll fetch \$10,000, maybe \$20,000, apiece—a fraction of what they'd pay in the US, where they have relatives in South Florida. "The bad thing is the prices," Avendaño says, noting that "\$700,000 is too much."

Others don't think so. By the time Pacheco leaves the hotel, she has several signed contracts. She'd planned to spend the weekend relaxing, visiting friends and family in the coastal city of Barranquilla. Instead she holds back-to-back meetings



Catalina Martínez at the St. Regis's model apartment

dozen colleagues from EXp Realty for a three-and-a-half-day tour of Bogotá, Medellín and Barranquilla. "Many thought I was crazy when I said how many of us were flying down, but the need is real, and we need to advise them," she says. She'd already made 60 sales from a visit in November. Now potential clients, booklets in hand, evaluate the Miami and Orlando projects on display and speak to bankers offering mortgages and attorneys specializing in immigration or taxes.

Yelitza Avendaño and Juan Eduardo Vaamonde, who have a consulting business, are looking to make a move to the US. The couple left their native Venezuela nine years ago for

and fields calls as word spreads that she's in town. In all, her group pitches to 450 people across the country. Pacheco expects to return every three months.

The following week, a client from Colombia she'd met in Barranquilla pays her a visit in Miami. He's there to buy an apartment downtown. Days later he returns to snap up a second. All told, he spends \$1.4 million. ● —*With Felipe Marques, Valentina Fuentes and Rodrigo Orihuela*

Fieser, a Bloomberg editor, and Jaramillo, a reporter, are based in Bogotá.

When in ... San Francisco

By PRIYA ANAND

ILLUSTRATION BY PETER OUMANSKI



What's it like to live and work in San Francisco? Garry Tan, president and chief executive officer of startup accelerator Y Combinator, gives his insider take on life in the technology hub to *Bloomberg Markets*. The interview has been edited for clarity and length.

What's the best place to go out for breakfast?

Plow in Potrero Hill for lemon-ricotta pancakes.

Where do you always bring visitors from out of town?

R&G Lounge in Chinatown for lobster noodles.

What's your work commute like?

YC is San Francisco-based but remote. I go into the YC office two or three times per week and work from home the other days. I roll out of bed, take my kids to school and then get on Zoom for meetings. I may have a working lunch or drinks before dinner and then home for dinner with the family.

What's one local custom you'd like the rest of the world to adopt?

SF is a melting pot, and I love that I've never been asked, "You're not from here, are you?"

What's the best gift or souvenir to buy in San Francisco?

Arsicault [Bakery's] croissants are the best in the world. Buy a couple dozen and carry them home with you. Your friends will thank you.

What's the most frustrating thing about working and living here?

See previous answer.

What is a truly special treat?

I like to go with my family to the California Academy of Sciences. We visit the Osher Rainforest—a rainforest dome with butterflies—and then take the elevator down to the aquarium. On the way out, say hello to Claude, the white alligator.

What's the culture of tipping waitstaff and other service personnel?

Twenty-five percent.

When traveling, how can you instantly recognize a person is from here?

They're wearing a fleece.

What's the best weekend escape?

Any resort that has hot springs in Calistoga.

What's the one thing you would change about this city if you could?

Schools that focus on closing the achievement gap. More housing, so we have enough places to live for everyone. And public safety, especially for Asian elders.

What misconception about your city do you hear most often?

San Francisco is one of the most beautiful cities in the world, but it does have some of the biggest problems in the country. To have that in one city seems very extreme, but San Francisco is a city of extremes.

What's your favorite cultural institution?

SFMOMA [San Francisco Museum of Modern Art]. ●

Anand reports on venture capital and startups for Bloomberg in San Francisco.



Where's the best place to go for a business lunch?

Starbilly: good pizzas, good atmosphere.

What's one essential thing that everyone who lives here absolutely needs to know?

Don't leave your laptop or backpack in your car.

Where's the best place for a good workout?

Crissy Field. And the best run is Crissy Field to Fort Point.

Where do you take your partner when you really want to impress them?

Gary Danko. Classic San Francisco fun, incredibly good food.



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NEW ENHANCEMENTS TO TRY RIGHT NOW

W	The Security Worksheet function has been enhanced to simplify getting news on the securities in a worksheet. To begin, go to {W <GO>}, open a worksheet and select the News tab. A range of buttons will appear, enabling easy access to news and news analytics. The News Feed button lets you monitor headlines, social media updates, earnings news and concise summaries of breaking news. Click on the News & Event Icons button to add an indicator that provides real-time alerts for major news, research, analysis, corporate filings, corporate actions and significant social media activity.
SOVM	The Sovereign Debt Monitor function has been updated to let you track six additional emerging markets. Run {SOVM <GO>}. Use the drop-down to see data for Croatia, Cyprus, Georgia, Latvia, Lithuania and Nigeria.
MAP	The Custom Map function has been enhanced with natural gas flows data. Run {MAP <GO>}. Click on Natural Gas Flows (N. Am.) for North American data or on Natural Gas Pipelines (Eur.) to map European flows.
ICVS	To help prepare for the transition to the Canadian Overnight Repo Rate Average (CORRA) from the Canadian Dollar Offered Rate (CDOR), you can now calibrate the CAD vs. USD basis curve using CORRA vs. the US Secured Overnight Financing Rate (SOFR). Go to {ICVS 135 <GO>} and select the CAD vs. USD Basis with FX Forwards curve from the Name drop-down to view the updated instrument and dependency structure.
IMO	The Vessel Description function has been enhanced with a new fleet search feature that lets you identify multiple ships that match criteria such as type, class, beneficial owner and more. Go to {IMO <GO>} and click on the Fleet Search button, or run {IMO FLEET <GO>}. You can then enter criteria such as "LNG tanker" in the amber field to generate a list of ships of that type.

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Following the World's Biggest Fortunes

By BRIAN CHAPPATTA

RICH <GO>

THE WORLD'S RICHEST people are tied to seismic global events like never before.

Russia's tycoons, worth \$339 billion before President Vladimir Putin's invasion of Ukraine, were the targets of sweeping sanctions that erased almost \$70 billion in the first year of the war. Gautam Adani's rapid wealth creation through his conglomerate raised red flags for an American short seller, sparking a reckoning across India. Sam Bankman-Fried, once worth \$26 billion, was wiped out after precipitating a crypto crisis that led to the demise of some US banks. And Elon Musk showed that vast riches can buy not only

mansions and superyachts but even the "public square" itself: Twitter.

Unlike Musk, however, the majority of the superwealthy are secretive about their net worth. Bloomberg Wealth's **{RICH <GO>}** shines a spotlight on these influential fortunes, ranking the world's 500 wealthiest people. Their net worths are updated daily, based on market swings in their public holdings or, in the case of some private companies, changes among peers. The list can be sorted by country, gender, age and other categories.

Clicking through to individual billionaire profiles on **{RICH <GO>}** offers

a treasure trove of data, including a transparent summary of how Bloomberg reporters arrived at their estimates and links to regulatory filings and news reports. Net Worth Analysis provides a pie chart that neatly visualizes a billionaire's holdings. For those with large public stakes—think Mark Zuckerberg with Meta Platforms Inc. or Stephen Schwarzman with Blackstone Inc.—a Relationship Map gives a snapshot of analysis across the terminal.

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Chappatta is managing editor for wealth coverage at Bloomberg News in New York.



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4. BoA Merrill Lynch
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