

INVESTOR'S GUIDE 2023

# THE RECESSION PLAYBOOK

# FORTUNE



**CAN  
THIS MAN  
TAME  
INFLATION?**

P. 54

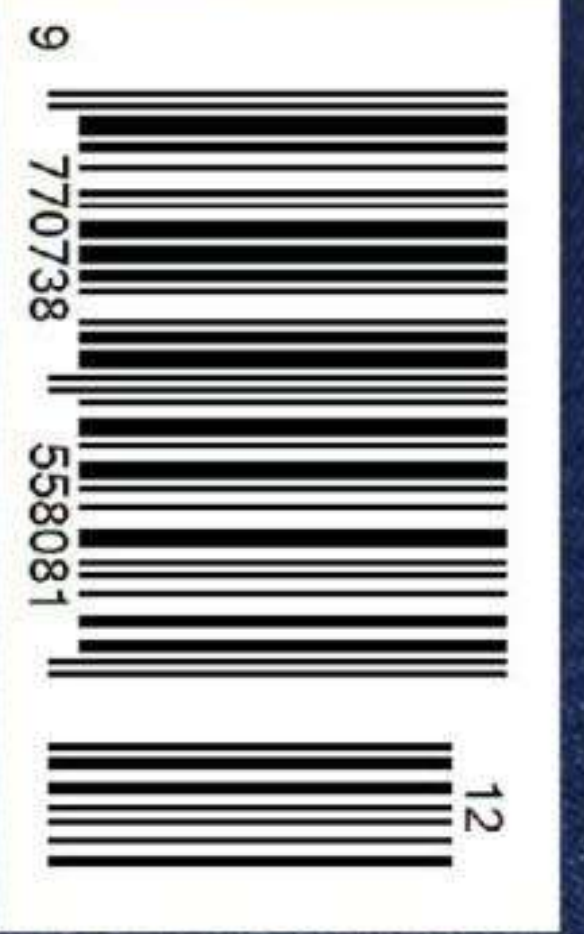
**HOW TO  
PROTECT YOUR  
MONEY IN A  
BEAR MARKET**

P. 47

**Jerome Powell,**  
chairman of the  
U.S. Federal Reserve

**EUROPE EDITION  
NUMBER 6**

Austria	8,00
Belgium	8,00
Finland	8,00
France	8,00
Germany	8,00
Greece	8,00
Ireland	(+tax) 8,00
Italy	8,00
Luxembourg	8,00
Netherlands	8,00
Norway	Kr69
Portugal	8,00
South Africa	(+tax) R60.00
Spain	8,00
Sweden	(+tax) Kr69
Switzerland	F15.00
United Kingdom	£6.00
UAE (Middle East)	AED 40.00







## Investment Partner **Gyeonggi Province**

Along with Seoul, the capital of the Republic of Korea, Gyeonggi Province is one of the world's most significant urban economies, and it continues to develop as a leading growth engine of Asia.

Gyeonggi Province is a land of promise. As a business center of Korea and a distribution hub of Northeast Asia, it is part of a core international trade network.

With diverse business opportunities and an ideal environment for leisure, Gyeonggi Province lives up to its reputation as a global region.

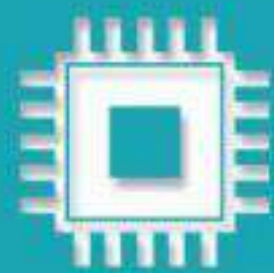


# Discover Your Business Opportunities in Gyeonggi Province



## Innovation foundation for future industries

- Next-generation research facilities of top 4 global semiconductor equipment manufacturers
- Korea's largest concentration of innovative enterprises with expertise in technology commercialization
- Pangyo: Korea's innovative IT convergence cluster
- R&D investment: USD **39** billion (52% of national total, No. 1 in Korea)
- Number of research institutions: **19,509** (35% of national total, No. 1 in Korea)
- Tech startups: **84,215** (36% of national total, No. 1 in Korea)



## Buying Power of Semiconductor & Auto Industries

- World's largest memory chip plant (Samsung Electronics)
- Headquarters and R&D hub of world's No. 3 automaker (Hyundai Motors)
- Massive Samsung and SK Hynix semiconductor clusters
- Samsung, SK Hynix and Hyundai Kia supply chain partner clusters
- Registered factories: **72,868** (36% of national total, No. 1 in Korea)
- Skilled personnel: **487,432** (30% of national total, No. 1 in Korea)



## Superior Human Resources

- Population: **13.93** million (27% of national total, No. 1 in Korea)
- GRDP: USD **413** billion (25% of national total, No. 1 in Korea)
- Economically active population: **7.82** million (27% of national total, No. 1 in Korea)



# Features Dec 2022/Jan 2023

VOLUME 186 • NUMBER 3

## INVESTOR'S GUIDE 2023 CONTENTS

**32 A Venture Giant's Risky Moonshot**  
 Marc Andreessen and Ben Horowitz built one of the most potent names in venture capital. Now they want their firm to transcend it.  
 BY ERIC NEWCOMER & JESSICA MATHEWS

**40 Investor Roundtable**  
 Despite soaring consumer prices and steep market declines, our experts believe a rough 2022 could set the table for far better returns in 2023 and beyond.  
 MODERATED BY MATT HEIMER

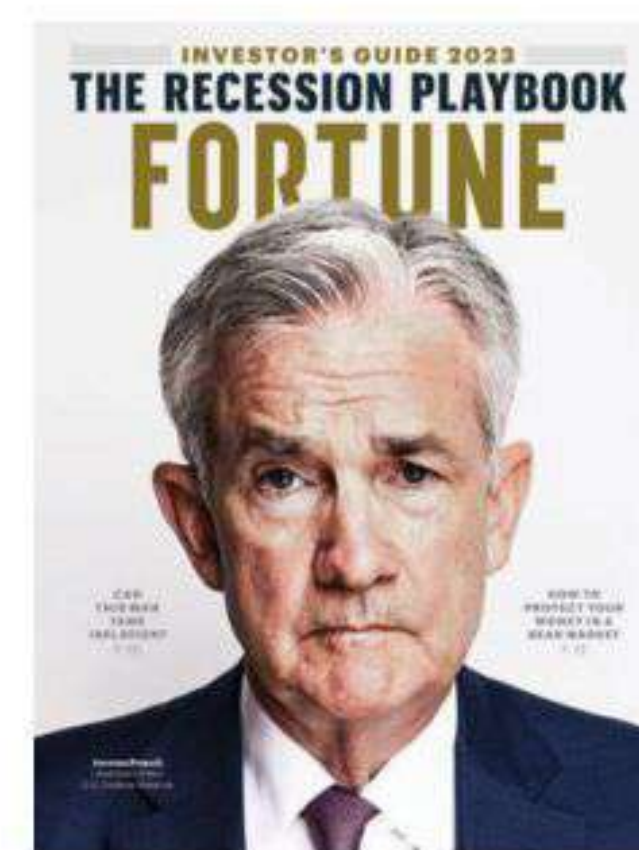
**47 11 Stocks to Stick With for 2023**  
 In expectation of a recession, the smart money seeks companies whose products and services sell well even when times are tough.  
 BY ANNE SRADERS  
 RESEARCH BY SCOTT DECARLO

**54 Will Jay Powell Blink?**  
 An inside look at the high-stakes battle to curb runaway inflation—as the Fed chair takes on perhaps the toughest job in America.  
 BY CHRISTOPHER LEONARD



**72 Why Amazon's Cloud Took the World by Storm**  
 AWS has become the ultimate case study in corporate innovation.  
 BY GEOFF COLVIN

**78 What's in the Water at PepsiCo?**  
 The maker of fizzy drinks and chips has also produced 16 current Fortune 500 CEOs.  
 BY PHIL WAHBA



COVER PHOTOGRAPH BY NIGEL PARRY



## Departments

### The Conversation

- 6 **ALEXANDRA COOPER**  
Meet the 28-year-old host of Spotify's wildly popular podcast *Call Her Daddy*.  
BY ALEXANDRA STERNLICHT

### Foreword

- 11 **Tough Times Make Leaders Better**  
BY ALYSON SHONTELL

### The Brief

- 12 **Where Crypto Goes After the FTX Debacle**  
BY JEFF JOHN ROBERTS
- 14 **The Booming Tech Industry That Caters to Creators**  
BY ALEXANDRA STERNLICHT
- 28 **The CEO Taking Psychedelics Seriously**  
BY DAVID MEYER

### Passions

- 86 **Where to Get Away in 2023**  
BY ADAM ERACE

### The Cartographer

- 89 **Life Is Too Short: The Devastating Trend in Shorter Life Spans Worldwide**  
BY MATT HEIMER & NICOLAS RAPP



**WHAT OUR EDITORS ARE UP TO NEXT**

#### FORTUNE CRYPTO

Get a daily dose of expert analysis and the advice you need to navigate this ever-evolving market.

#### FORTUNE RECOMMENDS

Make smart decisions about the financial and business-related products you use every day with the help of our comprehensive guides and reviews.

#### THE READER

A weekly round-up of *Fortune's* most compelling stories, curated by our editor-in-chief Alyson Shontell.

For all this and more, head to [fortune.com](https://fortune.com).



86  
Where you'll be in 2023—  
Tours, a Unesco World  
Heritage Site in France's  
Loire Valley.





CHANGE AGENTS



# WRITTEN IN THE STARS

**It was a night that Mishaal Ashemimry will never forget. When she was just 6, her mother took her deep into the Saudi Arabian desert to witness the majesty of the distant stars flickering across the sky. That was the night a dream was born—her dream to become a rocket scientist and reach for the stars.**

“It was stunning,” Mishaal remembers. “I was so curious and I had so many questions to ask about the stars. I decided that the best way to learn was to go there, and the best way to get there was to become a rocket scientist and design my own rockets.”

With an inquiring mind and insatiable appetite for scientific discovery, it didn’t take long for Mishaal to reach escape velocity. Part of a prize-winning robotics team at her Florida high school, she earned degrees in aerospace engineering and applied mathematics, followed by a MS focused on cutting-edge research into nuclear thermal propulsion.

“These are the types of rockets that one day will be used to send humans to Mars,” she says. “Because NASA was interested, I won a scholarship and was paid to research their development.”

On her way to fulfilling her dream, Mishaal has faced discrimination challenges that are well-known to female scientists everywhere. That has not stopped her from contributing to more than 20 rocket development programs at a major aerospace company and founding her own business, MISHAAL Aerospace, at the age of 26.

Dedicated to designing and building rockets to launch small satellites into low Earth orbit (LEO), the startup completed successful tests of its own propulsion system and proved the technical and business case for what has become a fast-growing segment of the satellite industry.

Mishaal is now embarking on a new adventure on her journey to the stars.

Nurturing a lifelong passion for space travel, rocket scientist **Mishaal Ashemimry** is helping to craft Saudi Arabia’s national space strategy. The inspiring aerospace pioneer plans to train as an astronaut and venture into space herself.

“

I HAVE ALWAYS WANTED TO PUSH THE ENVELOPE OF RESEARCH AND ENABLE HUMANS TO EXPLORE OUTER SPACE AND THE STARS.

**MISHAAL ASHEMIMRY,**  
CONSULTANT, SAUDI  
SPACE COMMISSION

”





## CULTURE OF INNOVATION



Mishaal Ashemimry (left) has been fascinated by aerospace ever since she was a young girl in Saudi Arabia.

▶▶ In July, she moved back to her Saudi homeland to continue her work as a consultant to the Saudi Space Commission. In September, she became the first Saudi national to be elected a Vice President of the International Astronautical Federation.

“Saudi Arabia can achieve a great deal in space and contribute to the advancement of technologies in the space sector,” Mishaal says. “For me, it is important to push the envelope with technology development and enable even more human beings to explore space and one day traverse the Universe.”

### What challenges have you faced as a woman in the aerospace industry?

I know my value. I am in this industry because I love it. What is exciting for me is designing a rocket and predicting how it is going to behave. In my field, I have often been discriminated against because I am a woman. You need a thick skin to be able to keep going forward and not lose sight of your dream. In Saudi Arabia, they recognize the wealth of my experience in the aerospace industry and as an entrepreneur. It is nice to be working in an environment that is built to be inclusive from the start.

### Who are your heroes?

The scientists who developed the first rockets. We have an incredible knowledge base today thanks to their hard work. I greatly admire Wernher von Braun and Robert Goddard. They contributed significantly to the development of rockets and trailblazed an unknown area. Apart from them, I would have to say that my mom is my hero. I have seen her struggle in her life and she always persevered. She is someone I aspire to be like because she never lost hope. I would love to have that capacity to face such hardships and still have the determination and passion to continue.

### Tell us about MISHAAL Aerospace.

I saw a gap in the market for rockets that launch small satellites that are 500 kilograms or less. I wanted to design and manufacture the rockets and provide launch services to the satellite operators. I was ahead of my time because this area is experiencing huge growth now. We were one of the first to try to capture the market. We were on the right track, but as is all too often the case, funding was an issue.

### How are you contributing to the Saudi Space Commission?

I was thrilled when the Saudi Space Commission was created in 2018. I am truly honored to be part of the human capital that is creating a space sector in Saudi Arabia, and I am enjoying watching that happen. We aim to be active participants in space exploration and development.

### What message do you have for young women interested in an aerospace career?

Pursue your passion because no matter how hard it gets, you can always

get up and try again. Make sure you have a deep knowledge of the field of your choice. You need to be well versed in the intricacies of every little detail. Do not be afraid to fail because failure is the seed from which success grows. I say this from experience. You learn so much more from the failures than you do from the successes.

### What are your dreams and aspirations for the future?

My dream is to be an astronaut who contributes to the advancement of science, research, and technology. I would like to contribute to research in the area of settlements on the Moon and on Mars. I studied nuclear thermal propulsion because it is a technology that we will need in order to traverse the Universe further. And I would love to go to the Moon myself. I am full of ideas about what we need to do to have settlements there and create a thriving cislunar economy.



An expert in nuclear thermal rockets, Mishaal now aspires to travel into space as an astronaut.





**SHOCK JOCK**  
Cooper launched her  
podcast to re-create  
her college locker  
room banter.



# The Conversation

## ALEXANDRA COOPER

Cooper launched *Call Her Daddy* in 2018 to talk about sex from the female perspective. The raunchy podcast boomed in popularity, earning Cooper a \$60 million Spotify deal. Cooper has toned down her content but keeps climbing the charts, becoming Spotify's No. 2 podcaster last year. She also boasts the IP rights to her show, setting the zillennial "Oprah" apart from her creator peers. **BY ALEXANDRA STERNLICHT**

“With the amount that I put into *Call Her Daddy* there was no doubt about it that I was going to fight quite literally till the end for that IP.”

—ALEXANDRA COOPER,  
HOST, *CALL HER DADDY*

IT'S FRIDAY NIGHT in New York City's Meatpacking District, and Spotify's most popular female podcaster is cold and looking for a place to drink. Alexandra Cooper started her podcast, *Call Her Daddy*, not far from here. She and then-cohost Sofia Franklyn taped the show from their Lower East Side apartment, chronicling their sexcapades through the city. "Sofia and I walk to the subway every day because we're peasants and we don't have fucking sugar daddies," Cooper said in an early episode. Now a limo driver is trailing her around the city, proof of just how much the 28-year-old's life and career have changed since she launched the podcast in 2018.

Since then, Cooper has transformed her podcaster profile from "sex girl" (her words) to a "role model" (fans' words). She moved to L.A. She's gone solo; Franklyn left the show in May 2020. Instead of rehashing her drunken antics,

Cooper's weekly episodes now feature self-care advice and interviews with stars like Miley Cyrus, Hailey Bieber, and Julia Fox. Sex still peppers her podcast—in November she recounted her effort to get a semen stain out of a suede headboard—but she also tackles topics within the safer-for-work zeitgeist. An October episode followed Cooper as she visited a North Carolina abortion clinic. At one point she asks a male pro-life protester if the government should mandate vasectomies for men. "We're regulating the uterus; we could also regulate the penises, right?" Cooper asks.

Listeners were riveted early on, and they remain hooked. The show's popularity earned Cooper an exclusive three-year licensing deal with Spotify in 2021 worth \$60 million, a sum that landed Cooper in the same realm as podcast king Joe Rogan, whose three-and-a-half-year Spotify exclusive deal is reportedly worth



\$200 million. Cooper outearns actual royals Meghan Markle and Prince Harry, who reportedly got between \$15 million and \$18 million for their three-year Spotify exclusive deals in 2022.

“The Daddy Gang is a bunch of predominantly women that are excited to engage in a roller coaster where we don’t know what happens next, but we’re on the ride with Alex,” Cooper tells me, referring to her fan base. “Let’s talk about mental health. Let’s talk about sex. Let’s talk about dating. Let’s talk about our issues. Let’s talk about our successes.”

Since Cooper joined Spotify exclusively, the streamer says, it’s gotten its money’s worth. *Call Her Daddy* was Spotify’s second-most popular podcast globally in 2021 behind *The Joe Rogan Experience*, and it was the No. 1 podcast among female listeners.

“She’s the equivalent of an Oprah or an Ellen because she’s able to touch people in a certain way,” says Spotify chief content officer Dawn Ostroff. “There’s a certain ownership of their femininity in a different way, where women feel entitled to be who they are, to be unapologetic about their sexual lives, to be unapologetic about their ambition and talk about things that are important to them—Alex is truly a leader of that movement.”

Cooper, known as Father among fans, has remade her show—and rewritten some of the creator economy’s rules. Yes, she established a new ceiling for top-earning female

podcasters, but she also battled for the licensing rights to her content. *Call Her Daddy* intellectual property—the podcast and related merchandise—belongs to Cooper alone, according to Cooper.

“With the amount that I put into *Call Her Daddy* there was no doubt about it that I was going to fight quite literally till the end for that IP,” says Cooper. “I understood what it would do to my career if I lost that.”

She also understood what could happen if she owned it. With the IP rights and a fiercely loyal audience, Cooper, who’s on the latest Fortune 40 Under 40 list, belongs to an elite club of top creators who are not limited by the platforms that distribute their content. She’s already switched her allegiance once, and despite the mammoth Spotify deal, she’s not ruling out doing it again.

### MASS LISTENER APPEAL

AS COOPER AND I roam Manhattan’s West Side, she is stopped by three adoring fans within 10 minutes.

“I’m, like, freaking out,” says Ella Sunshine, 21. The New York University undergrad tells Cooper the podcast helped her transition from childhood to living and dating in New York City—as Cooper once did.

“Oh, my God! I love you!” Cooper coos, squeezing Sunshine for a selfie.

Many creators will tell you they didn’t intend to become celebrities. Cooper did.

She grew up in Newtown, Pa., a town of 2,000, and attended a \$46,000-per-year prep school. The bleach-blonde soccer star started on Boston University’s varsity team and was a midfielder from 2013 to 2015. But she wanted stardom on the internet, and majored in film and television—honing video and audio editing skills she’d taught herself as a teen.

After graduation, her boyfriend at the time, then-Mets pitcher Noah Syndergaard, helped her score a job at a creative agency. Cooper hated it and cried “tears of joy” when she got laid off.

“I got a job through my famous boyfriend, and I was living with him. I didn’t have anything of my own. I was completely losing myself,” she says.

To find herself—and grow her fame—Cooper started *Call Her Daddy* with Franklyn. The two wanted to re-create the locker room talk Cooper had exchanged with her college teammates. In early episodes, Franklyn and Cooper encourage a man to stalk a love interest, suggest ugly people work harder during sex to appease partners, and glorify abuse as affection. At best their advice was questionable; at worst it was “toxic”—as a fan on Gansevoort Street put it.

“It was two white women talking about sex and sexuality who have analysis as deep as a puddle,” says Raquel Savage, therapist, sex worker, and founder of mental health nonprofit Zepp Wellness, who argues that Cooper’s fame is largely possible because she’s an attractive white woman. “The conversations they engaged in did not shift feminism in any capacity, at least not in a productive direction.”

Cooper cringes at some of the content but has no regrets. “There was no woman out there being so raw, honest, and calling it what it was,” Cooper says. “The whole time my goal was for people’s jaws to just drop, and it took off.”

Just one episode in, the podcast’s

“She’s the equivalent of an Oprah or an Ellen because she’s able to touch people in a certain way.”

—DAWN OSTROFF, SPOTIFY CHIEF CONTENT OFFICER



raunchy sex appeal caught the attention of Dave Portnoy, founder of Barstool Sports, the sports media empire known for a macho tone that veers into misogyny. (Insider published two stories in 2021 that accused Portnoy of sexual misconduct. He denied the claims and sued Insider for defamation. A judge dismissed the case earlier this year.) In 2018, Portnoy bought the rights to *Call Her Daddy*, initially paying Cooper and Franklyn each \$75,000 a year, plus bonuses based on downloads and merchandise and branded alcohol sales. The show was so popular that Cooper and Franklyn each earned around \$500,000 the first year, according to Barstool. Portnoy and Barstool CEO Erika Nardini did not respond to multiple requests for comment.

The duo's relationship with Barstool soured as they sought more money and the show's IP rights. The hosts stopped recording for over a month as talks stalled.

Portnoy blinked first. In May 2020 he offered the two ownership of the IP, \$500,000 starting wages, and an increased cut of merchandise sales in exchange for staying at Barstool. As Cooper recounts, she was in, but Franklyn balked. The duo parted ways—as cohosts, as roommates, as friends. “The moment Dave Portnoy was like, ‘I will give you your IP,’ I was like, ‘Great, I will do anything,’” Cooper says.

Franklyn tells a different story. “[Alex] decided that instead of trying to figure this out, ‘I’m just going to take this for myself and run with it.’ That’s what she did,” Franklyn said on a July 2022 episode of the podcast *Barely Famous*. She declined to comment.

Cooper stayed with Barstool for another year and proved to be an even bigger draw on her own, with *Call Her Daddy* becoming the most-popular female-created podcast on Spotify and climbing into the streamer's top five globally. In 2021,

“There was no woman out there being so raw, honest, and calling it what it was. The whole time my goal was for people’s jaws to just drop, and it took off.”

—ALEXANDRA COOPER

Spotify itself came calling, offering Cooper a \$60 million, three-year deal to license *Call Her Daddy* exclusively. (Cooper says Amazon offered her more, but she chose Spotify for its promise of creative freedom. Amazon didn't return a request for comment.)

“I knew Spotify was going to treat me the same as Barstool—if not better—because the way they talked about their relationships with creators was exactly what I wanted, which is: ‘Do what you want. We’re here to help,’” says Cooper.

What Cooper wanted was to shift her podcast away from explicit sexual content and toward topics like mental health. She started to pivot after signing with Spotify. “I got pigeonholed completely to being the girl that gives a good blow job and has great sex advice,” says Cooper. “No doubt about it—that’s why I was so successful, but it also hurt my image.”

Cooper's embrace of themes like mental health and long-term relationships hasn't hurt *Call Her Daddy's* listenership. In 2021, it ranked No. 2 on Spotify. According to Nielsen, it garners over 5 million listeners per episode on average. The demographic of Cooper's listener base has changed. It was split 40-60 between men and women early on, but it's now 90% female, according

to reports. The loss of male listeners didn't surprise Cooper: “The content got a little too heavy for the men.”

## MUSIC TO SPOTIFY'S EARS

**COOPER DECIDES** we should drink at club-restaurant Catch, where she once threw back several cucumber, matcha, and tequila Detox Retoxes on a first date. We order a round. “Be careful, you get fucked up,” she warns. As Cooper sips her drink, a group of twentysomething white women approaches us: “Alex Cooper! I’m going fucking nuts right now! I love you!”

These fans are one reason Spotify shelled out for *Call Her Daddy*.

The podcast's mostly female audience primarily consists of 18- to 29-year-olds, Cooper says. Listeners can only hear *Call Her Daddy* on Spotify, meaning the show draws the coveted demographic to the platform.

“Those top-end exclusives are most important,” says Mark Zgutowicz, senior analyst at Benchmark, who lists *Call Her Daddy* and *The Joe Rogan Experience* as examples. “If these podcasts get you into Spotify, and then you get wowed by the curation and how strong their playlists are—particularly relative to Apple Music—you’re unlikely to ever leave.”

Today, over 4.7 million podcasts live on Spotify alone; according to



Nielsen, an estimated 66 million American adults tune in to podcasts on a monthly basis, up 38% in the past two years. Spotify charges brands five times more to advertise via exclusives like *Call Her Daddy* since audiences of such content are sales gold mines—enormously loyal, with well-defined interests, Zgutowicz says.

Spotify stock cratered to a record low in November, and it laid off staff at in-house podcast production houses Gimlet and Parcast. The turmoil, however, is unlikely to hurt high-profile hosts like Cooper; in fact, she and her peers may benefit as the streamer concentrates resources on buzzy exclusives, says Ariel Shapiro, lead reporter at Hot Pod, an industry publication. Shows like *Call*

*Her Daddy* that draw large and loyal listenerships are helping Spotify wean itself off the music business, where it spends enormous sums to license content from record labels.

## FATHER KNOWS BEST

**IN PUBLIC, COOPER** is affable and gracious with fans. Back in her Dad Pad, her name for the airy West Hollywood home where she books, records, and edits her podcasts, her competitive nature pokes through in the stories she shares. In baggy, mismatched sweats and no makeup, Cooper recalls one of her show's most viral moments, when actress Julia Fox called herself “Josh Safdie’s muse in *Uncut Gems*,” pronouncing the film title

with a Valley girl lilt. The audio clip has been used in over 51,000 TikToks, accumulating millions of views and likes. In edits, one of Cooper’s team members suggested she cut the line. She cites her decision to keep it as a reason she’s so hands-on.

“I know *Call Her Daddy* better than anyone,” she says, answering “fuck no” to the question of whether she’ll ever have another cohost.

Her sole control of the podcast means she can decide its future. She’s in talks with Spotify to pioneer tools for listeners to interact with her content within the platform. That said, she’s not ruling out building her own podcast platform or taking *Call Her Daddy* elsewhere when her Spotify deal expires in 2023.

Owning the podcast IP gives her more options than other creators have. She’s already won the war that some artists have lost but most never fight. Taylor Swift famously rerecorded three studio albums after failing to retrieve her catalog from her former label Big Machine Records and music mogul Scooter Braun.

Cooper “understands the value of what she’s putting out into the world,” says Philippa Loengard, executive director of Columbia Law School’s Kernochan Center for Law, Media, and the Arts. “I think that’s a wonderful example for young artists.”

Cooper’s medium and deeply personal approach position her for longevity. Listeners engage in more active listening with podcasts than with music, deepening their connection to the content, says Jonah Berger, marketing professor at the Wharton School and author of *Contagious: Why Things Catch On*.

For now, Cooper is focused on making her podcast No. 1 in the world. “I’m never going to put something over *Call Her Daddy*. I’m never going to just do something for a paycheck,” she says. “If I don’t get another deal at the end of this deal, I’m going to keep creating. I’m here for the long game.” ■

## FORTUNE’S 40 UNDER 40

Cooper joins a slew of other influential individuals shaping the future of business. Below are the latest “innovators”; visit [Fortune.com](https://fortune.com) to view the full list.



### Enric Asunción

Cofounder and CEO, **Wallbox**

The EV veteran leads the maker of at-home charging systems. In 2021, it was the first Spanish tech firm to list on the NYSE.

### Alexis Barreyat

Cofounder and CEO, **BeReal**

The GoPro alum’s Paris-based social media app—valued at \$600 million—is a Gen Z favorite for prizing authenticity over curation.

### Jimmy Chen (1)

Founder and CEO, **Propel**

Propel’s free app helps 5 million low-income Americans manage their benefits, fulfilling Chen’s aim of using tech for good.

### Vivian Chu

Cofounder and CTO, **Diligent Robotics**

Determined to give nurses more time with patients, Chu built Moxi, a humanoid robot that can execute basic hospital tasks.

### Mariana Costa (2)

Cofounder and CEO, **Laboratoria**

Inspired by Black Girls Code founder Kimberly Bryant, Costa launched a tech boot camp for women across Latin America.

### Pavel Durov

Founder and CEO, **Telegram**

Durov, a Russian living in Dubai, has built his uncensored platform into a global megaphone for an estimated 700 million users.

### Susan Li (3)

CFO, **Meta**

The early Facebook employee became CFO in November, entering the C-suite amid the company’s metaverse pivot and belt-tightening measures.

### RJ Scaringe

Founder and CEO, **Rivian**

The MIT grad’s electric truck startup counts Amazon as a customer and held the biggest IPO since Facebook’s.



# Tough Times Make Leaders Better



▶ FOR BUSINESS, 2022 has been a dizzying year, and the fourth quarter has only upped the ante on the insanity. In November alone, we watched Elon Musk take over Twitter and decimate the company and its workforce, one tweet at a time. A \$32 billion crypto exchange, FTX, was exposed as a de facto Ponzi scheme and collapsed in 48 hours. And bloated Big Tech companies announced plans to lay off more than 50,000 employees, in total, in a quest to become more efficient.

With all this chaos swirling, perhaps the only certain thing is that 2023 will be even more uncertain. With inflation still punishingly strong, and a U.S. recession looking increasingly likely, the biggest challenge business leaders face is how to steer a course between those two dangerous rocks—and come out stronger on the other side.

CEOs can't fight rising prices without help from policymakers. Our cover story on U.S. Federal Reserve Chairman Jerome Powell (page 54) explores how he's struggling to rein in the highest inflation since the 1980s. Powell has followed the classic economic playbook by raising interest rates. But it's unclear if he'll be able to land this plane without a crash—especially since years of “quantitative easing” by the Fed have encouraged too many companies and investors to take risky bets with cheap, borrowed money.

As author Christopher Leonard notes, Powell has two choices: “He can tolerate high inflation, and risk that it gathers strength and begins to rage out of control. Or he can tighten the money

supply, and risk recession and possibly a financial crisis.”

Both those options are ugly, which is why smart CEOs are focusing on how to protect their companies. Fortunately, seasoned leaders have coped with recessions and inflation before—not to mention the unprecedented dilemmas that came with COVID. Shawn Tully spoke with and studied the work of five battle-tested Fortune 500 CEOs, compiling their top five strategies for steering their businesses in volatile times, including raising prices, taking care of your best people—and seizing opportunities that arise when your competitors stumble. (Find his story at [fortune.com/magazine](https://fortune.com/magazine).)

One inspiring thing to remember is that the strongest businesses are forged in tough times, when leaders are forced to get lean, focus, and execute. When COVID first hit, Airbnb CEO Brian Chesky was put to the test earlier than most. In 2020, his business nose-dived 80%; to save it, he had to lay off 25% of his workforce and get back to his company's core business of peer-to-peer rentals.

“We were focusing on flights and all these different businesses... we had to get back to our roots,” Chesky told *Fortune's* Trey Williams recently. The strategy paid off in a big way, he said: “We did more than \$3 billion in free cash flow in the last year, so that means we do roughly half a million dollars per employee.” (Read the interview at [Fortune.com](https://Fortune.com).)

The takeaway: Leaders who act decisively in stormy times can reap big rewards when the waters finally get calmer.

**ALYSON SHONTELL**  
Editor-in-Chief, *Fortune*  
@ajs





INVESTING

## Where Crypto Goes After the FTX Debacle

The collapse of Sam Bankman-Fried's firm is the financial scandal of the decade. But it might help the Web3 world clean up its act.

BY JEFF JOHN ROBERTS

PHOTOGRAPH BY  
SPENCER HEYFRON

▶ **IN JULY, THE** giant cryptocurrency derivatives exchange FTX looked like a pillar of stability. The company and its slacker-chic founder, Sam Bankman-Fried, projected calm and confidence during so-called Crypto Winter, even swooping in to rescue weaker rivals.

That facade crumbled in just a few days in November. First, the value of FTX's in-house token cratered; then FTX was in talks to be acquired by a rival; then it declared bankruptcy as the rival walked away. It was a stunning turn of events for a

◀ Investors and the media cut corners when it came to doing due diligence on FTX and Bankman-Fried.

company that had been valued at over \$30 billion, one regarded as a best-in-breed firm that could bring crypto into the mainstream of American finance.

The worst was still to come. FTX appears to have engaged in a massive fraud, lying to investors and looting customer funds, all while operating without board oversight or even basic financial controls. The 30-year-old Bankman-Fried had charmed investors, politicians, and the media (including, yes, *Fortune*: We put him on our August/September 2022 cover), but he came to be seen as a curly-headed cross between Elizabeth Holmes and Bernie Madoff.

Numerous regulatory and criminal investigations were underway as this story went to press. (Bankman-Fried has said on social media that he "f--ked up," but insisted he was naive, not nefarious.) Still, as investors and regulators scramble to determine how a massive fraud occurred right under their noses, it's not too early to take stock of what we've learned.

### **HARD LESSONS**

It's easy to spot a scam in hindsight, and with FTX, the signs were all there: the lack of a board, the refusal to share basic accounting documents with



the press or financial backers, a CEO who reveled in playing *League of Legends* during investor meetings. The harder question is how people who should have known better—including experienced hands like those at prestigious VC firm Sequoia Capital and the Ontario Teachers' Pension Plan—missed those red flags.

The best answer is that in the rush to snag a piece of the next big thing, basic safeguards and skepticism were thrown aside. Investment firms, reluctant to miss a hot deal, cut corners on vetting. Sequoia invested \$210 million in an FTX Series B round and commissioned a puffy 14,000-word profile titled "Sam Bankman-Fried Has a Savior Complex—and Maybe You Should Too." Now the firm is probably wishing it had spent some of that marketing money on a forensic accountant. (Sequoia apologized to investors and said it would beef up its auditing; OTPP said in a statement, "no due diligence process can uncover all risks.")

It's obvious now that the firms throwing money at Bankman-Fried should have done the humdrum work of due diligence and demanded a hand in overseeing the company. But FTX raised most of its financing in 2021, when it seemed like crypto prices could only go up. Under such circumstances, it's all too easy for founders to get funded with few or no strings attached.

Media and politicians,

meanwhile, gullibly accepted Bankman-Fried at face value—perhaps because he was a major contributor to Democratic causes. His earnest-sounding but fuzzy plans to give his money away through "effective altruism" also made him a refreshing contrast to the crypto-bro stereotype. As for FTX customers, who have lost millions in savings, it is hard to fault them, given that the company had run Super Bowl ads and gathered endorsements from the likes of Tom Brady, Steph Curry, and Larry David.

Then there is the question of transparency—something that FTX and many of its peers conspicuously lack. Blockchain, ironically, is a technology

## FROM CRYPTO UNICORN TO BANKRUPTCY

**\$32B**

▲ VALUE OF FTX ON 1/31/22

**\$0**

▲ VALUE OF FTX ON 11/10/22

SOURCES: CRUNCHBASE, BANKRUPTCY FILINGS

## FAR TOO MANY CRYPTO VENTURES HAVE REVOLVED AROUND EXOTIC FINANCIALIZATION.

that can allow an unprecedented level of visibility into ledgers and accounts. Yet FTX nonetheless was able to conceal its many misdeeds through a web of 130 offshore entities. In response to the debacle, there is a clamor in the crypto world for companies to furnish "proof of reserves"—a standard that at a minimum should require firms to show that customer funds are safe, in a way that does not require a Ph.D. in cryptography to understand.

### WHAT COMES NEXT

The White House, members of Congress, and agency heads have vowed to bring the crypto industry to heel, and some progressives have suggested they would be happy to destroy crypto once and for all. But it should be possible to fashion a response that will prevent another FTX while allowing the best parts of blockchain to flourish. Industry advocates argue that the SEC's current "regulation by enforcement" tactics, which many decry as vague and unpredictable, should be replaced with clear rules that define when a cryptocurrency is a security.

Another move that could help crypto thrive in a safer way: allowing

crypto-based financial products like ETFs and interest-bearing loans to exist, albeit under clear rules governing how they operate.

The financial toll of the FTX scandal will reach far beyond its own customers; crypto-lender BlockFi and a series of other crypto firms, especially centralized ones that offer loans, are expected to file for bankruptcy. But one unlikely winner, relatively speaking, may be Coinbase. That publicly traded exchange pursued a slow, stodgy course even as FTX ate into its market share. Its revenue and shares have plummeted during Crypto Winter, but it's playing nice with U.S. regulators, and it avoided the offshore schemes and proprietary trading sleight-of-hand that Bankman-Fried deployed.

There's a larger takeaway from the FTX meltdown. Shady practices aside, far too many crypto ventures revolve around exotic financialization and the introduction of tokens whose prime purpose is to enrich insiders. There are plenty of crypto entrepreneurs who care about building products that normal people would actually want to use. It's time to give those innovators more of the spotlight. ■





◀ Xenia Adonts (center) has built a thriving business with online tools used by many fellow influencers.

luxury brands like Fendi and Elemis. She also started her own sustainable fashion company, Attire, which has 14 employees. “Influencers work much more than people on the outside think,” says Adonts in her New York studio, a day after meeting remotely with the brand’s team in Paris and various business consultants.

To post photos on social media and otherwise run her mini empire, Adonts uses online services like project management platform Notion, video editor InShot, and marketing manager Unum. They are part of a booming cottage industry that caters to creators, the catchall term for the influencers and small businesses that make a living by posting photos and videos on social media such as Instagram, YouTube, and TikTok.

In recent years, legions of companies have sprung up to sell creators the tech tools they need or help them land sponsorship deals with brands. Meanwhile, more established businesses like software maker Adobe, which caters to all kinds of customers, are increasingly being adopted by influencers.

The reason is obvious: The creator economy, with its 450,000 full-time creators, huge ad budgets, and growing appetite for tools that make the jobs of everyone involved easier,

TECH

## Creator Capitalism

Providing social media influencers with tech tools and services is a hot industry. Can it survive the cooling economy?

BY ALEXANDRA STERNLICHT

▶ **WHILE WORKING** at the mall to save up for graduate school, Xenia Adonts saw her fashion photos going viral on Instagram. Eventually, brands noticed and started offering her up to \$400 to post photos on social media that trumpeted their clothes. Realizing she could earn more in a day as an influencer than in a week as a store greeter, she eventually quit her retail job.

Today, with 2.1 million Instagram followers, the 31-year-old continues to hawk products on social media for



is valued at a combined \$100 billion, according to career search platform Zippia.

It's just the latest take on the old business adage: In a gold rush, selling picks and shovels is usually far more lucrative than mining.

But with the global economy sputtering, and the tech industry in a layoff frenzy, the question is whether the creator economy and its constellation of startups are headed for a reckoning. U.S. venture capital investment, a key indicator of the outlook for fledgling tech companies, fell by more than half in the third quarter compared with the same period a year ago, to \$37 billion, according to consulting firm EY.

Video- and photo-editing tools are just one of the many areas that new businesses are piling into. Creators—sometimes with the help of professional editors—use the tools to tweak the raw footage they take. Though many creators use industry staples like Adobe's Lightroom and Photoshop, there is also a new generation of social-specific tools such as Lightricks, whose apps, including popular Facetune, let users do things like add six-pack abs to their bathing suit selfies. In a sign of its status as a high-flier, Lightricks was most recently valued at \$1.8 billion, according to PitchBook.

Companies that help the biggest creators post their content across the internet and take a cut of the ad

revenue in the process are another hot niche. Jellysmack, for example, cuts the videos of its clients into hundreds of variations and then publishes them on social platforms—generating billions of views.

Taking a slightly different tack, Spotter has adopted the music industry strategy of buying up a creator's entire catalog—YouTube videos, for example—and then collecting the ad revenue those videos generate. Some creator catalogs can sell for \$100 million, according to the company. "There are going to be more and more creators making money in more and more ways," says Spotter CEO Aaron DeBevoise. "It's going to expand no matter what. The platforms which enable that to happen will be the most successful."

Figuring out the best creators to enlist for pitching individual products can be complicated. There are millions of influencers, many of whom focus their social media posts on narrow interests, and thousands of companies in various industries looking to hire them.

To solve the problem, a number of companies have emerged, such as the startup Influential, that act as middlemen. Influential uses artificial intelligence to determine which combination of brands and influencers—it has 3 million in its network—would work best together. For instance, an influencer who is a DIY-

## PICKS AND SHOVELS

Companies whose tools are regularly used by creators are quickly growing in number. Here are some examples.

### Content managers

Help top creators distribute posts across social media

- ▶ Spotter
- ▶ Jellysmack

### Influencer brand partnerships

Use tech to choose the creators and brands that would work best together

- ▶ Influential
- ▶ Obviously
- ▶ Village Marketing (WPP)

### Video editing

Tools used by creators to tweak raw videos

- ▶ Videoleap (Lightricks)
- ▶ InShot
- ▶ Frame.io

### Photo editing

Tools used by creators to touch up photos

- ▶ Lightroom (Adobe)
- ▶ Facetune (Lightricks)
- ▶ Picsart

### Design tools

Services used to collaborate on design work such as graphics and product prototyping

- ▶ Canva
- ▶ Figma (being acquired by Adobe)

savvy Midwestern mom with 10,000 followers may be the better fit for a Lowe's social media campaign to sell home-improvement products than a major Hollywood celebrity with no DIY cred. "People say it's a bit of a Wild West, but we're in the teenage years of the creator economy," says Influential CEO Ryan Detert.

Predicting big paydays ahead, venture capitalists have poured money into startups that are at least partly focused on the creator economy. Initially, the goal for many of those startups is to get momentum for their products with influencers, says Sasha Kaletsky, cofounder of Creator Ventures, a two-year-old venture capital firm that has invested in a number of creator economy companies. Then, after some success, those businesses try to move up the food chain to larger customers, which opens the door to more revenue. "The classic creative economy route is to start with creators and expand to brands," Kaletsky says. "Brands are effectively the new creators."

Of course, many of the creator economy vendors are unprofitable. And if starved of venture capital, as often happens during downturns, they could die off. Kaletsky is optimistic, however. He's convinced that influencer advertising that is targeted at broad audiences will be relatively resilient during the current economic upheaval. But he expects that marketing of niche products will dry up, particularly because of recent privacy changes by Apple that make it more difficult to target ads to individual groups.

As for Adonts, she credits the tech tools and online services she uses for work with helping her rise from a minimum wage retail job three years ago to now earning seven figures annually (she declined to be more specific about her earnings). Otherwise, she may have ended up pursuing her original career plan—going to grad school and becoming a banker. ■



# MOROCCO

## PART 1



## A Symbol of Resilience

From its strategic location on the Atlantic Ocean to its trailblazing performance in renewable energy and ICT, Morocco has proven to be a competitive investment destination.

**M**orocco's economic growth rebounded to 7.4% in 2021, and the country is ranked the fifth-largest economy in Africa. The nation's economic modernization project, the Industrial Acceleration Plan, is credited with attracting a significant amount of foreign direct investment. At the core of this plan is the diversification of Morocco's economy into export-oriented sectors such as manufacturing, automotive, aeronautics, and electronics, among other industries, and the creation of half a million jobs in the industrial sector. "Our aim is to build a strong, competitive economy by continuing to incentivize private entrepreneurship, in addition to launching new programs for productive investment and creating more jobs," says His Majesty King Mohammed VI.

Morocco has the first high-speed train line in Africa, and exceptional infrastructure that is often ranked first on the continent. This has enabled the nation to reach different parts of the world with ease.

"Morocco has taken full advantage of its exceptional geographical location to create a bridge with Europe. The construction of the Tanger-Med Port makes it possible to reach the center of Europe in 48 hours by combining maritime and road transport," says Ali Seddiki, General Director of the Moroccan Agency for Investment and Export Development (AMDIE). Morocco is enabled to tap into these destinations and their important markets through its numerous free-trade agreements with the EU, the United States, Turkey, and other nations. "Now is the time to re-localize the industry in Europe," says Hassan Bennis, President of Glen Invest. "We specialize in manufacturing and want to grow the African continent."

Demonstrating its political stability, Morocco has established itself as one of the safest places in the world for long-term investments. "Today, many Moroccan companies are already working across the continent," says Ismail Akalay, CEO of Sonasid, the country's leading manufacturer of long steel for construction and industry. "Moroccan banks are in practically every African country. Morocco's human resources and its green energy are also important factors to consider when investing in the country."

Information and communications technology (ICT) is another sector where Morocco is leading the region, and the country is considered one of the most competitive destinations for ICT research and development. From launching programming and coding schools at the national level to establishing innovation startup centers, the kingdom is striving to advance the digitalization of Morocco. 

### MINISTRY OF INDUSTRY

## SUPPORTING INVESTMENTS AND BUILDING MOROCCO'S PROSPERITY


An open economy with free-trade agreements with over 60 countries, Morocco is a hub not only for trading, but also manufacturing. The North African country's industrial prowess is increasingly demonstrating impressive achievements. From automotive to aeronautics, the manufacturing sector has not only recovered from the impact of the COVID-19 pandemic, but also exceeded its pre-pandemic performance. "In the manufacturing sector, we recovered 105% of the pre-pandemic jobs. In addition, in the first five months of 2022, we have seen 40% growth in exports," says Ryad Mezzour, Morocco's Minister of Industry and Trade. Mezzour credits His Majesty King Mohammed VI's strong policies and vision, which prioritizes the well-being of people, for the success of Morocco's economy. "His Majesty set up a US\$12 billion plan to help the economy rebound. It was a plan in terms of investments supporting the financial stability of companies and paying wages for people that lost a lot of market during the pandemic."

Morocco, located at the crossroads of Africa, Europe, and the Middle East, is considered a strategic gateway for foreign



Ryad Mezzour,  
Minister  
of Industry  
and Trade

investment. FDI inflows in the country reportedly increased by around 56% year-over-year in the first quarter of 2022. To attract more foreign investors to Morocco, the Ministry of Industry and Trade implements various initiatives. "We are business-oriented, and we know the value chains very thoroughly. We support investors with their business plans so they can be competitive in Morocco. We provide training so they can build the necessary skills. We fast-track business processes, so there is no trouble with any of the authorities. We also integrate them in the country's value chains, providing them customers and suppliers," says Mezzour.

In a similar vein, the Ministry of Industry and Trade supports Moroccan companies in their global ambitions, thereby strengthening the Moroccan export market. "We work on strategic sectors in industry. In this regard, we are in the top three most competitive countries in the world," asserts Mezzour. He says that the government's critical support, the nation's productive and competitive human capital, and its affordable green energy are setting the stage for Morocco's economic growth. 



## AL HOCEINIA HOLDING

# 60 Years in the Service of Progress

Over 60 years ago, Al Hoceinia Holding began its operations in the textile industry. Today, the company is a leader in many major industries, enacting economic and social changes in the real estate, agriculture, education, and hospitality sectors.



For more than 60 years, Al Hoceinia Holding has been a pioneering and innovative force in the development of Morocco and international markets, excelling in real estate, agriculture, education, and hospitality. "My father founded the company in the late 1950s and began operations in the textile industry," explains Mohamed Laghrari, CEO of Al Hoceinia Holding. "At the end of the 1950s, Al Hoceinia entered real estate. Our first development was an infrastructure project on 100 hectares of land in the city of Casablanca. Today, this area is among the largest districts of the city." A decade later, Al Hoceinia invested in the agricultural sector, focusing on citrus fruits, nectarines, peaches, and grapes. Since then, the company has expanded into six farms in Agadir, Marrakech, Beni Mellal, and Meknes, and has secured a commercial contract with a large US distributor to sell nearly 100% of its production of raspberries and blueberries.

Since the second generation began running the company, Al Hoceinia has established best practices for governance. "Together with my brothers, Hamza and Ghali—CEOs of the hospitality and education branch, and the agriculture branch, respectively—as well as with external advisors of the group, we have established strategic and executive committees that meet regularly," says Laghrari.

Al Hoceinia's current portfolio is diverse and composed of 50% real estate, 30% agriculture, 10% education, and 10% hospitality. Moving forward, the company has strategic plans to give greater weight to education and hospitality while creating a more balanced portfolio. "Our goal in the mid-term would be to have 40% real estate, 30% agriculture, 15% education, and 15% hospitality," says Laghrari. Al Hoceinia is well on track to this profitable and balanced growth through its investments in hospitality and education.

As Morocco continues to grow as an investment destination, the demand for business hotels is rising. "Hospitality is important," says Laghrari. "We are focusing mainly on developing business hotels in large cities. There is a strong need for three- and four-star hotels with high quality at an affordable price." This year, Al Hoceinia's first hotel, a Radisson hotel in the center of Casablanca, is slated to open, and additional hotels will soon be inaugurated in Casablanca, Tangier,

and Marrakech. Al Hoceinia's versatility in various sectors places it in a particularly advantageous position, allowing the company to enact real, positive change as its daily operations blend seamlessly with CSR initiatives. Just over a year ago, Al Hoceinia launched its first school, which currently has 1,600 students, and it plans to open its second school next year.

In the real estate industry, Al Hoceinia Real Estate operates in three major segments: social housing, through its Miftah brand; the midrange housing segment, with Miftah Creation; and high-end properties, with Héritage. Al Hoceinia Real Estate has constructed about 1,500 units annually over the past few years. "In recent years, Morocco needed housing, and we have contributed significantly to overcome the deficit," says Laghrari. Al Hoceinia Real Estate has built 28,000 units in total, including over 15,000 social housing units for lower-income residents. "These are affordable homes, so if someone takes a mortgage for 20 years, they pay €120.00 a month, and they have their own house," he explains. "This is an achievement that I'm proud of. We have had two recognitions in the housing sector.

In 2015, we received the Itizam Label—the best quality recognition—and we were the first company to win a grant from the EU."

Al Hoceinia also transcends Moroccan borders through a new subsidiary that launched real estate projects this year in Senegal under the Miftah brand, and will soon launch projects in the Ivory Coast. "We have strong expertise, and these countries have launched ambitious housing programs to face the huge deficit," says Laghrari.

From social housing to agriculture, education, and hospitality, companies like Al Hoceinia are examples of the nation's investment potential. "The four sectors that we invest in have strong credentials and huge deficits," Laghrari says. "We have the experience, a long-term strategy, and strong financial foundations. These elements make us an ideal investment partner."



Mohamed  
Laghrari,  
CEO of Al  
Hoceinia Holding

**"In recent years, Morocco was in need of housing, and we have contributed significantly to overcome the deficit."**

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**AL HOCEINIA**  
HOLDING



## AMDIE

# Shaping the Backbone of Morocco's Thriving Economy

AMDIE is promoting Morocco's wide range of industries, focusing on securing foreign direct investment, and building the export performance of local companies.



AMDIE, the Moroccan Investment and Export Development Agency, plays a crucial role in attracting investment to the country and supporting export activities. "AMDIE's ambition is to promote and facilitate investment in the national territory and to accompany Morocco's international economic deployment," says Ali Seddiki, General Director of AMDIE. "His Majesty the King, Mohammed VI, has set an ambitious vision for investment development, and Morocco's new development model gives clear objectives for 2035 in terms of investment performance and what Morocco can supply. A new Ministry of Investment has been created, to which AMDIE is attached, and has been placed under the direct responsibility of the head of government, which highlights the priority given to investment in the achievement of the kingdom's strategic objectives."

Located in Northwest Africa, close to the Spanish coast and with a double seafront on the Atlantic Ocean and the Mediterranean Sea, Morocco has taken full advantage of its exceptional geographical location to create a bridge to the region's largest consumer markets. "The construction of the Tanger-Med Port, a vast complex installed in the North of Morocco—the first container port on the Mediterranean and also in Africa, and the 23rd-largest worldwide—makes it possible to reach the center of Europe in less than 48 hours. In addition, free-trade agreements signed by Morocco with more than 60 countries offer duty-free access to a market of over 1.5 billion consumers," Seddiki says. The port provides maritime connectivity to more than 180 destinations in over 70 countries.

Morocco has developed state-of-the-art infrastructure that ensures efficient domestic transportation coverage and international air connectivity. "Morocco has the first high-speed train line in Africa, linking Tangier, in northern Morocco, to Rabat, the administrative capital, in one hour, and to Casablanca, the economic capital, in two hours. This line also ensures the direct transport of vehicles produced at the Stellantis plant in Kenitra to Tanger-Med in less than an hour," explains Seddiki. The kingdom ranks first on the African continent for the quality of its infrastructure.



Ali Seddiki,  
General Director  
of AMDIE

Morocco has a well-trained and highly talented young population. Working-age residents comprise 60% of the population and include nearly 9 million young people between the ages of 20 and 34. The country has attracted a significant number of major investors including Renault, Stellantis, Lear Corp, Leoni, Boeing, Spirit AeroSystems, and many others. "Morocco has one of the highest investment rates in the world. Nevertheless, two-thirds of it has been carried by public investment. This has enabled us to provide our country with world-class infrastructure and to support national sectoral strategies. The ambition now is to reverse that ratio and make private investment the primary vector of growth," explains Seddiki.

**"Morocco offers a rare value proposition: a stable country committed to a long-term vision supported by all stakeholders, an abundance of quality human capital, world-class infrastructure, and competitive green energy."**

Focusing on low carbon emissions and renewable energy, Morocco ensures an environmentally conscious approach to investment. "Morocco offers a low-carbon solution that ranks among the most price-competitive in the world," says Seddiki. "Thirty-seven percent of Morocco's installed electricity production capacity is based on renewables, and the objective is to reach 52% by 2030. The kingdom has been a pioneer among developing economies in initiating renewable energy projects, which has resulted in the installation of one of the largest solar power plants in the world"—the Ouarzazate Solar Power Station, the world's largest concentrated solar power (CSP) plant.

In October 2021, AMDIE launched its national investment and export promotion brand, Morocco NOW, which is designed to be a "future-proof industrial platform to capture opportunities in a changing world." Morocco offers a rare value proposition: a stable country committed to a long-term vision supported by all stakeholders, an abundance of quality human capital, world-class infrastructure, and competitive green energy. 

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RABAT INVEST

# Stimulating Investments with Far-Reaching Impact

Supporting investors as they navigate Morocco's business landscape, Rabat Invest is forging a new path as a strategic partner in the Rabat-Salé-Kénitra region.

Helping to implement Morocco's state investment policy, Rabat Invest, formally known as the Investment Regional Center (CRI) of the Rabat-Salé-Kénitra region, provides essential services for the launch and implementation of investment projects in Rabat-Salé-Kénitra. From providing relevant information to investors to implementing incentives, Rabat Invest ensures that the region's investment landscape remains convenient for all investors, and it provides them with extensive support, including after-care services to ensure the sustainability of completed projects.

As part of recent government reforms, the regional center works alongside regional authorities to design and implement investment development strategies and territorial promotion plans for the region, suggest improvements in investment regulations, and settle disagreements between investors and departments. "We are positioned as a single window to simplify investment procedures," says Nejma El Houda Bouamama, General Director of Rabat Invest. "Being proactive is extremely important, as the goal is to support investors and help them benefit from better facilities and faster processing. In the past year, the region was ranked second [in Morocco] in investment volume, generating potentially more than 113,000 jobs."

In addition to these positive regional developments, the whole of Morocco offers appealing opportunities to foreign investors. "Morocco is politically stable and maintains stable macroeconomic indicators. The country has advanced infrastructure, land, industrial zones, and highly skilled human resources," says Bouamama, who points out that Morocco now has a completely new importance within the global supply chain that was disrupted by the COVID-19 pandemic. "The country is a 'best cost' investment destination, providing green energy to investors and giving access to more than 1.3 billion consumers worldwide with more than 60 free-trade agreements."

Located on the Atlantic Ocean in Northwest Morocco, Rabat-Salé-Kénitra holds increasing tourist appeal. "We are focused on sectors such as tourism as well as textiles, pharmaceuticals, agri-food, and automobiles, among others," says Bouamama, regarding investment opportunities for foreign investors.

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## GENERATION AFRICA

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## SMURFIT KAPPA

# Offering Innovative and Sustainable Packaging Solutions

From providing transport protection to optimizing product branding, Smurfit Kappa provides paper-based packaging for globally recognized companies and is gearing up for even better performance once its new state-of-the-art plant in Morocco is completed.



roviding innovative, fit-for-purpose packaging, Smurfit Kappa is one of the leading paper-based packaging producers in the world, with operations in over 30 countries. It is listed on the FTSE 100 Index, among the 100 companies with the highest market capitalization on the London

Stock Exchange. High demand for its services in the Moroccan market led to the firm establishing commercial representation in the country in 2018. "We created mini-plants close to the agriculture zones in Morocco—one in Agadir, one in the North, and another in Casablanca," says Mounir Naciri, General Managing Director of Smurfit Kappa Morocco. "These plants prepare customized packaging which can be delivered quickly to clients. It was our first industrial approach in Morocco, and it quickly got overcapacity,"

In 2022, this demand encouraged the firm to establish its first corrugated cardboard plant in Morocco with an investment of over €35 million. Naciri acknowledges the valuable support from the Rabat-Salé-Kénitra regional authorities for the fast-tracked plant construction process; the plant is over 50% complete and expected to be fully operational in 2023.


"The new plant will create jobs for at least 300 people within the community," he says. "We have 160 people working on the construction right now, and we are working with local experts including civil and installation engineers, architects, construction companies, etc."

International companies, such as Driscoll, Danone, Nestle, Unilever, and Procter & Gamble, that have set up shop in Morocco can now more easily benefit from Smurfit Kappa's packaging products. "Our innovation, quality, service, and drive for sustainability differentiate us from our competitors. All the market reports say that we are the leaders in Europe and Pan America," says Naciri. He points out the importance of the packaging industry, which continued operating through the

COVID-19 pandemic and was deemed an essential service, based on the need for packaging to contain goods such as food, pharmaceuticals, and medical devices.

As Morocco continues to increase its e-commerce activity, Naciri says that the country will be led to open its economy to Amazon, Alibaba, and other key online players, potentially changing Moroccan consumer behavior and increasing economic growth. "Investors look for opportunities, with less bureaucracy," he says. "Morocco offers both, and it's our gateway to the African market. We plan to have a second plant in Morocco soon to keep up with the market growth. There are only two packaging players in Morocco, and we are here to fill the gap of what they don't currently produce."

Naciri notes the features that make Morocco appealing to investors: "Because the global economy is moving away from the dominance of China and India, there is a need to have a competitive production hub in Africa, and not in Europe. Morocco makes a perfect competitive production hub, so we believe it's a good time to invest in Africa. There are a lot of African people emigrating to Europe to seek job opportunities. Let's fill two needs with one deed and invest in Africa."

As encapsulated in the firm's ethos to "think global and act local," the company focuses on a range of corporate social responsibility initiatives in the communities in which it operates, such as skills training, and the construction of recreational facilities. Smurfit Kappa also supports worthy causes outside its operation areas. "We recently raised money for Ukraine; employees contributed their share and Smurfit Kappa matched the amount," Naciri says. "The Smurfit Kappa Foundation was established over a decade ago and has a particular focus on helping disadvantaged children and young people through education. Our mission and vision are centered on the sustainability of our products, work, and legacy. Protecting people and the planet we leave behind is important to us." 



Mounir Naciri,  
General  
Managing  
Director of  
Smurfit Kappa  
Morocco

"Our innovation, quality, service, and sustainability drive differentiate us from our competitors."



## SONASID

# Steeling Morocco's Manufacturing Sector for Success

A leading construction player in the region, Sonasid is on a mission to build Morocco with green high-added-value products while reducing the production of commodities.



Founded in 1974, Sonasid is the kingdom's leading producer of rebar and wire rod and the provider of choice for construction in general, as well as for most of the infrastructure and industry development programs that have shaped Morocco's economy for decades.

State-owned until 1996, the company's main shareholders are ArcelorMittal—the world's largest steel and mining company—and leading Moroccan institutional investors.

Sonasid's growth strategy is integrated with a cross-operational excellence road-map to further sharpen the company's competitive edge and boost its leadership, encompassing industrial operations, employee health and safety, and environmental performance.

The company's operations are led by environment-centric industrial processes. "With a production process based on scrap recycling and powered by renewable energy, our steel is one of the greenest in the world," says Ismail Akalay, CEO

of Sonasid. "We have been using wind power for 85% of our electricity needs since 2018. We have also launched a 2 MW photovoltaic plant in Nador, which will allow us to source 100% of our electricity needs from green energy exclusively. In Morocco, we are the largest scrap metal recycler, and we target adding new types of recyclables to our mix to hone our recycling capacity and contribute to bettering our environment."

Sonasid is one of the first companies in the world to fuel its steel operations with green energy, while committing to diversification as a key corporate strategy lever. "A company that is diversified is a company that is better equipped to face a crisis," says Akalay. "We have established ambitious environmental, social, and governance [ESG] goals. In September 2021, Sonasid joined the ESG 10 Index of the Casablanca Stock Exchange, which tracks the performance of the top 10 socially conscious listed companies."

The company's prosperous prospects can be discerned via its listing on the Casablanca Stock Exchange, where its share price has risen from 250 dirhams (US\$22.94) at the end of 2019 to over 570 dirhams (US\$52.30) in October 2022, hitting 770


dirhams (US\$70.65) earlier in the year. Furthermore, in 2021, Sonasid distributed a dividend to its shareholders equivalent to 5% of its share value.

The company is currently developing specialized products such as steel fiber. "Steel fiber is a very fine steel, 0.5 to 0.9 mm in diameter, used to reinforce concrete. It offers major cost reduction and execution time," explains Akalay. "Production begins in the

last quarter of 2022, and 80% of the steel fiber will be sold in Canada and the United States." Sonasid also has several other projects forecast for fruition in upcoming years, such as the production of steel for Morocco's booming automotive industry. "Each vehicle contains about 160 to 165 kilograms of a type of steel that we could produce for the Moroccan automotive industry as well as for export," he says.

Sonasid is also dedicated to R&D and plans to set up a research center in Morocco, in collaboration with the ArcelorMittal research center,

to pursue projects that will improve its existing processes and to develop new products that will bring more value to Sonasid. "The manufacturing of steel will completely change in the next 10 years," says Akalay. "Green steel sets us apart from the other steel producers. We are standing out in our field thanks to clean and climate-friendly manufacturing."

Sonasid has a vision to develop Morocco's construction industry, but it is also looking ahead to its role as an important regional player. "Through free trade and the AfCFTA, we aim to export our products to African countries that are an interesting and important target to us," Akalay says. "Through our green energy strategy, we foresee that we will be able to export high-value-added products not only to Africa, but to North America and Europe, as well." 



Ismail Akalay,  
Chief  
Executive Officer  
of Sonasid

**"Through green energy, we will be able to export high-value-added products to Africa, North America, and Europe."**

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PROCTER & GAMBLE MOROCCO

# 65 Years of Success Through Superior Brands and Inspiring Leaders

Samir Lebbar, CEO of P&G North Africa, details how the multinational company has blossomed in Morocco over the past 65 years.



As the regional head of one of the world's most iconic manufacturing brands, Samir Lebbar, CEO of Procter & Gamble North Africa, is well positioned to detail the company's acclaimed legacy. "Morocco was one of the first international operations outside of the U.S. for

P&G," he says. "In fact, this is the oldest presence in Africa for P&G, well before most of our European operations. In 2023, we will proudly celebrate the 65th anniversary of our business presence in Morocco.

"P&G's strategy is focused on touching lives and improving life. This is done through our breakthrough innovations, leading to superior products that improve the quality of consumers' lives. We innovate to grow."

Lebbar says that P&G prioritizes developing its people and building leaders: "Our people are our most important asset. We strongly believe that great people build great brands. We hire the best people, and we focus on growing their skills and capabilities to become the leaders of tomorrow. We offer them an environment that prioritizes their development as well as their well-being." P&G is an important source of talent for the country, fostering P&G alumni leaders who excel across sectors and industries in Morocco and internationally.

"We continue to serve our consumers and customers through our high global standards and with a deep understanding of local needs," says Lebbar, explaining how P&G has remained



Samir Lebbar,  
CEO of  
Procter & Gamble  
North Africa

competitive throughout the years. "We are a global company with a strong local footprint." He also emphasizes the importance of being a trusted and preferred supplier: "Our goal is to be the number-one supplier for our customers, and I'm happy to report that Advantage, the industry leader in business-to-business performance monitoring, ranked P&G globally as the number-one supplier."

**"Morocco is a country that offers a lot of possibilities within the continent."**

P&G is also strongly dedicated to Morocco through its corporate social responsibility pillars, playing an active role of a "force for good and force for growth." Lebbar shares an example of how P&G brands contribute socially by building sustainable partnerships to advocate and support girls' education and women's empowerment in Morocco: "For the last 23 years, P&G has partnered with the Ministry of Education, providing support to girls at the age of puberty to make sure that they do not drop out of school. I believe this has helped thousands of girls to stay in school and become positive contributors to society."

Lebbar concludes by highlighting Morocco's stable and reliable economy that allows growth and value creation for investors, and the great potential of Morocco to boost the growth of aspiring businesses. "P&G continues to experience unwavering growth across a wealth of categories in Morocco, year-on-year," he says. "We are committed to remaining a strong contributor to the country over the years to come by serving consumers, customers, and communities." ●

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## RED MED CAPITAL

# Building the Bridge toward Change

From advising international investors to structuring innovative financing solutions for SMEs, to proposing a diversified range of UCITs to institutions and individuals, Red Med Capital is fully playing its role as an integrated investment bank and offering tailored, high-added-value services to its clients.

**R**ed Med Capital is an independent integrated investment bank that specializes in corporate finance, asset management, private equity, and brokerage. Established in 2004, Red Med Corporate Finance, the group's first unit, has been involved in many large M&A transactions, which has led the corporate bank to work in diverse sectors such as telecom, education, renewable energy, and agro-industry. Red Med Asset Management, the second subsidiary, founded in 2011, has more than €1 billion under management and a large client portfolio that includes funds, insurance banks, and large corporations whose investments perform above market trends.

In 2020, the group increased and strengthened its range of activities and answered a critical need for SMEs by founding Red Med Private Equity. The PE management company has a clear investment strategy to support domestic SMEs involved in industries driven by local consumption—which are characterized by chronic undercapitalization that worsened during the COVID-19 crisis—through investment tickets, mainly between 30 and 90 million dirhams (US\$2.74 million–US\$8.22 million). The idea is to contribute to the “Made in Morocco” label while promoting the emergence of national champions, not only by injecting equity or quasi-equity, but also by providing full support to management to strengthen governance and comply with international operational and CSR standards.

“The investment thesis is very simple. It involves investing in companies that are addressing local demand,” says Abdeslam Ababou, founder of Red Med Private Equity. “For example, there is a fast-growing local demand in agro-industry, education, and health care, since products and services are imported or not provided with the required quality and quantity. The idea is to invest in those SMEs to help them speed up their development of goods and services that can address the needs of the local community.”


Red Med Securities, the most recently launched division, aims to be a player in the stock market, which needs to recover from the COVID-19 effect by increasing transaction volumes through IPOs and through equity and debt capital market transactions. “We offer all the businesses of an investment bank and advisory services—

what we call ECM/DCM. We are complementary to the services provided by Moroccan banks,” says Ababou.

The company's flagship industry, in which it has been involved since the implementation of Morocco's 2009 National Energy Strategy, involves supporting the mission for renewable energy sources to reach 52% of the energy mix by 2030. “Morocco has all the assets to be one of the first players in renewable generation, and also in green hydrogen and ammonia generation, due to its reactive framework and the availability of land with first-class resources, wind, and solar, combined with low intermittence,” says Ababou. “Morocco has an outstanding future ahead; the International Energy Agency announced that Morocco could provide around 4% of the hydrogen needed by 2030, estimated at 200 million tons.

“Morocco was not competitive on electricity tariffs because we were almost completely dependent on fossil resources and were importing electricity. Morocco's renewable energy strategy has started to pay off and Morocco has become a net exporter of electricity, and that is an indicator of change. Now, green electricity will most likely be produced at the lowest cost in the world, bringing huge competitiveness to the industry and its derived products.”

Morocco is ripe with investor potential thanks to its liberal culture, open economy, capable logistics with first-class ports, and investment opportunities for green energy and power. “There is a new geopolitical context because of what is happening in Ukraine today,” says Ababou. “Europe must speed up its autonomy in industrial products, agricultural products, and energy. Due to Morocco's proximity to Europe, there is a clear opportunity for Europe and Morocco to secure a deal for green energy and product supplies.”

Red Med Capital has developed valuable expertise to align different stakeholders and produce the most competitive green electricity, lending to enormous investment potential. “I think this is a path that can be developed, and Red Med Capital can contribute to transforming opportunities in concrete projects,” says Ababou. 



Abdeslam  
Ababou,  
Founder & CEO  
of  
Red Med Capital

“Red Med Capital is a bridge between investors and opportunities.”

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EATON

# Efficient, Safe, and Reliable Power Management

Named one of the world's most admired companies by Fortune for five consecutive years, Eaton is building infrastructure that is efficient, safe, and eco-friendly.

As power and renewable energy increasingly take center stage in global discussions, power management company Eaton is presenting essential electric products and solutions to the world. The international firm, which established its presence in Morocco in 2007, has built a reputable portfolio of electrical infrastructure and energy sustainability projects. "Our strategy is to help Morocco and other African countries acquire the right power infrastructure with sustainable solutions," says Kassem Benhaddou, General Director of Eaton. The company inaugurated its first power plant in Morocco in 2016, and exports electric power devices to Europe, America, and Asia. In 2020, Eaton expanded its services by acquiring Souriau, a company that designs, manufactures, and markets high-performance interconnect solutions for aircraft.



Kassem Benhaddou, General Director of Eaton

The other part of the firm's core services focuses on installing electric power for buildings and infrastructure, and the company prioritizes people's safety as an important strategy. "Statistics show that 70% to 80% of the fires that can happen inside buildings or infrastructures in Africa arise from electrical panels that were

not installed properly," says Benhaddou. "As experts in this field, we want to advise our partners to have the right switchgear and the right power inside the building, where safety is very important. We have many innovative products that allow us to avoid fire inside buildings."

Eaton facilitates the installation of power for various facilities including industrial plants, hotels, and other buildings, and infrastructure. The firm incorporates green energy initiatives in its projects and acknowledges the importance of energy sustainability. The company's services complement Morocco's transition to eco-friendly energy, as the country aims to have 52% of its power produced by green sources by 2030. "Investors in Morocco need to review their installations and their facilities to be

labeled green and to be able to export to Europe. Eaton provides an eco-friendly label that allows them to export," says Benhaddou.

Using Morocco as a hub for the company's operations in North West Africa, Eaton continues to solve the world's most pressing power management challenges and actively contributes to the global transition to green energy.

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## ROLAND BERGER

# Living Up to Morocco's National Ambition

Roland Berger is one of the world's leading strategy consultancies, with 51 offices in 36 countries, and advises major private companies, investors, and public institutions on how to successfully overcome their most profound strategic challenges.

Aware of its structural challenges, Morocco, under the visionary leadership of His Majesty King Mohammed VI, has put forth its ambitious New Development Model to achieve accelerated, inclusive, and sustainable economic growth, and to rise as a leading regional hub bridging Europe and Africa. This new model provides a framework for required structural transformation, which is highly valuable in today's increasingly pressured and volatile environment, with multiple crises like the COVID-19 pandemic, the war in Ukraine, and the impact of climate change.

Morocco is changing on many fronts with the widespread introduction of economic programs, including industry acceleration and recovery initiatives to increase competitiveness and better position Morocco in global value chains. The country is developing megaprojects to reinforce infrastructure; a new investment charter to boost and orient private investments toward priority sectors and territories; a restructuring




Amine Tazi,  
Managing  
Partner

program of state-owned enterprises to further optimize their value creation; an energy transition plan toward more renewables; multiple initiatives to boost and scale entrepreneurship; and an ambitious plan to ensure universal social protection for all Moroccans.

To realize the targeted vision, these government-driven efforts will need to be embraced and amplified by all companies, both private and state-owned, to ensure that their strategies contribute to and benefit from these transformations.

Massive financing and investment will also be required, with solid prospects of value creation and returns, broadening opportunities in Morocco for domestic and international investors and financing institutions.

Morocco is undoubtedly at a turning point in accelerating its transformation, which, combined with its economic resiliency, geostrategic position, and political stability, makes it one of the most attractive hubs in Africa. 

## CREATING OPPORTUNITY THROUGH TECHNOLOGY

INEOS CYBERFORCE group is the leading Moroccan player when it comes to computer networks, data centers, and cybersecurity.

Founded in 2015, the group has more than 100 employees and has launched skill transfer in West Africa due to its technical presence in Gabon, Senegal, and Ivory Coast.

Sectors such as banking, insurance, industry, and energy in Morocco and West Africa have seen their performances significantly improve due to Ineos Cyberforce's technological added value.

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## POWER MAROC

# Award–Winning Service with Boundless Potential

Focused on providing indispensable IT services to big corporations, Power Maroc is modernizing applications, providing much-needed IT infrastructure, and operating, managing, and supporting remarkable initiatives in Morocco and beyond.

**S**tarting his career as an IT system engineer and working in the industry for two decades, Youssef Largou ventured into the IT business and founded Power Maroc in 2012 with the support of a local Moroccan fund (FTF). Based in Morocco, the firm specializes in providing computer solutions to the country's leading corporations. Its services include setting up IT infrastructure and modernizing IT systems and applications. "I started PowerM with zero business, and right now we have a turnover of US\$10 million," says Youssef Largou, CEO of Power Maroc, reflecting on the firm's remarkable performance. "We focus on the biggest institutions and companies in Morocco—mainly the government, banks, telco, and infrastructure industries."

PowerM partners with International Business Machines Corporation (IBM), the globally renowned US firm that produces and sells computer hardware, software, and cloud and integration services. "We are among the top IBM business partners for our investments in experts," says Largou. "Our main value in the market is our ability to augment our internal customers' capabilities through our subject-matter experts in IBM technology, and our deployment of IBM solutions all over the country. We have been selected five times as IBM Beacon Award finalists. This award celebrates global business partners integrating IBM technologies and services into solutions and those who break new ground, drive innovation, and move the world forward."

PowerM's state-of-the-art services have helped to develop some of IBM's products and publications, and it is involved in co-publishing IBM Redbooks on IBM Power, Storage, Cloud, Security, OpenShift, and Containers. Its SMEs are part of the IBM Champions team for their leadership, support, advocacy of IBM technology, and contributions to communities and solutions; the IBM Champions program recognizes innovative thought leaders in the technical community and rewards their contributions by amplifying their voices and increasing their sphere of influence.

Largou emphasizes that PowerM does not engage with small businesses in their digital transformation journey, but focuses on big corporations that have already been on the path of digital

transformation for at least a decade and have unique challenges related to IT. PowerM's years of experience enable it to address the market efficiently and respond to customer requests for change with agility, while promoting ethics in the business and compliance in line with partner guidelines and Moroccan standards.

PowerM's sole focus on infrastructure before 2019 has expanded to application modernization, which now comprises 35% of its activities. The firm has been growing its market share in Morocco and expects

to have upwards of 20% growth in 2022, and plans to expand its services to the US and Europe. "In 2019, during the annual IBM Think event in San Francisco, we received a lot of requests from companies that wanted to have a contract with us in specific areas, mainly application modernization," Largou explains. "I see a huge potential in Europe and the US, so we have started a partnership with one of the top 10 companies in the world in terms of professional services and digitalization expertise. The plan is to define a new business opportunity and drive new insights into existing ideas. PowerM is collaborating with peers to define opportunities and prototypes and co-create innovative solutions. We also

plan to open our first office in the US next year."

Citing Morocco's political stability, transparency in investments, a well-established ICT system, and its potential to be a gateway between Europe and Africa, Largou considers the country a viable business destination, and projects further growth for PowerM. "We will have very good growth in the coming three years because we have a clear vision, we are improving our margin and operational costs, and we are gaining profits," he says. "Last year, we deployed the leading meteorology supercomputer in Africa, AMTAR, for the Moroccan National Weather Service [DGM], which was an almost US\$5 million project." Having executed more than 170 successful projects with a remarkable success rate, PowerM is looking forward to a successful future.



Youssef Largou,  
CEO of  
Power Maroc

"I started PowerM with zero business, and right now we have a turnover of US\$10 million."

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ARMA HOLDING

# A Model of Social and Environmental Responsibility

The national leader in waste management collection, ARMA Holding is committed to delivering innovative, high-quality solutions for a cleaner and healthier future.

Responding to a burgeoning gap in the market, ARMA Holding was founded over a decade ago to answer the nation's waste management collection challenges. Today, ARMA serves 27 cities and generates over €110 million in turnover, making it the national leading waste service provider for municipalities, with services that encompass public lighting, water, and sanitation, industrial waste management, and urban cleanliness. "Our mission is to make Morocco's cities cleaner," says Youssef Ahizoune, CEO of ARMA Holding. "Our method is based on service design. We implement efficient models that bring value to the municipality and the final user, making cities cleaner and communities healthier."




Youssef Ahizoune, CEO of ARMA Holding

Ahizoune believes that innovation and technology play a key role in the drive for growth, improvement, and development of sustainable cities. "We use innovative IT solutions," he says. "This allows complete transparency with our clients. ARMA relies on technology to provide them with more assurance and data. All our trucks are equipped with sensors, integrated into a software platform that the municipalities have free access to. When you are responsible for the cleanliness of thousands of streets and

areas with millions of citizens, and manage over 8,500 employees, that means there is a lot of data. We tap into this data when designing new models for service management." ARMA Holding's vast IT system includes sensor-equipped dustbins that measure waste levels and provide notifications when bins are emptied.

But technology does not do it all. ARMA Holding's approach is rooted in responsibility and deep commitment to a clear strategy to reduce its environmental footprint and carbon emissions from its fleet. "We care about having well-trained people, and we care about their well-being as individuals and about our environmental impact as a company," says Ahizoune. "We organized a hackathon that aimed to identify innovative ideas in the smart-city field. The event gathered over 100 teams of passionate and driven individuals, allowing crowdsourcing for several solutions to pressing contemporary environmental issues."

ARMA is committed to using eco-friendly solutions when delivering its services. Deeply CSR-driven, ARMA is working toward obtaining the CGEM (General Confederation of Moroccan Enterprises) Environmental and Social Responsibility label by the end of the year. 

SERP RECYCLAGE

## RECYCLING WITH RESPECT FOR THE FUTURE

SERP, Morocco's leading operator of services for the management and recovery of industrial and household waste since 2004, offers a variety of solutions that aim to safeguard the environment. "I founded the company because I saw the waste in Morocco and felt driven to protect our environment," says



Touria Sbir, President of SERP Recyclage

Touria Sbir, President of SERP Recyclage. "I wanted to create a big recycling center, where our goal is zero waste in the dump. Everything is recyclable: Biodegradables can be transformed into compost or biogas; cartons, plastic, and iron can be transformed into different materials. I am the first woman to have a recycling center in Morocco, which also happens to be the first one in Africa."

SERP's strategy involves the important task of educating people about the vast economic and ecological potential of the recycling industry. "It is challenging to change people's mindsets," Sbir says. "The first federation focusing on the environment, which has a female president, tries to protect and include waste collectors. We have a huge responsibility to respect the environment and clean up the world."




**MOROCCO**  
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40 UNDER 40

## The CEO Taking Psychedelics Seriously

Florian Brand's Atai wants to use substances like psilocybin to treat mental illness.

BY DAVID MEYER

▶ **FLORIAN BRAND KNOWS** that there aren't many people with his profile in biopharma. "You would probably consider me an outlier," says the 36-year-old chief executive of Germany's up-and-coming Atai Life Sciences. He doesn't have a Ph.D. or any scientific background. His previous gig was running an online cookware retailer. But he does possess a history of profound experiences with mental health—experiences that left such an impression that four years

◀ Atai CEO Brand confronted his own mental illness and witnessed his best friend's struggle up close.

ago he dropped everything to cofound Atai, a biopharmaceutical company now backed by investors including Peter Thiel and Cathie Wood.

Berlin-based Atai is at the forefront of a broadening push to tackle mental health disorders with substances like psilocybin ("magic mushrooms") and ketamine that have been illegal in many countries for decades. Atai employs an unusual "hub-and-spoke" model, acting as an umbrella for a collection of companies—that Atai either founded or bought a large stake in—each conducting trials on individual substances. Brand's leadership of this unusual company has landed him on the latest Fortune 40 Under 40 list.

Brand says the closest comparison to Atai is the German startup incubator Rocket Internet, which gained notoriety a decade ago by rapidly cloning the business models of Silicon Valley darlings and rolling out its own copycat versions of the startups. "We usually have a handful of people actually in the subsidiaries—program manager, chief medical officer," he says, while Atai's people handle things like regulatory issues and toxicology, where common expertise is needed across all the companies. "We wanted to have a diverse portfolio and then we also wanted



to create an entrepreneurial environment where the scientific founders are kept on board.”

Brand, a Hamburg native, personally confronted mental illness at age 15. While attending school in Frankfurt, he developed a severe anxiety disorder. “My heart would start pounding, I’d break into a cold sweat, and I couldn’t think clearly,” he says. “Anxiety turned periodically into panic attacks, which in turn caused me to withdraw socially.” At its worst, his condition led to suicidal thoughts. But he was lucky enough to find a good psychotherapist and responded well to treatment.

The journey that brought Brand and Atai together began in earnest at that aforementioned cookware company, Düsseldorf-based Springlane. Brand was best friends with Lars Wilde, Springlane’s co-CEO, and watched as Wilde tried and failed to treat his own mental illness.

Wilde, who cofounded Springlane, was blindsided when company chef Holger Niltop suffered a massive heart attack while playing with his reggae band and died onstage. Wilde began suffering panic attacks and developed severe depression. He did not respond to the antidepressants he was prescribed, nor to psychotherapy. At one point he collapsed in his office and was found unconscious by Brand (then Springlane’s chief marketing officer)

and another colleague. Exhausted, Wilde resigned.

“It was the first time I really saw someone being failed by the mental health care system,” says Brand, who replaced Wilde as Springlane’s co-CEO.

Around the same time, researchers at Imperial College London and Johns Hopkins in Baltimore published groundbreaking studies that showed psilocybin could have a large positive effect on people suffering from depression and anxiety. That’s when Christian Angermayer, the billionaire German investor and Springlane’s first backer, stepped in. He showed Wilde the data and then guided him through a high-dose psilocybin trip in the Netherlands, where the substance is legally available.

“I was hoping it would help me, but it actually got rid of the condition,” Wilde recounts. “I felt like someone defragmented my brain and put it back in the order it had before I became anxious and depressed.”

In 2016, Wilde cofounded Compass Pathways, a firm dedicated to developing psilocybin-based mental health treatments. Angermayer invested, as did Thiel—who knew Angermayer well—and Galaxy Investment Partners’ Mike Novogratz.

Two years later, Wilde and Angermayer recruited Brand to cofound Atai. They wanted the firm to fund research into a broad array of psychedelics with the aim of treating mental

## ALL IN THE FAMILY

Atai Life Sciences’ best-known bet is Compass Pathways, the psilocybin specialist in which it holds a large stake. But that’s only one of eight companies under the Atai umbrella. Here are three more, all of which are subsidiaries:

### PERCEPTION NEUROSCIENCE

**New York-based Perception aims to tackle treatment-resistant depression with a ketamine-based substance. Top-line results from a 100-patient clinical trial are expected in coming months.**

### DEMERX

**DemeRx is developing drugs based on the psychedelic ibogaine, derived from a central African shrub. The Miami-based company hopes it will help people break opioid addictions.**

### EMPATHBIO

**The firm hopes its MDMA derivative will treat PTSD. The New York City-based company recently got approval to begin clinical trials.**

health disorders. Atai added a fourth cofounder in 2019: chief scientific officer Srinivas Rao.

According to Angermayer, the cofounders took detailed personality tests and “aside from Florian, every single one of them got a result that put them into the visionary category of personalities.”

“Florian was the only

realist,” the Atai chair says. “Srini is the mad scientist guy, and Flo is the strategic thinker who built the company—that is the unique fit between the two of them,” says Wilde.

Brand’s operational leadership has helped Atai make a splash in a growing industry. Atai led financing rounds for Compass Pathways in 2018 and 2020 and now holds a 22.5% stake in the psilocybin specialist. Compass remains the jewel in Atai’s crown; it recently grabbed headlines for its plan to conduct the largest-ever clinical trial of the compound as a treatment for severe depression.

It’s been a turbulent journey for Atai; its share price is a fifth of what it was a year ago—but the tall, amiable Brand exudes positivity. “I’m very grateful to work on something ... that I find truly meaningful,” he says over a coffee at Berlin’s Soho House.

“He’s not doing it for the money,” says Wilde, who last year left Compass Pathways to found drug discovery firm Pangea Botanica but remains an Atai and Compass shareholder. “He wants to see a major change in psychiatry.”

In its early days, Atai didn’t have much luck attracting attention from biopharma-focused investors who, Brand says, were wary of substances that were not “fully validated” in a clinical setting. But the Silicon Valley crowd has been increasingly keen on the potential of



psychedelics for both self-improvement and business opportunity, and Atai found several people there who “were quite open and curious about this concept,” Brand says. Thiel and Novogratz were early funders, as was Future Ventures cofounder Steve Jurvetson. “Atai’s great virtue is to take mental illness as seriously as we should have been taking all illness all along,” Thiel said in 2020 at the time of a \$24 million Atai financ-

Before Springlane, Brand toyed with several startup ideas that never cleared the pre-seed stage. He also worked in platform development at Rocket Internet and the e-commerce site Fab.com and did stints in micro-finance. His “grit and focus” is serving Atai well, Angermayer says. “In just four years with Florian as CEO we raised more than \$600 million, grew the staff to more than 100, brought eight compounds

replicate those results and then improve on them.

Brand argues that the media and retail investors initially misinterpreted the Phase 2b results, particularly the news that some trial participants experienced suicidal thoughts. “Given the patient population,” he noted, such thoughts are “unfortunately very common.” He also points out that the share-price drop “coincided with a general downturn of the biotech

Atai’s vision is not without controversy—Compass has been criticized for being aggressive in patenting psychedelics-related intellectual property. But experts say the company is on the right track.

“I think the approach, which is effectively resurrecting older compounds that have been banned, is a very good one for several reasons,” said David Nutt, director of Imperial College London’s Centre for Psychedelic Research, who has advised Compass Pathways (and its rivals) and received a grant from the company. The bans were based on politics, not medical reasons, he says. “There is good historical evidence of efficacy and safety, including lack of addiction,” Nutt says, adding that his team has shown these compounds to interact with the brain in a unique way, “thus adding an important alternative therapeutic option to current therapies.”

Atai’s path forward will involve close cooperation with regulators such as the U.S. Food and Drug Administration, Brand insists. “It’s the right way for patient safety and also to avoid any political backlash,” he said. He notes that there’s bipartisan support in the U.S. for the idea of using psychedelics to treat conditions such as post-traumatic stress disorder (PTSD), which ails many military veterans. That unity is “quite an interesting phenomenon, because in the U.S. there is not a lot of common ground between those parties.” ■

**“ATAI’S GREAT VIRTUE IS TO TAKE MENTAL ILLNESS AS SERIOUSLY AS WE SHOULD HAVE BEEN TAKING ALL ILLNESS ALL ALONG.”**

—PETER THIEL, ATAI INVESTOR, IN 2020

ing round in which he participated. “The company’s most valuable asset is its sense of urgency.”

Atai wasted no time going public. In mid-2021, it raised \$225 million at a market cap of \$3.2 billion on the Nasdaq. A public debut just three years after launching is an accelerated timeline for any startup, but companies in the Atai family already had clinical trials underway. And although those trials had not produced results yet, academic studies by then had provided evidence that psychedelics could help treat mental illness. Atai was well-placed to benefit from investors’ COVID-era obsession with medical innovation; its roster of big-name backers certainly didn’t hurt.

into clinical-stage trials, and took Atai public on the Nasdaq. I’d say that speaks for itself,” he says.

But the period since Atai’s flotation has been anything but plain sailing. Its shares had an IPO price of \$15 but are now trading at \$2.80. Things went south in late 2021, when Compass Pathways reported positive but not stellar results of a Phase 2b clinical trial of its high-purity psilocybin formulation, Comp360. The results, published in detail in the *New England Journal of Medicine* in November, showed nearly four in 10 patients with treatment-resistant depression quickly responded well to Comp360. Next up is a Phase 3 trial later this year that will attempt to

market and neuropsychiatry in particular,” and says Atai increased its stake in Compass afterward.

So how will he turn the company around? “Depending on which analysts or financial experts you listen to, the bottom has been reached in biotech or is a few months out, so we will focus on what we can influence,” Brand says, adding that Atai has enough capital to take it through to 2025, by which time some of those clinical trials should have delivered results. “Ultimately in biotech what counts is generating the data, and that usually moves the market and makes investors care about you,” Brand says.

Brand is well suited to “operationalizing a vision,” says Angermayer.



INVESTOR'S GUIDE  
2023  
INTRO

# INVESTOR'S GUIDE

**32**

## Andreessen Horowitz's Risky Moonshot

After upending venture capital, a16z is on a mission to reinvent itself.

**40**

## Investor Roundtable

The silver lining of a rough 2022: Our experts believe it sets them up for a better 2023.

**47**

## 11 Stocks to Stick With

Companies to feel bullish about in bearish times.

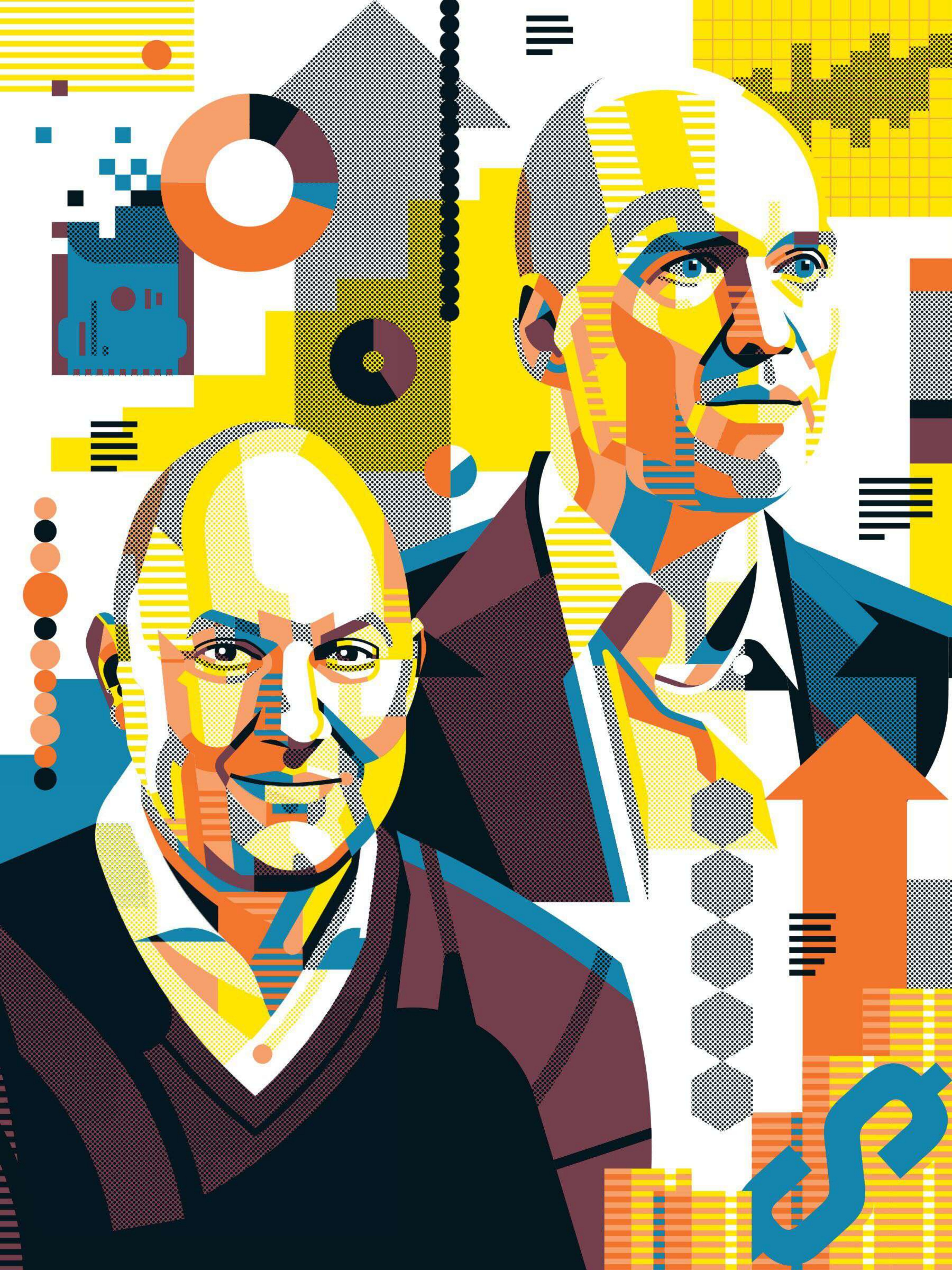
**54**

## Will Jay Powell Blink?

Inside the Fed chair's fight to curb inflation.









INVESTOR'S GUIDE  
2023  
ANDREESSEN HOROWITZ

# A VENTURE GIANT'S RISKY MOONSHOT

## A16Z'S HIGH-STAKES MISSION TO CONQUER THE REST OF THE FINANCIAL WORLD

□ Marc Andreessen and Ben Horowitz spent the past decade building one of the most potent names in venture capital. Now they want their firm to transcend it.

**BY ERIC  
NEWCOMER  
AND  
JESSICA  
MATHEWS**

**WELCOME TO  
THE MATRIX**  
Andreessen (left) and Horowitz have created a powerful machine to help startups scale, while generating huge returns for themselves and their investors.

▶ **DURING THE FIRST WEEK** of November, Marc Andreessen and Ben Horowitz, two of the most recognizable names in venture capital, put on a show for their firm's backers—an audience of gold-plated endowments, sovereign wealth funds, and pension plans.

The three-day affair was held virtually on Hopin, an online platform funded by the VC firm, and paired with in-person dinners for more than 100 guests in New York City and at the posh San Francisco sushi restaurant Pabu Izakaya.

Amid a battery of distractions competing for the audience's attention—from jarring economic data, to the war in Ukraine and midterm elections—Andreessen Horowitz's coterie of fund managers stayed on message, framing the market turbulence and tumbling tech valuations as an opportunity.

More than ever before in the firm's history, Andreessen Horowitz's partners needed to impress.

By the end of last year—a decade after Andreessen Horowitz, or a16z, was founded—the firm was riding high with \$55 billion in assets under management, more than three times the amount in 2020. That sum, massive by the standards of Silicon Valley venture capital firms, represented an accumulation of shares in startups and crypto tokens during the best time for tech investing since the dotcom boom.

Nearly a year later, Andreessen Horowitz is navigating the worst market for tech since the firm was founded. Coinbase, the company that generated the highest return ever for the firm, is down about 80% so far in the stock market this year. Share prices of other now-public a16z investments, such as Airbnb and Affirm, are also down sharply. And a few of its still-private companies, including Instacart, have cut their valuations significantly. Meanwhile, one of the largest exchanges in the crypto industry has collapsed, throwing the fate of



the entire digital asset industry, where a16z has pledged billions, into question.

"Andreessen Horowitz has an awfully good track record to point to... But that was then, and this is now," says Len Sherman, a professor at Columbia Business School.

If investors are getting antsy and reassessing their bets in a shifting market, they're not alone. Andreessen Horowitz is itself looking beyond the venture business, taking steps to become a more versatile financial creature that can tap new pools of capital and weather changes in the startup funding climate.

This evolution, begun a few years ago but all the more pressing today, aims to position the firm as a sort of Goldman Sachs or J.P. Morgan of the West. If there's money to be put to work in technology, Andreessen Horowitz is there to play with it. The firm will launch a private wealth management service in January, opening the door to invest the personal funds of business executives, according to a source. A public market investing effort is being led by David George, formerly with General Atlantic. And an expanding collection of academics and policy wonks are being added to the payroll, which now numbers more than 500 people compared with 240 in July 2021.

In a sense a16z is following its own recipe for turning startups into large companies—prioritizing growth while hoping to dodge the potentially fatal dangers that come with it. Based on the more than \$35 billion the firm has raised in the past seven years, a16z is almost certainly reaping about \$500 million a year on management fees alone—a sum that stands to grow even more as the firm sprawls into new markets.

"They are running a lot of experiments," says a former Andreessen Horowitz investment partner. "It seems to me relatively obvious that some will fail. The flip side is that some of them will work out."

There are plenty of reasons why venture—and Andreessen Horowitz specifically—might not be able to keep scaling: Larger funds and bigger bets may hinder the outperforming returns that have attracted limited partners; Andreessen Horowitz may find it's not as well suited for the public markets as it has been for the private ones; and star partners may leave in favor of building their own brand rather than being another cog in the wheel.

Meanwhile cofounder Marc Andreessen, 51, keeps leaping head-first into drama. Andreessen, a Facebook board member, recently invested the firm's money in two ostracized technology executives' new companies. He's grown contemptuous of the media. He thrust the firm into Elon Musk's chaotic \$44 billion Twitter takeover with a nearly \$400 million investment, underscoring a founder-first mindset toward investing that might not fly outside the venture world.

While the firm has been reticent about its plans, and its partners declined to discuss them on the record, *Fortune* spoke to more than two dozen a16z insiders, limited partners, and portfolio companies, as well as former partners and VC rivals, to get a clearer picture of the venture industry's ambitious moonshot.

Andreessen describes his firm as a portal where entrepreneurs enter the "Matrix," a place where people can cut through the expectations and barriers of conventional business reality and shape the universe to their will. "When founders come to work with us, the term that Ben and I use is, it's like plugging into the Matrix—you basically get access to the world," he said on one of the firm's self-published YouTube shows in October. It's a concept the duo may need for their own mission.

"They are running a lot of experiments. It seems obvious that some will fail. The flip side is that some of them will work out."

A FORMER A16Z INVESTMENT PARTNER

## COWBOY CAPITALISTS

**BY THE TIME** Marc Andreessen published his seminal essay "Why Software Is Eating the World" in 2011, Andreessen Horowitz had already made a dramatic entry onto Sand Hill Road's venture capital terroir.

Mixing Andreessen's mystique as the father of the web browser, Ben Horowitz's cred as a seasoned startup operator, and the in-house marketing prowess of PR pro Margit Wennmachers, the firm created an elite aura that overshadowed its newbie status in the venture club.

The two founders made the media rounds, sharing war stories, as they launched their \$300 million inaugural fund in 2009. They told *Fortune* about a snarky email that Horowitz, upset about a media leak, sent his boss at Netscape Communications in 1996.

The boss, Netscape CEO Marc Andreessen, replied, "We are getting killed killed killed by Microsoft! You're destroying the value of the company, and it's 100% server product management's fault. I'm just trying to help. Next time, do the f---ing interview yourself. F--- you. Marc."

Two years later, in 1998, Andreessen sold Netscape to AOL for \$4.2 billion. He and Horowitz teamed up to launch Loudcloud, a data center automation company, then sold it to Hewlett-Packard in 2007 for \$1.6 billion.

Venture was the next act. Horowitz, the no-nonsense manager, would run the firm, while





Andreessen, the charismatic visionary, would be its face in the public imagination and at the heart of its pitch: a fund for founders, built by founders, with an outsize operations staff and deep industry connections, to help startups scale.

The founder-first ethos was integrated throughout the firm's operations. Partners were fined \$10 for every minute they were late to a meeting with a founder. When a startup's funding pitch is turned down, partners must provide a prompt response with a specific reason for the rejection. Turned-away founders are sent Net Promoter Score feedback surveys to gauge their experience.

"People are scared of getting founders upset, which I think is a good thing," says the former investment partner.

Firm culture encourages staffers to challenge one another's assumptions. "Marc and Ben make a point of openly disagreeing with each other to encourage that spirit throughout the firm," another former partner said.

General partners at a16z have check-writing autonomy—a "single-trigger-puller" model, as a separate former partner describes it—allowing

individual partners to back founders they believe in, even if their peers are more skeptical.

"I admire that they take big swings; they really embody the cowboy capitalist ethos," a partner at a rival VC firm says of a16z.

Out of the gate, Andreessen Horowitz showed it wasn't afraid to pay up to win deals, and scored some big wins. In 2009 it bought about 2% of video service Skype for \$50 million. Less than two years later, Microsoft acquired Skype for \$8.5 billion, netting a16z a threefold return.

## THE CRYPTO PHILOSOPHY

**BY 2015**, Andreessen Horowitz had established itself as among Silicon Valley's most in-demand investors, going toe-to-toe for deals against elite VC firms like Sequoia Capital and Benchmark. In a glowing profile of Andreessen published in *The New Yorker* that year, he referred to his crosstown rival, Benchmark's Bill Gurley, as the Newman to his Jerry Seinfeld.

But in some ways, looking at Andreessen Horowitz in terms of Benchmark was a

↑  
**TECH'S POWER COUPLE**  
 Andreessen, 51 (left), and Horowitz, 56, first worked together in the 1990s at internet pioneer Netscape. They make a point of openly disagreeing with each other to foster that spirit at the firm, says a former partner.



category error. While Benchmark and a16z battle fiercely for the early-stage deals that are Benchmark's bread and butter, Andreessen Horowitz also competes for every other stage of venture capital investment—before and after Benchmark.

If Benchmark was a best-in-class race boat cruising the startup waters, Andreessen Horowitz was an aircraft carrier ready to steam toward wherever the action lay.

Cryptocurrencies offered an early demonstration of the model in action. Chris Dixon, a former founder with a master's degree in philosophy, joined a16z in 2012. A year later he led a \$25 million Series B funding round for the cryptocurrency exchange Coinbase.

To edge out a rival VC firm, a16z tapped into its "matrix" of connections. When Coinbase founders Brian Armstrong and Fred Ehrsam visited a16z partner Chris Lyons's home to watch a fight on television, they were greeted with a surprise visit by the rapper Nas, who would go on to become a limited partner investor in the firm's "cultural leadership" fund.

The Coinbase investment, which valued the company at \$125 million in 2013, would become Andreessen Horowitz's highest-returning. When Coinbase went public via direct listing in April 2021, a16z returned \$4 billion in Coinbase shares to investors.

The massive windfall—enough to pay back the crypto fund's invested capital and then some—has earned the firm a reservoir of investor goodwill that should come in handy as it chases new opportunities (especially since limited partners were able to lock in the gains before the crypto crash). Still, as one a16z investor tells *Fortune*, the firm must continue to deliver. "We've been impressed with them and their partners... But no matter how good the brand is, if a firm becomes too big and is no longer performing, we will leave it," the investor said.

## INSIDE THE MONEY MACHINE

**ALTOGETHER** Andreessen Horowitz has raised more than \$35 billion since its founding, including a \$4.5 billion crypto fund, a \$5 billion growth fund, a \$2.5 billion venture fund, and a \$1.5 billion bio

fund—all just last year.

That translates into huge management fees—the annual dues that limited partners pay venture capitalists just to invest their money, regardless of performance. On one of the firm's latest crypto funds, Andreessen Horowitz commanded a 2.5% fee, which would mean receiving \$50 million a year on a \$2 billion fund. Applying a similar fee to Andreessen's funds raised since 2016, the firm is generating about \$500 million in fees a year.

Critics accuse the firm of "stacking fees," or raising so much money that it can profit off management fees alone without relying on carry—or its cut of the actual performance of its investments. As a16z expands into different areas of the financial markets, its growing catalog of assets should generate ever more management fees—a model with parallels to the enormous banks and private equity giants that accumulated billions in assets as they broadened their investing focus.

The inspiration is in Marc Andreessen's office, where he keeps a picture of John Pierpont Morgan, the Gilded Age financier whose namesake bank is now one of the world's largest, with nearly \$4 trillion in assets.

"I think he intends to build an institution of that stature," one former partner says of cofounder Andreessen.

Andreessen is fond of citing Morgan's maxims and his example as a businessman who funded world-changing innovations like Thomas Edison's light bulb. Internally, a16z partners often invoke a Morgan quote as a sort of strategic refrain: They tell new em-

□

## KEY PLAYERS ON TEAM A16Z

**With a headcount of roughly 500, Andreessen Horowitz is more than the two names on the front door. A deep and growing bench of investing partners and operators are leading the firm's expansion (although the top ranks still suffer from a lack of diversity). Here are a few key players on the team.**



**KATHERINE BOYLE**  
FOCUS: AMERICAN DYNAMISM  
JOINED: 2021

Katherine Boyle co-leads the firm's pro-America investment thesis, along with David Ulevitch.



**MARTIN CASADO**  
FOCUS: ENTERPRISE  
JOINED: 2016

A Stanford computer science Ph.D., Casado cofounded the startup Nicira, acquired by VMware for \$1.26 billion.



**CONNIE CHAN**  
FOCUS: CONSUMER  
JOINED: 2011

The first person a16z promoted to general partner from within, Chan has emerged as an expert on China consumer tech.



employees that the firm strives to be a “first-class business in a first-class way.”

In July, a16z announced it was expanding to locations such as New York, Miami, and Los Angeles—the firm billed it as a move to be in step with the times and to become “cloud-based,” but it was hard to miss the statement it made about the VC firm’s ambitions to redefine itself as more than just a Silicon Valley outfit.

Already among the largest VC firms, Andreessen Horowitz has plans to grow its headcount to nearly 700 people, says a former partner.

Scott Kupor, who has long managed the firm’s relationship with its investors, started building out a wealth management offering to compete with the likes of Iconiq Capital, whose roster of A-list clients includes Mark Zuckerberg, Microsoft CEO Satya Nadella, and celebrities like Tom Hanks. The firm is calling the effort Perennial and is expected to begin raising money this January, led by the recently hired Michel Del Buono, a former chief investment officer at Jordan Park Group.

The idea is to manage the personal assets of startup founders as their businesses and careers grow, similar to the way investment banks provide ongoing services to the companies whose IPOs they underwrite.

A16z is also stepping up its political game, becoming an influential advocate in Washington for crypto-friendly regulations. Earlier this year it hired two leading thinkers in the space: Tim Roughgarden, a Columbia engineering professor, and Dan Boneh, a computer science and electrical engineering professor

from Stanford, to lead the firm’s crypto research efforts.

With size come all the challenges common to fast-growing organizations, from losing track of what colleagues do to cultural drift. An early policy mandating that investors at a16z have operator experience at a startup is no longer followed, for example.

Some startup founders wonder whether a firm with so many large investments can provide the kind of hand-holding a young business needs, though two current portfolio company founders say the partners and operators who work with them are incredibly attentive.

“They have grown significantly, but it’s clear that when [a16z partner Dixon] is on a call with us, he’s locked into what we’re doing and not spread too thin,” says one.

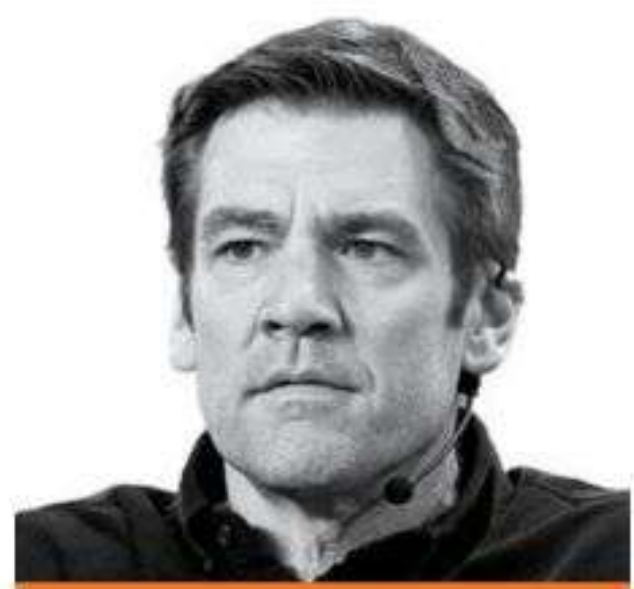
## THE HARD THING ABOUT INVESTING DURING A PANDEMIC

**IN HIS 2014** management book, *The Hard Thing About Hard Things*, Ben Horowitz, 56, tells readers that the difference between a mediocre company and one that’s magical is “often the difference between letting people take creative risk and holding them too tightly accountable.”

As Andreessen Horowitz snowballs in size and ambition, its ability to maintain the proper balance between risk and accountability is more critical than ever. Like much of the investing world, a16z was swept up in the tech valuation fever that erupted during the pandemic, resulting in some deals that now look batty.

The firm purchased a huge stake in the creator of Bored Ape NFTs, part of a \$450 million “seed round” that gave the year-old company a \$4 billion valuation. Since then industrywide NFT sales have cratered by as much as 97% from their January peak (a crash that could also affect a16z’s investment in NFT marketplace OpenSea).

Launch House, a startup that brings young entrepreneurs together for one-month-long co-living programs, has hired lawyers for an



**CHRIS DIXON**  
FOCUS: **CRYPTO**  
JOINED: **2012**

An early Bitcoin believer, Dixon led the firm’s 2013 investment in Coinbase, which turned out to be its most pivotal.



**DAVID GEORGE**  
FOCUS: **GROWTH, PUBLIC MARKETS**  
JOINED: **2019**

George is driving a16z’s push into public equities, opening the door to new investment opportunities.



**JEFF JORDAN**  
FOCUS: **CONSUMER**  
JOINED: **2011**

The former OpenTable CEO became a VC in his fifties after stints at Disney and eBay. He’s also on the Airbnb board.



**SCOTT KUPOR**  
FOCUS: **INVESTOR RELATIONS**  
JOINED: **2009**

A16z’s first employee, Kupor has led the firm’s efforts to expand into private wealth management.



**CHRIS LYONS**  
FOCUS: **WEB3 MEDIA**  
JOINED: **2013**

Lyons launched the firm’s cultural leadership fund, which includes celebrity investors like Nas and Kevin Hart.



investigation after Vox reported on troubling incidents including allegations of sexual assault. Several allegedly occurred in 2021, months before Andreessen Horowitz led a \$12 million funding round.

And then there's Clubhouse, the audio chat app that perhaps more than any other a16z investment epitomizes the power, and flaws, of the firm's approach to investing.

In a series of deals led by Andreessen Horowitz general partner Andrew Chen, the firm kept driving up the price of its own portfolio company: Chen invested in Clubhouse at an \$80 million valuation in May 2020; a \$1 billion valuation in January 2021; and a \$4 billion valuation in May 2021.

Meanwhile a16z's partners went all in on ginning up content for the audio chatroom company. Comedian Kevin Hart, another limited partner in a16z's cultural leadership fund, hosted a session on the app. Andreessen was a regular speaker, and Horowitz's wife, Felicia Horowitz, hosted a regular dinner party on the app where celebrity guests discussed issues like politics and culture.

But Clubhouse's popularity soon fizzled, and Andreessen Horowitz eventually let up on its constant promotion. Chen, who was also the lead investor in Launch House, recently left Andreessen's consumer investing team, moved to Los Angeles, and shifted his attention to investing in gaming companies for the firm.

Andreessen's crypto fund, once its star performer, has shed 40% of its value in the first six months of this year, according to the *Wall Street Journal*, and the firm has taken on enormous risk by holding highly volatile cryptocurrency tokens. While it's not clear exactly how many tokens the firm owns, the caveat in its disclosures reminding limited partners that they "could incur substantial, or even total, loss of capital," suddenly looks frighteningly sobering as crypto prices crash.

While a16z had no direct exposure to FTX, the crypto exchange that went bankrupt in early November, the firm's crypto assets are unlikely to escape the fallout. And the stunning lack of oversight that enabled FTX founder Sam Bankman-Fried to self-destruct is a reminder of the dangers in deferring too much to founders.

If anything, a16z has been leaning further into its founder bias lately. In August, Andreessen wrote a blog post about the U.S. housing crisis and trumpeted an investment in Flow, a startup that aims to make renting better. The founder of Flow is none other than Adam Neumann, of WeWork infamy.

A couple months later it was reported that Andreessen was back-

ing a startup founded by Android creator Andy Rubin. The *New York Times* reported in 2018 that Rubin had been accused of sexual misconduct with an employee while at Google and was paid \$90 million in a quiet exit package. Rubin has said in the past that the allegations are false.

Messages between Andreessen and Elon Musk, which emerged during a lawsuit related to Musk's Twitter acquisition, revealed Andreessen's willingness to bet large sums of his investors' money on an individual, with seemingly few constraints.

"My growth fund is in for \$250M with no additional work required," Andreessen volunteered in a message to Musk.

The firm ended up investing closer to \$400 million in the \$44 billion deal, which Musk himself acknowledged was vastly overpriced. Sriram Krishnan, an a16z partner focused on crypto investing, is currently doing double duty as an adviser to Musk, whose reputation as a successful entrepreneur has become increasingly tarnished by his erratic stewardship of Twitter.

"To me that was the most egregious of all," Columbia professor Sherman says of a16z's lack of due diligence on Twitter. "If I were a limited partner in the fund from which that came, I would be absolutely outraged... To jump in and say, 'I'm in,' with no questions asked—that doesn't even belong in the same sentence as due diligence."

## LIFE BEYOND THE VALLEY

**ANDREESSEN SIPPED** from a glass of Amrut Greedy Angels 10 Year Old, a whiskey that sells for \$842 a bottle. It was May of this year, and tech stocks were in free fall.

\$500,000,000

### ESTIMATED ANNUAL MANAGEMENT FEES

Andreessen Horowitz has raised \$35 billion in capital since its founding, allowing it to reap huge management fees from investors, regardless of performance.



“We continue to be in market,” he said. “We continue to be in business. We will continue to do rounds. We’ll continue to make investments—but if this downturn in price and economic activity continues, your prices will definitely reset.”

Andreessen wasn’t speaking on CNBC or Bloomberg TV. He was on the *Good Time Show*, the YouTube show hosted by colleague Krishnan and his wife, Aarthi Ramamurthy. Over the next 90 minutes, Andreessen opined on everything from tech to his favorite memes.

Like many people with the means to do things their way, Andreessen enjoys a friendly audience. A16z has built its own media operation, allowing the firm to promote its message without ceding control to intermediaries. Twitter is also a favorite medium for Andreessen, who blocks users committing unspecified transgressions.

Lately, Andreessen has taken to tweeting long reading lists. One of his favorite writers is James Burnham, author of *The Machiavelians* and *The Managerial Revolution*. The books, some of which date back to the 1940s, seem to hint at Andreessen’s souring on elites and doubts about American politics, though the onetime Obama supporter who later donated to Republican Mitt Romney has kept his political affiliation ambiguous in recent years. In a sardonic tweet directed at reporters supposedly digging into his personal life this month, Andreessen said he was not—among other things—funding political candidates or “plotting any subversion of American democracy and/or coup attempts.”

If there’s any clear fusion of politics and investing in the firm, it’s in the concept of American dynamism, a pro-America investment thesis spearheaded by partner Katherine Boyle. Andreessen and Horowitz helped green-light the strategy, and the firm has been recruiting investors to ramp up bets on defense tech, aerospace, education, housing, and transportation.

But Andreessen’s principles have at times been muddled. In August, he was the subject of widespread media derision after it was revealed that the author of infrastructure investment manifesto “It’s Time to Build” had cosigned with his wife a NIMBYish letter opposing new housing in Atherton, Calif., where the couple live.

The episode marked an embarrassing moment of out-of-touchness that undermined a16z’s message and its aspirations of becoming a firm whose perspective extends beyond Silicon Valley’s narrow field of view. The Information recently reported that some Andreessen Horowitz investors are grumbling about the risky bet on Neumann and its pricey participation in Musk’s Twitter adventure.

As Andreessen Horowitz pushes forward with its transformation, the question is whether its leaders are capable of adjusting their ambitions to the reality on the ground and the needs of its clients or if, like an overly confident startup CEO unwilling to change course, the firm remains locked in its own matrix.

Marc Andreessen wrote about the dangers of delusion many years ago while making the case for why someone might not want to join a startup. “First, and most importantly, realize that a startup puts you on an emotional roller coaster unlike anything you have ever experienced,” he wrote. “You will flip rapidly from a day in which you are euphorically convinced you are going to own the world, to a day in which doom seems only weeks away and you feel completely ruined, and back again.” ■

□

## A DECADE OF HOT DEALS AND HOME RUNS

### 3 VALUABLE INVESTMENTS

#### DATABRICKS

FIRST A16Z ROUND: 2013

CURRENT VALUE: **\$31 billion**

Since Ben Horowitz led a \$25 million Series A round in the cloud database company, a16z has led four further rounds.

#### FIVETRAN

FIRST A16Z ROUND: 2019

CURRENT VALUE: **\$5.6 billion**

A16z has been the lead investor in two funding rounds in data-integration startup Fivetran, totaling \$600 million.

#### DEEL

FIRST A16Z ROUND: 2020

CURRENT VALUE: **\$12 billion**

The pandemic had just begun when a16z invested \$14 million in Deel, a remote hiring startup whose valuation has since soared.

### 3 BIG RETURNS

#### COINBASE

FIRST INVESTMENT: **\$125 million valuation; 2013**

EXIT VALUE: **\$100 billion**

In a VC grand slam, a16z returned \$4 billion to its investors.

#### GITHUB

FIRST INVESTMENT: **\$750 million valuation; 2012**

EXIT VALUE: **\$7.5 billion**

A16z funded GitHub’s entire \$100 million Series A round. Six years later, Microsoft acquired it.

#### SLACK

FIRST INVESTMENT: **Co-led \$10.6 million investment; 2011**

EXIT VALUE: **\$19.5 billion**

A16z invested in a gaming firm led by founder Stewart Butterfield. The game failed, the startup became Slack.



■  
**INVESTOR'S GUIDE**  
2023  
ROUNDTABLE



Soaring inflation and steep drops in stocks and bonds have bruised many investors. But our experts remain undaunted. Here's why they believe a rough 2022 could set the table for much better returns in 2023 and beyond.

**MODERATED BY  
MATT HEIMER**



□ **INVESTOR  
ROUNDTABLE**

**SEEKING SHELTER AND SEEING SILVER LININGS**

PHOTOGRAPHS BY **PATRICK JAMES MILLER**





 **THE PAST 12 MONTHS** featured some relatively grim milestones—including the highest inflation in four decades and the first truly durable bear market since the Great Recession. That concatenation of bad news poses two challenges for investing pros: They need to figure out where to find positive returns, and they need to talk their clients out from under their proverbial beds. Neither of those prospects daunted our experts. Indeed, they were united in the view that a rough 2022 could pave the way for a better 2023—for

stocks, society, and our psyches.

Joining us for this year's panel were Josh Brown, CEO of Ritholtz Wealth Management; Georgia Lee Hussey, founder and CEO of Modernist Financial; and Savita Subramanian, head of U.S. equity and quantitative strategy as well as global ESG research at Bank of America Merrill Lynch. Edited excerpts from the conversation follow; read more at [Fortune.com](https://fortune.com).

**FORTUNE:** The markets have been in a long downward trend, and none of us, as adult



**READY FOR A REBOUND**  
Our panelists (from left): Savita Subramanian, Bank of America Merrill Lynch; Josh Brown, Ritholtz Wealth Management; Georgia Lee Hussey, Modernist Financial.



**investors, has ever coped with inflation this high. Did the three of you see this coming?**

**SAVITA SUBRAMANIAN:** We shifted to a fairly bearish outlook by the end of last year. We were starting to see inflation like we'd never seen in our careers, plus the relationship between the market multiple and the inflation rate was completely out of whack. We had an S&P 500 P/E of somewhere above 20, and a CPI that was around 9%; it just seemed really untenable.

It also smacked of 1999–2000. It was the same feeling of: Growth stocks are gonna go up forever, megacap tech is all you want to buy. These companies didn't necessarily have strong earnings today, but had these promises of fantastic growth. And that was awesome in an environment of very low interest rates. But as the cost of capital rises, it becomes more problematic to take that bet.

**GEORGIA LEE HUSSEY:** I've been telling people that market cycles generally are seven to 10 years. And for a while my Spidey sense has been saying: At some point, we're going to have some kind of correction. We've been working with clients building cash positions, building line-of-credit positions, especially for business owners, so they have a lot of choice when the market does correct or, more importantly, when the recession impacts their business. There's a lot of preparing them to be able to not only weather but utilize this moment.

**JOSH BROWN:** Our tactical model is designed to react quickly when it becomes statistically clear that we're no longer in a bull market. So by the end of February, we were completely out of the Nasdaq. And by the end of April, we were completely out of the S&P 500.

It's not the entire portfolio; it's one specific strategy in a bigger portfolio. But that addresses the clients' concerns as they see those lower highs and lower lows. And it gives us the option to buy back in later. With the big caveat of: We won't call the market bottom—we will most likely be significantly off the lows when that buy signal gets triggered. That's how technical analysis works; it's backward-looking.

**HUSSEY:** Emotional decision-making can work in our favor or work against us. A lot of the work that we do is preemptive: We'll ask clients, "What do you want me to tell you when the market goes down?" We literally write it down and then pull up the file to remind them what their more grounded, stable self said they wanted to do.

**BROWN:** I think that's such a great point. You'd have a client say, "Okay, get me out." "You have a million-dollar portfolio, 70% of it in stocks, sell it right now?" "Yes." "Okay, let's visit your financial plan that we created. Tell me which of these things you no longer want to be able to do. Can you throw college out? The boat not happening anymore?" We'll just start crossing items off the list.

**FORTUNE:** So, what are some useful adjustments for folks as they stay invested?

**SUBRAMANIAN:** Equities that pay dividends are one of the best ways to protect against an inflationary environment. If you look at financial companies, they tend to grow earnings during inflationary periods, and earnings are nominal, unlike bond yields. And financial

companies are still relatively inexpensive.

The energy sector offers nine percent-age points' higher free cash flow yield than Treasury Inflation-Protected Securities. That's a huge spread that you're getting. Energy is a tough sector to own if you have an environment-first sensibility. But these companies got the memo: They realize that they are being disintermediated by green, clean, renewable power, and they have pivoted aggressively to becoming more environmentally friendly.

**FORTUNE:** Are the energy companies that have more fully diversified into alternative energy commanding a premium?

**BROWN:** I want to talk about NextEra, an energy company that owns Florida Power and Light, which is as staid and boring a utility as you could possibly imagine. However, that's only half the business. The other half is this massive, fast-growing renewables company, where they're building out renewables infrastructure for other utility companies and large-scale corporations. On a five-year look back: NextEra up 126%; the S&P up 61%. This is a stock that is paying a dividend, acting like a utility, but has that premium return because they're thinking about, How do we power the next century?

**FORTUNE:** Georgia, you've been telling your clients that if they're bullish, everything's on sale—but ESG in particular, right?

**HUSSEY:** Yeah, we have clients that were in a globally well-diversified, all-the-good-stuff portfolio, but they wanted to move to ESG eventually. And I've had pings in my software for years, so when the downturn came,

**-17.2%**

**DECLINE IN THE BLOOMBERG U.S. AGGREGATE BOND INDEX from August 2020 through October 2022—the steepest decline ever for the U.S. bond market**



we were ready to move. And we're taking a 20% discount on that reallocation. So that's been really satisfying.

**BROWN:** Do you find that your clients are more likely to stick with a portfolio that aligns with their values?

**HUSSEY:** What I find is that when they're very grounded in their financial plan, and when they're very committed to values in their investments, the investing piece becomes the engine and not the path. It's all about: How do we get to your destination?

**SUBRAMANIAN:** We've also been seeing that at Merrill Lynch—we've got this growing cohort of not just younger millennials or Gen Zers, but a larger cohort of high-net-worth female investors, or of folks just looking to allocate capital according to their values.

I would say that a few years ago, this manifested itself as an exclusionary template: "I'm not going to invest in fossil fuels," or "I'm not going to invest in companies that do stem cell research plays." Now we've actually seen a lot of those exclusions being lifted. And we're starting to see individual investors approach this more holistically and thinking about: This is a company that might not look great right now. But are they on a path to improvement?

**BROWN:** I'm gonna be a little bit politically incorrect. The energy sector is up 65% this year; every other sector is negative. And I've seen a lot of clients who were only halfheartedly interested in ESG, or became interested because their grandson forced them into it, saying to themselves, "Why don't I have more exposure to Chevron?"

Which does not mean that ESG is dead. I know a lot of people get clicks for writing headlines like that. But maybe it's something as simple as: Let's look at ESG on a spectrum, rather than "This company's evil, this company's good." And then say, "Okay, I do want energy exposure: I won't buy the company that is lighting a river on fire; I'll buy the company that is making the biggest R&D investments in not flaring natural gas." I think that that's where the puck is going.

**HUSSEY:** There's something quite radical about investing in companies that are not going in the direction you want, and then utilizing shareholder power to say, "You have to move in this direction." One example I offer clients is the Sisters of St. Francis of Philadelphia: They bought into Goldman Sachs in order to put forward a letter that they would have to read at the next public board meeting, explaining their issues with the social implications of Goldman's decision-making. And when Goldman Sachs didn't respond, they put out a press release saying, "*You did not respond to Sister Nora Nash's letter.*"

**BROWN:** I would also just point out that with ESG investing, before it had a label, before it had a name, there were corporations that cared a great deal about their impact and the community that they serve and thought about employees as stakeholders. And the best example would be Hershey. When you go to Hershey Park, after the roller coasters, take five minutes go to the museum. And what you'll see is a century of them sponsoring public works in the town, and higher levels of education than the townspeople would otherwise be

## THREE THINGS TO GET EXCITED ABOUT, AND THREE TO WORRY ABOUT

### GET EXCITED ABOUT

#### LARGE-CAP STOCKS ON SALE

In November, the S&P 500 traded at 15 to 16 times estimated forward earnings, below its 25-year average. Some pros see that as a sign of better returns in the near future.

#### TAX BREAKS IN A BEAR MARKET

Investors who have to sell assets in a down market can use the losses to reduce their taxable income. That fact also makes this a good time for a Roth IRA conversion.

#### GREEN KEEPS GOING

In a hot market for energy stocks, investors are rewarding companies that are committing to renewable fuels, an encouraging sign of momentum in the climate fight.

### WORRY ABOUT

#### CORPORATE PROFITS UNDER THREAT

Companies have been able to pass rising costs along to customers, but those days may end soon; Bank of America Merrill Lynch expects earnings to shrink in 2023.

#### TECH LAYOFFS AND THEIR RIPPLE EFFECTS

Layoffs of high-paid staff at Amazon, Meta, and other tech giants could have a "negative wealth effect," hurting the service industries that orbit the tech economy.

#### INFLATION AND THE MOST VULNERABLE

Higher prices have sparked a hunger crisis in the U.S., inflicting suffering today and posing a threat to economic competitiveness and social cohesion down the line.



able to afford, and sponsoring women's athletic associations. And Hershey has not been less successful as a result.

**FORTUNE:** This is getting into the S side of ESG, the social side.

**SUBRAMANIAN:** We're in the tightest labor market ever. You want to have satisfied, happy employees who stay in their seats. We found in our research that if you look at Glassdoor rankings, and you look at companies with high job satisfaction, they're not necessarily the companies where the employees are paid the most. They're not the companies where the employees think they have the best trajectory of career success. These are companies where employees rank culture as a strong suit of their corporation.

**BROWN:** The challenge is, when you find something in the data that disagrees with your own feelings, what do you do? You may be familiar with Dimson, Staunton, and Marsh at the London Business School: They looked at the biggest industry classification returns. And going back to 1900, tobacco is undefeated. American tobacco companies, it's a six-and-a-half-million percent return, if you can wrap your head around that. So there are times where you have to say, "I believe that this ESG approach to investing is valid. However, I'm also willing to accept that if oil stocks double in a year, and I'm underweight or have no weighting, then I am prepared to explain to my clients why we just had to forgo that rally."

**HUSSEY:** There's a question that I bring forward to clients and in our own cultural conversation, which is: "What on earth is enough?"

**BROWN:** I'm from Long Island. So there's no such thing as enough.

**HUSSEY:** Ha, right. But do you really need that *next* million?

**BROWN:** We had that conversation in cryptocurrency last year: Is the goal here a Lambo? Is it gambling? Is it recreation? For people who work in crypto, investing in that asset almost defines their identity.

**HUSSEY:** Yeah, some things transcend our investment philosophy.

**BROWN:** But let's not do 20 minutes on crypto.

**FORTUNE:** Definitely not. But on the subject of assets that aren't stocks: For a long time, we've been invoking the acronym TINA—There Is No Alternative to stocks. When interest rates were so low, there wasn't really another reliably performing asset for most portfolios. With higher rates, it's a different conversation.

**BROWN:** There is this misconception on the part of investors that when the markets are going down, they're not making any progress. And in fact it's the opposite.

In the first 10 months of this year, arguably, we have done more hard work than at any point in the last 20 years. The 10-year Treasury index is down 18% going into November, which is literally the

worst performance for the 10-year in any year going back to 1788, which I don't remember personally, but I can imagine that was pretty rough. The Barclays aggregate index is in a 17% drawdown over the last 27 months. It's the longest and largest drawdown in U.S. bond market history.

Again, everyone's got their wounds to lick from this year. The S&P is down 20%. And when you look at a 60/40 portfolio, it's very hard to find a time where things were worse. But that is where future returns come from.

The TL;DR is, it's almost impossible to not succeed if this is your starting point. It's not going to be the starting point for your whole portfolio, but for new investors, for new money, we have made a lot of progress.

**SUBRAMANIAN:** At the beginning of this year, our long-term valuation framework was telling us that returns would be negative every year over the next 10 years. After the shakeout that we've seen, after the work that Powell has done, after we've been through a bear market, that same model is telling us that returns over the next 10 years are going to be about five

“It's almost impossible to not succeed if this is your starting point ... For new investors, for new money, we have made a lot of progress.”

JOSH BROWN, CEO,  
RITHOLTZ WEALTH MANAGEMENT



# \$55,150,000,000

**TOTAL Q3 2022 PROFITS FOR THE WORLD'S FIVE BIGGEST OIL COMPANIES**  
 BP, Exxon Mobil, Chevron, Shell, and TotalEnergies have benefited from a supply crunch and still-strong consumer demand.

percentage points per annum, give or take; if you add on another 2% to 3%, dividend yield, that's a fairly healthy return from stocks.

Then when you look at bonds, instead of getting zero in your cash, you might as well move it into a three-month T-bill or a two-year bond. If you're looking for yield and you can take a little bit of risk, the credit markets are starting to look really attractive.

One of the simplest strategies that we've found in our research—and I tell my parents about this, I tell my friends about this, I tell anybody who will listen—is that if you track dividend yields, and you own companies in the Russell 1000, the large-cap index, and bought not the ones with the highest dividend but the second-highest quintile, you would have outperformed the S&P 500 on a total return basis. And you would have outperformed every other cohort of the market: the high-flying, no-dividend-yield, zero-paying stocks, the super-high-dividend yield. And all with this Steady Eddie strategy.

**BROWN:** That's not going to be as much fun as meme stocks. That's the problem.

**HUSSEY:** We tell clients, investing should be boring! If you're too excited, you're probably doing it wrong.

Rising interest rates are slowing down real estate sales. Thank God, honestly, because there are systemic issues that have been created by this incredible booming real estate market, and it's creating houselessness issues all up and down the East and West coasts. And so being able to slow folks down, I appreciate this one cycle. This moment is winter. I just keep telling people: Winter's good.

**BROWN:** When everything's trending up, you can't think straight, and everybody's getting

richer around you and you lose your shit. You're just like, "Oh, my God, why aren't I doing this? How come I didn't get anything?" And now it's the opposite. Every day you wake up thankful: "Oh, thank God I missed out on that." Because all of these things are blowing up or going in reverse.

Back to valuations, the S&P 500 is now finally below its 25-year average. We're at about 15 to 16 times earnings. The 25-year average, which is the length of my entire career, is 17. So my question for you, Savita, is: Is that cheap enough? Doesn't the pendulum have to swing a little bit further?

**SUBRAMANIAN:** I hate to be the skunk at the garden party. But I do think there are still areas of overvaluation. I see it in companies that are very labor-intensive, that have a high cost structure. Labor costs have gone up; costs of basically every raw material have gone up. So the idea that earnings are going to be just awesome next year is not a foregone conclusion. In fact, we have negative earnings growth penciled in for next year.

The other problem is that we're starting to see the layoffs hit. We're starting to see skilled labor lose some skin, the wealthier consumers. We all talk about the wealth effect—I think the math is, for every dollar of wealth created, that impacts four cents of consumption. The negative wealth effect could be much more profound this time because a lot of people who made a ton of money in stocks, owning homes, or working in tech, working in these really well-paying industries, are now at that inflection point where they're no longer employed, and they're sitting on half the asset value they thought they would have.

**BROWN:** To your point: Meta is talking about laying off 13% of its workforce. These are people that make a million dollars a year. Their very existence supports the livelihoods of all manner of personal trainer, hairdresser, auto mechanic.

**FORTUNE:** A scarier economic climate often scares people away from philanthropy. How are you steering people through that?

**HUSSEY:** Most of the people we're talking about have significant resources. If they haven't totally overleveraged their lifestyle, they're probably going to be fine.



We need to remember that the market is not the economy, and the economy is not the market. And the economy makes me very worried about food banks. Children are hungry, people are hungry. And when kids can't eat they can't pay attention in school, and if they can't pay attention in school they can't be good students; they can't move forward in the world. And as a business owner I'm thinking, I need to hire these folks in 20 years.

There was a study that showed that an investment in programs for birth to 5 years old will have a 13% ROI, by reducing costs for our shared systems like prisons and health care. And so I say, move your focus away from your 401(k) or your trust account and instead focus on the thing that will benefit your neighbors, which will benefit your local businesses, which will benefit our interconnectedness.

**BROWN:** Politicians can't think that way because they have to get reelected in four years. But if we did think that way, the dividends that would come 15 years in the future are crazy.

**SUBRAMANIAN:** The corporate sector has really taken the reins in driving this home. What we've seen over the last 20 years is that supporting the communities in which you operate—banking the underbanked communities; teaching women skills around financial services and investing; returnship programs for people who left the workforce—is making your brand mean something positive. That translates into talent attraction and retention.

**HUSSEY:** One thing to add: What you could do if you want better returns is, you can hire a woman to manage your money. Two finance professors published a study in the '90s with the best title: "Boys Will Be Boys: Gender, Overconfidence, and Common Stock Investment." And there are several other studies that show that women outperform their male counterparts from 40, to 100, to 300 basis points a year.

**BROWN:** Was this study done pre- or post-Cathie Wood?

**HUSSEY:** What I'm interested in here is: Individual investors have a lot of power to make choices about how they allocate their capital, and that includes who manages their money. There are lots of fabulous female managers out there, or managers of a diverse background, who probably see the world differently. And that's what we need right now, to navigate a world that is uncertain.

**FORTUNE:** What's something you're feeling optimistic about?

**SUBRAMANIAN:** What's both exciting and scary to me is that the world of investments has become more democratized. Investing shouldn't just be for the elite, the wealthy; investing should be something we all think about, from our first job. It's important for us to teach our children: Start a savings account, start thinking about long-term investments. Even the whole meme stock phenomenon, it was a fascinating turn of individuals against the so-called smart money. You saw an interesting pivot from the idea that hedge funds are gonna make two-and-20 by being smarter than everybody

“Move your focus away from your 401(k) or your trust account and focus on the thing that will benefit your neighbors, your local businesses.”

**GEORGIA LEE HUSSEY,**  
FOUNDER AND CEO,  
MODERNIST FINANCIAL

else, to the idea that we can all build wealth, we can all invest, we can all participate.

**HUSSEY:** I think this is an exciting moment, but an uncomfortable moment. There are strong reasons to be nervous right now. SCOTUS's rulings on reproductive rights are unnerving all of our clients, as well as their signaling about gay rights, trans rights, and the impact that could have on my clients who have nontraditional families and businesses.

We have an opportunity to reflect: What are our priorities? What are our values? What do we want to be doing now? And then do the really radical thing, which is to not do a damn thing. We're grieving. We need to take a beat as investors, don't do anything in the down market, but also just chill. Hang out with people you love and figure out who you want to be in this next round. That's where we'll find a lot of the solutions to what we need next. But we're not quite ready to take action yet.

**BROWN:** When you look back in history and you look at these major turning points, like the aftermath of a war or the aftermath of an assassination, you can always see that there was a turn that resulted from that. And usually the turn is toward more progress, not less. So I hope you're right about this moment. ■



# 11 STOCKS TO STICK WITH FOR 2023

## **BULLISH PROSPECTS IN BEARISH TIMES**

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Where should you turn when the smart money expects a recession? Look for companies whose products and services sell well even when times are tough.

**BY ANNE  
 SRADERS**

**RESEARCH  
 BY SCOTT  
 DECARLO**



**IF THE INVESTMENT THEME** for 2021 was the post-COVID rebound, and the theme for 2022 was bracing for inflation, think of 2023 as the year investors should buckle up for a downturn. “Certainly the odds have increased that we’re heading into a recession,” says Ramiz Chelat, a portfolio manager for Vontobel’s Quality Growth Boutique. In fact, a whopping 98% of CEOs polled in a recent survey by the Conference Board said they were preparing for a recession in the U.S. in the next year.

The engine driving those recession fears, ultimately, is inflation—which in turn has launched the Federal Reserve on a campaign of interest rate hikes that has threatened corporate profits and helped drive the stock markets into bear territory over the past year. There are glimmers of hope that inflation may finally be peaking, but the watchword for 2023 remains caution.

Still, where regular investors may just see pain, investing pros see opportunity. Investing in 2023 is “really about quality,” says Lori Keith, director of research and portfolio manager at Parnassus Investments—in other words, owning companies “that not only can weather a deeper, more prolonged recession, should we see that, but also [are] able to participate when we do finally see a reversal” of the Fed’s rising-rate strategy.

Spotting those quality stocks may involve a change in mindset, for amateurs and pros alike. Eric Schoenstein, a managing director and portfolio manager at Jensen Investment Management, says he’s been tweaking his thinking when evaluating stocks, focusing more on profit margins than revenue growth. With war in Ukraine and persistently high inflation, and likely more rate hikes ahead, “I don’t think this is an environment where top-line growth is as easy to achieve, [and] that’s going to be with us for a period of time,” he says.

With that backdrop in mind, *Fortune* asked five top portfolio managers for their best stock picks for 2023. The stocks run the gamut from defensive staples to bets on emerging markets. But many of the



INVESTOR'S GUIDE  
2023  
STOCK PICKS

companies listed here have a few superpowers in common that should help them navigate the coming year, including business models that generate lots of recurring revenue; strong balance sheets; and pricing power that should help them pass rising costs through to customers without severely denting their profits. You won't find as many tech companies in the bunch: Their near-term prospects tend to suffer when interest rates are high. Still, the companies here should provide stable growth and profit margins as investors prepare for—deep breath—a new year, and wait for an eventual rebound.

## “STICKY” SERVICES, STEADY EARNINGS

**IF A RECESSION** is in the cards for 2023, money managers believe that businesses with “sticky” products and services—offerings that tend to generate and retain customer loyalty—will deliver steady revenue streams and perform well for investors.

A favorite of Keith's for years, **Republic Services** is the second-largest waste management company in the U.S. Keith argues that in rough times it “provides that degree of defensiveness,” given its market share. She also notes that the company has a “very significant amount of recurring, annuity-type revenue”: In fact, about 80% of its revenue comes from such recurring sources, through services that are “mission critical” to commercial and residential customers alike. Republic has a nearly 95% customer retention rate, and its contracts—which often span multiple years—include inflation escalators that allow the company to increase prices as it deals with higher costs. Keith also applauds the company's capital-allocation strategy and highlights acquisitions, like its recent purchase of US Ecology, another waste management firm. Trading at around 28 times its estimated earnings for the next 12 months, the stock isn't necessarily cheap. But analysts project that Republic can grow earnings by over 10% in 2023—a decent clip in a slower growth environment. And the company should be more insulated in a short-term recession, Keith notes, since many of its contracts are of longer duration and can't be modified.

**Otis Worldwide** is an elevator equipment manufacturer that, though not in “exactly a super glamorous industry,” is what Keith

## PICKS FROM THE EXPERTS

**Republic Services**  
(RSG, \$134)

**Otis Worldwide**  
(OTIS, \$78)

**Microsoft**  
(MSFT, \$241)

**Sysco**  
(SYY, \$85)

PRICES AS OF 11/18/22

Unless you have large-scale business failures, Microsoft's services are still going to be in pretty strong demand.”

ERIC SCHOENSTEIN —  
JENSEN INVESTMENT MANAGEMENT

considers a “very good business in terms of being able to generate consistent profits and cash flow.” Otis is the leading firm in the elevator industry worldwide, with over \$14 billion in revenue in 2021, and its business is split between new equipment sales and servicing and upgrades of existing elevators. There are a lot of aging elevator systems that need to be replaced in commercial buildings, Keith notes, so there's a “nice replacement cycle in front of us.” Service and maintenance, meanwhile, provide recurring revenue for Otis and make its earnings more predictable. While the company has been hurt by commodity costs and unfavorable exchange rates driven by the strong dollar, Keith believes it can keep steadily growing earnings. Otis also doles out a nearly 1.5% dividend yield, and year to date has repurchased \$700 million worth in shares. Although revenues aren't expected to go gangbusters in 2023, the Street expects Otis to increase earnings per share by a hefty 12% next year. Its shares trade at around 24 times estimated forward earnings, and Keith believes investors can take a ride—hopefully, upward—on this “very wide-moat business.”

Seeking steadiness doesn't require sacrificing growth. Jensen's Schoenstein still believes **Microsoft**, which was also featured on our stocks to buy for 2022 list, could provide investors with both. “Because it's



commercially focused, it's not so much about the economy growing for them as it is about their business customers continuing to need their services," Schoenstein points out. "Unless you have large-scale business failures, Microsoft's services are still going to be in pretty strong demand." That includes the tech titan's enterprise office and productivity software as well as its powerhouse cloud unit; those offerings "are actually allowing companies to be more efficient, which helps them in recessionary times," he notes. Microsoft ended its 2022 fiscal year in June with just shy of \$200 billion in revenue, and analysts project it can grow revenues by about 7% in the fiscal year ending June 2023, and 14% the following fiscal year. That would be below the company's average of around 15% or so in the past five years, but it still represents a decent pace, given the lackluster economic backdrop. With its shares trading at about 25 times forward earnings, Microsoft also doesn't come nearly as expensive as some of its growthy tech peers.

Parnassus's Keith believes that **Sysco** also fits into the "recession-proof bucket." Sysco is the world's largest food distributor, servicing the likes of restaurants, hotels, and hospitals. Keith notes that the company has benefited from having "very significant market share" in the U.S., at about 17% of the fragmented field. That leadership position helps the company on many fronts: "Sysco is investing in their business in terms of technology, in terms of their employees, [and] having the ability to service customers more efficiently," Keith says, which should help them gain even more market share. She also points to the firm's track record for surviving downturns well, noting that it navigated the 2008 financial crisis deftly: "There's a really strong case here that the company can weather additional downturns." Although recessions often prompt consumers to spend less money at restaurants, Keith notes that owing to changes in demographics and spending habits, consumers will likely continue eating out if the economy slumps in 2023. And if inflation does begin to meaningfully cool next year, that should also help Sysco by lowering its costs for fuel and other expenses. Analysts expect the company to post a whopping 53% earnings per share growth in the fiscal year ending June 2023; the stock trades at a reasonable 20 times the next 12 months' earnings, with a 2.3% dividend yield.

□

## IPOs TO WATCH IN 2023

**STARTUPS SEEKING to go public faced a tough time in 2022, as a sobering economic reality extinguished the overblown valuations and rapid dealmaking that defined Silicon Valley in recent years. As of mid-November, there had been only 64 IPOs with a market cap over \$50 million, raising a total of \$7.6 billion; through the same period in 2021, there were 397 IPOs of that size, raising \$142.2 billion, according to Renaissance Capital. Analysts say macroeconomic conditions are far from where they need to be to see IPO activity pick up significantly. Still, there's pent-up demand—and eventually there will be huge opportunities for investors when the more than 1,200 unicorns worldwide begin to enter the public market. And a few hit IPOs could revive investor interest. "After a few well-capitalized and well-known companies go public and perform well, we expect the focus will be back on growth," says Barrett Daniels, U.S. IPO services co-leader at Deloitte. Here are three companies that analysts say are positioned to find success in public markets sooner rather than later. —Lucy Brewster**

### TURO

■ The San Francisco-based car-sharing company first filed for approval to go public with the Securities and Exchange Commission in January; it has since updated its filing twice, "a sign that they're still trending to IPO at some point," says Nick Einhorn, vice president of research at Renaissance Capital. Back in January, Turo reported \$330.5 million in net revenue for the first nine months of 2021—well past the \$100 million that some analysts say is the minimum threshold for going public.

### WIZ

■ Wiz, an Israeli software-cloud startup, has grown from \$1 million to \$100 million in annual recurring revenue in just 18 months, and a fundraising round in December 2021 gave it a \$6 billion valuation. While Wiz has not announced plans to go public, Peter Cohan, a business professor at Babson College, projects it will do so soon. "At \$100 million in revenue, especially if you're growing at triple-digit rates, there's a very high likelihood... that your stock will probably do well after you go public," he says.

### MN8 ENERGY

■ Einhorn also sees an IPO looming for MN8 Energy, a solar energy producer launched and wholly owned by Goldman Sachs Asset Management. The company, which operates about 850 solar projects in the U.S., filed to go public in September on the New York Stock Exchange, reporting \$178 million in revenue in the first six months of 2022.



## CLASSIC RECESSION STOCKS

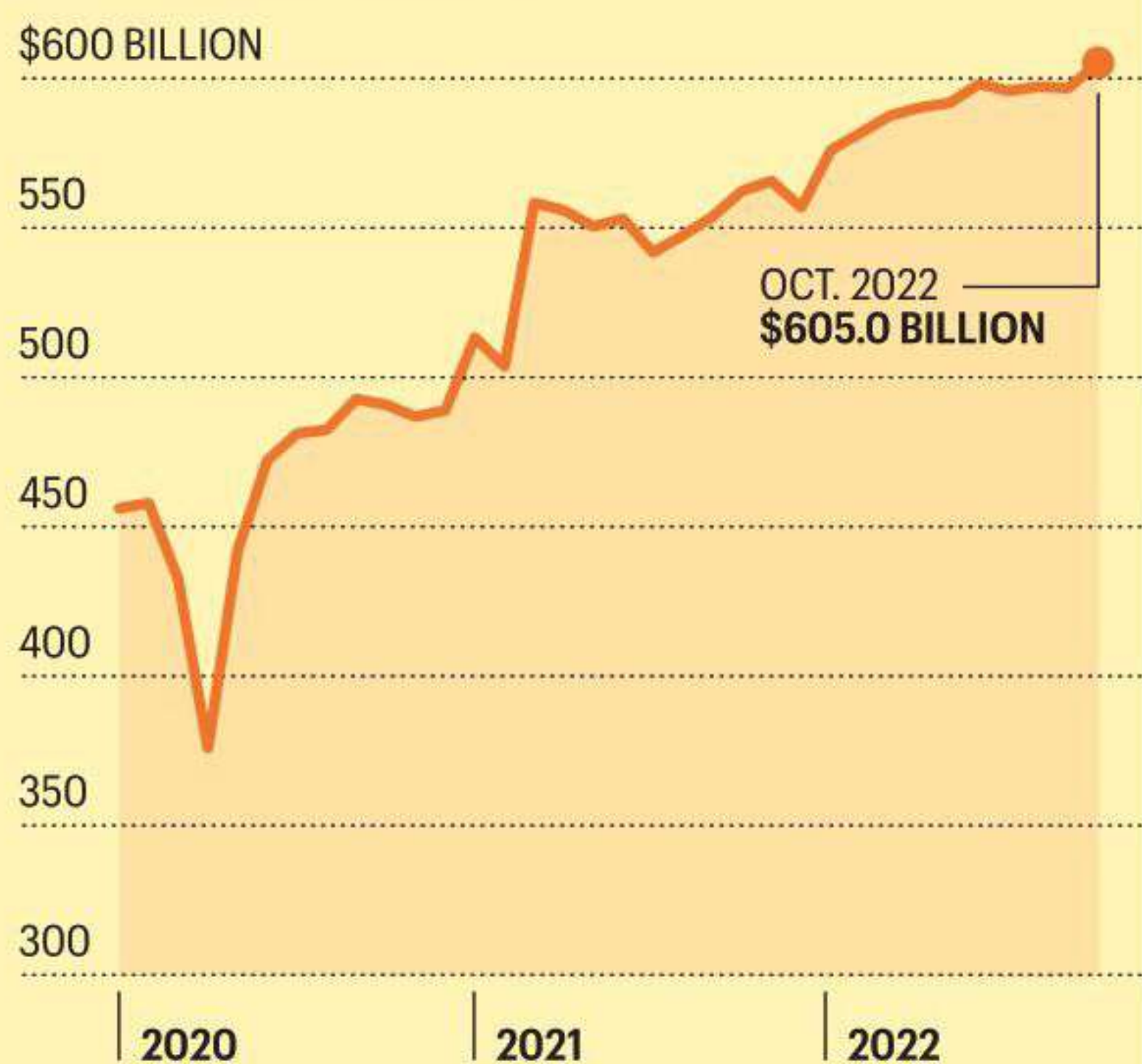
**IN DIFFICULT TIMES**, it can be comforting—and prudent—to return to what you know. And some money managers suggest doing just that, recommending stocks in industries that historically hold up well in recessions and lower-growth environments.

**TJX**, the off-price retailing giant whose stores include T.J. Maxx and Marshalls, is a longtime favorite of Eric Schoenstein's. TJX falls into the category of what Schoenstein calls "treasure hunt" stores, where budget-conscious customers search for deals. He points out that there's a "good track record of strong consumer trade-down spending in recessionary periods," which should be a boon for TJX if 2023 is as glum as some CEOs fear. The company buys some of its inventory from full-price department stores that can't sell it—and Schoenstein believes that if there is a recession, TJX should be able to get more of that discounted overstock. Morningstar analyst Zain Akbari is of the same mind, writing in a recent note that "with consumers increasingly

## NONSTOP SHOPPERS

**Retail sales have stayed strong this year even as anxiety about inflation has spread—a sign that could bode well for many consumer-oriented companies.**

### MONTHLY RETAIL SALES



SOURCE: U.S. CENSUS BUREAU

□

## PICKS FROM THE EXPERTS

**TJX**  
(TJX, \$78)

**Procter & Gamble**  
(PG, \$143)

**Zoetis**  
(ZTS, \$146)

**O'Reilly Automotive**  
(ORLY, \$838)

**Heineken**  
(OTC:HEINY, \$45)

**HDFC Bank**  
(HDB, \$68)

**Universal Robina**  
(PSE:URC, \$2)

PRICES AS OF 11/18/22

looking for value amid an unsettled economic landscape, we believe TJX is well positioned." The Street expects TJX to increase earnings per share by about 11% next year and to almost double that in 2024. The stock trades at 23 times forward earnings and comes with a 1.5% dividend yield.

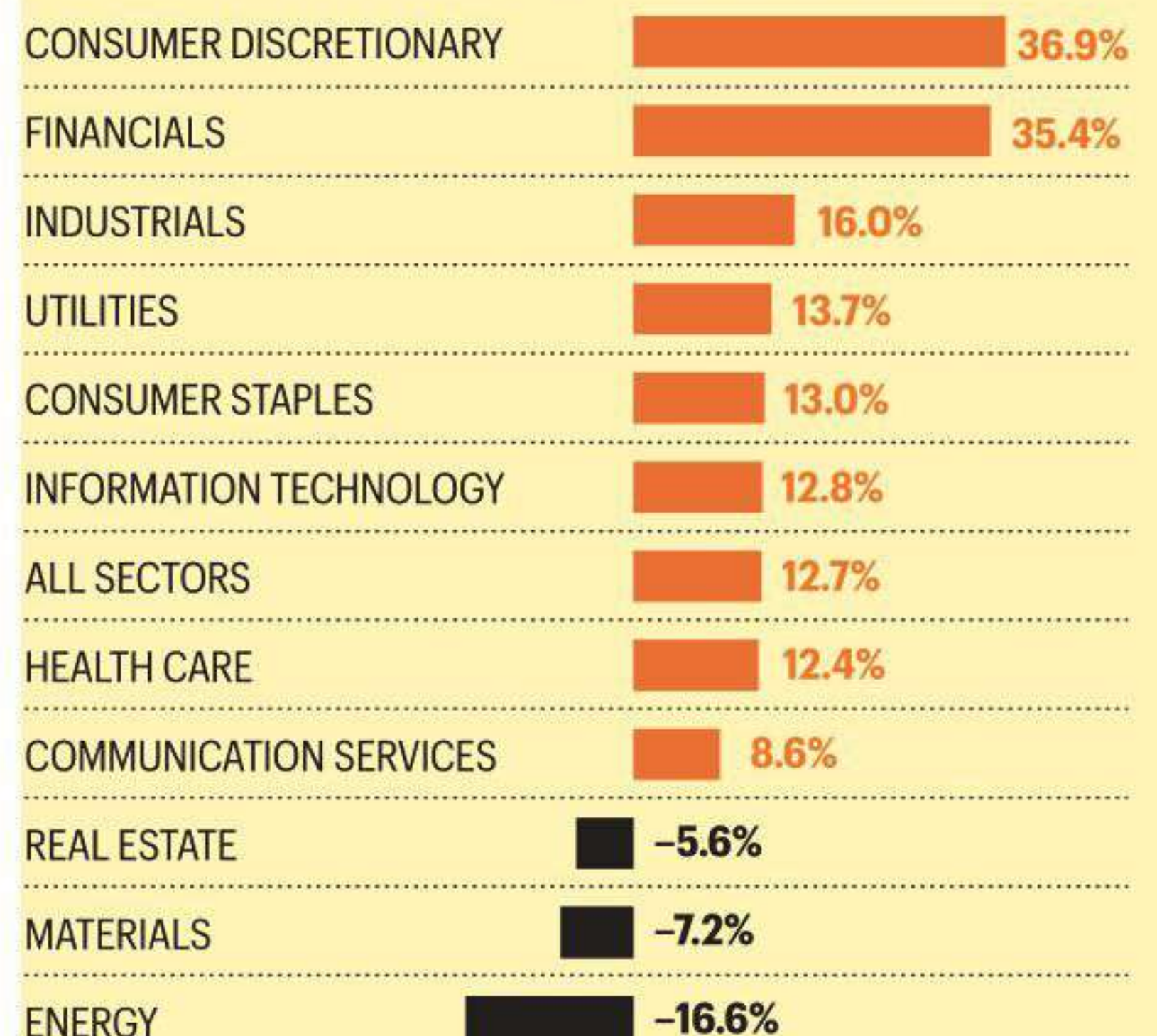
For investors who are really wringing their hands about the possibility of a 2023 recession, Schoenstein recommends tried-and-true **Procter & Gamble**, what he considers "your classic consumer staple that ought to be pretty good during a recession." The consumer goods titan's business focuses on "personal care, grooming, home care, fabric care, baby care," he notes. "People don't stop spending on those things." And even if tougher times and sticky inflation prompt consumers to look for the cheaper brand on the shelf, Schoenstein says, P&G has some lower-price brands within its family of products.

As a large holding in the S&P 500 (it has a market cap of well over \$300 billion), P&G has been hit by the overall selloff in the market; its share price has declined over 13% so far this year, as has the benchmark index. But Schoenstein says the company is still "showing strong,

## ROLE REVERSALS

**Soaring interest rates are expected to suppress earnings in recently hot sectors like tech and real estate, while boosting financials and utilities.**

### ESTIMATED EPS GROWTH, FY 2022 TO 2023



SOURCE: S&P DOW JONES INDICES



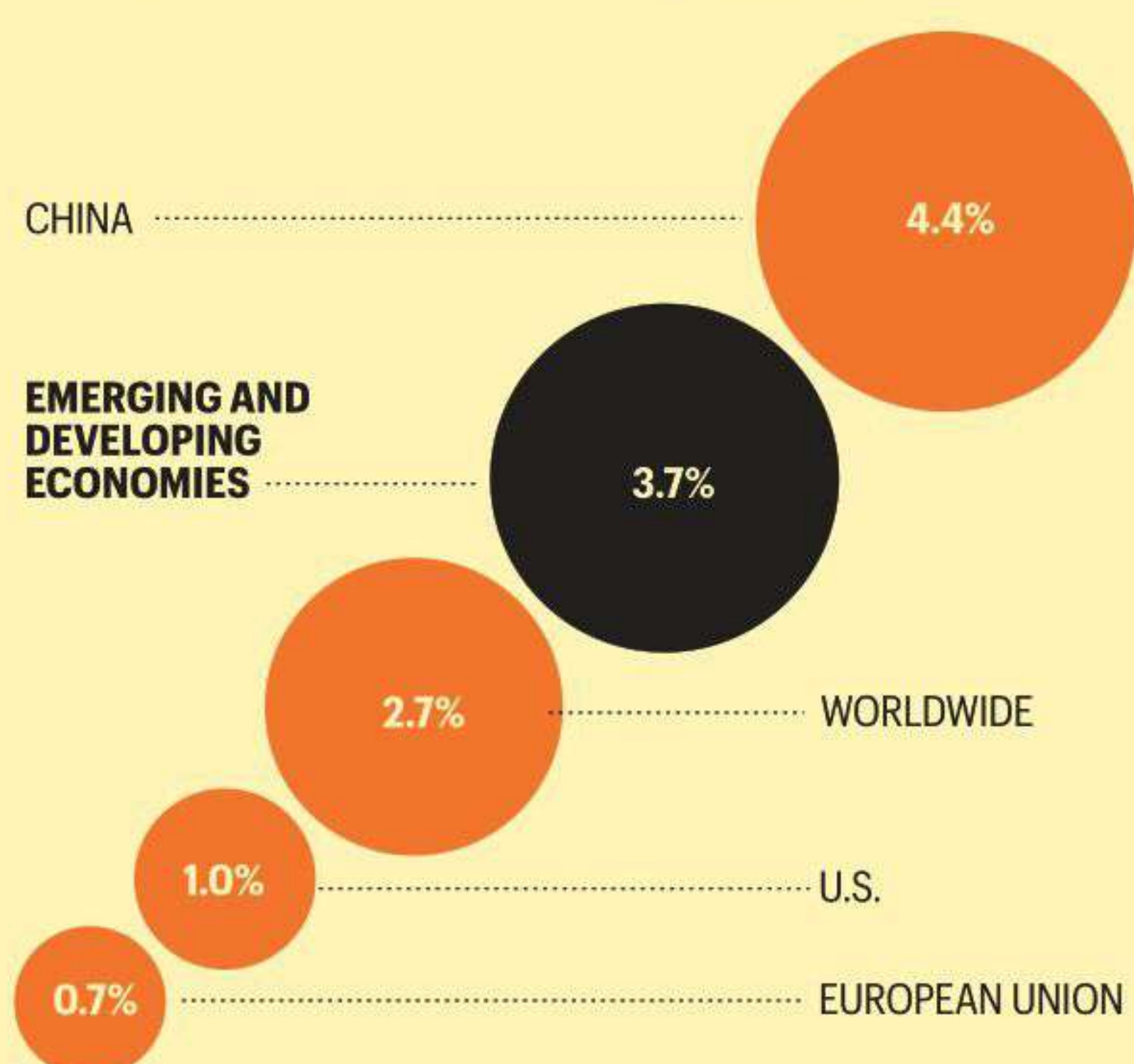
resilient, organic revenue growth”; from his perspective, that’s an upside that offsets hits to P&G’s business that have been driven by currency issues, with the U.S. dollar having soared compared with other global currencies. Both earnings and revenue growth are expected to be muted next year, but Schoenstein highlights P&G’s 2.5% dividend yield as something that strengthens its case for investors. If the company posts the anticipated growth, he says, it “will have a better opportunity to stand out in investors’ minds as everything else slows.”

James Tierney, chief investment officer of concentrated U.S. growth at AllianceBernstein, favors **Zoetis**, which makes medicines and vaccines for pets and livestock. “Animal health is going to be something that you need year in, year out, whether you have a recession or not,” Tierney notes. The stock has encountered some headwinds, including exchange rate issues, since a sizable portion of its business is outside the U.S.; supply constraints; and a shortage of veterinarians working in clinics. These factors have prompted Zoetis to lower sales guidance for the year, and its stock is down nearly 40% in 2022. But Tierney says the company’s balance sheet is “ironclad,”

## GROWING ABROAD

**Emerging-market economies are likely to generate more growth in 2023 than the U.S., in part because many are only now rebounding from peak-COVID lockdowns.**

### EXPECTED REAL GDP GROWTH, 2022–23



SOURCE: IMF

and believes that issues like vet supply will correct themselves next year. CEO Kristin Peck said on Zoetis’s recent earnings call that she’s optimistic the firm has the drug pipeline, market dominance, and financial fortitude to “continue outpacing” growth in the animal health market. Zoetis is expected to bring in nearly \$8 billion in revenue this year, and analysts estimate the company can grow earnings by over 8% in 2023, while revenues could grow more than 6%.

Recession or not, if your car needs to be fixed, you’re going to fix it. That’s why Parnassus’s Keith likes **O’Reilly Automotive**, the auto-parts retailer. In tougher economic times, Keith notes, “drivers hold on to their cars for longer [and] look to do more repairs versus purchasing new cars,” a trend that should benefit O’Reilly. She applauds the company’s strong cash flow generation and sturdy balance sheet, and says it has typically performed well in recessions. On the back of a strong third-quarter earnings report, during which the company beat estimates and raised earnings guidance for the full year, analysts across Wall Street upped their price target for O’Reilly. And the Street estimates the company can grow earnings per share by over 12% next year, a hearty clip faster than the 6% they expect for 2022. O’Reilly’s stock, meanwhile, is expected to trade around 23 times forward earnings in the coming year.

## EMERGING-MARKET BETS

**RAMIZ CHELAT OF VONTOBEL** says investors may be surprised to find that some emerging markets will be “quite resilient” in 2023—in particular India and Brazil, whose economies could outperform markets like the U.S. heading into next year while at the same time having room to cut interest rates. Factors like these, in those and other countries, could make emerging-market growth look more appealing than developed-market growth in certain areas next year, Chelat argues.

For those reasons among others, Chelat likes **Heineken**, the globally known brewer based in the Netherlands. Chelat says the company has a strong presence in Brazil and Southeast Asia, “which are seeing improving growth” as they accelerate their post-COVID pandemic reopening. He believes those markets structurally “should be in better shape in 2023 and beyond” than the U.S. Chelat notes that despite weaker earnings in the most recent quarter, Heineken has maintained strong pricing power, while generating organic volume growth in the upper single digits. Analysts estimate that Heineken can grow revenue in the 8% range and earnings per share by about 7% for the next calendar year. In 2023, the stock is expected to trade at a reasonable 17 times forward earnings (it’s currently trading at around 14).

Chelat is particularly bullish on India in the wake of systemic reforms of the country’s tax and bankruptcy laws. India’s GDP is estimated to grow at around 5% next year, a rate which, while slower than in 2022, will likely outpace that of the U.S. and other countries. Chelat argues that India is a market that’s poised for growth in mortgages and consumer credit. That belief is reflected in his enthusiasm for **HDFC Bank**, a longtime holding of Vontobel’s, which he says is still “taking market share in its core segments, in mortgages in particular.” That business is only expected to get stronger as the company completes its merger with one of India’s leading housing finance firms. Chelat says the combined network will be able “to sell mortgages across a much wider branch network and leverage



# \$1.001 TRILLION

## MARKET CAPITALIZATION LOST BY AMAZON.COM

between July 9, 2021, and Nov. 9, 2022, making Amazon the first publicly traded company ever to lose \$1 trillion in market value

HDFC Bank's deposit strength." Analysts are optimistic, predicting nearly 21% revenue growth for the fiscal year ending in March 2024 (for the current fiscal year, ending next March, analysts estimate it will bring in over \$14 billion in revenue), while earnings per share could grow roughly 17% in the same time frame. Trading at around 19 times the next 12 months' estimated earnings, HDFC's stock is among the cheaper picks on *Fortune*'s list—a potentially nice entry point for investors willing to bet on emerging markets.

For those who have faith in consumer demand in Southeast Asia, AllianceBernstein's co-CIO of concentrated global growth Dev Chakrabarti recommends Philippines-based **Universal Robina**. It's a consumer staples company that makes snacks, cup noodles, and beverages, exporting its wares to countries like Indonesia and Vietnam; it brought in \$2.4 billion in revenue in 2021. Chakrabarti believes that Southeast Asian markets are seeing the benefit of manufacturing moving outside of China; he expects that a growing youth demographic and rising incomes will combine to "be a key driver of demand for branded consumer goods." That should all benefit Universal Robina, which Chakrabarti says has taken advantage of the pandemic's disrup-

tions to improve its costs, poising the company to profit from Asia's post-COVID reopening. Though higher costs have put pressure on the company's margins, it recently reported strong sales growth in its third quarter, and Chakrabarti expects it will be able to push through price increases to offset inflation. Analysts expect Universal Robina's earnings to shrink this year, but they estimate the company can deliver over 15% earnings growth in 2023 while growing revenues at around 7%. The stock, meanwhile, comes historically cheap: It's trading 30% below its five-year high as well as below its average price-to-earnings ratio for that period. J.P. Morgan analysts consider the stock an "underappreciated high-quality staples name." That could offer investors an inexpensive way to bet on the Southeast Asian consumer. ■

## HOW FORTUNE DID

To quote a colleague: Oof. We believed our "Stocks for Smoother Sailing" for 2022 would withstand inflation. But prices and interest rates rose far faster than we expected, and our picks lost a median of 41% over the past 12 months. Here's how it went down. —Matt Heimer

### BIG TECH, TAMED

Tech giants are hardly teetering on the verge of extinction. But the growth they saw in the COVID work-and-shop-from-home lockdown era wasn't sustainable—nor, it turns out, were the share valuations that our picks **Microsoft**, **Amazon**, and **Salesforce** were commanding a year ago. They racked up losses of 29%, 49%, and 51%, respectively.

### CHIP SHOT

Few companies dominate their industry like chipmaker **Taiwan Semiconductor Manufacturing Co.**, and in the five years through January 2022, its stock nearly quintupled. This year, the combination of geopolitical tensions and recession fears dimmed its luster; its shareholders lost 32% over the past year, while the S&P 500 lost just 14%.

### COMFORT STOCKS

Our portfolio's only outperformers were consumer staples stocks, which often do well when recession fears loom. Those included **Nestlé**, **Johnson & Johnson**, and—speaking of chipmakers—**PepsiCo**, owner of Frito-Lay. Pepsi was our best pick, with a 14% total return; for more on the beverage and snack giant, see our feature in this issue.





THE AW609 TILT-ROTOR AIRCRAFT FLYS NEAR THE GULF COAST IN PENSACOLA, FLA.

# REVOLUTIONIZING THE FUTURE OF AVIATION

**Leonardo's** AW609 tilt-rotor aircraft, the highest expression of the new Agusta brand, is redesigning point-to-point air travel.

**AIR TRAVEL IS BACK—BUT TODAY'S FLIGHT LANDSCAPE** bears little resemblance to pre-pandemic days. Commercial flights were in chaos this summer, with the pandemic creating airport staffing shortages that resulted in mass cancellations and extensive delays. And with the uptick in “bleisure” travel—tacking leisure time onto work trips—increasing demand even further, it's beyond time for more convenient ways to fly.

Travelers, especially busy executives, are increasingly choosing private aircrafts for their journeys. Leveraging its unique aviation heritage, Rome-based aerospace and defense firm Leonardo has relaunched its Agusta brand for the luxury passenger transport market, offering a wide range of helicopter models, including the premium

AW609: a high-end tilt-rotor that combines a helicopter's convenience with an airplane's speed and range. Starting in the U.S., the revolutionary tilt-rotor aircraft is set to become the world's first such model approved for civilian use.

“Imagine taking off from your own yard, or from the roof of a parking lot, and escaping the time constraints involved in airport travel,” says Paul De Jonge, Leonardo's vice president of marketing. For example, the AW609 tilt-rotor can complete the frequently flown London-to-Milan route in roughly two hours, with no time lost due to car traffic or security lines.

For travelers craving convenience, the AW609 offers a variety of interior configurations that can accommodate up to nine passengers, along with a pilot and copilot. And in

just 40 seconds, the aircraft can convert from helicopter mode to a fixed-wing aircraft, allowing it to accelerate quickly, up to a maximum speed of approximately 500 km per hour at altitude. The AW609 can also be equipped with a range of composite luxury finishes and designed with a refreshment center and lavatory.

But corporate commuting and personal recreation aren't the only uses for the versatile aircraft. “Its unique performance—particularly in speed, range, and flexibility—are ideal for offshore transports, patrols, search and rescues, disaster relief, special operations, and government tasks,” says De Jonge. During a medical emergency, for example, the AW609 can access isolated areas quickly, land without a runway, and speed passengers to a hospital, eliminating the need to switch between air and road travel—and potentially avoiding life-threatening delays.

“The pandemic has caused a shift in perspective regarding air transport that was unforeseeable only two years ago,” explains De Jonge, noting that such travel could impact how cities are designed, extend the reach of life-saving care, and allow far-away innovators to collaborate easily. “The results will change the way we live and travel—transforming the skylines and improving the sense of freedom that mobility provides.” ■









# WILL JAY POWELL BLINK?

## INSIDE THE FED CHAIR'S FIGHT TO CURB INFLATION

□ In the high-stakes battle against runaway price increases, many Wall Street stock traders think Powell is raising interest rates too quickly. Others fear that he'll stop too soon. Why this Washington lifer may have the toughest job in America.

BY  
**CHRISTOPHER  
LEONARD**

← **HAWK OR DOVE?**  
Powell joined the Fed with a reputation as a critic of easy money. But his early tenure as chairman led some critics to doubt his inflation-fighting credentials.

▶ **FEDERAL RESERVE CHAIRMAN** Jerome "Jay" Powell stood at a podium at the Fed's headquarters in Washington, D.C., sending a stern message to the global investment community: The central bank was going to tighten the money supply, even if it hurt.

The Fed had been maintaining rock-bottom interest rates and pumping trillions of dollars into the banking system through an extraordinary program called "quantitative easing." But now it was time to withdraw that stimulus, to keep the economy growing and inflation low. The process, Powell proclaimed, was on "automatic pilot": It would not be slowed or hindered, even if stock prices plunged or the bond market panicked. The Fed was created to do hard things like this, insulated from political pressure, and Powell was determined to do them. Taking a more hawkish stance "has been a good decision," Powell said. "And I don't see us changing that."

It was a scene that could have played out any number of times in 2022, as Powell and the Fed stepped up to fight an unprecedented surge in consumer prices. But this speech took place on Dec. 19, 2018. Powell was still in his first year as Fed chair. The Fed had been pursuing "QE" for nearly a decade, to combat the effects of the Great Recession—and worries over how its actions could distort the economy were growing in Washington and on Wall Street alike.

So Powell assumed the role of financial disciplinarian—and the markets rebelled. Prices for stocks, bonds, and commodities fell in a frighteningly synchronized way, stunning analysts who thought such a coordinated downturn was unthinkable. Over just a three-week span, the S&P 500 fell into correction territory, dropping nearly 16%. On Christmas Eve, normally a quiet trading day, the Dow Jones industrial average fell 3%. Even President Trump, who had appointed Powell a year earlier, began hectoring him to stop tightening, accusing him on Twitter of relying on "meaningless numbers."

Powell had known this could happen: He predicted such turmoil



himself earlier in his career at the Fed, even as he advocated for an end to QE. The bank's loose monetary policy had pumped up asset prices; reversing that policy would come with costs.

But as those costs came due, in real time, Powell and the Fed flinched. Within weeks, Powell abandoned the notion of tightening. "The case for raising rates has weakened somewhat," he said at a press conference the following January. Markets swelled on the news, with stocks and bonds rising in tandem, just as they'd previously fallen together. Autopilot? Disengaged.

The episode became known on Wall Street as the Powell Pivot. And it signaled that Jay Powell, once seen as a contrarian at the Fed, would uphold a tradition that went back to the days of Alan Greenspan's chairmanship in the 1980s and '90s. If things went haywire in markets, the Fed would step in to protect investors—even if it risked making inflation and other problems worse down the road.

Understanding the Powell Pivot is key to understanding the stakes in today's fight against the inflation that's running at its hottest level since the early 1980s, as well as the stock and bond market volatility that has accompanied the fight. Powell has once again promised that the Federal Reserve will tighten the money supply. But many stakeholders—investors, bankers, lawmakers—are betting that he'll pivot again.

"I think a lot of people didn't think Powell would be serious, because he hasn't been," says Sen. Rick Scott (R-Fla.). Scott says he has met with Powell multiple times during the past year to figure out how aggressively Powell might tighten policy. Scott still isn't sure. (Powell declined to be interviewed for this article.)

Similar uncertainty is playing out daily in the markets. Stock and bond prices plunge when alarming inflation data arrives, since it indicates that the Fed will continue raising rates; they rally on any sign of weaker economic activity that might persuade the central bank to

back off. Stock-index moves of two percentage points in both directions *on the same day* aren't unheard of. A key market volatility tracker, the CBOE Volatility Index (VIX), started to rise in late 2021 and has stayed elevated ever since. Markets and economies in Europe and Asia are quaking, too, since rising rates in the U.S. can undermine the value of their currencies.

In eras past, investors might have counted on the Federal Reserve to be an anchor of stability. The central bank is the most powerful institution in finance, and the Ph.D. economists who run it were once seen as the equivalent of brilliant engineers in the control room of a power plant, deftly working the levers to tighten the money supply when inflation was high and then loosening it again when the economy needed a boost. But those days are over—thanks to a decade of the Fed's own unprecedented, sweeping interventions in the economy. Years of zero-percent interest rates, coupled with a radical acceleration of new money printing, have fundamentally redrawn the financial landscape. And it has transformed the Fed's leaders from all-knowing engineers to a group of people feeling their way through a dark room.

One way to measure the change, and the scope of the Fed's footprint in the economy, is to plot the size of the Fed's balance sheet,

## TOO MUCH MONEY

**To fight two crises—the Great Recession and COVID—the Federal Reserve pumped trillions of dollars into the economy. All that cash helped boost prices for assets like stocks, bonds, and real estate. Many economists believe that enormous cash infusion has also contributed to the soaring inflation of the past 18 months.**

### FEDERAL RESERVE'S BALANCE SHEET



SOURCE: BOARD OF GOVERNORS OF THE U.S. FEDERAL RESERVE SYSTEM

### 12-MONTH CHANGE IN CONSUMER PRICE INDEX



SOURCE: BUREAU OF LABOR STATISTICS



# \$4.2 TRILLION

**MONEY ADDED TO THE FED'S BALANCE SHEET DURING POWELL'S CHAIRMANSHIP**  
 Virtually all of that total represents bond purchases designed to prop up the U.S. economy during the COVID crisis.

which increases when the Fed creates money. Between 2008 and 2014, under QE, the balance sheet exploded from \$900 billion to \$4.4 trillion. That was just the beginning. When COVID hit, Jay Powell oversaw the largest economic intervention in history, roughly doubling the balance sheet to nearly \$9 trillion, where it hovers today. The consequences of this policy are far-reaching. The Fed created all that money by purchasing U.S. Treasury bonds (more on that later). By the middle of this year, the central bank owned 25% of all outstanding U.S. Treasury bonds.

When an entity's footprint is that big, every step can cause an earthquake—as the Fed has proved in 2022. Under Powell, the Fed raised rates six times between March and November, bringing the benchmark short-term rate from 0.25% to 4%, with a seventh increase likely in December. Powell has paused QE, as well. Meanwhile, stock prices have fallen. U.S. debt has gotten far more expensive. Corporate borrowers are at risk. And no one really knows how bad it might get.

Powell comes to this job from a background that makes it difficult to predict his next move. He is the first noneconomist to lead the Fed in decades. For his entire career, he has been a fixer between the worlds of big government and big money on Wall Street. Trained as a lawyer, he's a former private equity dealmaker, having worked at the venerable Carlyle Group from 1997 to 2005—where he led one spectacularly profitable buyout, of an old-line industrial conglomerate called Rexnord. Powell is a true creature of the nation's capital, having been born in the wealthy suburbs of Washington and worked around the rich and powerful his whole career.

Still, there's an ordinary-guy quality to Powell. He's quick to make a joke at his own expense, with a kind of humility that seems

impossible to fake. He has been known to ride his bike to work at the Fed, to stay fit. When he talks, he unspools his comments thoughtfully, building his arguments the way a chipmaker might solder pieces onto a circuit board.

"He's just a good thinker," says Betsy Duke, a former Federal Reserve governor who worked closely with Powell after he joined the Fed, in 2012. Duke, like Powell, came from private-sector finance. She was always impressed with the way he thought through problems, like an investor looking at complicated data. Duke recalls when Powell gave a presentation on the cost of Medicare. He explored the very root of the problem, using data on the ratio of per-capita health care spending compared with quality of outcomes, which is much higher in the United States than elsewhere. Narrow that gap, Powell argued, and the cost problems of Medicare essentially disappear. "He makes connections that aren't obvious from the way the data is normally read," Duke says.

But this flexibility only heightens the mystery about Powell's approach to inflation. He has changed positions on important monetary policy issues before, and he describes those changes as a hallmark of his leadership. These aren't political decisions, he insists. They're just the actions of a pragmatist responding to ever-shifting circumstances. "My views evolve with the evidence," Powell told me in 2020.

Current and former colleagues described this as one of Powell's strengths. On Wall Street and in Washington, however, no one is certain just which way Powell's evolution might take him—which means they can project their hopes, or fears, onto his every utterance.



**WHEN POWELL** joined the Fed's Board of Governors in 2012, he was something of a dissident. He started raising concerns almost immediately about the Fed's core policies and its activist approach.

The Fed's leader was Ben Bernanke, arguably the most interventionist Fed chairman in history. The central bank can't build dams, educate students, or put a shovel in somebody's hand. All it can do is print money, and after the global financial crisis struck, Bernanke did that to a degree unseen in history. First, Bernanke pushed the Federal Open Market Committee to keep short-term interest rates at zero. Rates had only briefly brushed the floor of zero in the past—the Fed would keep them pinned there from 2008 until the end of 2015. And it was Bernanke who launched the far-reaching and radical experiment of quantitative easing.

QE is effectively a way to pump money into bank vaults, giving



those banks, in turn, more money to lend or invest to prop up the economy. To do that, the Fed contacts a big bank—say, Wells Fargo—and asks to buy \$10 billion worth of Treasury bonds. When Wells Fargo sells the bonds to the Fed, the central bank simply creates new dollars to fund the purchase. Those dollars instantly appear inside the bank's reserve account at the Fed. Over the past 15 years, the Fed repeated this transaction until it had created trillions of dollars.

Critically, all this new money was created even as the Fed was keeping short-term interest rates pegged at zero. This strategy—of pumping money into Wall Street while reducing the ability to earn interest on that money by saving it—created a powerful force known as the “search for yield.” Big investors like insurance companies or pension funds had to frantically seek higher returns from riskier investments, because rates were so low. This, in turn, drove up the price of stocks and bonds as trillions of new dollars chased the same pool of assets.

The policy dramatically increased inequality. The richest 1% of Americans own nearly 30% of the nation's assets, up from about 18% two decades ago, according to Fed data, while the bottom half own about 5%. Since wealthier people hold a greater share of their net worth in stocks and bonds, QE helps explain the extraordinary gains at the top during the 2010s, even as most wage earners treaded water. Wall Street, meanwhile, became increasingly attuned to the Fed, and multiple “taper tantrums”—in which asset prices plunged when the Fed moved to taper off QE—helped convince many observers that catastrophe would ensue if the Fed took away the punch bowl.

Powell arrived at the Fed arguing that QE was getting out of hand: “We need to regain control of this,” he said during one market committee meeting in 2013. In another, he warned that QE had inflated some asset prices to levels that could precipitate a disaster. In his opinion, the Fed was piling up long-term risks—of runaway inflation, of a future asset-price crash—for very small short-term gains. Powell's approach to this debate was telling. He is not the kind of guy to pound on a table or make extreme comments; rather, he builds on granular detail, overlaid with his analysis. To make his case during a debate in 2013, he shared results from a survey of 75 investment managers; 84% said the Fed was inflating the value of assets like corporate junk debt. “The eventual correction could be large and dynamic,” Powell said during another meeting, using economist jargon to describe a steep market drop.

Needless to say, Bernanke wasn't happy to hear this. QE was Bernanke's brainchild. It would eventually be a huge part of his legacy. And over time, Powell's reservations eased; in 2015 he even gave a speech in which he praised QE. When asked what changed, Powell said that new data had emerged which supported quantitative easing. But Powell's colleague and friend Richard Fisher, former president of the Fed regional bank in Dallas, told me in a 2020 interview that he was skeptical of that take. More likely, Fisher said, was that Powell conformed to the predominant views inside Fed leadership circles. “The evolution may well have come from being there longer, being surrounded by brilliant staff that has a very academic side,” Fisher said. “You're living in a cloistered atmosphere... You conform more.”

When Powell became chairman of the Fed in early 2018, the central bank was trying to tighten monetary policy, in part because the economy had finally rebounded to close-to-normal growth and low unemployment. By mid-2018, the Fed had hiked rates from zero to roughly 2.5%. But later that year, when Powell threatened to take his foot off

# 25%

**SHARE OF U.S. TREASURY BONDS OWNED BY THE FEDERAL RESERVE**  
Quantitative easing has left the Fed with a huge number of government bonds on its books.

the QE gas pedal, was when the markets went haywire and the president went ballistic. The Powell Pivot put that headache to rest.

During the COVID crisis, of course, the Fed again pumped trillions of dollars into the market and kept rates pinned at zero. Even in mid-2021, the necessity of tightening or normalizing it seemed like a distant problem. Then, as price increases ramped up, Powell initially telegraphed a lack of concern, calling it “transitory,” a misreading of the situation that now hangs around his neck. Instead, inflation spread deeply throughout the economy and began to gather heat. It hit 9.1% by June.



**THE FED'S CORE JOB** is to kill inflation, and the only way it can do that is by tightening policy, which Powell has sworn he will do. During a speech at the Fed's August retreat in Jackson Hole, Wyo.—after four rate hikes in the previous five months—Powell delivered a sobering and shockingly direct message: The Fed was going to hike rates and keep them high until inflation fell to its target of 2%. If this caused pain in the economy, so be it. “These are the unfortunate costs of reducing inflation,” he said. “But a failure to restore price stability would mean far greater pain.”

Powell remains under pressure—both implied and explicit—to pivot again. On Halloween of this year, Sen. Elizabeth Warren (D-Mass.) sent Powell a letter, which her office immediately made public. Warren wanted Powell to explain exactly how many jobs might be lost as the Fed tightens interest rates, and how wages might be affected. She quoted Powell's own comments in which he said the Fed should tighten even if it leads to a recession. “These statements reflect an apparent disregard for the livelihoods of millions of working Americans, and we are deeply concerned that your interest rate hikes risk slowing the economy to a crawl while failing to slow rising





prices that continue to harm families,” Warren wrote in the letter, which was cosigned by 10 other progressive lawmakers.

Warren’s letter seems to assume that Powell has a significant measure of freedom. In fact, his path involves navigating a narrow causeway between two unappealing outcomes. He can tolerate high inflation, and risk that it gathers strength and begins to rage out of control. Or he can tighten the money supply, and risk recession and possibly a financial crisis.

If left unchecked, inflation can enter a self-feeding spiral, punishing working-class and poor families as prices increase much faster than their wages. Investors, meanwhile, face their own threats: All those risky deals made during the massive “search for yield,” many with borrowed money, must be reevaluated in a world where the short-term interest rate controlled by the Fed remains at 4% or higher, rather than near zero.

Interest-sensitive parts of the economy are already being hit, with the housing market slowing down as mortgage rates hit the highest level in decades. Heavily indebted corporations face a tough environment as rate hikes increase their interest expenses. The S&P 500 lost nearly 25% of its value between January and September. An extended period of high interest rates would almost certainly put millions of Americans out of work, with unforeseeable repercussions.

↑  
**THE PANIC BEFORE THE PIVOT**  
 Traders at work at the New York Stock Exchange on Dec. 24, 2018. A sharp market plunge that month put pressure on the Fed to reverse its efforts to tighten the money supply, a reversal that came to be known as the Powell Pivot.

Because the impact of tightening has already been so severe, many investors seem certain that Powell will eventually relent: They can’t believe that Powell’s Fed would usher in a financial crisis or a ruinous recession, even to fight inflation. When an inflation reading for October came in at 7.7%—lower than expected, but still painfully high—the Dow jumped another 1,200 points. Some of the calls for dovishness are coming from inside the house, so to speak. Before the FOMC’s November meeting, Chicago Fed president Charles Evans said that the Fed had raised rates so quickly that it might be “getting to a place where policy can plan to rest.” Fed Vice Chairwoman Lael Brainard echoed those sentiments in a separate speech.

Nonetheless, the Fed hiked rates again, at its November meeting. At the press conference afterward, Powell tried to throw cold water on any notion that he’d pivot. “What I’m trying to do is make sure that our message is clear, which is that we think we have a ways to go,” Powell said. How far is “a ways”? Powell, by his very nature, probably won’t know until he gets there. Investors, meanwhile, are stuck in the back seat, asking, “Are we there yet?” as their carsickness grows. ■

*Christopher Leonard is the author of The Lords of Easy Money (2022, Simon & Schuster).*



# TANZANIA

PART 1



## East Africa's Trade and Investment Hub

Tanzania has witnessed impressive growth in recent years, and under Her Excellency President Samia Suluhu Hassan's guidance, the nation continues its rise to prosperity.

**I**n 2020, Tanzania achieved lower-middle-income status following decades of economic growth, and today the nation is more prepared than ever to continue its rise toward prosperity. "As our country achieves the status of a middle-income economy, the impetus is placed on continuing to build a competitive and industrial economy for human development," states Her Excellency President Samia Suluhu Hassan in the third Five-Year Development Plan (FYDP).

Tanzania's third FYDP is firmly guided by national policy frameworks and built on the strategic priorities of the United Nations Sustainable Development Goals. Its objectives include increasing the country's capacity for production; building a competitive economy to attract trade and investment; stimulating human development; enhancing key production infrastructures; strengthening education and training systems; improving agricultural production to eliminate hunger; and tackling rural poverty by ensuring access to financial services.

The leadership of the country is committed to achievement of these objectives. "Her Excellency Samia Suluhu Hassan is a vigilant, strong, hardworking, honest, and responsive leader with a consistent vision of bringing great progress to our country," says Hon. Mwigulu Nchemba, Minister of Finance and Economic Affairs.

The nation's banking and financial sector is critical to the success of these initiatives, as financial inclusion is empowering the Tanzanian people toward autonomy and strengthening the economy in the process. "You must ensure that financial inclusion is not only inclusive, but also accessible and affordable," says Professor Florens Luoga, Governor of the Central Bank of Tanzania.

Digitalization and digital tools in the banking sector are key to opening the doors to accessibility, convenience, and competitiveness. "Digitalization is inherent to growth," says Jaffari Matundu, CEO of



Professor  
Florens Luoga,  
Governor of  
the Central Bank  
of Tanzania

"This is the greatest time to invest in Tanzania because Tanzania has been transiting, and as we strengthen the banking sector, investors can finance projects in Tanzania."

EXIM Bank. "It's not just to make us more competitive, but to make us more relevant in the market."

Tanzania has grown over the years by exploiting its natural resources, especially through mining. Her Excellency President Hassan's inaugural speech to the Parliament of Tanzania in 2021 stressed the importance of improving the mining sector's economic contribution to at least 10% of GDP by 2025.

"Her Excellency President Hassan's administration is improving the investment climate and embracing partnerships with the world's largest miners, among other measures that seek to almost double the contribution of the mining sector to the economy," says Hon. Doto Biteko, Minister of Minerals.

Gold is among the largest contributors to the mining sector, which accounted for US\$2.743 billion in exports in 2021. "Gold is definitely the most important mining commodity, and many people are forecasting a gold price increase in the future. If that happens, it would be a growth opportunity for Tanzania," says David Scott, Tembo Gold President and CEO.

As one of Africa's fastest-growing economies, Tanzania is focused on developing all sectors of the economy, including the tourism sector, which has witnessed a sharp increase in activity in response to the waning effects of the COVID-19 pandemic. The nation has all the tools for future growth: a young, determined, and tech-savvy workforce and a government administration that empowers young women to believe in themselves and declares that no goals are too far out of reach.

Under the guidance of Her Excellency President Hassan, Tanzania has recently witnessed growth that has surpassed expectations. To achieve its future growth projections, Tanzania is now positioning itself as East Africa's trade and investment hub.

"This is the greatest time to invest in Tanzania because Tanzania has been transiting; it has experimented with a command economy, and as we strengthen the banking sector, investors can finance projects in Tanzania," says Luoga.



A SPECIAL REPORT PRODUCED BY



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## CRDB BANK PLC

# CRDB Bank's Drive for a Digitalized Future

Abdumajid Mussa Nsekela, Group CEO and Managing Director of CRDB Bank Plc, has led Tanzania's largest bank toward greater success for the past three years. Nsekela is looking to expand further, leveraging a variety of digital incentives.



any bustling corporations within Tanzania are driven by technological advancements that underpin the market's ecosystem. CRDB Bank, renowned as a leading banking innovator, has brought automation to its customer service processes and digitalized most of its products.

Today, over 92% of customer transactions are performed digitally.

"Our philosophy is that one must finish the process within the customer's available time. Hence, we have been removing all the unnecessary bureaucratic processes by investing in digital systems and channels," says Abdumajid Mussa Nsekela, Group CEO and Managing Director of CRDB Bank Plc. He says that digital channels have helped the bank register significant success and improve its profit margins, and he is proud of the bank's track record of pioneering digital banking, which has been critical in driving financial inclusion in the country.

The bank has scored several firsts in deploying exciting and innovative products and services to meet the needs of its customers. Last year, amid COVID-19, the bank launched an improved version of its mobile banking solution, SimBanking, enabling customers to access most of its services digitally, including opening accounts, loan applications, insurance services, and bill payments. "We have a dedicated team for innovation, and most of the products and services that we offer, we innovate ourselves," says Nsekela.

Over the past three years, the bank's performance has strengthened on the back of its strategic reforms that continue to boost the group's fortunes, to the benefit of its shareholders. Nsekela attributes the sustained performance to ongoing digital transformations that have unlocked the bank's abilities and leveraged its solid customer base and a favorable business environment. In 2018, when he joined the bank, it doubled its profit to TZS68 billion (US\$29.16 million) from TZS34 billion (US\$14.58 million) the previous year. In 2021, CRDB Bank's net profit peaked at TZS267.56 billion (US\$114.73 million), further consolidating its pole position in the local market.



Abdumajid  
Mussa Nsekela,  
Group CEO  
and Managing  
Director of CRDB  
Bank Plc

It comes as no surprise that Nsekela is looking to expand CRDB's success and performance across East African countries. "We are the largest bank in Tanzania and third in Burundi, but our ambition is to be the leading bank in the region," he says.

The bank is finalizing its expansion plans into the Democratic Republic of Congo—an opportunity to grow its market share in the region. Alongside its steady growth, Nsekela says that the Dar es Salaam-based lender continues to dominate the agency banking business in Tanzania and Burundi, where the bank has a subsidiary. Since their introduction, the CRDB Wakala and Turi Hose networks have become household names for agency banking in Tanzania and Burundi.

**"We have a dedicated team for innovation and most of the things you see we innovate ourselves, and that is the path."**

"We have decided to put more focus into agency banking," says Nsekela. The bank is deploying a new agency banking system to enable it to provide more services to customers, including account opening. The bank has over 20,000 CRDB Wakala locations in Tanzania and over 400 in Burundi.

Nsekela says that the bank is working with regulators to build a more diverse market so financial institutions can operate more efficiently. "Very soon, we'll launch another new service to support entrepreneurship, which will be more digitalized and connected with the government's electronic payment system," he says.

CRDB Bank has aggressively supported sectors of the economy that are recovering from the challenges caused by COVID-19 by taking several actions, including interest cuts. Earlier this year, the bank reduced interest rates on agricultural loans to 9%, from 20%. Moreover, the bank has recently entered into credit line and portfolio guarantee agreements of over TZS500 billion (US\$214.4 million) with Proparco, USAID and DFC, IFC, AGF, and AfDB to support SMEs in the country. The ability of CRDB Bank to attract funding from global agencies speaks to the bank's international standing, reputation, and trusted ability to support economic stability during the COVID-19 pandemic.

Nsekela reveals that the bank's goal is to facilitate a quick recovery of the SME sector and keep the lights of the economy on by ensuring that enterprises can easily access the funds required



CRDB BANK PLC



PHOTO 1: H.E. President Samia Suluhu Hassan (center) transacting on one of the self-service screens in the digital banking area at CRDB Bank's new headquarters during its inauguration ceremony on March 5, 2022.

PHOTO 2: CRDB Bank Group CEO and Managing Director Abdulmajid Nsekela (center), Nnenna Nwabufo, Director General of the Africa Development Bank (AfDB) East Africa (right), and Jules Ngankam, CEO of the Africa Grant Fund (AGF) showing the agreements to empower women entrepreneurs in Tanzania during a signing ceremony in Dar es Salaam in July.

PHOTO 3: The Vice President of Tanzania, Hon. Dr. Philip Mpango, thanks the participants of the CRDB Bank Marathon for raising funds to help the community, while handing over a dummy check of TZS220 million to the Director General of CCBRT Hospital, Brenda Msangi (Fourth from left).

PHOTO 4: Fuat Kemal Uzun, Yapi Merkezi's Project Manager for the Standard Gauge Railway (SGR), during a visit to inspect the project's progress.

to grow their businesses. Nsekela emphasizes that Tanzania's economic recovery is taking place across all sectors, and he is enthusiastic about the country's investment opportunities for both domestic and foreign investors.

"It's not surprising that investors want to invest in Tanzania's economy; our president, H.E. Samia Suluhu Hassan, is doing an admirable job of opening up the country's economy and hastening recovery," he says. "We have all seen how 'The Royal Tour' has successfully promoted Tanzania as a leading country in terms of tourist attractions around the world. It has aided in the recovery of the tourism sector from the pandemic's challenges, while also increasing trade between Tanzania and other countries and attracting investors to Tanzania."

The bank also supports government-led social causes. "In Zanzibar, we are working closely with the government to support the Blue Economy agenda by empowering entrepreneurs. More than 30,000 entrepreneurs have benefited from the program. We support them financially by offering interest-free loans and business training, and by connecting them to markets," says Nsekela.

CRDB Bank also continues to support the country's communities through its corporate social investment policy. "Investing in our communities has always been a part of CRDB Bank's culture. The bank invests 1% of its profit each year to strengthen our communities and support noble causes. Last year,

the bank invested TZS1.8 billion [US\$767,000] in more than 50 projects in health, education, and environmental sectors across the country," he says.

According to Nsekela, this kind of performance, innovation, and sheer dedication to meeting customer needs and transforming the country's economy are precisely why the bank has achieved such great success. He says that CRDB is driven by a culture of excellence, strict adherence to best practices, and an unwavering commitment to customers.

Nsekela's claims are certainly more than rhetoric: Its dedication and excellence recently earned the bank another milestone by winning the Best Bank in Tanzania accolade at the prestigious Euromoney Awards 2022. In 2021, Global Finance Magazine named CRDB Bank the Most Innovative Bank in Tanzania as well as Best Bank in Tanzania for the third year in a row. The bank has also been awarded the Most Customer-Centric Bank award by Pan Finance Magazine and the Quality Achievement Award by the European Society for Quality Research (ESQR).

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## EXIM BANK TANZANIA

# Opening the Door to Investment and Growth

From its beginnings as a small branch to become one of Tanzania's top banks, Exim Bank has evolved and adapted to serve its customers, fully embodying its slogan and business philosophy: Innovation is life.



Established in 1997, Exim Bank Tanzania, the largest subsidiary of Exim Bank Group, counts over 30 branches across the country. What began as a small bank at the start of the liberalization of Tanzania's economy soon transformed into one of the top five banks in the country.

"Exim Bank Tanzania is Tanzania's first international bank, a status we obtained after opening a subsidiary office in Comoros. Our shareholders are innovative businesspeople, and for this reason, we couldn't find a better or more suited slogan than 'Innovation is life,' which embodies our ethos," says Jaffari Matundu, CEO of Exim Bank Tanzania.

The bank's innovative business philosophy has led to its impressive growth as a financial solutions provider. "We were the first bank to introduce credit cards in the country by partnering with MasterCard, and then slowly we expanded," says Matundu. Exim Bank's has extended its reach beyond Comoros to more subsidiaries in Djibouti, Uganda, and Ethiopia, through a representative office.

Throughout its history, Exim Bank has shown organic and inorganic growth, especially within the past two years as the Tanzanian economy exited the repercussions of the pandemic, and it began to grow through acquisitions. "I can proudly say we are among the first banks in the country to start acquiring other institutions," says Matundu. "We were successful in 2020 with the acquisition of one of the largest Pakistani banks in Tanzania, UBL Bank Tanzania Limited, and most recently with the acquisition of FNB Bank Tanzania. These successes have been made possible by our people, who are the most dedicated." Exim Bank has had impressive workforce growth and is aided by its diversity, boasting a gender-balanced staff throughout all its branches.

As an institution with a significant impact and reputation in Tanzania, Exim Bank strives to be a caring member of the community. This is reflected through its Exim Cares social responsibility arm, which addresses significant social issues and integrates its "Exim at work today, for tomorrow" approach that aims for a better future for the communities that support

and surround the bank. "Through Exim Cares, we have always strived to positively impact the communities in five main areas: environment, education, health, financial literacy, and the innovation ecosystem," says Matundu.

In the first half of 2022, before it acquired FNB Bank, Exim Bank delivered a TZS18 billion (US\$7.67 million) profit before tax, continuing its prosperous trajectory from last year, when it reported 39% growth. "Especially with the acquisition of FNB Bank, this is most likely going to be the best year in the last 25 years for us; it's going to be significant," Matundu says. "The 39% growth of 2021 was even in light of the post-COVID-19 impact.

"You can see the growth sectors that are coming up in the country. We see significant growth in the tourism and hospitality industries. From our perspective, about 30% of our customer base, including customer assets and customer liabilities, comes from hospitality, tourism, and related sectors," he says. This growth in the face of global challenges is a testament to the potential of the Tanzanian banking sector.

"We are also seeing significant trade growth, particularly for SMEs, which extends across all sectors and contributes to almost 90% of businesses in the country," adds Matundu, who says that having a very supportive regulator in the country has played a critical role in the bank's growth. "It is a conducive environment, both in fiscal and monetary policy, and that is encouraging growth for all the other key sectors of the economy. At Exim Bank, I think we will probably grow beyond 20%–30%. This shows that in the post-pandemic era, businesses are doing well. The government's support of the private sector is translating into the growth that we are seeing at Exim Bank."

The impacts of the banking sector and Exim Bank have a reverberating effect on the well-being of the entire economy, and Exim Bank's impressive performance since its inception has placed it in a position to be a brand ambassador for Tanzania's banking industry. "The sector, in terms of its contribution to the economy, has contributed significantly to the GDP," confirms Matundu. "Most recently, besides agriculture, electricity, and energy, financial services are coming in, and banking is critical."



Jaffari Matundu,  
CEO of  
Exim Bank  
Tanzania

**"I foresee Exim Bank playing a key role among the top banks in the economy."**



EXIM BANK TANZANIA



The Prime Minister of the United Republic of Tanzania, Hon. Kassim Majaliwa, officially launching a yearlong 1,000-desk donation campaign for primary schools in Tanzania.



Former Deputy Governor of the Bank of Tanzania, Dr. Bernard Kibesse (right), with Jaffari Matundu at the official opening of a new branch, marking the successful acquisition of UBL Tanzania.



The bank has entered a three-year partnership with the Zanzibar Tourism Investors Association (ZATI) as a strategic plan to promote tourism in Zanzibar.

The banking sector is set to soon become even more stable and well regulated, contributing further to the nation's growth and stabilization. "I see a growth trajectory for most of the banks, and I foresee Exim Bank playing a key role among the top banks in the economy," Matundu says. "We are not a foreign bank. We do not have a parent bank overseas. But, as a local bank, we are playing our part to be an important role-player in the economy."

As the needs of the economy rapidly change, the digital tools required to stay ahead of the game are essential. In recent years, technology has rapidly advanced in the fintech sector, ranging from blockchain and digital e-banking applications to cloud computing, to mobile account opening. In all these cases, digitalization is key to the advancement of the banking sector.

"With technology, there is growth," says Matundu. "Digitalization is inherent to that growth. Everyone in this sector is not only trying to be more digital, but they are trying to make digital part and parcel of the banking sector. At the end of the day, it is how you compete, not necessarily with the banks, but will all sectors."

Exim Bank is heavily investing in digitalization, improving its technology, and partnering with fintechs to facilitate innovation in all its operations. "This isn't just to make us more competitive," says Matundu, "but to make us more relevant in the market. It's about offering what is convenient to your customers." Through a partnership with Intellect Design Arena, Exim Bank is realizing major upgrades to its technology platform and digital channels, which will increase convenience for customers and expand its competitive advantage.

With the banking sector in a strategically favorable position, Exim Bank is welcoming foreign investors and partners to contribute to the rising FDI in Tanzania. Through various agreements and government initiatives that support FDI, Exim Bank is working to make an impact on investment contributions in the country. This year, the bank entered a three-year partnership with the Zanzibar Tourism Investors Association (ZATI) as a strategic plan to promote tourism in Zanzibar.

"This partnership provides an opportunity for both parties to work together to ensure that all relevant information about Zanzibar tourism is readily available around the world, and that ZATI members find a solution to their financial needs as well as link us with all the investors coming into the country, particularly in Zanzibar," says Matundu. "Business-wise, we are at an advantage as we are more independent, and our reputable name helps us, as well. We are trying to partner with the government and the Tanzania Investment Center for investors coming into the country. The central bank [Bank of Tanzania] plays a key role in linking investors with most commercial banks, and we are among these commercial banks. In this sense, partnerships have a 360-degree benefit, from government collaboration to connecting with associations that deal with all the investors from overseas."

Tanzania's banking sector has grown significantly since the end of the pandemic, with the government supporting all aspects of the economy and the private sector. It remains clear that the banking industry is poised for explosive growth in the coming years, and the Tanzanian government is focused on boosting investments and the business environment to contribute to GDP growth.

"Her Excellency President Samia Suluhu Hassan and her administration's vision are key to increasing investment in the nation," Matundu says. "In terms of fiscal policies, we should encourage investors to come and do business, and allow the government to focus on overseeing those investment policies. If you are an investor, Tanzania has a conducive environment with sustainable policies at both the fiscal and monetary levels." ●

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## KCB TANZANIA

# Revitalizing Tanzania's Banking Industry

Serving a large segment of the East African community, KCB Tanzania is providing high-quality banking services, rooted in 25 years of experience, that continue to evolve through innovation and digitalization.



Through successful operations lasting a quarter of a century, KCB Tanzania has cemented its position as one of Tanzania's leading and reputable banking brands. The firm is one of the subsidiaries of the KCB Group, which operates across six countries in East Africa and will soon open its doors in the Democratic Republic of the Congo.

"KCB started operations in Tanzania in 1997. It provides standard banking services in the corporate banking segment, and trade finance, retail banking, FX trading, and digital financial services," says Cosmas Kimario, Managing Director of KCB Tanzania, which has seen a significant increase in its operations and profit in the past five years.

The bank currently operates 15 full-fledged branches across the country and has plans to open three more, while also focusing on digital financial service delivery models. "We've got agency banking outlets across the country, which complement our work. Instead of investing in an extensive branch network, we are capitalizing on agency banking [Wakala] to communicate directly with our systems," says Kimario, emphasizing that this strategy reduces the bank's operational costs as well as extends customer reach.

"We are among the top banks in Tanzania when you look at balance sheet size and customer deposits," Kimario says. "When it comes to profitability, KCB is ranked seventh in the industry." He credits KCB's close relationship with its clients and its focus on quick turnaround time for transactions as major contributors to its success. "Look at our core banking system and alternative delivery channels, such as internet banking, mobile banking, ATMs, POS machines, and the agencies, and you will confirm that they are all top-notch. We invest heavily in technology to ensure prompt services," he says.

According to Kimario, targeting sectors that are growing exponentially, such as infrastructure, construction, trade, manufacturing, and transport, has propelled the bank's profitability and growth. KCB is accelerating its digital operations and online banking services and claims to be among the top three banks in Tanzania in terms of digitalization.



Cosmas Kimario,  
Managing  
Director of  
KCB Tanzania

"The focus has been to ensure that most of our transactions are done outside the core banking system," says Kimario. "For example, 97% of our transactions across the group in Kenya are currently done outside the core banking system. We intend to achieve that here. We have invested in a new platform, which will take us to the top in the next two or three years. We are developing a solution whereby our agencies will be directly integrated into our core banking system. If a customer lives in a remote area and deposits money through our agency, this is the same as depositing money in one of our branches."

**"We invest heavily in technology to ensure prompt services."**

Aside from its focus on agencies to reach its clients, KCB partners with different organizations to make its services easily accessible. "We have an arrangement with the wholesaler AzamPay; the aim is to see how we can simplify our deliveries and make our customer services better and easier. We are also in discussion with telcos on how we can work together in various areas including service delivery,

loans, transfers, and money movements. We are looking for partnerships that can improve our services," he says.

Within the next five years, KCB aspires to become one of the top five institutions in the banking industry in Tanzania by expanding its services through organic growth and acquisitions. Kimario says that investing in Tanzania guarantees a good return on investment, as there is high demand for services in different sectors due to inadequate supplies not meeting customers' needs.

"Tanzania has a stable political environment," he says. "It has abundant natural resources, such as huge amounts of gas deposits. Tourism, transport, manufacturing, and health are some of the many sectors that hold appealing opportunities for investors. I'm very pleased and commend Her Excellency, President of the United Republic of Tanzania, for 'The Royal Tour,' which could be seen as an initiative to open the tourism sector as well as to create awareness on the opportunities Tanzania holds."



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A.S. ABRI & Sons Transporters was founded in 1936 to be "a leader in the industry." Staying true to its vision and complementing the dynamic growth of its transportation business, it diversified into other sectors and formed the ASAS Group of Companies in 1978, with the same dedication to excellence and customer satisfaction.

Today, ASAS Group is a national brand and an economically resilient company that boosts Tanzania's economy and the communities it serves. For Faraj Asas, the company's excellent reputation for quality makes a difference in a highly competitive market. "We don't compromise on quality; we would rather not do business if we just deliver and produce low quality. That's why ASAS is still here," he says. He adds that a business has to be strong to grow consistently.

ASAS Group's ability to exercise market leadership, entrepreneurial drive, and strategic brand marketing has grown the company into one of the country's trusted conglomerates.



Faraj Asas, Director of ASAS Group of Companies

Faraj believes that doing good is good for business, and he emphasizes the importance of promoting greatness in a holistic sense to achieve sustainability. The group provides ample opportunities to farmers by giving them livestock and agricultural training at no cost; in return, ASAS Dairy maximizes the value of the raw milk they produce. The dairy is also a pioneer in introducing new quality dairy products to the country, like yogurts, and in educating consumers about their health benefits. The group constantly pursues innovative ways to enhance the goods and services they offer to customers.

ASAS Group advocates compassionate innovation to uplift lives, improve society, and create more opportunities. Faraj explains that putting people and purpose before profit is their greatest asset. "This is what ASAS is: We think about other people, so, before we make a decision, we have to consider how many people will be affected by that decision."

Faraj also praises the Tanzanian government for its support of businesses and entrepreneurs through assistance programs, grants, training, and management advice.

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## TANZANIA AIRPORTS AUTHORITY (TAA)

# The TAA's Welcoming Approach to Tourists and Investors

Mussa Mbura, Director General of TAA, explores how TAA plans to increase airport services and facilities and become one of the leading world-class airport operators.



As Tanzania prepares to welcome more tourists, the country also hopes to create a plethora of remarkable foreign investment opportunities. "TAA is mandated to operate, manage, maintain, and develop 57 domestic airports and one international airport, the Julius Nyerere International Airport [JNIA], on mainland Tanzania," says Mussa Mbura, Director General of the Tanzania Airports Authority (TAA). "TAA offers professional and cost-effective airport services as well as comfortable, efficient, and secure facilities for the movement of passengers and cargo, all aimed at establishing a positive image of our country to the world."

According to TAA's FY 2021–2022 traffic statistics, JNIA, the busiest airport in the country, handled about 86% of the country's cargo tonnage, 66% of passengers, and 48% of all flights recorded at TAA-managed airports. The airport handles 19 international flights and about 23 domestic flights, and Mbura says that the number of passengers recorded during the last fiscal year indicates a 62% growth in passenger traffic.




Mussa Mbura,  
General Director  
of the Tanzania  
Airports  
Authority (TAA)

While appreciating the vital role that airports play in the country, particularly in job creation and the economic growth of local communities, the Tanzanian government, in response to the demand for air travel, has prioritized the expansion and installation of highly developed airport infrastructure to handle passengers and freight. "The African Continental Free Trade Agreement is the pact that will enhance African and Tanzanian trade and investment in general," says Mbura. "Ratification of the agreement has encouraged the government to enhance and strengthen the development of its transportation system from ports, rail, roads, and airports, which allows free access to goods and services across the continent, thereby providing opportunities to face the current trade and markets

that greatly assist in nurturing trade volumes and, consequently, countries' economies."

Amid the current increase in demand for air travel in the country as a result of the recovery of air transport following COVID-19, and the promotion of tourism and investment opportunities that was achieved by the "Royal Tour" PBS film, the Director General is deeply passionate about improving and developing TAA's airport projects to provide high-quality facilities and services to its users.

"Our plans are centered on developing significant infrastructure needs that enhance 24-hour operations and increase airport ability to serve passengers and freighters," says Mbura. With a variety of transport initiatives in place, Tanzania is welcoming foreign investors with open arms and inviting them to learn more about what the country has to offer. 



TANZANIA AIRPORTS AUTHORITY (TAA)  
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**STATE MINING CORPORATION (STAMICO)**

# Worth Its Weight in Gold

By maintaining mining operations at every stage of the value chain, encouraging foreign direct investment, supporting small-scale miners, and finding sustainable solutions to combat climate change, State Mining Corporation (STAMICO) serves as a vital part of Tanzania's mining industry.



Established in 1972, State Mining Corporation (STAMICO) operates to increase the contribution of the mineral sector to the national economy and create employment opportunities for Tanzanians. STAMICO has been

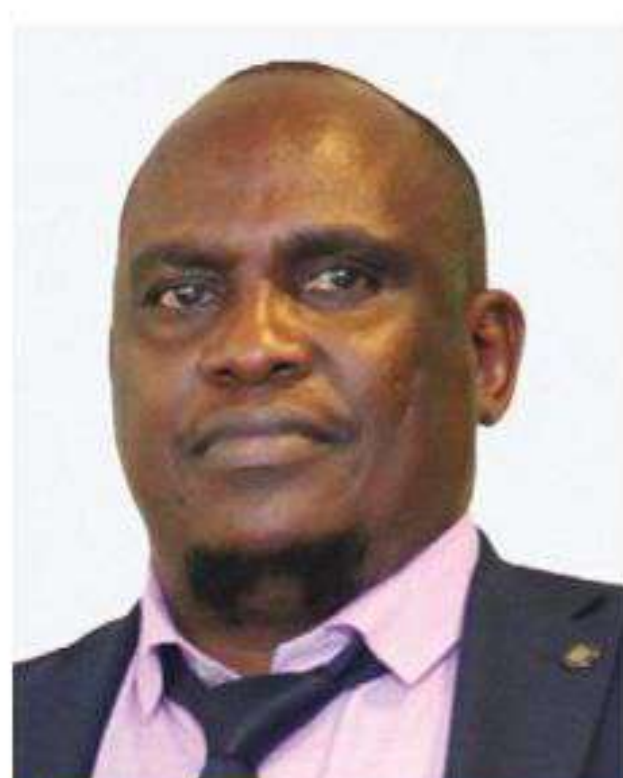
key in bringing high technology to Tanzania through the Mwanza Precious Metals Refinery, inaugurated by Her Excellency Samia Suluhu Hassan in June 2021. A state-of-the-art gold refinery and Tanzania's first new gold refinery since its independence, the facility has a 480 kg daily capacity and can purify gold to 99.99%.

"It's an international business, and we are now finalizing the ISO certification so that the product can be exported anywhere," says Dr. Venance Mwase, Managing Director, STAMICO.

STAMICO has established itself as the only company with numerous joint-venture gold operations with international companies, including the Buhemba and Buckreef gold mines, which have proven to be important economic drivers for the mining sector and the Tanzanian economy. For example, Buckreef Gold, in Geita, is capable of processing 45 tons of gold per hour. "We also operate under a subsidiary company, STAMIGOLD Company Limited, which runs and operates the Biharamulo Gold Mine, which is wholly operated by Tanzanians," explains Mwase.

STAMICO is also involved in sustainable initiatives such as manufacturing coal briquettes, which convert coal waste into an energy source for cooking in households. "This is a campaign and a strategic project to deal with climate change and develop a sustainable way for people to cook," says Mwase.

As the mining industry requires sizable investments in capital, technology, and time, the Tanzanian government has worked hard to make Tanzania a good investment environment. "Sometimes investors must wait 10 years to witness the return on their



**Dr. Venance Mwase,**  
Managing Director of  
STAMICO

investment, but once the investment comes, people start benefiting from day one through employment and local procurement," says Mwase. With this in mind, the government has developed local content regulations, CSR, and soft laws to attract capital and ensure that communities are recognized and benefit from mining operations. "As long as we have good regulations, especially those related to local content, it guarantees that most of the benefits accrue today, while ensuring that investments are well protected and investors are very well served," he says.

Another priority for the company is fostering the success of small-scale mining through education, licensure, and technical assistance. "Although the sector is dominated by foreign capital, we can make sure that locals are able to contribute," says Mwase.

To help small-scale miners, STAMICO has established education initiatives including training and demonstration centers to ensure that miners have the proper information, access to financial resources, and the support of modern technology. With these resources, they can mine efficiently and safely, thereby supporting themselves and making a meaningful contribution to society and the economy.

Today, Tanzania's gold reserves are estimated at 45 million ounces, and gold exports comprise around 90% of the mineral exports of the country. "The sector is dominated by gold, and you find that most of our joint-venture projects are related to gold, including Buckreef and Buhemba," says Mwase. Indeed, Tanzania is a literal gold mine, and the nation still has many unexplored areas in mining and sourcing that are welcoming investors into the sector.

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## TEMBO GOLD

# Developing Tanzania's Rich Mineral Resources

Focusing on the untapped potential of Tanzania's abundant mineral resources, in particular the exploration and development of gold projects, Tembo Gold is making a significant investment in Tanzania's resource prospects.



Gold is a major financial asset and an indicator of economic health for countries globally. Engaged in the exploration and development of this noble and precious metal in Tanzania, Tembo Gold is targeting the discovery of a major gold deposit that will make a significant contribution to

Tanzania's GDP and gold production ranking.

"Gold is the most important mining commodity, and many people are forecasting a gold price increase in the future. Resource discovery, and particularly gold, could be a remarkable growth opportunity for Tanzania," says David Scott, President and CEO of Tembo Gold. "After I joined the company, we took all the old data and did a complete reinterpretation with a group of consultants in South Africa. We then designed a drilling program, which we started in December 2011, and successfully drilled for 12 months."

Barrick Gold Corp. entered Africa in 1999 when it acquired the Bulyanhulu project, and subsequently retained Scott as Technical Services Manager, where he remained for the next four and a half years. When the Bulyanhulu mine opened, Tanzania became the third-largest producer of gold in Africa.

"I was at Bulyanhulu from the start of construction through to commissioning and full production. When we started drilling, there already was 3.5 Moz indicated Au resource," he says. "We conducted US\$54 million worth of drilling in about 18 months, totaling 275,000 meters, raising the resource to about 15 Moz. At Tembo, we are hoping to raise that kind of money with good results, too."

Tembo has already invested more than US\$20 million conducting over 50,000 meters of drilling on their property adjacent to Bulyanhulu, producing some remarkable results. "Our plan is to carry out US\$30 million to US\$50 million of core drilling over the next few years," says Scott.

In late 2021, Barrick and Tembo announced a transaction in which Barrick acquired six licenses from Tembo that adjoin Tembo's remaining license where the bulk of the company's exploration activities had been carried out. Among other benefits from their partnership, Tembo now has Barrick Gold Corp. as a shareholder.



David Scott,  
President  
and CEO of  
Tembo Gold

Discussing Tembo Gold's vision for the next five years and working toward its maiden resource development goal, Scott explains that the company's focus will remain on drilling. "There's lots of work to be done prior to drilling on some targets. We carried out a reinterpretation process with a company called Gold Spot in Canada a year and a half ago, and they identified 54 targets on the piece of land that we hold. We subsequently sold six licenses to Barrick, and we've kept the main

area that we had previously worked on," says Scott, explaining that the firm now holds about 35 square kilometers of land through its local subsidiary.

Scott acknowledges the Tanzanian government's support of the mining sector. "The terms and conditions that we have in terms of tax and free-trade agreements are good. I'm quite happy to continue working in Tanzania," he says, while also pointing out that ongoing support is required from the government in terms of investment security. "Like any industry, when you start spending millions of dollars, you want to know that your investment is secure."

**"Gold is the most important mining commodity, and many people are forecasting a gold price increase in the future."**

Passionate about uplifting people, Scott leads Tembo Gold in implementing corporate social responsibility activities. "My wife has helped launch about 10 schools in Tanzania and the children coming out of those schools are well educated, highly articulate in English, and have a strong performance in mathematics. I think the future growth and success of this country will depend on what can be done to improve education," he says.

In addition to the rising global demand for minerals and metals, Scott mentions a few reasons that further solidify the strong interest in Tanzania's limitless investment opportunities. "Tanzania's geology is favorable for mining sector growth, with a number of mine developments in progress," he says. "The willingness of the government to encourage investment and the terms and conditions of investment are very good."

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TEMBO GOLD CORP



## NATIONAL INSURANCE CORPORATION (NIC)

# Leading Tanzania's Insurance Sector

Working closely with the government and the Tanzania Insurance Regulatory Authority, the National Insurance Corporation of Tanzania is leading the insurance sector through digitalization, inclusive insurance services, and initiatives to protect agriculture—one of Tanzania's most important industries.



Established in Tanzania in 1963, the National Insurance Corporation (NIC) was Tanzania's first insurance company. NIC works to safeguard national interest in some of the nation's largest projects, including the Julius Nyerere Hydropower Station and the Tanzania Standard Gauge Railway construction project, and also insures Air Tanzania's aircraft. As more foreign insurance companies choose Tanzania to set up their businesses, NIC oversees the expansion of their insurance presence throughout the country.

To achieve this goal, NIC recognizes that the digital space is vital. "Our customers are becoming more sophisticated, and they want things to be simplified. That's why we strive to have more inclusive insurance services," says Elirehema Doriye, CEO of NIC. Digital tools are rewriting the ways in which customers interact with insurance services, and also reaching the youth market. "We are targeting the younger generations to present NIC as a refreshed brand. We are young, energetic, vibrant, and ready to listen. That keeps us closer to customers and makes us attractive to the new market and new customers," he says. Through NIC's convenient app, NIC Kiganjani, it is enabled to increase penetration without barriers.

The NIC Kiganjani app allows customers to access all of NIC's insurance services, from start to finish. "We are the only insurance company that has developed and designed an app where you can carry out all your insurance needs," says Doriye. "You can get your policy on the app, which increases the accessibility of our services. We cannot be everywhere, but digital is a solution to the logistics problem, especially in a large and growing country like Tanzania."

As Tanzania has a healthy and growing agriculture sector, ensuring its well-being is of the utmost importance. In fact, out of 30 registered insurance companies in the country, NIC is one of the few engaged in the sector. "Agriculture is key," says Doriye. "Much of the population is employed in agriculture, but we want to make it attractive to the youth. We are more focused on small-scale agriculture activities; big farmers have the knowledge and resources, but we want to provide this for small farmers who are scattered throughout the country." NIC has joined forces with



Elirehema Doriye,  
CEO of National  
Insurance  
Corporation (NIC)


the Tanzania Insurance Regulatory Authority (TIRA) to push for a national agriculture insurance policy that will guide insurance bodies on the best practices for agriculture insurance.

Awareness and education about insurance products are also key to the growth of the insurance sector in agriculture and beyond. Through education initiatives, NIC has helped many farmers understand the importance and positive impact that insurance

**"Everything that we do is focused on giving the customer the best experience possible."**

services can provide. "We conduct training to inform the farmers. Insurance knowledge is less than 30%, but we have been investing in training to impart knowledge," says Doriye. "We are still pushing on the agriculture side because Tanzania is a large country, and knowledge about insurance is very low. We must first invest in knowledge before people can invest in insurance."

Aside from the insurance sector, Tanzania offers numerous opportunities, with its young, tech-savvy population and its growing markets. Boosted by an administration that is working to see the nation grow, NIC shares the government's ambition. "Tanzania has a lot of untapped opportunities," Doriye says. "We also have a visionary president. She's open; she listens. She's not just a talker; she's a doer. And if you combine her open mindset and the available opportunities, the country is quickly becoming more attractive."

As government initiatives continue to enhance Tanzania's economy, NIC is working closely with the national agenda to ensure every part of the nation's sustainable growth. "The opportunities are there, and the country is ready. We have a well-defined vision and direction from the president, and these give NIC an opportunity. We are a strong company with very strong capital; we are a transformative, private-led, government institution. Everything that we do is focused on giving the customer the best experience possible. Our objective is to deliver to the customer in the best way and ensure that we help them to trust in the future and thrive." 

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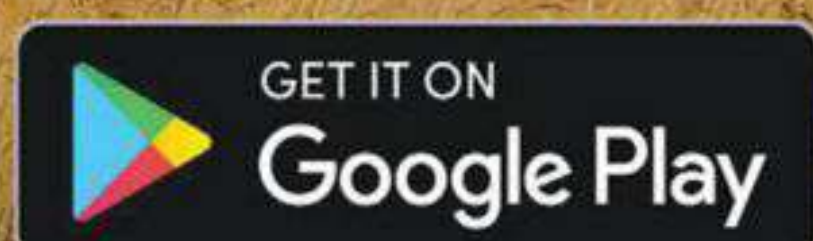
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● **IF YOU HAVE TOUCHED** your phone or computer today, you very likely have been touched by a vast business few outside the technology world are aware of. Maybe you've checked the *Wall Street Journal* or MarketWatch, traded a stock on Robinhood, bet on a football game through DraftKings, or posted on Pinterest or Yelp; ordered treats for Fido on Chewy or treats for yourself on DoorDash; submitted an expense report on Workday or made plans for the evening via Tinder, OkCupid, or Hinge.

If so, you did it with the help of Amazon Web Services. The less glamorous sibling to Amazon's operations in e-commerce, streaming video, and smart devices, AWS is no less ubiquitous, deploying millions of computers worldwide, humming away somewhere in the cloud.

For all those AWS customers the on-demand cloud computing platform isn't just another vendor. They rely on it so heavily that it resembles a public utility—taken for granted, but essential to keep the machinery humming. In the past 12 months each of the companies mentioned above has stated in Securities and Exchange Commission filings that they “would be adversely impacted” if they lost their AWS service. Hundreds more companies—Netflix, Zoom, Intuit, Caesars Entertainment—have reported the same risk factor to the SEC in the past year. By the way, the SEC uses AWS. (So does *Fortune*.)

And those are but the tiniest fraction of AWS customers. AWS—initially run by Andy Jassy, who went on to succeed Jeff Bezos as Amazon's CEO—won't say how many customers it has, only that it provides computing power, data storage, and software to millions of organizations and individuals. Now, even as Amazon lays off a reported 10,000 workers, Wall Street analysts expect another blowout performance from its web services division. That's probably why few if any of those staffing cuts will affect this relatively recession-proof part of Bezos's empire. (Amazon won't say how many of its 1.5 million employees work for AWS.)

For years AWS has brought in more profit than all other divisions of Amazon combined, usually by a wide margin. AWS's operating profit last year, \$18.5 billion, was nearly three times the operating profit reported by the rest of the company (\$6.3 billion). AWS pulled in \$58.7 billion of revenue in this year's first nine months; if it were independent, it would easily rank in the Fortune 100.

How did this offshoot of an online retailer come to rule the lucrative cloud-computing industry, towering over tech giants such as Microsoft and Google, which might have seemed better positioned to dominate?

AWS's ascent is so unlikely that it demands an explanation. It reveals the power of a truly iconoclastic culture that, while at times ruthless, ultimately breeds innovation and preserves top talent by encouraging entrepreneurship.

● **THE BEST-KNOWN ORIGIN STORY** of AWS is that it started when Amazon had some spare computer capacity and decided to rent it out to other companies. That story won't die, but it isn't true. The real story traces a circuitous path that could easily have ended in a ditch. It's grounded in a philosophy that still guides AWS's progress.

“To me, it's the concept of insurgents versus incumbents,” says Adam Selipsky, who became AWS's CEO last year when his predecessor, Jassy, took over as Amazon CEO. Selipsky, 56, speaks quietly, conveying an understated intensity. “One thing that I think is really important, that we intentionally worry about all the time,” he says, is that “we continue to keep the customer need dancing in front of our eyes at all times.”

The real story of the AWS insurgency began with Amazon's innovative responses to two problems. First: By the early 2000s, Amazon—still known mainly as an online bookseller—had built from scratch one of the world's biggest websites, but adding new features had become frustratingly slow. Software engineering teams were spending 70% of their time building the basic elements any project would require—most important, a storage system and an appropriate computing infrastructure. Building those elements for projects at Amazon scale was hard, and all that work merely produced a foundation on which to build the cool new customer-pleasing features Amazon was seeking. Every project team was performing the same drudgery. Bezos and other Amazon managers started calling it “undifferentiated heavy lifting” and complaining that it produced “muck.”

In response, Selipsky recalls, company leaders began to think, “Let's build a shared layer of infrastructure services that all these teams can rely on, and none of them have to spend time on general capabilities like storage, compute capabilities, databases.” Amazon's leaders didn't think of it as an internal “cloud”—the term wasn't widely used in the tech world yet—but that's what it was.

The second problem involved other websites wanting to add links to Amazon products on their own pages. For example, a website about cooking might recommend a kitchen scale and include a link to the Amazon.com page for the product. Amazon was all for it, and would send them a bit of code they could plug into their site; if



someone bought the product through the link, the site owner earned a fee. But as the program grew, cranking out bits of code for every affiliate site became overwhelming, and those affiliates' website developers wanted to create their own links and product displays instead of the ones Amazon sent them. So in 2002 Amazon offered them a more advanced piece of software, enabling them to create far more creative displays. The new software was complicated. Users had to write software rather than just plug it in. Yet thousands of developers loved it immediately.

When Amazon launched a fuller, free version of the software building block a few months later, it enabled anyone, not just affiliates, to incorporate Amazon features into their sites. The surprise: A lot of the downloads were going to Amazon's own software engineers. The building block turned out to be a proof of concept for the labor-lightening innovations that Amazon itself was looking for.

A picture was emerging. Amazon desperately needed to free its software developers from creating muck. Developers everywhere, not only its own, were starving for new tools that did just that. "We very quickly figured out that external developers had exactly the same problems as internal developers at Amazon," Selipsky says.

**BUT WAS THAT A BUSINESS** for Amazon? During a 2003 offsite at Bezos's house, the company's top managers decided that it could be. That decision was the turning point, especially significant because it could so easily have gone the other way. Amazon's customers were consumers who bought "new, used, refurbished, and collectible items," as the company told investors at the time. Why would anyone imagine this company could build a business selling technology services to software developers?

The decision to plunge ahead revealed a subtle distinc-

tion that outsiders didn't understand. The world saw Amazon as an online retailer, but the company's leaders never thought of it that way. They thought of it as "a technology company that had simply applied its technology to the retail space first," Jassy later told Harvard Business School professors who were writing a case study. For that kind of company, AWS looked like a promising bet.

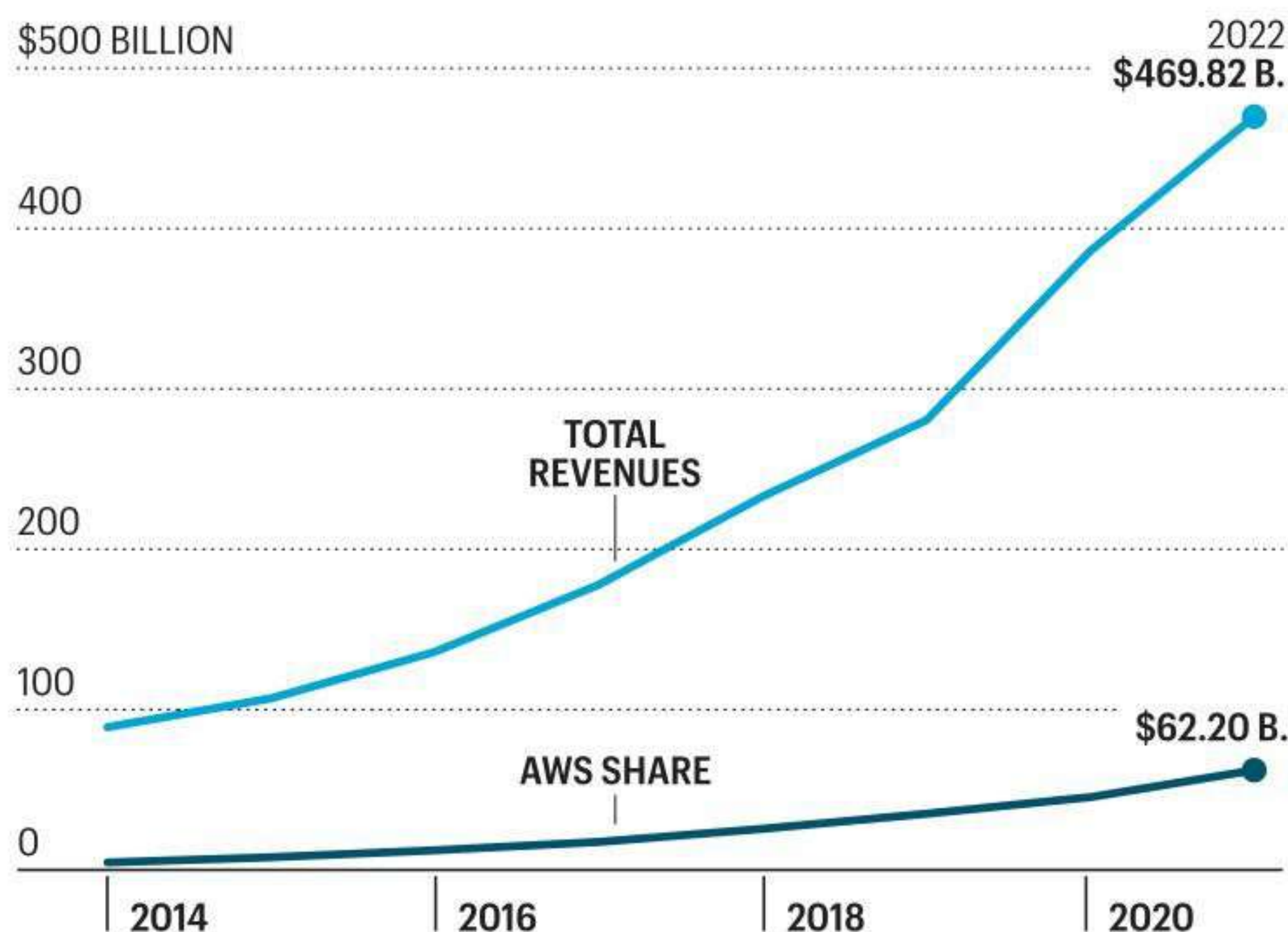
Coming out of the 2003 offsite, Jassy's job was to build a team and develop AWS. He wrote a proposal for it as a cloud-computing business. The document, one of the famous six-pagers used at Amazon's executive meetings instead of PowerPoint (which is banned), reportedly went through 31 revisions.

It took three years before AWS went live. In 2005 Jassy hired Selipsky from a software firm to run marketing, sales, and support, Selipsky recalls: "Amazon called and told me there was this initiative for something about turning the guts of Amazon inside out, but other companies could use it." AWS's first service, for data storage, "was such a novel concept that it was even hard to explain and hard for me to understand," he says.

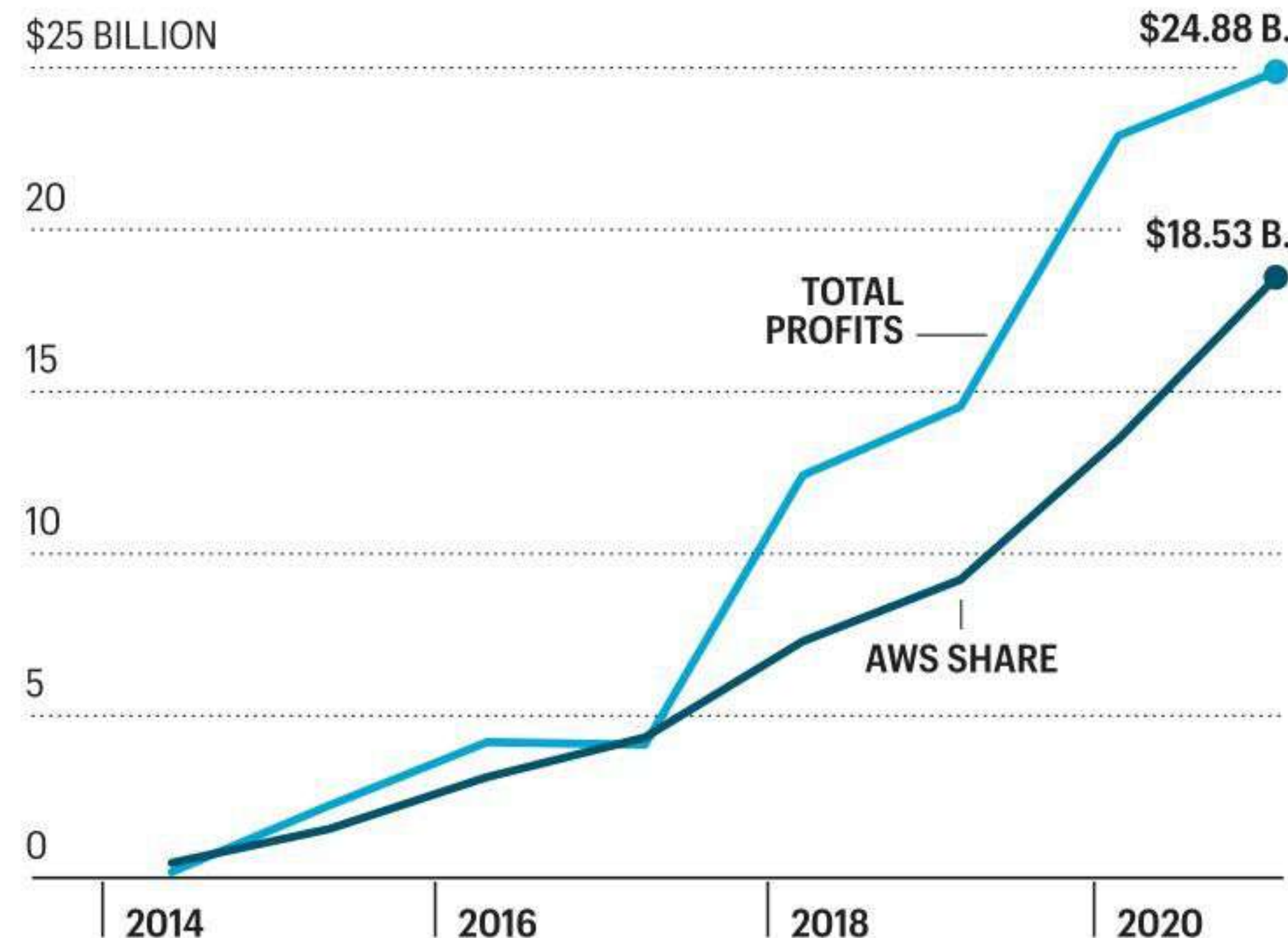
Wall Street didn't get it. "I have yet to see how these investments are producing any profit," a Piper Jaffray analyst said in 2006. "They're probably more of a distraction than anything else."

The rest of the world didn't get it either. "I cannot tell you the number of times I got asked, with a quizzical look on people's faces, 'But what does this have to do with selling books?'" Selipsky recalls. "The answer, of course, was: AWS has nothing to do with selling books. But the technology we use to sell books has everything to do with AWS and what we can offer customers." Those customers were software developers, an entirely new target market that baffled outsiders.

## ANNUAL AMAZON REVENUES



## ANNUAL AMAZON OPERATING PROFIT BEFORE TAX



SOURCE: S&P GLOBAL





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“I CANNOT  
TELL YOU  
THE NUMBER  
OF TIMES I  
GOT ASKED...  
**‘BUT WHAT  
DOES THIS  
HAVE TO  
DO WITH  
SELLING  
BOOKS?’”**

• **ADAM SELIPSKY,**  
CEO, AMAZON WEB SERVICES

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AWS was prepared for that reaction. One of Amazon’s principles reads in part: “As we do new things, we accept that we may be misunderstood for long periods of time.”

On the day in March 2006 when AWS finally launched its inaugural service—S3, for Simple Storage Service—Selipsky was at a trade show in Santa Clara, Calif., “in a windowless, internet-less conference room,” as he describes it, unable to learn how the launch was going. At day’s end he and a colleague ran outside to call Seattle for news.

“We were told that 12,000 developers had signed up,” he says, a note of marvel still in his voice. “On the first day. It was just amazing.”

Five months later AWS launched its other foundational service, EC2, for Elastic Compute Cloud, which was also instantly popular. The revolution had begun. Instead of raising millions of dollars to buy servers and build data

centers, startups could now get online with a credit card, and pay a monthly bill for just the computing power and storage they used. If their new app was a hit, they could immediately engage all the cloud services that they needed. If it bombed, they weren’t stuck with rooms of junk equipment. As a Silicon Valley entrepreneur and early AWS customer told *Wired* in 2008: “Infrastructure is the big guys’ most powerful asset. This levels the field.”

In response to that historic shift, AWS’s potential competitors did ... nothing. “A business miracle happened,” Bezos told a conference years later. “This is the greatest piece of business luck in the history of business so far as I know. We faced no like-minded competition for seven years. I think the big established enterprise software companies did not see Amazon as a credible enterprise software company, so we had this incredible runway.”





Amazon Web Services maintains data centers like this one in Oregon so that companies can rent the capacity they need.

Selipsky suspects an additional motivation: “They either didn’t believe this could be a real business, or they were so threatened by what it would do to their own business models, and the way they were overcharging customers, that they didn’t want to believe it.”

● **NO ONE, NOT EVEN** at Amazon, foresaw how massive a business cloud computing would be, or AWS’s dominance in the space. To understand how this happened, it’s worth examining the company’s guiding principles.

Eye-roll alert: Every company has principles, missions, visions, values; the vast majority are indistinguishable and sound as if they were written by committees, which they probably were. Some of Amazon’s leadership principles, as they’re called—there are 16—sound that way, until they get a little “peculiar,” to use a favorite Amazonian word.

For example, principle No. 11 begins, “Earn trust.” Leaders, it explains, “are vocally self-critical, even when doing so is awkward or embarrassing. Leaders do not believe their or their team’s body odor smells of perfume.” This peculiarity is a badge of pride at Amazon; its web page for job seekers even says that its use of the principles “is just one of the things that makes Amazon peculiar.”

Not every Amazonian observes every principle all the time; in a company of 1.5 million employees, that’s not realistic. But Amazon’s batting average is high.

To answer the basic question of why a retailer would even think of creating AWS, consider principle No. 1, seemingly the hoariest of them all: “Customer obsession.” Amazon sees itself as a tech company and sees the world as 8 billion potential customers. That’s one reason AWS made sense for a bookseller.

Amazon allows new projects lots of time, as with AWS,

in part to make sure decisions are based on data. An unusual principle states that leaders “work to disconfirm their beliefs.” Groupthink is comforting, contagious, and dangerous. Being able to invoke one of the principles enables doubters to speak up.

“We have senior engineers who will stop a meeting and say, ‘We’ve got to disconfirm our beliefs—we’re going too far here without checking,’” says Mai-Lan Tomsen Bukovec, who oversees AWS’s storage services. “That’s actually kind of revolutionary in terms of corporate culture.”

It’s not a culture for everyone. Amazon is a famously demanding place to work, and there are plenty of stories of employees who found it to be too much. Media reports have criticized Amazon’s treatment of workers, and the company is battling unionization efforts at some of its e-commerce warehouses. It’s noteworthy that last year Amazon added a new leadership principle: “Strive to be Earth’s best employer.”

“It’s not good for our business and not good for our customers if we turn out great employees and burn them out, and they leave after a couple of years,” says Matt Gorman, an early AWS employee who now oversees sales and marketing. “Sometimes there are people who don’t like the culture, don’t like those leadership principles. It’s not a good fit for them. People like the culture or they don’t like the culture, and I think that’s okay. But we want people here for the long term.”

● **ASKED TO DESCRIBE** AWS’s strategy, Tomsen Bukovec says, “That’s not a word we use a ton.”

The foundation of conventional strategy, the subject of hundreds of books and articles, is understanding a company’s industry and competitors. That approach gets us nowhere with Amazon. What industry is it in? No one industry encompasses selling dog food and selling computing power.

So does Amazon even have a strategy? “Yes,” says Ram Charan, an adviser to CEOs and boards, and coauthor of a book on Amazon’s management system. But “it’s not a competitive strategy,” he says. “It’s a customer strategy.”

That’s a mind bender. Business is competition, and business strategy is inherently competitive strategy. Except that at Amazon it isn’t. If it had been—if Amazon had been conventionally competitor-focused—AWS probably wouldn’t exist.

Colin Bryar, a former Amazon executive, says he’s often



asked what Amazon is going to build next. Can it repeat what it did with AWS, create an out-of-the-blue business, unexpected and underestimated, in which it becomes dominant? “That’s not the first question Amazon asks,” Bryar says. “They ask, ‘What’s the next big customer problem we can go try to solve?’”

The word “big” is key. At Amazon’s size—analysts expect revenue exceeding \$500 billion for 2022—small problems are simply not of interest. When company leaders identify a sufficiently big problem, they must then conclude that Amazon can solve it, and that customers will adopt the solution. Those are not easy or quick questions to answer.

● **CLOUD COMPUTING** will grow 20% annually through 2026, far faster than any other segment of infotech, according to the Gartner tech consulting firm. It’s no longer just smaller companies and startups who don’t want to invest in their own server systems. Many AWS customers are increasing their spend, and some “spend literally hundreds of millions of dollars per year on AWS,” says Gartner analyst Raj Bala, who sees the contracts. “I’m not shocked anymore to see a \$200 million annual commitment, which is astonishing.”

Yet AWS’s dominance of the market will likely diminish even as its revenue grows. With a 44% share of the market, AWS has 20 points over Microsoft’s 24%—but that lead is shrinking, says Bala. “In the next five, six, seven years, that gap is going to be very, very narrow, if not equal.” That’s because “a lot of late adopter enterprises are coming to market,” he says, “and a lot of these folks will gravitate to Microsoft because they’ve got an existing contractual relationship with Microsoft.”

The narrowing gap with Microsoft is probably inevitable. AWS’s great challenge for the future is to maintain

the discipline that made it a global colossus.

Losing that discipline is insidiously easy. Jim Collins, author of *Good to Great*, which identifies the factors shared by the world’s most successful companies, has also written an analysis of failure, *How the Mighty Fall*. Winners invariably maintain discipline, and loss of discipline is always an element of decline. One of the principle threats? Attempts to control workers by overregulating them. “Bureaucracy subverts discipline,” he tells *Fortune*.

When a company is growing as fast as AWS, it can be tempting to weaken hiring standards. “As you grow, you start to bring in some of the wrong people,” he says, speaking of companies generally. “If they don’t get the intensity of being there, they shouldn’t be there, but if enough of them stay, you try to control them with bureaucracy. Then the right people get out, which creates a cycle.”

With success and growth come further threats to discipline. When a business is riding high, “easy cash erodes cost discipline, and that discipline is hard to recover once you lose it,” he says. Expansion brings risks, too: Responding desperately to deteriorating performance, the business bets on “undisciplined discontinuous leaps”—acquisitions or expansions for which it isn’t ready.

At the top of its game, bigger and stronger than any competitor, AWS must now meet an enviable challenge but a challenge nonetheless: the curse of success. Its most crucial task is to maintain the unwavering rigor—the discipline—of its principles and processes.

Selipsky seems to understand the need. Asked to define his job, he is silent for several seconds. Then, quietly but emphatically, he says his job “is to ensure that the positive, productive, useful elements of what got us to this stage—that we hold those dear, and we safeguard them, and we don’t let them slip away. We don’t become incumbents.” ■

## AMAZON’S NEXT BIG, THORNY PROBLEM TO SOLVE

**WHAT MIGHT BE** the next industry to get Amazon’s AWS-style mega-venture treatment? The leading candidate is health care.

In 2018 Amazon bought PillPack, an online pharmacy, and last summer it paid \$3.9 billion for One Medical, a membership-based primary-care provider operating across the U.S., saying in its announce-

ment that “we think health care is high on the list of experiences that need reinvention.”

No one would disagree. For a company that seeks big problems to solve, this may be the biggest opportunity of all. Health care is the largest sector of the U.S. economy, and the industry is growing fast worldwide.

Data is the problem at the heart of

health care’s inefficiency and unfathomable, wearisome customer experiences—and it’s possible that it could be the solution.

That data is staggering in quantity and mostly unstructured—handwritten notes and X-ray and lab reports, sometimes of life-and-death importance—in an industry that is the last bastion of fax machines.

It’s a particularly attractive conundrum to Amazon because of the company’s dominance of cloud computing. AWS is already deeply entrenched in the industry, used by hospitals, pharma companies, equipment makers, insurers, pharmacy benefit managers, the Centers for Medicare and Medicaid Services, and more.

Another poten-

tial advantage is Amazon’s massive international workforce and its enormous health care needs and expenses. Just as Amazon developed AWS by observing its own software needs and seeing them mirrored elsewhere, its own challenges as a growing corporate behemoth now may point the way to a new market opportunity.







What's  
in the  
Water at  
**PepsiCo?**

The maker  
of fizzy drinks  
and chips  
has also  
produced  
16 current  
Fortune 500  
CEOs.

BY  
**Phil Wahba**

ILLUSTRATION BY STEVEN WILSON



● **WHEN LAXMAN NARASIMHAN** was hired to be the next Starbucks CEO in September, he joined a club that includes the chief executives of some of America's biggest and best-known companies—Brian Cornell of Target, Chris Kempczinski of McDonald's, Ed Bastian of Delta Air Lines, Al Kelly Jr. of Visa, Ron Coughlin of Petco, Lauren Hobart of Dick's Sporting Goods, Vivek Sankaran of Albertsons, Dave Kimbell of Ulta Beauty, Mary Dillon of Foot Locker, and Ann Mukherjee of Pernod Ricard North America.

What do these leaders have in common? They all spent significant time rising through the ranks of the same company. But they aren't alums of the expected "academy companies" known for turning out leadership talent, such as Procter & Gamble, nor a buzzy tech pioneer famous for its management culture.

No, these chief executives earned their chops selling fizzy drinks, hummus, and chips at PepsiCo.

Formed back in 1965 when the Pepsi-Cola company and Frito-Lay merged, PepsiCo has produced 16 current Fortune 500 CEOs, an analysis by *Fortune* found. We looked at companies whose alumni now lead at least five Fortune 500 companies, and found that PepsiCo is one of the most proficient corporations when it comes to leadership development, trailing only the management consulting firm McKinsey and General Electric. And there are hundreds more C-suite executives with PepsiCo pedigrees in the Fortune 500, as well as CEOs outside the Fortune 500, like those of Petco or Boston Beer Co.

In other words, PepsiCo, which brings in \$80 billion a year in revenue, is a veritable CEO factory.

What's PepsiCo's secret ingredient when it comes to creating so many leaders? It's all about a highly developed, well-oiled system that identifies and intensively develops "high-performers" within the company, PepsiCo's chief human resources officer, Ronald Schellekens, says. Those "hi-pos," as they're known internally at PepsiCo,

are lavished with training programs, stretch assignments around the world, mentorship, and opportunities to try—and even to fail at—new things. Many companies invest in management and leadership training, but few do it as systematically as PepsiCo. That system is key to a culture that has kept PepsiCo's revenue growing at a healthy clip for decades, and is expected to grow 12% this year.

But PepsiCo, whose portfolio includes Gatorade, Mountain Dew, and Quaker Oats, has an infrastructure for training and leadership development that goes back decades. Indeed, every PepsiCo CEO in its 57-year history rose within the company—including current CEO Ramon Laguarta and his predecessor, Indra Nooyi.

This leadership development apparatus was refined by the prominent industrial organizational psychologist Bob Eichinger, who worked at PepsiCo between 1978 and 1986. He made his mark by adapting psychometric tests to evaluate how executives behave, how they affect others, and how they can be more effective as leaders. This helped make PepsiCo a top "academy company," a term coined in the 1980s by Yale School of Management professor Jeffrey Sonnenfeld.

PepsiCo's hi-pos may dominate the Fortune 500 now, but it's far from the first company to be well-regarded as a talent mill. Macy's, Walmart, Target, Novartis, Lockheed Martin, Microsoft, and JPMorgan Chase have been considered top academy companies too.

At PepsiCo, "we take care of everybody," Schellekens says in an interview at the company's sculpture-filled campus in Purchase, N.Y. "But we take extra care of the top 20% performers, and they get extra love and extra attention from the company."

It's unusual for budding executives at any company to be shown such a clear path to advancement, says Jane Stevenson, global leader of the CEO succession practice at the organizational consultancy Korn Ferry. "At most companies, it's a black box," she says. "How do you become CEO? How do you get to the C-suite? You're on your own to figure that out."

## NO BRAGGING RIGHTS

● **WHILE THE PATH** may be clear, one of the striking aspects of the program at PepsiCo is that hi-pos have to guess whether they've been chosen for a faster track. Sure, a hi-po may have an inkling—otherwise, why would they be at a weeklong Wharton School business seminar?—but they are not formally told of that status. "In truth, if you were given certain jobs or were prioritized for various training programs, you knew you were well thought of within the business," says Petco's Coughlin.

The reasons for this secrecy have to do with morale and keeping strivers on their toes, Schellekens explains:

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**“At most companies, it’s a black box... How do you get to the C-suite? You’re on your own to figure that out.”**

• JANE STEVENSON • KORN FERRY







—

**“Taking inventory of rising stars and stretching them is fundamental to the PepsiCo talent machine.”**

• RON COUGHLIN • PETCO



No one wants to create resentments between employees, or a two-class system, or have a rising star become a showboat. Better to have bosses simply observe the person in action.

Besides, the composition of that 20% fluctuates all the time, with people regularly dropping out of the status if they're falling short or have simply plateaued, and achievers who impress the top brass being added to the pool. (What's more, that 20% isn't limited to aspiring senior managers: A truck driver can also be a hi-po.)

Once they're identified, hi-pos don't get to sail easily to their next gig, especially if it's a stop en route to the C-suite. Instead, those people deemed upper-management material are put through a rigorous, yearslong training program in many aspects of PepsiCo operations, from in-depth market

data to two- to three-year stints in areas such as supply-chain management and international markets.

Hi-pos are also expected to develop fast decision-making skills. “Our model is first and foremost based on risk-taking and putting people into big jobs, uncomfortable jobs, and trusting they will flourish if you take a chance on them,” says Schellekens. “Sink or swim.” No one is ever fully ready for a big role anyway, he points out—so why not toss them in at the deep end?

Hi-pos come from all over the company's sprawling, complex business, which includes a wide array of food and beverage brands in dozens of countries, and they can be plucked from any job function or level of seniority. Whether a hi-po is a bottling plant manager, an analyst, or a data scientist, they're usually first identified via their manager's

## The Soda-rati

These 16 Fortune 500 CEOs came up in a rigorous executive leadership program at PepsiCo.

**Chris Kempczinski**  
• MCDONALD'S

**Vivek Sankaran**  
• ALBERTSONS

**Michele Buck**  
• HERSHEY

**Brian Cornell**  
• TARGET

**David Kimbell**  
• ULTA BEAUTY

**Tom Greco**  
• ADVANCE AUTO PARTS

**Al Kelly Jr.**  
• VISA

**Lauren Hobart**  
• DICK'S SPORTING GOODS

**Laxman Narasimhan**  
• STARBUCKS

**Darren Rebelez**  
• CASEY'S GENERAL STORES

**Ed Bastian**  
• DELTA AIR LINES

**Mary Dillon**  
• FOOT LOCKER

**Tony Sarsam**  
• SPARTANNASH

**Hock Tan**  
• BROADCOM

**Beth Ford**  
• LAND O'LAKES

**David Gibbs**  
• YUM BRANDS





“PepsiCo gave me the space to fail and gave me the resources and support to dust myself off and find solutions to these challenges.”

• ANN MUKHERJEE  
PERNOD RICARD NORTH AMERICA

performance review. And they’re not necessarily just newbies fresh out of college or hungry mid-career strivers. An employee longer in the tooth who finds a second wind in a new role can also become a hi-po.

A spokeswoman for PepsiCo says that the company doesn’t track the demographics of who is a hi-po, given that it fluctuates constantly, but she estimates that the cohort at any given time reflects the company’s overall diversity. Some 43% of people in managerial roles across the company in 2021 were women. In the U.S., where PepsiCo tracks the workforce by ethnicity, some 18% of managers are Black or Hispanic. Diversity is an increasingly important piece of PepsiCo’s hi-po infrastructure, she added. There is a program called Breakthrough Organizational Leadership Development specifically for Hispanic and Black managers—hi-pos and others—looking to acquire new skills.

### “EXTRA LOVE” FOR THE CHOSEN FEW

● **THE HUMAN RESOURCES** department wields great power at PepsiCo and is key to this whole training system working properly. To determine who is a “hi-po” or a “very hi-po,” the HR department uses manager evaluations and performance metrics; 360-degree-review processes that include feedback from peers and reports; and personality assessments such as the Myers-Briggs Type Indicator. HR regularly checks in with managers to see who is standing out, and it’s not unusual for hi-pos to be plucked from the roles they’re excelling in to take on new challenges—sometimes to the chagrin of their current bosses.

PepsiCo offers training opportunities to all of its 300,000 employees, but the “extra love” Schellekens speaks of comes in the form of academic opportunities such as online classes from Pep university (PepsiCo’s center for learning) or a business school. They might be offered a chance to prove their mettle with a tough assignment, such as taking on a brand’s marketing in Latin America, or leading a profit and loss reporting unit. Hi-pos are also offered mentoring and access to top leaders at the company.

Coughlin spent 13 years at PepsiCo, ending in 2007, including a stint heading marketing for Pepsi and other drinks outside the U.S. His standout achievement: helping diversify the company’s overseas markets to be less reliant on soda and offer more items such as tea, juices, and Gatorade. Those PepsiCo lessons helped prepare him to make big moves at Petco, such as no longer selling pet food with artificial ingredients, he says.

As he rose up in the ranks, Coughlin got to spend a lot of time with two PepsiCo icons, then CEOs Roger Enrico and Steve Reinemund, as part of its vice president training program. Coughlin has replicated that program at Petco, giving up-and-comers a week of up-close time with him, the board, and other C-suite executives.

Another former hi-po, Ann Mukherjee, now CEO of Absolut maker Pernod Ricard’s North America unit, says she was given the space to fail and learn from the experience. Mukherjee took on a chief marketing role at PepsiCo in 2009, in the wake of the 2008 financial crisis—a climate in which business success was elusive, she recalls.

“But honestly, failure is the secret to my success,” she



says. “I came out stronger than ever before. PepsiCo gave me the space to fail and gave me the resources and support to dust myself off and find solutions to these challenges.” And that, she says, “ultimately unleashed me.”

That culture of letting a budding executive fail at something early is essential to avoid disaster later, says Korn Ferry’s Stevenson. “There has to be room for failure,” she says. “Because odds are they will eventually, and the CEO role is not the place for that to happen.”

Successes matter too, of course, and Mukherjee recalls a formative one for herself when she was chief marketing officer at Frito-Lay at PepsiCo: the decade-long “Doritos Crash the Super Bowl” campaign, which aired fan-made ads and is seen as a milestone in millennial-focused marketing. (Mukherjee was later known as the “Queen of Corn” at PepsiCo since she was in charge of its corn chip brands.)

Schellekens, a Dutchman four years into his second stint at PepsiCo, says no one should expect the company to manage their careers for them. Ambitious hi-pos must prove their mettle by hitting a few career markers.

PepsiCo wants prospective executives to understand the conglomerate as a whole and not just spend time in their business unit or silo. Hi-pos are expected to make at least one cross-functional move, and generally to have moved outside of their home countries for a stint, says Schellekens, who has worked in London, Barcelona, Geneva, and Johannesburg for PepsiCo. Laguarda, PepsiCo’s current CEO, is a 26-year company veteran and has worked in the U.S., Europe, and sub-Saharan Africa.

Brian Cornell is one of PepsiCo’s most successful alumni as the steward of Target’s stunning turnaround. He joined Target in 2014, leaving his role as CEO of PepsiCo Americas Foods—where he was seen as a possible candidate to succeed Nooyi in the top job. At PepsiCo, he says, “I learned so much about running complex, global organizations and being a student both of the consumer and the competition.”

## A CULTURE OF LEARNING

**IT SOUNDS SIMPLE ENOUGH** to build an infrastructure for career development and training. But humans are humans, and singling out high performers for extra attention can cause some internal drama. It is drilled into people up and down the hierarchy that the overall company is what reigns supreme.

That sometimes means going against the adage “Don’t mess with success,” Schellekens explains, because successful players need new challenges. “When you’re a manager, and your team is performing, the last thing you want is people pulling people out of your team,” he says. “So it’s the job of HR to pull people out of comfortable positions.” Besides, he explains, managers should be de-

## PepsiCo Is Still Popping

An effective leadership development program has helped keep the company on a fast growth trajectory for decades.

### PEPSICO REVENUE GROWTH



veloping a bench on their team so they are not too reliant on one successful team member.

Petco’s Coughlin says that has been key to the success of PepsiCo’s academy system. “Taking inventory of rising stars and stretching them is fundamental to the PepsiCo talent machine,” he says. “At PepsiCo, HR was very powerful, and they were on top of people’s career planning. You couldn’t hold on to people they were plotting across the company.”

That focus on cultivating the next generation of talent ultimately yields results, but it can be a slog, and sometimes another company ends up reaping the rewards by hiring away top executive talent.

Rather than bemoan the number of superstars who have left PepsiCo, Schellekens says PepsiCo’s leadership sees the Cornells, Coughlins, and Narasimhans as a vindication of the company’s investment in its talent development program. Besides, only so many people can become CEO of PepsiCo.

Turnover at the management echelon is “super low,” Schellekens says. And the focus on skills has helped the company remain on a fast growth trajectory for decades. As its hi-pos go on to lead other companies, PepsiCo’s reputation for minting corporate leaders has made the company a talent magnet.

“That’s what turns people on,” says Norm Smallwood of the RBL Group, a consulting firm specializing in leadership development. “They come to these feeder companies like PepsiCo to get opportunities they can’t get elsewhere.” ■



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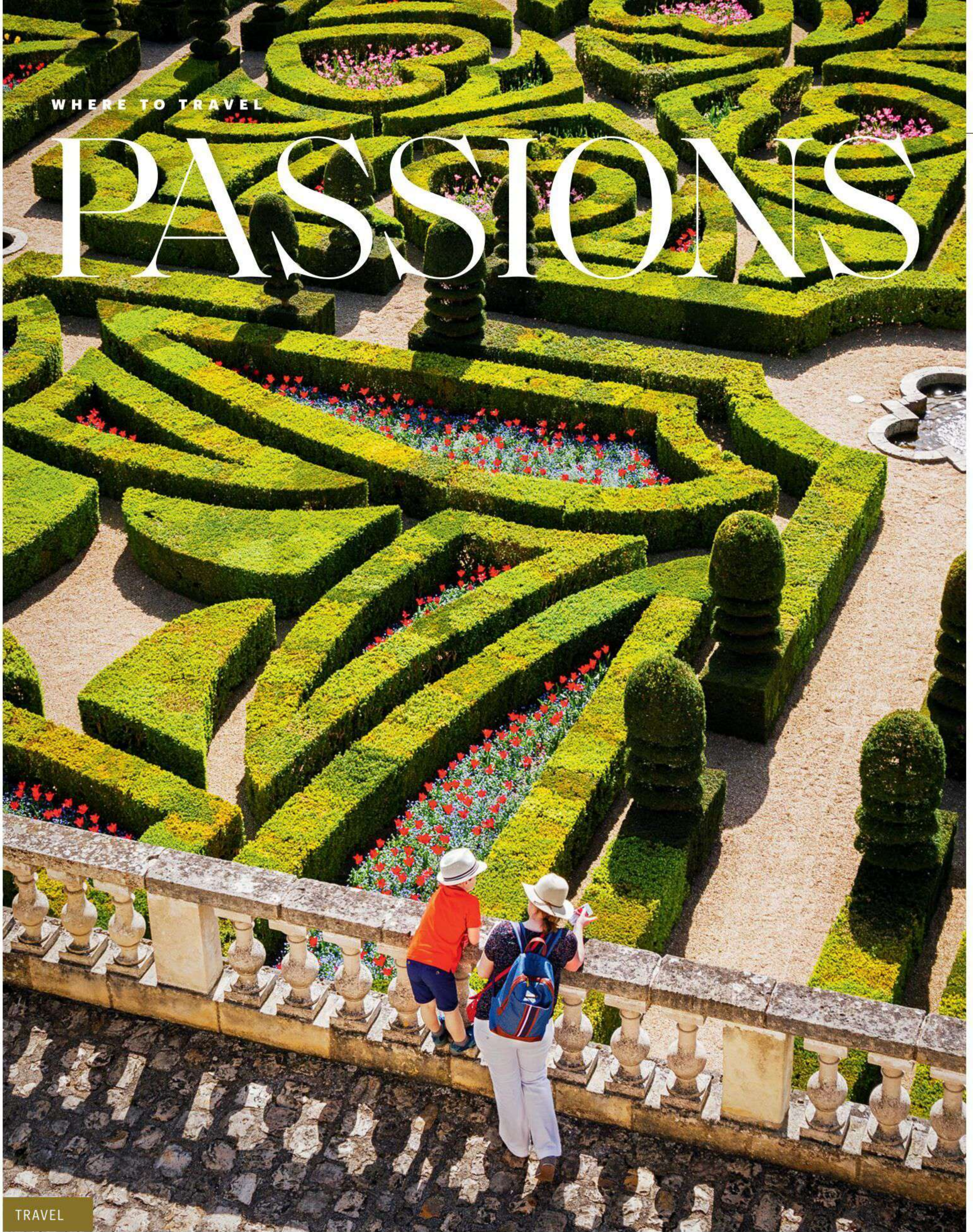
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WHERE TO TRAVEL

# PASSIONS



TRAVEL

## Where to Get Away in 2023

Tourism is all the way back—along with aggravating crowds. These newly opened destinations combine luxury with the quieter joys of being off the beaten track. **BY ADAM ERACE**

**PRIVATE GREENS**  
Stately châteaux and manicured gardens are star attractions at new hotels in France's Loire Valley.



## Kyushu

Prairie Stuart-Wolff spoke next to no Japanese when she moved to Japan with her wife, ceramist Hanako Nakazato. Had she relocated to Tokyo or Osaka, the American writer and photographer would have probably gotten by just fine with English alone, but her aging in-laws lived in rural Mirukashi on the island of Kyushu. While Nakazato worked and oversaw construction of their new home and studio, Stuart-Wolff hung around the kitchen with her mother-in-law, Kuniko. “I was just watching at first, then helping with dishes, and slowly trying my hand at prep tasks,” she recalls. Kuniko’s kitchen is “how and where I started to feel at home in Japan.” She took notes, which evolved into a book of recipes—which in turn flourished into Mirukashi Salon, the immersive culinary workshop Stuart-Wolff and Nakazato launched this year, just as Japan fully reopened to overseas tourists. The small-group program (\$3,150 per person for four nights, all inclusive) follows the 72 micro-seasons of Japan—the cooking lessons, foraging walks, and artisan outings shifting slightly as persimmons yield to yuzu, sansho pepper buds ripen, and new wakame seaweed appears offshore. Between meals and trips to soy sauce brewers and tea farmers, guests stay on turquoise Karatsu Bay, an ideal base for exploring Kyushu, an island with “mountains to climb, waves to surf, roads to bike,” as Stuart-Wolff says.

## Loire Valley

King Louis XI was far from the flashiest king of France, his reputation for thriftiness

earning him the lame-o sobriquet Louis the Prudent. He’d be aghast at the parade of lavish new hotels in his beloved Loire, the wine-drenched valley that he made the epicenter of his court. Luxury takes many forms at these lodgings: the resplendently wallpapered boudoirs of Château Louise de La Vallière (starting at \$440 per night), named for a mistress of Louis XIV; the chestnut-and-mushroom soufflé and proprietary Wagyu at Michelin-starred chef Christophe Hay’s riverside Fleur de Loire inn; oneness with wild woods and art gardens at the 39-room Le Bois des Chambres, the first hotel to open at the

Domaine de Chaumont-sur-Loire mansion. For those looking for something more, well, thrifty, the city of Loches will celebrate Louis XI’s 600th birthday by opening a walking tour through its palace and other historic sites associated with the ascetic monarch.

## St. Eustatius

The minute Peter Barnhoorn landed on St. Eustatius, a verdant Dutch blip near St. Kitts, in 2018, he fell in love. “There are no crowds, mass tourism, commercialized areas, [or] cruise ships,” says the Dutch cofounder and CEO of rose exporter

Afriflora. What Barnhoorn didn’t love was the lack of upscale accommodations. So he built his own, Golden Rock, which is slated for completion in January, just in time to welcome travelers via a new airport terminal and new ferry service from St. Kitts. Starting at \$600 per night, the low-slung 32-room resort nestles between the azure Caribbean, where candy-corn coral reefs and shipwrecks nurture incredible diving, and the shaggy dormant volcano called the Quill, which rises behind the property like a benevolent emerald dragon who welcomes hikers like a dog



Food stalls on Kyushu.



## FINE DINING IN FAR-FLUNG PLACES

[1] Picnicking near the Quill volcano at St. Eustatius's new Golden Rock resort. [2] Rustic luxury at Maine's Aragosta culinary camp. [3] Rice delicacies from the recently launched Mirukashi Salon.



1



2



3

“There are no crowds, mass tourism, commercialized areas, or cruise ships.”

—PETER BARNHOORN, CEO OF AFRIFLORA, ON THE JOYS OF ST. EUSTATIUS

does back scratches. On Statia, as the 3,000 or so locals call it, don't expect St. Bart's rosé brunches or St. Martin's casinos. “The tourism here is slower and remains focused on the natural wonders,” says Barnhoorn, who has committed Golden Rock to environmental stewardship. Behind the property's luxurious scenes, an on-site solar farm powers the resort; a reverse-osmosis system turns salt water into drinking water; and gray water gets filtered and recycled to irrigate pollinator gardens of oleander, bougainvillea, and the beautiful and rare Statia morning glory.

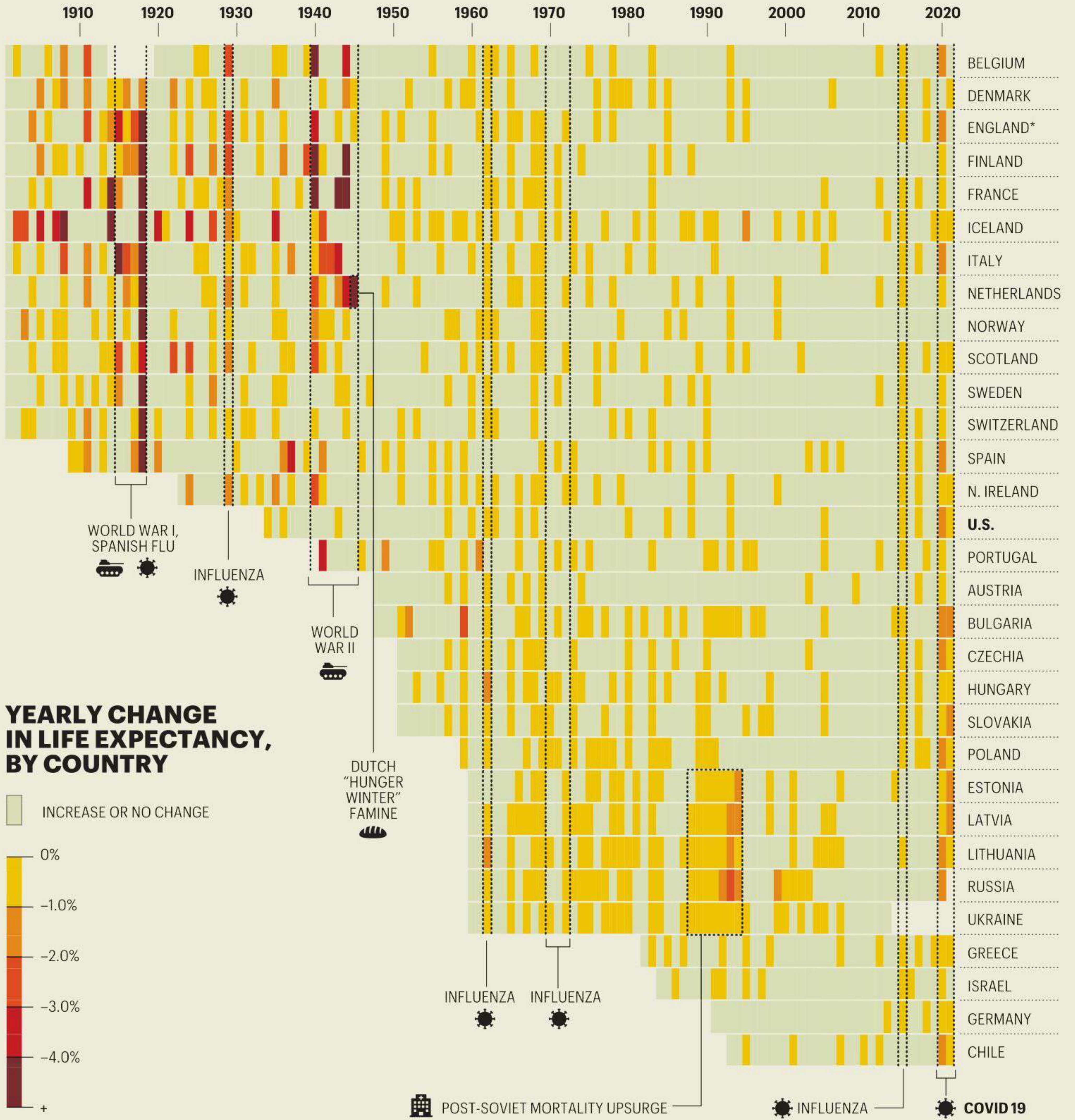
## Blue Hill Peninsula

Winter bites in Castine, the deepwater harbor on Maine's Blue Hill Peninsula. “It was so cold we could see our breath,” Max Katzenberg recalls of the afternoon he first stepped into Dennett's Wharf, a circa-1960s tavern and nine-pin bowling alley filled with ghosts of shipbuilders past. But Katzenberg could see summer's promise on the horizon. Last July, he and fellow ex-Brooklynites Ingrid Paronich and chef Taylor Hester rechristened Dennett's waterfront deck with skin-contact Grüner-Veltliner and lobster-

loaded baked potatoes. Meanwhile, just up the hill, two other New York runaways, Matthew Powell and George Trinovitch, took over the 128-year-old Pentagöet Inn (from \$220 per night), a spired Victorian whose dimly lit cigar box of a lounge looks like a fine place to plot a jewel heist. Situated just down the coast from Acadia National Park, the Blue Hill region is a Maine-gorgeous collage of evergreen forests and pewter coves, speckled with Stephen King-novel towns like Stonington, where Katzenberg helped rescue another stalwart, the Harbor Café, from closure. Folks from here and “from away,”

as the Mainers say, mingle with little drama. Usually that happens on pizza night at Brooksville's farm-bakery, Tinder Hearth, a Tuesday-night experience locals set their calendars by, and at the beachside happy hour at Aragosta at Goose Cove, Devin Finigan's culinary camp (from \$350 per night) just over the bridge on Deer Isle. Happy hour is a casual analog to Finigan's tasting menu, a summer destination of its own: On a given night, it might feature iridescent scallops with potato butter, black raspberry nori ice cream, and other treasures from the peninsula's water and woods. **F**





**YEARLY CHANGE IN LIFE EXPECTANCY, BY COUNTRY**

INCREASE OR NO CHANGE

0%  
-1.0%  
-2.0%  
-3.0%  
-4.0%  
+

**LIFE IS TOO SHORT**

**COVID'S DEVASTATION** shows up starkly in life expectancy data: The pandemic's peak marked the first time since World War II that LE (as demographers call it) declined across the globe. The graphic above is based on a data set that focuses mostly on Europe, but similar trends emerged worldwide. In the U.S., LE fell from 78.8 years in 2019 to 77.3 years in 2020—the biggest peacetime decline on record. LE has fallen particularly sharply among Americans ages 40 to 59, a trend that reflects the opioid and homicide crises as well as COVID. This human tragedy is compounded by an ominous economic dimension. Shorter life spans may presage slower growth in industries such as health care and financial services that cater to older people. Falling LE can also result in a smaller labor force, which in turn could have dire consequences; tax revenue could dry up, for example, and inflation could worsen if workers are scarce. —**MATT HEIMER**

\* INCLUDES WALES

SOURCE: SCHÖLEY, J.; ABURTO, J.M.; KASHNITSKY, I.; ET AL.; "LIFE EXPECTANCY CHANGES SINCE COVID-19"; NATURE HUMAN BEHAVIOUR (2022)



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