SPECIAL ISSUE

BANK DEPOSITS THAT DON'T RUN

F1'S HARD-DRIVING BILLIONAIRE

THE QUEEN OF CANNABIS

TOP 100 VENTURE CAPITALISTS

Forbes

AMD's Chipmaker in Chief
LISA SU

"IN FIVE YEARS, YOU WILL SEE AI IN EVERY SINGLE PRODUCT."

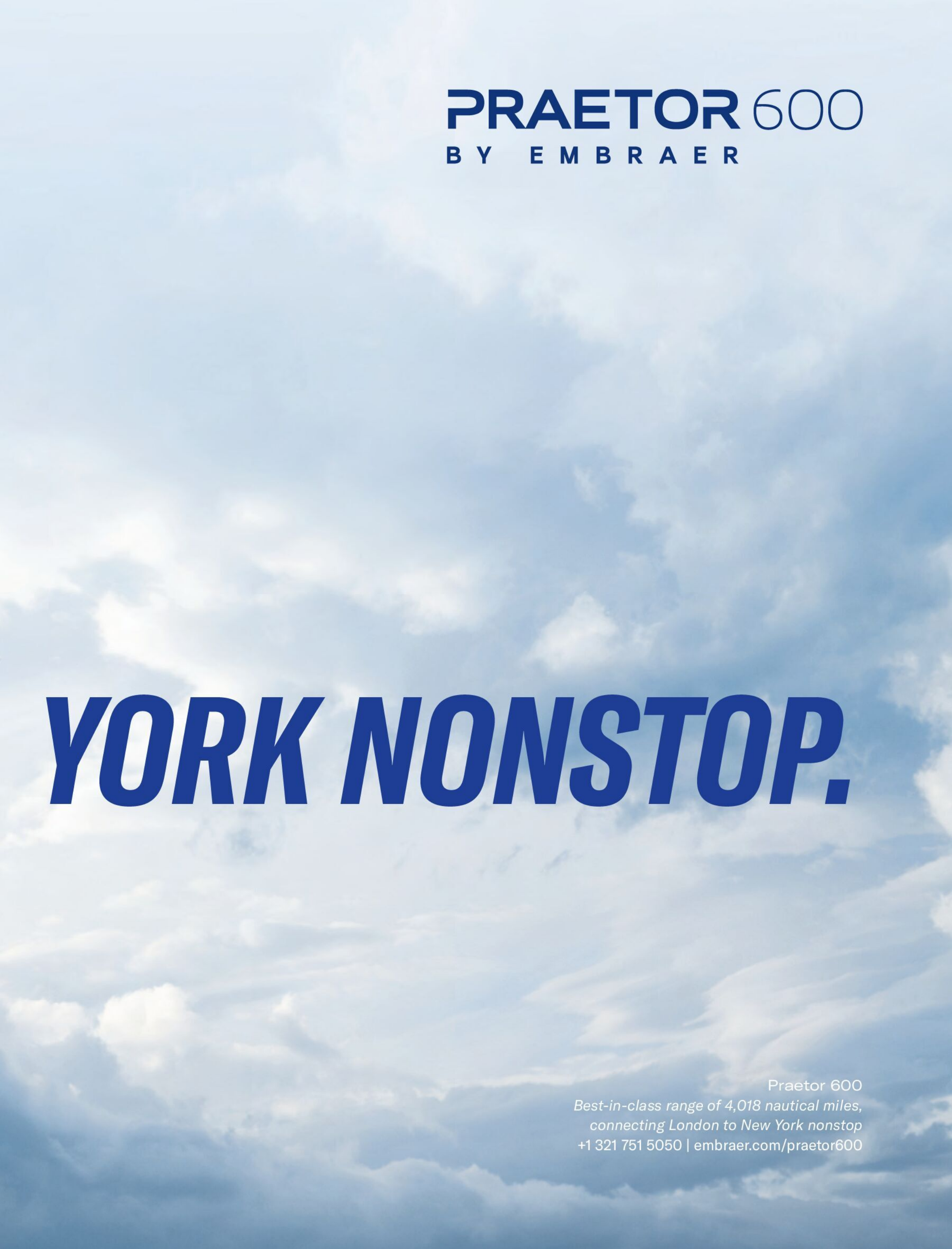
AMERICA'S RICHEST SELF-MADE WOMEN

TAYLOR SWIFT, SHONDA RHIMES, MEG WHITMAN AND 97 OTHER ENTERTAINERS, ENTREPRENEURS AND EXECUTIVES WORTH A RECORD $124 BILLION

PLUS: FINTECH'S 50 MOST INNOVATIVE STARTUPS


THE LEXUS LC
XHD 520


LONDON TO NEW
EMBRAER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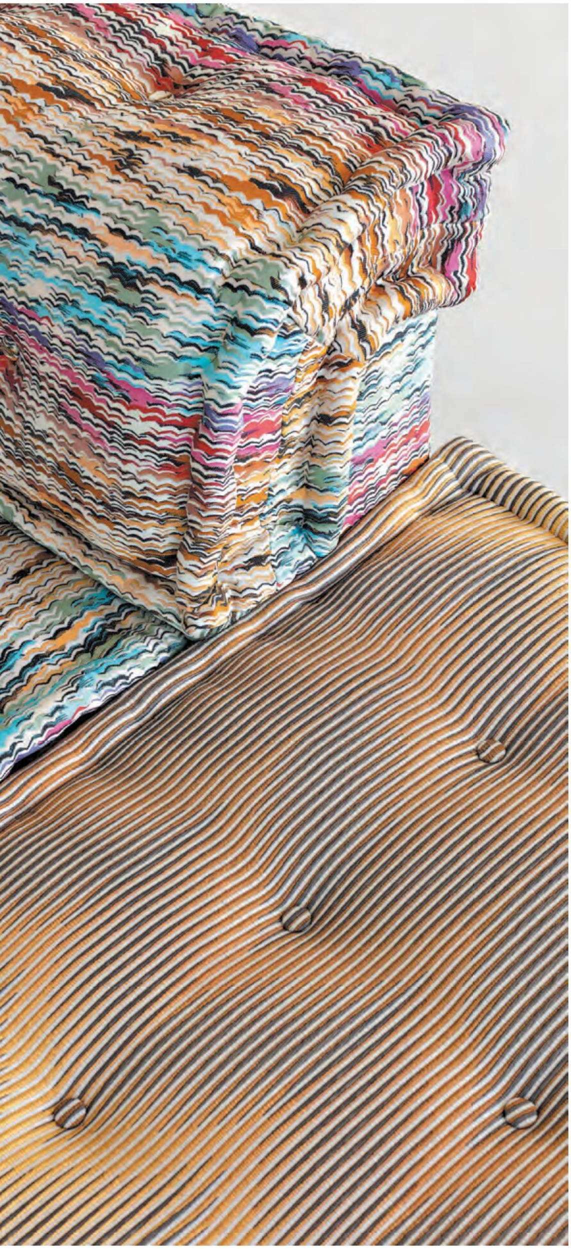

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Mah Jong. Modular sofa, designed by Hans Hopfer.
Upholstered in **Missoni** fabrics, Constellation collection.
Platforms in wenge-stained Alpi® Zebrano veneer.
Twin. Floor lamps and table lamps, designed by Clarisse Dutraive.
Rockford. Rug, Missoni.


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Forbes

June/July 2023 | Volume 206 | Number 3

INSIDE

Chip Shape

AMD CEO Lisa Su is taking on Nvidia in the AI wars. Her secret weapon: the Instinct MI300 *(shown here)*, a chip that melds traditional CPUs with GPU processors that are often used in gaming.

LISA SU BY JAMEL TOPPIN FOR FORBES

June/July 2023

ON THE COVER:
Photograph by Jamel Toppin for Forbes

TOTO WOLFF BY LEVON BISS FOR FORBES


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54

ADEYEMI AJAO BY CODY PICKENS FOR FORBES; SAL GILBERTIE BY FRANCO VOGT FOR FORBES

SIDELINES

In Forbes We Trust

Paradoxically, for all the historic innovation and prosperity we've collectively created, we live in an era of profound mistrust. Media sits at the heart of this. A world of unlimited choice has led to information silos, depriving our democracy of the common facts we need to maintain it.

That underscores the importance of YouGov's recent survey on trust in media, which incorporated more than 1,500 American adults, weighted for various backgrounds, and expanded in scope from just 22 outlets to 56, including *Forbes.* The results were extremely gratifying. *Forbes* ranked *fifth among all news sources,* with the top three (the Weather Channel, PBS and the BBC) wearing the untouchable halos of public utilities.

Top 10 Most Trusted News Sources

In addition to coming in first among the 34 newbies, *Forbes* ranked as both the No. 1 most trusted and *very* trusted—as well as the No. 1 *least untrusted.* This is a tough trick in an age of polarization. More Republicans trust *Forbes* than Breitbart or Twitter. More Democrats trust *Forbes* than they do the *Guardian* or the *Atlantic.* We score well across gender, region and educational background—and we greatly over-index with those under 30 and people of color, especially Black Americans. *Forbes* chronicles success—and success is universal.

It's also global. In the past few months, I've been privileged to help host the world's most prestigious International Women's Day gathering in Abu Dhabi, 1,000 of Africa's top entrepreneurs in Botswana and a solutions-driven pitch competition encompassing the entire Middle East/North Africa (MENA) region in Morocco. Trust in *Forbes* spans the globe.

As Warren Buffett often says, it takes 20 years to build a reputation and five minutes to ruin it. On behalf of our entire newsroom, please know this: While we're far from perfect, we cherish the trust you place in us, and we will work hard every single day to honor it.

—**RANDALL LANE,** CHIEF CONTENT OFFICER

Forbes

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DELIVERING FOR AMERICA

Biden Worldview: Bleak and Wrong

If you want to feel truly downcast about the U.S.' future, read a recent speech given by National Security Advisor Jake Sullivan. He thought he was outlining a dynamic vision of where the Biden Administration wants to take the country and the world; "dystopian" would be more accurate.

Free markets? Forget 'em! Without government guidance, Sullivan avers, free-market economies will go in undesirable directions. He reels off the usual tropes about inequality, stock buybacks, the hollowing out of U.S. manufacturing, sending jobs overseas and letting China and others take the lead on semiconductors and other critical technologies.

Sullivan scorns "tax cutting and deregulation, privatization over public action and trade liberalization as an end in itself." In his mind we need more government planning and less reliance on free markets: "A modern American industrial strategy identifies specific sectors that are foundational to economic growth, strategic from a national security perspective and where private industry on its own isn't poised to make the investments needed to secure our national ambitions. It deploys targeted public investments in these areas."

Forcing the use of renewables, primarily windmills and solar panels, is the top priority, as well as waging war against fossil fuels: ". . . to harness that opportunity, America needs a deliberate, hands-on investment strategy to pull forward innovation, drive down costs and create good jobs."

Sullivan's raps about free markets are off-base.

Inequality? People want rising incomes. Thanks to tax cuts enacted in 2017 that benefited both business and individuals, wages for lower-income earners and minorities rose faster than those in higher-income brackets.

Semiconductors? The U.S. has a five-year lead on advanced chip architecture over China.

Manufacturing? It was hurt by a binge of mostly unjustified regulation in the early years of this century. Deregulation—as well as tax cuts—during the Trump years saw improvement in manufacturing.

As for governments forcing the use of renewables, this has sharply raised energy costs in Germany and elsewhere to levels more than double our own. And renewables are a notoriously unreliable power source.

Moreover, greater production of green energy requires massive, environmentally disastrous increases in mining. The focus on renewables will also damage developing countries by hitting them with artificially high energy costs. This is why India, China and others are going all-in on fossil fuels.

What Sullivan and his ilk conveniently ignore is that economies "guided" by governments in the way he envisions invariably do worse than those geared more toward free enterprise. U.S. growth rates over the years have vastly outperformed those of statist European nations.

Sullivan's manifest distaste for free markets reflects a distrust of free people. Markets, after all, are people making countless numbers of buy-and-sell decisions every day. Creativity and innovation usually come from people who are not bound by conventional wisdom. Progress requires constant experimentation from numerous individuals and entities.

Government "guidance" ultimately guarantees stagnation. The innovative NASA of the 1960s gave way to a hidebound agency lacking in imagination. Thankfully, along came Elon Musk and SpaceX, whose know-how and vision exceed NASA's—and China's.

Don't Muzzle AM Radio!

AM radio is under assault, and it is too important to be silenced. AM radio is over 100 years old and has been a mainstay in cars and trucks for decades. It has tens of millions of listeners and is also essential for emergency broadcasts. Yet more and more auto manufacturers have slated AM radio for elimination. Ford Motor just announced that this legacy band will be disappearing in virtually all its new models.

Most makers of electronic vehicles (EVs), notably Tesla, don't provide AM because the vehicles generate electromagnetic signals that interfere with AM reception. But as the

DOUGLAS SACHA/GETTY IMAGES (BOTTOM)

Steve Forbes Cont.

Ford move indicates, traditional vehicles with internal-combustion engines are also being designed with dashboards that don't have AM radio.

The EV interference problems are resolvable. The remedies will come at a cost, but they are small change, especially considering the countless billions of dollars President Biden is shoveling out for EV industry subsidies.

Public emergency officials are worried. Seven former heads of the Federal Emergency Management Agency (FEMA) sent a letter of warning to Transportation Secretary Pete Buttigieg, declaring, "Federal law mandates that FEMA always maintain its ability to deliver messages to the American people en masse. The National Public Warning System, the only method the government has to reach every point of the country at once, allows it to do so.

"Because of the great distances that its signal carries, and due to its resiliency during even the worst natural disasters, the success of the National Public Warning System hinges on the use of AM radio. However, should EV makers continue removing AM radios from their vehicles, this vital public safety system will no longer function as intended."

AM radio has its flaws, starting with the quality of music on its stations on up to the static that listeners often experience around power lines. Overall listenership has been trending down, but clearly, AM has staying power here and around the world.

This brings us to another mortal threat to both AM and FM radio: Auto manufacturers want to tap into the billions of dollars in potential revenue from subscriptions for various services on the auto dashboard as it becomes more technologically sophisticated. Their appetites have been whetted by drivers' willingness to pay subscription fees for SiriusXM. Why give away all that radio programming for free?

Conservatives should be working overtime to save AM. After all, talk radio has been absolutely crucial to getting conservative views across to listeners in an otherwise increasingly hostile environment.

AM must be preserved.

RESTAURANTS: GO, CONSIDER, STOP

Edible enlightenment from our eatery experts and colleagues Monie Begley, Richard Nalley and Randall Lane, as well as brothers Bob, Kip and Tim.

● The Bar at Daniel

60 East 65th St. (Tel.: 212-288-0033)

Chef Daniel Boulud celebrated 30 years of serving French-influenced, multicourse prix fixe and tasting menus at Daniel in May. Since reopening postpandemic, he has also presented a delightful in-house alternative at his glamorous Bar, where one can enjoy an abbreviated menu that features main menu offerings à la carte. There are two caviars on offer, as well as champagne by the glass. The Michigan cucumber "vichyssoise" is velvety and filled with chilled Peekytoe crab. Arancini is served with wild ramps and Parmesan. Rabbit "chaud froid" is a delicious taste of foie gras with a mild mustard sauce. For vegetables, the Alsatian white asparagus is served with hazelnut in a comté-sauternes emulsion, and the green salad with burrata and asparagus is wonderfully rich. The cheese cart—complete with a "Captain of Cheeses" to guide you in your choices—is dizzying with its more than 30 selections of French and American cheeses. To close, the desserts are divine.

● Fleming by Le Bilboquet

27 East 62nd St. (Tel.: 332-282-0350)

This younger sibling of Le Bilboquet is equally unshy with its pricing but happily delivers very tasty fare. Tuna tartare is sublime; Bibb lettuce is bountiful, and with its vinaigrette is a tangy treat; and the whole cold artichoke with a heavy mustard vinaigrette makes for delectable dipping. The chicken paillard is pounded paper-thin and cooked to buttery perfection. The passionfruit dessert with shavings of coconut and a dollop of vanilla ice cream is refreshing and summery, or try the bowl of blueberries and you'll feel virtuous.

● Rezdôra

27 East 20th St. (Tel.: 646-692-9090)

This rustic Italian restaurant features specialties and pastas of the Emilia Romagna region—and the food is quite good. However, the place defies any standard of hospitality, service or comfort. After a strenuous effort to capture a reservation, the 5:30 p.m. time slot for four was the assignment. The setting is a long banquette with small tables along it, facing a long bar. There is also a small section up a flight of stairs for 15 or so guests. We were offered a table by the front door, which opened every four to five minutes, so we settled on the table at the far end, next to the service station. We waited 20 minutes for cocktails to arrive, and 20 more for the appetizers. When the main course was done, we waited another 20 minutes for the plates to be cleared. One hour of wasted time that the restaurant caused. As the gelati arrived, the manager put the check down ($500—it's expensive). She returned five minutes later to say the people at the bar really wanted our table and she was under a lot of pressure to turn it. We pointed out the wait time we didn't cause and inquired if we were supposed to put the gelati in our pockets and purses. There were no apologies from her, the waiter or anyone else. It was one of the most unpleasant and expensive evenings ever.

● Gotham

12 East 12th St. (Tel.: 212-380-8660)

Gotham is back and better than ever. The interior refurbishment was done with a deft hand: The walls are lighter; the ceiling baffles are more like sails than their predecessors and keep noise levels comfortable. Service is impeccable, and the food is a notch beyond what was previously merely fabulous. Start with the artichoke with crumbled bacon and melted cheese or the garden salad with its refreshing vinaigrette. The lobster is sweet and succulent, and the strip steak is sublimely tender. Save room for dessert, especially the dark passion—a wonderful pairing of rich dark chocolate cake and passionfruit sorbet—or the blood orange crème fraîche parfait.

● T Bar

116 East 60th St. (Tel.: 212-772-0404)

Tony Fortuna and Derek Axelrod invested a great deal in renovating T Bar's new home, a three-story, spacious and sexy interior done in muted tones. The all-American menu offers what you'd expect, but the results are beyond good. To start, try the seared octopus, the delicious guacamole, the shrimp cocktail or the tuna tartare, whose flavor and freshness cannot be improved upon. Cavatelli Antonucci, a tribute to restaurateur Francesco Antonucci, makes a great shared mid-course. The Dover sole is moist and simply prepared; the crusted tuna is also perfectly cooked. Some desserts offered are to be shared by several.

● l'abeille

412 Greenwich St., between Laight & Hubert streets (Tel.: 212-542-3898)

L'abeille, which means "the bee" in French, has generated a lot of buzz but packs a powerful sting when the check arrives. Unless one sits at the bar and orders à la carte, one must order from the six-course chef's tasting menu for $225 or the four-course discovery menu for $165. With both, supplements can add up quickly. The beet salad features three different beets with a rose-water-infused yogurt. The second part of the first course, served separately, is an abalone en croute with caviar and has a $65 supplement—we demurred. Next course is a delicious roasted Japanese Spanish mackerel, followed by a choice of crispy veal tenderloin with asparagus or a grilled A5 Wagyu beef with a braised half turnip. The 1.5-by-2.5-inch cube of beef entails a $95 supplement. Dessert is hickory ice cream, blackberry mousse and dark chocolate, followed by petits fours. Service is impeccable, and the low-key, contemporary 54-seat interior is a nondistracted setting for superb fare—at a price!

Forbes

UNDER 30 SUMMIT AFRICA

SCAN TO SEE MORE FROM THE SUMMIT

For the second time, the Forbes Under 30 Summit Africa in Gaborone this past April convened nearly 1,000 young entrepreneurs, investors and rising leaders from 51 countries for four days of networking, inspiration, impact and pan-African culture–with Botswana at the center. Founders from every sector shared business perspectives for the newest–and next–generation of innovators who are establishing entrepreneurship as the defining economic narrative on the continent that is the world's greatest growth market and largest free-trade zone. Esteemed speakers included Botswana President Mokgweetsi Eric Keabetswe Masisi, Tanzanian billionaire Mohammed Dewji, Kenyan tech tycoon Julius Mwale, South African Grammy Award winner Nomcebo Zikode, and Nigerian singer/songwriter Davido.

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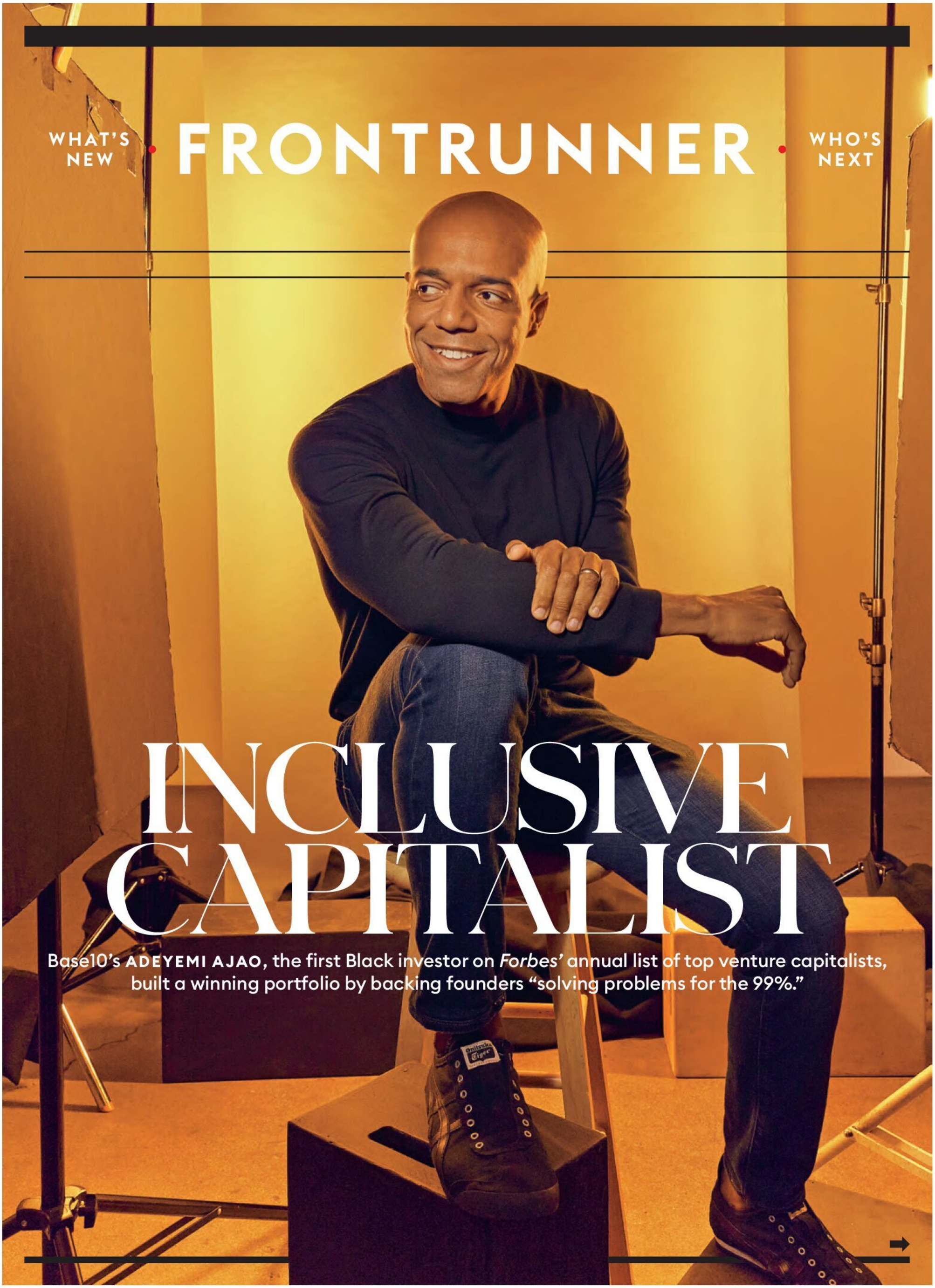


INCLUSIVE CAPITALIST

Base10's **ADEYEMI AJAO**, the first Black investor on *Forbes'* annual list of top venture capitalists, built a winning portfolio by backing founders "solving problems for the 99%."

BY **ALEX KONRAD.** CODY PICKENS FOR FORBES

CODY PICKENS FOR FORBES

W

When Adeyemi Ajao heard that fellow Spaniards were working on a Facebook competitor for their country at the famed tech hub of Stanford University in 2005, the college student coder figured his own nascent social network, Tuenti, was doomed. But Ajao held his own, signing up half of Spain's computer owners over the next five years before selling to Telefónica for $100 million.

It was while attending Stanford himself (MBA, 2010) that Ajao found his true calling: superstar tech investor. With his business school classmates, Ajao launched three startups—Identified, which used AI to scour social media for recruiting purposes; staffing marketplace Jobandtalent; and a Latin American Uber rival called Cabify. Identified, which he chose to run full-time, was acquired by Workday for about $50 million in 2014 (it was mostly stock, which was eventually worth more than $100 million). Jobandtalent and Cabify—the two he seeded with cash from Tuenti's sale—are each currently valued at over $1 billion.

Ajao's partners in those businesses revel in telling founders that his investor talents surpass his managerial skills. "They'll tell founders, 'Ade's great, particularly when he's not running things,'" he jests. "'Have him pop up and share stories when you need him.'"

At giving such part-time help, Ajao, 40, has proven one of the best. The cofounder and managing partner of Base10 Partners debuts on this year's Midas List of top venture capitalists at No. 96 due to his fund's investments in Mexican logistics unicorn Nowports, San Francisco–based cap table manager Carta and Atlanta-based restaurant software maker Popmenu. His most successful bet yet: Nubank, the São Paulo–based digital bank that went public in December 2021 and now sports a market cap of about $30 billion.

Nubank helped nine investors, including Ajao, make the Midas List this year. That's part of a broader trend of investors in companies that went public in past years dominating the ranks. Because they built large positions so cheaply, early backers of home-sharing site Airbnb, crypto exchange Coinbase and China's video-sharing app Kuaishou, for example, all surged despite those stocks mostly trading today at a fraction of their IPO highs.

With fewer first-timers (seven in total) on the Midas List than in past years, Ajao is a notable exception. The son of a Nigerian engineer father and Spanish architect mother, Ajao spent his childhood based in Lagos, traveling across Europe to follow his dad's work projects. He was 9 when his family settled in Málaga, Spain, where Ajao, who spent his after-school hours coding in Cobol, and his brother were the only non-white students. Ajao embraced his outsider status: "Yeah, so I'm different. Isn't that cool?"

Armed with capital from his success building Tuenti during and after college, Ajao made about 30 personal investments, including Colombian on-demand delivery startup Rappi and grocery delivery business Instacart. Ajao joined Workday after the Identified deal, where he launched a venture arm before leaving in 2017 to start Base10 with cofounder TJ Nahigian.

The common thread of Ajao's and Base10's investment wins:

NEW AND NOTABLE

Rather than gut instinct, Acrew Capital founding partner **Lauren Kolodny** relies on research-driven hypotheses–such as the notion that Millennials living paycheck to paycheck want a digital-first bank–leading her to bet on $25 billion (valuation) neobank Chime. Investments in payroll software provider Gusto, recently valued at $9.6 billion, and budgeting app Divvy (acquired by Bill.com for $2.3 billion in 2021) are rooted in her belief that more accessible fintech services will help alleviate financial inequality.

a strong thesis, such as the impact of "automation of the real economy"—think physical shopping, logistics and food—and an eye for applying it to emerging markets like Latin America. That's no easy task, but a higher degree of difficulty, according to Ajao, translates into higher profits. "A bad day at work at Workday was losing a contract to Oracle," he says. "But a bad day at Cabify was Mexico City kicking you out."

At Nubank, cofounder and CEO David Vélez says he was impressed by Base10's inclusion of Historically Black Colleges and Universities—typically shut out of venture profits—in its investor base. As Nubank eyes future expansion in Africa and Europe, he expects to lean on Ajao again. "He is able to build empathy and relationships with entrepreneurs, and he has a more global view of investing," Vélez says.

Ajao, who in addition to being the first Black Midas member is one of a record five Hispanic investors on the 2023 list, doesn't want his identity to define his investing. But he has learned to embrace his own story as an example for others. "I'm an optimist," he says. "I do think the world is slowly moving in a positive direction."

Find the full list at forbes.com/lists/midas.

KOLODNY AND NOZAD BY RASHI SHRIVASTAVA

HIGHEST-RANKED

1. Neil Shen
FIRM: Sequoia China
NOTABLE DEAL: ByteDance
LOCATION: *Hong Kong*

2. Micky Malka
Ribbit Capital • Coinbase
Menlo Park, California

3. Alfred Lin
Sequoia • Citadel Securities
San Francisco

4. Richard Liu
5Y Capital • Xiaomi
Hong Kong

5. Navin Chaddha
Mayfield Fund • HashiCorp
Saratoga, California

6. Garry Tan
Y Combinator • Coinbase
San Francisco

7. Zhen Zhang
Gaorong Capital • Pinduoduo
Beijing

8. Lee Fixel
Addition • Freshworks
New York City

9. Fred Wilson
Union Square Ventures
Coinbase
New York City

10. Hans Tung
GGV Capital • Airbnb
San Francisco

11. David Frankel
Founder Collective • Coupang
Brookline, Massachusetts

12. Samir Gandhi
Accel • Freshworks
San Francisco

13. Mike Speiser
Sutter Hill Ventures • Snowflake
London

14. Reid Hoffman
Greylock • Airbnb
Palo Alto, California

15. Satish Dharmaraj
Redpoint Ventures • Cockroach
Saratoga, California

16. Danny Rimer
Index Ventures • Figma
London

17. Eric Vishria
Benchmark • Confluent
Atherton, California

18. Jan Hammer
Index Ventures • Adyen
London

19. Luciana Lixandru
Sequoia • UiPath
London

20. Scott Shleifer
Tiger Global Management
Upstox
New York City

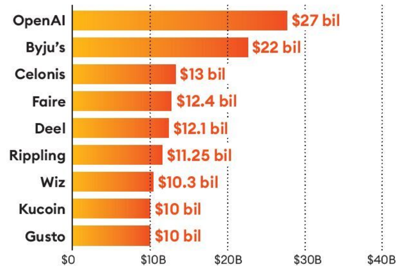
LINGERING IPOs

This list of the 10 IPOs helping investors make the Midas ranks is full of familiar names. That's because hardly any new businesses are going public these days. Among the companies staying private for now is the list's overall biggest driver: $220 billion (valuation) ByteDance.

COMPANY	IPO DATE	IPO MARKET CAP	NUMBER OF INVESTORS
Coinbase	April 2021	$86 bil	11
Uber	May 2019	$76 bil	4
Kuaishou	Feb. 2021	$61 bil	3
Coupang	March 2021	$60 bil	5
Nubank	Dec. 2021	$41.5 bil	9
Airbnb	Dec. 2020	$41 bil	13
Roblox	March 2021	$41 bil	2
Snowflake	Sept. 2020	$33 bil	4
DoorDash	Dec. 2020	$32 bil	7
Palantir	Sept. 2020	$21 bil	3

TRUE UNICORNS

Game-changing AI startup OpenAI (valued at about $27 billion) and Indian edtech giant Byju's (valued at $22 billion) were among the few unicorns that maintained or increased their last valuation, helping investors navigate a sea of red ink.



No. 1
PEJMAN NOZAD

RUGS TO RICHES

Before he cofounded seed-stage firm Pear VC and grew it to a $50 billion portfolio, **Pejman Nozad** was a sports journalist in Iran and a Persian rug dealer in Palo Alto, California. He owes his top spot on the Midas Seed List to recent exits from early bets: food delivery giant DoorDash ($32 billion market cap at IPO) and digital storage business Dropbox ($9.2 billion market cap at IPO). Find the full list at **forbes.com/lists/midas-seed.**

SOURCE: *TrueBridge Capital Partners*

Philly Special

A lifelong 76ers fan, David Adelman agreed to lead the team's new arena project under two conditions: no city funding and no moving the team out of Philadelphia.

New Billionaire

BIG MAN ON CAMPUS

David Adelman made a fortune in college housing. Now he's making enemies as an NBA owner.

Starting to feel the heat of public scrutiny, David Adelman knew it was finally time to sit his two college-age daughters down to have the talk. "They knew we did well," says Adelman, who was officially outed as a billionaire in May, "but I never talked about numbers."

There hadn't been much need. Adelman, 51, spent most of his life flying under the radar. Lately, though, he's been hard to miss. In October, he bought 7% of Harris Blitzer Sports & Entertainment, owner of the NHL's New Jersey Devils and the NBA's Philadelphia 76ers. Now he's spearheading a plan for a new Sixers arena that has drawn scorn from community activists who say it will destroy the neighborhood. "I'm getting punched in the face," he says.

Adelman made his first move in Philly real estate at age 13, investing $2,000 of bar mitzvah money in a property with Alan Horwitz, a family friend and student housing entrepreneur. He went to work for Horwitz, rising from leasing agent to property manager and, in his 20s, CEO. Over the years, he began taking more equity. Today, his Campus Apartments ranks among the largest providers of on- and off-campus housing in America, with some $2 billion worth of properties across more than 70 schools in 24 states—a lucrative gig, if you've seen rents near colleges these days.

Off campus, Adelman has built an even bigger fortune with FS Investments, an alternative-investment firm he cofounded in 2007 that manages $35 billion across more than a dozen mutual funds, REITs and other vehicles. His Darco Capital family office has pumped cash into everything from LeBron James–backed Lobos 1707 tequila to Premier League soccer club Crystal Palace.

All told, *Forbes* estimates Adelman to be worth $2 billion—a good war chest for the coming battle over the new arena. Critics say it would harm nearby Chinatown; Adelman contends the privately funded, $1.3 billion project will revitalize the area. "David has made his money," says his longtime friend Michael Schulson, a Philadelphia restaurateur. "This is his legacy plan."

Trend Lines

PERFECT TIMING

At the annual Watches and Wonders expo in Geneva, the world's top watch brands reveal their releases for the coming year. From a new Rolex dress watch to a 60th-anniversary TAG Heuer Carrera, here are the timeless timepieces that had watch collectors all wound up this spring.

Dress Watches

(From left) Rolex Perpetual 1908 ($22,000); Cartier Tank Normale ($46,400); Vacheron Constantin Overseas Self-winding (price upon request); Grand Seiko Spring Drive Limited Edition SBGZ009 ($79,000)

Sport Watches

(From left) TAG Heuer Carrera Chronograph ($6,450); Tudor Black Bay 54 ($3,850); IWC Ingenieur Automatic 40 ($11,700); Patek Philippe Calatrava 6007G ($37,850)

NEW BILLIONAIRE BY JABARI YOUNG. JAMEL TOPPIN FOR FORBES

Promotion

Fidelity INVESTMENTS CAREERS

Forbes 2023
BEST EMPLOYERS FOR DIVERSITY
POWERED BY STATISTA

Career perspectives:
Chasity Holt, Director of Software Engineering

Chasity started her career right after graduating from college by joining the Fidelity LEAP technology development program. With a passion for helping women in technology, diversity & inclusion, and mentorship, Chasity shares insights about her experience at Fidelity.

WE WANT YOU TO BE YOU.

“ **Oftentimes, it’s difficult to find women in technology roles—especially in leadership.** At Fidelity, I’ve seen quite the opposite. Not only have I had the pleasure of being mentored and managed by women within technology, but I’ve also found opportunities to lead in areas such as cloud engineering that have traditionally been male dominated.

At Fidelity, women are driving strategy and innovation conversations, being recognized for their contributions to technology, and being empowered to lead organizational change while continuing to build on their personal and technical skills.

I started my career at Fidelity in the LEAP program as a recent college graduate, uncertain, but eager to see what my career would potentially evolve into. Now I’m able to reflect on the opportunities to influence, showcase my technical skills, and develop many of my behavioral skills through experiences given to me while working in technology. Fidelity has provided me the space to be authentic and intersect my passions with my career, presenting myself as a whole person each day.

Fidelity Investments is an equal opportunity employer.

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30 Under 30

WATER WORLD

Pursuing liquidity with the Forbes 30 Under 30, in 30 words or less.

Bunim Laskin 26
COFOUNDER, **SWIMPLY**

His Airbnb-like site lets folks rent private swimming pools by the hour. It power-stroked its way to $25 million in revenue in 2022. Up next: tennis courts.

Nick Doman 29
William Pearson 28
COFOUNDERS, **OCEAN BOTTLE**

Buy one stainless steel water bottle from this British duo and they'll save 1,000 plastic ones from ending up in the ocean. Revenue in 2022 hit $10.5 million.

Jake Danehy 29
Caroline Danehy 26
COFOUNDERS, **FAIR HARBOR**

The siblings have transformed nearly 10 million plastic bottles into board shorts and beachwear, bringing in $53 million in revenue last year.

Dylan Gastel 27
FOUNDER, **EZ ICE RINKS**

His portable ice-skating rinks can be assembled in an hour, without tools, on any surface—just add water. (Zamboni not included.) Sales hit a cool $13 million in 2022.

Urban Affairs

BEST PLACES TO RETIRE

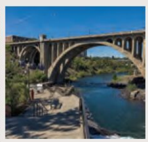
We compared housing costs, taxes, access to health care, air quality and crime data across more than 800 American locales to determine the 25 best cities and towns for those in their golden years. The full list is at forbes.com; here's a sampler.

Jacksonville, FL
Pros: Oceanside; no state income or estate taxes; moderate (by Florida standards) risk of natural disasters.
Cons: Not very walkable; tickets for NFL's vastly improved Jaguars now harder to get.

Pittsburgh, PA
Pros: Median home price 42% below national figure; bikeable and walkable; three rivers are better than two.
Cons: Above-average crime rate; nasty state inheritance tax.

Rochester, MN
Pros: Home to the Mayo Clinic, so doctors-a-go-go. Low crime.
Cons: Not very walkable—which is probably a pro during winter.

San Antonio, TX
Pros: Affordable housing; no state income or estate taxes. Great tacos.
Cons: Too much crime. Easily mistaken for the inside of a kiln in summer.



Spokane, WA
Pros: Good air quality; outdoorsy; low risk of natural disasters.
Cons: Cold winters; new 7% excise tax on capital gains topping $250,000.

30 UNDER 30 BY KRISTIN STOLLER. ILLUSTRATION BY DIEGO PATIÑO


Blackmagicdesign
INVESTOR UPDATE
Preview
Program
Marcus Jordan
Chief Executive Officer
Camera 1
Camera 2
Camera 3
Keynote
ON AIR
00:30:45
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OK
YouTube
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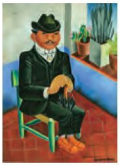
BUY, HOLD, SELL

Latin American Paintings

Anna Di Stasi

Senior Vice President, Head of Latin American Art at Sotheby's, New York

BUY:



Latin American Modernism
Twentieth-century Latin American artists have become essential for museums wanting to appeal to the growing Latino diaspora. Buy before blue-chip becomes blue-sky: Miguel Covarrubias' circa-1940 "El Hueso" *(above)* went for $756,000 in 2022—ten times its high estimate.

HOLD:

Carlos Cruz-Diez (1923–2019)
Demand for this Venezuelan giant of kinetic abstraction has waned in recent years, but interest is rekindling. "Physichromie No. 1150" *(above)*, from 1979, sold in May for $139,700. Expect more of the same.

SELL:

Remedios Varo (1908–1963)
Once insatiable, collectors' appetite for female artists has diminished some—but Varo, a leading Surrealist with limited production, is still immensely popular. "Armonía" *(above)* sold for $6 million in June, double its high estimate. Cash in now.

Baseball Memorabilia

Chris Ivy

Director of Sports Collectibles at Heritage Auctions, Dallas

BUY:

Iconic Player Cards
Speculating on rookies and other active players is always the game within the card collecting game, but the smartest money is still on Hall of Famers. Someday soon the $516,000 spent in January 2022 for this 1914 Cracker Jack Ty Cobb will seem like a bargain.

HOLD:

1980s Stars' Game-Used Items
Fans favor the heroes of their youth, and with Gen X'ers in their peak spending years, '80s gear like this game-worn Don Mattingly jersey, which sold for $18,600 in 2020, should get only more valuable with age.

SELL:

Modern Limited Editions
"Limited release" sounds nice, but recent collectibles can't match older ones' rarity. While this unique Pete Rose bat used to tie the base-hit record in 1985 fetched $855,000 in 2021, an ordinary signed Rose bat from a "limited" set of 100 recently sold for just $300.

Necklaces

Caroline Morrissey

Bonhams Director and Head of Jewelry, New York

BUY:

Signed Art Deco
Thanks to Art Deco's enduring popularity, well-preserved necklaces from legacy houses are only getting rarer. This Mauboussin piece (circa 1920) sold for nearly $280,000 at Bonhams in March—and such figures will only climb.

HOLD:

Diamond Rivière
When the world is crumbling, diamonds are the ice to keep in your chest. Safe and mobile, gems like this $1.3 million 1960s Harry Winston rivière necklace, once owned by Zsa Zsa Gabor, are likely to increase in value.

SELL:

Schlumberger for Tiffany & Co.
Thanks to a redesign of its Fifth Avenue flagship and a Beyoncé and Jay-Z ad campaign, Tiffany has its luster back. Seize the moment to dust off heritage pieces like this Schlumberger 18-karat gold Tulip necklace, which sold for $250,000 in November 2022.

My First Investment

Arte Moreno
NET WORTH: $4.7 billion
(Billboards, baseball)

ASSET:
Rental House

After returning from the Vietnam War, Arte Moreno, now 76, used the G.I. Bill to purchase a two-bedroom house in his hometown of Tucson, Arizona. "The government was my financier," Moreno recalls. In 1969, he put $1,000 down (the equivalent of about $8,300 today) for a $20,000 mortgage ($165,000 in current terms)—then rented the place to his brother and two of his brother's friends. He converted the rear garage into a studio and rented that to a local mailman. The tenants paid two and a half times his mortgage, more than paying for his student apartment near the University of Arizona, where he studied marketing. "There's always value in real estate," says Moreno, who added to his rental portfolio throughout his 20s, then graduated to the big bucks when he cofounded billboard company Outdoor Systems, which he sold to CBS in 1999 for $8.3 billion. He used some of the proceeds to make another wise purchase: the Los Angeles Angels. He bought the MLB team for about $180 million in 2003; it's now worth $2.7 billion.

BUY, HOLD, SELL BY ISABEL LORD AND NINA BAMBYSHEVA. ILLUSTRATIONS BY CHRIS LYONS. BASEBALL PICS: HERITAGE AUCTIONS, HA.COM; NECKLACES: BONHAMS; PAINTINGS: SOTHEBY'S

SportsMoney

THE WORLD'S HIGHEST-PAID ATHLETES

With revenues skyrocketing and a gusher of money flowing in from the Middle East, sports stars are making more than ever.

The 50 top-earning athletes, spanning eight sports and 15 nationalities, hauled in an estimated $3.4 billion over the last 12 months. That obliterates the previous high of $3 billion set last year and roughly doubles the total of a decade ago. The floor just keeps rising: The cutoff for the elite 50 is $45.2 million, up an astonishing 20% from 2022's $37.6 million. At the top, eight athletes earned at least $100 million, twice as many as in any previous year.

1. Cristiano Ronaldo 38

TOTAL: **$136 million**
ON-FIELD: **$46 mil** | OFF-FIELD: **$90 mil**
SPORT: Soccer
NATIONALITY: Portugal

The soccer star claims the top spot for the third time, and the first time since 2017, after leaving England's Premier League for a club based in Saudi Arabia in January.

2. Lionel Messi 35

$130 million
$65 mil | **$65 mil**
SPORT: Soccer
NATIONALITY: Argentina

The 2022 World Cup winner with Argentina can look forward to a blockbuster new playing contract next season, but for now he makes plenty from a dozen-plus long-term sponsors.

3. Kylian Mbappé 24

$120 million
$100 mil | **$20 mil**
SPORT: Soccer
NATIONALITY: France

One of only five among the top 50 who are 25 or younger, Mbappé made more on the field than any other team-sport athlete.

4. LeBron James 38

$119.5 million
$44.5 mil | **$75 mil**
SPORT: Basketball
NATIONALITY: U.S.

The Los Angeles Lakers forward was the first active athlete to become a billionaire (he did so in 2022) thanks to his stake in the SpringHill Company, the media empire he cofounded.

5. Canelo Álvarez 32

$110 million
$100 mil | **$10 mil**
SPORT: Boxing
NATIONALITY: Mexico

The boxer collects tens of millions of dollars every time he steps in the ring, and he's an active entrepreneur as well. Among his businesses: sports drinks, a fitness app and a gas station chain.

6. Dustin Johnson 38

$107 million
$102 mil | **$5 mil**
SPORT: Golf
NATIONALITY: U.S.

The golfer is believed to have received more than $60 million upfront to sign with the Saudi-backed LIV tour. He pocketed an additional $18 million for winning LIV's individual title last year.

7. Phil Mickelson 52

$106 million
$104 mil | **$2 mil**
SPORT: Golf
NATIONALITY: U.S.

The oldest member of the top 50, Mickelson received an estimated $100 million upfront to join the LIV tour (which counts toward his on-course earnings) and was a runner-up at the Masters in April.

8. Stephen Curry 35

$100.4 million
$48.4 mil | **$52 mil**
SPORT: Basketball
NATIONALITY: U.S.

The four-time NBA champion with the Golden State Warriors had a league-high $48.1 million salary this past season and is set to become basketball's first $50 million man next season.

9. Roger Federer 41

$95.1 million
$0.1 mil | **$95 mil**
SPORT: Tennis
NATIONALITY: Switzerland

The tennis ace played his last match in September—doubles alongside his longtime rival Rafael Nadal. He owns a significant stake in fast-growing Swiss shoe company On.

10. Kevin Durant 34

$89.1 million
$44.1 mil | **$45 mil**
SPORT: Basketball
NATIONALITY: U.S.

The NBA forward, traded to the Phoenix Suns in February, signed a lifetime deal with his sneaker sponsor, Nike, two months later. He also runs investing firm 35V and media network Boardroom.

METHODOLOGY: *Forbes tracked income collected between May 1, 2022, and May 1, 2023. All figures are converted to U.S. dollars using the current exchange rate. Forbes does not deduct for taxes or agents' fees. The list includes athletes active at any point during the 12 months in question.*

BY BRETT KNIGHT. ADDITIONAL REPORTING BY JUSTIN BIRNBAUM AND MATT CRAIG. PHOTOS BY GETTY IMAGES

WORLD OF FORBES

Around the planet, our 45 licensed editions span six continents, 27 languages and 14 time zones. They all share the same mission: celebrating entrepreneurial capitalism in all its forms.

ANGOLA

Since Edson dos Santos (no relation to former president José Eduardo dos Santos) joined Angolan energy company Somoil—now called Etu Energias—in 2020, crude oil production has nearly tripled to 17,000 barrels per day and turnover is approaching $450 million. The chairman is eyeing expansion to neighboring Namibia and beyond.

ARGENTINA

While building 10-year-old Workana into a leading freelancer platform in Latin America, Buenos Aires–based cofounder and chief operating officer Eliana Bracciaforte revealed her trans identity in 2022. The company serves more than 2 million registered workers, with more than 200,000 new users each month.

AUSTRALIA

"Turnaround boss" Christina Holgate has increased revenue 16% and reduced staff turnover by half since mid-2021 leading Melbourne-based logistics company Team Global Express. The former head of Australia's postal service exited that position in 2020 amid controversy regarding expensive gift giving.

BULGARIA

Musala Soft, a Bulgarian software provider cofounded by Elena Marinova in 2000 with $34 million in 2022 revenue, was acquired early last year by Czech holding group Aricoma, part of billionaire Karel Komárek's KKCG investment group.

CHINA

As Hong Kong billionaire Vincent Lo, 75, plans semi-retirement, daughter Stephanie will take the reins of Shui On Land, the family's public company known for developing Shanghai entertainment district Xintiandi. Her priorities include reducing carbon emissions.

COLOMBIA

Forbes Colombia presents the list of the country's most powerful women—featuring *(from left)* Sandra Hinestroza, director of HP Colombia; Leonor Espinosa, chef; Francia Márquez, the country's first Black vice president; and Liliana Restrepo, cofounder of chicken restaurant chain Frisby.

CYPRUS

Nikos Christodoulides, president of Cyprus, details his plans as he takes office. His government's main priorities include boosting tourism and speeding the digitization of the economy, tax reform and a strong focus on environmental sustainability.

CZECH REPUBLIC

Forbes Czech remembers Soňa Červená, an internationally acclaimed opera singer who died in May at 97. The soloist had performed around the world and fronted the 2017 magazine issue featuring the country's most influential women.

ECUADOR

"I'm an entrepreneur, hardworking, brave, a fighter, mother, wife, lawyer, financier, woman. I'm many things. I refuse to be catalogued and judged just for being a woman."

—Mónica Heller, the first woman to chair the Chamber of Commerce in Quito, Ecuador's capital, since its 1906 founding

FRANCE

Among the newest honorees in venture capital, *Forbes France*'s 30 Under 30 list recognizes Alice Groth as part of the founding team of Sistafund, a Paris-based firm planning to invest more than $110 million into female-led and gender-balanced teams.

GEORGIA

The executives of TBC Leasing see big growth potential in lending, which currently accounts for just 1% of Georgian GDP. The Tbilisi-based team serves 4,000 clients and manages a portfolio worth $158 million.

GERMANY

Quantum Systems has supplied Ukraine's military with some 100 unarmed drones capable of scouting enemy positions and artillery targets. Cofounded by Florian Seibel and backed by German-born billionaire Peter Thiel, the Munich-based manufacturer prices each drone at about $198,000.

GREECE

Forbes Greece ranks the best ESG performers of the country's 100 largest companies. Titan Cement, among 18 earning top marks, recorded $2.4 billion in sales last year while reducing carbon emissions at its plants, including four in Greece.

BY KATHERINE LOVE AND GIGI ZAMORA. CYPRUS: DEMETRIS VATTIS; CZECH REPUBLIC: HANA KNÍŽOVÁ; FRANCE: MARC HAYOT PHOTOGRAPHY; GEORGIA: KHATUNA KHUTSISHVILI/FORBES GEORGIA; GERMANY: THOMAS DASHUBER

HONDURAS

To boost the economy and reduce logistical issues, Central American infrastructure needs a makeover that will cost $8.3 billion by some estimates. In 2022, the Central American Bank for Economic Integration, a multilateral development bank headquartered in Honduras' capital, approved $4 billion in grants for the region's rehabilitation and expansion costs.

JAPAN

Among its "Creator 100" list of innovators in the creative economy, *Forbes Japan* features Shiori "Siorine" Onuki. The midwife, author and sex educator based in Kanagawa, south of Tokyo, counts more than 200,000 followers across YouTube and Twitter.

PORTUGAL

Carlos Mota Santos *(right)* and cousin Manuel Mota recently took over the family's multinational construction business, becoming CEO and deputy CEO, respectively. Mota-Engil recorded 2022 turnover of $4 billion, employing some 1,800 Portuguese expatriates on three continents.

UAE

Mark Chahwan and Nadine Mezher cofounded UAE-based investment platform and personal finance app Sarwa with Jad Sayegh in 2017. The fintech has raised $25 million in total funding and has over 180,000 users.

HUNGARY

Former billionaire Michael O'Leary, longtime CEO of Ireland-based budget airline Ryanair, decries the Hungarian government's intentions to purchase Budapest Airport for $4.8 billion. "What for? To make it unprofitable? Governments are generally very bad owners of airports and airlines."

INDIA

Even with Android dominating India's market share, Apple is expanding its operations in the country, having opened its first Indian retail store in April in Mumbai. Apple is also boosting local manufacturing, taking advantage of lower production costs and rising demand.

ISRAEL

Eilon Elhadad *(left)*, recently 31, and Eylam Milner, 29, front *Forbes Israel's* 30 Under 30 issue. Their Tel Aviv–based startup, Argon Security, protects clients' custom software against cyberthreats. It sold to Aqua Security for an estimated $80 million in late 2021.

ITALY

Altus Lifestyle, a real estate firm cofounded by Pasquale Cataldi, has restored and sold properties for the ultrawealthy since 2016. From castles to palaces, the Florence-based company relies heavily on local artisans and craftsmanship for its renovations.

KENYA

Forbes Africa's ninth annual 30 Under 30 list features 29-year-old Tesh Mbaabu *(front right)*, cofounder and CEO of Nairobi-based MarketForce. The B2B startup raised $40 million in funding last year and is providing fintech and e-commerce tools to 200,000 retail merchants.

KAZAKHSTAN

Government leaders and Yerlan Shulanov, rector of Kozybayev University, hope a partnership with the University of Arizona will stop young people from leaving northern Kazakhstan. The program enables students to obtain dual degrees in disciplines such as information science.

MEXICO

Ceramics maker Lamosa plans to invest more than $260 million this year to strengthen its global presence. The family business, based in Monterrey, has grown from revenue of $80 million to a projected $1.8 billion for 2023 since its CEO, Federico Toussaint Elosúa, arrived 30 years ago.

POLAND

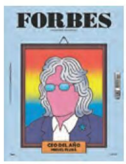
"If we survived the pandemic, we will survive everything," says Daniel Pawełek, as his six restaurants and wine shops weather inflation, near-recession and war next door. He leads *Forbes Poland's* list of the country's top 50 restaurateurs two years running.

SLOVAKIA

Simplicity, an app from *Forbes Slovakia* 30 Under 30 alumni Juraj Gago *(left)* and Andrej Krúpa, is used in major cities including New York, Austin and Miami by local governments and institutions to communicate with up to 50 million residents.

SPAIN

Spanish hotel company Grupo Iberostar, led by 84-year-old billionaire Miguel Fluxá Rosselló, signed a 30-year contract late last year with InterContinental Hotels Group, bringing 70 beachfront properties worldwide under IHG's marketing umbrella and into its customer rewards program.



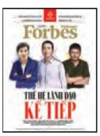
ROMANIA

Forbes Romania lists the country's best areas for business. Bucharest lands the No. 1 spot, with a GDP of $76 billion—$62 billion more than runner-up Timișoara.

UKRAINE

Among the largest private-sector donors to Ukraine's wartime efforts, billionaire investor Warren Buffett's son Howard *(left)* and his foundation gave about $150 million last year and plan to give an additional $300 million in 2023. Projects include funding school meals alongside Olena Zelenska, the country's first lady.

VIETNAM



While the country's six billionaires range in age from 53 to 63, *Forbes Vietnam* features the next generation of industry leaders. Le Hong Minh *(center)*, 45, cofounded VNG, a media, gaming and payments unicorn challenging Facebook Messenger and expected to go public in the U.S.

HUNGARY: ARTHUR CARRON; INDIA: MADHU KAPPARATH; ISRAEL: NIR SLAKMAN AND RAISA VERBITSKAYA; JAPAN: MUNEHIRO HOASHI (AVGVST); MEXICO: OSWALDO RAMIREZ; POLAND: ADAM PANCZUK; ROMANIA: SHUTTERSTOCK; SLOVAKIA: MIRO NOTA; UAE: FORBES MIDDLE EAST; UKRAINE: HOWARD BUFFETT

The American Heart Association Is Celebrating Workforce Well-Being Champions

Long hours, looming deadlines, job insecurity. These familiar work-related pressures can take a major toll on employee health.

Employers have an opportunity to intervene. And for those that do, a healthier staff means better business—translating to improved outcomes across productivity, retention and reputation, reports the CDC.

That's why the American Heart Association expanded its longstanding commitment to workforce health by launching Well-being Works Better™ in 2022, an online platform offering no-cost, evidence-based tools to help employers create a healthy, supportive and inclusive work environment. A year later, the American Heart Association is recognizing companies that used the platform's signature self-assessment tool—the Workforce Well-being Scorecard™—to benchmark their efforts.

Leaders from companies that utilize the American Heart Association's workforce well-being resources share standout strategies for enhancing the health and happiness of your employees.

"We examine how our internal policies, benefits and health coverage impact staff. Are we serving all archetypes and designing who we are in a way that reflects our similarities and differences as individuals and population groups?"

KULLENI GEBREYES, MD
U.S. Chief Health Equity Officer,
Deloitte

"The challenges of the last three years have taken their toll, especially on frontline caregivers who feel exhausted and emotionally drained. If we're not taking care of ourselves, we won't be able to take care of others."

CARLA DAWSON
Chief People Officer,
Texas Health Resources

"After years of focusing on physical and financial wellness, data from our workforce highlighted the need for more emotional wellness support. We needed to start by reducing the stigma."

CHRIS FABRO
Global Head, Compensation,
Benefits & Executive Development,
Bank of America

The American Heart Association applauds the 2022 Workforce Well-being Scorecard organizations below for their commitment to building a culture of health and well-being.

To learn more, visit www.heart.org/workforce.

PLATINUM

American Heart Association, TX
Apex Benefits Group, Inc, IN
Baird, WI
Bank of America, NC
Banner Health, AZ
Baptist Health South Florida, FL
Bean Automotive Group, FL
Broward County Government - WellBeing Program, FL
CareFirst BlueCross BlueShield, MD
Chevron, CA
City of Highland Village, TX
CME Group, IL
CNO Financial Group, IN
County of Chester, PA
Crum & Forster, NJ
Crystal Clean Green Cleaning, FL
Deloitte, NY
Edwards Lifesciences, CA
Erie Insurance, PA
Grady Legal, PA, FL
Grinnell Mutual, IA
Humana, KY
Merck & Co., Inc., NJ
Nestlé in the U.S., VA
Packard Culligan Water, MN
PSECU, PA
Sentara Healthcare, VA
Texas Health Resources, TX
The Starr Group, WI
UCLA Health, CA
United HealthGroup, NY
Utica National Insurance Group, NY
VF Corporation, CO
Village of Wellington, FL

GOLD

AIG, NY
Akin Gump Strauss Hauer & Feld LLP, DC
Allegacy Federal Credit Union, NC
Amarin Pharma Inc., NJ
Amgen, Inc., CA
Associated Bank, WI
Atrium Health, NC
Aultman Health Foundation, OH
Availity, L.L.C., FL
AVANGRID, CT
Avera Health, SD
Banyan Air Services, Inc., FL
Baptist Health, FL
Baylor University, TX
Blue Cross and Blue Shield of Alabama, AL
Broadstep Behavioral Health, Inc., NC
Brown University, RI
Capital District Physicians' Health Plan, Inc. (CDPHP), NY
Carrier Global Corporation, FL
Catawba Valley Medical Center, NC
CESA #1, WI
Chevron Pascagoula Refinery, MS
Children's Healthcare of Atlanta Cardiology, GA
Children's Wisconsin, WI
Ciena, MD
Cigna - Midwest, IL
City Of Alexandria, VA
City of Bloomington, IL
City of Coconut Creek, FL
City of Doral, FL
City of Ennis, TX
City of Jefferson, MO
City of Lancaster, TX
City of Memphis, TN
City of Mesa, AZ
City of Scottsdale, AZ
City of Tucson, AZ
City of Wilson, NC
Clerk of the Circuit Court and Comptroller, Palm Beach County, FL
Collegiate School, VA
CompTIA, IL
Contec Inc., SC
Cook Children's Hospital, TX
County of Marin, CA
Crisafulli Bros. Plumbing and Heating Contractors, Inc., NY
CSAA Insurance Group, CA
Delta Air Lines, GA
Desert Oasis Healthcare, CA
Donor Network of Arizona, AZ
Dow, MI
Dr. Reddy's Laboratories Inc., NJ
Duval County Public Schools, FL
Eisai Inc., NJ
Eisenhower Health, CA
Elements Financial, IN
Ericsson Inc., TX
Faith Technologies Incorporated, WI
First Horizon, TN
First Insurance Company of Hawaii, Ltd., HI
Florida Department of Health in Broward County, FL
Gas South, FL
Georgia Power Company, GA
Gilead Sciences, CA
Great HealthWorks, FL
Greeley-Evans School District 6, CO
Greenleaf Hospitality Group, MI
GTE Financial, FL
HealthSource Solutions, MN
Helen of Troy, TX
Higginbotham, TX
High Point University, NC
Hill & Wilkinson General Contractors, TX
Hill Physicians Medical Group, CA
Hillsborough County Public Schools, FL
Hitachi Astemo Greenfield (Tarboro Plant), NC
Huntington Health, An Affiliate of Cedars Sinai, CA
Huntsville Hospital, AL
Husch Blackwell LLP, MO
IDEXX Laboratories, ME
Imagine360, L.L.C., PA
infirmary health, AL
Jamestown Board of Public Utilities, NY
Jefferson County, Colorado, CO
Johnson & Johnson, NJ
Kaiser Permanente, CA
Kemin Industries, IA
Koch Industries, Inc., KS
KKR, NY
Lacks Enterprises, Inc., MI
Lam Research, CA
Levi Strauss & Co., CA
Lifespan, RI
Louisville Metro Government, KY
MaineGeneral Health, ME
Mark Miller Subaru, UT
Marsh McLennan Agency-Bouchard Region, FL
Mashburn Construction, SC
Mate Precision Technologies, MN
Memorial Health, OH
Metro Nashville Public Schools, TN
Metropolitan Atlanta Rapid Transit Authority (MARTA), GA
Molex, IL
NASCAR, FL
Nascentia Health, NY
Nektar Therapeutics, CA
Nemours Children's Health, FL
Newport News Shipbuilding, VA
Nielsen, NY
Norfolk Healthcare Consortium, VA
Northern Arizona Healthcare, AZ
Northern Kentucky University, KY
Northrop Grumman, VA
Nova Southeastern University, FL
Orange County Library System, FL
Palm Beach County Sheriff's Office, FL
Perdue Farms, MD
Pima Community College, AZ
Premier Health, OH
Premium Waters, Inc., MN
Prisma Health, SC
Quest Diagnostics, NJ
R&R Insurance, WI
Rock House Farm Family of Brands, NC
Ross & Yerger, MS
Sacred Heart University, CT
Safran Landing Systems, KY
Saint Meinrad Archabbey, IN
Sanofi U.S., NJ
Savannah River Nuclear Solutions, LLC., SC
Schneider Electric, MA
Solano County, CA
Southeast Service Cooperative, MN
Southern Adventist University, TN
St. Elizabeth Healthcare, KY
The Breakers Palm Beach, FL
The School District of Palm Beach County, FL
Trane Technologies, NC
University of California, Los Angeles, CA
U-Haul International, AZ
United Independent School District, TX
University of California, Irvine and UCI Health, CA
University of San Francisco, CA
University of Virginia, VA
UR Thompson Health, NY
USI Insurance Services, NY
Virginia Beach City Public Schools, VA
Walsh Duffield Cos., Inc., NY
West Bend Mutual Insurance Company, WI
Western Municipal Water District, CA
WOGF-Daystar Television Network, TX
ZOLL Medical Corporation, MA

SILVER

AC Transit, CA
ALPHA House of Pinellas County, FL
Arizona Department of Administration, AZ
Ashland University, OH
AssetMark, CA
Badger Liquor Co., Inc., WI
Banker Lopez Gassler P.A., FL
Bay Area Hospital, OR
Blue Cross and Blue Shield of Kansas, KS
BMC Software, Inc., TX
Bowers + Kubota Consulting, HI
Broward Sheriff's Office, FL
CARF International, AZ
Carma Laboratories Inc., WI
Carolina Caring, Inc, NC
Cheshire Public Schools, CT
CITY Furniture, FL
City of Coral Springs, FL
City of Fort Collins, CO
City of Largo, FL
City of Maple Grove, MN
City of Oakland, CA
City of Rocky Mount, NC
City of Vineland, NJ
City of Virginia Beach, VA
Coachella Valley Water District, CA
Cobb County Government, GA
ColonialWebb, VA
Core Creative, WI
County of Mendocino, CA
Delta Dental of NJ & CT, NJ
Dermatology Consultants, PA, MN
Dixie Pulp & Paper, Inc., AL
Dollar Tree and Family Dollar, VA
Doris USA Inc., TX
ESL Federal Credit Union, NY
Excellus BlueCross BlueShield, NY
Experian, CA
Fairchild Medical Center, CA
Farm Bureau Financial Services, IA
Farmers Mutual of Nebraska, NE
Federal Realty Investment Trust, MD
First Business Bank, WI
Fontana Unified School District, CA
Franklin Special School District, TN
Gentex Corporation, MI
McCarthy Building Companies, MO
GOJO Industries Inc., OH
Gulfshore Insurance, FL
Hall County Government, GA
Hoosier Energy, IN
Horizon Honors Schools, AZ
Hudson Valley Credit Union, NY
IDI Composites International, Inc, IN
Insuramax, KY
KLINGSPOR Abrasives, Inc., NC
Lycoming County Insurance Consortium, PA
LCMC Health, LA
LYNX Transportation, FL
Martin Starnes & Associates, CPAs, P.A., NC
ME GLOBAL INC, MN
MEB Management Services, AZ
Mediacom Communications Corporation, NY
Mercedes-Benz U.S. International, AL
Milwaukee County, WI
Monument Health, SD
Nazdar, KS
Novant Health, NC
Oceanside Unified School District, CA
Ohio University, OH
PegasusTSI, INC, FL
Royal Oaks, AZ
Phoenix Union High School District, AZ
Pinehurst Medical Clinic, NC
Port of Oakland, CA
RTI International, NC
Rural Wisconsin Health Cooperative, WI
San Diego County Regional Airport Authority, CA
San Diego Unified School District, CA
Select Health of SC, SC
South Central Service Cooperative, MN
St. James Hospital, NY
Swedish Medical Center, CO
Tampa General Hospital, FL
Teledyne Brown Engineering, AL
Tempe Union High School District, AZ
The Bonadio Group, NY
The Christ Hospital Health Network, OH
Town of Longboat Key, FL
Town of Penfield, NY
Trident Seafoods, WA
Turner Construction - MMC Expansion Project, ME
University of California, Berkeley, CA
University of California, San Francisco (UCSF), CA
United Health Services, Inc., NY
UAMS- University of Arkansas for Medical Sciences, AR
University of California, Davis, CA
University of California, Santa Cruz, CA
University of Richmond, VA
Virginia Commonwealth University (VCU), VA
W3 Insurance, FL
Wayne HealthCare, OH
University of Alabama, AL
Wyndham Hotels & Resorts, NJ
Yuma Regional Medical Center, AZ

BRONZE

Bergeron Automotive, LA
Buehler's Fresh Foods, OH
Calexico Unified School District, CA
Central Union High School District, CA
Chicanos por la Causa, AZ
City of Chula Vista, CA
City of La Quinta, CA
City of Newton, NC
City of Upland, CA
County of Tulare, CA
Cucamonga Valley Medical Group, CA
Elk Grove Unified School District, CA
Isana Academies, CA
Marin Community College District, CA
Milwaukee County Transit System, WI
National Information Solutions Cooperative (NISC), MO
Neiman Marcus Group, TX
Poway Unified School District, CA
Public Agency Coalition Enterprise (PACE), CA
Rainbow Municipal Water District, CA
Sacramento County, CA
Superior Court of California - County of Sacramento, CA
San Joaquin Regional Transit District, CA
South Baldwin Regional Medical Center, AL
Syracuse Orthopedic Specialists, PC, NY
Tandem Diabetes Care, Inc., CA
The Bank of Tampa, FL

Conversation

PEOPLE POWER

Two years ago, just 24 years old, Scale AI cofounder Alexandr Wang, our April/May cover subject, briefly became the world's youngest self-made billionaire by supplying artificial-intelligence companies with the one thing they all need: humans. His bet on an army of workers to "label" the masses of data required to power AI—the kind that teaches a self-driving car the difference between a paper bag in the road and a small child, say—prompted Scale AI's high-water $7.3 billion valuation in April 2021. Readers were divided on Wang's career and business model. "Dropping [out of] MIT at 19. Establishing a unicorn at 22. Hell of a ride," said Mohammad Abu on LinkedIn. Others expressed their AI fears. "It's like building a time bomb that can destroy the earth," wrote @vitamironova on Instagram. Critics scoffed at Wang's use of inexpensive overseas workers given great unease about the risk AI poses to jobs. On Instagram, @rishxp slyly observed that such practices might be a threat to Scale AI itself: "Isn't labor a lot cheaper in India? What if someone finds a way to gather the resources and do it better than him?"

NOT WASTIN' AWAY

Theme restaurants, booze partnerships, a lucrative song catalog, surf-and-sand merch, real estate and much more: Life in the Conch Republic is pretty good for Jimmy Buffett, now officially a billionaire at 76. Readers praised the beach bum's beach bum for his business moxie—but were shocked to learn he apparently keeps quite a pile under the mattress.

@EVANKHOLMES: "Homeboy is holding $570 million in CASH? Hopefully it's not at regional banks."

@MORNINGBREW: "That feeling when you make one good song and spin it into becoming a billionaire."

@DONDUPREY1: "His music created a lifestyle. Can't put a price on that."

@BLOOMBUDFOX: "Talk about a cheeseburger in paradise."

@RALPHHOLIMANLAW: "It's amazing how much money you can make just giving people what they want. JB deserves it as much as anyone."

DAVE SEITTER: "Perhaps the secret to one's business life is to have a career doing something you love?"

@DABAUBAU: "I'm sorry, HALF of his portfolio is cash?"

THE INTEREST GRAPH

324,607 How Tony Hsieh's Friends and Family Milked Millions in His Drug-Fueled Final Months

282,668 The 25 Richest People in the World 2023

211,489 The Definitive Net Worth of Donald Trump

167,932 How Alexandr Wang Turned an Army of Clickworkers Into a $7.3 Billion AI Unicorn

130,086 Why Warren Buffett Wants Jimmy Buffett to Write Him Into His Will

75,679 How This Estonian Startup Beat Uber at Its Own Game

37,013 How a Crime-Fighting Cowboy Became Alabama's Only Billionaire

14,684 **THE BOMB:** How to Beat the Market with Boring Stocks

BY EMMY LUCAS


MADDY TURNED HATE
INTO HOPE
AND STARTED A MOVEMENT
Maddy Park
Founder,
@CafeMaddyCab
In 2021, the rise of violence against the Asian community made even the simple act of taking public transportation unsafe. So, Maddy started a fund to pay for cab rides for those in the Asian community that needed it most, including women, the elderly, and the LGBTQ+ community. With over $100,000 raised in just two days, she started a movement based on love that lives on today.
love has no labels
ad COUNCIL
Join Maddy's cause and get the tools to support the Asian community now at LoveHasNoLabels.com

CONTRARIAN

ENTREPRENEURS

By **Justin Birnbaum**

Photograph by **Levon Biss** for Forbes

A Winning Formula

TOTO WOLFF built Mercedes' F1 team into an auto racing dynasty. Their championship days may be behind them, but the billionaire racing boss is more successful than ever.

Race Course

Wolff begins a teaching fellowship at Harvard Business School in 2024. "Everything else I do is to become better in Formula 1," he says.

LEVON BISS FOR FORBES

As Toto Wolff surveys a large room at the Mercedes-AMG Petronas headquarters in Brackley, England, his eyes are drawn to the rear axle of a silver car. The right wheel is broken, and it bothers him, prompting him to call for repairs immediately. But the billionaire co-owner and team principal of Mercedes' F1 team is not inside his factory, and this isn't a full-scale $8 million Formula 1 car he's assessing. Rather, Wolff is dissatisfied with a decorative model of a classic Mercedes, only a few inches long. "It just jumps into my eyes," he explains. "In my normal life, it's actually an annoyance for my environment because I just can't stop trying to eliminate imperfection."

That obsessive pursuit of perfection may be a burden for most people, but in Formula 1 racing, where success can be defined by less than a tenth of a second, it has consistently kept Wolff's team on the podium. Over the past decade, the 51-year-old Austrian has collected eight Constructors' Championships, seven Drivers' titles and an astonishing 115 Grand Prix victories—thanks to his flawless machines and Mercedes' marquee driver, Lewis Hamilton. It's an unprecedented run in the sport, befitting other legendary franchises like the New York Yankees and Boston Celtics.

Except Mercedes *isn't* winning anymore. The team scratched its way to third place last year, taking the checkered flag at just one Grand Prix. Returning to the top looks unlikely in 2023, as Red Bull Racing currently possesses a stranglehold on first place. A financial overhaul of F1 rules in 2021 that limits spending—the cost cap—has stifled Wolff's perfectionist approach, allowing fewer chances to rebound from mistakes.

While the cost cap has presented its greatest challenge on the grid, it's had a strikingly positive effect away from the track. In 2021, the last year Mercedes won the Constructors' title, the team posted its best results ever under Wolff, with revenue of $529 million and Ebidta of $128 million. Although the organization has yet to release its 2022 figures, *Forbes* estimates it will exceed those marks by roughly 10% and 30%, respectively.

Such turbocharged revenue has translated

Déjà View

OFF TO THE RACES

Modern F1 cars zip around at more than 200 miles per hour thanks to cutting-edge 1,000-horsepower engines, but humans have long been rushing from point A to point B. A brief history of racing through the centuries:

776 B.C. | The Olympics begin with a single event: a 600-foot sprint won by Coroebus, a cook from the Greek city of Elis.

46 B.C. | Chariot racing is the most popular sport in Caesar's time. Romans flock to the city's Circus Maximus stadium to watch two- and four-horse teams square off on as many as 60 race days a year.

1700s | Thoroughbred racing takes over England after three speedy Arabian horses are imported from the Middle East and bred to English mares. It spreads to America, too, with the three legs of the Triple Crown—the Kentucky Derby, the Preakness and the Belmont Stakes—all established by the late 1800s.

1920s | Southern moonshiners who souped up their cars to evade the G-men soon begin racing one another at local fairgrounds and tracks. Later on, a driver named Bill France convenes the leading motorists in Daytona Beach, Florida, in 1947 and establishes the National Association for Stock Car Racing—Nascar.

directly into team value. *Forbes* valued the Mercedes team in 2019 at $1 billion and estimates it has at least doubled since. Wolff owns 33% of the team—most of which he purchased in 2013 for an estimated $50 million—constituting the cornerstone of his $1 billion fortune. In essence, he has built a brand akin to the Dallas Cowboys, which remains the world's most valuable sports franchise at $8 billion despite a 27-year Super Bowl drought.

"I would give up every single penny of the profits to win," he says. "So choosing between financial success or sporting success, every day of the week, every day of the year, I'll go for the sporting success."

That monomaniacal desire to win is hardwired into Wolff. Born in Vienna, he dreamed of becoming a race car driver since childhood. He came up short chasing his passion—in part because he is too tall at six-foot-five—and soon shifted to business. He founded Vienna-based tech incubator Marchfifteen in 1998, spending his days cold calling potential investors. Two years later, at 28, Wolff notched a profit of more than $30 million, almost entirely from the sales of text-messaging outfit UCP and video game publisher JoWooD. Flush with cash, he wound down his company and returned to his first love, auto racing, and started managing junior drivers. That led him to engine maker HWA AG, which supplied Mercedes' lower-level racing teams. He bought 49% of HWA in 2006 and later helped take it public in a $175 million IPO, netting himself an additional $85 million.

Wolff invested in the Williams F1 racing team a few years later and helped deliver a stunning Spanish Grand Prix victory in 2012. That same year Mercedes was struggling and invited Wolff to Stuttgart to tap his expertise. He bluntly told them they were vastly under-budgeting the team, and Mercedes replied by offering him the top job. "He's not a bullshitter," says René Berger, Wolff's longtime friend and a Mercedes F1 board member. "Toto will never tell you something he believes is not really true, and that's why he's so persuasive."

Wolff agreed, but only under the stipulation that he could buy in as a co-owner. In 2013, he departed Williams and took a 30% ownership stake in Mercedes at a $165 million valuation, *Forbes* estimates.

The timing of the move also worked well for Mercedes, given rule changes that expanded hybrid engine use in F1—which the German automaker had already spent more than $100 million developing. The titles followed quickly, with Mercedes collecting both the Constructors' and Drivers' Championships in 2014, the first in its dynastic eight-year run. "It was the perfect move from Mercedes at this stage," says Scuderia Ferrari team principal Frédéric Vasseur, "and they took a real lead on the engine."

That type of strategic spending is now more difficult. Under the cost cap in 2023, teams can spend only roughly $150 million to cover equipment, engineering and staffing. Driver salaries, such as Hamilton's estimated $55 million, are excluded for now.

In years past, big-budget teams like Mercedes, Ferrari and Red Bull would spend hundreds of millions annually, justifying the cost as global marketing. Lower-end teams would slip into financial ruin trying to keep pace with the F1 elite. Much to the credit of the Liberty Media Corporation, which in 2017 bought Formula 1 for $4.7 billion in cash and stock, and the FIA, racing's governing body, the cost cap has created greater parity among teams.

F1 is also getting a huge boost—especially in America, where the sport has lagged in popularity—from Netflix. Debuting in 2019, the *Drive to Survive* docuseries, which chronicles each F1 season, tapped into a younger, digital-first audience. It also created new F1 stars, including the charismatic Wolff with his militaristic metaphors, fiery competitiveness and oddly specific breakfast order. ("Ham and eggs. With a little bacon and two pumpernickels, really toasted so they break.")

And F1 will only get bigger this year when it adds a third U.S. Grand Prix in Las Vegas in November. (Miami and Austin, Texas, already host events.) "The sport's growing," Wolff says, "but you must not take it for granted."

He's not taking Mercedes' good fortune lightly, either, securing a lucrative future even without being world champion. Sponsorships remain the most important revenue stream; Mercedes counts Ritz-Carlton, Monster Energy drinks and watch brand IWC among its partners. It also sells equipment to other teams, including gearboxes to Aston Martin. That doesn't mean Wolff has any plans to slow his push for wins.

"As long as we are competing at the front, racing for victories, being among the top teams," he says. "Nobody can expect us to win every single year."

HOW TO PLAY IT

By John Dobosz

It's hard to deny the upward trajectory of fan attendance and financial performance of Formula 1 racing. More than 5.7 million people attended F1 races in 2022, up 36% since 2019, the last year without Covid restrictions. Revenue in 2022 rose 20% to $2.6 billion from $2.1 billion; operating income jumped 260% from $92 million to $239 million. If you want to get a piece of the action, the most focused way is owning Liberty Formula One Group, the voting shares of the Formula 1 group owned by **Liberty Global,** the company headed by cable TV billionaire John Malone. You could also buy Liberty Global and get exposure to the Atlanta Braves Major League Baseball franchise and Sirius XM satellite radio along with Formula 1.

John Dobosz is editor of Forbes Billionaire Investor, Forbes Dividend Investor and Forbes Premium Income Report.

FINAL THOUGHT

"AUTO RACING BEGAN FIVE MINUTES AFTER THE SECOND CAR WAS BUILT."

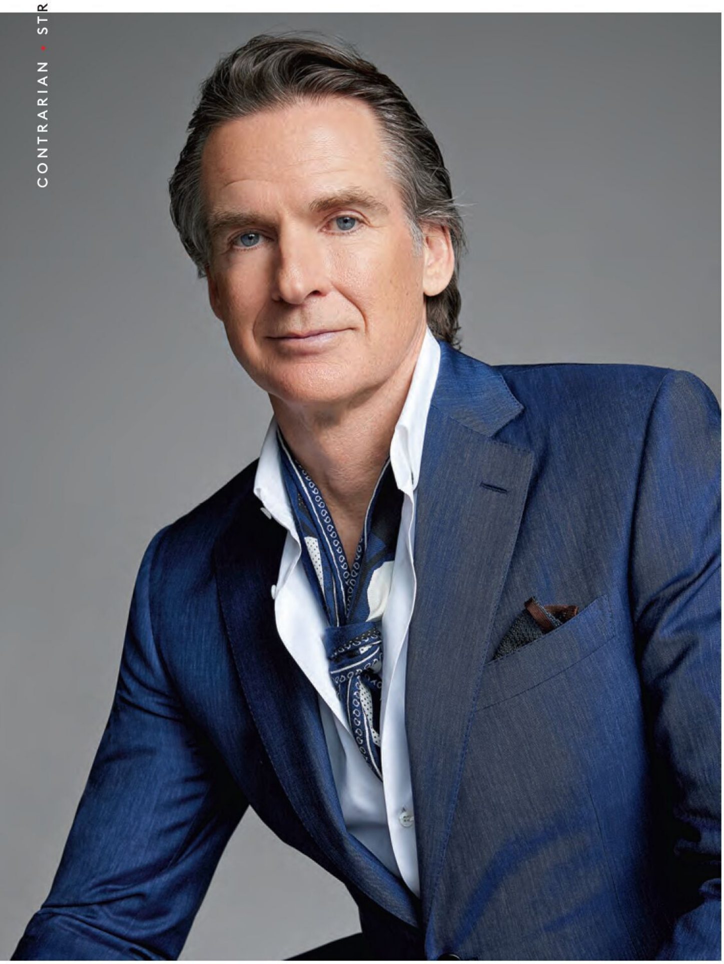
—Henry Ford

PATRICK WELSH FOR FORBES

By Jemima McEvoy

Canadian Cool

Everyone thought Covid was the final coffin nail for brick-and-mortar retail. For ARITZIA, a nearly 40-year-old Vancouver-based fashion outlet, it proved quite the opposite.



Dressed in a stylish navy suit and matching cravat, Brian Hill settles down in his usual seat in the corner of the vast 12,000-square-foot commissary in Aritzia's downtown Vancouver headquarters. In front of him baristas pour custom drinks for his staffers. To the side, a master sushi chef slices fresh king salmon and bluefin tuna. Behind him are floor-to-ceiling windows framing a breathtaking view of British Columbia's snow-capped North Shore Mountains.

The space was personally designed by Hill, 62, as part of his grand vision for Aritzia, his fashion brand. For 39 years, the Canadian entrepreneur has been obsessing over every detail of his company, from the minimalist silhouettes of his Divinity Kick Flair jumpsuits to the cash register setup at his sleek retail stores. There are now 115 Aritzia "boutiques" (Hill dislikes calling them stores) scattered across Canada and the lower 48, peddling $148

Retail ABCs

Brian Hill, then 23, picked the name Aritzia for his new store in part because it began with the letter A and would appear at the top of listings.

COURTESY OF ARITZIA

"expertly tailored" Program Pants and a $328 cocoon wool coat once worn by Meghan Markle. The mission? "Everyday luxury" at an "attainable price."

After each location is hand-selected, a small army of architects and designers maps out the interior. That includes an in-house carpenter who works on all the displays. Once open, every boutique has a personal stylist with whom customers are pushed to interact. There are intentionally no dressing room mirrors, which forces shoppers to head into a communal space. Some locations have complimentary coffee bars. Others serve alcohol.

"I think we have to understand that the retail stores aren't just for selling clothes. The e-commerce site is for that," says Hill, who is Aritzia's executive chairman. "It has to be an experience. There's an option now, so you have to give people a reason to come back to your stores. It's not easy, but if we can continue to do that, we'll be successful."

Aritzia, which was founded in 1984, is a "40-year overnight success," as Hill calls it, though due to a sudden acceleration of its business in the U.S., things have sped up lately. Not until 2007 did Hill open his first American stores (in Santa Clara, California, and Seattle); now there are 47 U.S. outposts, most of them opening in the last five years. America now accounts for more than half of Hill's business for the first time.

Whether Canadian or American, bricks still beat clicks at Aritzia, which waited until 2012 to launch a website. Sales at its boutiques jumped 53% overall in the fiscal year ending February 2023 and now account for 65% of Aritzia's $1.6 billion in revenue. Although it's not Hill's passion, e-commerce is doing well too, growing by 36% last year and projected to account for about 45% of total sales within a few years, up from 35% today. Hill himself is worth an estimated $950 million, both from his 19% equity stake in the company and the cash he got from selling shares since the IPO.

"What's ironic is our market position and our approach to business hasn't really changed since the day we opened our first store," says Hill, who last year handed over the CEO reins to Jennifer Wong, his longtime COO, who joined the firm in 1987 as a sales associate in one of his first stores. But Hill, who owns 70% of the voting shares, retains ultimate control.

It's not hard to figure out the source of Hill's brick-and-mortar bias. His grandfather, an Irish immigrant, was an exec at Hudson Bay Company, Canada's largest and oldest retailer, before he bought a dry-goods store in Vancouver in 1945. He passed that business on to Brian's father, James, who later opened his own department store, Hill's of Kerrisdale, with his brother Forbes. Brian and his brother and sister spent many hours working at the store. "I used to sweep the streets and take the garbage out and do everything," Hill recalls.

After graduating from Queen's University of Ontario in 1982 with a degree in economics, Hill spent about a year traveling and three months working as a garbageman in Vancouver, trying to figure out his next move. His big break came when a local mall reached out to his father in search of new store concepts. Hill came up with the idea for Aritzia with the help of his father and brother Ross.

For the first decade, his stores were filled with other brands' apparel. Then, around 1995, Hill decided to take control, a move he describes as crucial, both in terms of boosting margins and shaping the luxury experience for customers. Today, Aritzia designs almost all its own clothes, including more than a dozen in-house brands, tailored to different prices and demographics. Babaton is focused on "minimalist designs for the modern woman," while TNA is a street- and sportswear brand. Some lines get their own stores: Since the winter of 2020, Aritzia has operated seasonal "Super World" pop-ups in New York and Los Angeles, which sell only its popular rainbow-hued goose-down puffer jacket, known as the "Super Puff."

"When you go to shop at an Aritzia store, you're not going to buy a product with an Aritzia tag. That's a bit unique," says Martin Landry, a Montreal-based retail analyst at Stifel Financial Corp. "They're able to offer you something for work, something to wear when you go out at night and then something to wear when you're lounging on a Sunday afternoon at home."

While Covid wreaked havoc on plenty of retailers, it was a boon for Aritzia. Social media helped: Its $148 vegan leather Melina pants went viral on TikTok (35 million views and counting). But behind the scenes, Aritzia made other changes, including reassigning sidelined retail workers to help run the website and moving quickly to offer more comfortable stay-at-home clothes. (It says it didn't lay off a single employee.) Aritzia started to see unprecedented traffic on its e-commerce site in what Hill thought would be a permanent change. "I wouldn't suggest I thought retail was going to die, but we thought it would become a lot less relevant," he says. Instead, when his boutiques reopened, he was surprised to see an influx of customers showing up in person. People

PATRICK WELSH FOR FORBES

HOW TO PLAY IT

By William Baldwin

How fickle are tastes in apparel, whether in stores or on labels. There were times when Dressbarn, Forever 21, Limited and Wet Seal were in fashion. And then they weren't. Lesson: Hesitate to buy into a clothing brand when it looks like it will never go out of style. Aritzia and Lululemon Athletica, hot at the moment, trade at high multiples. You're better off in a company that is enduring but no longer hot. Put on your shopping list outfits like **Ralph Lauren, PVH** (formerly Philips-Van Heusen) and **VF** (owner of North Face and Timberland). These are trading, respectively, at 13, nine and ten times what Value Line expects for earnings.

William Baldwin is Forbes' Investment Strategies columnist.

***Canadian Cool** Cont.*

who had discovered the brand online sought it out offline too.

Another silver lining: Prime commercial real estate was suddenly extraordinarily cheap. “The so-called ‘retail apocalypse’ coupled with the pandemic has opened real estate opportunities I’ve never seen in my lifetime, and we’re taking advantage of those,” says Hill, whose company signed one of the largest retail leases in Manhattan last year. It plans to relocate its Midtown flagship (it also has one in SoHo) to a 33,000-square-foot space at Fifth Avenue and 49th Street, whose most recent tenant, Topshop, vacated in 2019. It also inked Chicago’s largest lease (46,000 square feet) in seven years on Michigan Avenue, the city’s premier shopping stretch. Five more locations are in the immediate pipeline—and the company has scouted 100 more. Overall, Aritzia plans to open eight to ten American boutiques every year for the next four years. “There’s still a lot of white space,” Wong says.

The obvious danger is overexpansion. But Hill isn’t worried. “We’ve been through 2008. We’ve been through other recessions as well,” he says. “We know that usually the thing that affects our business is ourselves. If we execute really well, we’re fine.” F

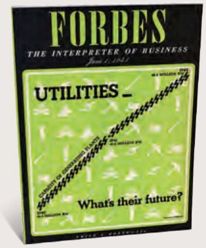
Remarkable Rise

CEO Jennifer Wong, then a high school student, was turned down by Hill for a sales job at the first Aritzia, so she drove to another store and got hired. “It was a part-time job while I went to school,” she says. “The rest is history.”

The Vault

MAIL-ORDER MILLIONS

Long before Aritzia began bringing “everyday luxury” to the masses, Leonard Leonwood Bean was peddling tents, blankets and boots to a worldwide audience of fishermen, hunters and hikers from his hometown of Freeport, Maine. Business at L.L. Bean—founded in 1912, it’s now a $1.8 billion (2022 sales) American icon helmed by Leonard’s great-grandson—was already booming when *Forbes* peeked inside the outdoorsman’s mail-order operation in 1941.



Today his catalog brings in 98¾% of his sales. How? By being quaint. He keeps it that way by writing all the copy himself. He even keeps some bad grammar in. He knows it’s wrong, but it’s been there for years helping along the catalog’s quaintness, so why change it?

Last year his bill for postage stamps was $54,540, his cash balance at the bank one day recently $130,000. Sales last year went to $920,642, and this year will top over a million. So many sportsmen wait to buy at “Bean’s” that he now has to give 24-hour service, holidays and Sundays, all year. His celebrity customers run from [author] Kenneth Roberts dropping in for fishing tackle to get his mind off [his character] Oliver Wiswell to Mrs. [Eleanor] Roosevelt taking away a pair of khaki shorts, waist thirty. He ships to Iraq, to Chile, to a maharaja in India.

—*Forbes*, June 1, 1941

FINAL THOUGHT

“PEOPLE WANT ECONOMY, AND THEY WILL PAY ANY PRICE TO GET IT.”

—Lee Iacocca

COURTESY OF ARITZIA (LEFT)

PROMOTION

THE MILLION-DOLLAR BLUEPRINT: LEARN THE SECRETS OF AN ENTREPRENEUR WHO TRANSFORMED $300 INTO $10,000,000

Leah Kay has defied all odds and achieved remarkable success in the world of hair accessories. In a span of just four years, she transformed a humble $300 investment into a thriving brand with sales surpassing an astounding $10,000,000. Today, her brand, Soulvation Society, is a testament to her unwavering determination, creativity, and entrepreneurial acumen.

Leah Kay's journey began with a dream and a small budget. Armed with a passion for hair accessories, she set out to make her mark in the industry. Through sheer dedication and resourcefulness, Leah built her brand from the ground up, starting with a few handmade pieces that she marketed through social media platforms. Despite facing numerous challenges along the way, Leah remained undeterred. She adopted a bootstrapping mindset, reinvesting profits back into the business and carefully managing resources. This allowed her to scale her operations, expand product lines, and build a robust supply chain to meet increasing demand.

While achieving extraordinary success with Soulvation Society, Leah's desire to give back to future founders led her to establish the Brand Builder Academy. Through this academy, Leah shares her wealth of knowledge and experience with aspiring entrepreneurs, teaching them how to start and scale their own online brands using her million-dollar blueprint for success without the need for outside capital or venture investment.

Inside Brand Builder Academy, students gain valuable insights into effective brand building strategies, social media marketing, customer acquisition, and more. Leah Kay's expertise in leveraging social media platforms has become a cornerstone of her teachings. Students learn how to harness the power of these platforms to create brand awareness, engage with their audience, and drive sales.

Leah's remarkable journey from a $300 investment to a $10,000,000 brand serves as an inspiration to aspiring entrepreneurs worldwide. Her success story exemplifies the power of determination, innovation, and leveraging social media effectively. Through Soulvation Society and the Brand Builder Academy, Leah Kay continues to make a significant impact on the entrepreneurial landscape, empowering others to transform their dreams into reality.

https://www.soulvationsociety.com
Follow Leah Kay: @itsleahkay

Join Leah's Free Workshop

By Jeff Kauflin

Photograph by **Chad Kirkland** for Forbes

The Next Great Grift

SENTILINK uses AI to help fight synthetic identity theft—fake people created to get real credit—and other novel forms of financial fraud. But its secret sauce is human insight.

Fraud Fighters

Cofounders Naftali Harris *(left)* and Maxwell Blumenfeld, photographed at a SentiLink retreat in Park City, Utah, let employees work remotely. The duo now live in Austin, Texas.

D

During the summer and fall of 2018, Hasan Hakim Brown, a Floridian in his early 40s, was applying online for loans—for the fake companies and bogus identities he'd set up. He had mixed success. He swindled more than $1 million from a Texas bank. But a few of his other targets, using software from San Francisco–based startup SentiLink, flagged his applications as suspicious because too many Social Security numbers were associated with the same address.

Brown, it turned out, had started manufacturing "synthetic identities"—stolen (but real) Social

Security numbers merged with made-up names. He later refined his technique, buying a rig from an Atlanta computer consultant that let him simultaneously manage multiple virtual desktops from different IP addresses, thereby evading certain fraud-detection screens.

When Covid-19 hit in early 2020 and Congress appropriated hundreds of billions in forgivable Payroll Protection Program loans for hurting businesses, Brown was ready. Ultimately, according to federal court records, including guilty pleas, Brown and his half-dozen criminal associates controlled 700 synthetic identities and dozens of shell businesses and related bank accounts. Overall, the gang defrauded the Small Business Administration and various banks out of more than $20 million. Brown was sentenced to 60 months.

While Brown was busy thieving, SentiLink cofounders Naftali Harris and Maxwell Blumenfeld, both now 31, were also thinking about synthetic ID fraud, turning their early insights into a nicely growing niche business. “Everyone initially told us that this type of fraud was impossible, and that we must have misunderstood something,” says CEO Harris.

Last year, Harris and Blumenfeld’s six-year-old startup had about $25 million in revenue, more than double that of the year before, *Forbes* estimates. It counts seven of the U.S.’ 15 biggest banks and six of its 10 largest credit unions, as well as major fintechs like Ramp and Plaid, among its 300-plus customers. SentiLink raised $70 million in July 2021 at a $430 million valuation, according to PitchBook. Harris says it’s burning only $1 million a month and has enough cash to keep operating without additional funding for more than five years. He and Blumenfeld are veterans of the 2020 Forbes 30 Under 30 list, and this year SentiLink makes its debut on the Fintech 50, our annual list of the most innovative private fintech startups.

Artificial intelligence is, of course, a key part of SentiLink’s business. But Harris and Blumenfeld took a crucial lesson from how they first recognized synthetic fraud: A human, not a computer, made the key connection. In August 2016, the college buddies were both data scientists at buy-now, pay-later startup Affirm. Harris’ team was building the models for approving or declining borrowers. Blumenfeld’s job was to look for fraud. One day Blumenfeld noticed two applicants had the same name and date of birth but different Social Security numbers. He ran that name through the computer and found 12 people had applied for loans with the same name and birthdate but different Social Security numbers. More shocking, all 12 had credit bureau histories and good FICO credit scores above 700. One had a credit card with a $20,000 limit. Another got a $35,000 personal loan. A third had secured a loan for an $80,000 BMW.

“This is crazy,” Harris recalls thinking. “These people don’t exist, but they tricked the bureaus into getting a credit report.” Using the same name and birthdate was stupid. But the underlying strategy was clever and patient: Scammers were stealing Social Security numbers from folks who weren’t likely to be actively shopping for credit, such as kids, prisoners and nursing home residents. They paired those numbers with fictitious names and real addresses. Then they built up credit records for their creations by opening checking accounts and making timely payments on loans and credit cards. Eventually, they could use those credit histories to qualify for big loans they wouldn’t repay—an event that’s now known as a “bust-out.”

But this type of fraud was little known, even to experts, when Harris and Blumenfeld first came upon it. “They told us that the bureaus had accurate records of all credit-active Americans and that as long as you checked that the identity had a bureau record, this wouldn’t be possible,” Harris recalls. But it was. And it still is, despite the launch last year of a somewhat clunky federal database (which SentiLink uses) that enables authorized users to cross-check Social Security numbers and names.

Today, 78-person SentiLink has eight full-time employees dedicated to manually reviewing potential fraud attempts and requires others to spend at least an hour a week eyeballing cases to spot emergent patterns—new fraud angles or even legitimate applicants who may be unfairly rejected by the algorithm. “There’s a big misconception with AI that it discovers these things in and of itself,” says Blumenfeld, who is chief operating officer and leads research and development at SentiLink. “The [AI] model in our case is literally trying to mimic what the human would do. It can just scale really quickly.”

Ingenuity and speed have been key to the pair’s success so far. Harris grew up in Los Angeles (his father is a finance professor at the University of Southern California) and sped through four years of high school math, English and Spanish in three years at the Milken Community School, a Jewish day school named after billionaire donor Michael Milken. Without fin-

HOW TO PLAY IT

By Jon D. Markman

Financial tech businesses are now using artificial intelligence to fight fraudsters. The best way to play this trend is **Nvidia,** the business that powers the high-performance computers that make AI possible. The San Jose, California–based company operates a full AI stack, with best-in-class hardware, and CUDA, a widely adopted AI software development platform. One of Sweden’s largest banks in 2021 began using Nvidia to prevent fraud and money laundering. Nvidia reported in February that AI reached an inflection point, with broad interest from every industry. Strong growth trajectories should power shares to $350 within 18 months, up 16% from the current price.

Jon D. Markman is president of Markman Capital Insight and editor of Fast Forward Investing.

PATRICK WELSH FOR FORBES

THE FINTECH 50

THE PAST YEAR WAS BRUTAL FOR FINTECHS, WITH VALUATIONS CRASHING AND LAYOFFS MOUNTING. BUT THERE WERE STILL LOTS OF STANDOUT CANDIDATES FOR OUR EIGHTH ANNUAL LIST OF AMERICA'S MOST INNOVATIVE PRIVATE FINTECH FIRMS. SIX NEWCOMERS ARE PROFILED BELOW. FOR THE FULL LIST, GO TO **FORBES.COM/FINTECH50.**

• • •

by JEFF KAUFLIN, EMILY MASON *and* JONATHAN PONCIANO

Danielle Cohen-Shohet 33

FOUNDER AND CEO, GLOSSGENIUS

As an undergraduate economics major at Princeton, Cohen-Shohet had an unlikely side hustle as a makeup artist. After graduation, she took a job in finance at Goldman Sachs but kept thinking about the beauty business. In 2016, she founded an appointment booking and payments software company geared to the needs of independent beauty businesses and freelancers. GlossGenius has raised $44 million (most recently in June 2022 at a $360 million valuation), has more than 50,000 active customers and is now processing over $2 billion a year in transactions. Cohen-Shohet's twin, Leah, also a Princeton economics grad, is chief business officer.

Sanjay Desai 49

COFOUNDER AND CEO, MUDFLAP

As chief product officer of Trucker Path, Desai helped build a navigation and load-management program for truckers. But the Stanford MBA and a coworker saw another opening—for an app that would link owner-operators and small fleets with truck stops ready to offer them fuel discounts. In 2016, they cofounded Mudflap, which now has 500,000 truckers using its free app. In addition to collecting transaction fees from its fuel marketplace, Mudflap last year rolled out its own Visa debit card offering added discounts—and enabling it to collect fees on customers' purchases. It has raised $85 million, most recently at a $700 million valuation in July 2022.

David Dindi 30

COFOUNDER AND CEO, ATOMIC INVEST

A Stanford-educated software and AI engineer turned quantitative money manager, Kenya-born Dindi teamed up with former classmates in 2020 to build a digital platform enabling fintechs, banks and credit unions to provide a range of consumer services including money market funds, ESG investing and tax-loss harvesting. Atomic's direct indexing services allow even the smallest investors to own portfolios of fractional shares. So far, it has signed up nearly 50 customers; fintech startup Lilly, for example, uses Atomic to convert credit card rewards into Roth IRAs. Atomic raised $25 million in November 2021 in a Series A led by QED Investors and Anthemis.

ishing high school, he applied to a dozen top colleges. The University of Chicago was one of five that accepted him. During his first few days there, he met Blumenfeld, the son of an art teacher and a tax lawyer.

Harris graduated in three years from Chicago with a degree in statistics and started a Ph.D. at Stanford—but found it too theoretical and earned a master's in statistics instead. In June 2014, Affirm cofounder Max Levchin persuaded him to become the company's first data scientist. Harris, Levchin says, is a "very first-principles thinker. He didn't take anything for granted, evaluated things from scratch and was very, very mathematically competent." Blumenfeld joined Affirm six months later.

In March 2017, just seven months after their first encounter with synthetic ID fraud, Harris and Blumenfeld decided to build their own company around it. They got $575,000 in seed funding—$300,000 from Dallas venture capital firm Goldcrest and most of the rest from Levchin. They started working out of a windowless basement office in a seedy part of San Francisco. "It was the cheapest office we could find at the time. And it felt like a company that was fighting fraud should be in a basement office," Blumenfeld muses.

To build a useful fraud-scoring model, you need customer data, and lots of it. They used a clever shortcut to get started, buying millions of dollars' worth of written-off bad debt from lenders for about $10,000. That entitled them to pull credit reports on the defaulted borrowers and look for telltale patterns. They also started coding specific behaviors into their algorithm. If someone was applying with an email address created just a month before or using an IP address from a different location than their physical address, those counted as red flags.

As they scrambled to build their model, the need for it was growing. Research firm Aite-Novarica estimates that U.S. financial institutions' losses from synthetic ID fraud tripled from $800 million in 2017 to at least $2.4 billion last year. But the firm notes that losses could be more than twice its estimate because some lenders still write off bad debt without knowing whether the deadbeat is synthetic or real. (Aite-Novarica doesn't estimate losses sustained by the government, telecoms or online gambling sites, which are also big victims.)

In 2019, Harris and Blumenfeld finally got their first big bank customer: Synchrony, the consumer lending specialist behind the retail

The Next Great Grift Cont.

Hussein Fazal 41
COFOUNDER AND CEO, SUPER

In 2008, Canadian Fazal quit a tech job to cofound AdParlor, which built marketing campaigns to run on Facebook. He sold it in 2011, stayed on as CEO for a few years and then in 2016 launched Snapcommerce, a discount hotel reservation service recently valued at nearly $1 billion. Last October, he changed its name to Super and branched into financial services with SuperCash, a secured credit card that offers cash-back rewards and reports payments to credit bureaus. When San Francisco–based Super's millions of users book a reservation, they're prompted to sign up for SuperCash. So far, 50,000 have.

Sean Harper 42
COFOUNDER AND CEO, KIN INSURANCE

In 2009, Harper launched an e-commmerce startup while earning an MBA at the University of Chicago. It was bought in 2012 by Groupon, and he stayed on for a few years. In 2016, he cofounded Kin as a digital-first home insurer. It now has 100,000 policyholders but is available in just six states, which keeps underwriting and marketing costs low. He structured the insurer as a co-op owned by policyholders, with Kin taking 32% of premiums as a management fee; it more than doubled revenue in 2022 to $68 million. After canceling a plan to go public in a SPAC deal that valued it at $1 billion, Kin recently raised $109 million at an $875 million valuation.

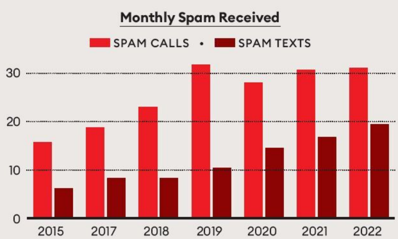
Jacqueline Reses 53
COFOUNDER AND CEO, LEAD BANK

A former executive at Yahoo and the private equity firm Apax, Wharton grad Reses spent five years, from 2016 to 2021, building up banking services at Square (now Block). Last August, Reses, who appears on our 2023 ranking of America's Most Successful Businesswomen with a net worth of $390 million *(see page 64)*, teamed up with other ex-Square execs and investors—including Ribbit and Andreessen Horowitz—to buy Kansas City–based Lead Bank. She's expanding its services to other fintechs; it helps credit card startup Ramp lend money to businesses and Unchained Capital make loans collateralized with bitcoin. A secondary sale in April valued Lead at $450 million.

Little Big Picture

GONE PHISHING

Americans lose nearly $40 billion every year from phone scams, per 2022 estimates by spam-blocking app Truecaller. Phony calls peaked in 2019, as regulators and carriers cracked down and people stopped picking up, leading scammers to do what everyone else already does—send a text instead.



SOURCE: *Truecaller Insights/Harris Poll*

credit cards offered by Amazon and JCPenney. That year SentiLink also raised its first substantial funding—$14 million from Andreessen Horowitz and Felicis Ventures, among others. Hans Morris, managing partner of venture capital firm NYCA, one of the investors, says the boyish, geeky-looking pair have a way with financial services execs. "They're so nerdy that they're trusted and charming."

Charming or not, it helps that the duo had targeted the right sort of wonky fraud problem—growing as a threat but not yet so significant that there were already lots of big competitors in the space fielding good models. Then came the pandemic. The surge in e-commerce and the flood of federal money were a boon to both fraudsters and SentiLink, which grew from 12 customers in December 2019 to 45 by the end of 2020. Last year, it processed 323 million identity checks for customers, up from 148 million in 2021. The more data it processes, the better its models are trained—and the more revenue it makes, since many clients pay both a fixed licensing fee and a usage fee for each identity check.

SentiLink has expanded beyond synthetic fraud to old-fashioned identity theft and first-party fraud, in which people use their real identities to steal money or goods, often by disputing legitimate charges. Harris says they've been able to cross-sell more than half of their synthetic-fraud customers on a second or third product, and about 60% of revenue now comes from new areas.

Yet despite such traction, SentiLink has only a tiny sliver of the fraud-prevention market, which totals $15 billion a year, estimates credit bureau (and competitor) Experian. In fact, some banks work with as many as 10 fraud-prevention firms at a time. Companies like Experian, Lexis-Nexis and fintech unicorn Socure all offer a broader set of services than SentiLink.

Another challenge: The business moves fast. Crooks continuously come up with new schemes and variations as fraud-prevention models proliferate. "I have 1,000 companies a year saying, 'I'm better at this than everybody else,'" says Max Axler, chief credit officer at Synchrony. Harris and Blumenfeld will need to keep grinding if they want to keep up—with competitors and criminals alike. F

FINAL THOUGHT

"OPPORTUNITY MAKES A THIEF."

—Francis Bacon

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Sustainability is for the road to net zero.
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We’re taking **climate** action by decarbonizing faster: by 2025, we’ll save and avoid 800 million tons of CO_2 emissions for our customers.
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By William Baldwin

Photograph by Franco Vogt for Forbes

Playing the Fields

SAL GILBERTIE sells down-to-earth inflation hedges: funds that hold futures contracts on crops like corn and soybeans.

The dollar is weak, the world is hungry and the Russians are making a mess of the grain markets. Would you be interested in a food-based inflation hedge?

Sal Gilbertie, farm-family scion turned money manager, has just the thing. His Teucrium Trading offers pure-play exchange-traded funds that hold futures positions in corn, wheat, soybeans and sugar. When the conditions are right, these things add quite some spice to your portfolio.

In the space of four weeks beginning just before the invasion of Ukraine last year, Teucrium Wheat zoomed up 65%. Over the past three years the soybean ETF is up 92%, the sugar fund 162%. Of course, agricultural commodities can sink just as easily. Wheat has given up all last year's gain. Beans and sugar fared very poorly over the decade of low inflation that preceded the pandemic.

Farmer-Financier

At his greenhouse-adjacent office in Easton, Connecticut, commodities trader Sal Gilbertie keeps an eye on crop production—and on ethanol demand, which has a lot to do with corn prices in the U.S. and sugar prices in Brazil.

PATRICK WELSH FOR FORBES

Why subject yourself to such uncertainty? To get diversification. The low correlation between grains and stocks means that a blend ought to be less volatile than either asset alone. In 10 of the 11 stock market corrections of 10% or more since 1998, Gilbertie says, the S&P grains index has beaten stocks.

As a commodities trader, Gilbertie, 63, has spent his entire career in finance. But he has farming in his blood. You get a taste of that when you visit his office in rural Easton, Connecticut. His desk is in a tiny room cluttered with sacks of seeds and housed in a ramshackle building alongside 36 acres of fields and greenhouses. Teucrium's nine other employees are scattered to the winds, in Vermont, Minnesota and other states.

What's the chief executive doing in Connecticut? The nearby farm operation is a family business called Gilbertie's Organics. A century ago, Gilbertie's great-grandfather came to the U.S. from Italy to grow for the cut-flower market. Handed down from generation to generation, the flower business survived for a long while—Gilbertie remembers helping, as a child, to deliver bouquets to funeral parlors—but it was doomed. Air freight brought in a bumper crop of import competition.

To survive, Gilbertie's entrepreneurial father pivoted into supplying cut greens and potted herbs to home gardeners and restaurant chefs; at 86, Sal Gilbertie Sr. remains the hands-on manager of a multimillion-dollar operation that employs 62 workers. It would be in the natural order of family businesses for the reins to be handed on by now. But the younger Gilbertie wanted to break away and, apart from taking advantage of some low-rent office space, he has largely succeeded in doing that.

Fresh out of Fairfield University, Sal Jr. headed to Minnesota to learn how to be a trader at Cargill. That giant firm is best known for handling farm commodities, but it gets involved in energy trading, too—no surprise given that food and energy intersect in the ethanol business. At 23, Gilbertie was buying diesel oil from Russia and reselling into the European market. The job responsibility included regular debriefings from a Russia watcher at the Central Intelligence Agency.

Gilbertie went from Cargill to Merrill Lynch to Bear Stearns to Société Générale to out on his own, juggling contracts for oil, natural gas, gasoline, ethanol and even orange juice. In 2009 he created Teucrium Trading. It has $440 million under management, enough, with a 1% management fee on most of the funds, to cover the bills but not enough to make anyone rich just yet. Gilbertie owns a fourth of the equity—other owners include a former employee and the bond trading firm Cantor Fitzgerald—and has voting control.

The Teucrium lineup includes the four single-grain funds, two ag-commodity blends and a bitcoin futures fund. Recently germinated: two ETFs using artificial intelligence to time futures contracts in farm commodities and in metals. Some of these products have tiny assets and might die off. Funds are as chancy as crops.

The whole operation was at risk of withering away when, in 2014, Russia snatched Crimea and drove grain markets into a tizzy. Last year's invasion of Ukraine was even more powerful, bringing a fickle crowd of speculators into the wheat fund and sending Teucrium's assets, momentarily, above $1 billion.

Here's the deal with grain prices, per Gilbertie. For years they lie sluggishly at just above the cost of production. Then something happens—a flood in China, a drought in Nebraska, a war—to send prices on dramatic trajectories. As he puts it: "Supply is erratic, demand is steady. Nobody is going to let themselves or their families get cold or go hungry."

At a sponsor of commodity ETFs, revenue is erratic and the costs of paperwork are steady. Even if a fund consists of nothing but three or four futures positions (as in the corn ETF), Teucrium has to put a "mine safety" statement and 248 pages of additional argle-bargle into the annual report. Gilbertie: "An ETF sponsor is a legal, compliance and accounting company that happens to have some funds."

He will make what he can of these bitter herbs. A recently introduced Teucrium venture is a "white label" fund service. For a fee, it handles the worst of the paperwork for some other sponsor's fund. There is one customer so far, a vendor of funds that make risky bets on stock market volatility.

Futures trading and securities law have taken Gilbertie far afield from his roots. But he still has one foot planted on the farm. Teucrium is the name of an ornamental herb in his father's catalog. Not far from his office he is using a patch of soil to experiment with an heirloom corn variety. "I'm a trader," he says, "but I'd much rather be out there scratching dirt." ⓕ

HOW TO PLAY IT

By William Baldwin

If you want a lot of action in a short time, any of the four single-malt ag funds from Teucrium would be tempting, despite their stiff expense ratios (in the vicinity of 1.75% a year). Buy-and-hold investors, though, will gravitate to a more diversified portfolio. For tax-deferred accounts I recommend **GraniteShares Bloomberg Commodity Broad Strategy No K-1** (expenses 0.25%), which mixes farm commodities with fossil fuels and base and precious metals. The K-1-free format, however, can be deadly to taxable investors. They should get the **Invesco DB Commodity Index Tracking Fund** (expenses 0.85%), whose partnership structure makes some of the return a capital gain.

William Baldwin is Forbes' Investment Strategies columnist.

FINAL THOUGHT

"THE EXCHANGEABLE VALUE OF ALL COMMODITIES RISES AS THE DIFFICULTIES OF THEIR PRODUCTION INCREASE."

—David Ricardo

OVERCLOCKING

A M

THE PROFILE

LISA SU ORCHESTRATED ONE OF THE GREAT TURNAROUNDS IN SILICON VALLEY HISTORY, DRIVING THE DYING SEMICONDUCTOR MAKER'S STOCK PRICE UP NEARLY 30-FOLD IN LESS THAN A DECADE. NOW SHE'S PREPARING FOR BATTLE IN THE COMING AI REVOLUTION—AND SHE EXPECTS TO KEEP WINNING.

BY **IAIN MARTIN** AND **RICHARD NIEVA** • PHOTOGRAPH BY **JAMEL TOPPIN** FOR FORBES

D

FROM A CONFERENCE ROOM ATOP AMD'S HEADQUARTERS IN SANTA CLARA, CALIFORNIA, A STRETCH OF HIGHWAY 101 RUNNING OUTSIDE, LISA SU PRESIDES OVER A COMPANY OLDER THAN THE TERM "SILICON VALLEY."

Down the road is a link to the company's past, an old foundry in Sunnyvale where AMD used to press its chips. But from her window she can see a recent milestone in the company's fast-evolving present: the offices of archnemesis Intel, whose market capitalization ($120.3 billion) AMD's now eclipses ($153.5 billion).

It wasn't always this way. In 2014, when Su, now 53, took up the CEO reins at AMD (Advanced Micro Devices), the chipmaker was foundering. The company had laid off around a quarter of its staff and its share price hovered around $2. Patrick Moorhead, a former AMD exec, remembers it as "deader than dead." Then Intel began to stumble, dragged down by manufacturing delays and Apple's decision not to use its chips in iPhones. Nimble, with a tactician's eye, Su was able to capitalize on her rival's missteps, inking deals with laptop makers such as Lenovo and gaming giant Sony, plus Google and Amazon, whose massive data centers generated $6 billion of the chipmaker's sales last year.

At $63 billion, Intel's annual revenue still dwarfs AMD's $23.6 billion. But wresting away coveted server chip market share from its Silicon Valley neighbor, as well as scooping up the semiconductor company Xilinx, has spiked AMD's stock nearly 30-fold in the nine years since Su took over. Now, with the mainstreaming of artificial intelligence stoking demand for the silicon brains behind machine learning, she's facing a legacy-defining opportunity and a daunting challenge: Can AMD produce a chip powerful enough to break Nvidia's near-monopoly on the processors that undergird the coming wave of generative AI technology? "If you look out five years," she says, "you will see AI in every single product at AMD, and it will be the largest growth driver."

Su has been overclocking AMD for the last nine years, much like a gamer who pushes a processor to perform beyond its manufacturer-specified limits. Unlike many tech executives, she's a world-class researcher, with a Ph.D. in electrical engineering from MIT. Her unique combination of technical genius, people skills and business savvy has made her among the highest-paid S&P 500 CEOs for the last several years (total 2022 compensation: $30.2 million). Overall, she has amassed a $740 million fortune (largely in AMD stock), landing her in 34th place on our annual ranking of America's richest businesswomen *(see page 64)*. "Talk about leaning in and just killing it," marvels Panos Panay, Microsoft's chief product officer, who first met Su in 2014 as she began AMD's turnaround.

Unlike Intel, though, whose revenue has seen a 12% decrease to $63.1 billion over three years, Nvidia appears at the top of its game. Beyond rendering stunning imagery in games like *Cyberpunk 2077*, its GPUs (graphics processing units) have become the engine of choice for artificial intelligence companies such as OpenAI, whose ChatGPT chatbot has delighted and disturbed the public by answering questions and commands with surprisingly detailed human-sounding responses.

These so-called large language models are really just stunning parlor tricks, but they're the opening act for an AI transformation that big shots like Bill Gates say will be as significant as the dawn of the internet. Already there is huge demand for the GPUs that power them, and at least one research firm foresees a $400 billion bonanza within the next decade for the companies that make them. But right now there's really just one. "AI equals Nvidia," says Glenn O'Donnell, a Forrester analyst. "That's pretty well-entrenched, and AMD has to really step up its game to overcome that."

Meanwhile, the specter of Intel still looms across Highway 101, even as the O.G. of PCs has faced further manufacturing delays, chip defects and leadership changes. "There are many great things about AMD, but the bad thing is that we have two world-class competitors," says AMD exec Forrest Norrod, who helped Dell build its approximately $10 billion (2014 revenue) data center business in part on AMD chips and adds that the company never assumes its main rival will let problems linger. "We will always assume that Intel will fix it."

WHEN SU WAS promoted into AMD's top job in 2014, analysts were calling the company "uninvestable," with $2.2 billion in debt. Some of its prized assets were already being sold for parts. Its fabrication plant where chips are baked ("fabs," in industry-speak) was spun off in 2009—a blow to AMD cofounder Jerry Sanders' infamous boast that "real men have fabs." It even had to sell and lease back its corporate campus, in Austin, Texas—Su's current base—in 2013.

More troubling, AMD was struggling to execute. It couldn't hit product deadlines, and Intel dominated

JAMEL TOPPIN FOR FORBES

Ask Me Anything

Su is an avid reader of tweets and Reddit posts about AMD's products–and will even reply. "Sometimes it's the best way I get my news," she says. For the record: She does not have a burner account.

all but the bargain end of the laptop market with Nvidia, Qualcomm and Samsung carving up the new smartphone business. "Our technology wasn't competitive at the time," Su admits.

AMD hadn't always been such a headache for investors. Sanders broke into the microprocessor business making chips for IBM in the early 1980s, but things started to change in the late '90s and early 2000s. AMD, which had been a perennial second-rater, began generating record profits by building its own processors that beat Intel's on speed.

By 2014, those glory days were long gone. As were about a quarter of AMD's staff, sacked by Su's predecessor, Rory Read (Sanders stepped down as CEO in 2002). AMD had once commanded about a quarter of the now $24 billion server chip market, but its share dwindled to 2% in 2014. On her second day as CEO, Su stepped up to the microphone during an all-hands call with a message for AMD's demoralized employees: "I believe that we can build the best," she remembers telling her staff. "You might think that was obvious, but it wasn't to the company at the time."

That rallying cry was also an edict and step one in her three-pronged plan to fix AMD: Create great products, deepen customer trust and simplify the company. "Three things, just to keep it simple," she says. "Because if it's five or ten, it's hard."

Su refocused her engineers on building Intel-beating chips, but it can take chip designers years to draw up a viable final blueprint. AMD's share of the server market fell even further, to half a percent, while researchers toiled in the lab. "At the time, the company wasn't doing well, but holy cow, they were working on the most exciting design in the industry," she says. "Engineers are motivated by products, and I like to keep that front and center."

Her decision to prioritize a new chip architecture called Zen paid off when it finally launched in 2017. "It was really good," she says with palpable pride, adding that Zen could compute more than 50% faster than the company's previous designs. More importantly, it signaled to the industry that AMD had turned a corner. By Zen's third generation, released in 2020, it was the market leader in terms of speed. Zen architecture now underpins all of AMD's processors.

With her team shepherding a new generation of chips, Su hit the road to hard-sell them to jaded data center clients. She had already spent years building relationships even when AMD had no chips to sell, once driving more than four hours through a Texas ice storm to charm Antonio Neri, now CEO of Hewlett Packard Enterprise. "I was, let's say, disenchanted by AMD's prior generation," Neri says. "She showed me she had the conviction of what needed to be done."

A big part of Su's strategy was inking new deals with the tech giants, which needed oodles of CPUs to power their exploding cloud businesses. "For us, there are really three microprocessor partners. We have Nvidia, Intel, AMD," says Thomas Kurian, CEO of Google Cloud. "AMD, when I joined, was not really a significant part of our ecosystem—at all. And it is a credit to Lisa that they are a very important partner for us now."

Last February, when AMD's market cap first surpassed Intel's, company cofounder Sanders, now 86, was ecstatic. "I called everybody I know!" he says. "I was delirious. I'm only sorry that Andy Grove isn't around so I could say 'gotcha!'" (Grove, Intel's legendary former CEO, died in 2016.)

SU, THE DAUGHTER of a mathematician and a bookkeeper turned entrepreneur, was born in Tainan, Taiwan, in 1969, the same year Sanders founded AMD. Her family immigrated to New York City when she was 3. She chose electrical engineering at the Massachusetts Institute of Technology because it seemed to be the most difficult major. For someone so technically talented, she was also good with people, playing peacekeeper when disagreements flared between fellow students, says Hank Smith, who ran MIT's nanostructures lab at the time.

Su laughs upon hearing herself described as a people person. "Well, that's compared to other MIT people," she jokes. "I don't think anyone would say I'm an extrovert, but communication is a huge part of my job."

After a brief stint at Texas Instruments, in 1995 she was hired as a staff researcher at IBM, where she helped design chips that run 20% faster by using semiconductors with copper circuitry instead of the traditional aluminum. Higher-ups quickly spotted her talent: In 1999, a year after the launch of the copper technology, IBM's then-CEO, Lou Gerstner, tapped her to be his technical assistant. In his first interview in 20 years, Gerstner tells *Forbes* he initially worried Su was too junior for the job, but his doubts were quickly quelled. "She proved to be one of the most outstanding employees who worked in my office. Lisa doesn't follow normal patterns—she's been blowing them up her entire career."

That appointment gave Su a front-row seat for a corporate turnaround that is now a classic business school case study—a rejuvenation ignited, in part, by leaning on the company's scale and creating a culture devoted to customers. Gerstner grew the stalled IBM's market cap nearly sixfold in his almost nine-year run. Su also got a taste for dealmaking, helping IBM sign a joint deal with Sony and Toshiba in 2001 to put its chips in Sony's PlayStation 3.

Early on, she sometimes worried she wasn't qualified to sit at tables packed with business heavyweights, but Su soon realized that her hard-learned technical acumen gave her an edge over executive-track types. "I saw that MIT Ph.D.'s worked for Harvard MBAs, and the truth is that made absolutely no sense to me," she said in a 2017 graduation speech at her alma mater, whose new nanotech laboratory now carries her name.

In late 2011, Nick Donofrio, at the time an AMD board member whom Su had met at IBM, called up his old protégée, who by then was a senior vice president of Freescale, the Austin-based chipmaker that is now part of NXP Semiconductors. The two met for dinner, and over a bottle of Brunello, he made his pitch: an opportunity not

MARTYN GODDARD/ALAMY

Microchip Giant

AMD cofounder Jerry Sanders (shown here in 1979) was an early Silicon Valley swashbuckling salesman. "People thought I was all hat and no cattle," he tells *Forbes* now. But he argues AMD wouldn't have lasted so long if that were true. "We were just trying to get attention. We were in the shadow of Intel."


On and off the boat she flies,
her confidence is soaring high,
a force of nature on the rise.
There's something
in the water.
Women who fish have significantly greater grit and confidence
than women who don't. Find your best self on the water.
TAKEMEFISHING.org
Ipsos (May 2022). Identifying What Gives Female Anglers an 'Edge'. © 2023 Recreational Boating & Fishing Foundation

just to chase incremental improvements, but to reinvent and innovate—with the ground cover to actually do it. A few days later, Su accepted a role as senior vice president of AMD's global business units. Two years after she started, she was running the entire company—making her the first female CEO of a major semiconductor company.

"I would walk into rooms where there were, like, 25 people, and I might have been the only woman," she recalls of her early engineering days. "Where I have a lot of passion is young women engineers—keeping them in engineering."

When Su first took over, she flew to Beverly Hills and personally asked AMD's Sanders to speak to her team. Sanders says he was touched by Su's offer but declined. "It's not my team now. It's your team," he recalls telling her. Ever the salesman, though, he also made a counteroffer: He'd make the visit once the company had hit two years of profitability. In 2019, coinciding with the company's 50th anniversary, Sanders made good on that promise.

Semiconductor hotshot Mark Papermaster, who led the iPhone and iPod engineering teams at Apple and who had joined AMD around the same time as Su, has been a keen observer of the company's remarkable comeback under her leadership. At Apple, Papermaster had worked for another skilled turnaround artist: cofounder Steve Jobs, who saved the company from catastrophe and set it on the path that would make it the world's most valuable company. "What Lisa had, in a number of ways, was an even more difficult task," Papermaster says. "When you're not a founder, you have to establish your own credibility and your own vision, and bring the entire company, your customers and your investors with you."

Su's success at AMD has made her an inspiration for young engineers and a hero to investors. It has also made her into a meme: A few years ago, 8-bit animations in which Su uses AMD's Ryzen chips to morph into a superhero or shoot lasers from her eyes went viral on Twitter. A figurine of her clad in orange-and-red armor, helmet at her side, features prominently on her office shelf, a gift from a fan at the E3 gaming conference. "That's probably one of the funnier moments in my career," says Su, who, while a keen Twitter and Reddit user, isn't "big on memes. It's not my thing."

NOW THAT SU has renewed and energized AMD, she's focused on ensuring its future in a highly competitive market. While she diligently rebuilt its business, Nvidia cofounder and CEO Jensen Huang was hard at work making his company the go-to vendor for artificial intelligence computing power.

Huang, who is a distant relative of Su's ("his mother is sisters with my grandfather," she says), sees a gold mine in selling the chips to buttress AI tools like ChatGPT. Demand has already catapulted Nvidia's share price to near all-time highs with a forward P/E of around 64x—nearly double AMD's. "It's why investors are looking at AMD: because they want the poor man's Nvidia," says Stacy Rasgon, an analyst at Bernstein. "Maybe the market is so big they don't need to be competitive."

But Su intends it to be. And she hopes to take on Nvidia's AI-centric H100 GPUs by betting on annual chip upgrades meant to burnish AMD's position. Under her leadership, R&D spending has risen nearly fourfold, to $5 billion—almost as much as AMD's entire revenue when she took over.

A new supercomputer at Tennessee's Oak Ridge National Laboratory—the fastest in the world when completed in 2022—is Su's passion project. The groundbreaking machine was built to have the processing power of at least a quintillion calculations per second and is a showcase for AMD's AI chips. She's throwing a curveball as well: The MI300 chip, which fuses CPUs with GPUs in a bid to counter Nvidia's new superchip, will ship later this year.

SU IS IN A GOOD POSITION TO TAKE A RUN AT THE AI CHIP MARKET. BUT SHE KNOWS WELL HOW QUICKLY TURNAROUNDS CAN BECOME DOWNFALLS.

She has also been maneuvering against Nvidia with acquisitions, such as her $48.8 billion takeover in 2022 of Xilinx, a company that makes programmable processors that help speed up tasks like video compression. As part of the deal, Victor Peng, Xilinx's former CEO, became AMD's president and leader of AI strategy.

Beyond Nvidia lurk other emerging threats: Some of AMD's customers have begun doing chip development of their own—a move designed to mitigate their dependence on the semiconductor giants. Amazon, for example, designed a server chip in 2018 for its AWS business. Google has spent nearly a decade developing its own AI chips, dubbed Tensor Processing Units, to help "read" the names of the signs captured by its roving Street View cameras and provide the horsepower behind the company's Bard chatbot. Even Meta has plans to build its own AI hardware.

Su shrugs off concerns that her customers could someday be competitors. "It's natural," she says, for companies to want to build their own components as they look for efficiencies in their operations. But she thinks they can do only so much without the technical expertise AMD has built over the decades. "I think it's unlikely that any of our customers are going to replicate that entire ecosystem."

Su is in a good position to take a run at the AI chip market. But she knows well how quickly turnarounds can become downfalls. There's more work to be done to ensure AMD endures: "I think there's another phase for AMD. We had to prove that we were a good company. I think we've done that. Proving, again, that you're great, and that you have a lasting legacy of what you're contributing to the world, those are interesting problems for me." Ⓕ


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THE LIST: RICHEST SELF-MADE WOMEN

AMERICA'S MOST SUCCESSFUL BUSINESSWOMEN

Books. Biometrics. Beauty products. These 100 entrepreneurs, executives and entertainers made their fortunes in every conceivable way. Bolstered in part by a rebound in the stock market, they are cumulatively worth a record $124 billion, up nearly 12% from a year ago. Building supply distributor Diane Hendricks remains No. 1 for the sixth year in a row, with a $15 billion net worth. Showrunner Shonda Rhimes and Insitro CEO Daphne Koller, whose firm is using AI to develop drugs more quickly, are among the eight newcomers.

(From left) Diane Hendricks
Taylor Swift
Iman Abuzeid

1. DIANE HENDRICKS

$15 billion ↑

SOURCE: **Building supplies**

AGE: **76** • RESIDENCE: **Afton, WI**

SELF-MADE SCORE: **9**

The residential construction boom continued in 2022 and pushed sales at Hendricks' ABC Supply, which she owns, up 25% to $18.5 billion. That lifted her fortune by nearly $3 billion. She also runs Hendricks Holding, which has investments in manufacturing, real estate, construction, recycling and life sciences.

2. JUDY LOVE

$10.2 billion ↑

SOURCE: **Gas stations**

AGE: **85** • RESIDENCE: **Oklahoma City**

SELF-MADE SCORE: **9**

Her husband of 62 years, Tom, died in March 2023. Her fortune now includes his half of Love's Travel Stops & Country Stores, the retailer the pair started together in 1964 with a $5,000 loan. The $26.5 billion (est. revenue) company, which her sons Greg and Frank have run as co-CEOs since 2014, plans to open 25 new locations this year and invest $1 billion in renovating and updating existing stores.

3. JUDY FAULKNER

$7.4 billion ↑

SOURCE: **Health care software**

AGE: **79** • RESIDENCE: **Madison, WI**

SELF-MADE SCORE: **8**

Epic Systems, the electronic health records company Faulkner founded in 1979, announced an expanded partnership with Microsoft in April to use generative AI to help draft responses to patients' messages and improve data analysis for hospital customers. Epic, which had $4.6 billion in 2022 revenue, also launched a program last year to help match hospitals with clinical trials.

4. LYNDA RESNICK

$5.3 billion ↑

SOURCE: **Agriculture**

AGE: **80** • RESIDENCE: **Beverly Hills, CA**

SELF-MADE SCORE: **8**

The nation's richest farmers, Resnick and her husband, Stewart, co-own the $5 billion (sales) agricultural giant Wonderful Co., which grows and sells pistachios, almonds, pomegranates, mandarin oranges and seedless lemons from 135,000 acres in California's Central Valley, Texas and Mexico. Caltech, to which the couple pledged $750 million in 2019, is nearing completion on a 79,500-square-foot sustainability center to be named after them.

CHANGE IN WEALTH KEY: ↑ UP ↓ DOWN ↔ UNCHANGED • **SELF-MADE SCORE:** 6 7 8 9 10

5. THAI LEE

$4.8 billion ↑
SOURCE: **IT provider**
AGE: **64** • RESIDENCE: **Austin, TX**
SELF-MADE SCORE: 9

America's most successful female immigrant has run IT provider SHI International for 34 years. The company, which is the largest minority- and woman-owned enterprise in the U.S., is investing heavily in its international operations, which grew by 25% in 2022; that helped boost overall revenue to $14 billion, up nearly 14% from the previous year.

6. JOHNELLE HUNT

$4.4 billion ↑
SOURCE: **Trucking**
AGE: **91** • RESIDENCE: **Fayetteville, AR**
SELF-MADE SCORE: 7

Six decades ago Hunt cofounded rice hull packaging firm J.B. Hunt with her husband (d. 2006); they later turned it into a trucking firm. She was the detail-oriented business manager; he was the ideas person. "Johnnie was looking through the windshield and I was always looking through the rear-view," Hunt once said. She is still a key shareholder of the $18 billion (market cap) freight haul company.

7. GAIL MILLER

$4.2 billion ↑
SOURCE: **Car dealerships**
AGE: **79** • RESIDENCE: **Salt Lake City**
SELF-MADE SCORE: 7

Miller wants to bring Major League Baseball to Utah. In April she and her family announced they're leading a group of investors called Big League Utah that hopes to land an expansion team or an existing franchise. She and her husband, Larry (d. 2009), owned the NBA's Utah Jazz for 35 years before selling a majority stake in 2020 to fellow Utah billionaire Ryan Smith. In 2021 she sold the car dealerships she started with her husband for nearly $3.5 billion.

8. MARIAN ILITCH

$4 billion ↓
SOURCE: **Little Caesars**
AGE: **90** • RESIDENCE: **Bingham Farms, MI**
SELF-MADE SCORE: 9

Ilitch's Little Caesars, which had nearly $5 billion in estimated systemwide sales in 2022, became the official pizza sponsor of the NFL last year. She also owns an NHL team (Detroit Red Wings), an MLB team (Detroit Tigers) and the MotorCity Casino Hotel, as well as other companies in the food, sports and entertainment industries. She's the chairwoman of Ilitch Holdings while her son Chris is CEO.

Meg Whitman

9. ELIZABETH UIHLEIN

NEW

$3.7 billion
SOURCE: **Packaging materials**
AGE: **77** • RESIDENCE: **Lake Forest, IL**
SELF-MADE SCORE: 7

Starting in their basement in 1980, Uihlein and her husband, Richard, built packaging supplies company Uline into a $6.1 billion (annual sales) giant. Elizabeth is its president, while Richard is CEO of the company, which sells more than 41,000 items including cardboard boxes and bubble wrap, via its well-known catalog. Together the couple have donated at least $190 million to conservative political causes.

10. PEGGY CHERNG

$3.1 billion ↑
SOURCE: **Fast food**
AGE: **75** • RESIDENCE: **Las Vegas**
SELF-MADE SCORE: 9

Her Panda Express chain is celebrating 40 years of dishing out Chinese-American cuisine at malls, airports and free-standing stores, mainly in the U.S. An electrical engineering Ph.D., Cherng worked for McDonnell Douglas and 3M before leaving to cofound the business with her husband, Andrew, in 1983. Cherng serves as co-CEO, with Andrew, of the 2,300-location chain, whose sales topped $5 billion last year. "I've always upheld a family-first mindset," she tells *Forbes*.

11. MEG WHITMAN

$3 billion ↓
SOURCE: **eBay**
AGE: **66** • RESIDENCE: **Nairobi, Kenya**
SELF-MADE SCORE: 6

Whitman, the former CEO of eBay, Hewlett-Packard and the short-lived video platform Quibi, was confirmed as U.S. ambassador to Kenya in July 2022. Drawing on her experience leading blue-chip firms, Whitman plans to push for new trade partnerships between the U.S. and Kenya.

12. EREN OZMEN

$2.8 billion ↑
SOURCE: **Aerospace**
AGE: **64** • RESIDENCE: **Reno, NV**
SELF-MADE SCORE: 9

Ozmen and her husband, Fatih, own aerospace and defense company Sierra Nevada Corporation (SNC); she is chairwoman of SNC and Sierra Space, which spun off from SNC in 2021. Sierra Space has developed a reusable space vehicle to carry cargo to the International Space Station for NASA and is planning its first trip for December. With Jeff Bezos' Blue Origin, it is also building Orbital Reef, a business park in space.

(PREVIOUS SPREAD: HENDRICKS: GABRIELA HASBUN FOR FORBES; SWIFT: JON KOPALOFF/GETTY IMAGES) MEG WHITMAN BY ETHAN PINES FOR FORBES

CHANGE IN WEALTH KEY: ↑ UP ↓ DOWN ↔ UNCHANGED • SELF-MADE SCORE: 6 7 8 9 10

13. OPRAH WINFREY
$2.5 billion ↓
SOURCE: **TV shows**
AGE: **69** • RESIDENCE: **Montecito, CA**
SELF-MADE SCORE: 10

Winfrey reportedly purchased nearly 900 acres of land in Maui earlier this year, adding to her portfolio of 13 properties on the Hawaiian islands plus real estate in California and Wyoming. The media mogul returned to her alma mater, Tennessee State University, for the first time since 1987 to deliver the commencement address in May.

14. DORIS FISHER
$2.3 billion ↓
SOURCE: **Gap**
AGE: **91** • RESIDENCE: **San Francisco**
SELF-MADE SCORE: 7

Gap, which she cofounded with her husband, Don (d. 2009), has struggled with declining sales, financial losses, layoffs and a roughly 30% stock drop in the past 12 months. Not that it affected her fortune too much: Fisher, whose net worth is down $100 million in the past 12 months, has been transferring shares to her children for years. She donated three houses in Woodside, California, worth a combined $27 million to her charitable foundation in 2020. Most of her fortune now lies in her art collection and other investments.

15. JAYSHREE ULLAL
$2.2 billion ↑
SOURCE: **Computer networking**
AGE: **62** • RESIDENCE: **Saratoga, CA**
SELF-MADE SCORE: 6

The Silicon Valley engineer and Cisco veteran joined computer networking company Arista Networks as CEO in 2008 when the business had no sales. The now publicly traded company, which she still runs, recorded $4.4 billion in revenue in 2022, up 48% from the prior year, despite component shortages and supply chain challenges. Arista plans to launch a new suite of AI-based network services this year.

16. ELAINE WYNN
$2.1 billion ↑
SOURCE: **Casinos, hotels**
AGE: **81** • RESIDENCE: **Las Vegas**
SELF-MADE SCORE: 8

Wynn, who cofounded Wynn Resorts with her ex-husband Steve Wynn in 2002, is the largest individual shareholder of the casino company, with an 8% stake. Shares of the business rose nearly 60% in the past year, boosted by an increased focus on sports betting.

17. SHERYL SANDBERG
$1.7 billion ↑
SOURCE: **Facebook**
AGE: **53** • RESIDENCE: **Menlo Park, CA**
SELF-MADE SCORE: 6

The former Meta Platforms chief operating officer announced via a June 2022 Facebook post that she was stepping down from the social media giant after nearly a decade and a half to focus on philanthropic work. She officially left the company at the end of September. Sandberg and her husband, Tom Bernthal, are part of a reported $125 million investment consortium unveiled in April to bring a new professional women's soccer team to the Bay Area. *Forbes* calculates Sandberg sold or gave away nearly $2 billion worth of Facebook stock over the past decade.

17. ALICE SCHWARTZ
$1.7 billion ↓
SOURCE: **Biotech**
AGE: **96** • RESIDENCE: **El Cerrito, CA**
SELF-MADE SCORE: 8

Schwartz served as a researcher in the early days of Bio-Rad Laboratories, which she launched with her husband, David (d. 2012), in 1952. She stepped down from the board in 2022 but still owns nearly 16% of the $2.8 billion (sales) research products firm, now run by her son Norman.

19. SAFRA CATZ
$1.6 billion ↑
SOURCE: **Software**
AGE: **61** • RESIDENCE: **Fort Lauderdale, FL**
SELF-MADE SCORE: 6

Oracle's CEO since 2014, Catz has helped close more than 130 acquisitions for the software giant since she joined it in 1999. In 2022, Oracle paid $28 billion for electronic health records firm Cerner in its largest acquisition ever; it's now in a restructuring process likely to cost $930 million. Oracle's stock is up 40% in the past year; in April she sold $320 million of it.

20. RIHANNA
$1.4 billion ↔
SOURCE: **Music, cosmetics**
AGE: **35** • RESIDENCE: **Los Angeles**
SELF-MADE SCORE: 10

Rihanna's Super Bowl halftime show in February attracted 121 million viewers. It was her first live performance in more than five years and came two months after she released new music for the *Black Panther: Wakanda Forever* soundtrack. She is launching a new Fenty X Puma partnership and has an estimated 30% stake in lingerie line Savage X Fenty. The bulk of her fortune comes from Fenty Beauty, the makeup line she co-owns with LVMH and whose sales doubled in 2022.

Safra Catz

SAFRA KATZ BY JUSTIN SULLIVAN-GETTY IMAGES

TELLING OUR STORIES

Celebrating Women At The Forefront Of Change

To celebrate Women's History Month, Forbes and The Macallan hosted a reception in Mexico City on March 6, 2023, spotlighting innovators leading in their industries. Female founders, CxOs, entrepreneurs, philanthropists and members of the ForbesWomen community gathered to connect with and honor today's women at the forefront of change.

Explore key highlights from the event below, and visit Forbes.com to watch the event video.

Event Highlights

Mónica Santos Gil

FOUNDER AND CREATIVE DIRECTOR, SANTOS BY MÓNICA

"There's all these misconceptions ingrained in our culture. You have to reframe your mindset and realize that it's never too late to start, and you have to start somewhere... For me, it was all just baby steps."

Vanessa Torrivilla Ariel

COFOUNDER AND CHIEF PRODUCT OFFICER, GOLDBELLY

"I don't think I ever really set out to be an entrepreneur...I just knew that shaping the future and the way people did things, changing something in the world–that's what I wanted to do...The way I got here was just following happiness and always taking the risk."

Marlene Garayzar

COFOUNDER, CHIEF REGULATORY AND GOVERNANCE OFFICER, STORI

"We were trying to figure out how to provide millions of Mexicans access to financial products. The reality in our country is that most people are excluded from the traditional financial sector...We are driven by our mission of financial inclusion."

Trailblazing Now & Then

The event kicked off with a documentary video about Janet Isabella Harbinson, affectionately named "Nettie," who became The Macallan's first female Managing Director in 1918.

After the death of her father and husband, the company's previous owners, Nettie made the bold choice to take charge, becoming one of few women at the time to run a business. She used her role to employ war widows and oversaw The Macallan brand's rise to prominence and the creation of the most expensive wine or spirit ever sold at auction, The Macallan Fine and Rare 1926.

Sheila Johnson

21. KIM KARDASHIAN

$1.2 billion ↓
SOURCE: **Shapewear, skin care**
AGE: **42** • RESIDENCE: **Hidden Hills, CA**
SELF-MADE SCORE: 7

The TV star and business mogul is pushing forward in both realms. She'll join the season 12 cast of FX show *American Horror Story,* premiering later this year. Her private equity firm, SKKY Partners, headed by a former Carlyle Group exec, is reportedly trying to raise a $1 billion fund to invest in consumer and media companies. Kardashian, who launched skin care line SKKN by Kim last summer, still owes much of her ten-figure wealth to a 35% stake in shapewear label Skims.

22. SARA BLAKELY

$1.1 billion ↔
SOURCE: **Spanx**
AGE: **52** • RESIDENCE: **Atlanta**
SELF-MADE SCORE: 8

A former fax machine salesperson, Blakely is now battling it out against two of the world's most famous women—Kim Kardashian and singer Lizzo—for dominance in the booming shapewear category. Spanx's estimated valuation is down compared to last year, but Blakely's other assets did well, including a real estate portfolio of at least five homes and a 4% stake in the NBA's Atlanta Hawks.

22. WEILI DAI

$1.1 billion ↓
SOURCE: **Semiconductors**
AGE: **61** • RESIDENCE: **Las Vegas**
SELF-MADE SCORE: 8

Her latest projects include VR and conversational AI startup MeetKai, which is building its own metaverse—complete with "MeetKai Virtual Humans"—and training its own large language models. Dai made her mark as cofounder of semiconductor company Marvell Technology, although she was forced out in 2016 over an accounting investigation; no evidence of fraud was found. She and her husband own seven residences at the Trump Hotel in Las Vegas.

24. TORY BURCH

$1 billion ↑
SOURCE: **Fashion**
AGE: **56** • RESIDENCE: **New York City**
SELF-MADE SCORE: 7

Burch is a billionaire again for the first time since 2015 after her namesake fashion brand recorded an estimated $1.8 billion in revenue in 2022. The company is focused on expanding the reach of its preppy-chic clothing overseas. After opening 30 locations since May 2022, including its first store in Vietnam, Tory Burch now boasts more than 370 locations around the world.

25. NEERJA SETHI

$990 million ↓
SOURCE: **IT consulting, outsourcing**
AGE: **68** • RESIDENCE: **Fisher Island, FL**
SELF-MADE SCORE: 8

Sethi and her husband, Bharat Desai, who met while working for IT firm Tata Consultancy Services, launched IT services firm Syntel in their Troy, Michigan, apartment in 1980. In 2018, they sold it to French IT firm Atos SE for $3.4 billion.

26. ANNE DINNING

$900 million ↔
SOURCE: **Hedge funds**
AGE: **60** • RESIDENCE: **New York City**
SELF-MADE SCORE: 6

Dinning is a member of the six-person executive committee leading D.E. Shaw, a quantitative hedge fund managing $60 billion in assets. The secretive firm had an impressive year in 2022, with its flagship Composite Fund generating a 24.7% net return. Dinning, who joined D.E. Shaw in 1990, has donated more than $180 million to her charitable foundation since 2007.

27. GWYNNE SHOTWELL

$860 million ↑
SOURCE: **SpaceX**
AGE: **59** • RESIDENCE: **Jonesboro, TX**
SELF-MADE SCORE: 6

Elon Musk's tenure at Twitter may be chaotic, but one of his other ventures, SpaceX, continues to thrive thanks to Shotwell, its president and chief operating officer. The company undertook 61 launches in 2022—mostly satellites but also three trips to the International Space Station with astronauts. In May it hit another milestone when it placed its 4,000th Starlink internet satellite in low Earth orbit. Investors now value the rocket company at $125 billion.

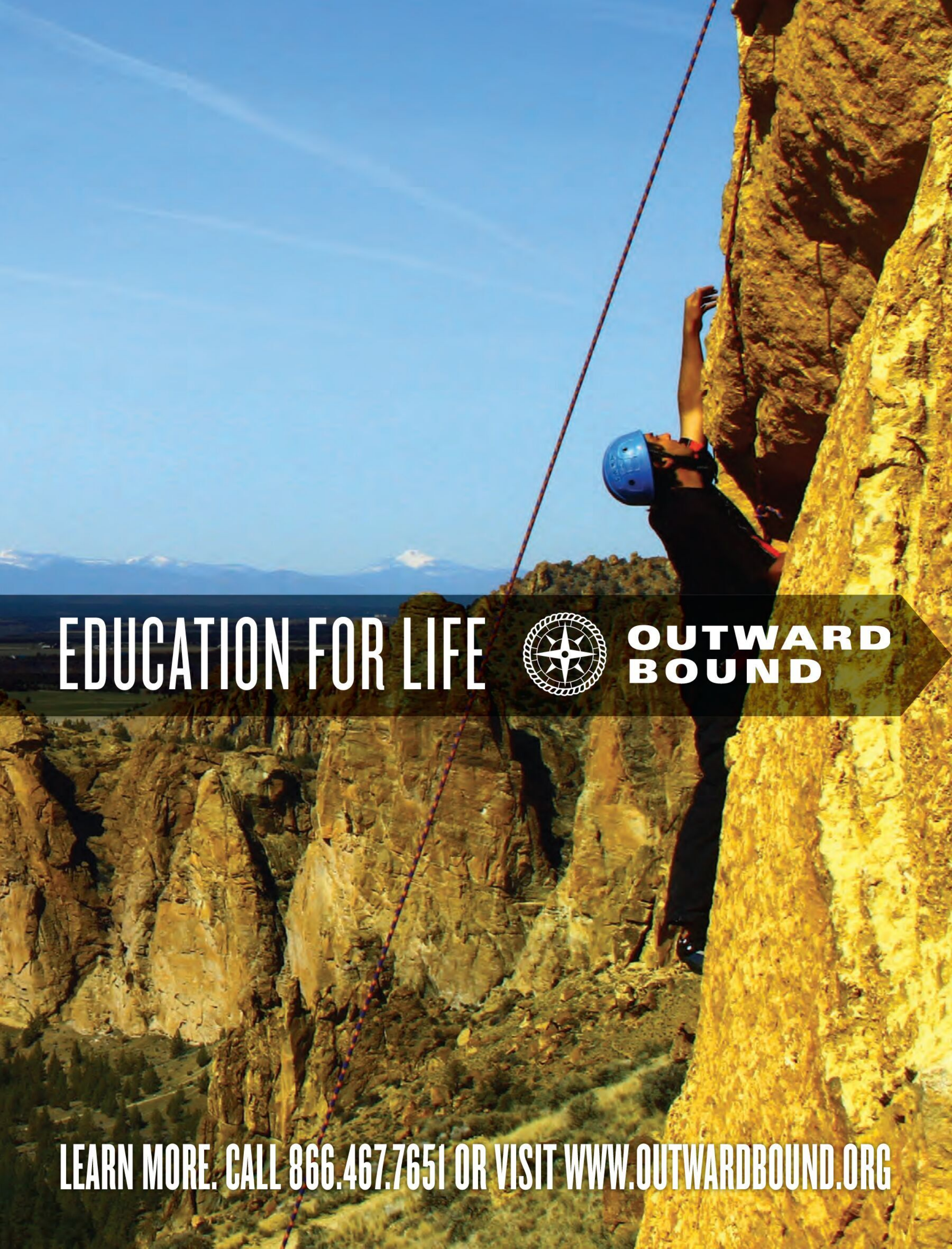
28. SHEILA JOHNSON

$840 million ↑
SOURCE: **Cable television**
AGE: **74** • RESIDENCE: **The Plains, VA**
SELF-MADE SCORE: 9

Johnson was a violinist and music teacher before she cofounded TV channel Black Entertainment Network in 1979 with her then-husband, Robert, and sold it to Viacom in 2001. She will publish a memoir in September about breaking into entrepreneurship and philanthropy while battling relationship hardships and institutional racism. She also founded the Salamander Collection, a luxury hotel group that last fall opened its Washington, D.C., hotel in what was formerly the Mandarin Oriental.

SHEILA JOHNSON BY JARED SISKIN

CHANGE IN WEALTH KEY: ↑ UP ↓ DOWN ↔ UNCHANGED • **SELF-MADE SCORE:** 6 7 8 9 10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29. ROBYN JONES

$830 million ↑
SOURCE: **Insurance**
AGE: **60** • RESIDENCE: **Fort Worth, TX**
SELF-MADE SCORE: 9

Canada-born Jones founded Texas-based Goosehead Insurance in 2003; she serves as vice chair and her husband, Mark, who joined in 2004, is CEO. Rising interest rates hurt the firm's bottom line in 2022, with net income falling by 68% to $2.6 million, despite revenue growing by nearly 40% to $209 million. In April, she was awarded an honorary doctorate from Montana State University, which came two years after she and Mark donated $101 million to the college's nursing school.

30. KIT CRAWFORD

$800 million ↑
SOURCE: **Clif Bar**
AGE: **64** • RESIDENCE: **St. Helena, CA**
SELF-MADE SCORE: 8

Crawford and her husband, Gary Erickson, sold their majority stake in Clif Bar, which he had cofounded in 1992, to snack giant Mondelez in August. They walked away with approximately $1.5 billion in cash. The pair has poured an estimated $30 million into their "mission driven" venture capital firm, White Road Investments, and runs the Clif Family Winery in the Napa Valley.

31. ANASTASIA SOARE

$790 million ↑
SOURCE: **Cosmetics**
AGE: **65** • RESIDENCE: **Beverly Hills, CA**
SELF-MADE SCORE: 9

The Romanian immigrant, best known for revolutionizing makeup for eyebrows, is celebrating the 25th anniversary of her cosmetics brand, Anastasia Beverly Hills, this year. Moody's issued an upgrade to its debt rating in June 2022, citing a recovery in sales and earnings but still indicating it was at high risk of default.

32. SUSAN WOJCICKI

$780 million ↑
SOURCE: **Google**
AGE: **54** • RESIDENCE: **Los Altos, CA**
SELF-MADE SCORE: 6

Twenty-five years after joining Google, which started in her garage, Wojcicki stepped down as CEO of YouTube in February. In her resignation letter, she announced she'd begin a new chapter focusing on "family, health and personal projects." She'll still have an advisory role at Google and parent company Alphabet. Anne Wojcicki *(No. 91)* is her sister.

Susan Wojcicki

33. MARISSA MAYER

$760 million ↓
SOURCE: **Google, Yahoo**
AGE: **48** • RESIDENCE: **Palo Alto, CA**
SELF-MADE SCORE: 6

Mayer joined Google as its first female engineer, spent 13 years there, then served as CEO of Yahoo until 2017. The tech veteran has since turned her attention to Sunshine, which automates "mundane tasks" using AI. The 25-person startup, which she founded and reportedly helped fund, raised $16.5 million in 2020. It has since launched two apps: one to manage contacts and another to help users remember birthdays.

34. APRIL ANTHONY

$740 million ↓
SOURCE: **Health care**
AGE: **56** • RESIDENCE: **Dallas**
SELF-MADE SCORE: 8

Last August the health care veteran was named CEO of Dallas-based VitalCaring, which provides home health, hospice and pediatric care. She started in the industry as controller of a distressed home health care company that she turned around and bought. She later founded Encompass Home Health & Hospice, which she sold for $750 million in 2015 to publicly traded HealthSouth. Now called Encompass Health, it sued Anthony for breaching her noncompete agreement; a Dallas County judge ruled in June 2022 that she had violated an agreement not to recruit away any Encompass employees.

34. LISA SU

$740 million ↑
SOURCE: **Semiconductors**
AGE: **53** • RESIDENCE: **Austin, TX**
SELF-MADE SCORE: 6

Advanced Micro Devices' stock has soared nearly 30-fold since Su became CEO in 2014. *(See "Overclocking AMD," page 56.)*

34. TAYLOR SWIFT

$740 million ↑
SOURCE: **Music**
AGE: **33** • RESIDENCE: **Nashville, TN**
SELF-MADE SCORE: 8

The ninth-highest-earning entertainer of 2022 had a massive year thanks to the success of her tenth studio album, *Midnights*, and the announcement of her Eras tour, which kicked off in March. A record 2 mil-

SUSAN WOJCICKI BY TIM PANNELL FOR FORBES


Martine Rothblatt

MARTINE ROTHBLATT BY MARTIN SCHOELLER FOR FORBES

lion-plus tickets were sold by Ticketmaster in one day. She will get a cut from all 52 performances and merchandise sales.

37. NANCY ZIMMERMAN

$730 million ↑
SOURCE: **Hedge funds**
AGE: **59** • RESIDENCE: **Boston**
SELF-MADE SCORE: 8

Zimmerman is cofounder of Bracebridge Capital, a Boston-based hedge fund firm that manages $12 billion in net assets for endowments including Yale's. Among its recent stock holdings: biotech and pharmaceutical companies Alvotech and Mallinckrodt. She sits on the board of nonprofit Social Finance.

38. THERESIA GOUW

$680 million ↑
SOURCE: **Venture capital**
AGE: **55** • RESIDENCE: **Palo Alto, CA**
SELF-MADE SCORE: 9

Acrew Capital, the second VC firm she has cofounded, has paid out more than $2 billion to investors since its 2019 launch. Its newest fund, the $300 million Diversify Capital Fund, aims to diversify stockholders and, eventually, board members—close to 70% of its capital comes from women and people of color. Gouw was the first female partner at Silicon Valley powerhouse Accel Partners, whose early investment in Facebook she helped lead.

38. KYLIE JENNER

$680 million ↑
SOURCE: **Cosmetics**
AGE: **25** • RESIDENCE: **Hidden Hills, CA**
SELF-MADE SCORE: 7

The social media star continues to pump her followers—including 390 million Instagrammers—with endorsements of products like Glow water (she recently became a spokesperson) and ads for Kylie Cosmetics items sold in British luxury retailer Selfridges and a line of products inspired by DC Comics' Batman. In March, Jenner's cosmetics brand lit up Dubai's Burj Khalifa skyscraper with her face to celebrate its launch in the Middle East. Jenner owns an estimated 44.1% of Kylie Cosmetics; she sold 51% of it to French beauty giant Coty for $600 million in 2020.

38. MICHELLE ZATLYN

$680 million ↓
SOURCE: **Cybersecurity**
AGE: **43** • RESIDENCE: **San Francisco**
SELF-MADE SCORE: 8

Cybersecurity and network services company Cloudflare, which she cofounded and runs as president, became snagged in controversy last year when an activist campaign pressured it to block sites and services for one of its customers, Kiwi Farms, a web forum that targeted and harassed individual members of the LGBTQ community online. In September, Cloudflare announced that it had blocked Kiwi Farms due to specific, targeted threats the site posted. Zatlyn owns a 2.5% stake in the company, whose shares fell about 10% over the course of the past year.

41. MARY WEST

$610 million ↑
SOURCE: **Telemarketing**
AGE: **77** • RESIDENCE: **San Diego**
SELF-MADE SCORE: 8

West and her husband, Gary, sold most of their stake in their telemarketing firm for $1.4 billion in 2006. Their Gary and Mary West Foundation has donated some $200 million, mostly to fund efforts to improve health care for seniors. Long involved in the horse racing industry, the couple's thoroughbred Maximum Security finished first in the 2019 Kentucky Derby but was disqualified for interfering with other horses.

42. JANICE BRYANT HOWROYD

$600 million ↓
SOURCE: **Staffing**
AGE: **70** • RESIDENCE: **Las Vegas, NV**
SELF-MADE SCORE: 9

Howroyd told *Harvard Business Review* that she is prepared for a recession to boost her staffing business, ActOne Group, with trends like the sweeping tech layoffs of the past year already augmenting the demand for gig workers. The company, which she started 45 years ago, recorded $1.1 billion in revenue last year from 17,000 clients in 33 countries.

42. MARTINE ROTHBLATT

$600 million ↑
SOURCE: **Pharmaceuticals**
AGE: **68** • RESIDENCE: **Satellite Beach, FL**
SELF-MADE SCORE: 8

Biotech firm United Therapeutics, which she heads, was the first to transplant organs grown in genetically altered pigs to humans; it's now aiming to 3D-print human lung scaffolds. Rothblatt, who earlier founded SiriusXM radio, started the company in 1996 after her daughter was diagnosed with a rare illness. Her goal is to eventually create an unlimited supply of transplantable lungs. She joined the Mayo Clinic's board of trustees in 2022.

CHANGE IN WEALTH KEY: ↑ UP ↓ DOWN ↔ UNCHANGED • SELF-MADE SCORE: 6 7 8 9 10

44. KATHLEEN HILDRETH

$590 million ↑
SOURCE: **Airplane maintenance**
AGE: **61** • RESIDENCE: **Aubrey, TX**
SELF-MADE SCORE: 8

A West Point grad and service-disabled helicopter pilot, Hildreth cofounded defense contractor M1 Support Services in 2003. It specializes in maintenance of U.S. military aircraft. Revenue declined about 8% to $870 million in 2022.

45. MADONNA

$580 million ↑
SOURCE: **Music**
AGE: **64** • RESIDENCE: **New York City**
SELF-MADE SCORE: 9

Until January, Madonna had agreed to co-write and direct a biopic about herself with *Ozark*'s Emmy-winning star Julia Garner cast as the singer. The production was shelved after the queen of pop announced her Celebration tour, which she'll kick off in July. The show is dedicated to Madonna's four decades in the music industry.

46. JAMIE KERN LIMA

$575 million ↑
SOURCE: **Cosmetics**
AGE: **45** • RESIDENCE: **Los Angeles**
SELF-MADE SCORE: 9

The former morning news anchor and *Big Brother* contestant sold her IT Cosmetics at the peak of the beauty market boom in 2016 to L'Oréal in a $1.2 billion deal. She stayed on as CEO until 2019. She has invested at least $400 million into startups including Dutch Bros coffee and Duckhorn Portfolio, both of which are now public.

47. KENDRA SCOTT

$550 million ↓
SOURCE: **Jewelry**
AGE: **49** • RESIDENCE: **Austin, TX**
SELF-MADE SCORE: 9

Her eponymous jewelry company has gotten a boost lately from sorority members on TikTok who name-check her brand in their "outfit of the day" posts. She is founder and executive chair of the company, which has announced multiple collaborations this past year, including a limited-edition collection with Barbie celebrating the jewelry brand's 20th anniversary and Barbie Dreamhouse's 60th.

48. BEYONCÉ KNOWLES

$540 million ↑
SOURCE: **Music**
AGE: **41** • RESIDENCE: **Los Angeles**
SELF-MADE SCORE: 8

Knowles released her seventh studio album, *Renaissance,* last year, which helped her break the record for the most Grammy wins in history, with 32 trophies. Her clothing line, Ivy Park, severed its partnership with Adidas in March. The singer announced a couture collection with fashion house Balmain that's inspired by the new album. In May, she embarked on the Renaissance world tour, her first solo tour in seven years.

49. VICTORIA ZOELLNER

$530 million ↑
SOURCE: **Hedge funds**
AGE: **80** • RESIDENCE: **Alpine, NJ**
SELF-MADE SCORE: 8

Zoellner, who got her start as a portfolio analyst, and her husband, Robert (d. 2014), founded hedge fund Alpine Associates in 1976, initially operating from their Manhattan apartment. She still chairs the New Jersey–based fund, whose assets exceed $2 billion; top holdings as of the first quarter include large-cap stocks like Activision Blizzard and Altria Industrial Motion.

50. NEHA NARKHEDE

$520 million ↑
SOURCE: **Software**
AGE: **38** • RESIDENCE: **Palo Alto, CA**
SELF-MADE SCORE: 8

The software engineer-turned-entrepreneur announced her new company—fraud detection firm Oscilar—in March. She cofounded the business with her husband in 2021, funding it with $20 million; she is CEO. She was previously cofounder and former chief technology officer of data-streaming software firm Confluent, which went public in 2021 at a splashy $9.1 billion valuation.

Caryn Seidman Becker

51. CARYN SEIDMAN-BECKER

$515 million ↓
SOURCE: **Airport security**
AGE: **50** • RESIDENCE: **New York City**
SELF-MADE SCORE: 8

With post-pandemic demand for travel near record highs, her biometric screening company, Clear Secure, is benefiting from consumers' desires to skip long security lines. Enrollment in Clear's expedited airport security program grew 48% last year to 15 million people, helping boost revenue 70% to $437 million. The cofounder and CEO of Clear Secure, she predicts an additional 1 million people per day will go through America's airports by 2030.

52. DONNA KARAN

$510 million ↑
SOURCE: **Fashion**
AGE: **74** • RESIDENCE: **New York City**
SELF-MADE SCORE: 8

After selling her fashion line to LVMH in 2000 for $195 million, Karan stayed on as

CHANGE IN WEALTH KEY: ↑ UP ↓ DOWN ↔ UNCHANGED • SELF-MADE SCORE: 6 7 8 9 10

Cash is food
Cash is water
Cash is hygiene
Cash is relief
Cash is safety
Cash is flexible
Cash is best

Donating cash to international relief efforts is the best way to ensure those in need get what they need

USAID
FROM THE AMERICAN PEOPLE

CENTER FOR INTERNATIONAL DISASTER INFORMATION chief designer until 2015. Since then, she has shifted her focus to her luxury lifestyle brand, Urban Zen, profits from which fund her Urban Zen Foundation. She has also been a longtime supporter of Everytown for Gun Safety, founded by former New York mayor Michael Bloomberg.

52. WHITNEY WOLFE HERD
$510 million ↓
SOURCE: **Dating app**
AGE: **33** • RESIDENCE: **Austin, TX**
SELF-MADE SCORE: 8

Bumble's former billionaire founder lost another $230 million in the past year as shares of the dating app plunged nearly 30%; its stock is down 79% since Bumble's 2021 IPO. The company continues to struggle with a drop in paid users of its international dating app, Badoo. That hasn't stopped Wolfe Herd from enjoying her wealth: In January, she and her husband reportedly bought a $21 million California ranch from Ellen DeGeneres *(No. 73)*.

54. PAMELA M. LOPKER
$500 million ↑
SOURCE: **Software**
AGE: **68** • RESIDENCE: **Bellevue, WA**
SELF-MADE SCORE: 8

Lopker and her husband, Karl (d. 2018), founded software company QAD in 1979 after he couldn't find manufacturing software for his sandals firm, Deckers Outdoor. She appeared on the cover of the 1996 Forbes 400 issue, just before they took QAD public. In late 2021 private equity firm Thoma Bravo bought QAD for $2 billion.

54. YOUNG SOHN
$500 million ↔
SOURCE: **Software**
AGE: **64** • RESIDENCE: **New York City**
SELF-MADE SCORE: 8

Sohn, an angel investor, serves on the board of Oryn Therapeutics, which is developing a rheumatoid arthritis treatment. She made her initial fortune as a founding board member and significant shareholder of life sciences software firm Veeva Systems. In 2014, she helped found cloud software firm Vlocity, which Salesforce bought for $1.3 billion cash in 2020.

56. CELINE DION
$480 million ↑
SOURCE: **Music**
AGE: **55** • RESIDENCE: **Las Vegas**
SELF-MADE SCORE: 8

The Canada-born chanteuse has Sin City to thank for her fortune; earnings from her Las Vegas residency account for the majority of her wealth. But it's unclear when Dion will return to the Strip. In December 2022, she revealed she is suffering from a rare neurological disorder that affects her ability to sing. She continues to release music; she contributed five new songs to a rom-com soundtrack that was released in May.

56. JUDY SHEINDLIN
$480 million ↔
SOURCE: **Television shows**
AGE: **80** • RESIDENCE: **Naples, FL**
SELF-MADE SCORE: 8

In 2021, the longtime TV judge ended her CBS show *Judge Judy* and moved to Amazon Freevee, where she now helms *Judy Justice*. The judicial series' first season won a Daytime Emmy. Sheindlin is expanding her fiery legal brand on the platform with two new series: *Tribunal Justice*, which premieres in June, and *Justice on Trial*, which was greenlit in May.

58. KATHY FIELDS
$460 million ↓
SOURCE: **Skin care**
AGE: **65** • RESIDENCE: **San Francisco**
SELF-MADE SCORE: 8

Revenue at Rodan + Fields, the skin care firm that Fields, a dermatologist, cofounded with Katie Rodan *(No. 64)* in 2002, has been on the decline, dropping to $674 million in the 12 months through September 2022, from $870 million in 2021, according to ratings agency Moody's, which also reported that the company refinanced $650 million of debt in April. A spokesperson says the company, which is private, does not discuss financial figures.

59. DOLLY PARTON
$440 million ↑
SOURCE: **Music, investments**
AGE: **77** • RESIDENCE: **Nashville, TN**
SELF-MADE SCORE: 10

Approaching 80, the country music icon is showing no signs of slowing down. In the last year, she's had two TV specials, published a novel (and companion album) with author James Patterson, a children's book and added fresh lines of branded baked goods and pet products. Coming up: a 30-song rock album due in November. The main source of her wealth is her Tennessee theme park, Dollywood, which has benefited from a post-pandemic tourism boom.

59. REESE WITHERSPOON
$440 million ↑
SOURCE: **Entertainment**
AGE: **47** • RESIDENCE: **Los Angeles**
SELF-MADE SCORE: 8

Witherspoon appears both in front of and behind the camera this year. She is executive producer of hit series *Daisy Jones & the Six* and *Tiny Beautiful Things*, and stars in *The Morning Show*, which was renewed for a fourth season in May. Blackstone's Candle Media purchased a majority stake in her media company, Hello Sunshine, in 2021; she still owns at least 18%.

61. BARBRA STREISAND
$430 million ↑
SOURCE: **Music**
AGE: **81** • RESIDENCE: **Malibu, CA**
SELF-MADE SCORE: 10

The acclaimed singer and actor last year released *Barbra Streisand Live at the Bon Soir*, an album of her earliest live recordings made in 1962; it was originally intended as her debut solo record. Its release is part of a new retrospective from Streisand; her long-awaited memoir, *My Name is Barbra*, will hit bookstores in November. Her wealth comes from a lifetime of performing, plus a Malibu compound worth about as many millions as she is years old.

62. SONIA GARDNER
$420 million ↑
SOURCE: **Finance**
AGE: **61** • RESIDENCE: **New York City**
SELF-MADE SCORE: 8

For nearly three decades Gardner has run Avenue Capital, a firm specializing in distressed debt that manages $12.6 billion in assets; she founded it with her brother Marc Lasry in 1995. She is also a goodwill ambassador for the United Nations, advocating for ways to give women in the poorest countries access to economic resources.

62. DANIELLE STEEL
$420 million ↑
SOURCE: **Books**
AGE: **75** • RESIDENCE: **San Francisco**
SELF-MADE SCORE: 7

The romance author has penned over 180 novels, including three already released this year—*Worthy Opponents, Without a Trace* and *The Wedding Planner*—with four more expected by year's end. Steel has sold 1 billion copies of her books, which have been published in 69 countries and 43 languages.

64. NORA ROBERTS
$410 million ↓
SOURCE: **Books**
AGE: **72** • RESIDENCE: **Boonsboro, MD**
SELF-MADE SCORE: 8

Eight romance novels by Roberts (who also publishes under the name J.D. Robb) were recently pulled from the shelves of a Martin County, Florida, high school library because of their sexual content. The author told the *Washington Post* the removal was "shocking.

CHANGE IN WEALTH KEY: ↑ UP ↓ DOWN ↔ UNCHANGED • SELF-MADE SCORE: 6 7 8 9 10


Christina Cacioppo

If you don't want your teenager reading this book, that's your right as a mom—and good luck with that. But you don't have the right to say nobody's kid can read this book."

64. KATIE RODAN

$410 million ⬇
SOURCE: **Skin care**
AGE: **67** • RESIDENCE: **Orinda, CA**
SELF-MADE SCORE: **8**

Rodan, a dermatologist who cofounded skin care firm Rodan + Fields, and her husband donated more than $100 million to their Rodan Family Foundation from 2018 to 2020; as a result, her estimated net worth is lower than that of her cofounder, Kathy Fields *(No. 58)*. Private equity firm TPG, which spent $1 billion to buy 25% of Rodan + Fields in 2018, increased its stake to a majority in late 2022.

66. HUDA KATTAN

$400 million ⬌
SOURCE: **Cosmetics**
AGE: **39** • RESIDENCE: **Dubai, UAE**
SELF-MADE SCORE: **9**

Huda Beauty, which she founded and chairs, sells more than 100 different cosmetics, skin care products and fragrances. Private equity firm TSG Consumer Partners acquired a minority stake in a 2017 deal valuing the business at $1.2 billion; it likely wouldn't fetch that much these days, according to analysts who say the cosmetics industry is off its high. Born and raised in Oklahoma and the daughter of immigrants from Iraq, Kattan now seeds other startups including social audio app Clubhouse through the Dubai-based HB Investments.

66. THERESE TUCKER

$400 million ⬇
SOURCE: **Software**
AGE: **61** • RESIDENCE: **Los Angeles**
SELF-MADE SCORE: **8**

Tucker returned as co-CEO of accounting-automation software company BlackLine in March after having stepped down as chief executive in January 2021. Over the course of her two-plus years away, the company's stock price tumbled nearly 50%. She started the business in 2001 using her retirement savings.

68. NICHOLE MUSTARD

$390 million ⬆
SOURCE: **Online credit service**
AGE: **50** • RESIDENCE: **Orinda, CA**
SELF-MADE SCORE: **9**

Mustard is cofounder and chief revenue officer of Credit Karma, which boasts nearly 130 million customers, most of whom use its credit monitoring services. Earlier this year, Credit Karma launched a new Net Worth product in partnership with Mint, a personal finance app. Both companies are subsidiaries of tax planning firm Intuit, which bought Credit Karma for $8.1 billion in 2020.

68. JACQUELINE RESES

$390 million ⬇
SOURCE: **Payments software**
AGE: **53** • RESIDENCE: **Woodside, CA**
SELF-MADE SCORE: **6**

After spending a decade in California in senior positions at Yahoo and Block (the payments company formerly known as Square), Reses, a fintech executive, is planning to move to Kansas City, Missouri—a place she has called a "hidden treasure"—to run Lead Bank, a community bank she took over as CEO last year. She says the bank is valued at $450 million following a recent secondary market sale of shares.

68. SUSAN WAGNER

$390 million ⬆
SOURCE: **Asset management**
AGE: **62** • RESIDENCE: **Mount Kisco, NY**
SELF-MADE SCORE: **8**

Wagner is one of eight cofounders of the investment behemoth BlackRock, which has $8.6 trillion in assets under management. She retired in 2012 but is still a director of the company. She also sits on the boards of Apple, Massachusetts' Wellesley College and the software company Samsara.

71. CHRISTINA CACIOPPO

NEW

$385 million
SOURCE: **Software**
AGE: **36** • RESIDENCE: **San Francisco**
SELF-MADE SCORE: **8**

The Ohio native previously worked in venture capital at Union Square Ventures and as a product manager at Dropbox, but the itch to build things—dating back to the eBay Beanie Baby business she ran at age 11—never went away, even after a couple of failed startup attempts. In 2017, she cofounded security and compliance company Vanta, which has quickly grown under her leadership as CEO and is now valued at $1.6 billion.

Daphne Koller

71. LIZ ELTING

$385 million ↑

SOURCE: **Translation services**

AGE: **57** • RESIDENCE: **New York City**

SELF-MADE SCORE: 8

She cofounded language translation business TransPerfect in 1992, then sold her stake for $385 million (pretax) and left the company in 2018. Elting now spends her time investing in female entrepreneurs, giving to charitable causes and writing. Her first book, *Dream Big and Win: Translating Passion Into Purpose and Creating a Billion Dollar Business,* will be published in September.

73. ELLEN DeGENERES

$380 million ↑

SOURCE: **Television shows**

AGE: **65** • RESIDENCE: **Carpinteria, CA**

SELF-MADE SCORE: 8

After putting an end to her daytime TV show in May 2022, the comedian has been busy flipping homes. *Forbes* found six properties that she has sold and three she has bought since the final taping. That includes the estate she purchased for $70 million in January in Carpinteria, near Santa Barbara, where she lives with her spouse, Portia de Rossi.

73. PAIGE MYCOSKIE

$380 million ↑

SOURCE: **Fashion**

AGE: **43** • RESIDENCE: **Austin, TX**

SELF-MADE SCORE: 8

Revenues at Mycoskie's trendy fashion brand, Aviator Nation, rose to $130 million in 2022, up from $110 million the previous year—not quite the 100% increase she had predicted. But the surfer chick isn't sweating it. She recently spent $20 million on her eighth home, her second in Aspen, Colorado. Aviator Nation, which has 19 stores, just signed a lease for its first New York City store, in SoHo.

75. DAPHNE KOLLER

NEW

$365 million

SOURCE: **Drug development**

AGE: **54** • RESIDENCE: **Portola Valley, CA**

SELF-MADE SCORE: 8

An Israeli-American computer scientist, Koller launched Insitro in 2018 to use machine learning to develop drugs faster and find targeted groups of patients for existing therapies. The South San Francisco–based firm, which has a research deal with Bristol Myers Squibb on neurodegenerative diseases, reached a valuation of $2.4 billion in 2021. Koller previously cofounded online education company Coursera.

76. LUCY GUO

$360 million ↓

SOURCE: **AI software**

AGE: **28** • RESIDENCE: **Miami**

SELF-MADE SCORE: 8

Guo launched Passes, a "web3 platform for creators" that is a competitor to Patreon, in April last year and raised $8 million from investors in September. The bulk of her fortune comes from her nearly 6% stake in artificial intelligence firm Scale AI, which *Forbes* estimates is worth one-third less than a year ago. She cofounded the firm with Alexandr Wang in 2016 and left in 2018.

77. IMAN ABUZEID

NEW

$350 million

SOURCE: **Health care staffing**

AGE: **38** • RESIDENCE: **Austin, TX**

SELF-MADE SCORE: 8

The daughter of a Sudanese surgeon living in Saudi Arabia, Abuzeid got her medical degree in the U.K. but skipped her residency to move to the U.S. for a job in health care consulting. In 2017 she cofounded Incredible Health to help solve the nursing shortage plaguing American hospitals. The service, which is like a souped-up version of LinkedIn for nurses, raised $80 million of funding in August 2022, valuing the company at $1.65 billion.

77. DOREEN GRANPEESHEH

NEW

$350 million

SOURCE: **Autism treatment centers**

AGE: **60** • RESIDENCE: **Marco Island, FL**

SELF-MADE SCORE: 8

Armed with a doctorate in psychology, Granpeesheh founded the Center for Autism and Related Disorders (CARD), an autism treatment firm, in 1990. Blackstone bought a majority of it from her in 2018 in a deal that valued the company at $600 million; as part of the deal, she got an estimated $315 million in cash (pretax) and reinvested another $135 million. She stepped down as CEO in 2019 and left

DAPHNE KOLLER BY JAMEL TOPPIN FOR FORBES

the board in 2022 over disagreements with its new leadership. Since the acquisition, CARD has stopped operating in at least 19 states but still has 130 centers in 14 states; it is reportedly in talks to be sold for about $80 million.

77. INDRA NOOYI

$350 million ↑
SOURCE: **Pepsi**
AGE: **67** • RESIDENCE: **Greenwich, CT**
SELF-MADE SCORE: 6

The first woman of color and immigrant to run one of America's 50 largest companies, she retired as PepsiCo's CEO in 2018 and as chair in 2019 after a dozen years in those roles. Now a director of Amazon and health tech firm Philips, Nooyi joined scandal-plagued Deutsche Bank's new Global Advisory Board last November.

77. PLEASANT ROWLAND

$350 million ↑
SOURCE: **American Girl dolls**
AGE: **82** • RESIDENCE: **Madison, WI**
SELF-MADE SCORE: 8

Rowland has spent much of her post–American Girl years investing in the small town of Aurora, New York, and creating her own doll-like village. Among her small town properties: boutique hotels, a restaurant and a spa. The American Girl founder got the bulk of her wealth from selling the company to Mattel for $700 million in 1998.

81. TONI KO

$340 million ↔
SOURCE: **Cosmetics**
AGE: **50** • RESIDENCE: **Los Angeles**
SELF-MADE SCORE: 8

Using $250,000 in seed money from her parents, who moved from South Korea to Los Angeles when she was 13, Ko built NYX Cosmetics into a popular drugstore makeup brand that L'Oréal bought for $500 million in 2014. Five years later, Ko launched incubator Bespoke Beauty Brands; it has since launched four brands including a makeup line from fashion designer Jason Wu.

81. LYNDA WEINMAN

$340 million ↑
SOURCE: **Online education**
AGE: **68** • RESIDENCE: **Montecito, CA**
SELF-MADE SCORE: 8

Weinman made her fortune selling her online learning platform, Lynda.com, to LinkedIn for $1.5 billion in cash and stock in May 2015. These days she spends much of her time creating 3D-printed sculptures; a Santa Barbara gallery exhibited her work earlier this year. Via Another Chapter Productions, she has co-produced 17 documentaries and four dramas.

83. PATRICIA GALLUP

$325 million ↓
SOURCE: **IT reseller**
AGE: **69** • RESIDENCE: **Keene, NH**
SELF-MADE SCORE: 8

Gallup cofounded computer reseller PC Connection 41 years ago using $8,000 of her and her cofounder's savings. Having taken the company public in 1998, she stepped down as CEO in 2011 but remains chair of its board. The company, which now calls itself Connection, reported a record $3.1 billion in sales in 2022.

84. RACHEL ROMER

$320 million ↓
SOURCE: **Online education**
AGE: **34** • RESIDENCE: **Denver**
SELF-MADE SCORE: 8

In June 2022, Romer's online education company, Guild Education, raised $175 million from investors at a $4.4 billion valuation. Guild, which she founded in 2015, helps companies retain employees by assisting them in learning new job-related skills. Romer's fortune declined by nearly half as a result of her divorce in late 2022; she was previously listed under her married name, Carlson.

84. EMMA GREDE

$320 million ↓
SOURCE: **Apparel**
AGE: **40** • RESIDENCE: **Los Angeles**
SELF-MADE SCORE: 9

Grede spent her childhood saving spare change to buy fashion magazines. Now she is CEO and cofounder, with Khloe Kardashian, of inclusive fashion brand Good American, which will open its first store in Los Angeles this summer; cofounder, with Kris Jenner, of cleaning products brand Safely; and partner in Kim Kardashian's shapewear brand Skims, which her husband runs as CEO. The couple paid $45 million last year for a Malibu home once owned by Ellen DeGeneres *(No. 73)*.


Emma Grede

EMMA GREDE BY JAMIE GIRDLER

CHANGE IN WEALTH KEY: ↑ UP ↓ DOWN ↔ UNCHANGED
SELF-MADE SCORE: 6 7 8 9 10


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11 consecutive Charity Navigator 4-star ratings, among top 2% of all charities
Charity Navigator


Julia Cheek

84. PATRICIA MILLER

$320 million ↔

SOURCE: **Accessories**

AGE: **84** • RESIDENCE: **Fort Wayne, IN**

SELF-MADE SCORE: **8**

Cofounder of Vera Bradley, known for its colorful patterned duffel bags, wallets and purses, she stepped down as co-president in 2010 and board member in 2019. Her 10% stake in the company is worth only about $16 million; the majority of her fortune is in cash and other investments.

87. RUTH PORAT

$310 million ↑

SOURCE: **Google**

AGE: **65** • RESIDENCE: **Palo Alto, CA**

SELF-MADE SCORE: **6**

Alphabet's chief financial officer announced in April that the company is "meaningfully" slowing the pace of hiring in 2023 after laying off 12,000 employees in January. Also this spring, Porat announced that Alphabet is cutting back on some of its signature office perks like food and fitness classes. A Wall Street veteran, she has served on Blackstone's board since 2020.

88. DONNA CARPENTER

$300 million ↓

SOURCE: **Snowboards**

AGE: **59** • RESIDENCE: **Stowe, VT**

SELF-MADE SCORE: **8**

Carpenter owns the snowboarding gear and apparel company Burton, which she helped her husband, Jake Burton Carpenter (d. 2019), build, first as chief financial officer, then chief executive officer and now board chair. On Instagram last August, she denied rumors of an $800 million sale. "It was for a nice price, but as I've always said, we are family-owned and will remain family-owned," she wrote.

89. SERENA WILLIAMS

$290 million ↑

SOURCE: **Tennis, investments**

AGE: **41** • RESIDENCE: **Jupiter, FL**

SELF-MADE SCORE: **9**

The tennis ace announced in August that she would be hanging up her racket to focus on her family, bringing to a close a career in which she earned nearly $95 million in prize money, more than twice as much as any other female athlete ever. The bulk of her fortune comes from endorsements and other endeavors such as her investing firm, Serena Ventures. She recently launched a TV and film production company and is a cofounder of Will Perform, which sells pain-relief and muscle-care products. She is pregnant with her second child.

90. JENNY JUST

$280 million ↓

SOURCE: **Financial technology**

AGE: **55** • RESIDENCE: **Chicago**

SELF-MADE SCORE: **8**

A former options trader, Just and her now-husband, Matthew Hulsizer, parlayed a small investment in a failing clearing house into Apex Fintech Solutions, which handles back-end trading and technology for fintechs such as WeBull and Stash. It nearly went public in 2021 at a $4.7 billion valuation through a SPAC merger—briefly making Just a billionaire—but slumping fintech markets and a skeptical SEC tanked the deal. In April, Apex dumped its crypto division to publicly traded Bakkt for $55 million. *Forbes* now values Apex at a little under $600 million.

91. ANNE WOJCICKI

$270 million ↓

SOURCE: **DNA testing**

AGE: **49** • RESIDENCE: **Los Altos, CA**

SELF-MADE SCORE: **7**

The cofounder and CEO of direct-to-consumer DNA testing firm 23andMe and ex-wife of Google cofounder Sergey Brin added another feather in her cap this year: She has been immortalized as a Mattel Barbie doll. The commemorative series of women-in-STEM Barbies also features her sisters, former YouTube CEO Susan Wojcicki *(No. 32)* and professor of pediatrics and epidemiology Janet Wojcicki. Anne's fortune is largely derived from her shares in 23andMe, which went public in June 2021 via a SPAC sponsored by U.K. billionaire Richard Branson's Virgin Group; shares tumbled nearly 30% in the past year.

92. JULIA CHEEK

NEW

$260 million

SOURCE: **Health and wellness testing**

AGE: **39** • RESIDENCE: **Austin, TX**

SELF-MADE SCORE: **8**

Cheek founded Everly Health in 2015 out of her frustration at having to pay thousands of dollars for lab tests to diagnose issues related to vitamin and hormone imbalance. The company's at-home health and wellness testing kits are sold online and in stores like Target and CVS. Revenue hit an estimated $250 million in 2022; the Austin, Texas–based company also conducted layoffs as the Covid testing boom receded. Most of the tests are for screening—not diagnosing—disease, but a new push would connect more customers to doctors and prescriptions, including thyroid and weight-loss drugs.

92. PHEBE NOVAKOVIC

$260 million ↓

SOURCE: **Aerospace**

AGE: **65** • RESIDENCE: **Fairfax, VA**

SELF-MADE SCORE: **8**

A former CIA operative and CEO of defense contractor General Dynamics since 2013, Novakovic said in an April earnings call that demand for munitions and combat vehicles are the strongest they've been in eight years. She's a JPMorgan Chase board member.

JULIA CHEEK BY MICHAEL THAD CARTER FOR FORBES

CHANGE IN WEALTH KEY: ↑ UP ↓ DOWN ↔ UNCHANGED • SELF-MADE SCORE: 6 7 8 9 10

92. THERESA PAN

$260 million ↑

SOURCE: **Fiber optics**

AGE: **77** • RESIDENCE: **Milpitas, CA**

SELF-MADE SCORE: **8**

Pan cofounded fiber optics components business E-Tek Dynamics in 1983 with her then-husband, Jing Jong Pan. They sold the business to fiber optics company JDS Uniphase in 2000 for $15 billion in stock, enough for both to be billionaires until the shares sunk amid the dot-com crash. Her Dynamic Foundation builds and renovates schools in rural China.

92. ADI TATARKO

$260 million ↓

SOURCE: **Home design**

AGE: **50** • RESIDENCE: **Palo Alto, CA**

SELF-MADE SCORE: **8**

Houzz, the home remodeling and interior design platform Tatarko founded with her husband, Alon Cohen, in 2009, reportedly announced its third round of layoffs in under four years in December. The company, which she runs as CEO, last raised money in 2017, when it was valued by investors at $4 billion.

96. BELINDA JOHNSON

$250 million ↓

SOURCE: **Airbnb**

AGE: **56** • RESIDENCE: **Austin, TX**

SELF-MADE SCORE: **6**

Johnson's 11-year tenure at Airbnb will end in June, when she steps down from its board. She joined the home- and room-renting company as its first executive hire and later became its first and only chief operating officer; she resigned from that role in 2020.

96. SHONDA RHIMES

NEW

$250 million

SOURCE: **TV shows**

AGE: **53** • RESIDENCE: **New York City**

SELF-MADE SCORE: **8**

Rhimes brought in more than $2 billion to ABC's parent company, Disney, with hits such as the long-running medical drama *Grey's Anatomy*. She topped that with hit shows for Netflix including *Bridgerton* and its spin-off, *Queen Charlotte: A Bridgerton Story*, which premiered in May. The Hollywood mogul's real estate portfolio includes a New York City apartment decorated like the sets of the royal period romance series, and a Westport, Connecticut, mansion she purchased from Melissa and Doug Bernstein, the founders of the Melissa & Doug toy company. "I never worried that I deserve the money," Rhimes said in 2021. "I deserve every penny I make."

98. BETSY COHEN

$245 million ↑

SOURCE: **Banking, investments**

AGE: **81** • RESIDENCE: **Osprey, FL**

SELF-MADE SCORE: **8**

A financier and lawyer, Cohen founded Philadelphia-based Jefferson Bank in 1974, sold it 25 years later and then founded banking tech firm The Bancorp, which she ran as chief executive until 2015. In her third act, Cohen made millions of dollars taking fintech companies, such as Payoneer and CardConnect, public through SPACs. Now her investment firm, Cohen Circle, is focused on later-stage venture capital bets.

99. CORDIA HARRINGTON

$240 million ↑

SOURCE: **Bakeries**

AGE: **70** • RESIDENCE: **Franklin, TN**

SELF-MADE SCORE: **8**

The Tennessee native founded Crown Bakeries (then called Tennessee Bun Company) in 1996. She sold a controlling stake to private equity firm Arbor Investments in 2019 but remains CEO of the company, which bakes more than 15 million rolls, biscuits, bagels, muffins and other goods daily. Last year she pledged $6 million to her alma mater, the University of Arkansas, for a student center.

100. NANCY WHITEMAN

NEW

$225 million

SOURCE: **Cannabis edibles**

AGE: **64** • RESIDENCE: **Boulder, CO**

SELF-MADE SCORE: **8**

The former insurance exec is now one of the most successful entrepreneurs in cannabis *(see "The Sweet Spot," page 84).* F

Shonda Rhimes

SHONDA RHIMES BY JAMEL TOPPIN FOR FORBES

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METHODOLOGY: To compile net worths, we valued individual assets including stakes in public companies using stock prices from May 12, 2023. We valued private companies by consulting with outside experts and conservatively comparing them with public companies. To be eligible for the list, women have to have substantially made their own fortunes in the U.S. and/or be U.S. citizens or permanent residents. While none inherited their wealth, some climbed higher and overcame more obstacles to get into the ranks. To measure just how far some have come, women are given a self-made score of 6 (hired hand) to 10 (rags-to-riches entrepreneur). We attempted to vet numbers with all list entrants. Some cooperated; others didn't. Ages are as of June 1, 2023. For more information including details on the self-made scores, go to **forbes.com/self-made-women.**

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THE LIST

THE SWEET SPOT

NANCY WHITEMAN BUILT WANA BRANDS INTO A CANNABIS EDIBLES GIANT AND THEN SOLD IT FOR $350 MILLION—RIGHT BEFORE POT STOCKS CRASHED.

BY **WILL YAKOWICZ**

PHOTOGRAPH BY **JON ROSE** FOR FORBES

On a recent Saturday morning, Nancy Whiteman found herself stoned in a Boulder, Colorado, supermarket.

Whiteman, 64, who cofounded the Boulder-based cannabis edibles company Wana Brands in 2010, was testing a new gummy her company had developed, and her product team asked her to identify what effects it had on her, specifically on her physical or mental energy. She took the edible shortly before a Pilates class and two hours later found herself captivated by the labels and products in her local King Soopers.

"I'm always the guinea pig," says Whiteman, who tests every product Wana creates, including gummies engineered to make users feel calm, fall asleep or stay focused. "I wasn't especially hungry," she says of her grocery experience. "It wasn't a munchies-driven thing; it was more cognitive. I said to myself: 'Oh, my God, look at the packaging. Who knew that there is tuna fish in glass jars packed in extra virgin olive oil?' But all of a sudden, this became very intriguing to me with this particular formulation."

In a little more than a decade, Whiteman, who was dubbed the "queen of legal weed" in 2017, has built one of the most successful brands in the cannabis industry. She is not a household name, but she has quietly and methodically made Wana one of the largest cannabis-infused edibles companies in the world, with estimated 2022 revenue of $115 million. And after Whiteman, who owned 100% of the company, inked a deal in October 2021 to sell Wana at a $350 million valuation to cannabis business Canopy Growth Corporation, she has become one of the richest entrepreneurs in the $26 billion legal weed industry.

Canopy is based in Canada, where cannabis is legal nationwide, but publicly traded in the U.S., which means the deal cannot close until marijuana is no longer banned at the federal level. Canopy has decided to set up a U.S. entity to close the deal with Wana sooner, and a few others like it, but Whiteman has already received most of the money. The deal she struck is unique: She convinced Canopy to buy the option to buy Wana, and Canopy paid her $297.5 million in cash for 85% of the company and will give her the remaining 15% when the transaction closes. After taxes, a sizable cash disbursement to her employees and a $50 million donation to her nonprofit, *Forbes* estimates that Whiteman is worth $225 million, enough to debut on this year's ranking of America's Most Successful Businesswomen *(see page 64)*.

"She won," says cannabis investor Emily Paxhia, who cofounded the pioneering San Francisco–based hedge fund Poseidon in 2013 and has not backed Wana. "She cleared one of the biggest exits, dollar for dollar, as an individual owner. She hit the timing well, and everyone in the gummy category owes a debt of gratitude to Nancy. It's easy to follow, but she started it."

Wana is not the flashiest brand or a media darling like competitors Wyld or Kiva, but it is the steady workhorse of the category. "We don't particularly care about being cool," says Whiteman over a breakfast of scrambled eggs and potatoes at Manhattan's Lambs Club. "We care about being effective. And being innovative."

According to Seattle-based data company Headset, edibles make up about 13% of the legal cannabis market, or about $3.4 billion in sales last year. In its home state of Colorado, Wana is the second-best-selling edibles brand, just behind Wyld, with an estimated 26% of the market and $61 million in retail sales in 2022, according to Headset data. (Wana sells wholesale, so it captured an estimated $30 million in revenue in Colorado.) Overall, Wana and its licensees produce nearly 100 million gummies a year. While Kiva and Wyld are bigger brands in terms of sales, Wana is the most widespread, available in 15 U.S. states, Puerto Rico and nine Canadian provinces.

"I think the Wana strategy is wide versus deep in the sense that they have more exposure than most brands on a state-by-state basis," says Cy Scott, the CEO and cofounder of Headset.

Whiteman wasn't destined to be a power player in pot. Born in Chicago and raised in White Plains, New York, she got her MBA at the University of Massachusetts and by the early 1990s was living in Boston, working as vice president of marketing at the venerable life insurance company Paul Revere. Whiteman, her husband and child moved to Boulder in 1996 and she started her own consultancy, helping clients such as Microsoft's MSN with marketing. One day in 2010, her daughter had a friend over and Whiteman started talking to the friend's father about work. When she asked him what he did, he said, "'Oh, you wouldn't approve,' Whiteman

JON ROSE FOR FORBES

Hungry for Success

"We just tried a whole bunch of stuff," says Whiteman, at her Boulder headquarters, of Wana's early products. "We had baked goods, we had candy and for one brief period of time we made infused beef jerky."

JON ROSE FOR FORBES

Gummy Gumption

Whiteman isn't content with her success in America. "I'm starting to look at Europe," she says. "It looks like edibles are on the table for Germany."

JON ROSE FOR FORBES

recounts. "Which got my undivided attention." He explained that he was making an "infused soda pop," and while Whiteman was "extremely familiar" with pot—she started smoking weed as a teenager—she wasn't hip to the language of legal cannabis.

"I didn't even know what he was talking about, but he explained it was infused with marijuana, which is what we called it before we started calling it 'cannabis,'" she says. "And we started talking."

Whiteman and her husband started making edibles in a commercial kitchen they shared with their daughter's friend's father in Boulder. During the early days of legal cannabis in Colorado, the edibles market featured mostly homemade-looking food like what you'd find at a school bake sale. "We just tried a whole bunch of stuff—we had baked goods, we had candy and for one brief period of time we made infused beef jerky," Whiteman says, laughing.

Without data firms or CRM software to help cannabis companies make product decisions, Whiteman visited each dispensary that sold her products to find out which were most popular with customers. "We stopped doing the things they didn't buy," she says, "and kept doing the things they bought."

By the end of 2011, the Whitemans had moved into their own kitchen—and gotten divorced. (Seven years later, she bought out her ex-husband to become Wana's sole owner.) They had developed a version of the product that Wana would become known for—the THC-infused gummy. At that point, in Denver, a competitor had begun buying gummy

bears and spraying them with hash oil. Whiteman thought they could do better and made Wana's first vegan-friendly pectin gummy from scratch.

"We got into that product segment very early, before the data told us that that the gummy was going to be the killer app, if you will, of edibles," she says. "Now, of course, gummies are something like 75% of the category and have really become the platform for edibles."

•••

In 2015, Wana expanded to Oregon. As marijuana was, and remains, prohibited at the federal level, cannabis cannot legally cross state lines. Whiteman had a choice: build a kitchen in every state she wanted to expand into or license her recipes, formulations and branding to partners in other states. She went with licensing.

"We chose not to go out and raise a lot of money and instead be asset-light, which is a very capital-efficient way to do things," says Whiteman, who still looks as though she would fit well in any corporate board meeting but can tell you the difference between THC extraction methods such as live rosin and distillate. "I looked at other models, and I felt that licensing had the potential to be as profitable or more profitable than setting up facilities in every state. Back then we all thought federal legalization might come a little bit quicker, so there was the specter of having to set up facilities in every state with a good possibility that you were then going to have to shut them down at some point."

The company now has 16 partners across the U.S. and Canada. Depending on the need to hire local sales-and-marketing staff, Wana takes a cut of between 15% and 40% of revenue.

"We got in early, before the data told us that the gummy was going to be the killer app of edibles."

The strategy hasn't always gone well. Despite being one of the three largest edibles makers in the U.S., Wana no longer has a presence in California, the country's largest cannabis market, home to $5.3 billion in sales last year. Kiva generated $183 million in retail sales there in 2022, while Wyld brought in $127 million, according to Headset. (Both companies sell wholesale.) But despite the money at stake, Wana left California after two and a half years.

"We happened to enter the market just as wholesale pricing started to really plummet," she says. "Our partner didn't want to race to the bottom, understandably. We ended up in an unenviable position of being a very expensive product in a market that was experiencing severe price compression. I didn't see my way to profitability." After having launched in California in 2019, Wana left the highly competitive market by the second half of 2022. The company is also pulling out of Oregon for similar reasons.

•••

In 2020, when it looked as if federal legalization was within reach under the incoming Biden administration, Whiteman started taking meetings with a few large cannabis companies that had cultivation, manufacturing and retail facilities in multiple states, and with private equity firms and investors outside the industry to explore how much Wana might be worth.

"My feeling was that the industry was starting to change," she recalls, "and I felt that being aligned with a larger organization was going to make more sense for an independent brand."

Whiteman began speaking with Canopy, which is listed on the Nasdaq and of which New York–based alcohol giant Constellation, maker of Corona beer and Svedka vodka, owns a 47% stake.

"Like all of us, I was more optimistic about federal legalization happening quicker," she says of that period. "And I certainly liked the Constellation connection and the access they had to liquor stores. The time seemed right to me."

With federal legalization up in the air and Canopy's stock price down 86% since last April, Canopy is setting up a U.S. entity to complete the acquisition.

"Nancy had brilliant timing," Poseidon's Paxhia says, explaining that she sold Wana at the top of the market, before the industry fell from its pandemic-induced highs.

With the deal to sell in place, Whiteman has become one of the most successful entrepreneurs in the cannabis industry.

As she finishes her breakfast at the Lambs Club ahead of a speech at a cannabis conference across the street, she ponders a question. As New York's licensed cannabis economy struggles against its rampant unlicensed gray market, will Wana come to the Empire State?

"The attractiveness of the New York market for legal brands, between taxes and lack of enforcement around illegal dispensaries and the slow rollout of legal dispensaries, currently isn't there," she says. "It's hard for me to see how anyone makes money right now."

So instead of losing sleep over the city that never sleeps, Whiteman is focusing on strong, growing markets that don't get much attention. "Sales are booming in Missouri," she says. "I can tell you that."

STAY ALIVE UNTIL '25.

BY **GIACOMO TOGNINI**
AND **RICHARD J. CHANG**

PHOTOGRAPH BY
COLIN WINTERBOTTOM

THE COMMUTERS HAVE LEFT—AND THEY AREN'T COMING BACK. INTEREST RATES ARE SOARING. CITIES ARE LOSING HUGE SUMS IN TAXES. IT'S AN URBAN CATASTROPHE OF UNPRECEDENTED PROPORTIONS. HERE'S WHAT THE SMARTEST MINDS IN REAL ESTATE ARE DOING ABOUT IT.

Torpid Terminal

Opened in 1908, Union Station in Washington, D.C., which now has 39 stores and restaurants and 172,000 square feet of office space, has gone from bustling to battered as millions of commuters stay home—forever.

As

millions of Americans stayed home to avoid Covid-19 in 2020, one of the most iconic buildings in the nation's capital, Union Station, sat virtually empty. The Beaux Arts–style rail terminal with offices and retail space was one of the jewels in the real estate portfolio of billionaire Ben Ashkenazy (net worth: $2.6 billion), who purchased an 84-year lease on the property for $160 million in February 2007.

The lack of passengers quickly took its toll. In May 2020, Ashkenazy defaulted on $430 million in loans on the station that he had refinanced in 2018, according to court records in a foreclosure lawsuit filed against him by the lender, New York–based Rexmark. Seven months later, Ashkenazy lined up a deal with an unnamed sovereign wealth fund to take a 50% stake in the terminal for more than $700 million. But that deal collapsed in 2021—and in another twist, Amtrak moved to take over Union Station for $250 million via eminent domain in April 2022.

Now the landmark is at the heart of a legal battle between the federal government, Ashkenazy and Rexmark, which maintains that it purchased Union Station for $140.5 million at a foreclosure auction last June. One thing is certain: The commuters aren't coming back. Amtrak's annual passenger numbers decreased from more than 5 million in 2019 to 1.8 million in 2021, a 66% drop. Ridership on two key routes through Union Station dropped 26% to 9.2 million through 2022.

The plight of Union Station is one of the most visible manifestations of the crisis facing America's urban cores, which for decades relied on a steady stream of office workers to remain economically vibrant. More than three years after the lockdowns, it's obvious that those workers are never returning in the same numbers. Daily commuters are down an average of 39% across six markets *(see "Unoccupied," page 95)*. As a result, office towers are languishing, losing nearly 20 million square feet of leases in the first quarter of 2023, according to real estate brokerage JLL. A record 962 million square feet of office space is now vacant in the United States—20.2% of the country's entire stock—with the highest vacancies in New York, Washington, D.C., and Chicago.

In the absence of workers, social problems are proliferating, making downtown spaces even less appealing. Petty crime in New York is up 29% since 2019. Homelessness in the San Francisco Bay Area has surged 35% over the last four years. Last July, Starbucks closed 16 stores around the country, including six in Seattle, two in Portland, Oregon, and one at D.C.'s Union Station, citing safety issues including drug use. Nordstrom recently announced that it was closing its flagship store at the Westfield mall in downtown San Francisco, with the mall's owner citing "lack of enforcement against rampant criminal activity."

The plummeting value of commercial real estate means that cities are far less able to address these problems: In New York City, taxes on office buildings and retail spaces account for nearly 40% of its property tax revenues and 12% of its $107 billion budget. In San Francisco—where office buildings make up 18% of the city's $328 billion total property assessments—the controller recently forecast a loss of up to $200 million in property tax revenue by 2028 due to declining office values, a big cut considering the city pulled in $2.3 billion in property taxes last year.

Soaring interest rates—now as high as 7.5%, up from 4% in 2020—compound the problems. Developers who were highly leveraged before the pandemic now face a set of unappealing choices. They can refinance at much higher rates—if they have enough cash on hand to do so—or hope that lenders will agree to an extension to avoid default. Another option is to sell their properties at a steep discount, but even that is proving difficult: In New York, only $470 million of office transactions took place in the first quarter of 2023, down from $3.1 billion over the same period last year, according to Ariel Property Advisors.

"You've got to get rid of the debt," says Jeff Greene, a 68-year-old real estate billionaire based in Florida

> "70% OF THE OFFICE STOCK IN THE UNITED STATES IS EITHER OBSOLETE OR HEADING TOWARD OBSOLESCENCE."

Risky Businesses

Martin Selig got into real estate in 1958 because he didn't trust the stock market. Nowadays he's critical of the Fed's interest rate hikes. "It's very dangerous. . . . A lot of people are getting hurt."

GUERIN BLASK FOR FORBES; GETTY IMAGES (3)

who made his fortune from misfortune. During the 2008 financial crisis, Greene bought credit default swaps on subprime mortgage–backed bonds as the housing market crashed, resulting in a windfall of $800 million. "There are these young guys, kind of in that whole Ben Ashkenazy group, spending the big bucks, flying around. They've never had to deal with this, they've never seen rates go up. So they're shell-shocked; they don't know what to do."

"Nobody wants to buy their properties," he adds. "I think you're going to see a lot of really desperate real estate people pretty soon."

Ashkenazy wouldn't comment, but a person close to his company, Ashkenazy Acquisition Corporation, told *Forbes* that the federal government has taken over Union Station and that troubled properties make up a small part of his overall portfolio. Says Yehuda Sheinfeld, the company's chief financial officer: "We are disciplined and limit our debt to well below market standards."

Trophy properties in America's largest cities, bought for top dollar like Union Station, are among the har-

UNOCCUPIED

MORE THAN A THIRD OF THE NEARLY 1 BILLION SQUARE FEET OF VACANT OFFICE SPACE IN AMERICA IS IN THESE SIX CITIES.

New York City

OCCUPANCY RATE: **80.5%** (Q1 2023)
DECLINE IN OCCUPANCY SINCE 2020: **–8%**
WORKERS GOING INTO THE OFFICE: **–51.6%** (since Feb. 2020)

New York's office buildings lost an estimated $70 billion in value between December 2019 and 2022, according to a research paper by Columbia and New York University professors. Mayor Eric Adams announced tax incentives in May to those who renovate older office buildings south of 59th Street in an effort to halt the stampede.

Chicago

OCCUPANCY RATE: **73.9%**
DECLINE IN OCCUPANCY: **–10.1%**
WORKERS GOING INTO THE OFFICE: **–49.2%**

Chicago is providing financial assistance to developers who are spending $570 million to convert Great Depression–era offices in the LaSalle Street Corridor to mixed-use residential. The city is also betting on tech giants like Google, which bought the Thompson Center government building for $105 million last year. "The ideal end state is in three years Google is going to be opening a new major Chicago presence that's anchoring one end, and then you have the Board of Trade on the other end," says Samir Mayekar, former deputy mayor for economic and neighborhood development.

Los Angeles

OCCUPANCY RATE: **73.8%**
DECLINE IN OCCUPANCY: **–7.8%**
WORKERS GOING INTO THE OFFICE: **–50.6%**

Mayor Karen Bass, who was elected on a platform of getting control of the city's homeless crisis, in February announced plans to turn vacant city-owned buildings into emergency housing. In April, Bass said the city has identified more than 3,000 public properties that could be converted to housing.

Cubicles Into Kitchenettes

Billionaire Charles Cohen quadrupled his family's real estate empire, started by his dad and uncle, to 12 million square feet, which includes eight Manhattan office towers. "The city needs to loosen up regulations for office conversions," he says.

GUERIN BLASK FOR FORBES

dest hit. In February, Canadian real estate firm Brookfield defaulted on $754 million worth of debt on two office skyscrapers in Los Angeles. Last December, Vornado Realty Trust failed to repay a $450 million loan on 697–703 Fifth Avenue—a luxury retail property at the base of the St. Regis Hotel in Midtown Manhattan.

Retail investors want nothing to do with the sector. Large publicly traded office real estate investment trusts (REITs) such as Vornado, SL Green and Boston Properties have seen their stock prices slide by more than 50% over the past year. Privately owned firms are feeling the pain as well. Nationwide, office buildings lost an estimated $506 billion in value between 2019 and 2022, according to a research paper published in May by Columbia and New York University professors Arpit Gupta, Vrinda Mittal and Stijn van Nieuwerburgh. Things have only gotten worse since: "Interest rates have risen more than we anticipated, which has lowered even further the value of offices and other commercial real estate," Gupta says.

That value destruction will hit city budgets. A 2021 research paper from the nonprofit Institute on Taxation and Economic Policy found that cities like Chicago, New York and San Francisco—which depend on property taxes for more than 20% of their revenue—could see those proceeds decline by more than 5%, potentially costing hundreds of millions of dollars in future tax receipts. That will make it more difficult to fix a range of problems—from crime to homelessness—whose mitigation might keep large companies from fleeing.

"If you've ignored things for far too long, and you haven't fixed your potholes and your transportation systems, and you tax, tax and tax and now you've got crime and all the rest, that is not very conducive to businesses, is it?" says John Kilroy, the CEO of publicly traded office REIT Kilroy Realty.

The outlook is especially gloomy for buildings that already looked tired going into the pandemic. Aging, saddled with debt and losing value, they lack the amenities to compete with state-of-the-art developments—raising the specter of acre upon acre of vacant downtown lots. "Seventy percent of the office stock in the United States is either obsolete or heading toward obsolescence," Kilroy adds.

Greene sees parallels with the late '80s and early '90s, when savings-and-loan institutions collapsed and real estate owners were unable to secure loans to refinance their properties, leading to a wave of foreclosures. In 1991, amid that downturn, billionaire investor Sam Zell (who died in May at 81) came up with a mantra: "Stay alive until '95."

"Now they're saying 'Stay alive till '25,'" Greene says. "It's going to take a long time to clean this mess up."

To make it through this crisis, America's savviest real estate operators are going back to basics. The dreamers had their moment—erecting lavish buildings financed with near-zero-interest loans. But the present belongs to the pragmatists, those who kept their cool and followed age-old wisdom like using little leverage, buying good locations and developing strong banking relationships.

Charles Cohen, a real estate developer who oversees an empire of millions of square feet of office space across the U.S., has been in the business since the late 1970s. In a conference room adorned with framed awards and newspaper clippings at International Plaza, one of his office towers on New York's Lexington Avenue, the 71-year-old billionaire has a simple answer when asked how he'll make it through the storm. "You've got to be very defensive," he says.

More than half of his properties have debt with fixed

THE DREAMERS HAD THEIR MOMENT, BUT THE PRESENT BELONGS TO THE COOL-HEADED PRAGMATISTS.

interest rates, temporarily insulating them from the Fed's rate hikes. Those don't come due for several years, meaning he doesn't face an immediate crunch to pay back the loans and should be able to work out a solution with his lenders. "We have lots of fixed-rate debt with years to go," he says. "It's not an issue of imminent concern to me."

Not every developer has been so savvy. Donald Trump, for one, secured a variable rate on his $360 million portion of a $1.2 billion loan on 555 California Street, a trophy office complex in San Francisco that he co-owns with publicly traded Vornado. When he took out the loan, in

San Francisco

OCCUPANCY RATE: **67.3%**
DECLINE IN OCCUPANCY: **–21.5%**
WORKERS GOING INTO THE OFFICE: **–55.1%**

Mayor London Breed introduced legislation to allow developers to convert underused office buildings downtown to housing and give buildings in the core Union Square area additional flexibility for diverse uses. "Clearing the way for office conversions . . . while not flashy, these critical roll-up-your-sleeves technical improvements will help keep our downtown engine running," says San Francisco's planning director, Rich Hillis.

Houston

OCCUPANCY RATE: **70.3%**
DECLINE IN OCCUPANCY: **–3.6%**
WORKERS GOING INTO THE OFFICE: **–38.2%**

Sylvester Turner, Houston's mayor and former housing director, was accused in 2021 of favoring specific developers for his plans to build affordable housing projects using $15 million of Hurricane Harvey relief funds. (Turner denied the accusations.) He has not announced any further plans.

Washington, D.C.

OCCUPANCY RATE: **78.3%**
DECLINE IN OCCUPANCY: **–5.1%**
WORKERS GOING INTO THE OFFICE: **–53.3%**

The capital's Comeback Plan aims to create 35,000 jobs and boost its population to 725,000 residents by 2028—a roughly 8% increase—largely through incentivizing tech companies to relocate to the district or keep their offices open by covering certain expenses such as rent and employee recruiting. The city is also giving tax relief of up to $2.5 million for office-to-residential conversion projects in its business district.

GETTY IMAGES (3)

May 2021, his 2% rate seemed a bargain compared to the 2.26% fixed-rate one secured by Vornado. But Trump's loan has since ballooned to an estimated 5.93% rate. (He appears to have hedged that variable rate since.)

Still, Cohen isn't immune to the challenges facing other developers. International Plaza, where he has his main office and which sits opposite Bloomingdale's in Midtown East, was only 72% occupied at the end of the second quarter of 2022, and the tower's two loans, totaling $125 million, were more than 30 days delinquent this April. But Cohen believes that working closely with his lenders is key, rather than taking a confrontational approach that could end in default.

"Do we need help from our lenders? Yes, everyone needs flexibility right now," he says. "We're keeping lenders apprised of what's going on, being transparent, explaining why things are the way they are."

"THEY ARE UNINVESTABLE. NO ONE WANTS THESE BUILDINGS AT ANY PRICE."

It has been difficult for Cohen to replace tenants like Ralph Lauren and law firm Locke Lord, both of which ended their leases before the pandemic—"leasing activity is spotty," he says—but he is seeing some success by being more flexible with clients who are now more price-conscious. Space that's ready to move into rather than requiring a lengthy and expensive build-out has become more popular.

"If it's not good for the tenant, then it's not good for the landlord," he says. "My understanding of the bankruptcy code is that the greatest security an owner can have is a year's rent."

On the other side of the country in Seattle, Martin Selig has a tried-and-tested method to avoid trouble during real estate downturns. "We have a habit of only putting a loan on a building at 60% of value. That leaves you a lot of room to maneuver," he says. "I've been doing that since day one. You do that from day one specifically for situations like this."

The 86-year-old billionaire has seen his share of crises: When he was 3, his family fled Nazi Germany, traveling through Poland, Russia, Korea and Japan before arriving in Seattle. His first foray into real estate came in 1958, when he began buying shopping malls. Now Selig is one of the largest office developers in the city, with tenants including Amazon and Cisco.

Another strategy that has proved useful for Selig is to bundle loans of multiple buildings together, so that better-performing ones can cover the debt of underperformers. "We put five buildings together. If one building loses a tenant, the other four will pay what's due to the bank," he says. "We're spreading the risk among the five buildings."

Many loans on office buildings are packaged into commercial mortgage-backed securities, or CMBS, which banks sell to institutional investors. Most CMBS have fixed interest rates, so developers like Selig—who have loans that were packaged into CMBS—aren't currently facing higher interest payments and can avoid refinancing at today's much higher rates.

It's a different story when it comes to loans to finance the construction of new buildings. Those loans almost always have variable rates, so Selig has halted all new projects. "We have room for four more buildings, and we're not doing those with this climate," he says. Cohen is doing the same, putting off construction on a new building in South Florida until next year. "We're not borrowing money now," he says. "Rates have to come down."

Another route is to forgo borrowing altogether, assuming one has the cash to do it. Neil Bluhm, an 85-year-old real estate and casino billionaire, is building a new office tower in Los Angeles that has already signed the talent agency CAA as a future tenant. He's considering financing it all himself.

"We could do it all with equity, which we'll do unless we get a loan that makes sense. We're fortunate that over the years we've made enough money so we could just build it ourselves," he says. "Interest rates are very high, especially if you need a lot of money. Office buildings are almost impossible to get financed."

Bluhm also points to another way to survive tough times: Focus on the classic real estate maxim of location, location, location. He owns office towers in L.A.'s Century City neighborhood and luxury retail in Chicago's tony Gold Coast, both of which have been outperforming other areas in those cities. Another office project he's building in Atlanta, set for completion in the third quarter of this year, will have Intuit subsidiary Mailchimp as an anchor tenant.

On the other hand, Bluhm has jettisoned buildings in which he doesn't see much potential. Last year, he wrote off his First City Tower in Houston, a 49-story high-rise that was hit hard by falling oil prices in 2019 and 2020.

There's some evidence that splashy newer developments are faring better. Billionaire Stephen Ross' Hudson Yards—the $25 billion private development by his Related Companies on Manhattan's far West Side is the biggest in U.S. history—has been adding leases at a steady clip. Ditto One Vanderbilt, a 93-story skyscraper overlooking Grand Central Terminal developed by publicly traded SL Green, which opened in September 2020. Filled with hotel-style amenities ranging from posh gyms to Michelin-starred restaurants, they're both more than 90% occupied (One Vanderbilt is at 99%). The perks not only make workers more likely to endure long commutes, but they command premium prices. Tenants at One Vanderbilt are paying upward of $200 per square foot—well above the $80 average in New York. "If we have great amenities, we really feel like we can lease the space at compelling rents," adds Andrew Mathias, president of SL Green.

Jeff Blau, CEO of Related, points to existing tenants like private equity giant KKR and investment manager


BUILD A BRIDGE OVER THE CHASM OF ADDICTION.
Physical distance can keep you safe and healthy. But if an emotional distance forms between you and those closest to you, it may be due to drug or alcohol use. Partnership to End Addiction works with you to establish the connections that can help save lives and end addiction.
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Partnership to End Addiction

BlackRock as examples of firms that have been able to entice employees back to the office thanks to the comforts on offer. "We're doing a lease right now with [the leader of] a well-known private equity firm in Midtown. He can't get his people back to work," Blau says. "He spoke to Larry Fink and Henry Kravis, and they were telling him about Hudson Yards, that [they're] 100% back in the office because people like being here. He called us up, and they're taking two floors at over $200 a [square] foot."

Still, bread and circuses go only so far. Last September, Warner Bros. Discovery put 30% of its space at 30 Hudson Yards—450,000 square feet—up for sublease. At One Vanderbilt, some tenants still receive free rent, a perk that's keeping the tower occupied but not helping SL Green's bottom line.

Developers saddled with troubled office towers have few options left. Refinancing is difficult, buyers are scarce and there is no indication that the Fed plans to lower rates anytime soon. Amid the doom and gloom, some have decided on a radically different approach: converting their properties to residential buildings.

In cities across the country, mayors have embraced conversion plans as a Hail Mary that could revitalize their downtowns and add much-needed housing. Cities including San Francisco, Chicago and Washington, D.C., are offering incentives and plans to make it easier to adapt older office towers into residential units. Private investors are also getting into the mix, with New York–based Silverstein Partners announcing a $1.5 billion fund in December to buy older office buildings and convert them into apartments.

The problem with these plans? It's extremely difficult to convert most office towers into apartments. "These buildings weren't designed in the first place to be apartments," Bluhm says. "There's a huge amount of work to try to restructure them, and they're not necessarily where people want to live." Adds Selig: "How often are you going to put toilets on a 20,000-square-foot floor?"

If they can't be converted, other cities—such as New York—are offering tax incentives for "transformative renovations" that could make these older buildings more attractive to tenants. But not everyone is convinced that's a good plan. "They're uninvestable. Nobody wants to be in these buildings at any price," says Related's Blau. "Even if you could find a tenant that wanted to lease those buildings, the amount of money that you have to spend to bring them up to par just doesn't make economic sense."

Tax incentives are a sweetener, but they won't help real estate owners who just don't have the money to renovate or convert their properties. And if they resort to loans, they'll face the same problems they have with their current debt troubles. "The majority of refinancings over the next year or two will be cash-in. Does every owner have the extra cash to get [them]?" says Bob Knakal, a senior managing director and longtime broker at JLL. "If not, the writing's on the wall. If they do, why do it if their perception is that the value is going down further?"

According to Jeff Greene, simply waiting in the hope that workers come back to the office and interest rates start to fall isn't an option. To stay alive until 2025, developers must attract new tenants and lock in leases—even at reduced prices—while trying to restructure their debt and come up with a plan for their worst-performing properties.

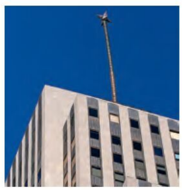
Comparing the real estate business to boxing, he adds: "When you're being battered, put up your fists and defend yourself." F

COMMERCIAL CASUALTIES

A TOXIC MIX OF HIGH INTEREST RATES, FEWER COMMUTERS AND FICKLE TENANTS HAVE HIT SOME BUILDINGS HARDER THAN OTHERS. HERE ARE FIVE OF THE BIGGEST IN THE U.S. TO DEFAULT SINCE THE FED STARTED RAISING RATES LAST YEAR.

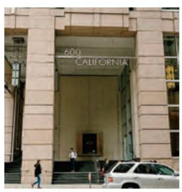
Gas Company Tower
Los Angeles
LOAN DEFAULT:
$465 million
Brookfield Properties defaulted on this Downtown L.A. tower, home to Deloitte and WeWork, in February.

697–703 Fifth Avenue
New York
$450 million
Vornado Realty Trust defaulted on this retail property on Fifth Avenue, home to luxury jeweler Harry Winston, last December.



1740 Broadway
New York
$308 million
Blackstone handed the keys of this 26-story tower on Manhattan's Columbus Circle to the lender in March 2022 after L Brands vacated its lease.

777 Tower
Los Angeles
$289 million
Brookfield also defaulted on this 52-story tower in L.A. in February.



600 California Street
San Francisco
$240 million
WeWork and its joint venture partners stopped payments on this tower in San Francisco's financial district in March.

GETTY IMAGES; ALAMY (2); GETTY IMAGES; BLOOMBERG

THE INVESTIGATION

ILLUSTRATION BY **STUART BRADFORD** FOR FORBES

SOME LIKE IT HOT

AS BANK RUNS RATTLE INVESTORS AND TEST REGULATORS, IT'S TIME TO RETHINK AMERICA'S FINANCIAL SYSTEM. ONE OLD SOLUTION, ONCE CONSIDERED A CANCER ON SAVINGS INSTITUTIONS, MIGHT BE JUST WHAT THE DOCTOR ORDERED.

BY **MATT SCHIFRIN**


TRANSFER SUMMARY
00.00
SEND FUNDS
AMOUNT & DELIVERY
EDIT

Nestled on the second floor of a suburban office building in Fairfield, New Jersey, not far from Interstate 80 and just down the hall from an opthalmology center, are the offices of Financial Northeastern. Its chief executive, Jeff Zage, 60, could be one of the saviors of the troubled $23 trillion U.S. banking industry. Zage is a money broker, and for the past 38 years, his firm has specialized in underwriting certificates of deposits for needy banks. These deposits are generally bank-run-proof—they are not redeemable prior to maturity unless the deposit holder dies or becomes mentally incapacitated. Over the last 12 years, Zage's small firm has quietly raised some $150 billion for banks small and large, connecting them with business owners, municipal treasurers and wealthy individuals eager to park sums of $250,000 or less in FDIC-insured accounts around the nation. Thanks to the Federal Reserve, interest rates on CDs maturing from three months to ten years are now above 5%. That means business is good for Financial Northeastern, which makes a small fee on each CD it brokers. But Zage repeatedly demurs when *Forbes* asks him for a photograph or even just a face-to-face meeting.

"I am a very unassuming individual," he says. "I try to do my best to stay under the radar."

Thirty-five years ago, it was a different story. Zage—then just 24 years old—his older brother Steven and their team of young cold-calling brokers were making millions providing funding to the nation's ailing $1.2 trillion savings-and-loan industry in the form of high-rate CDs. A 1987 *Forbes* article headlined "WE'RE THE LIFEBLOOD" pictured Zage popping out of the sunroof of his new car, his brother reclining on the hood. The story chronicled how regulators at regional Federal Home Loan Banks were calling brokers such as Financial Northeastern and Merrill Lynch to funnel billions to prop up zombie thrifts, mostly in Texas. Those S&Ls had gotten into deep trouble after newly deregulated deposit rates soared by investing in commercial real estate, junk bonds and other risky assets.

When the dust settled, 747 savings-and-loans were shuttered and FSLIC, the insolvent government insurance fund backstopping the industry, was absorbed into the FDIC. The debacle cost U.S. taxpayers $124 billion, about $300 billion in current terms, or the equivalent of 2% of America's 1989 GDP. Money brokers were blamed for worsening the S&L crisis. Pundits called them a "cancer" afflicting the system because they peddled "hot money" that surged in and out of banks chasing the highest yield. In 1991, new regulations enacted by the FDIC made Zage's bread-and-butter product, so-called brokered deposits, practically toxic to banks. Regulators warned against using them and increased FDIC insurance premiums for those who did. Today few of the nation's 4,700 banks hold significant amounts of them.

But perhaps they should.

Silicon Valley Bank didn't have a single brokered deposit on its books on March 9, the day depositors withdrew $42 billion in just 10 hours. Hot money? Sure—but it's all hot these days. SVB's $1 million-per-second deposit run was sparked by a handful of tweets. Dozens of fintechs, including Chime, Mercury and Robinhood, are more than happy to assist you with fast, frictionless money transfers. When Apple, backed by Goldman Sachs, announced in mid-April that it was offering an FDIC-insured savings account yielding 4.15%, it sucked in nearly $1 billion in four days. Non-banks, in the form of money market mutual funds like those offered by Vanguard and Fidelity, love hot money too. According to the Federal Reserve, over the last 13 months, $1 trillion in deposits has fled commercial banks for higher-yielding uninsured accounts.

Despite their pejorative "hot money" nickname, Zage's FDIC-insured brokered CDs are far stickier than any of these bank savings accounts. Plus, there is strong evidence from a niche group of so-called industrial banks, which are in stellar financial condition while relying heavily on this funding, suggesting that this sort of heat is a stabilizing force. But brokered CDs alone won't cure what's ailing our nation's banking system. The fact that after 40 years they continue to be stigmatized by regulators—and consequently shunned by banks—points to a larger problem. Bank regulation, with its multiple state regulators and three primary federal watchdogs—the Federal Reserve, the FDIC and the Office of Comptroller of the Currency—is stunningly inefficient, laden with political baggage and miles behind a quickly changing marketplace.


Three years ago regulators called money brokers a "spreading cancer" for thrifts. Now Washington turns to them for help.

"We're the lifeblood"

By Matthew Schifrin

Savings Savior

CD brokers like Jeff Zage *(above right, in 1987)* got cash to troubled thrifts during the S&L crisis. He's still at it: "It's a powerful tool for the banks."

Part of the problem comes from clinging to old-fashioned banking ideals like "core" deposits, thought to be foundational to community banking and the soundness of our system. SVB and First Republic were far from the only banks caught flat-footed when the Fed hiked rates 10 times in the last year. According to FDIC call report data compiled by Roanoke, Virginia–based bank analytics firm KlariVis, 31 FDIC-insured banks with total assets of $30 billion are sitting on losses in their securities portfolios in excess of their tier 1 capital *(see "Underwater on Main Street," page 106)*. And that's just the ugliest tip of the iceberg. Nearly 400 banks with combined assets of more than $3.7 trillion have losses amounting to more than half of their tier 1 capital. Virtually all these institutions are local community banks, most with assets of less than $300 million. Fortunately, few of these sick minnows are likely to have lots of uninsured deposits exceeding $250,000—or the external

pressure of being publicly traded like Silicon Valley Bank and First Republic.

"In light of recent bank failures, the question is really not whether we need to rethink what a brokered deposit is or what hot money is, but what is a core deposit anymore?" says Jelena McWilliams, former chair of the FDIC and now a managing partner at Washington, D.C., law firm Cravath Swaine & Moore. "Long-term, the community banking model will have to change. These small banks basically cannot survive unless they engage in fintech partnerships because it's an easier and less costly business model to attract customers. But for whatever reason, the regulators in Washington are very averse to fintech."

Support for community or "Main Street" banking dates to the founding of the republic, when populist Thomas Jefferson squared off against federalist Treasury Secretary Alexander Hamilton, an elitist who wanted to create a national bank. Jefferson believed it was unconstitutional and a threat to the young democracy, in part because it would concentrate funding in the big cities and away from small, developing agrarian communities. Hamilton prevailed in 1791 with the establishment of the first central bank, but in 1811, Congress failed to renew its charter. It wasn't until 1863, when the Union needed to finance the Civil War, that the national banking system was created.

UNDERWATER ON MAIN STREET

THESE 31 COMMUNITY BANKS RECENTLY REPORTED THEY WERE HOLDING BONDS AND OTHER SECURITIES WITH LOSSES EXCEEDING THEIR CAPITAL. LUCKILY, THE FEDERAL RESERVE ANNOUNCED IT WOULD ADVANCE LOANS TO ANY BANK FOR THE FULL PAR VALUE OF THESE SECURITIES. THESE ARE THE WORST, BUT HUNDREDS MORE ARE SITTING ON LARGE LOSSES.

BANK	STATE	ASSETS ($MIL)	UNREALIZED SECURITIES LOSSES AS A % OF TIER 1 CAPITAL
Community State Bank	OK	90	–222%
Lemont National Bank	IL	55	–175%
Mauch Chunk Trust Co.	PA	617	–146%
Republic Bank	PA	6,142	–132%
First National Bank of Shiner	TX	932	–129%
Fayetteville Bank	TX	649	–126%
Bank of Lafayette	GA	393	–124%
Citizens State Bank	TX	1,248	–119%
Citizens National Bank of Cheboygan	MI	481	–119%
Spur Security Bank	TX	68	–118%
First National Bank of Bellville	TX	791	–118%
Northern Interstate Bank	MI	183	–117%
Marblehead Bank	OH	59	–117%
First American Trust	CA	6,892	–116%
Bank of Brenham	TX	680	–116%
Monterey County Bank	CA	204	–114%
First State Bank of Randolph County	GA	89	–113%
Phenix-Girard Bank	AL	267	–112%
Community Bank of Raymore	MO	363	–111%
Industry State Bank	TX	924	–111%
Astra Bank	KS	431	–111%
Union County Savings Bank	NJ	1,782	–107%
First National Bank of Saint Ignace	MI	325	–107%
First State Bank of Red Wing	MN	80	–106%
Green Dot Bank (Bonneville Bank)	UT	3,841	–106%
Bank of Labor	KS	922	–106%
TrustTexas Bank	TX	455	–105%
Pinnacle Bank	AL	334	–104%
Community Bank of Pleasant Hill	MO	135	–102%
First Financial Bank	AL	225	–100%
First National Bank of Stigler	OK	133	–100%

Source: *KlariVis, from FDIC call report data, 3/31/2022*

This historic bias enabled small-town banks to proliferate, and by 1929 there were nearly 26,000 banks in the U.S., one for every 5,000 Americans. The stock market crash and Great Depression sparked a blizzard of bank runs on these often-undercapitalized institutions: In the four years before the FDIC was established in 1933, nearly 6,000 U.S. banks and savings institutions failed, costing depositors $1.3 billion, about $31 billion in today's dollars.

Ever since, the number of community or "Main Street" banks has been shrinking. There are currently 4,676 FDIC-insured banks, but on average 200 of them are merged out of existence each year. Dwindling numbers have done little, though, to weaken the strength and resolve of small banks' primary lobbying group, the Independent Community Bankers of America (ICBA), which spent nearly $4.8 million lobbying in 2022, according to Open Secrets, including about $1.3 million in donations spread around Congress, the largest chunk to the House Financial Services Committee. The ICBA's stated goal is to "keep money local and invest in communities."

"They're politically powerful because they're on every single corner," says bank consultant Mayra Rodríguez Valladares. "There's actually rare bipartisan support for community banking."

Adds former FDIC chairwoman McWilliams, "There is a strong sense in Washington that these small banks matter. Large banks don't understand local conditions where a loan may have originated in the past based on 'I've known your grandfather. He was a man of his word, and I trust that you're going be the man of your word.' [The ideal] is Norman Rockwell–esque."

The ICBA asserts that big Wall Street banks are transactional, making decisions based on "predetermined credit boxes," while community banking boils down to relationships. Of course, this is largely nonsense. Small banks use—or should use—precisely the same metrics in evaluating creditworthiness that larger ones do. There is no evidence of any bank of any size in the year 2023 making a loan because it "knew your grandfather." On the flip side, in many ways, Silicon Valley Bank, with its $212 billion in assets, was practicing community banking.

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"SVB was built exactly the way the regulators say a bank should be built: customer by customer, relationship by relationship. No hot money," says bank regulatory expert Paul Clark of Seward & Kissell. "Everything was 'You want a line of credit from me, you keep your deposits here.' Those are so-called core deposits."

Moreover, because regulators were never especially precise in their definition of core deposits, except for the fact that brokered deposits should mostly be avoided, clever entrepreneurs and financial institutions over the years have figured out ways around the prohibitions and FDIC insurance limits.

In 2003 an Arlington, Virginia, company called IntraFi launched a deposit swapping service called CDAR (Certificate of Deposit Account Registry), which allowed banks to offer wealthy customers and businesses the ability to deposit up to $50 million. The big deposits are chopped up into $250,000 increments and placed at various FDIC-insured banks in IntraFi's network. Banks that accept the deposits are then able to place their own over-the-limit deposits through the network.

In Toyota We Trust

Says Toyota Financial Savings CEO Mara McNeill, "We want to be the bank that acts like a hospitality company. There is a word in Japanese: *omotenashi.*"

"For me it's being able to retain multigenerational customers that have accounts that will exceed the $250,000 limit," says Jill Castilla, president of Citizens Bank of Edmond, Oklahoma, which has deposits of about $330 million, 18% of which are "reciprocal" thanks to IntraFi. "So now they don't have to manually place those funds in different institutions to ensure they have coverage."

Citizens' $58 million in reciprocal deposits is not considered brokered by the FDIC but instead fall under the "core" deposit designation. Likewise, if you're a bank that advertises your CD rates online using services like Bankrate, NerdWallet or Forbes Advisor, the high-rate deposits you bring in from across the nation typically qualify as "core."

Then there are the multiple, and often confusing, brokered deposit "exemptions" granted by the FDIC to various banks, including those working exclusively with fintechs. FDIC-insured $1.8 billion (assets) Evolve Bank & Trust of Memphis, Tennessee, provides banking services for large fintechs like Dave, Affirm and Mercury, but shows only 0.3% of its deposits are brokered.

Sourcing deposits outside your home market is apparently okay with regulators so long as you avoid broker-dealers like Zage, or UBS, Bank of America or Wells Fargo. Iowa's Luana Savings Bank, a 115-year-old family-owned bank located in a town of 300 people amid thousands of acres of cornfields, found this out the hard way.

From 2016 to 2020, Luana's assets more than doubled to $1.7 billion as its ambitious president, David Schultz, became one of Iowa's biggest agricultural lenders. Luana and its six small branches were unable to attract enough local deposits to fuel its growing business, so Schultz connected with brokers that allowed him to fund his loans with out-of-market CDs with similar maturities. As assets climbed toward $2 billion, brokered deposits accounted for 60% of the total.

Luana's operating stats have been exemplary, its return on equity averages 19% and it was a perennial winner of Des Moines–area "best bank" awards. Still, alarm bells sounded at the FDIC regional office, and in 2021, it and the Iowa Superintendent of Banks issued a cease-and-desist order claiming Luana was taking "excessive" risks and operating in an "unsafe and unsound" way. It also fined the bank $14.5 million and cut off its access to Federal Home Loan Bank loans. Schultz, who declined to speak to *Forbes,* told the *Des Moines Register* at the time that the charges were manufactured, and sued the FHLB.

Ultimately Schultz decided fighting regulators wasn't worth it, so without admitting or denying the charges, Luana signed a consent order in 2022 and agreed to add independent directors to its board and reduce its reliance on non-core deposits.

Among banks, the biggest users of brokered deposits are a small group of FDIC-insured institutions known as industrial banks. There are 24 of them, representing only $250 billion in total assets, but they are extremely well capitalized and profitable *(see "Industrial Strength," page 110).* They are also despised by the ICBA and the Federal Reserve, and barely tolerated by their regulator, the FDIC.

Sometimes referred to as industrial loan companies (ILCs), these banks are FDIC-insured and -regulated, but their parent companies are typically commercial or financial institutions. The first ILC was formed in 1910 to make loans to industrial workers who couldn't obtain credit elsewhere. Over the years companies like General Electric, Target and Goldman Sachs have owned ILCs. Today their owners include Harley-Davidson, Pitney Bowes, UnitedHealth Group, BMW, Square and USAA. Only a few states, including Utah, Nevada and California, can authorize their charters, and though they're subject to the same rigorous FDIC application process and examinations as other banks, they're exempt from Federal Reserve oversight because their parent companies, which are required to support their ILC with capital, aren't bank holding companies.

Industrial banks can offer savings accounts, credit cards, loans and mortgages, but are prohibited from offering check-

INDUSTRIAL STRENGTH

BELOW ARE FDIC-INSURED INDUSTRIAL BANKS THAT ARE ALSO THE BIGGEST USERS OF NON-CORE BROKERED DEPOSITS. VIRTUALLY ALL HAVE IMPRESSIVE CAPITAL AND RETURN-ON-ASSETS STATS.

INDUSTRIAL BANK	STATE	ASSETS ($MIL)	BROKERED DEPOSITS AS A % OF TOTAL DEP.	TIER 1 CAPITAL LEVERAGE RATIO (%)	2022 RETURN ON AVG. ASSETS (%)
LCA Bank Corporation	UT	225	99.6%	19.5	1.99
Eaglemark Savings Bank	NV	497	99.3%	18.2	3.73
Medallion Bank	UT	2,062	99.3%	16.4	4.26
Hatch Bank	CA	178	99.2%	19.3	1.54
Beal Bank USA	NV	32,045	92.8%	11.8	7.71
Celtic Bank Corporation	UT	2,393	89.9%	20.1	4.28
Webbank	UT	2,263	85.9%	14.1	3.00
BMW Bank of North America	UT	11,858	76.2%	13.6	1.89
Toyota Financial Savings Bank	NV	5,904	57.8%	14.6	0.32
Sallie Mae Bank	UT	29,389	46.7%	10.0	2.12
All Banks in Nation			1.8%	11.1	1.04

Source: *KlariVis, FFEIC, UBPR and call reports, as of 3/31/23*

ing accounts or financing their parent company's products. Pitney Bowes Bank, for example, doesn't make loans to purchase its postage meter machines, but it can finance and manage shipping payments for its thousands of small-business customers. Industrial banks tend to be specialized and branchless, which is why many rely heavily on brokered certificates of deposit for funding, which they use to match asset maturities.

One of the most profitable and well-capitalized banks in the nation, Nevada-chartered Beal Bank USA, is an industrial bank owned by Texas billionaire Andy Beal. It has $32 billion in assets and, as of March 31, 93% of its deposits were brokered. It's currently offering one-year CDs yielding 4.65%.

Toyota Financial Savings Bank is another well-capitalized Nevada ILC, set up to provide savings accounts, mortgages and commercial loans to the company's 35,000 U.S.-based Toyota and Lexus employees. Under its new chief executive, Mara McNeill, a former JPMorgan Chase auto finance executive—she graduated from the Air Force Academy in 1993 but also has a JD from Georgetown and a master's in public policy from Harvard—its assets have grown from $1 billion in 2020 to nearly $6 billion, funded to a great extent by broker deposits, which currently stand at 58% of the total.

"It can be economically advantageous to have core deposits. You don't have as much in fees from the FDIC," McNeill says. "But at the same time, you've gotta pay for the salespeople to go out there and get those accounts. And so, you know, there's a fee here and a cost there."

Other successful but little-known industrial banks, all based in Utah, include Comenity, an $12 billion credit card lender; Nelnet, a $1 billion specialist in student loans; and Wex, a $6.5 billion bank offering gasoline charge cards to small and midsize fleets with discounts from refiners like Chevron and Exxon. Until a few years ago, $2 billion Medallion Bank specialized in financing taxicab medallions. But Uber and Lyft forced a hard pivot to lending for recreational vehicles and boats, and financing home contractors. Virtually all its funding comes from brokered deposits. "Our Deposits Don't Run," reads a headline on its website.

Industrial banks currently represent about 1% of all bank assets, but the ICBA apparently views them as a dire threat to community banking. In July 2005, when Walmart applied for an industrial bank charter, the ICBA helped orchestrate a tidal wave of thousands of alarming letters to the FDIC and Congress. Their message: Just as Walmart killed mom-and-pop retailing, an industrial bank charter would help it eliminate Main Street banks. In fact, efficiency-minded Walmart merely wanted to streamline credit card processing, saving money on bank fees, and would have been precluded from offering banking services directly to its customers.

The FDIC, under chairman Martin Gruenberg, ignored Walmart's application. Then, a full year after the retailing giant submitted its forms, the FDIC announced a six-month moratorium on approving all ILC applications, ostensibly to "determine if any emerging safety and soundness or policy issues exist." Walmart withdrew its application in March 2007, and that six-month moratorium wound up lasting 14 years, until Jelena McWilliams took over as FDIC chairperson and approved Nelnet and Square's application.

"Martin Gruenberg does not like nontraditional banks. And so they just slow-walked the applications when they hit Washington," says George Sutton, general counsel for the National Association of Industrial Bankers and Utah's former commissioner of financial institutions. "Eventually it just goes into a black hole." (The FDIC declined *Forbes'* interview requests.)

Banking crises are always about trust and stability, something traditional banks no longer have a monopoly on. Most people now trust Apple and Toyota more than their community bank. The next generation of banking customers care little about charters or regulatory turf wars and are savvy enough to know that hot money offering higher returns, whether from their local bank, fintech or broker, is smart money. F

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Mentoring

"Who cannot give good counsel? 'Tis cheap, and it costs them nothing."
—Robert Burton

"While I made my living as a coach, I have lived my life to mentor, and to be mentored."
—John Wooden

"We all have a better guide in ourselves, if we would attend to it, than any other person can be."
—Jane Austen

"Advice is seldom welcome, and those who want it the most always like it the least."
—Lord Chesterfield

"The recommendation when I'm mentoring folks—I always tell them, take a risk."
—Ginni Rometty

"I have lived some 30 years on this planet, and I have yet to hear the first syllable of valuable or even earnest advice from my seniors."
—Henry David Thoreau

"The delicate balance of mentoring someone is not creating them in your own image but giving them the opportunity to create themselves."
—Steven Spielberg

"The mind is not a vessel to be filled, but a fire to be kindled."
—Plutarch

"Without access to mentors, many of us are not prepared for the game. It's as if we're trying to play soccer on a baseball diamond."
—Brenda Harrington

"Teach them the quiet words of kindness, to live beyond themselves. Let your spirit move through them softly."
—Pat Conroy

Return Game

June 30, 2019

The greatest women's tennis player of all time, Serena Williams, was flexing her business prowess when she appeared on the cover of our Richest Self-Made Women issue four years ago. With an estimated fortune of $225 million at the time (she's worth some $290 million today), she became the first athlete on the list—especially impressive, as we noted, for someone who as a kid growing up in Compton, California, occasionally had to steer clear of gun-toting neighbors. And while her on-court crew helped her win a record 23 Grand Slam singles titles (as well as 14 in doubles and two in mixed doubles), she looked to new coaches for her next challenge: tech investing. With money in 34 startups at the time, Williams, now 41, **has leaned into Silicon Valley mentors** like former Facebook executive Sheryl Sandberg ("I always ask her advice," she told us) and her husband, Reddit cofounder Alexis Ohanian. "She's determined to be great at everything she does," Ohanian said.

SOURCES: ANATOMY OF MELANCHOLY, BY ROBERT BURTON; WALDEN, BY HENRY DAVID THOREAU; THE PRINCE OF TIDES, BY PAT CONROY; ACCESS DENIED, BY BRENDA HARRINGTON; MANSFIELD PARK, BY JANE AUSTEN; NORTH AND SOUTH, BY ELIZABETH GASKELL; SIDDHARTHA, BY HERMANN HESSE; THE UNDERGROUND HISTORY OF AMERICAN EDUCATION, BY JOHN TAYLOR GATTO.

"A wise parent humors the desire for independent action, so as to become the friend and advisor when his absolute rule shall cease."
—Elizabeth Gaskell

"It is perfectly fine with me that what for one man is precious wisdom for another sounds like foolery."
—Hermann Hesse

"Mentors have a way of seeing more of our faults than we would like. It's the only way we grow."
—George Lucas

"In the absence of a perfect universal mentor, books and other texts are the best and cheapest stand-ins, always available to those who know where to look."
—John Taylor Gatto

"Whether you turn to the right or to the left, your ears will hear a voice behind you, saying 'This is the way; walk in it.'"
—Isaiah 30:21

FINAL THOUGHT

"The really big executive rejoices when others grow big."
—B.C. Forbes


RICHARD MILLE
RM 07-04
In-house skeletonised automatic winding calibre
50-hour power reserve (± 10%)
Baseplate and bridges in grade 5 titanium
Function selector
Shock-resistant to 5000 g's
36 grams including Velcro® strap
Case in Quartz TPT®
A Racing Machine
On The Wrist