

# MADE FOR THIS moment

‘It’s ridiculous’:  
Gas prices spike  
above \$4 in  
SF & California

## People Around the World Are Panic- Buying ... Toilet Paper?

March 2020



# 2019—2

Lowe’s to lay off thousands of workers as it outsources th  
chain, based in Mooresville, N.C., declined to say exactly how many  
Street Journal reported that thousands of employees were told this  
which the company confirmed. ¶ Lowe’s spokeswoman Jackie Pardi  
are coming as the company moves to third-party assemblers and faci  
spend more time on the sales floor serving customers. Previously, s  
such as constructing floor models, and janitorial work. Hartzell said  
have the opportunity to apply for other open roles at Lowe’s. ¶ She s  
many are affected as the number of employees affected varies by sto  
record of retaining associates in other roles within the company.



STOCKS JUST HAD THEIR BEST WEEK IN  
DECADES. NOW COMES THE DROP.  
Telling investors to sell now, in  
the midst of the coronavirus  
crisis, feels a bit like yelling  
fire in a crowded room—even if  
there are no crowded rooms anymore.  
Still, it feels like the right  
thing to do. ¶ We’re not being  
bearish for bearishness’ sake. in  
fact, we’re optimists by nature.  
The market goes up over time, after  
all, and history teaches that it  
pays handsomely—especially in a  
retirement account—to keep the  
faith. But one of the things about  
the Covid-19 crisis is the speed at  
which things happen. It has been  
breathtaking... (Barrons, April ‘20)



NOV. 2, 2019

## Berkshire Hathaway’s Cash Pile Hits a Record

GM workers strike after talks  
on pay and benefits break down  
Sept 2019

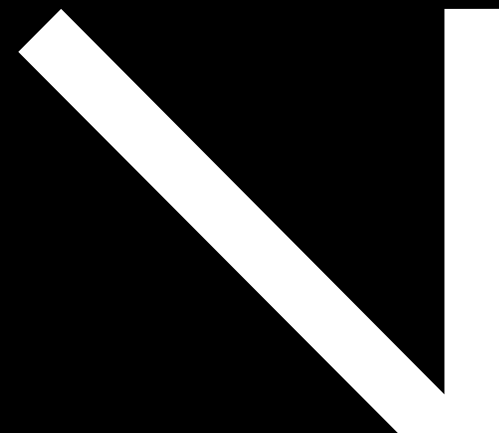
OCTOBER, 2019

## Trade War Pause Leave

*The Great Coronavirus Crash of 2020 Is Different* (Bloomberg)  
The Great Coronavirus Crash has been frightening in its  
and breadth. Stocks have lurched lower worldwide, with  
rallies between the falls, like wounded bulls in a c  
Through 1 p.m. on March 18 the S&P 500 index was off 2  
the year to date, Germany’s DAX was down 38%, and  
Nikkei was off 29%. In the credit market, investors ha  
junk bonds. Even U.S. Treasury bonds—traditionally  
harbor in crisis times—have come under pressure, p  
because investors are selling them to cover losses else

# 中美贸易战 737

American Airlines extends  
Boeing 737 Max flight  
cancellations through early  
September. The airline, which  
is the largest U.S. carrier, said  
the cancellations would affect  
approximately 115 flights per day.  
American previously announced  
in April that it would cancel flights  
on the 737 Max through Aug. 19 due  
to the Federal Aviation Administra-  
tion’s mandatory grounding of the  
Boeing jet. (Fox Business, Sept. 2019)



OIL PRIC  
STOCKS F  
AFTER U.  
IRANIAN  
PUBLISHED .



*For the past six years, UC Investments  
has worked to make sure we were ready  
to support the university when the  
longest-running market expansion in  
history came to an end.*

*This year, we faced a crisis of epic  
proportions, in the markets and beyond.  
And it’s not over yet.*

*Although no one knows where we’ll  
land, because of our steady  
leadership, strong partnerships and  
strategic creativity, we’re ready.*

UC INVESTMENTS — MADE FOR THIS MOMENT

# CONTENTS

STRONG  
LEADERSHIP

01

04—15

Statement from CIO  
Jagdeep Singh Bachher  
  
Statement from President  
Janet Napolitano  
  
Q&A: Regent Richard  
Sherman

DYNAMIC  
PARTNERS

02

16—29

Q&A: Ron O'Hanley  
from State Street  
  
Q&A: Doug Leone from  
Sequoia Capital

THE UC  
INVESTMENTS  
WAY

03

30—61

Made for this Moment  
  
Our 10 Pillars  
  
The Greatest Wealth  
is Health  
  
A Nobel Cause  
  
A Transformational  
Approach to 21st Century  
Investing  
  
Risk Management  
  
A Brave New World, by  
Neil Brown  
  
Q&A: Arthur Guimarães  
from UC Investments  
  
Retire Better

STRATEGIC  
CREATIVITY

04

62—94

Challenge Grows Creativity  
  
What Happened in  
the Markets  
  
Overview  
  
Endowment  
  
Pension  
  
Working Capital  
  
Blue & Gold Pool  
  
Fiat Lux Insurance  
  
Meeting the (Next) Moment  
  
UC Regents & Officers  
UC Investments Staff



**STRONG**

**LEADERSHIP**

# Jagdeep



# Singh Bachher

Every year brings new challenges and new opportunities at UC Investments. And though we never know quite what to expect — investing’s like that — our 10 pillars, our people, and our partnerships combine to produce results that ensure our university thrives.

Ignore for a minute all the numbers, the fancy algorithms, and the novel investment strategies. We are at heart a people business. That has never been more evident to me than over this tumultuous past year. We couldn’t do what we did — and continue to do — without a solid governance structure anchored by the UC Board of Regents, the president of the University of California, my UC Investments leadership team, and our entire staff.

Regent Richard Sherman, who chairs the Regents’ Investments Committee, has been a close and invaluable partner from the start. With his calm and steady demeanor, he has both inspired and mentored me, and especially in times of crisis, there’s no one better to turn to for guidance and advice. And Board Chair John A. Pérez and Regent Hadi Makarechian, chair of the Finance and Capital Strategies Committee, are keen advisors, always available to bounce around ideas.

Janet Napolitano, who as I write this is stepping down after seven years as UC president, has been a phenomenal leader and partner in helping to transform UC Investments from the isolated office I encountered six years ago into today’s agile, innovative and collaborative organization. She has been supportive and steady, while always challenging me to do better. I’m confident and hopeful that her successor, Dr. Michael V. Drake, with his long and storied history with UC, will follow a similar path. Welcome, Dr. Drake, and huge congratulations on taking on this role at such a pivotal time.

This past year has certainly been an outlier of epic proportions, for us and for the world. At the start of the fiscal year, we were cruising along, enjoying the 11th year of a bull market — the longest in history — and fully expecting it would last through 2020.

The novel coronavirus, however, had more nefarious plans. As the world went into virtual lockdown, every economist, investor, risk expert and manager scrambled to alter their assessments in response to the unprecedented geo-economic challenges posed by the crisis. The Dow, S&P and NASDAQ

went off the rails. Oil prices plummeted to negative \$40 a barrel. And as gold marched slowly but steadily upward, it was clear cash was king again.

As the Federal Reserve moved quickly to slash interest rates and the federal government poured trillions of dollars into the economy, the markets took on a “keep calm and carry on” vibe. In fact, if you’d been fitfully asleep the whole year and woke up on June 30, 2020 to check the markets, you’d think a global pandemic might just have been a bad dream. The S&P 500 was up 7.5 percent from the year before, the Dow was down a mere half percentage point, and the NASDAQ jumped up 27 percent.

Of course at UC Investments, we were awake for the whole mindboggling thing (even when we really shouldn’t have been, like at 3 a.m. on a Tuesday.) With higher education being one of the sectors hit hardest by the pandemic, we made sure the UC system had the operating liquidity it needed while we also reviewed every asset in every class to ensure we were well positioned to weather this perfectly chaotic storm with as little disruption to our benchmarks as possible.

The shocks to US and global markets — with 11 years of a bull market turning into a bear in 19 days — have been profound. More important, the record-high unemployment, the bankruptcies that have hit small businesses particularly hard and the entire industries that have essentially been put on ice, have played havoc with people’s lives. And in the midst of this devastating pandemic that has sickened and killed millions, we are facing a long overdue reckoning over systemic racism at home and abroad. These are times for the history books, and we really don’t know what a “new normal” will be or when it will arrive.

Here’s what our day-to-day has looked like over the past fiscal year.

**STRONG LEADERSHIP** — There’s nothing more important in times of upheaval than a steady hand on the wheel. The years of crafting and implementing our 10 UC Investments pillars served us very well, allowing us to stay grounded and work from strength, not desperation. Not a single person on my leadership team panicked; instead we teamed up. We can’t sugarcoat it: The pandemic could affect our university’s operations for the next two years. Two years is a long time to have classrooms half empty.

Two years is a long time to house a single student in a three-person dorm room. Two years is a long time to go without watching a UC football or basketball game. But in the context of a 152-year institution that’s gone through the 1918 influenza pandemic, multiple wars and the Great Depression, two years is just a blip. So leadership in these times is about engaging, and listening and learning. And that includes learning and openly discussing things about which we may have been silent before, such as what we can do to fight racism, exclusion and neglect. It’s about having the humility to recognize you will be wrong. But we know that to fulfill our duty as long-term investors, we have to stay steady, stay strong and stay creative to provide the financial stability our system needs to emerge from this crisis and be stronger for it.

**DYNAMIC PARTNERS** — As much as the days might look uncertain right now, we know that the six years we’ve invested in building and strengthening our partnerships is helping us as we work to steer through this crisis. UC is a massive engine of innovative ideas, known for finding solutions to the biggest problems on Earth. One of our strongest advantages is that we can partner with our outstanding community. Our people — 300,000 students, more than 227,000 faculty and staff, some 2 million living alumni — populate an innovation ecosystem for which UC is world-renowned. Inspiration born of the current crisis will ultimately translate to ways to better our lives, our environment, and our collective future — and in these transformative ideas we hope to invest. We’re not merely reading about ideas in a research report or on a computer screen. We have human-to-human interactions and tap into a vast breadth and depth of knowledge that’s unmatched. This past fiscal year, we interacted with everyone we could and made ourselves available in every way we could. We also created stronger partnerships within our own office, working together — virtually — like never before, an effort enabled by the dynamic data tools we’ve invested in that allow us to respond to the ever-shifting challenges in real time.

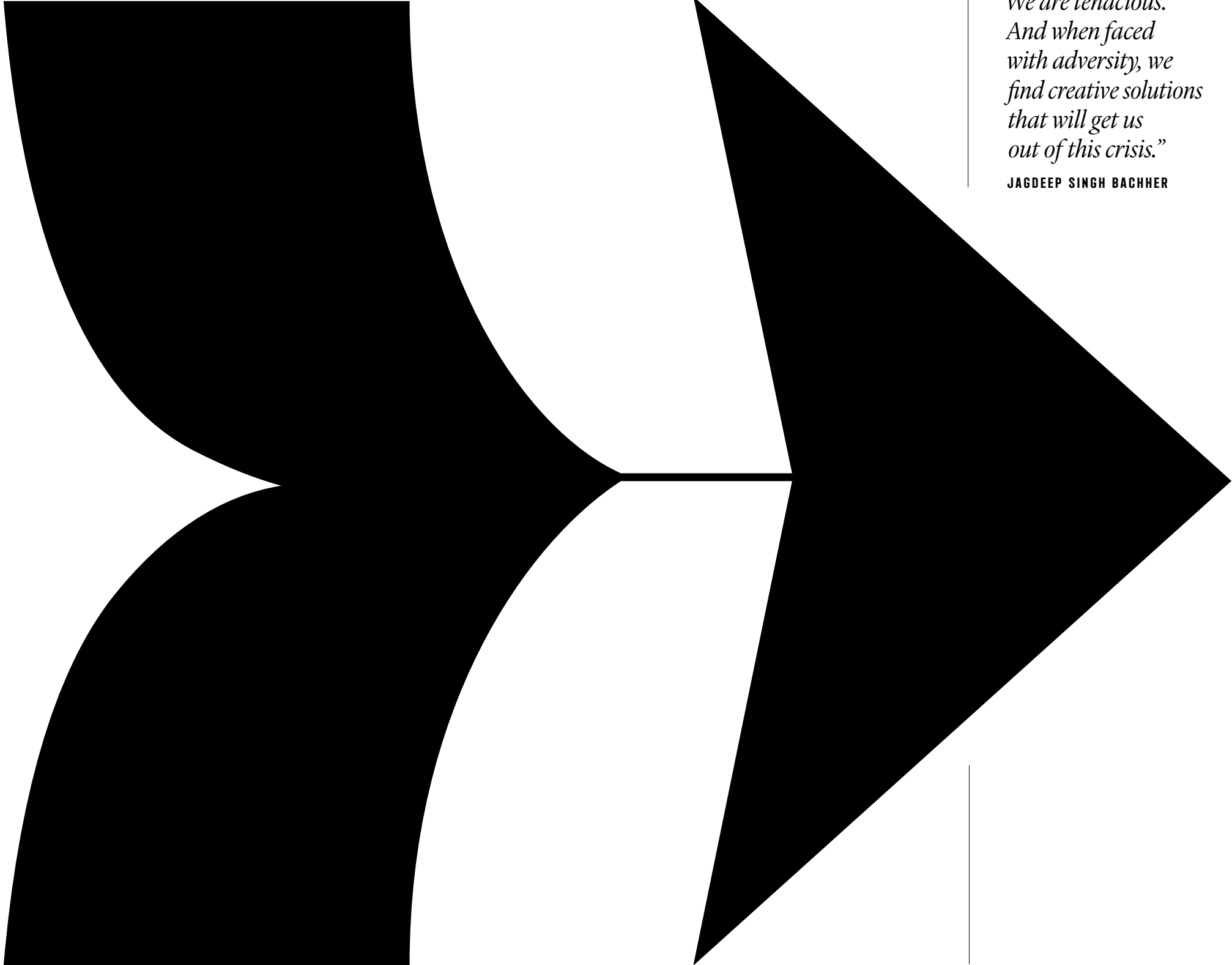
**STRATEGIC CREATIVITY** — One of our 10 pillars is Creativity Pays. And this year it was the guiding light as we worked to

find solutions no one could envision to a crisis no one could predict. We’ve had to be agile. We’ve had to pivot. (And yes, we’ve had to do all this with our kids and our dogs creating a ruckus on Zoom calls.)

When faced with adversity, we persist. We don’t hunker down, taking comfort in our spreadsheets and checklists. We create opportunities where none existed, and at a scale we’ve never dreamed of before. For example, during this crisis, we doubled down on environmental, social and governance (ESG) commitments, achieving our objective to free our portfolios of fossil fuel investments and surpassing our five-year goal of investing \$1 billion in promising clean energy projects. As of the end of June, we’ve invested \$1.5 billion with African American, Latino and women managers, and over the next four years, we will invest another \$2 billion with diverse investment firms. We recognize that being intentional about diversity by being open-minded and looking where we haven’t before is the only way to achieve results. We’ve also committed to connecting promising students from different backgrounds with our most significant investment partners, and working with the 10 UC chancellors to create a pipeline of underrepresented talent, today’s students who will become tomorrow’s finance leaders and entrepreneurs.

In last year’s report, I said that the real test of any leader doesn’t come when things are going well; that leaders are measured by how they lead when things turn bad. All of us have been put to the test this year, and I’m so proud of how our office has come together to help lead the University of California through this unprecedented time. It is not easy, and it’s not comfortable.

At UC Investments we believe the ongoing crisis will translate to markets that will generate overall lower returns in the short to medium term. We have been working with the Board of Regents and among ourselves to determine the appropriate asset allocation for the uncharted territory ahead. We’re holding on to our hats, and looking forward to the ride. It is our bold creativity that will pay the dividends of emerging from this and creating a new and better way of living in the world. We are steady, strong and strategic — and we’re here for the long term.



*“I am optimistic about the future because human beings are innovative. We are creative. We are tenacious. And when faced with adversity, we find creative solutions that will get us out of this crisis.”*

JAGDEEP SINGH BACHHER

# Janet



# Napolitano

Given the pandemic we’re going through and the myriad of unprecedented decisions we’re having to make in real time, there’s quite a lot to think about as I end my tenure as the president of the University of California.

But a good place to start is my gratitude for the UC community. I’m continually impressed by the strength, resilience and boundless creativity of our students, faculty and staff in rising to meet one of the most urgent challenges of our lifetimes. They’ve continued to carry out work that is essential to our missions of teaching, research and public service, and I am so proud to be a part of a community that is united by such a deep sense of purpose and commitment to action during this time.

The efforts made by Jagdeep Singh Bachher and the UC Investments team are particularly notable because of the massive importance of their work to the stability of our university. Given the precarious nature of state funding — and it’s even more precarious this year — we’ve had to make hard choices to contain costs. For example, we froze salaries for our policy-covered staff, and the chancellors and I took a 10% cut in our salaries. We are going to have to do more things like that across the system for the foreseeable future because protecting the corpus of the university is our highest priority, and we don’t want to let the budget exigencies over the next two or three years create lasting damage to the institution.

Jagdeep and his team have done a terrific job of keeping people informed, keeping people motivated and being agile with the investment portfolio. I know he’s got both the short-term and the long-term solidly in mind as he makes decisions, and that’s right where we need to be.

But taking a step back to reflect on the bigger picture of my tenure, one of the things I’m most proud

of is championing entrepreneurship and innovation at UC. The things our students and faculty are doing and creating are just incredible. But whether it’s a lifesaving drug, a game-changing piece of software or a radical new solution to an existing engineering problem, UC-grown innovations have the ability to change the world, but not if they stay secreted behind the walls of our campuses. And so I’ve worked to make the academy-to-market process more efficient.

Another area of pride is our commitment to address climate change. Early in my presidency, I announced my goal of making UC carbon neutral by 2025,

and just by stating that goal, it mobilized so much activity throughout the system. All of a sudden, we had teams on one campus working with teams from other campuses. We had 56 faculty members who collaborated to create 10 scalable solutions to address climate change. We had people changing how they design our buildings. And today, we’re making real progress toward getting there: We produce more green power than any other university in the nation.

In May, we also achieved the milestone of making our investments fossil-free. As a university, we are not a big fan of divestment, but we wanted to get out of fossil fuels. I thought the way Jagdeep did it was very creative. If we want to de-risk our energy portfolio, we had to take the fossil fuel industry out of it because renewables were actually generating greater returns. And if you paid attention to oil prices this year, you’ll see we’re already reaping the benefits of this investment strategy. At the same time, we have surpassed our five-year goal of investing \$1 billion in promising clean energy projects. If UC can do it, so can other large, complex institutions — and together, we can turn the tide on climate change.

Another shining light in this otherwise dark year came on June 18 with the U.S. Supreme Court decision that blocked the Trump administration’s plan to dismantle the Deferred Action for Childhood Arrivals (DACA) program, which I created when I was Department of Homeland Security secretary under President Barack Obama. When the congratulation texts started pouring in at 7am, I was thrilled. Of course, we realize it’s likely only a temporary victory, but in the meantime, all of our DACA students could finally breathe a huge sigh of relief. It was a righteous moment.

I hope people look back on the last seven years of my tenure and say it’s been lively. I’m proud I haven’t been afraid to take on the hard challenges and that I persisted even when others thought the issues were too big to solve. Because it’s these issues that matter most, and when you’re a public servant, it’s in your blood to take a stand for what’s right, even when it’s difficult and when it’s not popular.

I find it fitting that during the final year of my tenure, UC graduated its largest and most diverse class ever. I’m blown away by the resilience, strength and poise they showed during these challenging times, and I know that as the leaders of the next generation of innovation and service, they’ll do us proud. There’s no greater legacy than that.



# Q&A: Richard Sherman



**Q** : The pandemic has created uncertainty in every aspect of our lives, including investing. What was your committee’s mindset about investing during this unprecedented time?

**RS** : Coming into the pandemic, we had a fairly significant cash position relative to our overall asset allocation because the equity rally before the pandemic had run long and far. We maintained that cash in the beginning and then started to put some of it to work a month or so later. Having a more significant cash allocation has been beneficial; we didn’t have to liquidate positions. It worked out well for everybody. In terms of specific investment decisions, that’s not the job of the regents. We’re asset allocation-oriented; asset selection is the purview of Jagdeep and his team.

**Q** : How do you think Jagdeep has done as a leader in this crisis?

**RS** : Jagdeep has done very well at keeping a steady hand and being the calm leader the organization needs. He’s been measured about his choices and hasn’t made any drastic moves in terms of changes in assets, acquisitions, or dispositions. In hindsight, we may have had more cash than would have been opportunistic coming out of the March low, but it got put to work. And that’s fine; we don’t have to be first out or first back in.

**Q** : You’ve been supportive of UC being free of fossil fuel investments for a long time, and in May 2020, that milestone was reached. How do you feel about it?

**RS** : To me, it just makes sense. If the world is turning away from fossil fuels from an environmental standpoint, political standpoint or however you want to characterize it (which we may agree with, by the way), we shouldn’t be investing in this asset. That asset becomes too risky. We’re long-term investors, not traders. So I feel very good about the financial decision we made to no longer own those assets and to choose to participate in this arena through alternative sources of energy. As those alternative sources rise in demand, I think we’ll be rewarded for it.

**Q** : Could you talk about the importance of increasing diversity, equity and inclusion, both in the UC Investments office and among the partners we work with?

**RS** : We started our efforts in this area some time ago, and our internal office reflects our work to increase diversity across all the spectrums. But we also realize that it’s important that the managers we invest with reflect the diversity of the community we



serve — our students, our professors and our staff. Data also show that having diverse managers is good from a financial standpoint, and as with selling our fossil fuel assets, our decision to increase the diversity of external managers is the right investment decision, too.

**Q** : A recent analysis by Cambridge Associates shows that UC’s endowment is one of the top performing in the country. In addition to our asset allocation and investment strategy, how do you think the culture of UC Investments plays a part in these results?

**RS** : When I interact with the people in the office, it’s clear that it’s a very inclusive and collaborative environment. Though Jagdeep makes the final decisions, of course, everyone in the office has input into these decisions; you get the best thinking from a group of the best people. And you can’t argue with the results. They’ve done better than their benchmarks fairly consistently.

**Q** : We know you’re a big proponent of investing in the ideas coming out of the UC system. What opportunities do you see right now?

**RS** : We have a tremendous knowledge base on our 10 campuses, and the research teams here are among the best in the world. We’re working to make sure we’re aware of all of the innovations coming out of our system so we can be positioned to be the first investor on projects from our own “family.” As I have said before, we should “eat our own cooking.” Whether it’s in medical research, engineering or technology, we want to invest in those that have the most promise. We don’t always have to take the entire investment, but we should be the lead on it. Plus, there is a certain amount of herd mentality in the private equity space, so if UC Investments puts money in something, it’s going to be a calling card going forward for that particular group to raise more money.

**Q** : The regents just announced Dr. Michael Drake as our new president at one of the most challenging moments in the history of the University of California. What would you say to Dr. Drake about the role that Jagdeep can play on his leadership team and how UC Investments overall can help the university achieve its goals?

**RS** : Especially over the next 12 months, UC Investments can help the new president by marshaling the financial assets of the entire system, creating liquidity and helping monetize some of the assets that are created out of the system. There have been a lot of discussions about looking at the outstanding public

debt of the university in addition to our pension obligations—and so Jagdeep will be a valuable advisor to the Office of the President and the chief financial officer.

**Q** : You’re starting your fifth year as chair of the Investments Committee. Looking back beyond just the last fiscal year, what would you say you’re proudest of?

**RS** : I’m very proud of the close and collaborative working relationship I’ve had with Jagdeep all along the way. It’s very much a true partnership, and I think it’s worked well. He and his team are doing a great job in a very difficult environment these days.

**Q** : In the current investment environment, would you say this close working relationship is more important than in less turbulent times?

**RS** : When you’re managing over \$100 billion — including a pension that hundreds of thousands of our current and former employees rely on — it’s never not important; it’s an enormous responsibility. And looking at probable state funding cutbacks, our endowment will be crucial as a means to supplement funding that’s not necessarily a guarantee going forward. That’s about as important as it gets.

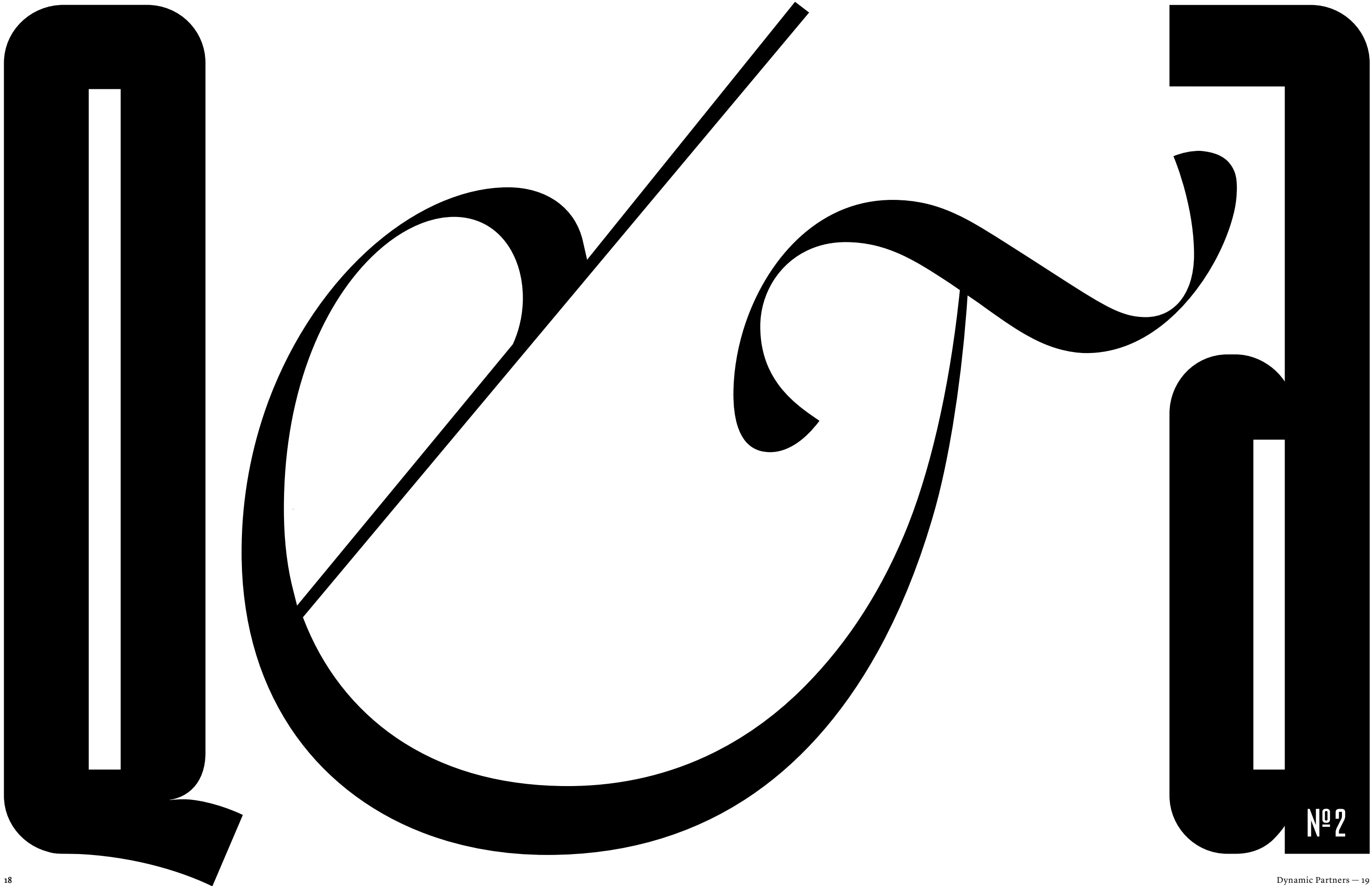
*I’m very proud of the close and collaborative working relationship I’ve had with Jagdeep all along the way. It’s very much a true partnership, and I think it’s worked well. He and his team are doing a great job in a very difficult environment these days.*

**RICHARD SHERMAN**

An abstract graphic featuring two large, overlapping circles. The left circle is solid black and contains the word "DYNAMIC" in white, bold, sans-serif capital letters. The right circle is white with a black outline and contains the word "PARTNERS" in black, bold, sans-serif capital letters. A thick black diagonal line runs from the bottom left towards the top right, passing through the intersection of the two circles. The background is solid black.

**DYNAMIC**

**PARTNERS**

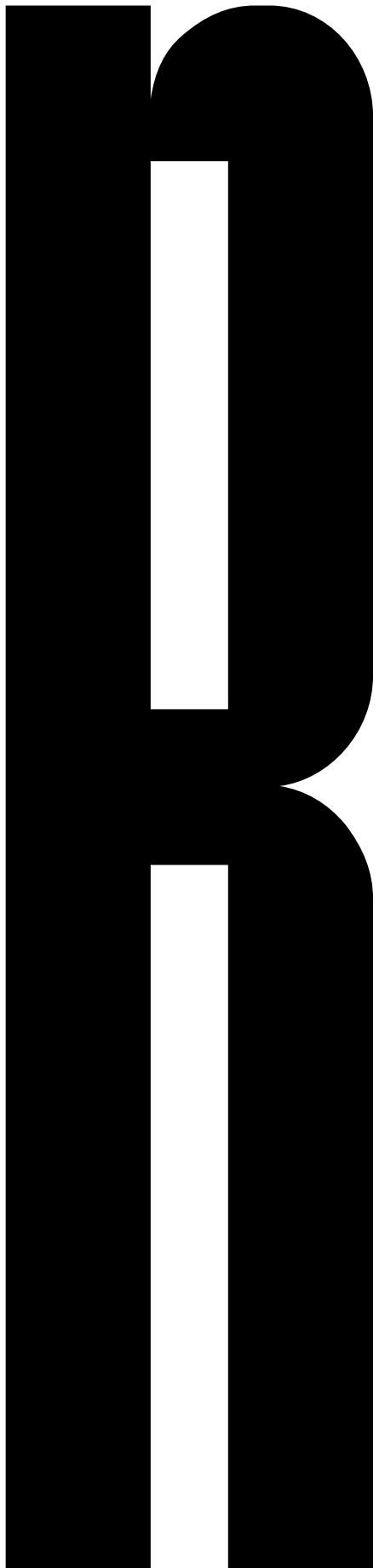




## RON O'HANLEY

*Chairman & Chief Executive Officer  
State Street Corporation*

*State Street is among the world's largest providers of investment services to institutional investors, including investment servicing, investment management, investment research and trading. It is also UC Investments' single biggest partner. Out of our total \$130 billion in assets under management, State Street is responsible for managing \$59 billion of it — 91 percent of it in index strategies and 9 percent in active strategies. State Street is also our master custodian, providing accounting, performance and analytics, alternatives administration, agency lending, FX and transition management services. Chairman and CEO Ron O'Hanley sat down to talk with us about the current investing climate and what we're learning from this unprecedented year.*



Q:

A global pandemic. Massive fiscal stimulus at home and abroad. A disconnect between Main Street and Wall Street. What are the most important lessons the financial industry should take away from the events of this year?

**RO'H** : I think the main lesson from the crisis is the importance of resiliency. I'd look first to operational resiliency, where 90 percent of financial services workers worldwide had to transition to working from home virtually overnight. The second aspect of resiliency is liquidity. Many investors found themselves caught short in terms of the amount of liquidity they had available relative to what they needed. When looking at Main Street businesses, it only took a week into the crisis to start hearing talk about business failures. So the crisis has shown that the whole economic system is probably less resilient than it should be. Many businesses are built and capitalized assuming very high capacity utilization. When volumes and demand fall sharply, failures loom.

The other lesson is the importance of expertise. We're paying the price for not having sufficient expertise, particularly public health expertise. Now, we are paying multiples more to combat this pandemic.

Finally, we've learned how important it is to have coordinated global leadership. We had it in terms of keeping financial markets functioning, but we saw it fall apart in other important areas, particularly around public health.

**Q** : Let's pivot to pension plans. In our view, they were already endangered. What do you think is on the horizon? Can pension plans be saved? Should they be?

**RO'H** : I agree that pension plans were already endangered, and with the crisis, they're even more at risk. This is particularly true with public plans, which have been chronically underfunded. Here's why: Germany's Iron Chancellor from the 19th century, Otto von Bismarck, designed the first pension plan to start paying off at 65 at a time when the average life expectancy was somewhere between 59 and 60 years. A pretty good deal for the plan sponsor, right? The problem is we haven't adjusted plans for dramatic increases in longevity

since then, and in fact, many public plans have promised additional benefits to those already in retirement.

But this economic crisis may be the tipping point at which we finally say, "We've got to make some changes here." I don't see a way of fixing public pension plans without everyone giving something up — beneficiaries as well as taxpayers — and instituting some kind of proportionate sharing of risk. Personally, I think we ought to use this crisis as an opportunity to fix pension plans, not do away with them.

**Q** : After this current crisis passes, what changes do you foresee in the way people work and in the way people invest?

**RO'H** : First, as an institutional investor, particularly an asset owner, you need to make sure you have enough liquidity to rebalance back to your policy asset allocation should you wish to do so. Second, I believe there will be a greater focus on capital resiliency as opposed to capital efficiency alone. You can't predict black swans, other than you know the unexpected will happen. Take the airline industry: they've had a black swan every decade of this century — 9/11, SARS and now Covid-19. That suggests that airlines and aircraft manufacturing probably should be operating with higher levels of capital, to name just one example. Investors and boards alike should not focus just on capital efficiency without asking also about capital resiliency. I believe we will see much more focus on capital resiliency and investors getting back to fundamentals and looking more at working capital.

In terms of how we work, we've learned a lot. On the positive side, I think you'll see a much more rapid digitization and adoption of automation than you would have seen otherwise. At State Street, we had always had a fair number of employees working from home regularly, but it was an accommodation for their schedules as part of strategic workforce management. I do think working from home will be very much part of our repertoire. But, it has its limits. For existing employees doing ongoing work, I think that work-from-home works. But I do worry about how to onboard new people to the company and how to foster

Q:

and instill a high-performance corporate culture when we encounter new colleagues as squares on a screen as opposed to teams sitting around a conference table or gathered around the coffee machine.

I also worry about the pace of innovation in a virtual world, because by definition innovation requires looking at old problems in new ways. Without effectively assimilating new people — or people new to the problem — into the mix, problem-solving will be harder. Ultimately, I don't see the world moving to permanent work from home, but I think you'll see much more flexible arrangements, which is great for all kinds of reasons: time management, the easing of traffic in major metropolitan areas and greater flexibility with housing prices. I must say that what I've seen from our employees in this rapid shift to work from home has been truly heroic. As always, they prioritized taking care of our clients even under the most extraordinary circumstances.

**Q** : One thing we've learned in this crisis is that without data, you're dead in the water. Is State Street looking to increase its investment in data?

**RO'H** : Data has emerged as truly the world's most valuable resource. Our acquisition of Charles River was underpinned by a belief that if we could deploy what we call a "data lake" readily available as a normalized and searchable single source of truth, we could serve our clients better and help them achieve better investment outcomes. And if this crisis has demonstrated anything to us, it's that this vision and investment thesis were correct. The best decisions require high-integrity data available everywhere even from home. Data helps our clients move faster and deliver results at a lower cost, so the outcomes are going to be better.

**Q** : As an industry we all want to find the next big thing. Where do you think we should look for innovation that will help change the world for the better?

**RO'H** : Artificial intelligence tops the list, because I think there's much more that we can develop. While robotics are already integrated into manufacturing, I think post-Covid, we'll see robotics become much

more prevalent in the service industries.

In all areas, I think innovation will come from this intersection of the machine and the human. You can see it in action across the UC campuses: you've got great machines and even greater minds programming the machines. There are going to be so many more opportunities and innovations there.

In fact, the crisis is driving a great experiment at UC and other universities in terms of education during a pandemic. I think there will be some great innovations as a result in how institutions teach and how students learn.

**Q** : The financial industry seems to finally be waking up to the importance of ESG. What is State Street doing around diversity, equity and inclusion?

**RO'H** : In terms of incorporating environmental, social and governance issues into risk analysis and investment frameworks, I think the industry has recognized that these are material to a company's ability to generate long-term value. ESG is a great framework for thinking about long-term risks and opportunities. The pandemic has only reinforced the connections between resiliency and sustainability and the importance of long-term thinking.

When it comes to diversity and inclusion, I think there's a growing admission by financial services firms that we have a problem — and there's something we can do about it. At State Street, it's been a time of incredible introspection for us in the wake of George Floyd's death and the serious conversations happening around race and racism. But we have made dramatic improvements with women since our Fearless Girl campaign around gender diversity at the board level forced us to hold ourselves accountable for female leadership at State Street. We now need to do the same for Black and Latinx employees. We intend to use what we're learning to make the changes needed to improve our own practices. It pains me to think that it took the deaths of so many people to get us all to wake up. But the fact that we have woken up is a good thing. Now we need to act.

**№3**

DOUG LEONE

Global Managing Partner  
Sequoia Capital

*Founded in Menlo Park, California in 1972, Sequoia Capital is an iconic venture capital firm that backs company founders early and at every stage of growth. Today those companies have an aggregate public market value of more than \$4 trillion. Sequoia is also UC Investments’ oldest partner; we’ve worked together for nearly 40 years. Sequoia’s Global Managing Partner Doug Leone brought his well-known straight talk to our conversation about the evolution of the venture capital world and what to look for next.*

**Q** : Let’s start off with the proverbial elephant in the room. You’ve been a partner of UC Investments since 1981, but a few years ago, our status as a public university got in the way of us doing business together. Can you talk about the challenges in our relationship and how they were overcome?

**DL** : We parted ways with a class of investors that had issues related to the Freedom of Information Act (FOIA), of which UC was one. But over time, things changed. First, the regulations evolved a little bit, so you could now assure us that company-specific information wouldn’t be publicly released. Second, Jagdeep (Singh Bachher) came on board, and he was aggressive in pursuing a restart of the relationship, and he deserves a lot of the credit for us becoming partners again. And he’s now one of my trusted partners, one of just three or four clients I call for advice prior to launching a new product or when I need help.

**Q** : In your 30+ years at Sequoia, you’ve seen a lot of change in the world

of venture capital. Opportunity doesn’t only reside in the Bay Area, it’s all over the world. How has this changed the way Sequoia operates?

**DL** : We used to invest in technology between San Francisco and San Jose. The opportunities were few, and the competition was limited. It was as if we were at a riverbank, with our fishing rods baited with better worms, and we were staying out fishing longer than our competitors. We caught our unfair share of fish. But then technology went from being systems and chips to being ingrained into every market sector: travel, shopping, you name it. All of a sudden, the river became an ocean that was full of more fish. But the number of fishermen also increased. So instead of fishing rods, we had to switch to nets. We had to increase our reach and we devised ways to work with partners and programs which would help us find good things. So we created our own seed fund, and at the same time, we vertically integrated into seed, venture, growth, global growth and public. We wanted to make sure we could catch the best companies as early as possible, work as closely with the very best founders, and apply our resources to help them build a business. The old “rod-in-the-river” model just did not work anymore.

**Q** : What about founders and company-building over the past 20 years or so? How has that changed?

**DL** : It’s changed a lot. When we invested in technology, such as semiconductors and systems, founders used to be engineering directors at companies such as Cisco, which means they had lots of previous experience. But would that same experienced engineering manager come up with a company where you let a stranger sleep in the spare room in your house (Airbnb)? That is a novel idea, usually from the mind of a 20 something person. But there’s the catch: even though that founder may have the flash of genius, her level of business experience is a lot less than someone with 15 years of operating experience. As a result, we had to invest heavily within our partnership into resources that could help that founder in their company-building efforts.

Another change is we’re all connected thanks to products such as the browser and the iPhone. You no longer have the luxury of building a business slowly. You have to run a lot faster and doing so requires more capital than growing slowly. It has never been more expensive to grow a business, as you have to run like crazy,





given the speed of information transfer and the resulting competitive pressures.

**Q** : It also sounds a lot riskier for investors.

**DL** : Yes, it is riskier, but the upsides have never been bigger, and so it has all worked out, so far.

**Q** : So why are there suddenly so many seed investors?

**DL** : Most of the companies in which we invest today do not build incredible amounts of technology. For example, an

e-tailer is a technology flavored company, not a deep technology company. For this class of company, one can build a prototype in a weekend, going from nothing to something in record time. A small seed investment can fund this effort. There have also been a ton of people who have exited companies, made a lot of money and are looking for ways to invest \$100,000 on day zero. Many former Google, Facebook and Amazon employees are seed investors.

**Q** : What are you most excited about now?

**DL** : At this moment in time, the consumer market has slowed down a bit. The number of apps on your phone hasn't changed very much in the last few years. But the B2B market is vibrant and will remain so for a while. One trend is technology companies bypassing the chief information officer and going right to the business user, helping them to be as productive as possible; the "low code, no code" trend fits into that. The second trend, which is probably even bigger, is the AI layer on top of a business application that makes mere mortals more efficient. Today, it's not about the overwhelming amounts of data, but it is about adding intelligence that turns that data into actionable information.

**Q** : How is Sequoia prepared for the changes coming in the next 10 years?

**DL** : First of all, it's important to understand that one of the truisms of technology is that we live in a world of accelerating change. Therefore, the status quo is, by definition, the incorrect way to attack the problem. In fact, the status quo is a sure-fire formula for failure. We've evolved over the last 48 years by going into geographical locations that matter in a world that's more interconnected. While we invest all over the globe, we now have offices in the US, China, India, Southeast Asia and Europe. And we are vertically integrated. Our \$8 billion fund gets a lot of press, but the real strategic parts of the business are the \$180 million seed fund and the \$650 million venture fund, because meeting a founder early is one of the keys to our success. I'm not going to disclose what we are doing internally to get prepared for 2030, but you should assume that we're not standing still. Because we know that we may fail when we try new things, but we also know if we don't do anything, we will certainly fail.

**Q** : One of UC Investments' 10 pillars is "Less is more." Can you talk a bit about the size of your team as compared to other firms?

**DL** : From the U.S. view, we have made the decision that we do not want to transact. If someone were to bring in a company and say, we can invest \$30 million, and we are guaranteed to turn that into \$90 million in a couple of years, we wouldn't make that investment. Our returns are driven by the power law, both in venture and in growth investing. Turning 10 into 50, or 30 into 90 is not how you get there. The way you get there is by backing monster companies, and

*(Jagdeep's) now one of my trusted partners, one of just three or four clients I call for advice prior to launching a new product or when I need help.*

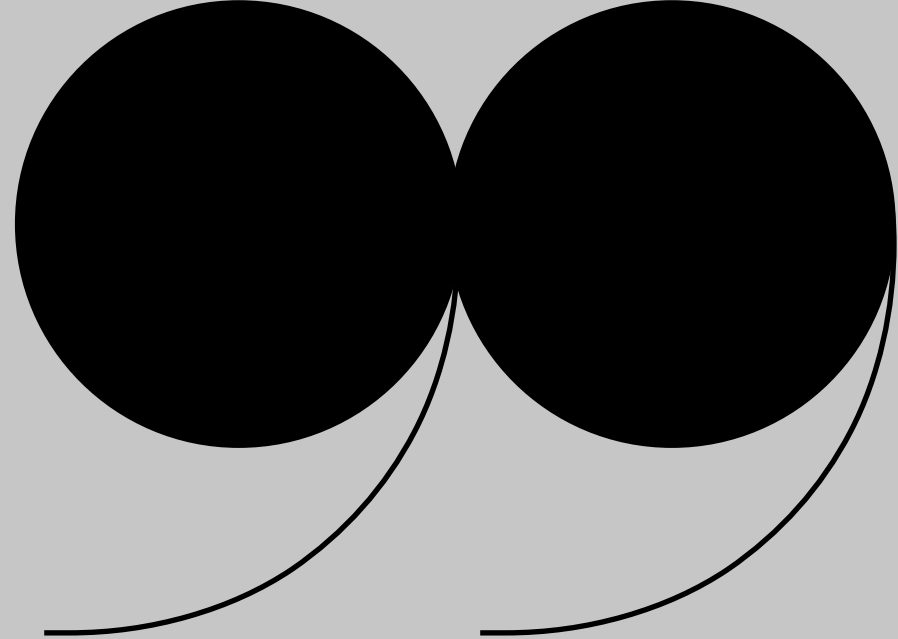
**DOUG LEONE**

that means you have to get to the best founders as early as possible. And if that's the business you want to be in, you do not need 45 associates, 32 VPs, and so on. All you need is a handful of people, probably fewer than two dozen, to network like crazy for venture investing, and to develop a list with fewer than 50 companies to track for growth investing. And that's it. When you are chasing deer do not let rabbits distract you.

**Q** : Could you give us a take on Sequoia's culture and the changing face of leadership?

**DL** : At Sequoia we love to hire the underdogs, the misfits, the immigrants and the outliers. We put these people in a very trusting environment and teach them how to use the "we" pronoun. Our first tenet is performance and our second is teamwork. We work as a team, always. When there's a win, it's our win. When there's a mistake, it's our mistake. And this includes the people who make us lunch, to whom you better show the highest level of respect. No one is incentivized to be the lone wolf here.

One of the things that irritates me about the word culture is that many leaders use it as an excuse to not pay their people fairly. You can have all the principles of culture you want, but at the end of the day, everybody needs to share in the winnings. They need to be paid a lot during great years and then everybody can suffer a little bit in the lean years.



**Q** : Can you say a few words about the lack of diversity in tech?

**DL** : It's clearly nowhere near where it needs to be. We have made some progress as it relates to women, and we are pleased that we have been able to hire a number of exceptional women investors in recent years. Today, we have approximately 25 women investors throughout our partnership and five in the U.S.

But there's no question that we need to do better, especially when it comes to underrepresented minorities. We've made the decision that we're going to go look for talent in all the places we haven't looked before, because it's the right thing to do, both at the human level and at the professional level. We're taking a long-term view and trying to do everything we can to address this issue so we can build the inclusive future we all want, while still generating strong returns. We are also going to contact a few of the historically Black colleges and universities (HBCUs) and invite them to be our limited partners in the next fund cycle.

**Q** : The University of California is one of the biggest innovators in the world, and we like to invest within the family. Where would you advise us to invest in the UC ecosystem?

**DL** : First of all, you are sitting on a gold mine of engineering and scientific talent. I would want to know what's going

on in the university to gain differentiation against other limited partners and to find investment opportunities in which I can co-invest with venture firms. I might even allocate a headcount to this effort because it is not something you can map out once, but it is a dynamic situation where you constantly have to keep up with new developments.

Second, I would make sure the current leave-of-absence policy for UC is liberal so that people with these innovative ideas can take the time they need to get them off the ground. You've got to run a university, I get it. But find the happy medium that serves both purposes.

Third, I would have liberal licensing policies. Differentiate between what you can license to a pharma company for cash versus what you should license, for little ownership, to a new startup which is venture funded. These successful professors come back and give major gifts to the university.

Fourth, I would make sure to look at cross-functional efforts; not just computer science, but also biology, and chemistry, materials and data science. The interconnected nature of our world means that multi-threaded research can lead to wonderful discoveries.

Finally, I do think UC is underappreciated by the industry, and you can increase its competitive advantage by helping turn research projects into meaningful companies.



**THE UC INVESTMENTS**

**WAY**

2

MADE

*When life as we knew it came to a screeching halt this year, we didn't have a playbook for what to do next. No one did.*

THIS

2

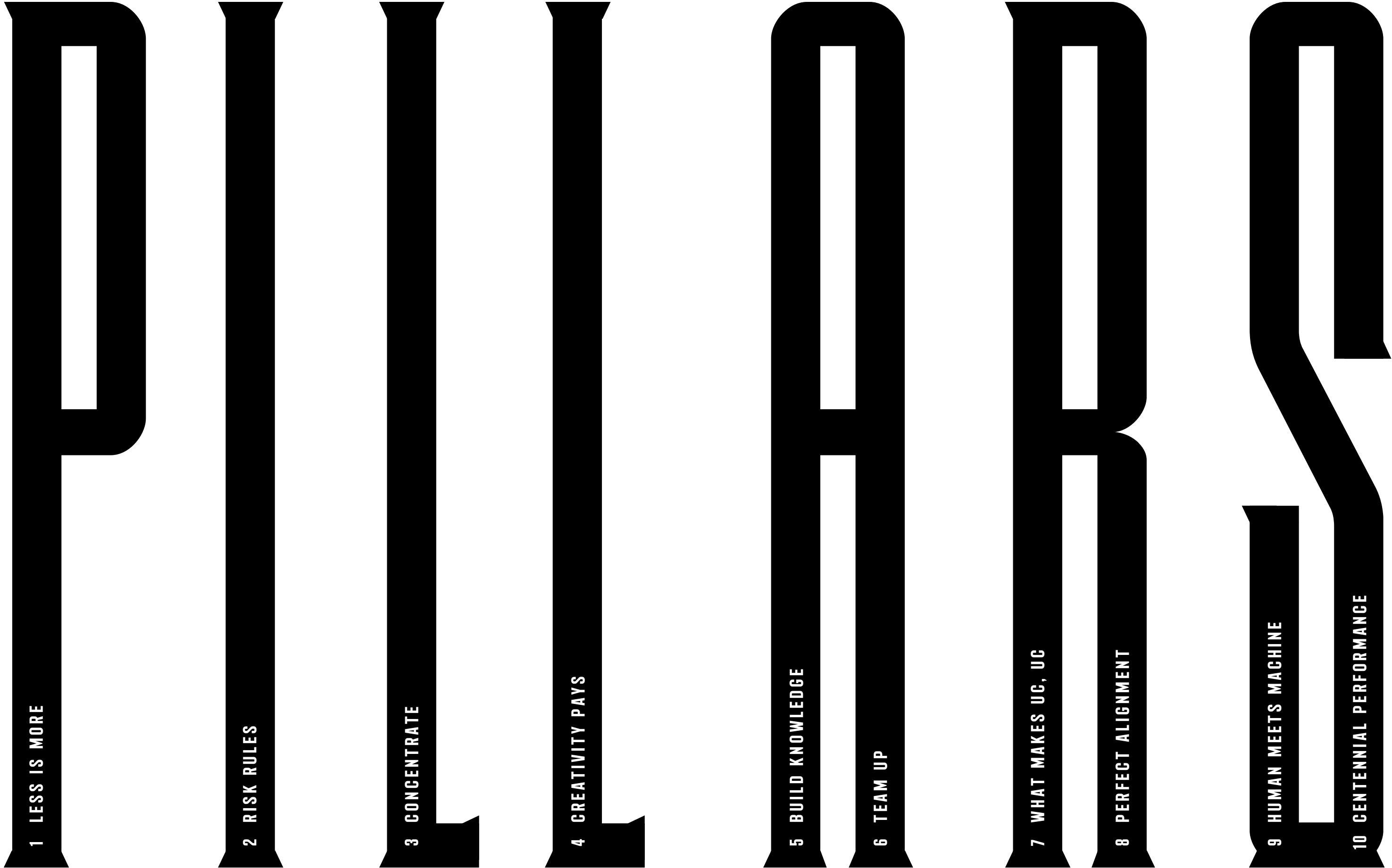
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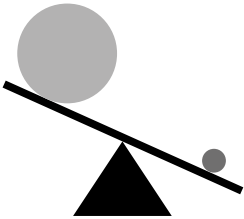


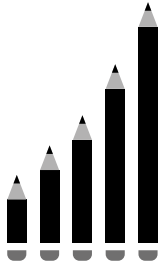
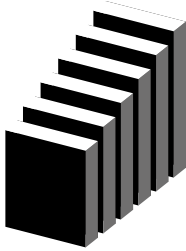
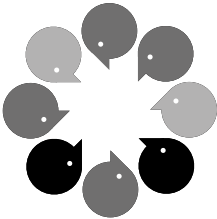
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What we had was more powerful: a set of principles. The 10 pillars of the UC Investments Way act as our North Star to guide us no matter how turbulent the waters, how dark the night, or how foggy the future might appear. The UC Investments Way is what kept us strong and steady as we met a once-in-a-century challenge. And it is what will keep us moving boldly forward as we embrace the innovation and opportunities that crisis can bring.

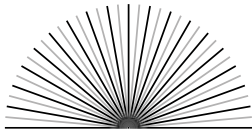
MOMENT

O



<div>LESS IS MORE</div> <div></div> <div><p><i>“You have to work hard to get your thinking clean to make it simple. But it’s worth it in the end because once you get there, you can move mountains.”</i></p><p>STEVE JOBS</p><p>Fewer assets, higher quality, better performance. Experience has shown us the value of lean, high-performance teams working collaboratively to manage a concentrated, high-conviction portfolio. We’ve greatly reduced the number of external managers we use and the number of line items on our books. That makes it easier to understand what we own, especially in a crisis, and gives us fewer decisions to make. The result is a small, agile team laser-focused on areas where we can outperform the market.</p></div> <div>1</div>	<div>RISK RULES</div> <div></div> <div><p><i>“In investing, what is comfortable is rarely profitable.”</i></p><p>ROBERT ARNOTT</p><p>With opportunity, there is always risk. We’ve instilled that truism into our team members, and now we think of ourselves as risk managers, not asset managers. To bridge perspectives among asset classes, we speak the same “risk language.” From our partners, we demand transparency into the assets we hold, which allows us to assess the risks we’re taking across all our portfolios. We don’t just measure risk, we manage it with a forward-looking approach. That’s why we understand that risk is dynamic, human and long-term.</p></div> <div>2</div>	<div>CONCENTRATE</div> <div></div> <div><p><i>“Wide diversification is only required when investors do not understand what they are doing.”</i></p><p>WARREN BUFFETT</p><p>Know what you own, well. We construct our portfolios from a concentrated set of assets that we understand deeply, as opposed to many assets that we would be hard pressed to describe to our mothers. By limiting the number of investments in our portfolios, we believe we can reduce risk and increase returns.</p></div> <div>3</div>	<div>CREATIVITY PAYS</div> <div></div> <div><p><i>“The person who goes farthest is generally the one who is willing to do and dare. The sure-thing boat never gets far from shore.”</i></p><p>DALE CARNEGIE</p><p>We believe that building a culture of innovation means opening your mind and sometimes charting new paths toward performance. We think like entrepreneurs, celebrating the wins and learning from the flops. We’re developing a dedicated innovation team within our organization — a rarity in institutional investment — to incubate, validate and develop unique pools of capital that leverage our UC competitive advantages.</p></div> <div>4</div>	<div>BUILD KNOWLEDGE</div> <div></div> <div><p><i>“An investment in knowledge pays the best interest.”</i></p><p>BENJAMIN FRANKLIN</p><p>We are always on the look-out for opportunities that others might not have noticed or simply passed by. That’s why it’s critical to build knowledge — through connections, collaborations and the occasional deep dive into research — that can give us an edge. We’re fortunate to operate within one of the world’s most knowledge-rich university systems and we’re delighted to capitalize on that.</p></div> <div>5</div>	<div>TEAM UP</div> <div></div> <div><p><i>“Talent wins games, but teamwork and intelligence wins championships.”</i></p><p>MICHAEL JORDAN</p><p>We’re a collaborative bunch. And we realize that to be successful, we must attract the highest- caliber people aligned with that culture of honesty, humility and respect. We put people first, not lone wolves. We prize diversity of thought and background and share the University of California’s core values. That makes it an honor and pleasure to work in service of the university’s long-term investment goals.</p></div> <div>6</div>
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WHAT MAKES UC, UC



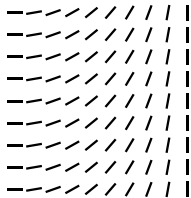
“If you don’t have a competitive advantage, don’t compete.”

JACK WELCH

We are integrated within one of the world’s premier public research universities. We manage its money, while its students, faculty, staff and alumni discover and create. This unparalleled innovation ecosystem is a steady source of high-quality investment opportunities we can mine, while its people — including world-class experts in every discipline and field — offer knowledge and insights that bolster our success.

7

PERFECT ALIGNMENT



“Control your expenses better than your competition. This is where you can always find the competitive advantage.”

SAM WALTON

As long-term investors, we choose our partners with particular care. Without trust and transparency, a long-term relationship won’t work. Costs matter, of course. If external managers won’t provide us with a detailed accounting of how they make their money from our money, we pull our capital and walk. Perfect alignment means win-win — in performance, collaboration, and goals — and the costs tend to take care of themselves. By demanding complete transparency, which gives us understanding of our risks, we avoid a misalignment of interests and relationships cut short.

8

HUMAN MEETS MACHINE



“You are cruising along, and then technology changes. You have to adapt.”

MARC ANDREESSEN

With a small team investing large sums of money, we rely on technology to gather data that drives our returns and blends our human intelligence with that of machines. It makes us better, and faster. We’re just a short drive from Silicon Valley and fully recognize the benefits, and near limitless future, of tech. Now we’re working with innovative startups to better understand and manage our portfolios and gain more access to unique markets around the world.

9

CENTENNIAL PERFORMANCE



“We should all be concerned about the future because we will have to spend the rest of our lives there.”

CHARLES FRANKLIN KETTERING

We think of ourselves as an organization that invests for the next 100 years. We’re not in this to make a quick buck. Instead, we are always mindful of our fiduciary duty to help ensure the success of the University of California for generations to come. Our centennial orientation means our decision-making considers the long-term, fundamental challenges and risks facing society such as climate change, diversity, equity and inclusion, and corporate governance.

10

“We created the 10 pillars of what we call the UC Investments Way to guide our long-term investment strategy. And over the years, these guideposts have become something bigger. They’ve endured because they work. They underpin our success.

The UC Investments Way embodies our values. It’s our culture. The 10 pillars keep us grounded when times turn tough. They help us find common ground when we collaborate among ourselves and with our partners. We codified the UC Investments Way so that every stakeholder of our great institution can easily understand who we are, what we do and why we do it.”

JAGDEEP SINGH BACHHER

When Dr. Carrie L. Byington took on her position as UC Health’s executive vice president on October 31, 2019, she had no way of knowing that her first three months on the job would present her with the challenge of a lifetime.

But as an infectious disease expert (she chaired the Infectious Diseases Advisory Group for the U.S. Olympic Committee during the Zika virus outbreak), there was perhaps no one better to be at the helm when the Covid-19 pandemic hit the state—and the University of California.

So, when UC Investments CIO Jagdeep Singh Bachher sought out Byington in early January 2020 to gain insight into what would become a global pandemic, she was ready. “Though the country hadn’t yet come to grips with what was in store with the virus, I told Jagdeep the threat was real, that it would disrupt markets worldwide, and that we needed to be prepared to re-envision how we serve our community during and after the pandemic,” Byington says.

The collaboration between the two soon deepened. When the antiviral Remdesivir was shown to be a promising treatment for Covid-19, Byington asked Bachher if he could make an introduction to the biopharmaceutical company Gilead Sciences to ensure UC medical centers had access to the drug. “One of our professors, Arie Beldegrun, sold his company Kite Pharma to Gilead in 2017, so I thought he might be able to connect us to senior leadership,” says Bachher. “Arie quickly made the connection, and Gilead’s chief financial officer called me back right away. They were eager to help UC.”

Soon after, UC was able to get expanded access (called “compassionate use”) to the drug, and that connection also led to all five UC medical centers participating in

the clinical trial of the drug that helped get the treatment to market.

And when Byington needed help getting more Covid-19 tests and treatments for the system, it was UC Investments’ strong relationships with leading suppliers that got her in front of the people who could make a profound difference in the UC system’s ability to meet the challenge.

“Being able to test was vital for protecting our staff and our patients,” says Byington. “But there was stiff competition for tests in the marketplace. Jagdeep quickly got us a meeting with Roche, and the very next day they agreed to supply tests for our entire system. It was a huge win, particularly for our most underserved patient population.”

Once these two important initiatives were underway, Bachher approached Byington to vet the more than 300 UC Health research projects related to Covid-19. Working together, they were able to advance those with the most promise, and now Bachher is looking for ways to connect these innovations with UC Investments’ corporate partners and venture capitalists.


“Covid-19 is a new problem and so it requires new solutions that come from innovative thinking,” says Bachher. “Because of our relationships — both with our research institutions and our investors — we’re in a great position to help move those innovations through the pipeline to market.”

Adds Byington, “UC is the largest academic health system in the country, and coming in at this unprecedented time was daunting. I’m so gratified to find partners like Jagdeep, and I really feel that working together, the entire UC system has risen to meet the moment.”



Dr. Carrie L. Byington

**LARGEST ACADEMIC HEALTH SYSTEM IN THE UNITED STATES**

  
*Largest health sciences instructional program with nearly 15K students in 20 health professional schools on 7 campuses*

**5**  
*Nationally-ranked academic medical centers (including UCLA (#4) and UCSF (#8)\*)*

**12**  
*Hospitals*

**9,000+**  
*Faculty physicians*

**10,000+**  
*Nurses*

\*U.S. News & World Report 2020-2021 Best Hospitals



# Nobel Cause

## SIXTY-EIGHT UC FACULTY AND STAFF HAVE BEEN AWARDED 69 NOBEL PRIZES — SO FAR

*That includes the 2020 Nobel Prize in Physics shared by UCLA’s Andrea Ghez, a professor of physics and astronomy, and Reinhard Genzel, a UC Berkeley professor emeritus of physics and astronomy, for discovering “a supermassive compact object at the center of our galaxy.” Winning the 2020 Nobel Prize in Chemistry was UC Berkeley biochemist Jennifer Doudna, who co-developed CRISPR-Cas9, a genome editing breakthrough that has been called the discovery of the century for its powerful implications.*

*More than 25 UC alumni have won Nobel Prizes as well, including UC Davis alumnus Charles Rice, who won the 2020 Nobel Prize in Physiology or Medicine for the discovery of the hepatitis C virus.*

As we often say at UC Investments, our goalpost isn’t short-term returns. We invest for the long term — in financial assets, of course, but in people, too. And so we’re always looking for new ways to give our stakeholders the opportunity to grow, stretch and thrive — to build knowledge that will enrich their lives and through them, all of us.

One such opportunity can be found at an extraordinary gathering of Nobel laureates from around the world that takes place every summer in Lindau, Germany. Not long ago, UC’s Chief Investment Officer Jagdeep Singh Bachher had the opportunity to attend as a guest.

“It was a life changing experience, something I’ll never forget,” Bachher said. “And though several UC students have attended Lindau over the years, I realized our office could do something to give more of our students the opportunity.”

The Lindau Nobel Laureate Meetings offer invitation-only lectures and small

seminars by some 40 Nobel Prize winners. The organization also selects about 600 university students and postdoctoral fellows to attend the meetings, not only to learn from the Nobel laureates, but to build relationships with international peers.

Bachher’s idea came to fruition this year with the creation of a highly competitive fellowship that would cover travel and attendance costs for UC’s best and brightest. The selection process is rigorous: students must submit an essay, letters of recommendation, an evaluation of their research accomplishments, and approval by the Lindau meetings organization in Germany. A work group of UC administrators and faculty winnows down the list of candidates, which is then approved by the UC president and the CIO.

In March 2020, UC Investments announced the inaugural class of the UC President’s Lindau Nobel Laureate Meetings Fellows, an accomplished and

diverse group of 20 young scientists, scholars, and economists selected from nine UC campuses.

“This first class of UC fellows embodies the academic rigor and endless intellectual curiosity that is a hallmark of our university,” said UC President Janet Napolitano. “I anticipate that this rare opportunity to directly engage with Nobel laureates and their global peers will spark ideas and forge lasting connections. The fellows benefit, and so does UC.”

“I am so pleased that the president’s office has allocated funds to make this a possibility for many diverse young scholars throughout the UC system,” said selection committee member Randy Schekman, the UC Berkeley professor awarded the Nobel Prize in physiology or medicine in 2013.

The fellows were set to travel to Lindau. Then a global pandemic intervened.

While the in-person event was canceled — no impromptu get-togethers,

Image source: Thomas Fisher Rare Book Library, University of Toronto

no spectacular landscapes of deep blue waters and Alpine mountains, no German beer — much of the content was moved online. The first week concentrated on the fields of medicine, physics, chemistry and physiology, with an emphasis on interdisciplinary research. A second week of the program centered on economic sciences.

As for the inaugural class of UC fellows, they are all invited back — in person — for the summer of 2021.

And UC Investments will continue to sponsor fellows every year.

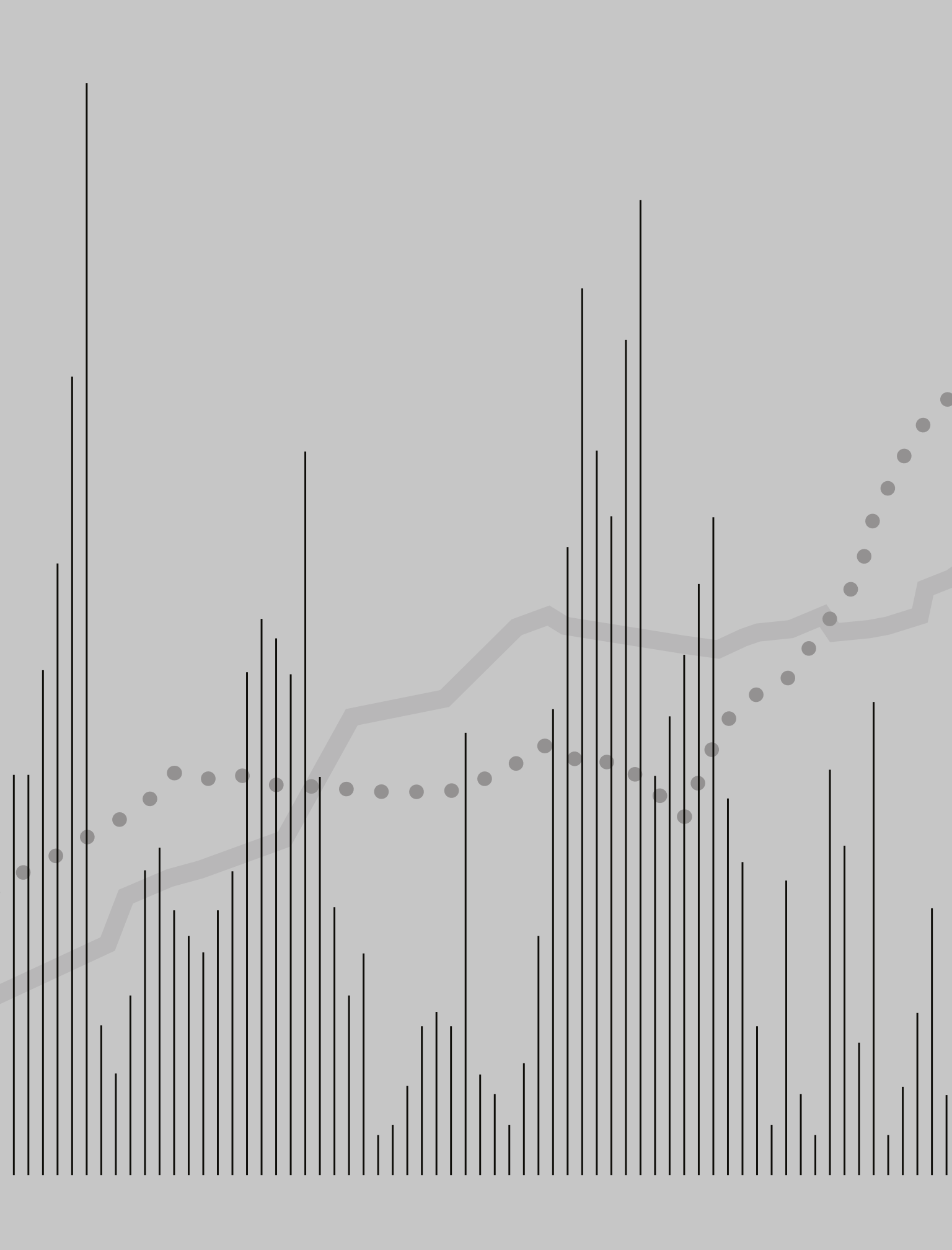
“There is no better investment than in the promise of young minds intent on making our world better,” said Bachher. “Our office hopes to sponsor this fellowship for many years to come and to continue to be inspired by the accomplishments and caliber of UC students and postdoc researchers who may one day win a Nobel Prize themselves.”

## THE 2020 UC PRESIDENT’S LINDAU NOBEL LAUREATE MEETINGS FELLOWS

David Boyer (UCLA)  
Kevin J. Bruemmer (Berkeley)  
Priya Crosby, Ph.D. (Santa Cruz)  
Tomas Gonzalez Fernandez, Ph.D. (Davis)  
Samantha Marie Grist, Ph.D. (Berkeley)  
Yuki Kobayashi, Ph.D. (Berkeley)  
Dequina A. Nicholas, Ph.D. (San Diego)  
Michelle M. Nuño (Irvine)  
Jonas Oppenheimer (Santa Cruz)

Akshay Paropkari (Merced)  
Andrew J.E. Rowberg (Santa Barbara)  
Nicole S. Michenfelder-Schauser (Santa Barbara)  
Bryan Scott (Riverside)  
Lauren M. Sheehan, Ph.D. (Irvine)  
Leslie Allyn Simms (Davis)  
Sarah M. Tashjian, Ph.D. (UCLA)  
Xinting Yu, Ph.D. (Santa Cruz)  
Neil Bennett (Irvine)  
Will Gorman (Berkeley)  
Diana Van Patten Rivera (UCLA)

Coordinators for the fellowship program are UC Investments’ chief of staff, Dianne Klein, and Robert Louis Powell, III, distinguished professor of chemical engineering, food science and technology at UC Davis.



“We strive to be the most data-forward pension and endowment on the planet.” **ARTHUR R. GUIMARÃES, UC INVESTMENTS CHIEF OPERATING OFFICER**

## A TRANSFORMATIONAL APPROACH TO 21ST CENTURY INVESTING

Large institutional investors aren’t known for their ability to pivot, their innovative data platforms, or their investment and operational risk tools and practices. And six years ago, UC Investments was sorely in need of all three. There was no investment operations and data team to speak of. Instead the team was focused on accounting, and compliance practices were weak. That forced our investment teams to do much of the work themselves. We were hardly alone. Most institutional investors have struggled to innovate and embrace new technology, relying instead on traditional accounting skills and evaluating investment decisions after the fact based on performance.

But when you’re managing \$130 billion in a fast-moving market, you need every competitive edge. And Chief Investment Officer Jagdeep Singh Bachher knew he had to shake things up. So he brought in Arthur R. Guimarães as chief operating officer to transform a team and find a modern technology stack that would meet the ever-changing demands of UC Investments’ multi-asset class portfolio.

This past year, as we and the rest of the world have been buffeted by a deadly pandemic, recession and civil unrest, these early investments in people and state-of-the-art technology have more than proved their value. Technology is only as effective as the

humans who use it, and that’s why it was so important to transition our investment operations team with people who could take advantage of the innovations the technology provided. With the right data systems in place, we can quickly gather insights critical to our internal clients, the 10 UC campus foundations who have sent us \$5 billion to manage on their behalf, as well as better integrate our environmental, social and governance (ESG) criteria into our investment process. Our small team is as driven by analyzing data as it is by crunching numbers. Today, our team has experts in:

- Data Management & Analytics
- Investment Transaction Support
- Operational Risk Management
- Investment Administration
- Client Relations

It was the powerful combo of “Human Meets Machine”— one of our 10 investment pillars — that allowed us

to meet the challenges of day-to-day operations once Covid-19 hit. Because we had built a culture of agility and innovation, our team members didn’t miss a beat when they started working from home in mid-March. And because we had invested in the technology, our systems were completely decentralized, meaning we transitioned seamlessly from moving money from our office in downtown Oakland, California to moving money from a team member’s kitchen table in the Bay Area suburbs. With the systems we have in place, we run daily reports that give us the data-driven insights we need to make the right moves at the right time.

This was a direct result of our CIO’s prescient belief that antiquated operations and compliance practices were not only a liability, but a drag on future investment success. Immediately after his arrival in 2014, Guimarães embarked on a massive effort to move the office from the costly, ill-fitting legacy technologies he inherited to a more holistic, modern and agile platform. He found a willing partner in Solovis, then an innovative fintech start-up (recently acquired by Nasdaq), and he led the effort to implement a data platform that made data inconsistencies, irregularities, undocumented assumptions and just flat-out-wrong data things of the past. At the same time, the new technology streamlined processes and provided a holistic portfolio view uniting investments, operations and risk teams. The whole process took just a little more than a year — a pace unheard of in the institutional investing world — and at one-tenth the cost of other modern tools in the marketplace. In fact, the expected 10-year cost savings is \$20 million. Compared with many legacy system implementations across the globe, cost savings over 10 years would be closer to \$100 million.

True innovation and a break from the status quo are paramount to being successful investors. We’re proud that over the past few years, we’ve transformed our investment operations team into a nimble, forward-thinking group of experts and adopted a holistic approach to technology, one that will reap a tremendous return on investment for the University of California.

At UC Investments, simplicity sustains us. It underpins our 10 investment pillars, guideposts that are easy to understand and impossible to forget. In a complex global investment landscape, we pare down options, demand transparency and stick to what we know well.

“Risk Rules” sums up how we assess — and reassess — every investment opportunity. It is core to our governance and culture of compliance. This risk mindset has served us well as we have managed the University of California’s assets during a deadly and devastating pandemic, a market drop unseen since the Great Depression, a bazooka of federal stimulus, and a baffling disconnect between Wall Street and Main Street. Our approach to managing risk is forward-looking, dynamic and human.

While the past may be prologue, when it comes to managing risk, it should never be prescriptive. Today’s market is not the market of the past. Leverage and liquidity are different. There are new strategies and an emphasis on new instruments. Regulation and fiscal and central bank policy can shift. In the past two decades, we’ve lived through three major financial crises: the dot-com bust of 1999, the Global Financial Crisis of 2008 and now the novel coronavirus pandemic of 2020. We’ve learned many lessons, of course, but we don’t follow playbooks of the past. It has often been said of this latest crisis that organizations have been forced to “build the plane as they are flying it,” but at UC Investments we are hardly flying blind. We have had six years to prepare.

**TRANSPARENCY** — Know what you own. There’s hardly an investment adage simpler than that. Yet one of the most salient lessons of the Global Financial Crisis was that too many investors did not know what they owned — that is, until the risks hidden in opaque investment

*“Our approach to monitoring risk is forward-looking, dynamic and human.”*

**RICHARD BOOKSTABER,  
UC INVESTMENTS  
CHIEF RISK OFFICER**



products made themselves abundantly clear. Today, most organizations still don’t invest in understanding what they own, nor the underlying risks, instead relying on a custodian bank to maintain a list and measure performance. But that information is rarely available in real time, essential during a crisis such as the one we’re in.

When Chief Investment Officer Jagdeep Singh Bachher arrived at the University of California in 2014, the situation at UC Investments was much the same. There was no internal risk team. There was no centralized database of the many — too many — assets, companies and financial instruments we owned. And we did not ask our partners for transparency.

There was much work to do. Many of our partners were uncomfortable providing the transparency we sought; those are the partners we no longer work with. And by eliminating partners who were doubling, or tripling, the risks we had been inadvertently taking, our portfolio became more concentrated, avoiding over-diversification. With far fewer partners and key investments in technology, we can now effectively manage our risk. We know what we own and where we are. We measure our risk in real time, critical to navigating a financial crisis that, as yet, has no end in sight.

**COMMON CULTURE, COMMON LANGUAGE** — At UC Investments, we are all risk managers. This is a mindset, part of a culture where all our investment professionals are fluent in the same risk language and share the same approach to risk. We think in terms of risk factors, for example, not only asset classes. We are aware of the state of the portfolio risk, and active in discussions of risk in those terms. The hallmark of a strong risk culture is thoughtful discussion across all investment areas, particularly when the markets seem to be going off the rails. And, finally, all of this must lead to action. If the process simply stops with risk reports generated and recited in weekly investment meetings, it is a risk ritual, not a risk culture.

**JUDGMENT** — Collect and study the data, consult and seek advice, weigh the risks, and then decide. This is the management part — the human part — of risk management that no algorithm can handle

# RISK

## MANAGEMENT

on its own. This human decision-making is born of experience, talent, conviction and, yes, gut. Investment decisions, especially in the midst of crisis, take time and deliberation, and the resulting actions require agility and focus. Reducing the number of our positions has confirmed to us that “Less is More,” another of our 10 pillars that informs our risk philosophy. At UC Investments, this has been the risk story to date during the crisis of 2020.

**WHAT’S NEXT?** — As the inventor Charles Kettering said, “We should all be concerned about the future because we will have to spend the rest of our lives there.” We need a mindset and technology that accommodates this unerring truth. And because the markets discount now for events in the future, some of the long-term issues will manifest as risks in the shorter-term. For example, the most severe outcomes from climate change might not be realized for decades, but prices will quickly readjust once the market wakes up to these long-term effects.

The short time frame of standard risk models comes from one characteristic — one could say flaw — that has persisted since they were introduced nearly 30 years ago: they measure risk only through a rearview mirror. Typically, they look at the variability of returns over the past one or two years to assess risk going forward. Risk in the next few days or months might generally be similar to the risk over the past year although, unfortunately, not when it really matters.

But however well the standard risk models work for the short term, they are not appropriate for the long-term mission of UC Investments as an asset owner. In contrast to the monthly or even daily focus of banks and hedge funds, the time horizon of a pension is measured in lifetimes. UC Investments is focused on Centennial Performance, our tenth investment pillar. The University of California has been around for 152 years, and we must look toward risks over an equally long horizon. That is a difficult task, but certainly as a start we have to think beyond the next few months. The world will change and the markets as we see them today — and how they might evolve in the future — are not what they were in the past.

**CLIMATE CHANGE**

Seemingly lost with the current focus on the pandemic is the existential threat from climate change. Its effects will come to the fore over the next decades, but for market risk the implications are more immediate. As investors increasingly realize the inevitability of the longer term effects, they will reprice assets today. We have added climate change analysis to our risk systems, and, consistent with our environmental, social and governance (ESG) objectives, we have moved away from exposures in the path of climate change risk, most notably those related to fossil fuels.

**GEOPOLITICAL TENSIONS**

Although the U.S.-China trade war was the most visible, there were broad tensions in the geopolitical sphere. We monitored our China exposure — positions directly in China and other positions and risk factors that could be collateral damage. We were mindful of our non-U.S. positions generally, holding an overweight in the U.S.

**THE BULL MARKET**

We were in the longest market expansion in history. With the expansion has come increasing vulnerability, rising leverage and concentration and increasing illiquidity, in particular in the fixed income markets. This vulnerability led our decision to increase cash holdings over the course of the year.

**PRIVATE CREDIT**

Investors have sought out fresh corners of the private asset space, the dominant one being private credit. We created a new private credit asset class for risk management purposes, pulling this exposure into a single sleeve and placing limits on it. This bore fruit during March and April, when private credit experienced disproportionate losses.

**COVID-19**

The market vulnerability characterized by illiquidity and the concentration of positions became readily apparent in March. Fixed income markets seized up, nearing the point of failure, only to rebound with unprecedented action by the Federal Reserve. Risk remains asymmetric, the risk of a large drop greater than of a similar rise. Only the path of the pandemic, the future course of the Fed and stimulus, and the prospects for a vaccine, will determine when this asymmetry is mitigated.

**RISK  
CHALLENGES  
OF THE  
PAST YEAR**

## A BRAVE NEW WORLD

There was a time before the pandemic. For most of the year, geopolitics permeated the headlines and the pricing of risk. Leaders struggled with populism and great power competition. The pandemic exacerbated these and wider trends, exposed weakness in the resilience of nations and the global order, and accelerated the end of globalization as we know it. National and international responses to the health and economic crises highlighted weak leadership at the top and prompted alarm over an inability to deal with the much bigger climate emergency ahead. But not even a pandemic could stop a crassly timed oil price war or the new Cold War between the world’s two largest economies.

**AN EXTRAORDINARY YEAR** — In mid-2019 President Trump was in his pomp, dominating his party and brushing off lessons from the 2018 midterms. He reaped the benefits of delivering on campaign promises to his adoring core, and a still-firing economy won him the benefit of the doubt with enough of what was left of the political center. He wielded sanctions and tariffs, and in his unique way, conflated trade and foreign policy while targeting trade deficits and pursuing the interests of traditional manufacturing jobs even at consumers’ expense. He was abandoning (or rebranding) NAFTA, and edging toward a “great” trade deal with China. And he was making bold foreign policy moves: abandoning the Iranian nuclear deal and applying “maximum pressure” on Iran, withdrawing from “endless wars,” supporting Netanyahu’s strident Israel, meeting Kim Jong-un, encouraging

Venezuelans to oust Maduro, and roughing up “free-loading” allies. He claimed tactical successes and implied there was a strategy behind them. Impeachment ended what was left of bipartisan cooperation on Capitol Hill and proved the high-water mark of Republican party loyalty in the Senate. The president’s unorthodoxy continued to test the allegiance of his party’s senior echelons, and then a virus from distant Wuhan Province created a health crisis and questioned his ability to provide national or global leadership. The ensuing economic crisis removed his electoral ace card in the eyes of all but his most fervent supporters, and the killing of George Floyd in Minneapolis revived racial tensions and concerns about the president’s willingness, never mind ability, to unite. By mid-year, Joe Biden had been catapulted from deep in the field of Democratic candidates to a poll lead over Trump in the presidential race.

Overseas, opponents and bemused allies had begun to distinguish between Trump’s rhetoric and delivery and see predictability in policies devised primarily to appeal to his core. With U.S. global leadership and the 20th-century global order undermined, an emboldened China aggressively pursued Communist Party influence at home and abroad, North Korea tested nuclear bombs and moved inexorably toward intercontinental ballistic missile capability, Maduro endured thanks to Russia and Cuba and even Iran, Gulf states reached for non-U.S. allies, India legislated aggressively over Kashmir, Iran continued to fuel unrest from Yemen to Syria, Russia continued to

*The pandemic exposed weakness in the resilience of nations and the global order and accelerated the end of globalization as we know it... Across the world a stark choice emerged as Washington and Beijing each asked: “Are you with us or against us?”*



mask domestic weakness and triggered (with Saudi Arabia) an unsuccessful oil price war targeting American shale, and the European Union moved toward the strategic autonomy from the U.S. that France had always sought without the credible defense capability to make it real. But the U.S. did show leadership on one issue: China.

China continued to act with impunity in Xinjiang and Hong Kong, and toward Taiwan, India, and regional neighbors in the South China Sea. But these actions and its crude, ham-handed attempts to impose a narrative that China’s pandemic response had been flawless only served to elevate into the mainstream suspicions in the West of “China’s rise.” China’s increasingly urgent activities spoke to domestic pressures over its handling of the pandemic, and its impact on slowing growth that was already threatening Xi Jinping’s ambitious economic targets ahead of the Chinese Communist Party’s 2021 Centenary. These weighed on the delayed National People’s Congress, which strictly controlled pandemic-related debate, and rubber-stamped very modest economic targets and a draconian national security law that rode roughshod over treaty obligations and Hong Kong autonomy. Taiwan, where Chinese pressure unintentionally led to electoral success for President Tsai, was on notice; China’s offer of special status, just like Hong Kong, no longer looked attractive.

With the U.S.-China decoupling, the Cold War concept of spheres of influence re-emerged. Gulf states struggling with the toxic mix of “reform fatigue” and low oil prices looked to

leverage their sovereign wealth funds and courted transactional relationships with China and Russia. Southeast Asian nations were pushed into the U.S. orbit on issues of maritime sovereignty as China ignored the 2016 international court ruling and asserted sovereignty within the “nine-dash line” that encompasses 80 percent of a sea as large as the Mediterranean and the zones of neighboring states. In many places, notably Africa and Latin America, states realized the price of indebtedness to Beijing. But in Europe, a new “Geopolitical E.U.” determined to trust the power of trade to reset its China relations and influence “suspect” behavior. Across the world a stark choice emerged as Washington and Beijing each asked: “Are you with us or against us?”

The long awaited two-year Council on the Future of Europe was another victim of the pandemic, but the prospect of meaningful E.U. and Eurozone reform was increased by the pandemic’s health and economic impacts. The usual bars to meaningful change appeared negotiable in the face of an existential threat to the union. And as in the U.S., the prospect of green investment increased as political leaders struggled to keep up with enthusiasm for sustainable investment led by consumers and embraced by investors and industries. Brexit was done on January 31, and the United Kingdom and the E.U. set about finding a landing zone for their future relationship that gets smaller (and Brexit gets “harder”) as the December 31 end of the U.K. transition period nears.

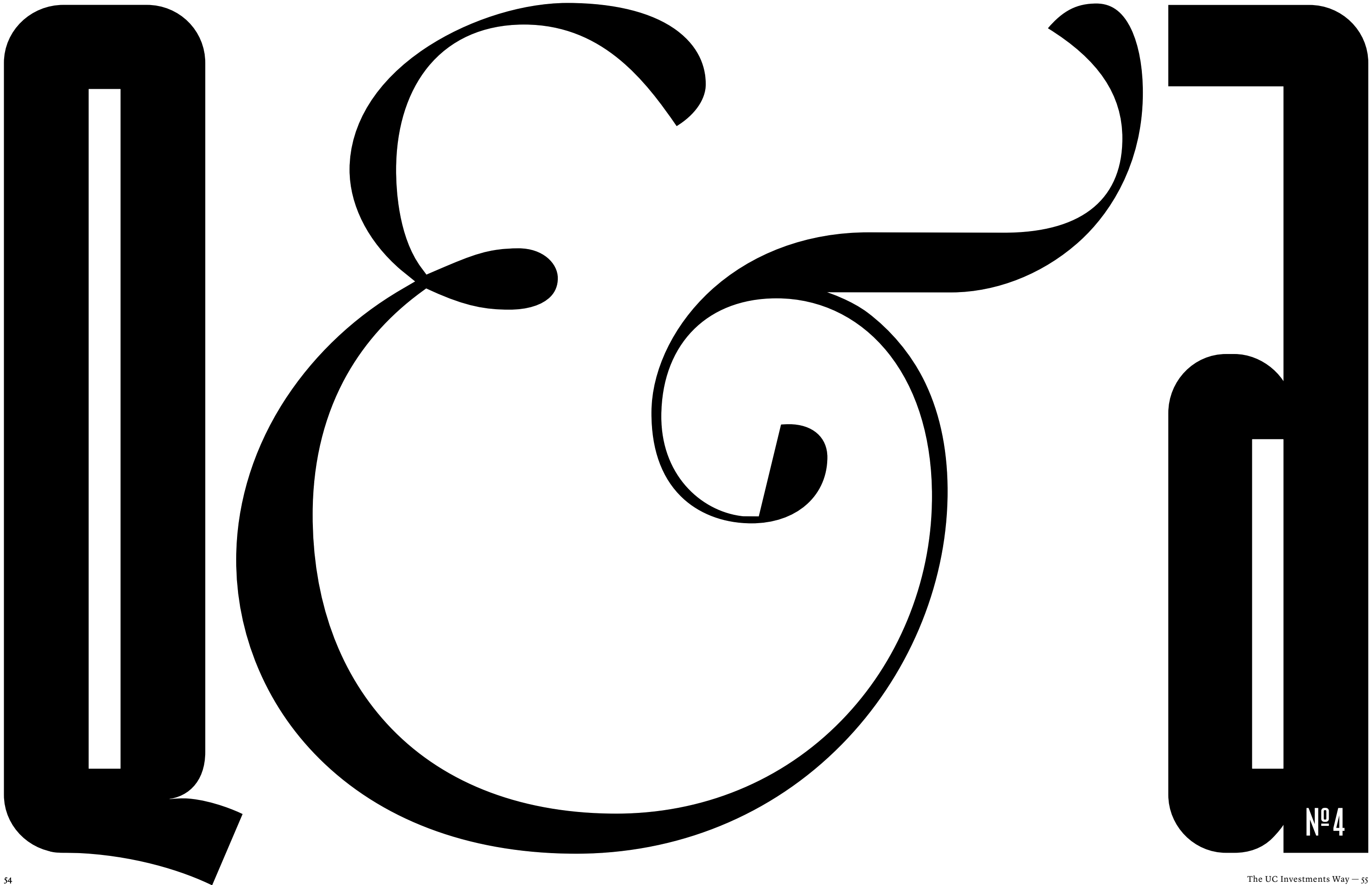
**PANDEMIC** — The human impact of the pandemic will not be known for some time, especially in fragile states that have minimal health and social care, but it was quickly recognized as the greatest peacetime disruptor of global economic activity in a century, and that some of the economic and societal change would be permanent. The pandemic accelerated national, regional and global debates already underway on rising income inequality, supply chain risks, the return of great power politics, and the ascendancy of China. Governments, especially those without experience of viruses such as SARS and MERS, struggled with the speed of the crisis, hampered by a lack of clarity over events in Wuhan and each other’s national responses. The pitfalls of the globalization that had emerged after the Cold War became abundantly clear. Governments learned they were responsible for stockpiles and supply chains, and that they had been complacent over what the market could deliver (e.g. medicine, personal protective equipment and intensive care units) to ensure resilience as a pillar of national security.

Early in the pandemic, as governments wrestled with health and economic crises and struggled to avoid adding political crises, there was a realization that nothing would be the same. But they were unsure exactly what that meant. And while medical experts warned that this pandemic would not be the last, an increasing number of leaders highlighted that the health, economic and political impact of climate change would, by an order of magnitude, be much greater still.

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*Neil Brown is global strategist at CQS (UK) LLP, a UC Investments partner based in London.*







ARTHUR GUIMARÃES

—  
*Chief Operating Officer  
UC Investments*

*During a year of unprecedented challenges, UC Investments reached major milestones in our environmental, social and governance (ESG) approach to how we invest. We spoke with UC Investments’ Chief Operating Officer Arthur Guimarães, who oversees ESG integration, about our work over the past six years to become one of the nation’s most innovative institutions in sustainable investing.*



DOING  
WELL

*by*

DOING  
GOOD

UC INVESTMENTS’ BOLD APPROACH TO SUSTAINABLE INVESTING

**Q** : Let’s start with the big picture. What’s been the overall approach to integrating ESG risk factors into UC Investments’ decision-making, operations and internal processes?

**AG** : We’ve really focused on two core issues: climate change and diversity, equity and inclusion. Let’s start with climate, which we’ve been working hard on since I got here in 2014. We’ve taken a risk-appropriate and returns-focused approach to eliminating fossil fuels from our portfolio, a milestone we reached in this year. After thoughtful analysis, we determined that the risks associated with fossil fuel assets made them poor long-term investments.

In regard to diversity, equity and inclusion, it’s no secret the financial world in general isn’t known for its leadership in this area. That’s a problem for many reasons, and for us as investors, chief among them is the fact that diverse teams get better results. But we’ve been ramping up our efforts in this area over the past few years, which has positioned us to move



forward with power and speed, especially in light of the recent events in our country that have spotlighted the urgent need to focus on these important issues. And as with climate, our decisions in diversity, equity and inclusion are driven by our fiduciary duty to aim for the best risk-adjusted returns.

**Q** : So let’s dig into the details a bit. This year, UC Investments announced it had sold its fossil fuel assets. What does that mean, exactly, and why did you do it?

**AG** : Well, the bottom line is we sold off \$1 billion of fossil fuel assets. Here’s why: As a long-term investor, we don’t believe these assets will generate great risk-adjusted returns. So today our pension, endowment and working capital pools are fossil free, and we’ve beaten our own five-year goal of investing \$1 billion in climate change solutions. And not only did we sell, we also worked with

MSCI to create a brand new index that will exclude all companies in the MSCI ACWI IMI (our benchmark) that have proven or probable fossil fuel reserves, whether that’s a billion barrels of oil, gas or thermal coal or just one. We believe having a public, transparent approach is best, and now anyone can see what we don’t invest in. We’re proud to be the first major university to have taken this comprehensive approach.

**Q** : So is your work on climate change done? What advice would you give other asset owners who are thinking of doing the same?

**AG** : No, I don’t think we’re ever “done.” We’re always gathering information, data, looking into new areas. However, in our business, it’s the returns that matter. Our Real Assets portfolio, which since inception had been dependent on oil and gas, is the best example. Until a few years ago, the returns for that portfolio were basically zero. But after strategic sales and no new acquisitions of fossil fuels, the portfolio has compounded at

more than 7 percent for the past three years. We believe that institutional investors are well positioned to invest in transformational solutions to environmental and social issues while earning a competitive return. Our investments in clean energy illustrate how we put our ideas into action. In the past year, our investments in clean energy solutions topped \$1 billion. I’d also emphasize, too, that we’re investing for the next 100 years. If you look at the science of climate change, oil and gas are just not sustainable. So we’re getting in early on alternatives, with the idea that we will be holding these assets for a long time.



**Q** : Let’s look more deeply at what you’re doing in the areas of diversity, equity and inclusion.

**AG** : The business case for diversity is clear and compelling: academic and corporate research establishes that diverse and inclusive teams perform better than homogeneous teams. And UC Investments is fully committed to diversity, equity and inclusion, recognizing the inherent benefits of both. The Knight Foundation study by Harvard is one of the most comprehensive studies with several concrete conclusions. Diverse-owned firms represented just 1.3 percent of assets in 2017, yet diverse teams performed at least as well, and often better, than more homogenous firms. So if we’re all practicing what we preach — investing for performance — there’s a significant disconnect. We want to do our part to change the system.

We believe that the cognitive diversity that comes with diverse backgrounds and experiences is a competitive advantage, and we won’t let implicit or institutional bias hamstring our investment performance. So in FY19-20, we designed an innovative strategy — called “Diversified Returns” — that helps increase our access to and inclusion of diverse talent when we invest, when we hire and when we exercise our rights as

a company shareholder. We refined our recruiting and outreach process to ensure that whenever we have an open position on our team, we cast a wide net for talent.

We were the first endowment to publicly report our diversity statistics and we’ve worked to expand and deepen our relationships with groups such as the Diverse Asset Manager Initiative and the National Association of Investment Companies. To better integrate our commitment to diversity, equity and inclusion in our investment process, we updated key documents in our investment process, including our due diligence questionnaire and our contracts with investment partners. We also engaged with our top 15 investments partners — who manage some 60 percent of our assets — around their diversity, equity and inclusion policies, programs, and metrics. We surveyed our U.S.-based investment partners to develop baseline data about our investments in funds run by women, people of color, veterans, disabled persons and members of the LGBTQ community. Among other things, we learned that diversity among our investment partners is far greater than the aggregate national numbers for the asset management industry. But we also realized we may be missing out on investment opportunities unless we increase our access to top performing firms owned by women, Black people and Latinos. So we’ve changed our manager selection process to ensure we always consider a diverse slate of qualified potential managers. This more



intentional process has already resulted in UC Investments investing more than \$10 billion with firms owned by women and diverse investment partners.

**Q** : What about the “G” of ESG: governance?

**AG** : Over the past year, we took a fresh look at our approach to proxy voting and shareholder engagement and made several improvements to better integrate governance factors into our process. First, we updated our proxy voting guidelines to reflect our concern that executive compensation is inadequately linked to long-term performance and shareholder value. We also updated the guidelines to advance cognitive diversity on boards of directors. And we determined that by collaborating with like-minded institutional investors we could have a greater impact on the companies we invest in. To amplify our voice without adding staff, we retained the responsible engagement overlay (reo®) service offered by BMO Global Asset Management. Working with reo®, UC Investments can be part of constructive dialogues with many of the companies in which we invest about material environmental, social and governance risks.

**Q** : So how will you know you’ve achieved success in meeting your diversity and inclusion goals?

**AG** : Our success around diversity will be measured the same way we measure our success overall: good investment returns. We have tools and programs to help us get there and we will track

indicators along the way, but this is not a destination, it is a journey. We hope our efforts not only improve our risk-adjusted returns, but help advance diversity and inclusion in the US asset management industry as well. Success won’t be summed up by a single metric; we aren’t chasing arbitrary numbers or filling quotas. We have been transparent about our efforts in diversity and will continue to track and report our progress. Our success here involves people, culture and human relationships, and as such, no single static milestone can mark victory. Our efforts and results will evolve.

But as we did with the “E” part of ESG, we’ve begun an intentional process that will lead us to answers on diversity, equity and inclusion. Our bottom line will ultimately telegraph the measure of our success.

We plan to invest at least another \$2 billion with diverse investment firms over the next four years. We will also work with the chancellors of our 10 campuses to create a pipeline of underrepresented talent, because we believe today’s students will become tomorrow’s finance leaders and entrepreneurs and we want to support and nurture them. And because we manage the money of the largest public research university in the nation, we are also able to connect promising students from different backgrounds with our most significant investment partners, firms that manage trillions of dollars in assets. We commit to that.

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In addition to the traditional pension, UC Investments manages the university’s defined contribution plan, the UC Retirement Savings Program. UCRSP was created more than 50 years ago as a supplemental plan to allow participants to voluntarily save above and beyond their mandatory pension contribution. Today, its more than 300,000 members have amassed some \$27 billion in savings, making it one of the largest public defined contribution plans in the United States, second only to the federal government’s plan for its own employees.

The supplemental nature of UCRSP changed in 2016 with the introduction of the Savings Choice defined contribution plan. Instead of automatically being enrolled in the traditional pension plan, new hires were given the option of making the Savings Choice plan their primary

retirement benefit. Since then, more than 15,000 new employees have done so, which has meaningfully increased the importance of our best-in-class investment lineup.

Here’s how we’ve evolved and improved our retirement operations over the past few years:

- Recruited a strong team at UC Investments to manage the Retirement Savings Program.
- Concentrated our fund line: We had 242 funds in 2014; we have just 13 funds today.
- Made the Target Date Fund series the default investment choice (replacing the Savings Fund), leading to a four-fold increase in assets from \$2.5 billion in 2014 to \$10.5 billion today.
- Evolved the Pathway Funds asset allocation, improving overall performance.

- Increased passive implementation to 75 percent from 38 percent in 2014.
- Reduced operational complexity for UC Investments.
- Reduced management fees by 65 percent (14 bps to 4 bps), saving \$65 million in fees for participants over six years that will save participants an estimated additional \$150 million over the next 10 years.
- Significantly increased direct communication of UC Investments with participants.
- Significantly deepened collaboration and engagement with internal and external stakeholders.

While being laser focused on our strategic plan, we have stayed agile to address unexpected challenges. When Covid-19 hit in early 2020, we immediately addressed the significant risk of participants selling

out of equities at the wrong time. So UC assembled a “strike team” of UC Investments, UC Human Resources, and our outside partners: State Street Global Advisors and Fidelity Investments.

Working together, we monitored our participants’ behavior, doing daily check-ins on both their selling activity and their engagement with our investment advisors. Then we created a comprehensive education campaign that included written materials as well as a live webinar with CIO Jagdeep Singh Bachher that reached thousands of participants. Through our collective effort, we flattened our participants’ selling curve and successfully delivered the message of staying the course in times of market volatility.

**WHAT’S NEXT?** — With more employees opting for Savings Choice, we are keenly focused on providing a path to allow

them to retire well. Here’s the good news: our retirees are living longer. The not-so-good news is that for some, that means their savings might not last as long as they do. That’s why we are working on a plan to offer a “Lifetime Income” option to our retirement program by the end of the 2021 fiscal year. This option is what’s called a qualified longevity annuity contract — or QLAC — designed to help make income last throughout retirement. We will be rolling out an educational campaign explaining all the particulars, including a below-market price that takes advantage of UC Investments’ institutional purchasing power.

This evolution is one more example of how we’re continuously innovating our retirement savings program, helping participants have a seamless shift to retirement readiness — and beyond.

#### UCRSP BY THE NUMBERS:

**\$27B**

*In assets under management*

**300,000+**

*Members*

**10.7%**

*Amount of paycheck members voluntarily save on top of their mandatory contribution of between 7%-8%*



**STRATEGIC**

**CREATIVITY**

Taken together, our 10 pillars are the bedrock upon which our organization is built. This year, we leaned into one in particular — Creativity Pays — as we made real-time decisions during one of the greatest crises of our lifetime. When faced with adversity, we relied on our deep well of creativity — through our partnerships, by using technology, when making decisions — to lead us forward. Though our crystal ball was fogged, the tenacious resiliency of our people and culture remained clear. We’re Californians, after all. We’re known for having the creativity and spirit to tackle the biggest problems on Earth. This year, we were in our element.

*Challenge Grows*

OUR CREATIVITY

# Public Equity Markets

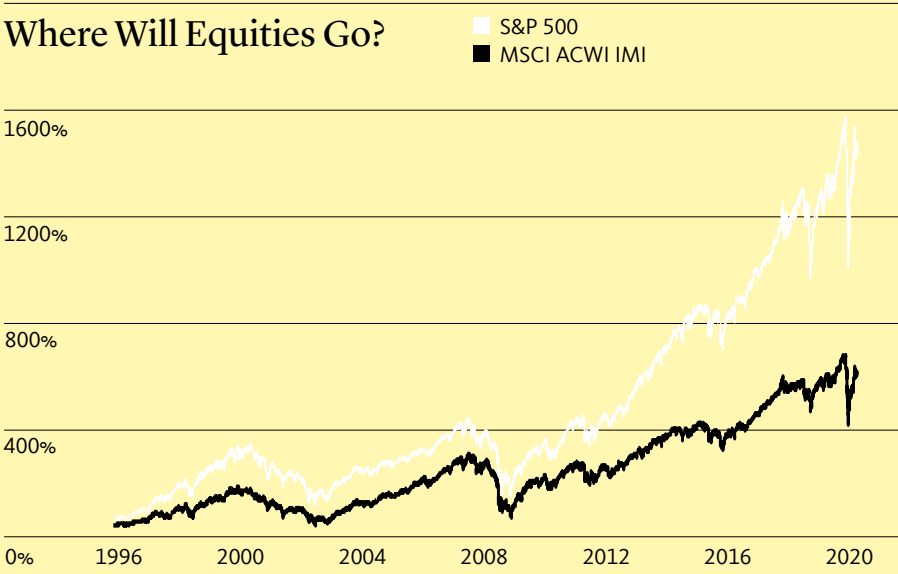
We entered the fiscal year on July 1, 2019, celebrating the longest economic expansion on record: a decade of low rates, abundant global liquidity and steady growth. While many investors fretted about late-cycle aggressive behavior and feared the good times were nearing an end, market behavior did not change. The trade war between the United States and China dragged on, and commentators debated whether interest rates should be increased (assuming the economy was healthy enough) or decreased (to support consumption, borrowing and the financial markets). In late February 2020, U.S. equity markets surged to all-time highs.

But just as the U.S.-China trade war seemed near resolution, news hit of a fast-spreading coronavirus in Wuhan, China. Health experts predicted that absent effective measures to contain what became known as Covid-19, the world would soon be faced with a deadly pandemic unlike any experienced in our lifetimes.

They were right. When the world went on lockdown, equity markets crashed. Combined with a collapse in oil prices stemming from a breakdown in OPEC talks, uncertainty about what “normal” would look like in the future drove unprecedented market volatility.

The Federal Reserve and the Treasury used every available tool to prop up the economy and markets: from helicopter money to bailouts to security purchases in the open market. Instead of raising rates, the Fed cut them five times, including twice in the first half of March.

UC’s overweights to China and healthcare stocks, as well as our underweight to energy stocks, helped us beat the public equity benchmark. By May



we had already sold our fossil fuel assets.

But the real story of this fiscal year was, of course, March’s calamitous market meltdown due to Covid-19. The collapse was unparalleled in its speed (fastest widening in credit spreads, fastest bear market achieved in equities) and unprecedented in its reach. No asset class was spared, and correlations spiked. Liquidity became dear and anything that could be sold was sold; illiquidity was exacerbated by aggressive bank behavior such as marking down securities and triggering margin calls. The confluence of these circumstances created massive forced selling and liquidations from leveraged players, including mortgage real estate investment trusts, mutual funds and levered exchange traded funds.

Purchase price multiples in private companies reached an all-time high, and more than 75 percent of new deals had

leverage of over six times their ratio of debt-to-earnings before interest, taxes, depreciation and amortization. Fundraising statistics were also off the charts, with private equity assets under management at a record \$4.1 trillion, and nearly half of limited partners reporting being under their private equity allocation target, meaning increased amounts of capital were chasing the asset class.

With the pandemic still raging worldwide at the time of this writing in late August 2020, the S&P 500, the Dow and global equities have already surpassed their February peaks. Once again, investors are speculating that something has got to give: the markets are not reflecting the reality of the tremendous economic and human costs the pandemic has wrought. Asymmetric market risk remains. What’s ahead? No one knows, of course. Caution is the watchword.

# Fixed Income Markets

It’s no surprise that in an unprecedented year on all fronts, we saw much activity in global rates. In a risk-off environment (lower equities), investors usually flee to safer assets, or what’s called a “flight to quality.” The Federal Reserve lowered shorter-maturity benchmark rates from 2.5 percent to zero to encourage people and companies to borrow money cheaply and keep the economy operating. This move affected long-maturity rates like the 10-year benchmark US Treasury, which dropped to 0.60 percent, and the 30-year, which came down to 1 percent. Lower interest rates — and the corresponding higher prices — were the biggest driver of investment returns and resulted in consumers using (almost) “free money” to buy automobiles or jump into home ownership with mortgage rates at a 60-year low.

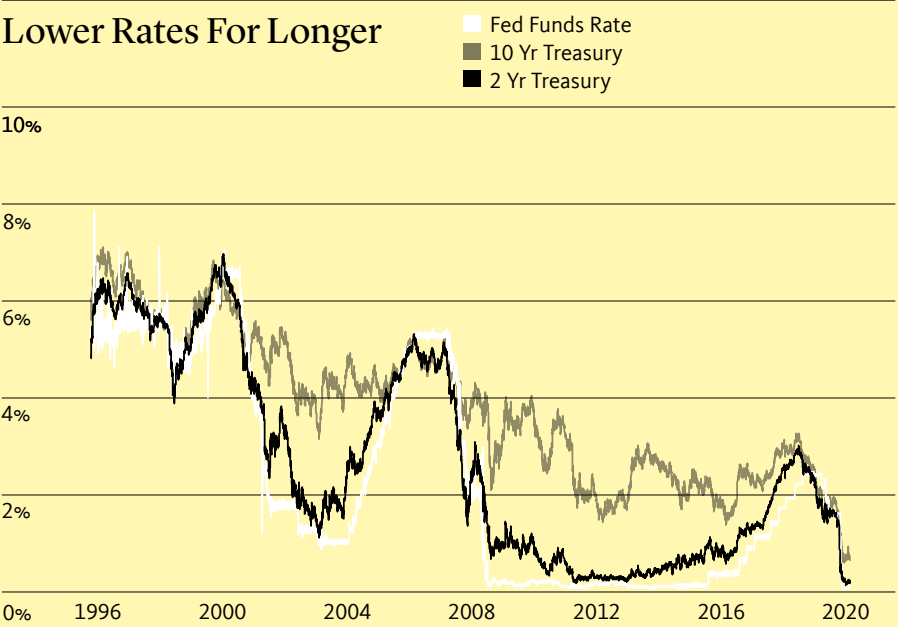
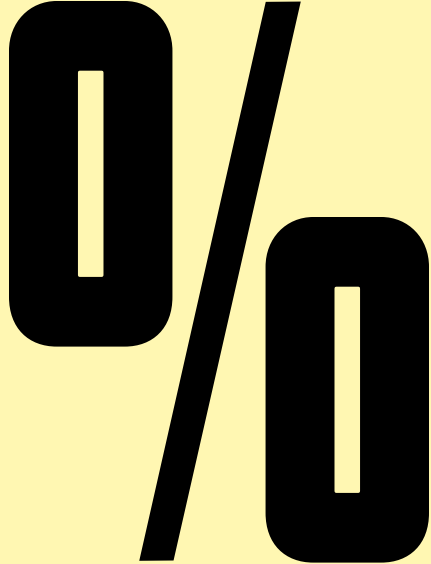
To keep the economy afloat, the Fed also bought \$3 trillion worth of securities and increased its balance sheet from \$4 trillion to \$7 trillion (and eventually headed to close to \$10 trillion, more than twice what it was during the global financial crisis of 2008.)

Keeping pace with the Fed, the Treasury fired its own bazooka, spending \$3 trillion to help small businesses and individuals who had lost jobs due to the pandemic. It aggressively raised money to fund this by selling Treasury securities, from T-bills all the way to 30-year bonds, and even re-introduced the 20-year bond for the first time in several decades.

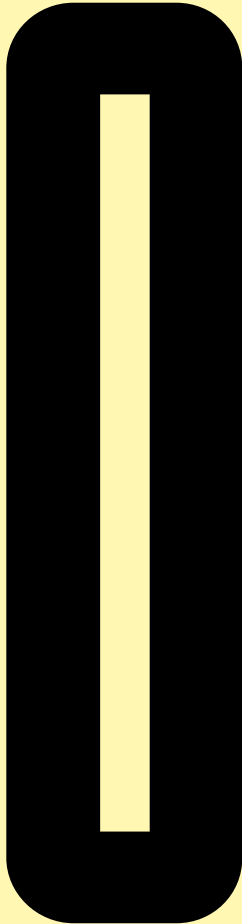
In yet another sign that low interest rates will be with us for the foreseeable future, in late August 2020 the Fed approved a major shift in how it sets

those rates. It formally dropped its longstanding practice of pre-emptively raising rates to head off inflation above its 2 percent target. It explicitly stated that “maximum employment is a broad-based and inclusive goal,” a signal that it hoped for a modest inflation rise.

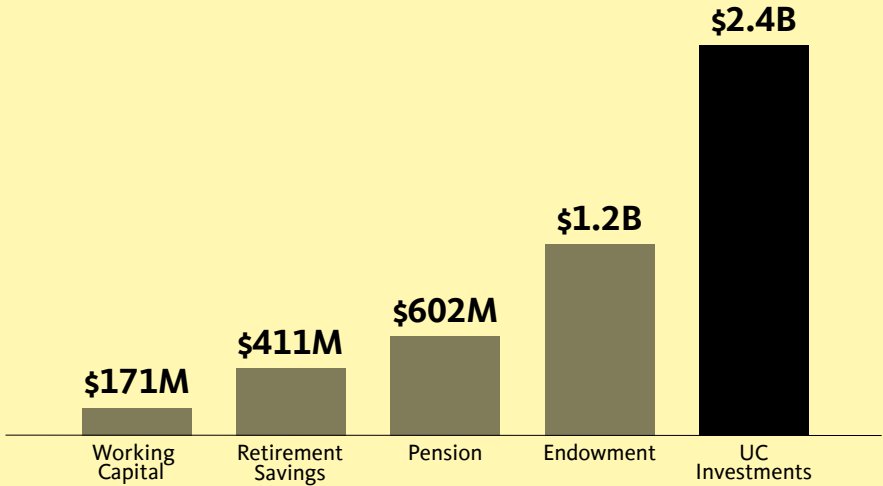
In a low interest rate environment, it becomes difficult to generate attractive returns in fixed income, making passive portfolio management to a lower risk benchmark the best strategy for UC. It’s also important to preserve capital by not taking undue interest rate risk, so the role of fixed income for the upcoming year will be to preserve capital and provide liquidity to fund opportunities in other asset classes that offer a higher return potential to overall UC investments.



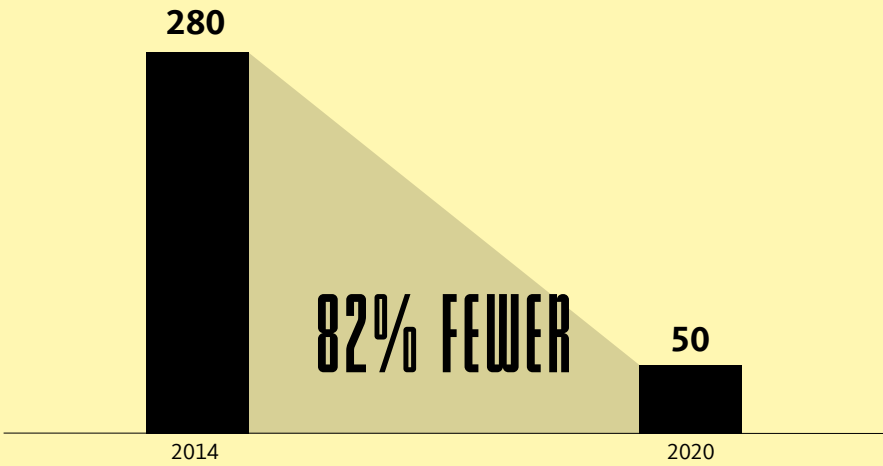
OVERVIEW  
As of June 30, 2020



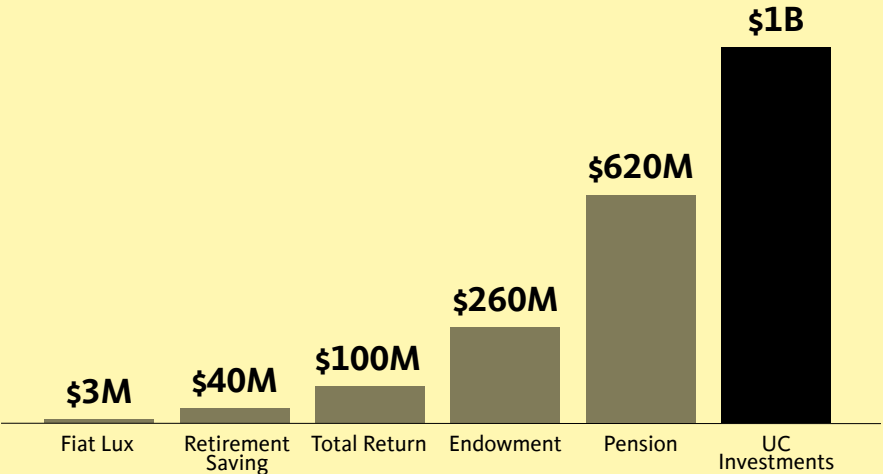
UC Investments  
\$2.4 Billion of Value Added Over 6 Years



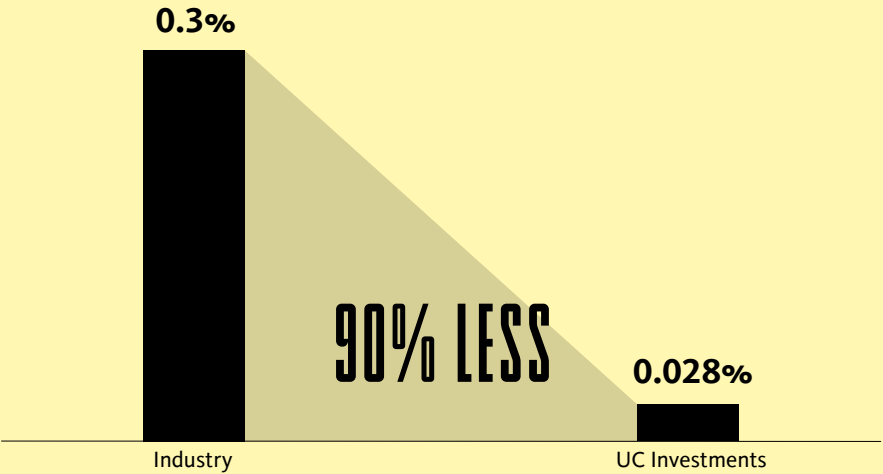
UC Investments — Key Partnerships  
“Less is More”



UC Investments  
“Costs Matter” — \$1 Billion Saved in Fees Over 6 Years



UC Investments — Office of CIO Costs  
Size. Scale. Service



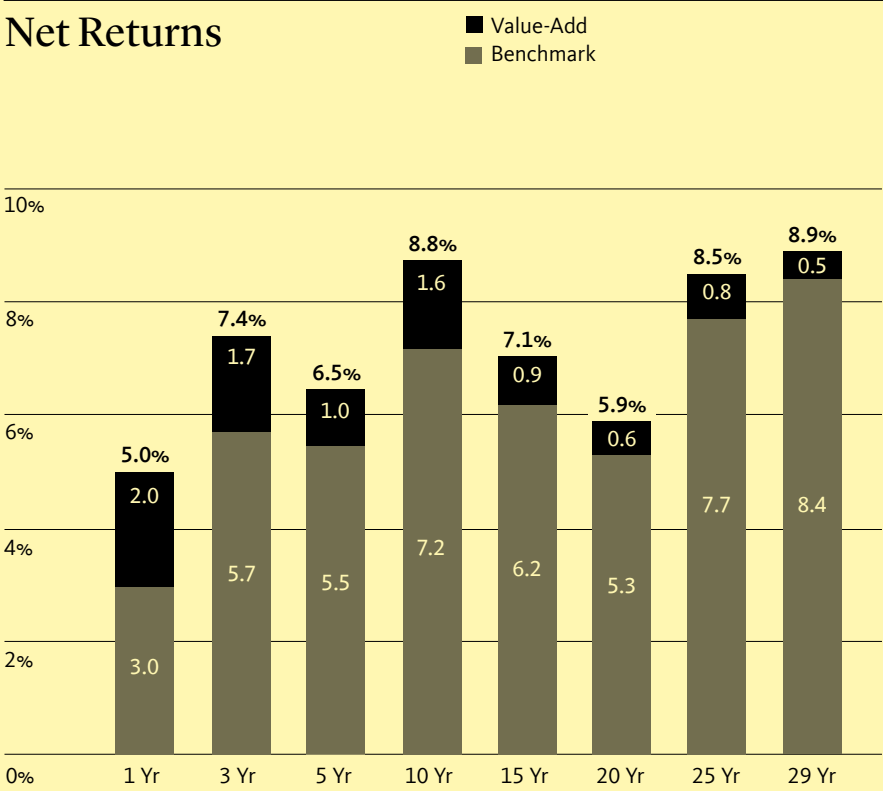


ENDOWMENT

*Critical financial support for the programs and initiatives that make our system the best in the world.*

Highlights

Gross Return	6.5%	Assets	\$14.0B			
Net Return	5.0%					
	FY	Q4	Q3	Q2	Q1	
Beginning Market Value	\$13.4B	\$13.0B	\$14.2B	\$13.3B	\$13.4B	
Market Gains	\$0B	\$1.2B	(\$2.0B)	\$0.8B	\$0B	
Value Added	\$0.5B	(\$0.2B)	\$0.6B	(\$0B)	\$0B	
Net Cash Flow	\$0.1B	(\$0B)	\$0.1B	\$0.2B	(\$0.2B)	
Ending Market Value	\$14.0B	\$14.0B	\$13.0B	\$14.2B	\$13.3B	



	Market Value in Billions (\$)	1 Yr (%)	3 Yr (%)	5 Yr (%)	10 Yr (%)	15 Yr (%)	20 Yr (%)	25 Yr (%)	29 Yr (%)
Endowment	14.0	5.0	7.4	6.5	8.8	7.1	5.9	8.5	8.9
Policy Benchmark		3.0	5.7	5.5	7.2	6.2	5.3	7.7	8.4
Value Added		2.0	1.7	1.0	1.6	0.9	0.6	0.8	0.5
Public Equity	6.0	6.0	7.3	6.4	9.9	6.9	4.5	7.8	–
Fixed Income	0.6	5.9	4.7	3.7	4.3	4.8	5.9	6.6	–
Private Markets									
Private Equity	2.4	21.9	24.0	21.4	19.4	14.9	10.5	20.4	–
Absolute Return	3.1	(1.4)	4.0	2.3	5.1	5.0	–	–	–
Real Estate	1.0	(0)	5.5	7.2	11.3	5.1	–	–	–
Real Assets	0.7	9.3	7.0	2.3	2.7	–	–	–	–
Cash	0.3	1.9	2.0	1.7	1.8	2.6	3.0	3.7	–

	Market Value in Billions (\$)	Portfolio Weight (%)	June 30, 2020 Long-Term Policy Weight (%)	July 1, 2020 Long-Term Policy Weight (%)
Public Equity	6.0	42.8	30.0	40.0
Fixed Income	0.6	4.0	10.0	8.0
Private Markets				
Private Equity	2.4	16.9	22.5	24.0
Absolute Return	3.1	22.2	25.0	10.0
Private Credit	–	–	–	4.0
Real Estate	1.0	7.0	8.5	8.0
Real Assets	0.7	5.0	4.0	4.0
Cash	0.3	2.1	0	2.0
Total	\$14.0B	100%	100%	100%

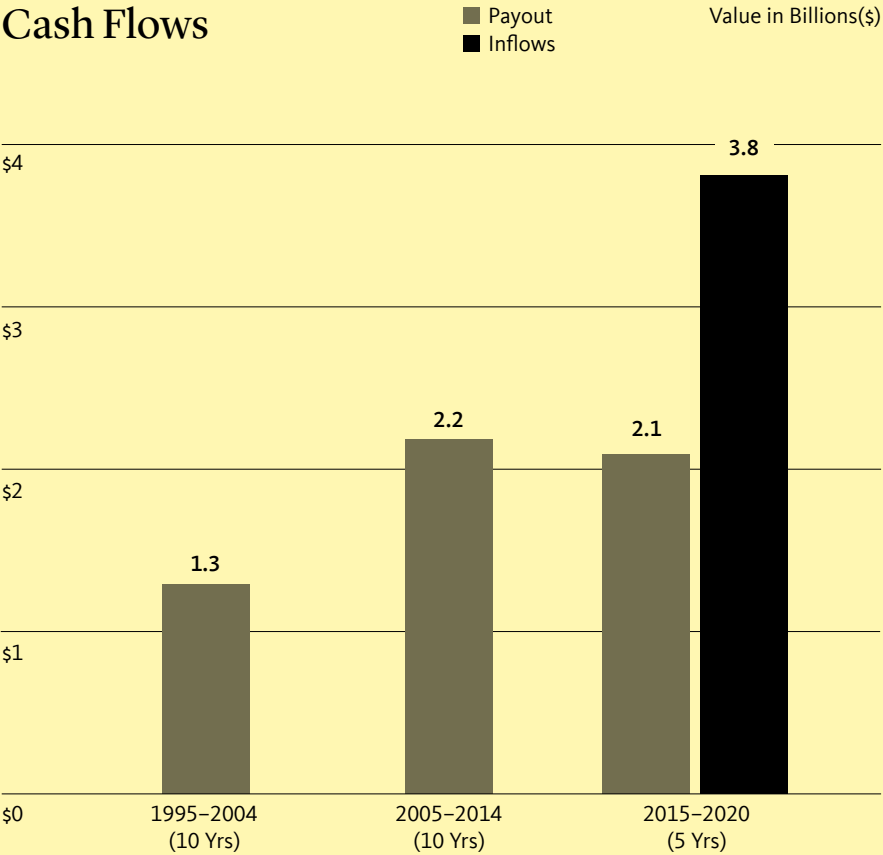
Policy Benchmarks  
June 30, 2020

		Target (%)	Minimum (%)	Maximum (%)
Public Equity	MSCI All Country World Index IMI (Tobacco Free)	30	20	52.5
Fixed Income	Barclays US Aggregate Bond Index	10	0	17.5
Private Equity	Russell 3000 Index + 2.0%	22.5	10	32.5
Absolute Return	HFRI Fund of Funds Composite	25	15	32
Private Credit	Actual Portfolio Return	–	–	–
Real Estate	NCREIF ODCE Index (lagged 3-months)	8.5	–	–
Real Assets	Actual Portfolio Return	4	–	–
Cash	Actual Portfolio Return	–	–	–

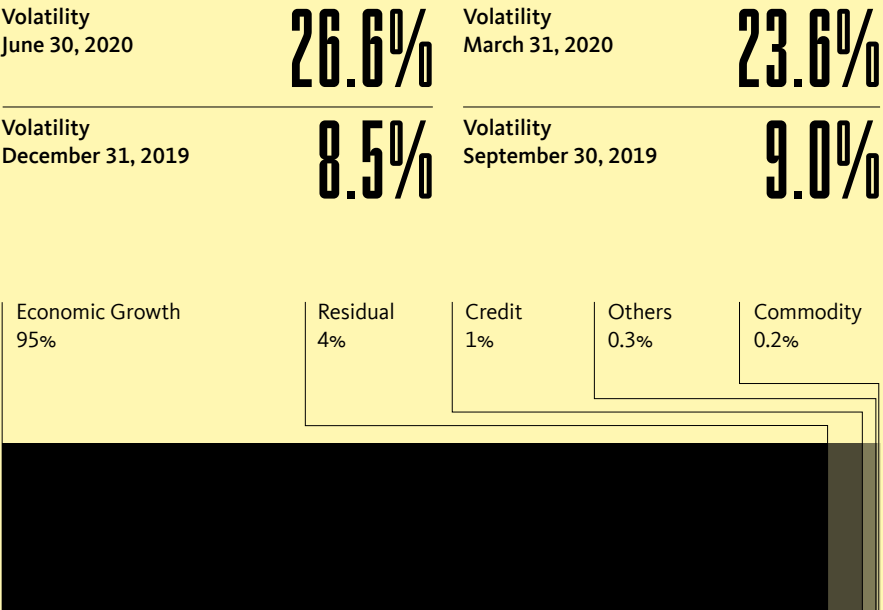
Policy Benchmarks  
July 1, 2020

		Target (%)	Minimum (%)	Maximum (%)
Public Equity	MSCI All Country World Index Net IMI (Tobacco and Fossil Fuel Free)	40	30	50
Fixed Income	Bloomberg Barclays US Government/ Credit 1-5 Year Index	8	5	15
Private Equity	Russell 3000 Index + 2.5%	24	10	30
Absolute Return	HFRI Fund of Funds Composite	10	5	15
Private Credit	Actual Portfolio Return	4	0	6
Real Estate	NCREIF ODCE Index	8	4	12
Real Assets	Actual Portfolio Return	4	0	8
Cash	Bank of America 3-Month US Treasury Bill Index	2	1	5

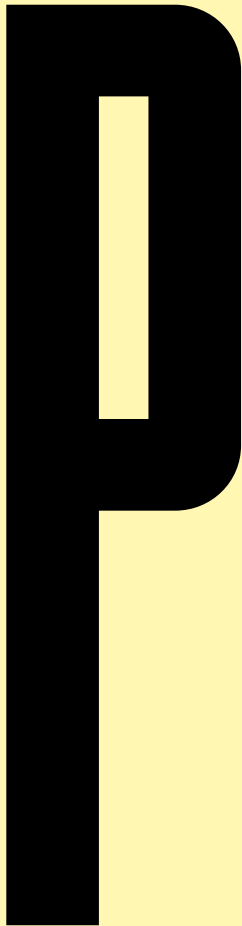
Cash Flows



Risk Allocation



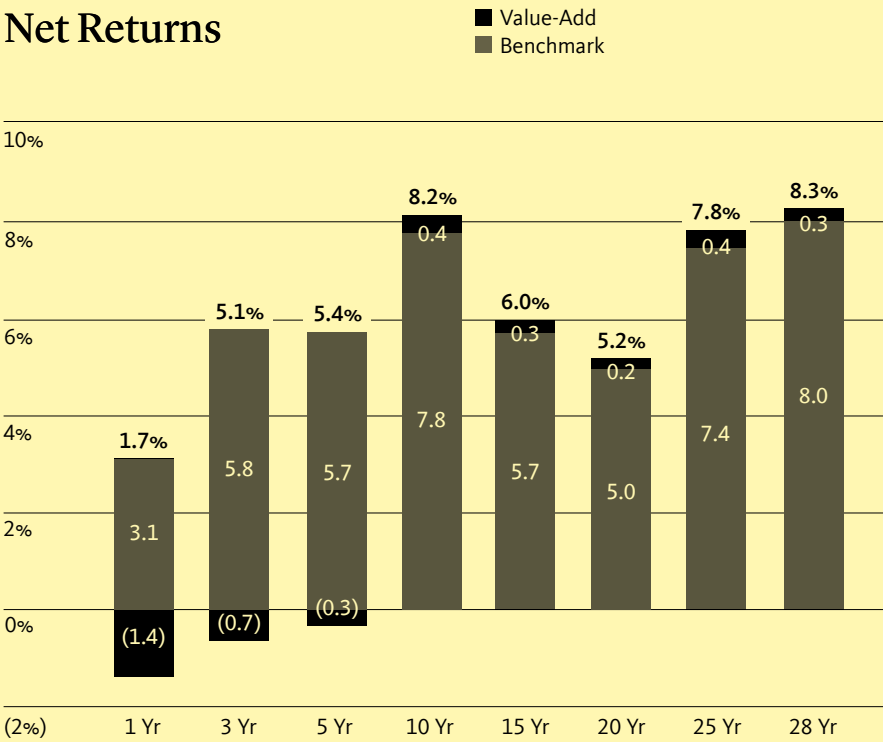
**PENSION**  
*A plan that invests across a broad range of asset types to provide retirement income security for all of our members.*



Highlights

Gross Return	2.3%					Assets	\$70.2B				
Net Return	1.7%										
	FY	Q4	Q3	Q2	Q1						
Beginning Market Value	\$70.0B	\$64.6B	\$73.6B	\$69.7B	\$70.0B						
Market Gains	\$0B	\$6.3B	(\$10.8B)	\$4.2B	\$0.3B						
Value Added	(\$0.2B)	(\$1.4B)	\$1.6B	(\$0.3B)	(\$0.1B)						
Net Cash Flow	\$0.4B	\$0.7B	\$0.2B	\$0B	(\$0.5B)						
Ending Market Value	\$70.2B	\$70.2B	\$64.6B	\$73.6B	\$69.7B						

Net Returns



Performance

	Market Value in Billions (\$)	1 Yr (%)	3 Yr (%)	5 Yr (%)	10 Yr (%)	15 Yr (%)	20 Yr (%)	25 Yr (%)	28 Yr (%)
Pension Policy Benchmark Value Added	70.2	1.7 3.1 (1.4)	5.1 5.8 (0.7)	5.4 5.7 (0.3)	8.2 7.8 0.4	6.0 5.7 0.3	5.2 5.0 0.2	7.8 7.4 0.4	8.3 8.0 0.3
Public Equity	39.8	3.3	6.4	6.6	10.0	6.4	4.3	7.6	8.2
Fixed Income Core High-Yield Emerging Market Debt TIPS	14.3 10.3 2.0 2.0 –	5.2 6.8 (0.3) 0.5 –	4.4 4.7 3.1 3.6 –	4.2 4.2 4.5 4.7 –	4.5 4.1 6.7 4.8 –	4.9 4.5 – – –	6.0 5.7 – – –	6.8 6.6 – – –	7.2 7.0 – – –
Private Markets Private Equity Absolute Return Real Estate Real Assets	4.6 4.5 4.2 2.2	9.4 (2.4) (1.6) 5.5	14.0 3.6 4.5 6.2	12.4 2.0 6.5 2.1	13.4 5.0 10.9 2.9	11.3 – 4.0 –	7.3 – – –	17.8 – – –	18.1 – – –
Cash	0.6	1.9	2.0	1.7	1.8	2.6	3.0	3.7	4.0

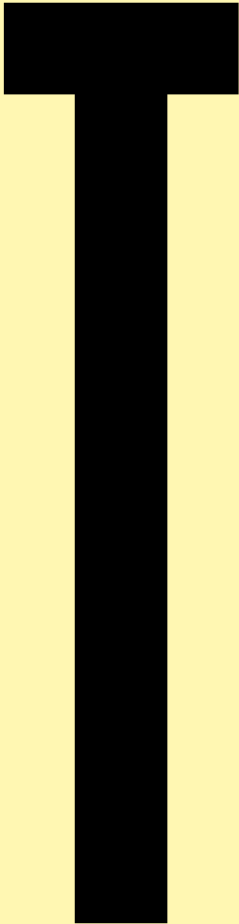
Asset Allocation

	Market Value in Billions (\$)	Portfolio Weight (%)	June 30, 2020 Long-Term Policy Weight (%)	July 1, 2020 Long-Term Policy Weight (%)
Public Equity	39.8	56.8	50.0	53.0
Fixed Income Core High-Yield Emerging Market Debt TIPS	14.3 10.3 2.0 2.0 0	20.4 14.7 2.9 2.8 0	20.0 13.0 2.5 2.5 2.0	17.0 13.0 2.5 1.5 0
Private Markets Private Equity Absolute Return Private Credit Real Estate Real Assets	4.6 4.5 – 4.2 2.2	6.5 6.4 – 5.9 3.1	10.0 10.0 – 7.0 3.0	12.0 3.5 3.5 7.0 4.0
Cash	0.6	0.8	0	0
Total	\$70.2B	100%	100%	100%

	Policy Benchmarks June 30, 2020		Target (%)	Minimum (%)	Maximum (%)		
	Public Equity	MSCI All Country World Index IMI (Tobacco Free)	50	40	60		
	Fixed Income	Barclays US Aggregate Bond Index	13	10	16		
	High-Yield	Merrill Lynch High Yield Cash Pay Index	2.5	0	5		
	Emerging Market Debt	JP Morgan Emerging Bond Markets Global Diversified	2.5	0	5		
	TIPS	Barclays U.S. TIPS	2	0	4		
	Private Equity	Russell 3000 Index + 2.0%	10	5	15		
	Absolute Return	HFRI Fund of Funds Composite	10	0	20		
	Private Credit		0	0	0		
	Real Estate	NCREIF ODCE Index (lagged 3-months)	7	2	12		
	Real Assets	Actual Portfolio Return	3	0	6		
	Cash	Actual Portfolio Return	0	0	10		
	Policy Benchmarks July 1, 2020		Target (%)	Minimum (%)	Maximum (%)		
	Global Equity	MSCI All Country World Index Net IMI (Tobacco and Fossil Fuel Free)	53	43	63		
	Core Fixed Income	Bloomberg Barclays US Government/Credit 1-5 Year Index	13	10	16		
	High-Yield	Merrill Lynch High Yield Cash Pay Index Fossil Free	2.5	0	5		
	Emerging Market Debt	JP Morgan Emerging Markets Bond -Global Diversified Fossil Free	1.5	0	3		
	TIPS	Removed from Policy	0				
	Private Equity	Russell 3000 Index + 2.5%	12	7	17		
	Absolute Return	HFRI Fund of Funds Composite	3.5	0	5.5		
	Private Credit	Actual Portfolio Return	3.5	0	7		
	Real Estate	NCREIF ODCE Index	7	2	12		
	Real Assets	Actual Portfolio Return	4	0	8		
	Cash	Bank of America 3-Month US Treasury Bill Index	0	0	5		
Risk Allocation							
Volatility June 30, 2020		24.7%		Volatility March 31, 2020		22.6%	
Volatility December 31, 2019		8.1%		Volatility September 30, 2019		8.2%	
Economic Growth 95%		Residual 3%		Credit 1%		FX 0.3%	
				Others 0.3%			

TOTAL RETURN INVESTMENT POOL

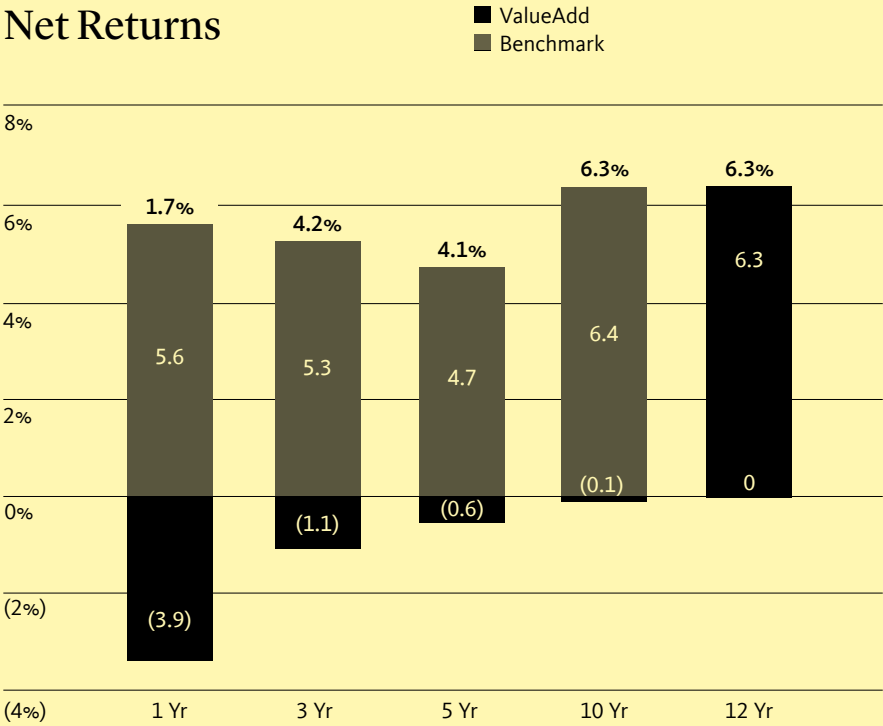
A working capital portfolio with an asset and risk allocation geared to an intermediate-term horizon.



Highlights

Gross Return	2.0%					Assets	\$7.4B				
Net Return	1.7%										
	FY	Q4	Q3	Q2	Q1						
Beginning Market Value	\$9.2B	\$7.7B	\$8.9B	\$9.0B	\$9.2B						
Market Gains	\$0.3B	\$0.5B	(\$0.7B)	\$0.3B	\$0.1B						
Value Added	(\$0.1B)	(\$0.1B)	(\$0B)	(\$0B)	(\$0B)						
Net Cash Flow	(\$1.9B)	(\$0.8B)	(\$0.5B)	(\$0.4B)	(\$0.3B)						
Ending Market Value	\$7.4B	\$7.4B	\$7.7B	\$8.9B	\$9.0B						

Net Returns



Performance

	Market Value in Billions (\$)	1 Yr (%)	3 Yr (%)	5 Yr (%)	10 Yr (%)	15 Yr (%)	20 Yr (%)	25 Yr (%)	12 Yr (%)
Total Return Investment Pool	7.4	1.7	4.2	4.1	6.3	-	-	-	6.3
Policy Benchmark		5.6	5.3	4.7	6.4	-	-	-	6.3
Value Added		(3.9)	(1.1)	(0.6)	(0.1)	-	-	-	0
Growth	4.8	(11.3)	1.7	3.4	8.5	-	-	-	5.7
Public Growth	4.6	(2.1)	4.9	5.1	9.4	-	-	-	5.7
Private Growth	0.1	(0.7)	16.2	-	-	-	-	-	0
Income	2.5	6.4	4.9	4.4	5.0	-	-	-	5.8
Public Income	2.3	6.9	4.9	4.4	5.0	-	-	-	5.8
Private Income	0.1	(1.5)	3.7	3.4	-	-	-	-	-
Cash	0.1	1.9	2.0	1.7	1.8	-	-	-	-

Asset Allocation

	Market Value in Billions (\$)	Portfolio Weight (%)	June 30, 2020 Long-Term Policy Weight (%)	July 1, 2020 Long-Term Policy Weight (%)
Growth	4.8	64.6	35.0	0
Public Growth	4.6	63.1	0	50.0
Private Growth	0.1	1.5	0	0
Income	2.5	33.7	50.0	0
Public Income	2.3	31.9	0	50.0
Private Income	0.1	1.9	0	0
Private Markets				
Absolute Return	0	0	15.0	0
Cash	0.1	1.6	0	0
Total	\$7.4B	100%	100%	100%

Policy Benchmarks  
June 30, 2020

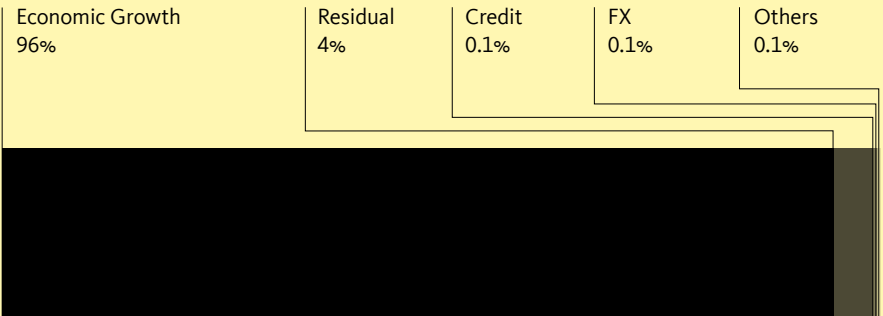
		Target (%)	Minimum (%)	Maximum (%)
Growth	MSCI All Country World Index IMI (Tobacco Free)	35	30	40
Income	Barclays US Aggregate Bond Index	50	45	55
Absolute Return	HFRX Absolute Return Index	15	5	25

Policy Benchmarks  
July 1, 2020

		Target (%)	Minimum (%)	Maximum (%)
Public Equity	MSCI All Country World Index Net IMI (Tobacco and Fossil Fuel Free)	50	35	55
Fixed Income	Bloomberg Barclays US 1-5 Year Government/Credit Index	50	35	55
Private Assets	Total TRIP Portfolio Benchmark	0	0	10

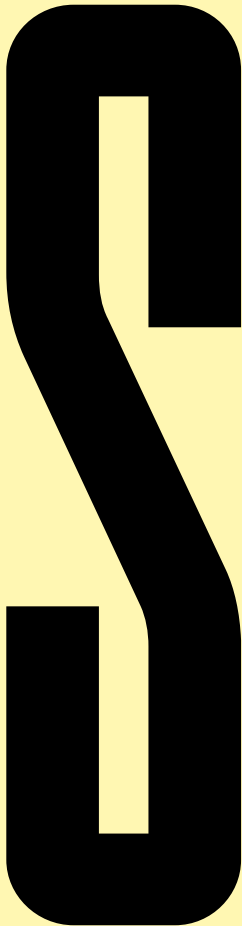
Risk Allocation

Volatility June 30, 2020	18.8%	Volatility March 31, 2020	14.1%
Volatility December 31, 2019	4.4%	Volatility September 30, 2019	4.6%



SHORT TERM  
INVESTMENT POOL

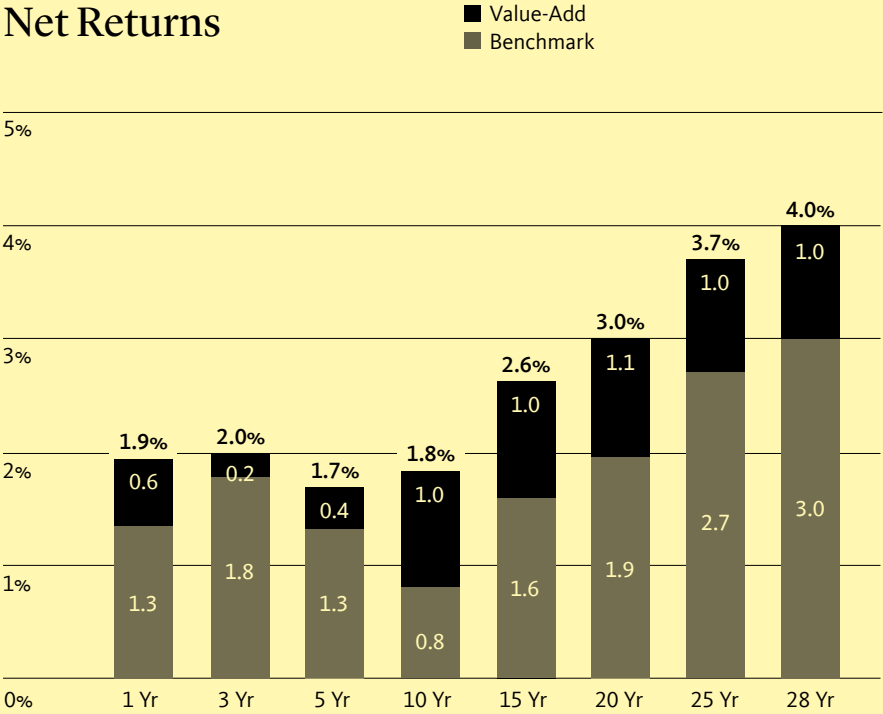
A working capital  
portfolio managed  
to ensure adequate  
liquidity to meet our  
system’s cash needs.



Highlights

Gross Return	1.9%		Assets			\$10.5B
Net Return	1.9%					
	FY	Q4	Q3	Q2	Q1	
Beginning Market Value	\$5.6B	\$7.1B	\$5.5B	\$6.0B	\$5.6B	
Market Gains	\$0.1B	\$0B	\$0B	\$0B	\$0B	
Value Added	\$0B	\$0B	\$0B	\$0B	\$0B	
Net Cash Flow	\$4.9B	\$3.4B	\$1.6B	(\$0.5B)	\$0.4B	
Ending Market Value	\$10.5B	\$10.5B	\$7.1B	\$5.5B	\$6.0B	

Net Returns



Policy Benchmarks

		Target (%)
Short Term	Weighted Average of the Income Return on a Constant Maturity 2-Year U.S. Treasury Note and the Return on 30-Day U.S Treasury Bills	100

Policy Benchmarks

		Target (%)
Short Term	50/50 Weighted Average of the Yield on a Constant Maturity 1-Year U.S. Treasury Note and the 30-Day U.S. Treasury Bills	100

**BLUE & GOLD**  
*An investment vehicle  
that helps our campuses  
increase their revenues  
while reducing reliance  
on state funds.*

B

Highlights

Gross Return	Assets					\$0B
	—					
Net Return						
	—					
	FY	Q4	Q3	Q2	Q1	
Beginning Market Value	\$1.3B	\$1.7B	\$2.0B	\$1.7B	\$1.3B	
Market Gains	(\$0B)	\$0.1B	(\$0.3B)	\$0.1B	\$0B	
Value Added	(\$0.1B)	(\$0.1B)	\$0B	\$0B	\$0B	
Net Cash Flow	(\$1.1B)	(\$1.7B)	(\$0B)	\$0.2B	\$0.4B	
Ending Market Value	\$0B	\$0B	\$1.7B	\$2.0B	\$1.7B	

Performance

	Market Value in Millions (\$)	1 Yr (%)
Blue and Gold Policy Benchmark Value Added	0	- - -
Growth	0	-
Income	0	-
Cash	0	-

Asset Allocation

	Market Value in Millions (\$)	Portfolio Weight (%)	June 30, 2020 Long-Term Policy Weight (%)
Growth	0	0	70
Income	0	0	30
Cash	0	100	0
Total	0	100%	100%

Policy Benchmarks  
June 30, 2020

		Target (%)	Minimum (%)	Maximum (%)
Growth	MSCI All Country World Index IMI (Tobacco Free)	70	60	80
Income	Barclays US Aggregate Bond Index	30	20	40
Total		100%		



**FIAT LUX INSURANCE**  
*The largest university  
captive insurance  
program in the country.*

**F**  
**L**

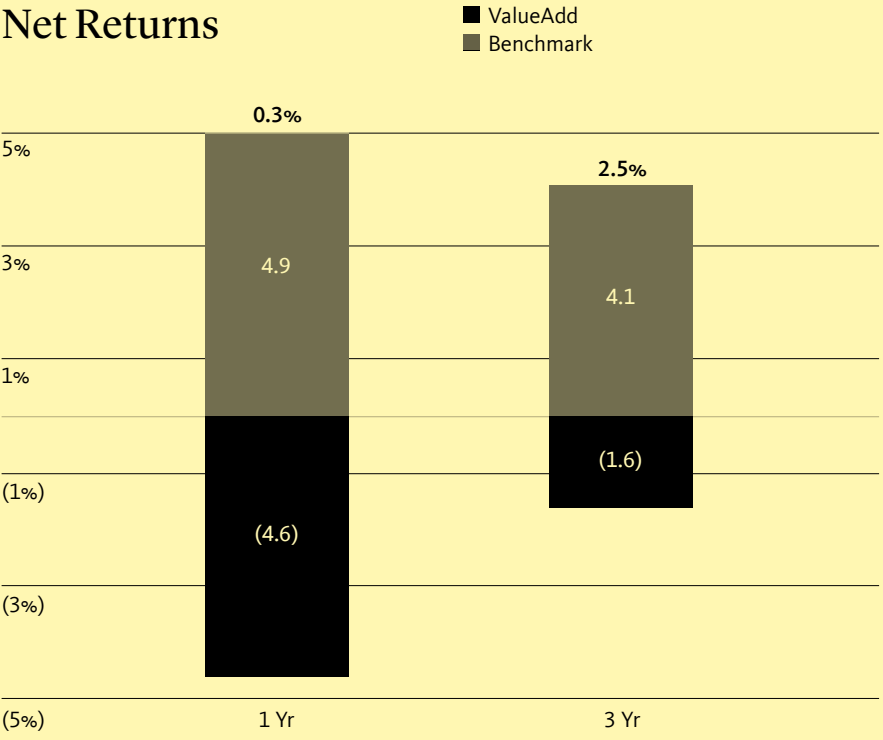
Highlights

Gross Return	0.3%	Assets				\$1.2B
Net Return	0.3%					
		FY	Q4	Q3	Q2	Q1
Beginning Market Value		\$1.1B	\$1.1B	\$1.2B	\$1.1B	\$1.1B
Market Gains		\$0.1B	\$0.1B	(\$0B)	\$0B	\$0B
Value Added		(\$0.1B)	(\$0B)	(\$0B)	\$0B	(\$0B)
Net Cash Flow		\$0.1B	\$0B	\$0B	\$0.1B	\$0B
Ending Market Value		\$1.2B	\$1.2B	\$1.1B	\$1.2B	\$1.1B

Performance

	Market Value in Billions (\$)	1 Yr (%)	3 Yr (%)
Fiat Lux Insurance Policy Benchmark Value Added	1.2	0.3 4.9 (4.6)	2.5 4.1 (1.6)
Growth	0	-	-
Income	0	-	-
Alternatives	0	-	-
Cash	1.2	1.4	1.6

Net Returns



Asset Allocation

	Market Value in Billions (\$)	Portfolio Weight (%)	June 30, 2020 Long-Term Policy Weight (%)
Growth	0	0	14.0
Income	0	0	65.0
Alternatives	0	0	7.5
Cash	1.2	100	13.5
Total	\$1.2B	100%	100%

Policy Benchmarks

		Target (%)	Minimum (%)	Maximum (%)
Growth	MSCI All Country World Index IMI (Net)	14.0	0	30.0
Income	Barclays Intermediate Aggregate	65.0	55.0	100.0
Alternatives	HFRI Fund of Funds Composite	7.5	0	20.0
Cash	90 Day T-Bill	13.5	0	15.0

# MEETING THE (NEXT) MOMENT

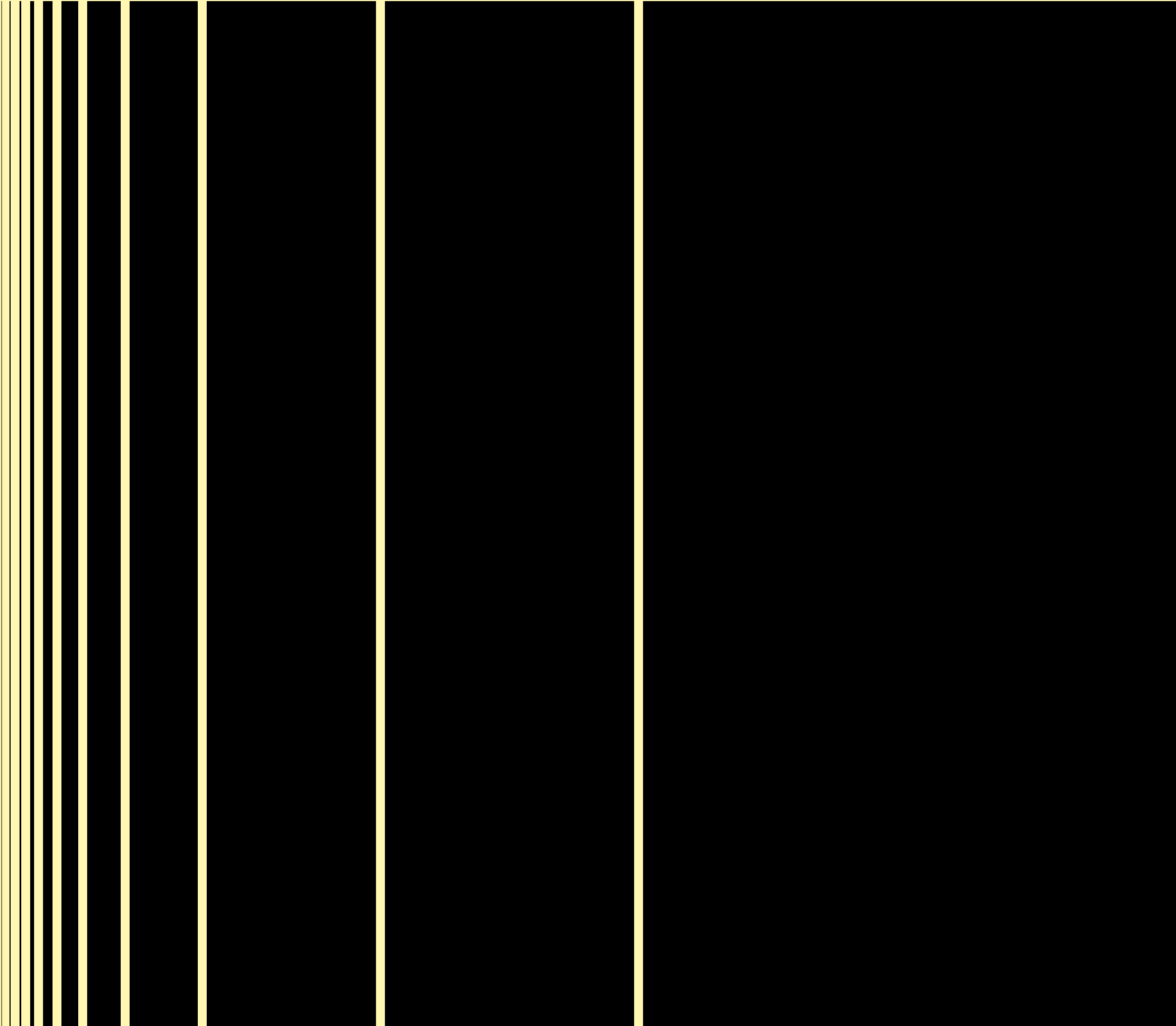
For UC Investments, 2020’s cascade of shocks to humanity and the global economy has surfaced some simple, yet profound, truths. We will not return to the “normal” we knew. Time doesn’t go backward — and nor will the world.

From an investment perspective, among the most important lessons we’ve gleaned from the ongoing crisis is that those that adapt, survive. But those that innovate, thrive.

A crisis such as the present one is an incubator for innovation, and at the core of innovation is technology. So we ask ourselves, “What companies are innovating for tomorrow? Which are using technology to hone their competitive edge?” These are the companies that have staked their future on the truth that change is the constant of our innovative time. In such companies we seek to invest.

Technology is an agent of change. It evolves and scales, and it will move the world forward to something different — and better, we hope. And so tech is the investment lens that will guide us forward to the new year and beyond, always connecting dots, looking for disruptors and gauging risks to the status quo. With fiduciary responsibility for the world’s leading public research university, we cannot afford to be left behind.

No matter what happens next, we’re prepared.



<p><b>Appointed Regents</b></p> <p>Maria Anguiano  Richard C. Blum  Laphonza Butler  Michael Cohen  Gareth Elliott  Cecilia Estolano  Howard “Peter” Guber  George Kieffer  Sherry L. Lansing  Richard Leib  Hadi Makarechian  Eloy Ortiz Oakley  Lark Park  John A. Pérez  Janet Reilly  Richard Sherman  Jonathan “Jay” Sures  Hayley Weddle  Charlene R. Zettel</p>	<p><b>Ex Officio Regents</b></p> <p>Eleni Kounalakis  <i>Lieutenant Governor of California</i>  Janet Napolitano  <i>President of the University of California</i>  Gavin Newsom  <i>Governor of California</i>  Anthony Rendon  <i>Speaker of the Assembly</i>  Christine Simmons  <i>Vice President, Alumni Associations of the University of California</i>  Tony Thurmond  <i>State Superintendent of Public Instruction</i>  William Um  <i>President, Alumni Associations of the University of California</i></p>	<p><b>Office of the President</b></p> <p>Mark Cianca  <i>Interim Vice President and Chief Information Officer</i>  Jagdeep Singh Bachher  <i>Chief Investment Officer &amp; Vice President, Investments</i>  Alexander Bustamante  <i>Senior Vice President, Chief Compliance &amp; Audit Officer</i>  Michael Brown  <i>Provost &amp; Executive Vice President, Academic Affairs</i>  Pamela Brown  <i>Vice President, Institutional Research &amp; Academic Planning</i>  Carrie Byington  <i>Executive Vice President, UC Health</i>  Arthur Ellis  <i>Vice President, Research &amp; Graduate Studies</i>  Yvette Gullatt  <i>Vice President &amp; Vice Provost, Graduate, Undergraduate and Equity Affairs</i>  Claire Holmes  <i>Senior Vice President, External Relations &amp; Communications</i>  Glenda Humiston  <i>Vice President of Agriculture &amp; Natural Resources</i>  Nathan Brostrom  <i>Chief Financial Officer</i>  Craig S. Leasure  <i>Vice President, Laboratory Management</i>  Cheryl Lloyd  <i>Acting Vice President, Human Resources</i>  Janet Napolitano  <i>President of the University of California</i>  Rachael Nava  <i>Executive Vice President, Chief Operating Officer</i>  Charles F. Robinson  <i>General Counsel &amp; Vice President, Legal Affairs</i></p>	<p><b>Regents-Designate</b></p> <p>Eric Mart  <i>Treasurer, Alumni Associations of the University of California</i>  Jamaal Muwwakkil  <i>Student Regent Designate</i>  Debby Stegura  <i>Secretary, Alumni Associations of the University of California</i></p> <p><b>Officers of the Regents</b></p> <p>Jagdeep Singh Bachher  <i>Chief Investment Officer and Treasurer</i>  Alexander Bustamante  <i>Senior Vice President, Chief Compliance &amp; Audit Officer</i>  Charles F. Robinson  <i>General Counsel &amp; Vice President, Legal Affairs</i>  Anne Shaw  <i>Secretary and Chief of Staff to the Regents</i></p> <p><b>Faculty Representatives (Non-voting)</b></p> <p>Kum-Kum Bhavnani  <i>Chair, Academic Senate</i>  Mary Gauvain  <i>Vice Chair, Academic Senate</i></p>	<p><b>Chancellors</b></p> <p>Gene D. Block  <i>Los Angeles</i>  Cynthia Larive  <i>Santa Cruz</i>  Carol Christ  <i>Berkeley</i>  Howard Gillman  <i>Irvine</i>  Sam Hawgood  <i>San Francisco</i>  Pradeep K. Khosla  <i>San Diego</i>  Juan Sánchez Muñoz  <i>Merced</i>  Gary S. May  <i>Davis</i>  Henry T. Y. Yang  <i>Santa Barbara</i>  Kim Wilcox  <i>Riverside</i></p> <p><b>Advisors</b></p> <p>Kate Klimow  <i>Staff Advisor</i>  Ann Jeffrey  <i>Staff Advisor designate</i></p>	<p><b>Investments Committee</b></p> <p><b>Membership</b></p> <p>Maria Anguiano  Richard Blum  Michael Cohen  Gareth Elliott  Richard Lieb  Hadi Makarechian  Lark Park  Richard Sherman  <i>Chair</i>  Christine Simmons  William Um  <i>Vice-chair</i>  Charlene R. Zettel</p> <p><b>Ex Officio Members</b></p> <p>Gavin Newsom  John Pérez  Janet Napolitano</p> <p><b>Advisory Members</b></p> <p>Kum-Kum Bhavnani  Kate Klimow  Drew Zager</p> <p><b>Chancellors</b></p> <p>Sam Hawgood  Pradeep K. Khosla  Kim Wilcox</p>
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UP



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Designed by Mucho. Printed by Primary Color.  
This book is printed on recycled paper made from sustainable, well-managed forests.

  
*Foreign Students Sour on America, Jeopardizing a \$39 Billion Industry.*  
They provide critical revenue to U.S. universities. But the administration's immigration crackdown has them going elsewhere. ¶ Last May, Luis Carlos Soldevilla graduated with one of the best grade point averages in his Mexico City high school. For his senior project, he even tackled Goldbach's conjecture, a famous number theory problem. Soldevilla considered attending Boston University and the University of Washington, both of which had accepted him. He also had fond memories of the University of California, Berkeley, where during the summer of 2016 he took a computer science course. But instead of enrolling at a U.S. school, Soldevilla started this fall at the University of Toronto, Mississauga, where he's pursuing a double major in computer science and mathematics. Why did he pick the Canadian school over those big American names? (Bloomberg, Jan '19)

**EBBT**  
Economists increasingly say it's acceptable for the U.S. to take on more debt — for the right reasonsos. January 2020

**SOMEBODY FINALLY TOLD WALL STREET THE WORLD IS ON FIRE.** While the rest of us have been feeling every bump, pothole and rumble strip on this godforsaken road called 2020, Wall Street had, for weeks, seemed to float above it all, blissfully unaware. That ended today. (CNN Business, June 2020)

**因新冠疫情，中国东航暂停往返美国航班**  
First major Chinese airliner suspends flights to the United States over coronavirus outbreak (Feb 2020)

**U.S. UNEMPLOYMENT RATE SOARS TO 14.7%, THE WORST SINCE THE DEPRESSION ERA**  
20.5 million people lost their jobs in April, the Labor Department said Friday. Many analysts believe it could take years to recover. ¶ The U.S. unemployment rate jumped to 14.7 percent in April, the highest level since the Great Depression, as many businesses shut down or severely curtailed operations to try to limit the spread of the deadly coronavirus. ¶ The Labor Department said 20.5

million people abruptly lost their jobs, wiping out a decade of employment gains in a single month. The speed and magnitude of the loss defies comparison. It is roughly double what the nation experienced during the entire financial crisis from 2007 to 2009. ¶ As the virus's rapid spread accelerated in March, President Trump and a number of state and local leaders put forth restrictions that led businesses to suddenly shut down and shed millions of workers. Many businesses and households also canceled all travel plans. Analysts warn it could take years to return to the 3.5 percent unemployment rate the nation recorded in February, in part because it is unclear what the post-pandemic economy will look like, even if scientists make progress on a vaccine. (The Washington Post, May 2020)

  
**CORONAVIRUS FALLOUT THREATENS AUTO INDUSTRY'S SUPPLY CHAIN**  
PUBLISHED FEB 2020



**China Deals 'Body Blow' to Struggling U.S. Farm Belt** — The U.S. Farm Belt braced for deeper pain from the escalating trade battle between the world's two biggest economies after China said it would suspend all imports of U.S. agricultural goods. China's move will affect farmers raising fuzzy green soybean pods in Illinois, milking cows in California and feeding hogs in North Carolina, all of whom have seen business suffer as a result of tariffs that Chinese officials implemented last year. (The Wall Street Journal, Aug 2019)

**GE Moves to Cut Roughly 13,000 Aviation Workers** — May 2020

**FED CHAIR POWELL SPEAKS AND LEAVES INVESTORS EXPECTING A RATE CUT**

