

2016—
2017

ANNUAL REPORT



UNIVERSITY
of VIRGINIA

Investment Management Company



Investment Management Company

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**LAWRENCE E. KOCHARD**

Chief Executive Officer
 Chief Investment Officer
 UVIMCO

To the Rector and Visitors of the University of Virginia, foundation trustees, and other members of the University community:

I am pleased to report a healthy return of 12.4% on the Long Term Pool for the fiscal year that ended June 30, 2017. UVIMCO's objective is to generate long-term investment returns that (1) preserve the purchasing power of the University of Virginia's endowment after spending, and (2) exceed the returns of our passive policy portfolio. While we do not unduly focus on short-term results, we appreciate a year such as fiscal year 2017, when our 12.4% return exceeded the inflation-adjusted spending rate of the University by more than 5.0% and the return of our passive policy portfolio by 1.0%. Our long-term returns are similarly strong, as the Long Term Pool's annualized return of 11.0% for the twenty-year period ending June 30, 2017, handily exceeds both the annualized return of 6.2% for the policy portfolio and the University's inflation-adjusted spending rate. The collective

value of the long-term University and foundation funds invested with UVIMCO is now \$8.6 billion, having grown by \$1 billion during the 2017 fiscal year.

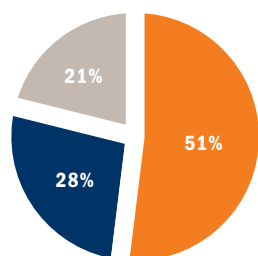
Global equity markets were generally calm and bullish during the year, with many indices posting double-digit gains for the year and only three of the forty-seven countries in the MSCI All Country World Index failing to rise in local currency terms. Rate-sensitive global bonds and global public real estate underperformed other investments, returning -0.4% and 1.8%, respectively. This risk-on market environment represents a reversal from the prior fiscal year, when public equities lost ground and investors flocked to rate-sensitive investments.

UVIMCO proudly supports the mission of the University, and in this report we highlight a few of the ways in which the funds invested by UVIMCO are used to develop responsible citizen leaders and professionals; advance, preserve, and disseminate knowledge; and provide world-class patient care.

Also included in this annual report is an overview of UVIMCO's investment strategy. The proliferation of exchange-traded funds has tempted many investors to become short-term and macro-oriented, often causing those investors to overreact to market and geopolitical events around the world. In contrast, UVIMCO adheres to a value-oriented, long-term investment philosophy that helps us avoid imprudent reactions to short-term news or market dislocations.

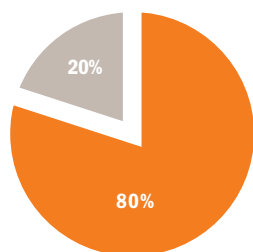
One of UVIMCO's core principles is placing a high importance on people. Our investment process relies on the identification of talented investment managers who share our passion for investing and our focus on ethics, partnership, and hard work. Similarly, we seek staff and board members who exemplify our corporate values and believe in the mission of the University of Virginia. Today, we are fully staffed with first-rate, experienced investors who employ a laser-like focus on the challenging job of investing the University's financial resources for the benefit of both current students and future generations. We work hard, but we greatly enjoy our work. On behalf of the entire team, I thank you for your continued faith in us. ■

UVIMCO Overview



LONG TERM POOL
(\$8.6 billion)

- University of Virginia
- University Strategic Investment Fund
- University-Related Foundations



SHORT TERM POOL
(\$188 million)

- Long Term Pool Cash
- University-Related Foundations



UVIMCO provides investment management services to the Rector and Visitors of the University of Virginia. Many of the University's schools and programs have related foundations that help raise funds and attract private investment in the University's undergraduate and graduate programs. UVA and its foundations work together with the associated schools and programs to enhance alumni support and ensure funds are managed prudently and gifts used according to donors' intentions. Together, the University and related foundations

determine how best to use unrestricted contributions to provide student aid, enhance teaching and research, build and maintain library collections, and support student organizations and publications.

UVIMCO invests the endowment and other long-term funds held by the University and its related foundations in a Long Term Pool, which is custom managed for the endowment spending requirements and risk profile of the University. UVIMCO also manages a Short Term Pool for University and related foundation funds with near-term liquidity needs. The shareholder compositions of the Long Term Pool and Short Term Pool as of June 30, 2017 are as shown in the graphs on the left.

The Purpose of an Endowment

An endowment fund is a permanent, self-sustaining source of funding.

Endowment assets are generally invested with a view toward long-term capital appreciation. Each year, a portion of the endowment value is paid out to support the fund's purpose, and any earnings in excess of this distribution help build the fund's market value over time. In this way, an endowment fund grows and provides support for its designated purpose in perpetuity.

The University of Virginia's consolidated endowment ranks among the five largest for public institutions of higher education and among the twenty largest of all colleges and universities in the United States. Equally important, the University's endowment-per-student ratio is one of the largest among U.S. public institutions of higher education.

The University of Virginia's strong endowment has been a critical asset in enabling the University to expand its program offerings and facilities, and attract high-quality students and faculty. Invested properly, endowments generate the reliable stream of income essential to funding professorships, scholarships, fellowships, lectureships, book funds, and many other purposes.

The University of Virginia's endowment strength also provides the financial support and flexibility necessary when other revenue sources change. Historically, the University relied heavily on appropriations from the Commonwealth of Virginia. However, macroeconomic changes and constrained state budgets in recent years

have resulted in less revenue available for public education—in Virginia and many other states. Steadily declining state support means the University must increasingly rely on past and continued donor generosity to sustain its margin of excellence. Annual contributions help cover the University's yearly operating expenses, whereas new gifts to the endowment, along with the endowment's long-term investment performance, help secure the University's long-term financial stability. As Graph 1 (on page 6) illustrates, endowment spending has surpassed state appropriations as a funding source for the University's academic budget for the past six fiscal years.

The Strategic Investment Fund

The University of Virginia's Strategic Investment Fund (SIF) provides essential support for initiatives that have the potential to transform a critical area of knowledge or UVA operations, further the research progress of the University, materially enhance the quality of the academic experience, support an affordable and excellent education for Virginians, and/or expand economic development in the Commonwealth of Virginia. In 2016–17, the Board of Visitors approved projects that include investments in interdisciplinary research in neuroscience, diabetes, and engineering, and in the expansion of the University's financial aid program.

Over the past decade, UVIMCO's active management of the Long Term Pool added \$1.8 billion to the University's long-term funds beyond the amount that would have been earned by investing in a passive benchmark portfolio.

TABLE 1: Long Term Pool at a Glance

Fiscal Year Ending June 30	2017	2016	2015	2014	2013
OVERVIEW					
Market Value (in thousands)	\$8,621,406	\$7,619,354	\$7,528,350	\$6,949,543	\$5,959,541
Net Asset Value per Share	\$9,696	\$8,625	\$8,760	\$8,131	\$6,833
Return*	12.4%	(1.5)%	7.7%	19.0%	13.4%
<i>Policy Portfolio Benchmark</i>	11.4%	1.8%	1.9%	16.6%	11.3%
STRATEGIC ALLOCATION					
Public Equity	26.7%	24.6%	22.5%	22.0%	24.4%
Long/Short Equity	19.6	21.7	23.8	23.2	23.6
Private Equity	15.7	17.1	18.8	19.9	18.1
Real Estate	5.5	6.6	6.6	7.6	8.6
Resources	6.6	4.5	3.7	4.9	5.5
Marketable Alternatives & Credit	14.5	14.0	9.9	10.9	10.0
Fixed Income & Cash	11.4	11.5	14.7	11.5	9.8

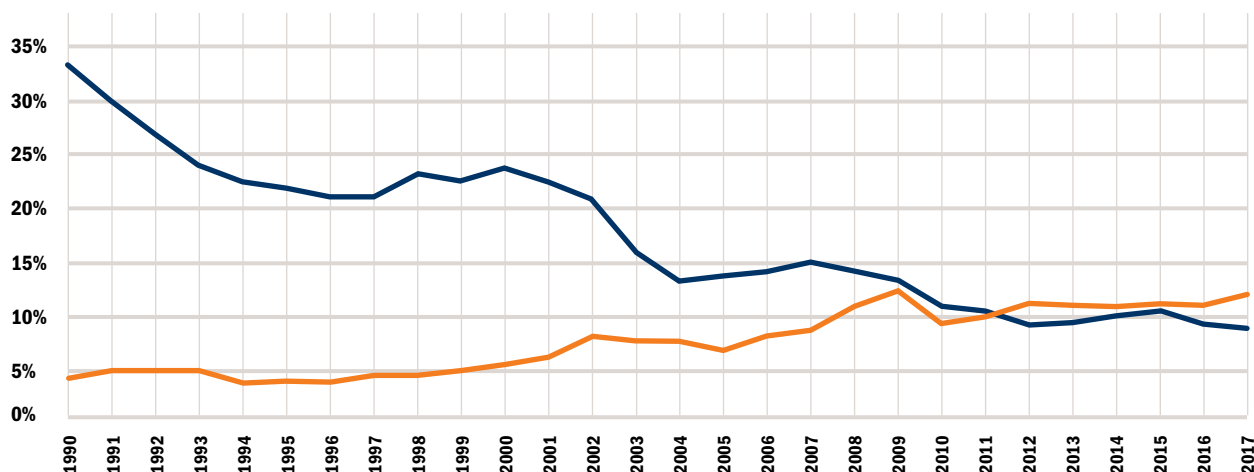
*Returns are presented gross of UVIMCO management and incentive fees.

GRAPH 1: Historical State Appropriations and Endowment Distribution

As a percentage of the academic division operating budget for the fiscal years ending June 30

State Appropriations*

Endowment Distribution



* State appropriations represent unrestricted state general funds appropriated for basic educational needs and exclude restricted state general funds to be used for research and financial aid.

The largest SIF commitment to date has been the Bicentennial Scholars Fund, an endowment dedicated to providing need- and merit-based scholarships at UVA. Created by the Board of Visitors and supported by both the SIF and private philanthropy, the Bicentennial Scholars Fund is a sustainable, long-term source of financial aid to help provide a world-class but affordable education for future generations.

UVIMCO's Long-Term Goal

UVIMCO's primary investment objective is to maximize the long-term, inflation-adjusted return of the Long Term Pool within the risk tolerance of the University. UVIMCO achieves this objective by actively managing the Long Term Pool in a manner carefully designed to provide a substantial and growing stream of income to support the University and its related foundations while preserving for future generations the purchasing power of their long-term investment assets. Over the past decade, UVIMCO's active management of the Long Term Pool added \$1.8 billion to the University's long-term funds beyond the amount that would have been earned by investing in a passive benchmark portfolio. The University and its related foundations have been served well for many years by UVIMCO's long-term perspective, relentless pursuit of excellence, and partnerships with exceptionally talented external investment managers. ■



Investment Strategy



Attractive long-term investment returns, in our view, are best produced by maintaining a consistent and effective investment philosophy and process over time. UVIMCO achieves this goal by adhering to several core principles. These principles guide everything we do at UVIMCO as we invest the Long Term Pool.

First, we are long-term investors. Our relatively long time horizon allows us to capitalize on market inefficiencies and risk premiums that arise from other investors' focus on short-term news and market events. In addition, our ability to avoid imprudent reactions to short-term dislocations gives us the potential to outperform investors who are unable to take a similarly long-term view. Although our portfolio may outperform expectations in the short term, this is not our goal. Rather, we seek to outperform our benchmarks over the long term, which means we are willing to underperform passive benchmarks and peer investors in the short term.

FIVE CORE PRINCIPLES

Invest for the long term

Partner with extraordinary investment managers

Focus on price

Retain an experienced, dedicated staff

Diversify our investments

Second, we seek exemplary long-term returns through our external investment manager selections, asset allocation decisions, and portfolio tilts that take advantage of economic themes. Securities are selected for UVIMCO by a team of extraordinary external managers. Whereas the vast majority of money managers fail to beat passive benchmarks, UVIMCO's disciplined research process and pattern recognition allow us to develop relationships with outstanding investment managers who demonstrate an edge in both

security selection and asset allocation. The reputation we have cultivated as a value-added partner, our extensive network of market contacts, and the patient capital we provide have allowed us to build relationships with the most successful managers—many of whom do not accept capital from new investors.

Third, we believe price matters. Behavioral biases of other investors with different investment time horizons can cause investment prices to differ from their fundamental values for long periods. Markets tend to overreact to recent events and operate under the assumption that recent good or bad news will continue. At UVIMCO, we believe in long-term reversion to fundamental values. Superior long-term returns depend on investing in securities, themes, and asset classes with current prices below their fundamental values. Mispricings and other special situations at the security level create opportunities for our external investment managers, whereas thematic and asset class inefficiencies may be exploited by external investment managers and our internal investment team through portfolio tilts and hedges. We also seek investments that have fallen out of favor, resulting in a supply/demand mismatch of capital. We recognize that prices can differ from their fundamental values for extended periods, so we must remain patient for this approach to yield results.

Fourth, we believe our success is largely dictated by the quality of people on the UVIMCO team and the long-term partnerships we maintain with external investment managers. We ask all staff members to demonstrate a strong work ethic, a passion for investing, effective teamwork skills, and a desire to put the University's interests above personal interests. We expect our external investment managers to uphold similar standards, and we believe that hiring talented, high-integrity managers is one of the most important ways to control portfolio risk.

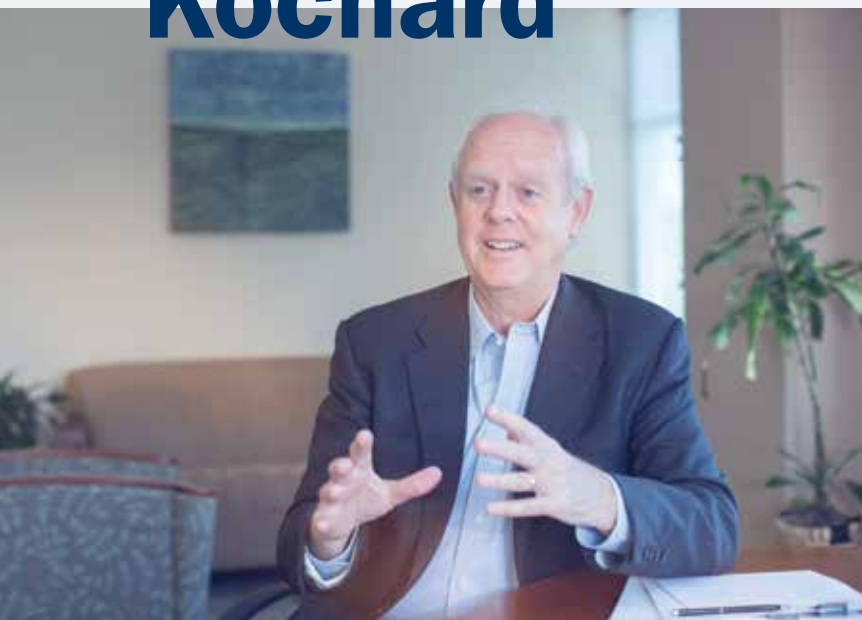
Finally, we believe in the benefits of diversification. We expect the quality of our research and investment selection to lead to good results over time, but we understand certain decisions will be unsuccessful. Therefore, we diversify our investments across asset classes, themes, and managers. We meticulously and continuously review and test each of these allocations, rebalancing the portfolio when necessary. We pursue strategies and investments in our areas of expertise, and we decline opportunities outside our realm of expertise. This approach requires humility in our investment team. We also seek humility in our investment managers and appreciate those who are confident but not overconfident, employ investment processes in which we have shared conviction, and consider the downside risk of every investment. ■



The stock market is a device for transferring money from the impatient to the patient."

—WARREN BUFFETT

American business magnate, investor, and philanthropist

Q & A
WITHLarry
Kochard

Chief Executive Officer/Chief Investment Officer

What are some of the advantages and disadvantages to investing with a long-term time horizon?

A basic tenet of portfolio management is to employ an investment philosophy that is commensurate with the investor's time horizon and risk preferences. UVMCO adheres to this principle, taking a long-term investing approach that carefully considers the objectives and operations of the University and its related foundations. A relatively long time horizon also allows us to exploit mispricings caused by short-term investors' overreaction to recent events and daily market movements.

One of the biggest challenges faced by long-term investors arises from their inevitable comparison to short-term investors. The latter group sometimes posts impressive short-term gains by taking advantage of temporal market dislocations. It is tempting to chase fads, particularly when our short-term performance lags that of other investors; however, UVMCO's goal is to outperform our passive benchmark in the long term, and achieving this objective requires that we stay the course with our long-term investment philosophy.

How has your approach to portfolio management evolved?

Over the years, I have gained greater perspective on the challenges of investing in illiquid markets. My experience managing investment portfolios through market downturns has helped me see clearly how outsized allocations to illiquid investments may cause poor investor decisions and/or future challenges in portfolio management. For example, I believe strategies intended to diversify the portfolio in down markets must also be relatively liquid, or those investments cannot serve their purposes of rebalancing or allowing opportunistic allocations. I believe there should be an inverse relationship between an investment's size and liquidity profile.

What are your thoughts on passive investing?

Passive investing is an excellent option for investors who cannot identify or access the admittedly rare, highly skilled managers who consistently beat passive benchmarks on an after-fee basis. The low-fee, liquid, and flexible nature of exchange-traded funds (ETFs) and other passive investment funds has disrupted the investment industry in a positive way. However, expanded ETF platforms better enable investors to quickly change their exposures to different market factors, causing many to become much more macro-driven and reactive to short-term market movements. Unfortunately, most market participants don't only fail to realize the hoped-for gains but actually lose value when they attempt to time markets or predict global macro forces.

At UVIMCO, we remain confident in our ability to find active investment managers who can add value in both liquid and illiquid investments. Our disciplined research process and pattern recognition allow us to cultivate long-term relationships with extraordinary investors who demonstrate an edge in security selection and asset allocation.

What investments look attractive in the current environment?

I expect future returns will be dampened due to low bond yields, high equity valuations, and excessive capital allocated to private investments over the past several years. Very few thematic opportunities look truly attractive in today's environment, but we are finding interesting opportunities in Japan, Europe, and frontier markets. I also expect private markets to struggle to fully absorb the recent capital flows into that space, but the performance differential between top- and bottom-quartile private managers will present unique opportunities going forward.

My conviction in our long/short public equity portfolio remains strong. We are nine years into a sustained bull market for equities. In the event of an equity market correction or increasing dispersion in security prices, our long/short equity managers are poised to excel. ■



UVIMCO's goal is to outperform our passive benchmark in the long term, and achieving this objective requires that we stay the course with our long-term investment philosophy."

Investment Policy



An investment policy is a financial blueprint designed to reflect an institution's return objectives and risk tolerance. Such a policy should balance an institution's ability to tolerate a decline in assets available for spending within a given time frame with its desire for returns and more available assets in the future. UVIMCO's Board of Directors establishes the investment policy for the Long Term Pool and monitors the development, analysis, adoption, and execution of investment decisions by the UVIMCO staff. The Board reviews the investment policy annually.

In addition to serving as a financial blueprint, the investment policy sets forth the applicable standard of care, delineates the responsibilities of the Board and staff, and establishes various parameters for risk management, including portfolio diversification and liquidity. The investment policy also includes a policy portfolio allocation, which the Board establishes based on the University's risk tolerance and expected future capital requirements. The Board carefully considers capital market risk and return estimates to ensure the policy portfolio is appropriately designed to achieve the investment objectives for the Long Term Pool. UVIMCO's long-term investment policy portfolio allocation and related performance benchmarks are shown in Table 2.

Equity investments provide an opportunity to participate in the growth of public and private companies. In a growing global economy with low inflation, these investments historically have provided the highest long-term return opportunities. Real assets provide protection in an inflationary environment, and thus tend to benefit a diversified portfolio during periods of a depreciating dollar and/or rising prices or interest rates. Fixed income and marketable alternative investments provide protection in deflationary or weak economic environments.

Since the strategic policy portfolio is established to reflect the risk tolerance and long-term needs of the University, revisions to the policy portfolio are infrequent and gradual, generally occurring only when the University's risk tolerance changes. However, because market prices and portfolio valuations are dynamic, and our "bottom-up" investment opportunity set is always changing, the actual investment allocation of the Long Term Pool will differ from the policy portfolio allocation at any given point in time. The actual asset allocation and exposures of the Long Term Pool are constantly monitored to ensure that the Long Term Pool's level of market risk is consistent with that of the policy portfolio. The Long Term Pool's actual allocation as of June 30, 2017, was 62.0% to equity managers; 12.1% to real asset managers; and 25.9% to fixed income, marketable alternatives, and cash managers. Looking through to our managers'

TABLE 2: Policy Portfolio

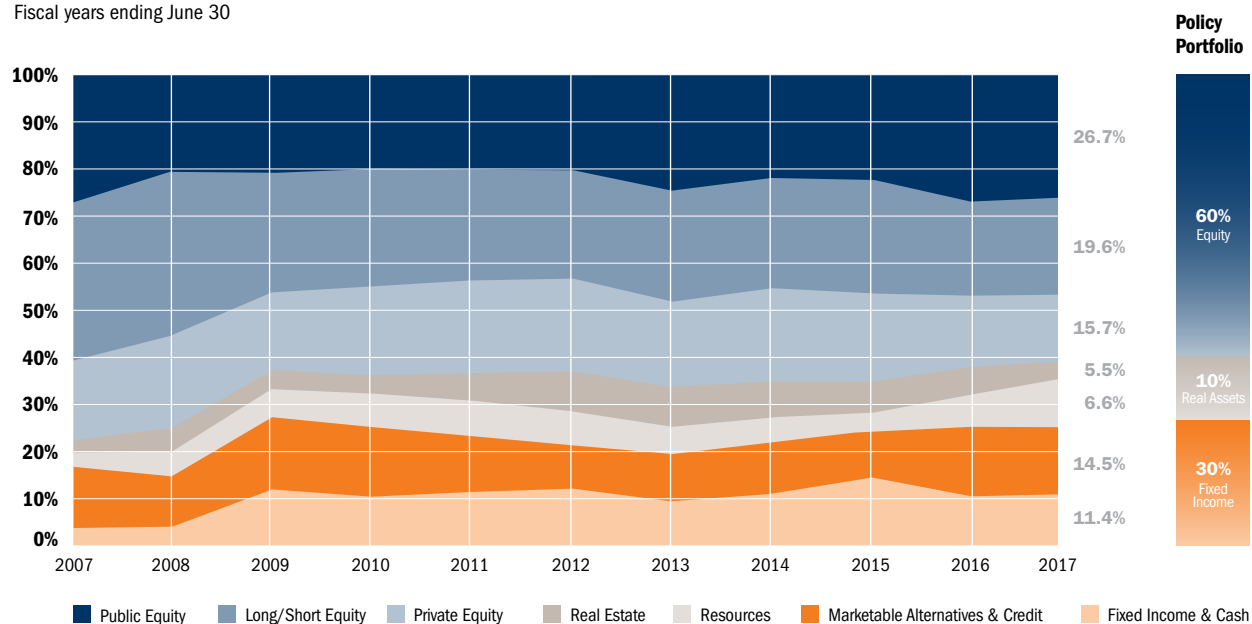
Broad Asset Class	Allocation	Benchmark
Equity	60%	MSCI All Country World Equity
Real Assets	10%	50% MSCI U.S. Real Estate; 50% MSCI All Country World Real Estate
Fixed Income	30%	50% Barclays U.S. Aggregate Bond; 50% Global Aggregate Bond (Hedged)
TOTAL	100%	Policy Portfolio

underlying investments, the Long Term Pool had allocations of 52.8% to equities, 14.4% to real assets, and 32.8% to fixed income (including marketable alternatives, credit, bonds, and cash).

The Long Term Pool's asset allocation has been relatively stable for several years. Graph 2 displays the trends in the asset allocation of the Long Term Pool over the past decade. ■

GRAPH 2: UVMCO Long Term Pool Historical Asset Allocation


Fiscal years ending June 30



ENDOWMENT AT WORK

Furthering the mission of
the University of Virginia,
today and tomorrow.





UVIMCO is pleased to highlight several ways in which endowment funds invested in the Long Term Pool are supporting UVA's top-quality faculty, students, and research.

FIRST, we bring attention to the importance of endowed professorships in fueling a strong and vibrant faculty in the College and Graduate School of Arts & Sciences. Endowed professorships help attract and retain an outstanding faculty and provide vital support for interdisciplinary initiatives in Arts & Sciences, and across the University.

SECOND, we highlight the innovative research of two McIntire School of Commerce faculty members, Amanda P. Cowen and Nicole V. Montgomery, recipients of the Walker Fund for Academic Excellence and the Davis R. Ledford Faculty Fellowship Fund, respectively. Thanks to the support received from these endowments, Cowen and Montgomery explored the relationship between CEOs' gender and public opinion of those CEOs during times of organizational crisis.

THIRD, we spotlight the Susan Nelson Fleiss Endowed Scholarship, which funds international study for one architecture student each year. The School of Architecture's study abroad programs span the world and encourage students to gain a global perspective on design and planning.



Fueling a Top Faculty in Arts & Sciences

The University of Virginia's longstanding reputation of academic excellence is a reflection of its distinguished scholars and researchers. Faculty recruitment and retention is one of the top priorities at UVA's College and Graduate School of Arts & Sciences. Endowed professorships help recruit academia's brightest minds and guarantee an outstanding Arts & Sciences faculty in perpetuity.

Endowed professorships are awarded to scholars who have had a profound impact on education, demonstrated excellence in their discipline, and achieved national and international recognition for their distinguished work. "An endowed professorship is one of the most prestigious honors that can be bestowed on a faculty member," said Associate Dean for the Sciences and Professor of Astronomy John Hawley.

In addition to indicating high professional stature and exemplary scholarly achievement, endowed professorships support the assembly of a diverse faculty leading cross-disciplinary research. As part of a pan-university hiring initiative, the College and Graduate School of Arts & Sciences seeks to attract top-quality faculty to interdisciplinary positions and eliminate boundaries to research across fields. With their funds invested in UVIMCO's Long Term Pool, endowed professorships at UVA propel collaborative research and teaching across the University, and help strengthen areas of strategic importance, such as neuroscience and environmental resilience.

In 2016–17, the College's sciences division appointed two faculty members to endowed professorships in the Department of Environmental Sciences. Marine chemistry researcher Scott C. Doney was named the Joe D. and Helen J. Kington Professor in Environmental Change. Eco-hydrologist Lawrence E. Band was selected to be the Ernest H. Ern Professor in Environmental Sciences, with a joint appointment in the Civil and Environmental Engineering department in the School of Engineering. Both experts in their fields, Doney and Band will strengthen the newly established University of Virginia Environmental Resilience Institute, a transdisciplinary initiative seeking to address complex socio-environmental problems.

An effective long-term investment strategy helps maintain the endowment's value over time, and provides a steady and growing stream of income essential to funding professorships in Arts & Sciences as well as other UVA schools and units. The type of long-term impact of this strategy is evidenced in endowments like the Brown-Forman Professorships. Established in the early 1980s with \$100,000 donations, the two Brown-Forman Professorships now have balances of close to



SCOTT C. DONEY

Joe D. and Helen J. Kington
Professor in Environmental Change



LAWRENCE E. BAND

Ernest H. Ern
Professor in Environmental Sciences



\$1 million each due to UVIMCO's strong investment performance.

With the generous gifts of alumni, parents, and friends, the College will attract outstanding faculty, foster progress in teaching, and provide a world-class education for many more generations.

Supporting Innovative Research by Emerging Scholars at McIntire

Amanda P. Cowen and Nicole V. Montgomery, associate professors at the University of Virginia's McIntire School of Commerce, tackle business issues that carry significant, complex social implications. Their recent and ongoing study about the relationship between CEO gender and public opinion during times of crisis illustrates the type of innovative and interdisciplinary work directly enabled by dedicated research funding at McIntire.

Cowen, the William Stamps Farish Professor of Free Enterprise and a 2017 All-University Teaching Award recipient, examines social dynamics and their ability to shape judgment and action in organizational contexts. Her interests have led her to conduct several studies about CEOs and crisis management.

Her colleague, Montgomery—the C. Coleman McGehee Professor of

Commerce—analyzes consumer behavior, decision making, and brand commitment.

Thanks to the support Cowen and Montgomery received in summer 2016 from the Walker Fund for Academic Excellence and the Davis R. Ledford Faculty Fellowship Fund, respectively, the duo fused their areas of expertise to create an experimental study exploring how the gender of a CEO affects people's perceptions of that CEO when the organization he or she leads suffers product failure. The study investigates how those opinions then influence consumers' willingness to purchase products from those companies in the future.

Cowen and Montgomery collected responses from focus groups presented with fictional articles about corporate missteps. The stories



AMANDA P. COWEN
William Stamps Farish
Professor of Free Enterprise

“As with everything we do here at McIntire, understanding is going to come from working across disciplines, combining insights from governance and organizational behavior with the latest thinking from marketing and corporate communications.”

—AMANDA P. COWEN

were identical except for the name of the CEO, who was identified as either Adam Clayton or Abigail Clayton. The resulting data revealed noticeably different reactions to and judgment of the corporate leaders.

“It turns out that gender does matter, but it depends on what caused the failure,” said Cowen. The male CEO in the article suffered a stronger backlash than his female counterpart for an unintentional error—or what is sometimes called “honest incompetence.” Apologizing elicited a more severe response, and the male CEO received less criticism when denying a failure. Interestingly, the female CEO was more readily blamed when the event concerned a moral error, and consumer reaction was harsh if she denied any wrongdoing. In contrast to her male counterpart, participants tended to be more lenient if she offered an apology. The study exposes the pitfalls of stereotypes and some of the important challenges women leaders face.

“Our research is now headed toward trying to understand these different stakeholder groups and the role that gender may play in shaping their perceptions,” Montgomery said. “We hope to identify recommendations that can benefit organizations and their leaders.”

Noting the role of private support in their study, Cowen added that the McIntire School attracts this kind of funding because of its longstanding tradition of examining business issues beyond rigid limitations: “As with everything we do here at McIntire,” Cowen said, “understanding is going to come from working across disciplines, combining insights from governance and organizational behavior with the latest thinking from marketing and corporate communications.”

Generous contributions by key members of the McIntire community provide the crucial resources necessary to facilitate creative approaches to scholarship. Strong partnerships with donors enhance the school by fostering a culture of inventive research, cutting-edge study, and exceptional business education programs.



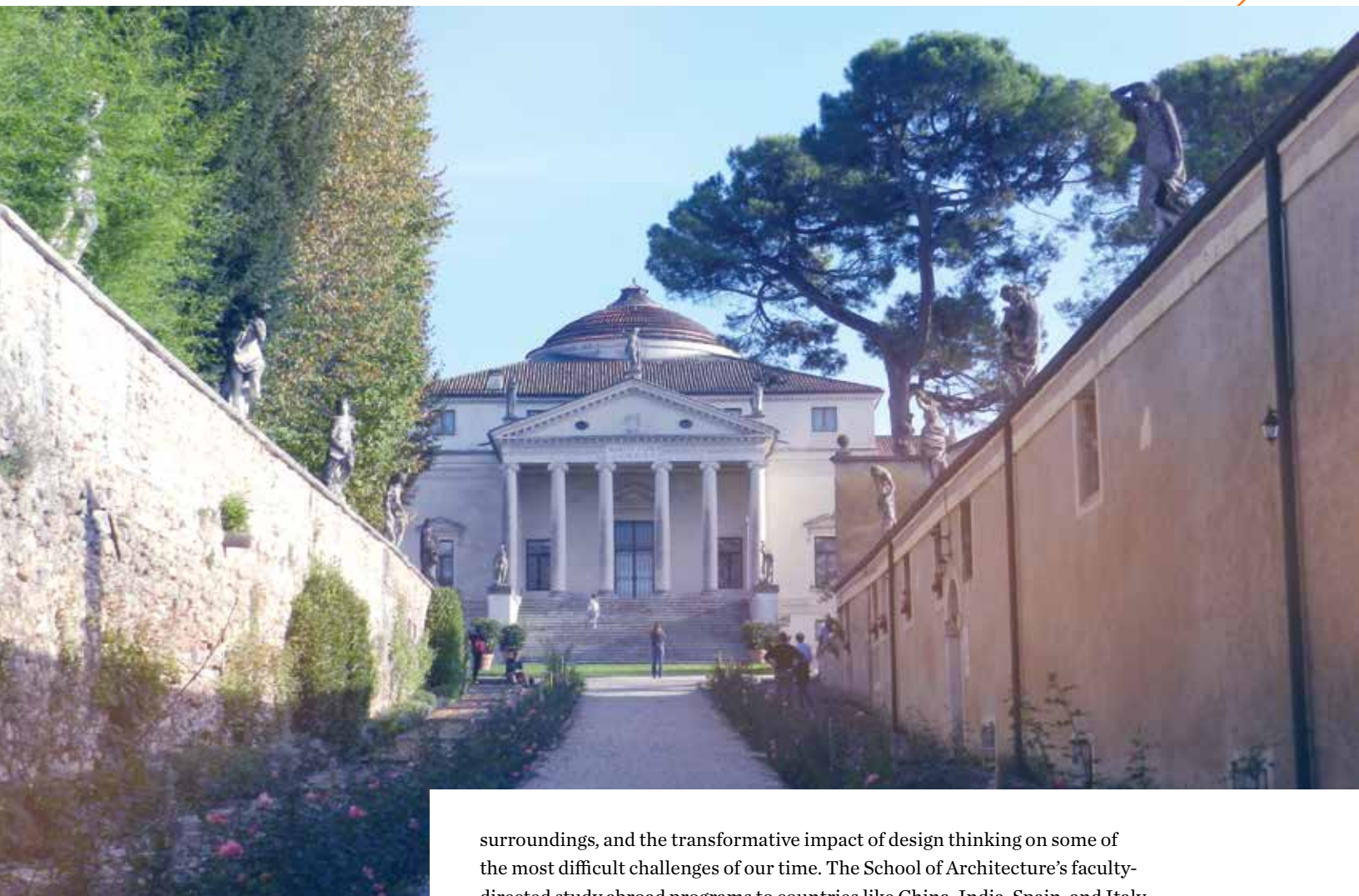
NICOLE V. MONTGOMERY

C. Coleman McGehee
Professor of Commerce

Providing International Perspective to Designers and Planners

The spaces in which we live shape our environment and influence the quality of our lives. At the University of Virginia School of Architecture, students study the relationships between the built environment and their



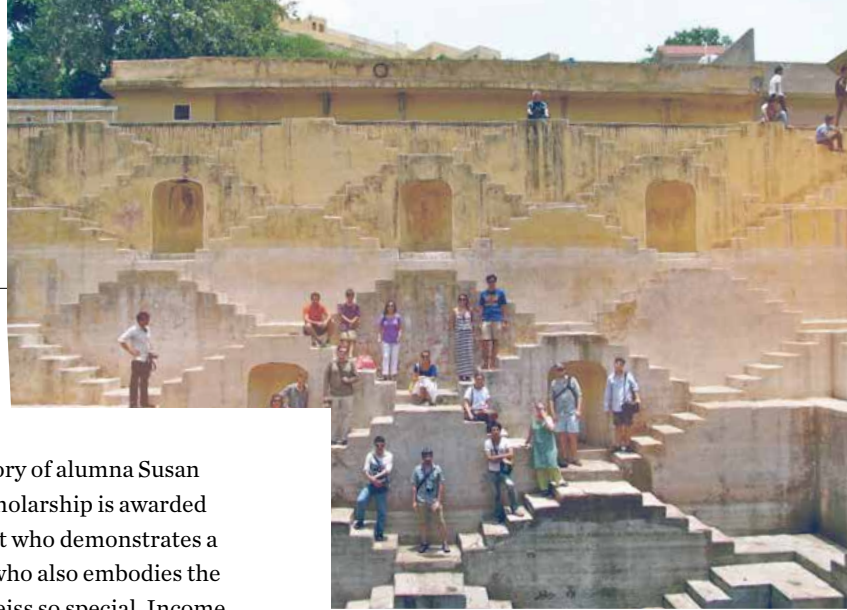


Villa "La Rotonda",
Vicenza, Italy

surroundings, and the transformative impact of design thinking on some of the most difficult challenges of our time. The School of Architecture's faculty-directed study abroad programs to countries like China, India, Spain, and Italy encourage students to bridge theory and practice while studying architecture, landscape architecture, urban planning, and architectural history.

Endowed scholarships and fellowships support the school's vision of providing students with a global perspective and real-world experience beyond the walls of Campbell Hall. The ultimate goal is to offer tangible solutions to big-picture questions universal to human occupation, such as sustainability, water management, urbanization, overpopulation, and historic preservation. Through travel, students meet with local stakeholders, learn from their expertise, and explore the applicability of developed solutions to diverse settings.

Invested in UVIMCO's Long Term Pool, the Susan Nelson Fleiss Endowed Scholarship allows one architecture student each year to study internationally.



Panna Meena ka Kund,
Jaipur, India

Created by classmates and family members in memory of alumna Susan Nelson Fleiss (Architecture '98), the merit-based scholarship is awarded to an exceptionally deserving undergraduate student who demonstrates a passion for the ageless process of construction and who also embodies the warmth in interpersonal relationships that made Fleiss so special. Income from the endowment is used for tuition, travel, and study, with preference for students taking part in the Veneto Programs, the School's longest-running international offerings.

The Veneto region of northeastern Italy is home to the cities of Venice and Vicenza—two of the region's UNESCO World Heritage Sites. Vicenza and the Palladian villas of the Veneto had a pivotal impact on the development of architecture in Europe and North America. Hitting even closer to home, Palladian architecture profoundly influenced Thomas Jefferson, informing his design of the Rotunda and the Academical Village at the University of Virginia. Studying these cities on-site allows students to develop a deeper

understanding of built structures' physical characteristics and their relationships to the surrounding culture, history, economy, and environment—all elements that are difficult to replicate in classroom settings.

In 2016–17, the Susan Nelson Fleiss Endowed Scholarship was awarded to Lydia Hatfield (Architecture '17). Hatfield studied in the School's Venice Semester Abroad Program in fall 2016. Now employed at an architecture firm dedicated to socially conscious design, she reflected: "Studying abroad provided me a chance to practice skills fundamental for a designer hoping to work in the field of community-engaged design. I am grateful to the Nelson and Fleiss families for offering me the opportunity to engage with these ideas in such an impactful and unforgettable way."

With the help of generous donors and endowments such as the Fleiss Scholarship, the School of Architecture will continue to provide students like Hatfield "the broad perspectives needed to succeed in a fast-changing, globalized society, along with the opportunities to serve and make an impact." ■

"Studying abroad provided me a chance to practice skills fundamental for a designer hoping to work in the field of community engaged design. I am grateful to the Nelson and Fleiss families for offering me the opportunity to engage with these ideas in such an impactful and unforgettable way."

—LYDIA HATFIELD

*University of Virginia School of Architecture Foundation purpose statement on the Susan Nelson Fleiss Endowed Scholarship.

Risk Management

Investors may be willing to bear risk only if they are adequately compensated with higher returns in the future. At UVIMCO, we are willing to assume certain risks but will eliminate other risks if we are unable to absorb associated downside losses or do not earn a sufficient premium for assuming those risks. UVIMCO uses quantitative and qualitative risk-management tools and analyses to assess and manage the risks in the Long Term Pool. We measure and control for three primary risks: market risk, manager risk, and liquidity risk.

Market Risk

Market risk is measured by the volatility of returns or maximum potential drawdown in a portfolio. Although UVIMCO actively monitors a variety of market risks—including inflationary, interest rate, and credit risks—we believe equity market risk represents the most meaningful market risk factor for the Long Term Pool. UVIMCO manages market risk in the Long Term Pool by diversifying across three broad asset classes: equity, fixed income, and real assets. We continually review our actual allocations to these asset classes and rebalance the portfolio when necessary. If needed, we also employ certain hedging strategies to maintain an estimated market risk in the Long Term Pool that is consistent with the estimated market risk of the policy portfolio.

Because the policy portfolio is designed to reflect the University's risk tolerance, the actual asset allocation and exposures of the Long Term Pool are constantly monitored to ensure their market risk level is comparable to that of the policy portfolio. As of June 30, 2017, the Long Term Pool's market risk was consistent with that of the policy portfolio.

Manager Risk

The Long Term Pool invests with more than 140 external managers. UVIMCO seeks to maintain a portfolio of managers that generates sufficient returns to

compensate for bearing the market risks of the asset classes as well as the additional risk inherent in working with individual managers. Manager risk includes the risk that the specific investments selected by the manager will underperform the relevant benchmark, operational or business risks within the manager's organization, lack of transparency, and leverage. UVIMCO mitigates manager risk by diversification and the employment of extensive due diligence to assess both the investment and operational aspects of our external fund managers. In addition, our investment policy ensures diversification by limiting our exposure to any single manager.

Over time, UVIMCO has been well compensated for assuming a certain level of manager risk. Attribution analyses suggest that manager selection is the largest contributor to the Long Term Pool's outperformance of policy benchmarks and peers.

Liquidity Risk

UVIMCO defines liquidity risk for the Long Term Pool as an inability to meet any of the following four primary liquidity requirements: (1) investor withdrawals, (2) the excess of capital calls over expected capital distributions from private funds, (3) the need to rebalance the portfolio's investment allocation following a market decline, and (4) the ability to deploy cash opportunistically as attractive new investment prospects arise. We manage liquidity risk in the Long Term Pool by maintaining a portfolio of U.S. Treasury bills and notes, retaining sufficient liquidity with our public equity and hedge fund managers, and carefully monitoring the pace of our commitments to private investments. We invest approximately 8% to 12% of the Long Term Pool in safe and highly liquid assets. We ensure at least 20% of the Long Term Pool is available for conversion to cash within one quarter, and at least 30% of the Long Term Pool is available for conversion to cash in any twelve-month period.

Actual liquidity is a function of the size and nature of our private portfolio, the total of Long Term Pool funds invested in fixed income or cash, and the liquidity terms of our public investments. As of June 30, 2017, approximately 11% of the Long Term Pool's assets were invested in highly liquid, government-issued debt securities and cash. Although this level of liquidity is at the high end of our preferred range, we are comfortable with this level because we have a robust pipeline of attractive investment opportunities. In addition, as of June 30, 2017, we were able to access more than 32% of the Long Term Pool's investments within three months and about 55% within a year. This current liquidity level exceeds the Pool's minimum requirements. ■



Successful investing is about managing risk, not avoiding it.”

—BENJAMIN GRAHAM

American investor, economist, and professor

Investment Performance

\$1.00 invested twenty years ago in the Long Term Pool would be worth \$8.09 as of June 30, 2017, whereas \$1.00 invested twenty years ago in the passive policy portfolio would be worth \$3.31.



VIMCO assesses the performance of the Long Term Pool in several ways. Our primary objective is to generate inflation-adjusted, long-term returns in excess of the University's spending rate, thereby achieving our goal of generating a steady source of income to support UVA's mission. We also seek to outperform the long-term returns of our passive policy portfolio benchmark. Lastly, we compare our performance to the broad universe of other institutional investors. Although we do not unduly focus on the

investment activities and results of peer organizations, we recognize that relative performance is important to our shareholders.

The Long Term Pool, as noted previously in this report, has a passive policy portfolio benchmark comprised of public market indices: 60% equity, 10% real assets, and 30% fixed income. During fiscal year 2017, global equity markets rebounded strongly, driven both by improving economic growth prospects and by continued accommodative monetary policies from central banks. Global equity markets gained 19.4% during the fiscal year, led by strong gains in several emerging markets. As equity prices rose, perceived safe-haven investments lagged, with global public real estate and global bonds gaining 1.8% and losing 0.4%, respectively. In aggregate, UVIMCO's policy portfolio advanced 11.4% for the fiscal year ending June 30, 2017.

As discussed earlier in this report, UVIMCO actively manages the Long Term Pool, primarily by employing external investment managers, to pursue long-term returns exceeding the policy benchmark while maintaining a comparable level of market risk. The Long Term Pool's return of 12.4% for the year ending June 30, 2017, outperformed the policy portfolio return by 1.0%. Double-digit returns in UVIMCO's public equity, real estate, and resources portfolios contributed to the Long Term Pool's one-year outperformance relative to the policy portfolio.

Of note, our goal is not to outperform the passive benchmark over one-year or other short-term time periods. Rather, as an endowment manager, we seek to outperform the passive benchmark in the long term. Over the ten- and twenty-year periods ending June 30, 2017, UVIMCO's portfolio compounded at an annualized rate of 7.3% and 11.0%, respectively. This performance exceeds both the University's spending rate (plus inflation) and the ten-year and twenty-year annualized returns available through ownership of the passive policy portfolio— 4.7% and 6.2%, respectively.

To illustrate, \$1.00 invested twenty years ago in the Long Term Pool would be worth \$8.09 as of June 30, 2017, whereas \$1.00 invested twenty years ago in the passive policy portfolio would be worth \$3.31. This long-term outperformance has allowed the endowment to provide a steady and growing

TABLE 3: UVIMCO Long Term Pool Relative Performance

In percentages, annualized through June 30, 2017

	1 YEAR	3 YEAR	5 YEAR	10 YEAR	20 YEAR
UVIMCO Long Term Pool	12.4	6.0	10.0	7.3	11.0
TUCS All Master Trust Universe Top Quartile	12.9	5.8	9.5	5.9	7.4
TUCS All Master Trust Universe Median	11.3	4.9	8.3	5.4	6.9

level of support to the University and its related foundations.

In addition to evaluating the Long Term Pool's performance relative to the market and our policy portfolio, we consider our performance relative to the TUCS All Master Trust Universe, a broadly accepted benchmark for the performance of institutional assets, including corporate and public pensions, endowments, and foundations. As shown in Table 3, the Long Term Pool's return for the 2017 fiscal year outperformed the median return of other institutional investors, but fell short of the top quartile return for the year. However, the Long Term Pool's returns exceeded the top quartile of other institutional investors' returns over all other time frames ranging from three to twenty years.

Table 4 (on page 26) summarizes the performance of the Long Term Pool and its component strategies over time. As the table shows, different investment strategies make positive contributions to the Long Term Pool's performance over time.

UVIMCO's equity portfolio, which includes public, long/short, and private equities, represented 62.0% of the Long Term Pool as of June 30, 2017. During the 2017 fiscal year, UVIMCO's public equity portfolio gained 24.5%, bolstered by the strong recovery in global equity markets following a period of negative returns in the 2016 fiscal year. Our long/short equity and private equity portfolios posted modest returns of 5.5% and 5.6%, respectively, trailing the 19.4% return of the policy benchmark MSCI All Country World Index (ACWI). Overall, the Long Term Pool's equity portfolio rebounded strongly from last year's negative returns but lagged behind its respective benchmark. While we are disappointed with the one-year returns of both our long/short and private equity portfolios, we do not overanalyze the short-term performance of any strategies and instead focus on long-term results. In the past two decades, the private equity portfolio has been the most significant contributor to the Pool's outperformance, as the twenty-year annualized return of 18.9% outperformed the return of the MSCI ACWI by 13.0% per year. Meanwhile, our long/short managers recorded a twenty-year annualized return of 10.2%, an impressive feat given the lower market exposure of that portfolio.

Overall, the Pool's composite equity portfolio returned 13.0% per year over the twenty-year period ending June 30, 2017, outperforming the policy benchmark return by 7.1% per year. While we are gratified by this outperformance, we expect outsized returns to be increasingly difficult to achieve in the future due to high valuations in equity markets.

Our real assets portfolio, which consists of real estate and resources, represented 12.1% of the Long Term Pool as of June 30, 2017. This portfolio is intended to provide valuable diversification and inflation protection benefits to the overall Pool. UVMCO's real assets portfolio was the top performer during

TABLE 4: UVMCO Long Term Pool Strategy Allocation and Investment Returns

In percentages

	June 30, 2017 Allocation ¹	ANNUAL RETURN (FISCAL YEAR)					ANNUALIZED		
		2017	2016	2015	2014	2013	5YR	10YR	20YR
EQUITY									
Public	26.7	24.5	(5.7)	7.2	26.8	22.8	14.4	8.4	11.0
Long/Short	19.6	5.5	(1.6)	6.4	11.3	17.3	7.6	6.1	10.2
Private	15.7	5.6	(3.9)	25.8	35.3	11.8	14.0	9.6	18.9
Total Equity	62.0	13.0	(3.6)	12.0	23.3	17.3	12.0	8.5	13.0
<i>MSCI All Country World Equity</i>		19.4	(3.2)	1.2	23.6	17.2	11.1	4.3	5.9
REAL ASSETS									
Real Estate	5.5	11.8	9.4	21.8	14.7	8.7	13.2	(2.8)	3.5
Resources	6.6	48.4	(8.6)	(21.2)	27.1	4.5	7.3	12.8	16.3
Total Real Assets	12.1	28.7	2.8	3.0	19.3	7.2	11.7	6.6	11.1
<i>MSCI Real Estate²</i>		1.8	16.5	3.3	11.6	10.0	8.5	3.5	6.6
FIXED INCOME, CASH & MAC									
Marketable Alternatives & Credit (MAC)	14.5	7.5	1.9	(2.4)	14.6	15.7	7.2	6.3	6.3
Fixed Income	9.1	(0.1)	1.2	0.7	0.4	0.2	0.5	3.3	5.5
Cash & Currency	2.3	0.5	0.1	0.0	0.1	0.0	0.1	—	—
Total Fixed Income, Cash & MAC	25.9	4.1	2.0	(0.8)	7.4	6.6	3.8	4.8	6.0
<i>Barclays Aggregate Bond³</i>		(0.4)	6.7	2.4	4.8	0.5	2.8	4.5	5.2
LONG TERM POOL⁴	100.0	12.4	(1.5)	7.7	19.0	13.4	10.0	7.3	11.0
<i>Policy Benchmark⁵</i>		11.4	1.8	1.9	16.6	11.3	8.5	4.7	6.2

1. Percent of net asset value

2. 50% MSCI U.S. Real Estate and 50% MSCI All Country World Real Estate (prior to January 1995, 100% FTSE NAREIT)

3. 50% Barclays U.S. Aggregate Bond and 50% Barclays Global Aggregate Bond (hedged in USD)

4. Long Term Pool returns are presented gross of UVMCO management and incentive fees

5. Geometrically linked monthly average of 60% MSCI All Country World Equity, 10% MSCI Real Estate, and 30% Barclays Aggregate Bond

fiscal year 2017. Our real estate investments generated an attractive return of 11.8%, outperforming the weighted policy benchmark of publicly traded U.S. and international real estate securities, which returned 1.8%. Meanwhile, UVMCO's resources portfolio gained 48.4% in fiscal 2017, significantly outperforming both the policy benchmark and the S&P GSCI, a broad-based index of commodities, which fell 9.0% during the year.

Over the past two decades, our composite real assets portfolio has contributed significantly to the Long Term Pool's outperformance, with a twenty-year annualized return of 11.1%—outperforming the real assets benchmark return by 4.5% per year.

UVMCO's pool of cash, fixed income, and marketable alternatives and credit (MAC) strategies represented 25.9% of the Long Term Pool as of June 30, 2017. The MAC portfolio, which is invested across a wide array of credit and absolute return strategies, rose 7.5% during fiscal year 2017. Our fixed income portfolio was roughly flat for the fiscal year, declining by 0.1%, while the blended Barclays Aggregate Bond Index portion of our policy portfolio lost 0.4%, as rising bond yields led to weak returns in the global bond market. Our cash portfolio continued to provide critical liquidity and risk control for the Long Term Pool, returning 0.5% during fiscal year 2017.

Over the past twenty years, our aggregate cash, fixed income, and MAC strategies have earned an annualized return of 6.0% versus the Barclays Aggregate Bond Index return of 5.2%. The MAC portfolio alone recorded a twenty-year annualized return of 6.3% versus the Barclays Aggregate Bond Index return of 5.2% and the Barclays U.S. High Yield Index return of 7.0%. Fixed income and cash are included in the Long Term Pool primarily for liquidity purposes and because of their low correlation to equity markets. While providing both of those benefits, our fixed income portfolio has earned a respectable 5.5% per year over the past two decades versus the Barclays Aggregate Bond Index annualized return of 5.2% and the Barclays U.S. Treasury Index annualized return of 4.9%.

UVMCO's focus remains on the long term. Our primary competitive edge is our ability to maintain a long-term view in all market conditions, and avoid overreacting to short-term market dislocations. We will continue to exploit this relative advantage to generate risk-adjusted long-term returns to support the long-term spending needs of the University. We remain disciplined in our approach to manager selection, asset allocation, and risk management. Our team is dedicated to investment excellence and supporting the University, and we will continue to seek new opportunities to add value to the endowment. We recognize the value of the relationships we have built over many years and will continue to partner with managers who we believe can generate outsized net returns beyond those of passive market participants. ■



Any time luck contributes to outcomes, you will have reversion to the mean."

—MICHAEL MAUBOUSSIN

Investment strategist,
author, and professor

Short Term Pool



Established in 2012, the Short Term Pool offers the University and related foundations an investment alternative for their short-term operating funds. The primary purpose of this Pool is to preserve principal and provide a low-cost, stable, highly liquid, and secure investment vehicle to UVIMCO's shareholders. The Short Term Pool allows the University and its foundations to invest their cash alongside the cash of the Long Term Pool. By varying their allocations of investment funds between the Long and Short Term Pools, UVIMCO's shareholders can tailor an individualized portfolio of investments to their desired risk and liquidity levels. Holding more liquid investments generally results in decreased overall expected returns in the long term.

TABLE 5: Short Term Pool at a Glance

	2017	2016	2015
Fiscal Year Return	0.49%	0.17%	0.06%
<i>Citigroup 30 Day Treasury Bill</i>	0.42%	0.11%	0.02%
Yield to Maturity	0.80%	0.27%	0.03%
Market Value as of June 30 (in millions)	\$188	\$382	\$264
Duration (in years)	0.17	0.18	0.16

The Short Term Pool is invested in U.S. Treasury notes, bonds, and bills with maturities of not more than one year, except for U.S. Treasury floating rate notes, which may have a maturity of up to two years. The Short Term Pool incurs low expenses because UVIMCO charges no management or performance-based fees to the Pool. UVIMCO is also able to customize the composition of the Short Term Pool to meet the liquidity needs of the University and its foundations.

Because asset protection and liquidity are the Short Term Pool's primary objectives, UVIMCO expects that the Pool may yield less than other short-term investment options. Other highly liquid vehicles, including money market funds, often invest in commercial paper or bonds that are exposed to interest rate or credit risk so as to capture incremental basis points of yield. However, these funds can lose principal in the event that investment income does not fully cover operating expenses or investment losses. Therefore, we do not strive for yield in the Short Term Pool. Rather, asset appreciation and income are achieved through the Long Term Pool. ■

Board of Directors

UVIMCO is a separate 501(c)(3) Virginia nonstock corporation. It is governed by a Board of Directors that includes three individuals appointed by the University of Virginia's Board of Visitors and one appointed by the University president. The Board meets four times a year to discuss investment strategy, set investment policy, and monitor performance. UVIMCO's Board of Directors as of September 1, 2017, is as follows:

David MacFarlane ♦

McIntire '84 / Chair

Mitchell Cohen ♦

McIntire '86

John Harris, Jr. ■

Law '79

Patrick Hogan ●

Meredith Jenkins ♦

College '93

Anton Levy ♦

McIntire '96

John Macfarlane III ■

Darden '79

Henry McVey ♦

College '91

Timothy O'Hara ■

College '86

Owen Thomas ♦

Engineering '83

Meryl Witmer ♦

McIntire '83

♦ Appointed by the UVIMCO Board

■ Appointed by the Board of Visitors

● Appointed by the President of the University

Biographical sketches of UVIMCO's Board members are available on our website: www.uvimco.org.

UVIMCO Staff

The Board of Directors delegates day-to-day investment management activities to UVIMCO's experienced full-time staff. Our team of thirty-five professionals works closely with the Board to implement UVIMCO's investment strategy through the selection of external managers, tactical asset allocation, and internal trading. UVIMCO draws on the talent and experience of women and men, many of whom are University of Virginia alumni and all of whom are committed to both investment excellence and supporting the University. Our team's combination of broad-based director experience and dedicated staff provides a generative environment for investment ideas and productive research. Together, we strive to continually refine and improve our investment acumen, due diligence process, and all efforts to fulfill our mission of service to the University.

SENIOR STAFF

Lawrence Kochard

Graduate Arts & Sciences '96, '99
Chief Executive Officer
Chief Investment Officer

Kristina Alimard

Darden '03
Chief Operating Officer

Melanie Davis

Managing Director

Jonathan Earnhardt

McIntire '00
Managing Director

Lindsay Larsen

McIntire '01
Managing Director

Jason Love

McIntire '95
Managing Director

Sargent McGowan

McIntire '95
Managing Director

John Winn

Law '05
General Counsel
Chief Compliance Officer

Sharon Argo

Executive Assistant

Jeff Barnes

Associate

Matt Bernstein

Applications Developer

Kristin Butler

Investment Accountant

Diana Clark

Investment Accountant

Matt Dorchuck

Investment Associate

Dubie Dubendorfer

BIS '08, McIntire '09
Information Technology Manager

Caitlin Fitzmaurice

Darden '11
Director

Allison Gillam

McIntire '06, '07
Director of Investment Operations

Leah Hall

McIntire '09
Senior Investment Associate

Rob Hamel

Engineering '12
Investment Associate

Sharon Herbert

Director of Corporate Operations

Duygu Ineci

College '15
Performance Analyst

Annie Kerns

Investment Accountant

Elizabeth Liles

Administrative Assistant/
Records Specialist

Heidi Ann Maloney

Legal & Compliance Administrator

Brian Mills

Information Technology Support Specialist

Chellie Morris

Administrative Assistant

Marilyn Perkins

McIntire '11
Investment Associate

Kaixi Ren

Quantitative Analyst

Tina Shifflett

Office Manager

Christina Shrestha

Investment Accountant

Sonia Speh

Receptionist/
Administrative Assistant

Sarah Spencer

College '16
Investment Analyst

Nancy Vetter

Travel Specialist

Katherine West

McIntire '08
Senior Corporate Accountant

Yichen Zheng

McIntire '14
Investment Associate



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