HARVARD UNIVERSITY

Financial Report

FISCAL YEAR 2023

Message from the President

I am pleased to present Harvard University's Annual Financial Report for fiscal year 2023.

This document is far more than an accounting of our finances; it is a reflection of our commitment to expanding access to education and knowledge, to driving discovery and innovation, and to fulfilling our responsibility to a society that looks to Harvard for approaches and answers — for hope that tomorrow will be better than today.

Expanded financial aid — totaling $851 million — continues to remove barriers to academic and research pursuits for all of our students. This year, we have adjusted an important threshold for our Harvard Financial Aid Initiative (HFAI). Undergraduates from families with annual incomes below $85,000 are fully funded by the University — they pay nothing —and expected contributions for families with annual incomes between $85,000 and $150,000 max out at ten percent of annual income. More than half of the individuals studying at Harvard College today benefit from our ongoing commitment to affordability, which helps to provide our institution with the excellence it deserves and our society with the leaders it needs and expects.

Creating opportunity is not limited to supporting our own community. Axim Collaborative, a non-profit created by Harvard and MIT, announced in June a partnership with the United Negro College Fund to develop a custom platform that will expand digital learning capabilities across Historically Black Colleges and Universities (HBCUs), and Harvard Library is partnering with the HBCU Library Alliance to preserve and digitize African American history collections across the country. At the same time, we continue to share our tremendous collections with the public, opening the doors of the Harvard Art Museums to our neighbors throughout Greater Boston and visitors from around the world with free admission for all.

We do these things with an eye on the horizon and with the philanthropic support of alumni and friends, seeking out new ways our mission can meet the needs of our moment. The Kempner Institute is welcoming its first wave of faculty and fellows as artificial intelligence becomes a more central aspect of our work and lives, and the Salata Institute has just announced its first cohort of grant recipients. Fourteen climate change projects are being funded, and their diversity — from measuring the rising sea to mapping tolls on mental health to outfitting buildings with better materials — demonstrates not only the complexity of the work before us but also the possibility of making a difference across many dimensions of our research and teaching.

I arrived at Mass Hall on July 1 thinking that my experience as dean of the Faculty of Arts and Sciences had afforded me a wide perspective on the University, but every day has given me an opportunity to learn more about the ambition and courage of our community. As this handful of examples and the following pages demonstrate, there is no end to what we aspire to achieve together — no end to what we can achieve together.

Claudine Gay
PRESIDENT

September 2023

Financial Overview

From the Vice President for Finance and the Treasurer

This was a fiscal year marked by significant changes, both within the University and across the broader higher education landscape. Leadership transitions marked major turning points within Harvard, with the departures last year of President Larry Bacow, Executive Vice President Katie Lapp and Vice President for Finance and Chief Financial Officer Thomas Hollister. Their farsighted leadership helped make Harvard stronger, by every financial metric, than at any point in its history. We are grateful to each of them for their indelible and enduring contributions.

Outside of Harvard, fiscal year 2023 was characterized by changes no less profound. Volatility in the capital markets and rapidly rising interest rates — intended to curb even more rampantly rising inflation — led to three bank failures, among the largest in the country's history; climate change catalyzed record heat and accelerating wildfires across the globe; the Supreme Court challenged the way in which we conduct admissions in our efforts to ensure a diverse class; and the potential of generative artificial intelligence, both propitious and perilous, erupted into the collective consciousness. The impacts from each promise to be profound.

Amidst this swirl of change, Harvard's commitment to excellence, opportunity, and impact remained steadfast. The University generated an operating surplus of $186 million or 3% of revenue, lower than last year's surplus of $406 million. This was driven by purposeful investments in the mission and the resurgence of expenses related to full campus operations, as well as inflationary pressures. This more modest operating margin is characteristic of the University's results prior to the pandemic.

Careful stewarding of resources over the past several years made it possible to advance our pursuit of academic excellence, expand our commitment to opportunity and access, and initiate new programs to address society's most vexing challenges. This year, the University welcomed its inaugural cohort of PhDs in quantum science, pioneers at the academic frontier. Harvard College raised the income threshold for cost-free attendance to $85,000, allowing an estimated 25% of undergraduate students to attend for free. And ongoing investments in initiatives, including Harvard and the Legacy of Slavery and the launch of the Axim Collaborative, call on Harvard to reckon with the past while reimagining learning for the future.

These commitments to academic excellence and opportunity would not be possible without our donors, past and present. Distributions from the endowment totaled $2.2 billion or 37% of total revenue for the year. An additional 8% of revenue came in the form of current gifts. Donors' generosity allows Harvard to advance mission-critical priorities. We are enormously grateful for their steadfast support.

While we rightly celebrate these achievements, we must acknowledge the financial challenges that lie in wait. On the heels of the most substantial interest rate tightening cycles since the 1970s, the cost of capital is anticipated to remain elevated, which may impact future investment returns. The end of the era of economic expansion, which we have written about in previous letters, may be upon us.

Indeed, while we are deeply appreciative of the capable navigation of complicated markets by CEO Narv Narvekar and his colleagues at Harvard Management Company, the 2.9% return on the endowment this year is below our long-term target return of 8%. Narv expressed caution about forward-looking returns in private portfolios last year, noting that "private managers have not yet marked their portfolios to reflect general market conditions." Accordingly, this year, the disparity between the public and private markets continued, this time as private markets lagged on the upside.

We must be judicious in the way we access the endowment to support our operations, as it is not a checking account, but rather must be managed to support both current and future generations of students and scholars. Nevertheless, the endowment distribution increased by 4.5% in fiscal year 2023 and is budgeted for the same level of growth for fiscal year 2024. As stewards of the endowment, our focus is on both supporting the University today, as well as ensuring a consistent level of support in the future, a task that will be complicated by a potential low growth economic environment.

This backdrop is exacerbated by the reality that the costs of running a world-class university — of ensuring the resilience and accessibility of our buildings, of eliminating greenhouse gas emissions from our campus footprint as we collectively address climate change, of expanding access and affordability — continue to increase. Overall expenses rose 9% this fiscal year, double the increase in revenue.

This is not sustainable. Our pace of spending cannot continue unabated without a commensurate increase in revenue. Yet as we have discussed in prior years' letters, traditional sources of higher education revenue face significant constraints. Looking forward, we must respond prudently, by prioritizing activities which most consequentially contribute to our mission, and by identifying and operationalizing ways to use our financial, physical, and technological resources more effectively.

Even with these challenges on the horizon, Harvard's finances remain strong. The University's net assets, a fundamental measure of our resources, increased year-over-year. Schools and units continued to build reserves to help mitigate the impact of future constraint and support new investments. Harvard added only modest new debt in fiscal year 2023 and invested over $500 million in renewing and improving our physical plant.

In closing, we want to thank each and every donor to the University — past and present — for making Harvard's excellence in teaching and research possible through your philanthropy. We want to thank Harvard's faculty, students and staff for revitalizing the campus following the pandemic, and for your vital contributions, on a daily basis, in making Harvard one of the world's preeminent institutions. We also want to extend a warm welcome to Harvard's 30th President, Claudine Gay, along with the University's new deans. Together, we are committed to advancing academic excellence and sustaining the farsighted stewardship that has been the gift of generations before us.

Ritu Kalra
VICE PRESIDENT FOR FINANCE

Timothy R. Barakett
TREASURER

September 2023

Harvard University's stewardship of its financial resources is aimed at advancing teaching, learning, and research priorities to make a positive impact in the world. This includes expanding access to education across the globe, supporting students with our strong financial aid program, fulfilling our ongoing dedication to public service, and transforming how problems are understood and addressed through research. The key financial highlights for fiscal year 2023 included in this report demonstrate the University's continued commitment to advancing these priorities.

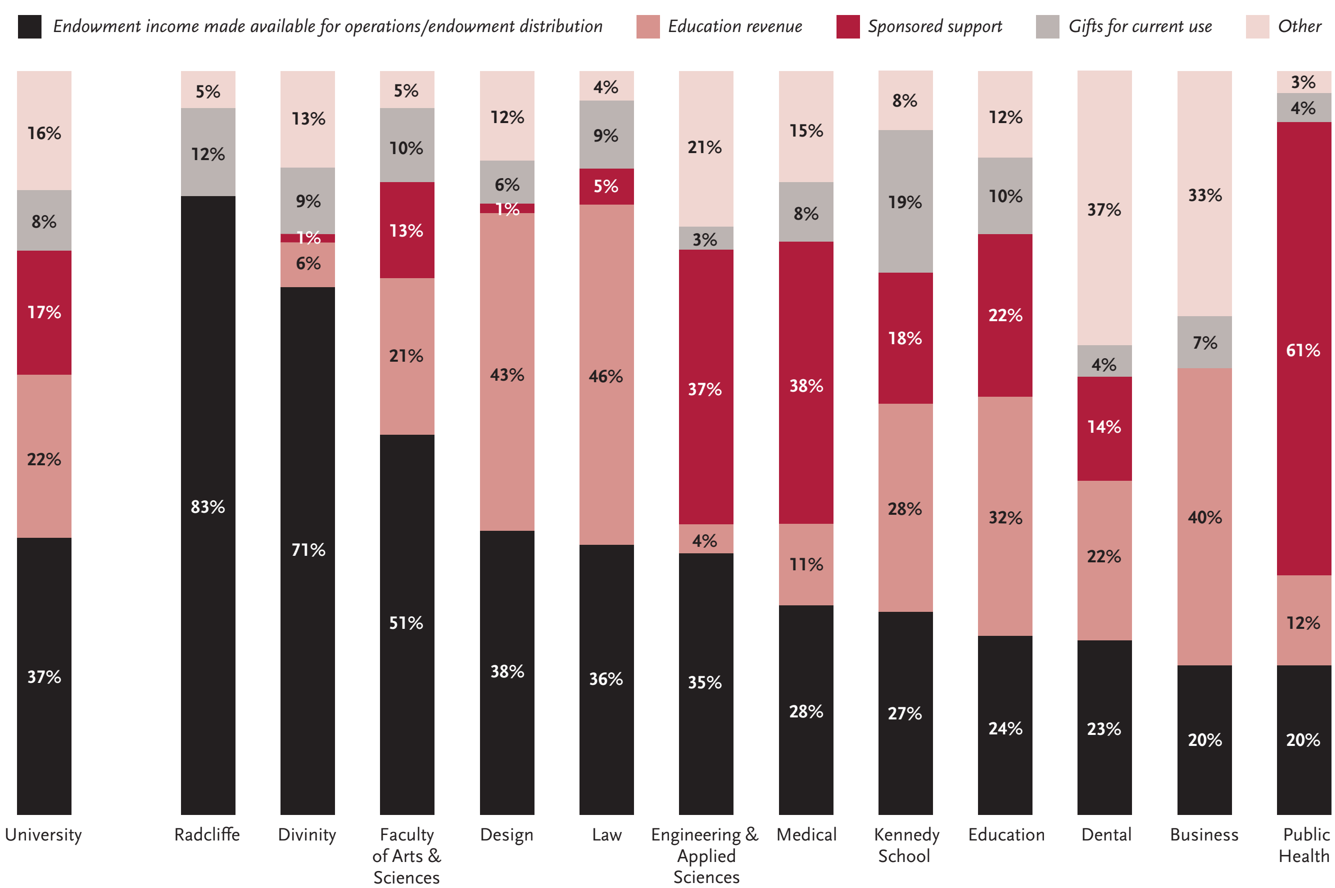
FINANCIAL OVERVIEW

The University ended fiscal year 2023 with an operating surplus of $186 million compared to $406 million in fiscal year 2022, on an operating revenue base that increased 5% or $262 million, to $6.1 billion. The reduced surplus was not unexpected and was driven primarily by expenses associated with renewed return to campus activity and strategic investments in our workforce, with increased compensation for faculty and staff, a decrease in vacancy rates, and overall growth in new workers across campus.

OPERATING REVENUES

The revenue profiles of Harvard's many schools and units vary widely, as each draws a different proportion of its budget from these primary sources as depicted in the following table:

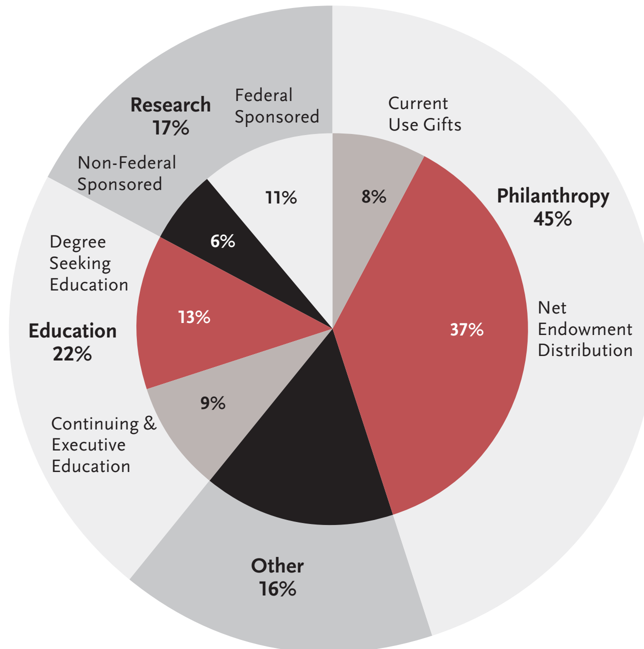
FISCAL YEAR 2023 SOURCES OF OPERATING REVENUE



Harvard's diversified activities rely on three main sources of revenue: education or tuition, sponsored research, and philanthropy, both past and present.

Total **education** revenue comprised 22% of revenue. This includes tuition and board and lodging income, net of financial aid, from both traditional degree seeking students (undergraduate, graduate, and professional), as well as executive and continuing education learners. In support of **research**, our faculty are awarded external grants by governmental and private partners to advance new academic knowledge; this sponsored funding made up 17% of revenue. Revenue generated each year from our education program and research endeavors is not sufficient to fund operations and as such, the University relies on **philanthropy** to fill in the gap. In fiscal year 2023, support from past and present donors provided 45% of revenue through current use gifts and endowment income, reflecting their generosity and belief in the broad impact of education and research at Harvard.

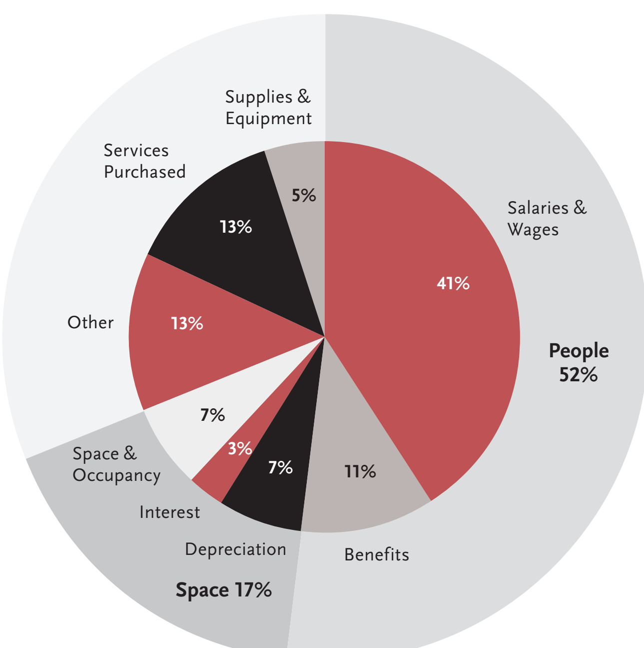
FISCAL YEAR 2023 OPERATING REVENUES



OPERATING EXPENSES

The spending associated with Harvard's diversified activities also encompass three primary categories, related to the faculty, staff and other **people** who make Harvard's work come alive; the classrooms, labs and other **spaces** in which their work is done; and the **supplies and services** they use to advance the work.

FISCAL YEAR 2023 OPERATING EXPENSES



The University's operating expenses increased by $482 million or 9% to $5.9 billion for fiscal year 2023. Spending rebounded in many areas across the University, reflecting both increased campus activity following the pandemic as well as the impact of inflation, with increases in compensation and higher discretionary spending (travel, food, supplies and equipment) leading the growth. Compensation, or **people**, expenses (i.e., salaries, wages and benefits) represented more than half of the University's total operating expenses in fiscal year 2023. Salaries and wages increased by 10% or $215 million, to $2.4 billion. This growth stemmed from wage increases, as well as an investment in new faculty and staff across campus. These new positions were the result of both filling open positions as well as targeted growth in key initiatives. Employee benefit expense grew 8% or $44 million, in line with salaries and wages.

As pandemic restrictions continued to ease, expenditures related to **space** as well as discretionary costs both rebounded in fiscal year 2023. University-wide space costs grew by 11% or $40 million, with the resumption of campus-based activity and an uptick in deferred maintenance projects. Other discretionary spending returned to pre-pandemic levels, largely driven by services purchased (+8% or $59 million) and travel (+114% or $50 million).

BALANCE SHEET

Investments and endowment

The return on the endowment in fiscal year 2023 was 2.9%. Its value (after the impact of distributions from the endowment for operations, and the addition of new gifts to the endowment during the year) stood at $50.7 billion, down from $50.9 billion at the end of fiscal year 2022. Additional information is available in the *Message from the CEO of Harvard Management Company,* found later in this report.

The University has a policy of maintaining liquidity outside of the endowment for operating purposes. These liquid, short-term investments totaled $1.4 billion at June 30, 2023 compared to $2.2 billion at June 30, 2022 (see *Note 2),* well above our minimum policy requirement.

Debt

Bonds and notes payable increased modestly from $6.1 billion in fiscal year 2022 to $6.2 billion in fiscal year 2023, driven by the issuance of $177 million in commercial paper. Issuances included $25 million tax-exempt commercial paper for capital spending and $152 million taxable commercial paper to supplement the University's working capital. The University maintained its AAA rating by S&P Global Ratings and Aaa by Moody's Investor Services.

Fixed assets

The University invested $512 million in capital for fiscal year 2023 compared to $356 million in fiscal year 2022. Despite the increase in capital expenditures, the construction market continued to experience challenges in fiscal year 2023 including supply chain disruptions, equipment and construction labor availability, and permitting delays, resulting in subdued spending relative to the projects in the pipeline.

EDUCATION

In fiscal year 2023, across its 12 schools, Harvard enrolled 25,266 students from around the globe, including 7,178 undergraduates at Harvard College.

Total education revenue

Student income increased 9% or $108 million to $1.3 billion in fiscal year 2023. Revenue from traditional student programs (undergraduate and graduate) grew by 5% or $54 million. Board and lodging revenue of $221 million grew 11% as graduate students continued to return to on-campus housing. Executive and continuing education revenue totaled $544 million, growing 12% or $57 million. Financial aid applied to student income increased 5% or $25 million to $531 million in fiscal year 2023.

Undergraduate and graduate programs and financial aid

Harvard is committed to cultivating a diverse community of bright and talented students regardless of their ability to pay. Thanks to our robust financial aid program, approximately 55% of Harvard College students receive need-based scholarships and pay an average of $16,100 for tuition, food and lodging. Since launching the Harvard Financial Aid Initiative in 2004, the College has awarded nearly $3.1 billion in grant aid, and the undergraduate financial aid budget has nearly tripled from $80 million in 2005 to $247 million in 2023. The average net cost of attendance for all Harvard College students is $42,695.

Approximately 94% of dollars supporting student financial aid at Harvard come from University sources, including gifts, the endowment and unrestricted funds. The other 6% comes from the federal government aid initiatives and other outside sponsors.

Harvard College has continued its ongoing efforts to expand financial aid by raising the family income threshold in 2023-2024 to $85,000—a $10,000 increase from last year's threshold. This change means that an estimated 25% of families do not have to contribute anything to tuition, food or housing. In addition, to ensure that students can participate fully in the Harvard experience, Harvard augments this aid by providing low-income students with funding for health insurance, emergency expenses, event fees, and other activities. First-year students from families making under $85,000 also receive a $2,000 start-up grant.

INCREASING ACCESS TO HARVARD

Harvard University's commitment to expanding access to opportunities includes not only access to world-class learning and research resources, but also ensuring that we are a community where everyone has the support to grow and succeed. Over the last year, we've advanced this commitment in many ways, including opening the doors wider to our museum collections through free admission for everyone at the Harvard Art Museums and expanding high-quality learning opportunities that go beyond the traditional classroom walls. The increased access is further supported with resources to strengthen intellectual, emotional and physical wellbeing by, for example, expanding our digital accessibility policy and adding new student mental health services and resources.

375 CELEBRATING 375 YEARS *of* FINANCIAL AID

Harvard College is committed to ensuring that all admitted students have the opportunity to attend Harvard, regardless of the economic obstacles they have encountered. Harvard launched the **Harvard Financial Aid Initiative** in 2004 to enhance this effort and to raise awareness of college affordability for students interested in all kinds of colleges and universities. The income threshold for cost-free attendance rose to $85,000, an increase of $10,000 from the prior year.

As part of its ongoing efforts to ensure the accessibility of its digital systems and communications, Harvard revised its **Digital Accessibility Policy** so that all new digital content designed and developed by Harvard schools, units, and departments after June 1, 2023, should aim to be accessible to people with disabilities. The University's initial Digital Accessibility Policy, which was put into place in 2019, focused on expanding access to Harvard's knowledge, information, and learning opportunities for audiences outside the University. Improving the accessibility of internally facing content and applications is an important next step toward making Harvard a more welcoming and inclusive place for everyone.

For students on tight budgets, a job interview can bring the thrill of starting a new chapter and the dread of locating work-appropriate apparel. To meet this need, Travis Johnson '24 and LyLena Estabine '24, launched the **Crimson Career Closet** (CCC), a brightly colored space on the 10th floor of the Smith Campus Center where students preparing for job interviews can borrow suits, dresses, and accessories for free. Currently, the CCC has five racks of clothes, mostly donated from faculty, and hopes to expand the donor base to alumni and classmates with support from the Office of Career Services.

axim collaborative

Axim Collaborative, previously known as the Center for Reimagining Learning, is a nonprofit started by Harvard and MIT that aims to make learning effective, accessible, and relevant to a diverse audience of learners and institutions. In June, Axim Collaborative launched its partnership with the United Negro College Fund and Harvard to support the development of HBCUv, a platform that will provide digital learning capabilities tailored to the specific needs of HBCUs and the communities they serve. HBCUv is intentionally designed to replicate the learning culture and community for which HBCUs are well known and aspires to be a shared resource open to all HBCUs and enable institutions to share knowledge, resources, and best practices.

In June, the **Harvard Art Museums announced a new free admission policy for all visitors**. This represents a significant expansion of free access to the museums' collections, exhibitions, and research for public audiences, and ensures that every campus visitor will have the opportunity to view and engage with the important collections in the Harvard Art Museums' care.

Nearly 40 Allston-Brighton students in grades 2-8 immersed in hands-on activities this summer through the Harvard Ed Portal's **Summer Explorations program**. Now in its seventh year, the program offers Allston-Brighton students free, weeklong courses designed to keep them engaged in learning during the school break. Among this year's highlights: students got a chemistry lesson by rolling out, frying, and fermenting Ukrainian flatbread ingredients in "Science of Cooking." Some learned about bones via "Ins and Outs of Skeletons," held at the Harvard Museum of Natural History. Others took to the stage in "Creative Drama: Ocean Explorations," led by staff of the American Repertory Theater.

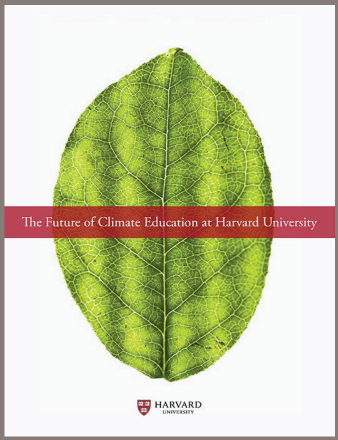
RESEARCH

Harvard scholars conduct research in almost every field, seeking to expand human knowledge through analysis, innovation, and insight. In 2023, research was supported by $1 billion of sponsored funds. In addition, the University funded $416 million of research through University funds, as submitted in the 2022 National Science Foundation Higher Education and Research Development (HERD) Survey. Research is carried out both in the departments of the schools and at more than 100 research centers, on campus and around the world. Researchers include faculty members, visiting scholars, post-doctoral fellows, and graduate and undergraduate students, and they collaborate with colleagues across the University, at affiliated institutions, and at other research institutions.

During fiscal year 2023, the University saw continued growth in research funding. In aggregate, revenue from federal and non-federal sponsored sources increased by 5% or $50 million. Federal funding, which accounted for approximately 66% of total sponsored revenue in fiscal year 2023, increased 5% or $34 million to $676 million. This includes a one-time grant from the Department of Homeland Security, provided through the Massachusetts Emergency Management Agency, for $25 million to reimburse the University for Covid-19 related expenses incurred in prior fiscal years.

The University's relationships with corporations, foundations and other non-federal sponsors expanded in fiscal year 2023, resulting in a 5% or $16 million increase in non-federal sponsored revenues, which totaled $350 million. Non-federal funding continues to be an area of growth, as researchers diversify their research funding support. In addition, Harvard devotes significant institutional resources to leverage these federal and non-federal investments. This funding provides crucial incubation to early-stage research ideas before they are ready to be presented to sponsors for additional funding, seeds new initiatives, subsidizes projects with insufficient external funding, and supports faculty to venture into new areas of scientific inquiry.

REDESIGNING HOW TO TEACH CLIMATE CHANGE



In September 2022, the Committee on Climate Education released "The Future of Climate Education at Harvard University," their analysis on how Harvard as an academic institution could meet the challenges of climate change. The report urges an all hands on deck approach for how Harvard teaches climate change, not only through more but also deeper instruction in disciplines that span the University at a moment of heightened concern about a changing world. The report outlines a series of concrete steps, including hiring additional faculty and establishing a climate education accelerator to foster needed changes, and envisions new courses in every discipline, increased internship and fellowship opportunities, and assistance for faculty in fields not traditionally linked to climate who want to incorporate it in classes.

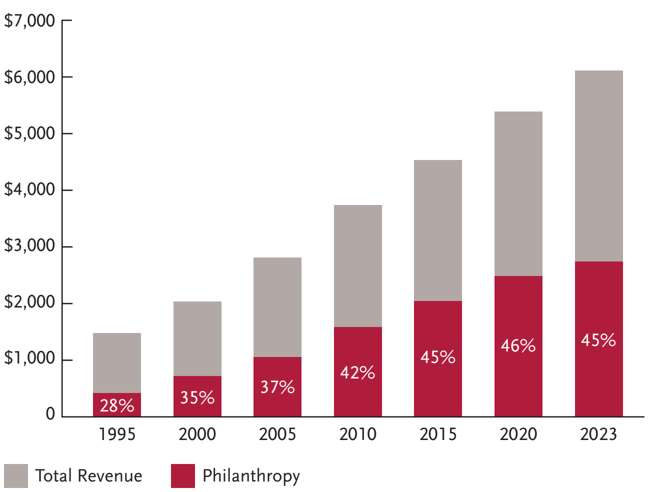
REMOVING CARBON USING NEW ENGLAND'S FORESTS

New England s Climate Imperative, a major report led by a Harvard ecologist, suggests that with a handful of strategies, New England s 32 million acres of forests, which cover about three quarters of the region, could eventually come close to absorbing 100 percent of all the carbon produced by the six states. The report lays out five steps policymakers and conservation non governmental organizations can pursue that can lead to forests absorbing almost 360 million additional tons of carbon dioxide over 30 years. That means New England s forests will be able to absorb virtually all the carbon produced in the region, provided the six states hit their existing emission reduction goals.

PHILANTHROPY

Combining gifts for current use and Harvard's endowment distribution, philanthropy accounted for 45% of fiscal year 2023 revenue. To support the rising cost of sustaining excellence in teaching and research, philanthropic support is increasingly important to colleges and universities—and to keeping college affordable. Excellence and affordability in higher education today rely on philanthropy to support nearly every aspect of university operations. Every gift helps Harvard continue to be a leader for progress in the world, enabling excellence in our teaching and research mission, recruiting and retaining our world class faculty, helping students thrive, and providing greater access through financial aid.

PHILANTHROPY AS A PERCENTAGE OF TOTAL REVENUE OVER TIME



Gifts for current use

In fiscal year 2023, Harvard received current use gifts from alumni, foundations, and others totaling $486 million, representing approximately 8% of operating revenues. Support for the University comes from donations of all sizes; more than 75% of the number of gifts in fiscal year 2023 averaged $157 per donor.

The Harvard endowment

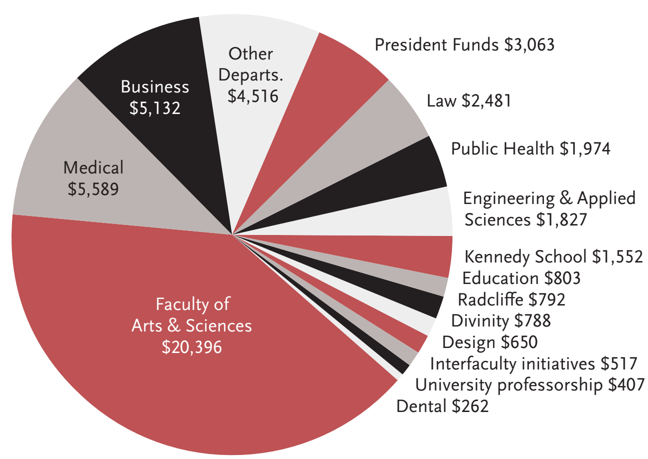
Harvard's endowment has existed for nearly four centuries and belongs to current and future generations of Harvard students, faculty, and researchers. The aggregate endowment is made up of more than 14,000 individual endowments that support nearly every aspect of the University's work, from student financial aid to neighborhood programs, from museum and library preservation to campus activities, from faculty and fellow positions to scientific advancement.

Donor contributions to the endowment have enabled leading financial aid programs, groundbreaking discoveries in scientific research, and hundreds of professorships across a wide range of academic fields. Each year, a portion of the endowment is paid out as an annual distribution to support the University's annual operations. In any given year, the University aims to maximize what it can responsibly draw, while balancing both current and future needs. Guided by this principle of intergenerational equity, Harvard's endowment is carefully managed in order to ensure that future generations will enjoy its benefits just as much as the current one.

Cash gifts to the endowment were $561 million in fiscal year 2023 compared to $584 million in fiscal year 2022.

MARKET VALUE OF THE ENDOWMENT AS OF JUNE 30, 2023

In millions of dollars



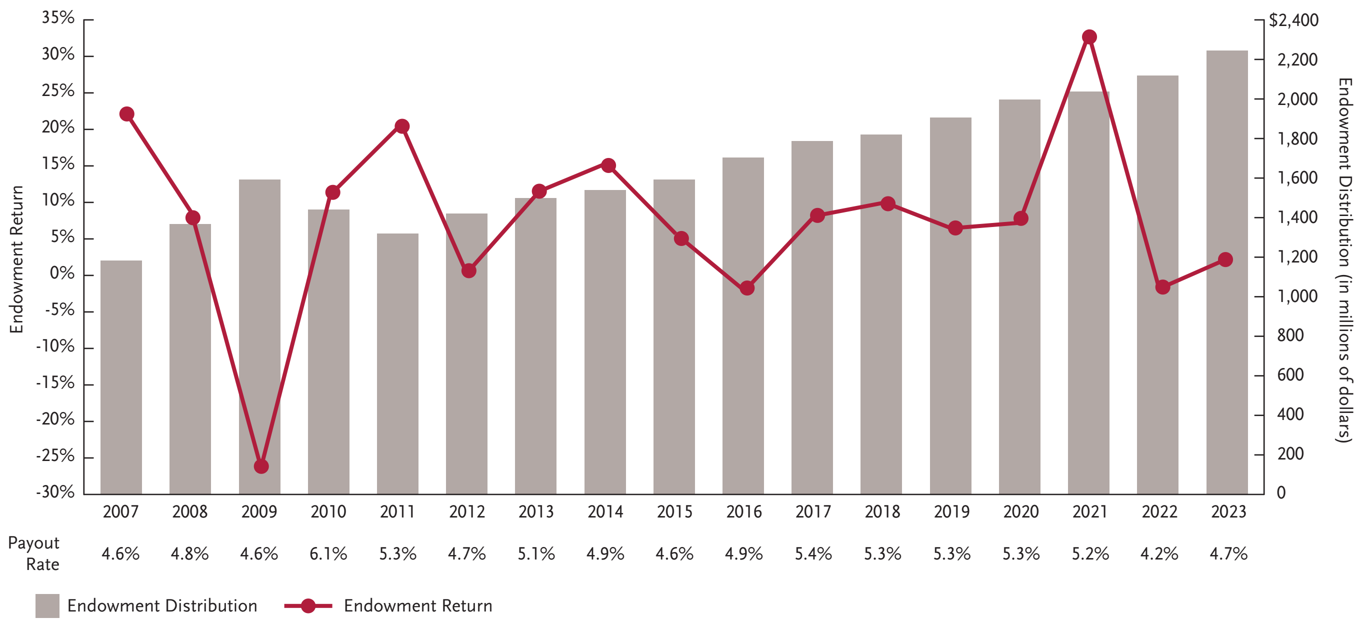
TOTAL MARKET VALUE $50,749

Endowment returns made available for operations

The University's endowment spending practice has to balance two competing goals: the need to fund the operating budget with a stable and sufficient distribution, and the obligation both legally and to our donors to maintain the long-term value of the endowment. There is a common misconception that endowments, including Harvard's, can be accessed like bank accounts, used for anything at any time as long as funds are available. In reality, Harvard's flexibility in spending from the endowment is limited by the conditions established by donors and by the fact that it is designed to last forever, which is crucial for an institution intended to serve generations of students and pursue new knowledge.

Harvard is obligated to preserve the purchasing power of the endowment by spending only a sustainable portion of its value each year. Spending significantly more than that over time, for whatever reason, would privilege the present over the future in a manner inconsistent with an endowment's fundamental purpose of maintaining intergenerational equity. As a general rule, Harvard targets an annual endowment payout rate of 5.0 to 5.5% of market value. The actual payout rate varies each year based on endowment returns. This critical source of funding distributed $2.2 billion in the fiscal year ending June 30, 2023—representing 37% of Harvard's total operating revenue—and is the single largest source of revenue supporting the University.

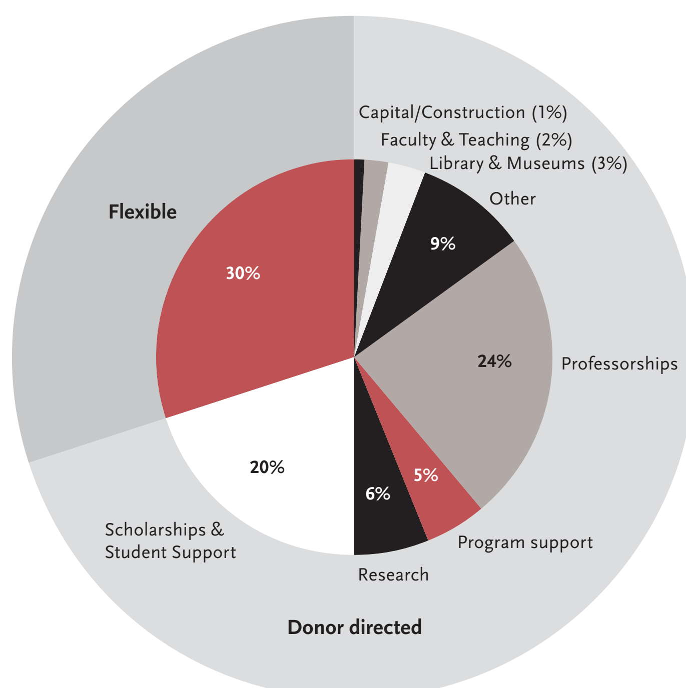
ENDOWMENT RETURNS MADE AVAILABLE FOR OPERATIONS BY YEAR



Endowment payout

While the endowment is a critical source of funding, 70% of the annual distribution from the endowment is directed to specific programs, departments, or purposes and must be spent in accordance with the terms set forth by the donor. Funds without donor restriction are more flexible in nature, although are often restricted at a high level such as to one school, and are critical in supporting structural operating expenses and transformative, strategic initiatives. In this way, the endowment bridges the gap between revenue that is brought in from tuition and research grants, and the critical costs associated with the University's teaching and research activities.

ENDOWMENT SPENDING FLEXIBILITY



Harvard Management Company

Message from the Chief Executive Officer

For the most recent fiscal year, which ended on June 30, 2023, the return on the Harvard endowment was 2.9% and the value stood at $50.7 billion. The endowment also made available more than $2.2 billion for the University's operating budget, supporting financial aid, faculty, research initiatives, and more.

PERFORMANCE

Fiscal year 2023 (FY23) was a year of generally muted returns for asset classes outside of public equities. While public markets were flat or negative during the first half of FY23, the dramatic equity rally during the second half of FY23 (i.e., the first six months of calendar year 2023) changed the picture meaningfully.

Index	FY22 Total Return	2022 July to December Return	2023 January to June Return	FY23 Total Return
ACWI	-15.8%	**2.3%**	**13.9%**	16.5%
S&P 500	-10.6%	**2.3%**	**16.9%**	19.6%
NASDAQ	-23.4%	**-4.7%**	**32.3%**	26.1%

As noted in the asset allocation chart below, Harvard Management Company (HMC) has limited long-only public equity exposure (11%) and, accordingly, the endowment's FY23 return does not reflect a significant impact from public equity movements. However, this portfolio construction also helps brace against significant swings in either direction, as it did last year when the FY22 return (-1.8%) was not meaningfully impacted by an overall double-digit public equity decline.

Asset Class	Allocation
Public Equity	11%
Private Equity	39%
Hedge Funds	31%
Real Estate	5%
Natural Resources	1%
Bonds/TIPS	6%
Other Real Assets	2%
Cash and Other	5%
ENDOWMENT	**100%**

Strong public equity returns are often outpaced by private equity and venture capital. However, the returns for these asset classes proved to be only slightly positive in private equity and mildly negative in venture capital/growth. While this outcome may seem counterintuitive, we anticipated a correction in those funds' performance in last year's annual letter, noting that their dramatic outperformance over public markets was likely due to a natural lag in how their assets are valued.

Put another way, in FY22 private managers did not reduce the value of their investments in a manner consistent with declining public equity markets. Accordingly, those private asset managers did not subsequently increase the value of their investments in the context of rising public equity markets in FY23. Given the continued slowdown in exits and financing rounds over the last year, it will likely take more time for private valuations to fully reflect current market conditions.

REFLECTIONS ON SIX FISCAL YEARS AT HMC

In FY21, HMC reported on the completion of our five-year restructuring of both the organization and the endowment portfolio one year ahead of schedule. We noted at the time that the swift, broad restructuring of HMC's operations and investment model allowed us to focus substantially all our time on the portfolio turnaround, which is now largely complete. We are fortunate to have maintained a 9.2% annualized return during that span.

There are three main components to endowment performance: risk level, asset allocation, and manager selection. We are particularly gratified by the second and third components outlined immediately below.

HMC's manager selection alpha is one of our proudest achievements. Over the course of the last six fiscal years, the alpha generated by HMC's manager selection has been very strong, greater than we would have anticipated. Although we are confident that HMC will continue to do very well, it is hard to imagine that the next six years of alpha production can be as strong as the previous six years.

Our approach to overall asset allocation is based on portfolio risk level. Accordingly, and as discussed in greater detail below, Harvard engaged in a deliberate process to analyze its risk tolerance. However, even before changing risk levels, HMC worked to optimize its asset allocation within the University's existing risk constraints. We moved swiftly in a risk-neutral manner to pivot from private real estate and agriculture/timber to private equities early during this period. We also built a portfolio of liquid uncorrelated funds within our overall hedge fund allocation. These decisions proved to be successful. Within the asset classes, we also diversified into biotech (both public and private markets) and significantly added to tech venture.

Looking back over many years, a main constraint on Harvard's endowment returns has been that the portfolio was structured to take less risk than what was likely prudent. The question of the amount of risk to take is not a simple one, as it must weigh, for example, budget stability against long-term growth in the endowment. HMC built an analytical risk framework and partnered closely with the University to help determine the University's risk tolerance. After several years of rigorous conversation and analysis, the University agreed to a measured increase in the portfolio's risk level, which HMC began implementing over the last two years.

While we are very pleased to have catalyzed this critical discussion and process, we note that we continue to operate, even after the risk increase, at a somewhat lower risk level than many peer endowments. Going forward, HMC will continue to work with the University to periodically review the appropriate long-term risk level and tolerance (similar to how many endowments periodically review their asset allocations with their investment committees and university constituents).

Ultimately, we believe that the measured increase in risk—carefully calibrated to ensure long-term endowment stability—and the improved asset allocation (versus when we started, six years ago) will continue to generate strong returns even if the manager selection alpha attenuates.

I would also like to highlight that HMC has started investing in innovation related to mitigating greenhouse gas emissions. While we have been early in investing in this area over the last few years, we believe that a decade from now it will be accretive to endowment performance. Innovation to reduce carbon emissions will be rewarded, as it is one of the most obvious needs in society today.

In addition to organizational structure and portfolio shifts, there were two other specific initiatives that we are proud to have incorporated into our operations: addressing gender and racial diversity in the financial industry and expanding our sustainable investing practices to meet the University's pledge to have the endowment net zero of greenhouse gas emissions by 2050.

HMC's focus on diversity looks at our own team, the leadership of our asset managers, and the companies in which those managers choose to invest. We aim to seek talent from the broadest possible pool of candidates and managers. In addition to actively seeking out more diverse managers for investment consideration, we collect data, where available, on the diversity of the managers' leadership, staff, and portfolio investments. The financial industry has a long way to go on this front, but we hope these steps can play a small role in addressing this challenge.

Nearly a decade ago, Harvard became the first U.S. higher education endowment to sign onto the U.N.-supported Principles for Responsible Investment. Along with that commitment, HMC formalized its Sustainable Investing Policy to ensure that we considered all environmental, social, and governance factors that could impact the value of our investments. More recently, Harvard became the first U.S. university to commit to making its endowment portfolio net zero of greenhouse gases by 2050—in line with the timeline of the Paris Agreement. In addition to the groundbreaking work that entails, our own operations were net zero of carbon emissions for the second consecutive year. Doing so has not only allowed us to hold ourselves to the same standards we are asking of others, but also is in line with Harvard University's climate commitments. Our annual Climate Report will go into greater detail on the variety of efforts associated with our sustainable investing initiatives and progress toward the net zero pledge.

I am proud of our team's ability to adapt to this new structure and to proactively engage with new challenges. And we have done so while always keeping Harvard's mission front of mind, ensuring that the University has the financial resources to achieve academic excellence, expand opportunities for students and faculty, and foster diverse educational experiences. I am excited to see what we will accomplish together in the years ahead.

Best Regards,

N.P. "Narv" Narvekar
CHIEF EXECUTIVE OFFICER

September 2023

Report of Independent Auditors

To the Joint Committee on Inspection of the Governing Boards of Harvard University

Opinion

We have audited the accompanying consolidated financial statements of Harvard University and its subsidiaries (the "University"), which comprise the consolidated balance sheet as of June 30, 2023, and the related consolidated statements of changes in net assets with general operating account detail and of changes in net assets of the endowment for the year ended June 30, 2023 and of cash flows for the years ended June 30, 2023 and 2022, including the related notes (collectively referred to as the "consolidated financial statements").

In our opinion, the accompanying consolidated financial statements present fairly, in all material respects, the financial position of the University as of June 30, 2023, the changes in its net assets for the year ended June 30, 2023 and its cash flows for the years ended June 30, 2023 and 2022 in accordance with accounting principles generally accepted in the United States of America.

Basis for Opinion

We conducted our audit in accordance with auditing standards generally accepted in the United States of America (US GAAS). Our responsibilities under those standards are further described in the Auditors' Responsibilities for the Audit of the Consolidated Financial Statements section of our report. We are required to be independent of the University and to meet our other ethical responsibilities, in accordance with the relevant ethical requirements relating to our audit. We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our audit opinion.

Other Matter

We previously audited the consolidated balance sheet as of June 30, 2022, and the related consolidated statements of changes in net assets with general operating account detail, of changes in net assets of the endowment and of cash flows for the year then ended (the balance sheet and the statements of changes in net assets with general operating account detail and of changes in net assets of the endowment are not presented herein), and in our report dated October 12, 2022, we expressed an unmodified opinion on those consolidated financial statements. In our opinion, the information set forth in the accompanying summarized financial information as of June 30, 2022 and for the year then ended is consistent, in all material respects, with the audited consolidated financial statements from which it has been derived.

Responsibilities of Management for the Consolidated Financial Statements

Management is responsible for the preparation and fair presentation of the consolidated financial statements in accordance with accounting principles generally accepted in the United States of America, and for the design, implementation, and maintenance of internal control relevant to the preparation and fair presentation of consolidated financial statements that are free from material misstatement, whether due to fraud or error.

In preparing the consolidated financial statements, management is required to evaluate whether there are conditions or events, considered in the aggregate, that raise substantial doubt about the University's ability to continue as a going concern for one year after the date the consolidated financial statements are issued.

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Auditors' Responsibilities for the Audit of the Consolidated Financial Statements

Our objectives are to obtain reasonable assurance about whether the consolidated financial statements as a whole are free from material misstatement, whether due to fraud or error, and to issue an auditors' report that includes our opinion. Reasonable assurance is a high level of assurance but is not absolute assurance and therefore is not a guarantee that an audit conducted in accordance with US GAAS will always detect a material misstatement when it exists. The risk of not detecting a material misstatement resulting from fraud is higher than for one resulting from error, as fraud may involve collusion, forgery, intentional omissions, misrepresentations, or the override of internal control. Misstatements are considered material if there is a substantial likelihood that, individually or in the aggregate, they would influence the judgment made by a reasonable user based on the consolidated financial statements.

In performing an audit in accordance with US GAAS, we:

- Exercise professional judgment and maintain professional skepticism throughout the audit.
- Identify and assess the risks of material misstatement of the consolidated financial statements, whether due to fraud or error, and design and perform audit procedures responsive to those risks. Such procedures include examining, on a test basis, evidence regarding the amounts and disclosures in the consolidated financial statements.
- Obtain an understanding of internal control relevant to the University audit in order to design audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the University's internal control. Accordingly, no such opinion is expressed.
- Evaluate the appropriateness of accounting policies used and the reasonableness of significant accounting estimates made by management, as well as evaluate the overall presentation of the consolidated financial statements.
- Conclude whether, in our judgment, there are conditions or events, considered in the aggregate, that raise substantial doubt about the University's ability to continue as a going concern for a reasonable period of time.

We are required to communicate with those charged with governance regarding, among other matters, the planned scope and timing of the audit, significant audit findings, and certain internal control-related matters that we identified during the audit.

Other Information

Management is responsible for the other information included in the annual report. The other information comprises the Harvard University Financial Report Fiscal Year 2023, but does not include the consolidated financial statements and our auditors' report thereon. Our opinion on the consolidated financial statements does not cover the other information, and we do not express an opinion or any form of assurance thereon.

In connection with our audit of the consolidated financial statements, our responsibility is to read the other information and consider whether a material inconsistency exists between the other information and the consolidated financial statements or the other information otherwise appears to be materially misstated. If, based on the work performed, we conclude that an uncorrected material misstatement of the other information exists, we are required to describe it in our report.

PricewaterhouseCoopers LLP

Boston, Massachusetts
October 18, 2023

CONSOLIDATED BALANCE SHEETS

with summarized financial information as of June 30, 2022

In thousands of dollars	June 30 2023	2022
ASSETS:		
Cash and cash equivalents	**$ 245,589**	$ 283,227
Receivables, net *(Note 4)*	**349,271**	339,792
Prepayments and deferred charges	**362,676**	317,448
Operating leases—right of use assets *(Note 18)*	**715,444**	677,147
Notes receivable, net *(Note 5)*	**400,401**	380,812
Pledges receivable, net *(Note 6)*	**2,699,634**	2,592,434
Fixed assets, net *(Note 7)*	**8,595,983**	8,442,840
Interests in trusts held by others *(Note 3)*	**438,892**	432,896
Securities pledged to counterparties, at fair value *(Note 3)*	**122,758**	179,514
Investment portfolio, at fair value *(Note 3)*	**59,078,919**	59,135,219
TOTAL ASSETS	**$ 73,009,567**	**$ 72,781,329**
LIABILITIES:		
Accounts payable	**$ 416,881**	$ 486,707
Deferred revenue and other liabilities	**1,747,823**	1,708,821
Operating lease liabilities *(Note 18)*	**754,195**	689,342
Other liabilities associated with the investment portfolio *(Notes 3 and 10)*	**629,995**	718,031
Liabilities due under split interest agreements *(Note 9)*	**886,222**	886,017
Bonds and notes payable *(Note 10)*	**6,214,734**	6,117,203
Accrued retirement obligations *(Note 11)*	**840,198**	928,514
TOTAL LIABILITIES	**11,490,048**	**11,534,635**
NET ASSETS	**61,519,519**	**61,246,694**
TOTAL LIABILITIES AND NET ASSETS	**$ 73,009,567**	**$ 72,781,329**

	Without donor restrictions	With donor restrictions	June 30 2023	2022
NET ASSETS:				
General Operating Account (GOA) *(Note 8)*	$ 6,640,552	$ 3,496,156	$ 10,136,708	$ 9,668,474
Endowment *(Note 8)*	9,229,293	41,519,301	50,748,594	50,877,680
Split interest agreements *(Note 9)*		634,217	634,217	700,540
TOTAL NET ASSETS	**$ 15,869,845**	**$ 45,649,674**	**$ 61,519,519**	**$ 61,246,694**

The accompanying notes are an integral part of the consolidated financial statements.

CONSOLIDATED STATEMENTS OF CHANGES IN NET ASSETS WITH GENERAL OPERATING ACCOUNT DETAIL

with summarized financial information for the year ended June 30, 2022

In thousands of dollars	Without Donor Restrictions	With Donor Restrictions	For the year ended June 30 2023	2022
OPERATING REVENUE:				
Net student income *(Notes 2 and 12)*	$ 1,331,557		**$ 1,331,557**	$ 1,223,363
Sponsored support *(Note 13)*				
Federal government – direct costs	491,878		**491,878**	460,707
Federal government – indirect costs	184,257		**184,257**	181,439
Non-federal sponsors – direct costs	93,069	$ 204,777	**297,846**	288,302
Non-federal sponsors – indirect costs	27,014	24,667	**51,681**	45,309
Total sponsored support	796,218	229,444	**1,025,662**	**975,757**
Gifts for current use *(Note 14)*	149,759	336,123	**485,882**	504,736
Investment income:				
Endowment returns made available for operations *(Note 8)*	420,219	1,824,480	**2,244,699**	2,118,855
GOA returns made available for operations	173,279		**173,279**	153,110
Other investment income	38,734	4,571	**43,305**	21,647
Total investment income	632,232	1,829,051	**2,461,283**	**2,293,612**
Other revenue *(Note 15)*	792,916		**792,916**	838,323
Net assets released from restriction	2,305,695	(2,305,695)	**0**	0
TOTAL OPERATING REVENUE	**6,008,377**	**88,923**	**6,097,300**	**5,835,791**
OPERATING EXPENSES:				
Salaries and wages	2,421,076		**2,421,076**	2,206,342
Employee benefits *(Note 11)*	628,304		**628,304**	583,931
Services purchased	791,941		**791,941**	732,709
Depreciation *(Note 7)*	424,809		**424,809**	428,860
Space and occupancy	394,079		**394,079**	353,786
Supplies and equipment	283,323		**283,323**	271,084
Interest *(Note 10)*	208,590		**208,590**	187,534
Scholarships and other student awards *(Note 12)*	181,295		**181,295**	171,312
Other expenses *(Note 16)*	578,380		**578,380**	494,575
TOTAL OPERATING EXPENSES	**5,911,797**	**0**	**5,911,797**	**5,430,133**
NET OPERATING SURPLUS	**96,580**	**88,923**	**185,503**	**405,658**
NON-OPERATING ACTIVITIES:				
Income from GOA Investments	24,769		**24,769**	15,206
GOA realized and change in unrealized appreciation/(depreciation), net *(Note 3)*	146,519		**146,519**	(259,353)
GOA returns made available for operations	(173,279)		**(173,279)**	(153,110)
Change in pledge balances *(Note 6)*		286,022	**286,022**	88,930
Change in interests in trusts held by others		(2,125)	**(2,125)**	(5,803)
Gifts for facilities and loan funds *(Note 14)*		96,175	**96,175**	87,874
Change in retirement obligations *(Note 11)*	70,158		**70,158**	142,745
Other changes	7,743		**7,743**	(11,067)
Transfers between GOA and endowment *(Note 8)*	(194,430)	(7,219)	**(201,649)**	(103,810)
Transfers between GOA and split interest agreements *(Note 9)*		28,398	**28,398**	25,213
Non-operating net assets released from restrictions	142,634	(142,634)	**0**	0
TOTAL NON-OPERATING ACTIVITIES	**24,114**	**258,617**	**282,731**	**(173,175)**
GENERAL OPERATING ACCOUNT NET CHANGE DURING THE YEAR	**120,694**	**347,540**	**468,234**	**232,483**
Endowment net change during the year	171,324	(300,410)	**(129,086)**	(2,288,073)
Split interest agreements net change during the year *(Note 9)*		(66,323)	**(66,323)**	(72,790)
NET CHANGE DURING THE YEAR	**292,018**	**(19,193)**	**272,825**	**(2,128,380)**
Net assets, beginning of year	15,577,827	45,668,867	**61,246,694**	**63,375,074**
NET ASSETS, END OF YEAR	**$ 15,869,845**	**$ 45,649,674**	**$ 61,519,519**	**$ 61,246,694**

The accompanying notes are an integral part of the consolidated financial statements.

CONSOLIDATED STATEMENTS OF CHANGES IN NET ASSETS OF THE ENDOWMENT

with summarized financial information for the year ended June 30, 2022

In thousands of dollars	Without Donor Restrictions	With Donor Restrictions	For the year ended June 30 2023	2022
Investment return *(Note 3):*				
Income from general investments	$ 34,240	$ 149,482	**$ 183,722**	$ 132,924
Realized and change in unrealized appreciation/(depreciation), net	214,972	938,954	**1,153,926**	(1,074,881)
Total investment return	249,212	1,088,436	**1,337,648**	**(941,957)**
Endowment returns made available for operations	(420,219)	(1,824,480)	**(2,244,699)**	(2,118,855)
Net investment return	(171,007)	(736,044)	**(907,051)**	**(3,060,812)**
Gifts for endowment *(Note 14)*	102,839	457,768	**560,607**	583,650
Transfers between endowment and the GOA *(Note 8)*	194,430	7,219	**201,649**	103,810
Capitalization of split interest agreements *(Note 9)*		50,747	**50,747**	18,603
Change in pledge balances *(Note 6)*		(179,700)	**(179,700)**	168,095
Change in interests in trusts held by others *(Note 8)*		8,121	**8,121**	(77,058)
Other changes	(5,173)	141,714	**136,541**	(24,361)
Net assets released from restrictions	50,235	(50,235)	**0**	0
NET CHANGE DURING THE YEAR	**171,324**	**(300,410)**	**(129,086)**	**(2,288,073)**
Net assets of the endowment, beginning of year	9,057,969	41,819,711	**50,877,680**	53,165,753
NET ASSETS OF THE ENDOWMENT, END OF YEAR	**$ 9,229,293**	**$ 41,519,301**	**$ 50,748,594**	**$ 50,877,680**

The accompanying notes are an integral part of the consolidated financial statements.

CONSOLIDATED STATEMENTS OF CASH FLOWS

with summarized financial information for the year ended June 30, 2022

In thousands of dollars	For the year ended June 30 2023	2022
CASH FLOWS FROM OPERATING ACTIVITIES:		
Change in net assets	**$ 272,825**	$ (2,128,380)
Adjustments to reconcile change in net assets to net cash (used in) operating activities:		
Depreciation	**424,809**	428,860
Amortization of premium and discount related to bonds and notes payable	**(37,179)**	(35,865)
Realized and change in unrealized (appreciation)/depreciation, net	**(1,336,740)**	1,511,867
Change in fair value of interest rate exchange agreements	**(4,985)**	(22,704)
Change in interests in trusts held by others	**(5,996)**	82,861
Change in liabilities due under split interest agreements	**42,175**	(101,062)
Gifts of donated securities	**(64,469)**	(81,017)
Proceeds from the sales of gifts of unrestricted securities	**16,437**	15,069
Gifts for restricted purposes	**(504,714)**	(556,994)
Cost of issuance of debt	**409**	343
Loss on disposal of assets	**8,923**	23,439
Change in accrued retirement obligations	**(88,316)**	(150,133)
Non-cash operating lease costs	**(38,297)**	12,815
Changes in operating assets and liabilities:		
Receivables, net	**(9,479)**	(17,310)
Prepayments and deferred charges	**(45,228)**	(2,276)
Pledges receivable, net	**(107,200)**	(256,476)
Accounts payable	**(82,631)**	(6,807)
Deferred revenue and other liabilities	**43,770**	(36,662)
Operating lease liability	**64,853**	(13,530)
NET CASH (USED IN) OPERATING ACTIVITIES	**(1,451,033)**	**(1,333,962)**
CASH FLOWS FROM INVESTING ACTIVITIES:		
Loans made to students, faculty, and staff	**(62,985)**	(64,584)
Payments received on student, faculty, and staff loans	**42,902**	48,654
Change in other notes receivable	**494**	12,714
Proceeds from the sales and maturities of investments	**8,689,761**	15,503,537
Purchase of investments	**(7,988,945)**	(14,028,307)
Change associated with repurchase agreements	**599,085**	(699,810)
Additions to fixed assets	**(578,365)**	(426,773)
NET CASH PROVIDED BY INVESTING ACTIVITIES	**701,947**	**345,431**
CASH FLOWS FROM FINANCING ACTIVITIES:		
Change in overdrafts included in accounts payable	**4,295**	(740)
Change in split interest agreements from new contributions, income and payments to annuitants	**(41,970)**	(32,278)
Proceeds from issuance of debt	**177,296**	746,530
Debt repayments	**(42,995)**	(97,004)
Proceeds from the sales of gifts of restricted securities	**48,032**	65,948
Gifts for restricted purposes	**504,714**	556,994
Change in government loan advances	**(4,768)**	(6,350)
NET CASH PROVIDED BY FINANCING ACTIVITIES	**644,604**	**1,233,100**
NET CHANGE IN CASH	**(104,482)**	**244,569**
Cash, beginning of year	**1,808,872**	**1,564,303**
CASH, END OF YEAR	**$ 1,704,390**	**$ 1,808,872**
Cash and cash equivalents (per *Consolidated Balance Sheets)*	**$ 245,589**	**$ 283,227**
Cash and cash equivalents held in investments *(Note 3)*	**1,458,801**	**1,525,645**
TOTAL CASH AND CASH EQUIVALENTS	**$ 1,704,390**	**$ 1,808,872**
Supplemental disclosure of cash flow information:		
Accounts payable related to fixed asset additions	$ 54,092	$ 45,583
Cash paid for interest	$ 235,881	$ 222,932
New operating leases – right of use assets	$ 150,680	$ 66,537

The accompanying notes are an integral part of the consolidated financial statements.

1. UNIVERSITY ORGANIZATION

Harvard University (the "University") is a private, not-for-profit institution of higher education with approximately 7,200 undergraduate and 14,200 graduate students in fiscal year 2023, as compared to 7,100 undergraduate and 14,100 graduate students in fiscal year 2022. Established in 1636, the University includes the Faculty of Arts and Sciences, the John A. Paulson School of Engineering and Applied Sciences, the Division of Continuing Education, ten graduate and professional Schools, the Radcliffe Institute for Advanced Study, a variety of research museums and institutes, and an extensive library system to support the teaching and research activities of the Harvard community.

The President and Fellows of Harvard College (the "Corporation"), a governing board of the University, has oversight responsibility for all of the University's financial affairs. The Corporation delegates substantial authority to the Schools and departments for the management of their resources and operations.

The University includes Harvard Management Company (HMC), a wholly owned subsidiary founded in 1974 to manage the University's investment assets. HMC is governed by a Board of Directors that is appointed by the Corporation.

2. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES

Basis of presentation

The accompanying consolidated financial statements have been prepared on the accrual basis of accounting and include the accounts of the University and affiliated organizations controlled by the University. Significant inter-affiliate accounts and transactions have been eliminated.

Funds transferred to the University on behalf of specific beneficiaries (agency funds) are recorded as assets and liabilities in the *Consolidated Balance Sheets* and are not included in the *Consolidated Statements of Changes in Net Assets with General Operating Account Detail*.

The consolidated financial statements include certain prior year summarized comparative information in total, not by net asset classification. This information is not presented in sufficient detail to conform to generally accepted accounting principles (GAAP). Accordingly, such information should be read in conjunction with the University's financial statements for the year ended June 30, 2022, from which the summarized information is derived. Certain prior year amounts have been reclassified to conform to current year presentation.

Net asset classifications

For the purposes of financial reporting, the University classifies resources into two net asset categories pursuant to any donor-imposed restrictions and applicable law. Accordingly, the net assets of the University are classified in the accompanying consolidated financial statements in the categories that follow:

WITHOUT DONOR RESTRICTIONS—Net assets not subject to donor-imposed restrictions. Funds invested in fixed assets and unrestricted endowment funds comprise 82% of the University's net assets without donor-imposed restrictions as of June 30, 2023. In addition, this category includes gifts and endowment income balances where the donor restriction has been met, University-designated loan funds, and other current funds.

WITH DONOR RESTRICTIONS—Net assets subject to legal or donor-imposed restrictions that will be satisfied either by actions of the University, the passage of time, or both. These net assets include net assets subject to donor-imposed restrictions that are invested to provide a perpetual source of income to the University. Generally, donors of these assets require the University to maintain and invest the original contribution in perpetuity but permit the use of some or all investment returns for general or specific purposes. The appreciation on these perpetual contributions must be reported as net assets with donor restrictions until appropriated for spending in accordance with Massachusetts law. Also included in this category are gifts donated for a particular purpose and amounts subject to time restrictions such as funds pledged for future payment.

Revenues from sources other than contributions are generally reported as increases in net assets without donor restrictions. Expenses are reported as decreases in net assets without donor restrictions. Gains and losses on investments are reported as increases or decreases in net assets without donor restrictions, unless their use is restricted by donor stipulations or by law. Investment returns earned by restricted donor funds are initially classified as net assets with donor restrictions and then reclassified to net assets without donor restrictions when expenses are appropriated or incurred for their intended purpose. Expirations of donor restrictions on net assets are reported as reclassifications from net assets with donor restrictions to net assets without donor restrictions and appear as "Net assets released from restrictions" and "Non-operating net assets released from restrictions" in the *Consolidated Statements of Changes in Net Assets*.

Liquidity and availability

As part of the University's liquidity management, it has a policy to structure its financial assets to be available as its general expenditures, liabilities and other obligations come due. A significant portion of the University's annual expenditures are funded by operating revenues in the current year including student income, sponsored support, endowment returns made available for operations, gifts for current use and other revenues.

The University's financial assets available within one year of the balance sheet date for general expenditure, such as operating expenses, scheduled principal payments on debt, and capital construction costs not financed with debt, are as follows (in thousands):

	June 30, 2023	June 30, 2022
FINANCIAL ASSETS		
Cash and cash equivalents	$ 245,589	$ 283,227
Receivables, net	349,271	339,792
Pledge receivables due in one year	459,286	376,097
Cash and short-term investments held separately by General Operating Account (GOA)[1]	1,418,472	2,236,157
Endowment returns made available for operations in the following year	2,649,533	2,460,142
TOTAL FINANCIAL ASSETS AVAILABLE WITHIN ONE YEAR	**$ 5,122,151**	**$ 5,695,415**
LIQUIDITY RESOURCES		
Credit facility, undrawn balance	1,500,000	1,500,000
Tax-exempt commercial paper, undrawn balance	975,000	1,000,000
Taxable commercial paper, undrawn balance	1,847,704	2,000,000
TOTAL FINANCIAL ASSETS AND LIQUIDITY RESOURCES AVAILABLE WITHIN ONE YEAR	**$ 9,444,855**	**$ 10,195,415**

[1] *The University has a policy of maintaining liquidity outside of the General Investment Accounting (GIA) through a combination of cash equivalents and short-term investments, as referenced on page 7 in the Financial Overview.*

Endowment and GOA returns liquidated from investments and made available for operations over the course of the fiscal year are distributed to University department and program budgets to spend, subject to donor restrictions where applicable.

While the University has no intention of doing so, there are additional investments held by the University and the endowment that could be liquidated in the event of an unexpected disruption. While a portion of the endowment is subject to donor restrictions, there was $9.2 billion and $9.1 billion in endowment funds without donor restrictions at June 30, 2023 and 2022, respectively, and $5.6 billion and $4.7 billion of General Operating Account investments (GOA) at June 30, 2023 and 2022, respectively, that could be accessed with the approval of the Corporation and subject to the redemption provisions described in *Note 3*.

Revenue recognition

Revenue is recognized when control of promised goods or services is transferred to customers, in an amount that reflects the consideration the University expects to be entitled to in exchange for those goods or services.

Student income is derived from degree programs as well as executive and continuing education programs and includes tuition, fees, and board and lodging. Student income is recognized ratably over the academic period of the course or program offered based on time elapsed, and scholarships awarded to students reduce the amount of revenue recognized. The University's individual schools have various billing and academic cycles and the majority of our programs are completed within the fiscal year. Student income received in advance of services to be rendered is recorded as deferred revenue which totaled $208.3 million and $209.1 million at June 30, 2023 and 2022, respectively, which are primarily recognized in the subsequent fiscal year.

Total student income of $1.3 billion and $1.2 billion was recorded during the years ended June 30, 2023 and 2022, respectively. Student tuition, fees, board and lodging at published rates is summarized as follows for the years ended June 30, 2023 and 2022 (in thousands of dollars):

	2023	2022
Undergraduate program	**$ 409,890**	$ 390,809
Graduate and professional degree programs	**687,136**	652,005
Continuing education and executive programs	**544,039**	486,682
Board and lodging	**221,235**	199,771

Scholarships applied to student charges were $530,743 and $505,904 for the years ended June 20, 2023 and 2022, respectively.

Unconditional contributions including pledges are recognized immediately and classified as either net assets with donor restrictions or net assets without donor restrictions. Conditional contributions for which cash is received are accounted for as a liability within deferred revenue.

Sponsored support of $1.0 billion includes support from governmental and private sources. Certain sponsored arrangements are considered exchange arrangements, and revenue under these agreements is recognized based on the University's fulfillment of the contract, which is typically based on costs incurred or the achievement of milestones. Other sponsored support is considered contribution revenue, which is recognized when any donor-imposed conditions have been met, if applicable. Sponsored conditional contributions received, where the barrier to entitlement is not yet overcome, are recorded as deferred revenues of $84.7 million and $64.3 million as of June 30, 2023 and 2022, respectively. As of June 30, 2023, the University also had $1.6 billion awarded but not yet expended contributions related to sponsored programs where the condition had not yet been met. This is subject to federal appropriations. Funding received in advance of recognition is recorded as deferred revenue.

Other revenue of $792.9 million in fiscal 2023 and $838.3 million in fiscal 2022 includes several revenue streams considered exchange contracts with customers totaling $651.5 million for fiscal year 2023 and $726.9 million in fiscal year 2022. These revenues are recognized at the point in time goods or services are provided. Deferred revenues related to other revenue of $96.5 million and $104.7 million were recorded as of June 30, 2023 and 2022, which are primarily recognized in the subsequent fiscal year.

Measure of operations

Revenues earned, expenses incurred, and returns made available for operations for the purpose of teaching, conducting research, and the other programs and services of the University are the components of "Net operating surplus" in the *Consolidated Statements of Changes in Net Assets with General Operating Account Detail*. The University's non-operating activity within the *Consolidated Statements of Changes in Net Assets with General Operating Account Detail* includes contributions to the University's building construction and renovation funds, investment returns (net of amounts made available for operations), change in pledge balances, long-term benefit plan obligation funding changes, and other infrequent transactions.

Collections

The University's vast array of museums and libraries contains priceless works of art, historical treasures, literary works, and artifacts. These collections are protected and preserved for public exhibition, education, research, and the furtherance of public service. They are neither disposed of for financial gain nor encumbered in any manner. Accordingly, such collections are not recorded for financial statement purposes. Proceeds on deaccessioned collections are used to fund new collections or the direct care of existing collections. Direct care is defined as general care for the preservation of a collection.

Insurance programs

The University, together with the Harvard-affiliated teaching hospitals, has formed a captive insurance company, Controlled Risk Insurance Company (CRICO), to provide limited professional liability, general liability, and medical malpractice insurance for its shareholders. The University self-insures a portion of its professional liability and general liability programs and maintains a reserve for incurred claims, including those related to Harvard Medical School activities not occurring in the affiliated teaching hospitals. CRICO provides malpractice coverage with no deductible for medical professionals practicing within Harvard's University Health Services department, the School of Dental Medicine, and the T.H. Chan School of Public Health. The University also maintains reserves for the self-insured portion of claims related to automobile liability, property damage, and workers' compensation; these programs are supplemented with commercial excess insurance above the University's self-insured retention. In addition, the University maintains an insured dental plan, and is self-insured for unemployment, the primary retiree health plan, and all health and dental plans for active employees. The University's claims liabilities are recognized as incurred, including claims that have been incurred but not reported, and are included in operating expenses.

Tax

The University is a tax-exempt organization under Section 501(c)(3) of the Internal Revenue Code.

On December 22, 2017, the Tax Cuts and Jobs Act (the "Act") was enacted. The Act impacts the University in several ways, including the addition of excise taxes on executive compensation and net investment income, as well as new rules for calculating unrelated business taxable income. The University records an estimate for related tax expense based on currently available regulatory guidance of the Act and continues to evaluate the impact of the Act on current and future tax positions.

Use of estimates

The preparation of financial statements in accordance with U.S. GAAP requires management to make estimates and assumptions that affect reported amounts and disclosures. Actual results could differ from those estimates.

New accounting pronouncements

Effective July 1, 2022, the University adopted ASU 2021-05, *Leases (Topic 842): Lessors—Certain Leases with Variable Lease Payments,* which amends the lease classification requirements for lessors with certain leases containing variable payments. A lessor is to classify and account for a lease with variable lease payments that do not depend on an index or a rate as an operating lease if the lease would have been classified as a sales-type lease or a direct financing lease and the lessor would have otherwise recognized a day-one loss. The University adopted ASU 2021-05 prospectively. This guidance did not have a significant impact on the University's consolidated financial statements.

Effective July 1, 2021, the University adopted ASU 2018-15, *Intangibles—Goodwill and Other—Internal-Use Software (Subtopic 350-40): Customer's Accounting for Implementation Costs Incurred in a Cloud Computing Arrangement That is a Service Contract*. This guidance aligns the requirements for capitalizing implementation costs incurred in a hosting arrangement that is a service contract with the requirements for capitalizing implementation costs incurred to develop or obtain internal-use software or software licenses. The University adopted ASU 2018-15 prospectively. This guidance did not have a significant impact on the University's consolidated financial statements.

Effective July 1, 2021, the University adopted ASU 2020-07, *Presentation and Disclosures by Not-for-Profit Entities for Contributed Nonfinancial Assets*. This guidance is intended to increase transparency on how contributed nonfinancial assets are to be used and valued. The University adopted ASU 2020-07 prospectively. This guidance did not have a significant impact on the University's consolidated financial statements.

Effective July 1, 2021, the University adopted ASU 2018-14, *Disclosure Framework—Changes to the Disclosure Requirements for Defined Benefit Plans,* which amends ASC 715, Compensation—Retirement Benefits. This accounting pronouncement modifies the disclosure requirements for employers that sponsor defined benefit pension or other postretirement plans. The University adopted ASU 2018-14 on a retrospective basis. The effects of adopting this amendment are addressed in *Note 11.*

In September 2022, the FASB issued ASU 2022-04, *Disclosure of Supplier Finance Program Obligations*. Under ASU 2022-04, the buyer in a supplier finance program is required to disclose information about the key terms of the program, outstanding confirmed amounts as of the end of the period, a rollforward of such amounts during each annual period, and a description of where in the financial statements outstanding amounts are presented. With the exception of the disclosure of rollforward information, the ASU is effective for fiscal year 2024 for the University. The rollforward requirement is effective for fiscal year 2025 for the University. The University is currently evaluating the impact of the new guidance on the consolidated financial statements, but does not believe the adoption will impact the consolidated financial statements going forward.

In March 2020, the FASB issued ASU 2020-04, *Reference Rate Reform (Topic 848): Facilitation of the Effects of Reference Rate Reform on Financial Reporting,* and in January 2021 issued ASU 2021-01, *Reference Rate Reform (Topic 848): Scope*. These ASUs provide temporary optional expedients and exceptions to existing guidance on contract modifications and hedge accounting to facilitate the market transition from existing reference rates, such as London Interbank Offered Rate ("LIBOR") which has been phased out, to alternate reference rates, such as Secured Overnight Financing Rate ("SOFR"). These standards are effective upon issuance through December 31, 2022. The adoption of this standard has not had a material impact on the University's consolidated financial statements and disclosures. In December 2022, the FASB issued ASU 2022-06, *Reference Rate Reform (Topic 848): Deferral of the Sunset Date of Topic 848,* which defers the sunset date of reference rate reform relief to December 31, 2024.

In June 2016, the FASB issued ASU 2016-13, *Financial Instruments—Credit Losses (Topic 326): Measurement of Credit Losses on Financial Instruments*. ASU 2016-13 replaced the incurred loss methodology with an expected loss methodology that is referred to as the current expected credit loss ("CECL") methodology. CECL requires an estimate of credit losses for the remaining estimated life of the financial asset using historical experience, current conditions, and reasonable and supportable forecasts and generally applies to financial assets measured at amortized cost, including loan receivables and held-to-maturity debt securities, and some off-balance sheet credit exposures such as unfunded commitments to extend credit. Financial assets measured at amortized cost must be presented at the net amount expected to be collected by using an allowance for credit losses. This guidance is effective for fiscal year 2024 for the University. The University is currently evaluating the impact of the new guidance on the consolidated financial statements.

3. INVESTMENTS

Investments are presented at fair value in accordance with GAAP and under the guidelines prescribed by the HMC investment valuation policy, which is reviewed and approved by the HMC Board of Directors on an annual basis.

The majority of the University's investments are managed by HMC in the GIA, a pooled investment account that consists primarily of endowment assets. Certain other investments such as cash, short-term investments, split interest agreements and other assets, are managed separately from the GIA.

The University's investment holdings as of June 30, 2023 and 2022 are summarized in the following table (in thousands of dollars):

	2023	2022
Investment portfolio assets		
Pooled general investment account assets	**$ 56,633,201**	$ 55,938,831
Other investments	**2,445,718**	3,196,388
Investment portfolio, at fair value	**59,078,919**	**59,135,219**
Securities pledged to counterparties, at fair value	**122,758**	179,514
TOTAL INVESTMENT ASSETS	**59,201,677**	**59,314,733**
Pooled general investment account liabilities	**626,371**	709,422
Interest rate exchange agreement	**3,624**	8,609
TOTAL OTHER LIABILITIES ASSOCIATED WITH THE INVESTMENT PORTFOLIO	**629,995**	**718,031**
TOTAL INVESTMENTS, NET	**$ 58,571,682**	**$ 58,596,702**

As of June 30, 2023 and 2022, University net investments were comprised of the following components (in thousands of dollars):

	2023	2022
POOLED GENERAL INVESTMENT ACCOUNT		
Endowment[1]	**$ 48,679,919**	$ 48,798,038
General operating account	**5,577,019**	4,658,269
Split interest agreements	**863,185**	934,971
Other internally designated funds	**1,009,465**	1,017,645
TOTAL POOLED GENERAL INVESTMENT ACCOUNT NET ASSETS	**$ 56,129,588**	**$ 55,408,923**
OTHER INVESTMENTS OUTSIDE THE GENERAL INVESTMENT ACCOUNT		
General operating and other investments[2]	**1,784,840**	2,536,192
Split interest agreements	**657,254**	651,587
TOTAL OTHER INVESTMENTS OUTSIDE THE GENERAL INVESTMENT ACCOUNT	**$ 2,442,094**	**$ 3,187,779**
TOTAL INVESTMENTS, NET	**$ 58,571,682**	**$ 58,596,702**

[1] *As of June 30, 2023, the total net assets of the endowment of $50,748,594 is comprised of investments in the GIA of $48,679,919, pledges of $1,253,486, interests in trusts held by others of $411,747, and $403,442 of other non-GIA investments and GIA interest and dividends net of all internal and external management fees and expenses. See* Note 8 *for further composition of the net assets of the endowment.*

[2] *Consists primarily of repurchase agreements, US government securities, money markets, and fixed income funds totaling $1,427,153 and $2,238,277 as of June 30, 2023 and 2022, respectively.*

Investment return

A summary of the University's total return on investments for fiscal years 2023 and 2022 is presented below (in thousands of dollars):

	2023	2022
Return on pooled general investment account:		
Realized and change in unrealized appreciation/(depreciation), net	**$ 1,320,925**	$ (1,223,200)
Interest, dividend, fees, and expenses, net	**211,887**	150,734
Total return on pooled general investment account[1]	**1,532,812**	**(1,072,466)**
Return on other investments:		
Realized and change in unrealized appreciation/(depreciation), net	**15,815**	(288,667)
Interest, dividend, fees, and expenses, net	**59,722**	36,225
Total return on other investments	**$ 75,537**	**$ (252,442)**
Realized and change in unrealized appreciation on interest rate exchange agreement, net	**3,929**	19,169
TOTAL RETURN ON INVESTMENTS[2]	**$ 1,612,278**	**$ (1,305,739)**

[1] *Net of all internal and external management fees and expenses.*
[2] *Total return on investments is comprised of returns on the endowment, GOA, Split Interest Agreements and other.*

Fair value hierarchy

The University's investments have been categorized based upon the fair value hierarchy in accordance with ASC 820, which prioritizes the inputs to valuation techniques used to measure fair value of investment assets and liabilities into three levels:

LEVEL 1 Unadjusted quoted prices in active markets that are accessible at the measurement date for identical, unrestricted assets or liabilities;

LEVEL 2 Quoted prices in markets that are not considered to be active or financial instruments for which all significant inputs are observable, either directly or indirectly;

LEVEL 3 Prices or valuations that require inputs that are significant to the fair value measurement, unobservable and/or require the University to develop its own assumptions.

Investments in externally managed funds where the University utilizes net asset values (as reported by external managers) as a practical expedient for fair value measurements are excluded from the fair value hierarchy.

The level of an asset or liability within the fair value hierarchy is based on the lowest level of any input that is significant to the fair value measurement. The University endeavors to utilize all relevant and available information in measuring fair value.

The following is a summary of the levels within the fair value hierarchy for those investment assets and liabilities subject to fair value measurement as of June 30, 2023 and summarized as of June 30, 2022 (in thousands of dollars):

	2023					2022
	Level 1	Level 2	Level 3[6]	NAV as Practical Expedient	Total	Total
ASSETS:						
Cash and cash equivalents[1]	$ 1,458,801				**$ 1,458,801**	**$ 1,525,645**
Repurchase agreements		$ 150,789			**150,789**	**749,873**
Domestic equity	1,532,888			$ 1,856,474	**3,389,362**	**3,085,276**
Foreign equity	290,381			786,461	**1,076,842**	**2,071,270**
Global equity				1,211,417	**1,211,417**	**1,262,693**
Domestic fixed income	1,984,636	10,065		1,057,153	**3,051,854**	**2,787,349**
Foreign fixed income	15,839				**15,839**	**17,479**
Emerging market equity and debt	29,932			3,093,108	**3,123,040**	**3,352,726**
High yield	13,863		$ 290,011		**303,874**	**301,106**
Hedge funds				17,267,674	**17,267,674**	**16,774,488**
Private equity			1,157,032	21,966,842	**23,123,874**	**21,940,923**
Natural resources	979			428,260	**429,239**	**431,129**
Real estate			7,170	2,996,167	**3,003,337**	**3,277,320**
Inflation-indexed bonds	1,077,269				**1,077,269**	**1,097,023**
Due from brokers		89,209	4,645		**93,854**	**22,186**
Other investments		82,826			**82,826**	**65,208**
INVESTMENT ASSETS SUBJECT TO FAIR VALUE LEVELING	**$ 6,404,588**	**$ 332,889**	**$ 1,458,858**	**$ 50,663,556**	**$ 58,859,891**	**$ 58,761,694**
Other investment assets not subject to fair value[2]					**341,786**	**553,039**
TOTAL INVESTMENT ASSETS[3]					**$ 59,201,677**	**$ 59,314,733**
Interests in trusts held by others[4]			438,892		**438,892**	**432,896**
NON-INVESTMENT ASSETS SUBJECT TO FAIR VALUE LEVELING			**$ 438,892**		**$ 438,892**	**$ 432,896**
TOTAL ASSETS					**$ 59,640,569**	**$ 59,747,629**
LIABILITIES:						
Due to brokers[5]	$ 4,142	$ 14,073			**$ 18,215**	**$ 77,081**
Other liabilities subject to fair value			$ 138,733		**138,733**	**154,949**
INVESTMENT LIABILITIES SUBJECT TO FAIR VALUE LEVELING	**$ 4,142**	**$ 14,073**	**$ 138,733**		**$ 156,948**	**$ 232,030**
Other investment liabilities not subject to fair value					**473,047**	**486,001**
TOTAL INVESTMENT LIABILITIES[3]					**$ 629,995**	**$ 718,031**
Liabilities due under split interest agreements[4]		$ 886,222			**886,222**	**886,017**
NON-INVESTMENT LIABILITIES SUBJECT TO FAIR VALUE LEVELING		**$ 886,222**			**$ 886,222**	**$ 886,017**
TOTAL LIABILITIES					**$ 1,516,217**	**$ 1,604,048**

[1] *This excludes money markets held in "Cash and cash equivalents" on the* Consolidated Balance Sheets *of $55.0 million and $65.0 million as of June 30, 2023 and 2022, respectively, which are Level 1 investments.*

[2] *As of June 30, 2023 and 2022 other assets not subject to fair value consists primarily of receivables for transactions that settled subsequent to the balance sheet date of $239,815 and $480,949, respectively.*

[3] *As of June 30, 2023 and 2022, total investment assets, net equal $58,571,682 and $58,596,702, respectively.*

[4] *Amounts excluded from investments and included separately on the University's* Consolidated Balance Sheets.

[5] *Includes fair value of an interest rate exchange agreement on the University's debt portfolio of $3,624 and $8,609 as of June 30, 2023 and 2022, respectively.*

[6] *As of June 30, 2023 $549,555 of Level 3 assets were valued using significant unobservable inputs.*

The following is a rollforward of Level 3 investments for the year ended June 30, 2023 and the condensed June 30, 2022 rollforward of Level 3 investments (in thousands of dollars).

	Beginning balance as of July 1, 2022	Net realized gains/ (losses)	Net change in unrealized (depreciation)/ appreciation[1]	Purchases/ contributions	Sales/ distributions	Transfers out of Level 3[2]	Ending balance as of June 30, 2023
INVESTMENT ASSETS:							
High yield	$ 298,319	$ 1,428	$ (9,346)	$ 423,970	$ (424,360)		**$ 290,011**
Private equity	1,174,625	51,473	(58,833)	94,293	(104,426)	$ (100)	**1,157,032**
Real estate	25,074	(28,822)	11,622		(704)		**7,170**
Due from brokers	4,640		5				**4,645**
INVESTMENT ASSETS SUBJECT TO FAIR VALUE LEVELING	**$ 1,502,658**	**$ 24,079**	**$ (56,552)**	**$ 518,263**	**$ (529,490)**	**$ (100)**	**$ 1,458,858**
Interests in trusts held by others	$ 432,896		8,008		(2,012)		**$ 438,892**
NON-INVESTMENT ASSETS SUBJECT TO FAIR VALUE LEVELING	**$ 432,896**		**$ 8,008**		**$ (2,012)**		**$ 438,892**
TOTAL ASSETS SUBJECT TO FAIR VALUE LEVELING	**$ 1,935,554**	**$ 24,079**	**$ (48,544)**	**$ 518,263**	**$ (531,502)**	**$ (100)**	**$ 1,897,750**
INVESTMENT LIABILITIES:							
Other liabilities subject to fair value	$ 154,949		$ 364	$ (98,916)	$ 82,336		**$ 138,733**
TOTAL LIABILITIES SUBJECT TO FAIR VALUE LEVELING	**$ 154,949**	**$ 0**	**$ 364**	**$ (98,916)**	**$ 82,336**		**$ 138,733**
NET ASSETS SUBJECT TO FAIR VALUE LEVELING	**$ 1,780,605**	**$ 24,079**	**$ (48,908)**	**$ 617,179**	**$ (613,838)**	**$ (100)**	**$ 1,759,017**

[1] *Total change in unrealized (depreciation)/appreciation relating to Level 3 investment assets and investment liabilities still held by the University at June 30, 2023 is $35,939 and is reflected in "Realized and change in unrealized (depreciation)/appreciation, net" in the* Consolidated Statements of Changes in Net Assets.
[2] *The transfers out of Level 3 represent interests in private companies that underwent an initial public offering during the fiscal year.*

	Beginning balance as of July 1, 2021	Net realized gains/ (losses)	Net change in unrealized (depreciation)/ appreciation[1]	Purchases/ contributions	Sales/ distributions	Transfers out of Level 3[2]	Ending balance as of June 30, 2022
PRIOR YEAR NET ASSETS SUBJECT TO FAIR VALUE LEVELING	**$ 2,560,200**	**$ 18,622**	**$ (1,086)**	**$ 631,136**	**$ (1,284,805)**	**$ (143,462)**	**$ 1,780,605**

[1] *Total change in unrealized (depreciation)/appreciation relating to Level 3 investment assets and investment liabilities still held by the University at June 30, 2022 is $95,568 and is reflected in "Realized and change in unrealized (depreciation)/appreciation, net" in the* Consolidated Statements of Changes in Net Assets.
[2] *The transfers out of Level 3 represent interests in private companies that underwent an initial public offering during the fiscal year.*

Investment strategy and risk

The University utilizes a number of wholly owned subsidiary entities to support its investment activities. The consolidated financial statements include all assets, liabilities, income, and expenses associated with these entities and intercompany accounts and transactions have been eliminated during consolidation.

The University's investment strategy incorporates a diversified asset allocation approach and maintains, within defined limits, exposure to the movements of the global public and private equity, fixed income, real estate, and commodities markets. Exposure to these markets is achieved through direct investments in individual securities, investments in special purpose vehicles and/or through investments in vehicles advised by external managers.

Investments in global markets involve a multitude of risks such as price, interest rate, market, sovereign, currency, liquidity and credit risks, amongst many others. The University manages exposure to these risks through established policies and procedures related to its ongoing investment diligence and operational due diligence programs. The University also considers manager concentration risk. As of June 30, 2023, 15% of the GIA NAV was invested across 5 diversified fund managers. The University anticipates that the value and composition of its investments may, from time to time, fluctuate substantially in response to any or all of the risks described herein.

Cash and cash equivalents

Cash and cash equivalents are recorded at cost, which approximates fair value, and includes cash in bank accounts, institutional money market funds and other temporary investments held for working capital purposes with original maturities of three months or less. Cash and cash equivalents do not include cash balances held as collateral by the University. Cash and cash equivalents designated for investment purposes are included in the "Investment portfolio, at fair value" in the *Consolidated Balance Sheets*.

Repurchase agreements

The University *Consolidated Balance Sheets* display the assets generated by repurchase transactions. The University enters into these transactions under agreements containing master netting arrangements. The University requires the fair value of the collateral exchanged under these agreements to be equal to or in excess of the total amount of the agreement, including interest where applicable. At June 30, 2023 and 2022 the University had gross asset repurchase agreements of $0.2 billion and $0.8 billion which were fully collateralized. The University does not offset repurchase agreements that are subject to master netting arrangements or similar arrangements on the University's *Consolidated Balance Sheets*.

Dividend and interest income

Dividend income is recognized net of applicable withholding taxes on the ex-dividend date. Non-cash dividends are recorded at the fair value of the securities received. Interest income and expense is recorded net of applicable withholding taxes, on an accrual basis. The University amortizes bond premiums and accretes bond discounts using the effective yield method and when cash collection is expected.

Traded securities

Instruments listed or traded on a securities exchange are valued at the last quoted price on the primary exchange where the security is traded. Where there is no readily available closing price on the valuation date, long positions are valued at the bid price and short positions are valued at the ask price. Restrictions that are attached to a security are factored into the valuation of that security, reflective of the estimated impact of those restrictions. Investments in non-exchange traded debt and equity instruments are primarily valued using inputs provided by independent pricing services or by broker/dealers who actively make markets in these securities.

Derivatives

The University uses a variety of financial instruments with off-balance sheet risk involving contractual or optional commitments for future settlement, which are exchange traded or executed over the counter (OTC). These instruments are used to (1) manage exposure to certain asset classes and/or various market risks, (2) arbitrage mispricings of related securities and (3) to manage the interest, cost and risk associated with its outstanding and/or future debt. These instruments are classified as due to/from brokers and may include option, swap, credit default, interest rate, and forward contracts. These types of instruments are primarily valued using industry standard models with independent market inputs, or by broker quotes. Inputs such as prices, spreads, curves, and/or broker quotes are evaluated for source reliability and consistency with industry standards. Counterparty marks obtained and utilized to determine daily collateral requirements are also used to corroborate input reasonability. The University considers current market conditions including interest rate and credit risks in its evaluation of inputs, pricing methodologies, and models utilized to determine fair values.

In connection with its investments in derivatives, the University maintains master netting agreements and collateral agreements with its counterparties. These agreements provide the University the right, in the event of default by the counterparty (such as bankruptcy or a failure to pay or perform), to net a counterparty's rights and obligations under the agreement and to liquidate and offset collateral against any net amount owed by the counterparty. Collateral, generally in the form of debt obligations issued by the US Treasury, is exchanged on a daily basis as required by fluctuations in the market.

Specific credit limits are established for counterparties based on their individual credit ratings. Credit limits are monitored daily by the University and are adjusted according to policy, as necessary. Some of the financial instruments entered into by the University contain credit-risk-related contingency features that allow the parties to the agreement to demand immediate payment for outstanding contracts and/or collateral.

The following table presents information about the University's derivatives by primary risk exposure for the years ended June 30, 2023 and 2022 (in thousands of dollars):

	As of June 30, 2023			For the year ended June 30, 2023	As of June 30, 2022			For the year ended June 30, 2022
Primary risk exposure	Average Quarterly Notional	Gross derivative assets	Gross derivative liabilities	Net profit/ (loss)[4]	Average Quarterly Notional	Gross derivative assets	Gross derivative liabilities	Net profit/ (loss)[4]
Equity instruments	$ 2,328,894	$ 115,648	$ 41,180	$ 131,794	$ 5,009,087	$ 79,784	$ 130,849	$ 484,118
Fixed income instruments[1]	117,000		3,624	3,929	117,000		8,609	19,169
Currency instruments	18,875	1,121	1,123	(1,792)	6,867	1,628	1,626	2,290
Credit instruments	4,800	4,797		132	4,752	4,777		(24)
SUBTOTAL		**$ 121,566**	**$ 45,927**	**$ 134,063**		**$ 86,189**	**$ 141,084**	**$ 505,553**
TOTAL COUNTERPARTY NETTING[2]		**(27,712)**	**(27,712)**			**(68,643)**	**(68,643)**	
NET AMOUNTS INCLUDED IN THE *CONSOLIDATED BALANCE SHEETS*[3]		**93,854**	**18,215**			**17,546**	**72,441**	
Collateral								
Cash collateral received/posted		120				115		
Securities collateral received/ posted[5]		89,351	98,305			9,606	156,121	
TOTAL SECURITIES COLLATERAL RECEIVED/POSTED		**89,471**	**98,305**			**9,721**	**156,121**	
NET AMOUNT		**4,383**	**(80,090)**			**7,825**	**(83,680)**	
NET AMOUNT IN ACCORDANCE WITH ASC 210[6]		**$ 4,383**	**$ 0**			**$ 7,825**	**$ 0**	

[1] *For the year ended June 30, 2023 and 2022 the balance represents an interest rate exchange swap on the University's debt portfolio.*
[2] *GAAP permits the netting of derivative assets and liabilities and the related cash collateral received and paid when a legally enforceable master netting agreement exists between the University and a derivative counterparty.*
[3] *Included within the "Investment portfolio, at fair value" and "Other liabilities associated with the investment portfolio" line items of the* Consolidated Balance Sheets.
[4] *Included within "Realized and change in unrealized (depreciation)/appreciation, net" within the* Consolidated Statements of Changes in Net Assets.
[5] *Includes securities posted to meet initial margin requirements on exchange traded futures.*
[6] *Excludes any over-collateralized amounts in accordance with ASC 210.*

External advisors

Investments managed by external advisors include investments in private equity, real estate, natural resources, hedge funds, and other externally managed funds. The University generally utilizes the capital account balance provided by the external advisor as a practical expedient to fair value. To evaluate the adequacy of these fair value measurements, the University has assessed factors including, but not limited to, the external advisor's adherence to fair value principles in calculating the capital account balance, the existence of transactions at NAV at the measurement date and the existence or absence of certain restrictions at the measurement date. In addition, the University evaluates these external advisors through ongoing due diligence and operational oversight, which includes an analysis of an advisor's use of and adherence to fair value principles.

The University, as an investor, has commitments to make periodic contributions in future periods to the investments managed by external advisors. The amounts of these expected disbursements as of June 30, 2023 and 2022 are disclosed below (in thousands of dollars):

	As of June 30, 2023			As of June 30, 2022		
	Fair value[1]	Remaining unfunded commitments	Estimated remaining life[2]	Fair value[1]	Remaining unfunded commitments	Estimated remaining life[2]
Private equity funds	$ 18,505,877	$ 8,958,071	4 – 10	$ 17,394,411	$ 8,858,770	4 – 10
Real estate funds	2,790,305	2,048,930	4 – 10	3,052,042	2,068,329	4 – 10
Other externally managed funds[3]	3,517,860	2,317,366	2 – 8	3,259,851	2,902,708	2 – 8
TOTAL	**$ 24,814,042**	**$ 13,324,367**		**$ 23,706,304**	**$ 13,829,807**	

[1] *Represents the fair value of the funded portion of investments with remaining unfunded commitments.*
[2] *The estimated remaining lives of these funds, expressed in years, are forward-looking projections based on the University's estimates and could vary significantly depending on the investment decisions of external managers, changes in the University's investment portfolio, and other circumstances.*
[3] *Investments in externally managed funds primarily include exposures to hedge funds and natural resources.*

Investments in externally managed funds generally have limited redemption options for investors and, subsequent to final closing, may or may not permit subscriptions by new or existing investors. These entities may also have the ability to impose gates, lockups and other restrictions on an investor's ability to readily redeem out of their investment interest in the fund.

Direct investments

Direct investments are primarily valued using a combination of independent appraisals and/or one or more industry standard valuation techniques (e.g., income approach, market approach, or cost approach). The income approach is primarily based on the investment's anticipated future income using one of two principal methods: the discounted cash flow method or the capitalization method. Inputs and estimates developed and utilized with these techniques may be subjective, unobservable, and require judgment regarding significant matters such as estimating the amount and timing of future cash flows, forward pricing assumptions and the selection of discount and capitalization rates that appropriately reflect market and credit risks. The market approach derives investment value through comparison to recent and relevant market transactions with similar investment characteristics. The cost approach is utilized when the cost of the investment is determined to be the best representation of fair value. This method is typically used for newly purchased or undeveloped assets. When applicable, the University examines market data and collaborates closely with independent appraisers to arrive at the best estimation of fair value for each respective asset. The HMC Board of Directors discusses the valuation process and results with HMC management, and makes determinations on significant matters impacting valuation that may arise from time to time.

4. RECEIVABLES

The major components of receivables, net of reserves for doubtful accounts of $16.4 million and $16.5 million as of June 30, 2023 and 2022, respectively, were as follows (in thousands of dollars):

	2023	2022
Federal Sponsored Support	**$ 74,844**	$ 67,130
Publications	**69,487**	61,545
Continuing Education and Executive Programs	**57,330**	63,629
Leases	**32,820**	32,525
Tuition and Fees	**22,579**	19,584
Non-federal Sponsored Support	**17,791**	13,159
Gift Receipts	**7,067**	17,344
Other	**67,353**	64,876
TOTAL RECEIVABLES, NET	**$ 349,271**	**$ 339,792**

5. NOTES RECEIVABLE

Notes receivable are recorded initially at face value plus accrued interest, which approximates fair value. Notes receivable, and related allowance for doubtful accounts, were as follows (in thousands of dollars):

	2023			2022		
	Receivable	Allowance	Net	Receivable	Allowance	Net
Student loans:						
Government revolving	$ 22,240	$ 519	**$ 21,721**	$ 26,754	$ 643	**$ 26,111**
Institutional	73,473	1,631	**71,842**	72,489	1,644	**70,845**
Total student loans	95,713	2,150	**93,563**	99,243	2,287	**96,956**
Faculty and staff loans	300,710	179	**300,531**	277,234	179	**277,055**
Other loans	42,527	36,220	**6,307**	49,448	42,647	**6,801**
TOTAL	**$ 438,950**	**$ 38,549**	**$ 400,401**	**$ 425,925**	**$ 45,113**	**$ 380,812**

Government revolving loans are funded principally with federal advances to the University under the Perkins Loan, the Health Professions Student Loan (HPSL) and Loans for Disadvantaged Students in Health Professions (LDS) Programs. These advances totaled $24.7 million and $29.5 million as of June 30, 2023 and 2022, respectively, and are included in "Deferred revenue and other liabilities" in the *Consolidated Balance Sheets*. During fiscal year 2018, the Perkins Loan Program ended and as a result the University began making required repayments to the government. In fiscal year 2023, the University made the requested $4.6 million repayment. Interest earned on the revolving and institutional loan programs is reinvested to support additional loans. The repayment and interest rate terms of the institutional loans vary considerably.

Faculty and staff notes receivable primarily consists of mortgage and educational loans. Mortgages include shared appreciation loans, loans that bear interest at the applicable federal rate and interest-free loans. In addition, certain mortgages that bear interest at the current market rate or applicable federal rate may be subsidized for an initial period. The educational loans are primarily zero-interest loans.

The University assesses the adequacy of the allowance for doubtful accounts by evaluating the loan portfolio, including such factors as the differing economic risks associated with each loan category, the financial condition of specific borrowers, the economic environment in which the borrowers operate, the level of delinquent loans, the value of any collateral, and, where applicable, the existence of any guarantees or indemnifications. In addition to these factors, the University reviews the aging of the loans receivable and the default rate in comparison to prior years. The allowance is adjusted based on these reviews. The University considers the allowance at June 30, 2023 and 2022 to be reasonable and adequate to absorb potential credit losses inherent in the loan portfolio.

6. PLEDGES RECEIVABLE

Unconditional promises to donate to the University in the future are initially recorded at fair value (pledge net of discount) and subsequently amortized over the expected payment period, net of an allowance for uncollectible pledges. The University's indicative 1- to 15-year taxable unsecured borrowing rate is used to discount pledges receivable at the end of the fiscal year they are received. Discounts of $351.2 million and $246.6 million for the years ended June 30, 2023 and 2022, respectively, were calculated using rates ranging from 0.7% to 5.0%.

Pledges receivable included in the financial statements as of June 30, 2023 and 2022 are expected to be realized as follows (in thousands of dollars):

	2023	2022
Within one year	**$ 866,208**	$ 816,775
Between one and five years	**1,711,457**	1,637,886
More than five years	**603,713**	541,641
Less: discount and allowance for uncollectible pledges	**(481,744)**	(403,868)
TOTAL PLEDGES RECEIVABLE, NET	**$ 2,699,634**	**$ 2,592,434**

Pledges receivable as of June 30, 2023 and 2022 have been designated for the following purposes (in thousands of dollars):

	2023	2022
General Operating Account balances:		
Gifts for current use	**$ 952,604**	$ 665,632
Non-federal sponsored awards	**199,014**	186,725
Construction and life income	**294,530**	306,891
Total General Operating Account balances	**1,446,148**	**1,159,248**
Endowment	**1,253,486**	1,433,186
TOTAL PLEDGES RECEIVABLE, NET	**$ 2,699,634**	**$ 2,592,434**

Because of uncertainties with regard to realizability and valuation, bequest intentions and other conditional promises are only recognized as assets if and when the specified conditions are met. Non-bequest conditional pledges totaled $122.4 million and $110.0 million as of June 30, 2023 and 2022, respectively.

7. FIXED ASSETS

Fixed assets are reported at cost or, if a gift, at fair value as of the date of the gift, net of accumulated depreciation. Depreciation is computed using the straight-line method over the estimated useful lives of the assets.

The major categories of fixed assets as of June 30, 2023 and 2022 are summarized as follows (in thousands of dollars):

	2023	2022	Estimated useful life (in years)
Research facilities	**$ 3,446,121**	$ 3,418,161	*
Classroom and office facilities	**2,596,184**	2,543,625	35
Housing facilities	**2,638,555**	2,525,545	35
Other facilities	**435,738**	425,737	35
Service facilities	**1,148,704**	1,114,162	35
Libraries	**549,503**	541,080	35
Museums and assembly facilities	**1,001,370**	990,568	35
Athletic facilities	**280,432**	263,825	35
Land	**1,024,986**	1,024,986	N/A
Construction in progress	**554,978**	357,434	N/A
Equipment	**1,488,311**	1,468,066	**
SUBTOTAL AT COST	**15,164,882**	**14,673,189**	
Less: accumulated depreciation	**(6,568,899)**	(6,230,349)	
FIXED ASSETS, NET	**$ 8,595,983**	**$ 8,442,840**	

** Estimated useful lives of components range from 10 to 45 years.*
*** Estimated useful lives of equipment range from 4 to 10 years.*

Certain University facilities are subject to restrictions as to use, structural modifications, and ownership transfer. Included in the fixed asset balances are restricted facilities with a net book value of $276.6 million and $267.4 million as of June 30, 2023 and 2022, respectively.

The costs of research facilities are separated into the shell, roof, finishes, fixed equipment, and services. These components are separately depreciated.

Equipment includes general and scientific equipment, computers, software, furniture, and vehicles.

The University has asset retirement obligations related to future estimated environmental remediation costs of $186.2 million and $189.2 million, which are included in "Deferred revenue and other liabilities" in the *Consolidated Balance Sheets* as of June 30, 2023 and 2022, respectively.

Right-of-use assets from finance leases of $45.5 million and $52.3 million are included in "Fixed assets, net" in the *Consolidated Balance Sheets* as of June 30, 2023 and 2022, respectively. Lease liabilities from finance leases of $79.2 million and $88.2 million are included in "Deferred revenue and other liabilities" in the *Consolidated Balance Sheets* as of June 30, 2023 and 2022, respectively.

8. ENDOWMENT AND GENERAL OPERATING ACCOUNT NET ASSETS

The University's net assets consisted of the following as of June 30, 2023 and 2022 (in thousands of dollars):

	2023			2022		
	Without donor restrictions	With donor restrictions	Total	Without donor restrictions	With donor restrictions	Total
NATURE OF SPECIFIC NET ASSETS						
Perpetual endowment funds		$ 9,652,906	**$ 9,652,906**		$ 9,057,578	**$ 9,057,578**
Endowment funds and appreciation subject to distribution policy and appropriation		30,201,162	**30,201,162**		30,925,321	**30,925,321**
Endowment funds without restriction, board designated and subject to distribution policy	$ 9,229,293		**9,229,293**	$ 9,057,969		**9,057,969**
Pledge balances		1,253,486	**1,253,486**		1,433,186	**1,433,186**
Interests in trusts held by others		411,747	**411,747**		403,626	**403,626**
TOTAL ENDOWMENT	**9,229,293**	**41,519,301**	**50,748,594**	**9,057,969**	**41,819,711**	**50,877,680**
Operating	6,640,552		**6,640,552**	6,519,858		**6,519,858**
Unexpended contributions and endowment distributions		3,395,978	**3,395,978**		3,048,468	**3,048,468**
Student loan funds		100,178	**100,178**		100,148	**100,148**
TOTAL GENERAL OPERATING ACCOUNT	**6,640,552**	**3,496,156**	**10,136,708**	**6,519,858**	**3,148,616**	**9,668,474**
Split interest agreements *(Note 9)*		**634,217**	**634,217**		**700,540**	**700,540**
TOTAL NET ASSETS	**$ 15,869,845**	**$ 45,649,674**	**$ 61,519,519**	**$ 15,577,827**	**$ 45,668,867**	**$ 61,246,694**

Endowment

The University's endowment consists of approximately 14,500 separate funds established over many years for a wide variety of purposes. Endowment fund balances are classified and reported in accordance with donor specifications and state law. The endowment includes both donor-restricted endowment funds and funds functioning as endowment which are not subject to donor-imposed restrictions, however decisions to spend their principal require the approval of the Corporation and therefore are classified as Board-designated endowment funds. The majority of the endowment is invested in the GIA (see *Note 3*).

The University is also the beneficiary of certain irrevocable trusts held and administered by others. The estimated fair values of trust assets, which include the present values of expected future cash flows from outside trusts and the fair value of the underlying assets of perpetual trusts, are recognized as assets and increases in net assets when the required trust documentation is provided to the University.

The fair values of these trusts are provided by the external trustees and are adjusted annually by the University. These are included as Level 3 investments in the fair value hierarchy table in *Note 3*.

The University's endowment distribution policies are designed to preserve the value of the endowment in real terms (after inflation) and generate a predictable stream of available income. Each fall, the Corporation approves the endowment distribution for the following fiscal year. Distribution from an underwater endowment fund (a fund below its historic dollar value) could continue in limited and defined circumstances under the University's endowment distribution policy. To the extent that the fair value of a donor restricted endowment fund falls below its historic dollar value it would be reported as a reduction of net assets with donor restrictions.

At June 30, 2023 and 2022, funds in a deficit position were reported in net assets with donor restrictions and are comprised as follows (in thousands):

	2023	2022
Fair value of underwater endowment funds	**$ 241,967**	$ 369,782
Historic dollar value	**246,804**	378,931
TOTAL DEFICIT OF UNDERWATER ENDOWMENT FUNDS	**$ (4,837)**	**$ (9,149)**

The endowment distribution is based in part on presumptive guidance from a formula that is intended to provide budgetary stability by smoothing the impact of annual investment gains and losses. The formula's inputs reflect expectations about long-term returns and inflation rates. For fiscal year 2023, the endowment distribution approved by the Corporation (prior to decapitalizations) was equal to 4.7% of the fair value of the endowment invested in the GIA as of the beginning of the fiscal year. The total endowment distribution made available for operations was $2.2 billion and $2.1 billion in fiscal year 2023 and 2022, respectively.

Each year the Corporation also approves certain decapitalizations from the endowment to support strategic, mission-critical activities or objectives that are typically one-time or time-limited and therefore, are excluded from net operating surplus. These decapitalizations totaled $43.4 million and $36.7 million in fiscal year 2023 and 2022, respectively. These additional decapitalizations, in combination with the endowment distribution, resulted in an aggregate payout rate of 4.7% and 4.2% in fiscal year 2023 and 2022, respectively.

General operating account

The GOA consists of the general or current funds of the University as well as the assets and liabilities related to student and faculty loans and facilities. The GOA accepts, manages, and pays interest on deposits made by University departments; invests surplus working capital; makes loans; and arranges external financing for major capital projects. It is used to manage, control, and execute all University financial transactions, except for those related to investment activities conducted by HMC.

9. SPLIT INTEREST AGREEMENTS

Under split interest agreements, donors enter into trust or other arrangements with the University in which the University receives benefits that are shared with other beneficiaries and institutions. Split interest agreement (SIA) investment assets are invested primarily in the GIA and publicly-traded securities, a small segment is managed by an external advisor, and all are recorded in the "Investment portfolio, at fair value" in the University's *Consolidated Balance Sheets*. Additional disclosures are included in *Note 3*. Associated liabilities are recorded at the present value of estimated future payments due to beneficiaries and other institutions. These liabilities are calculated using the University's current taxable unsecured borrowing rate of 4.9% and 3.5% as of June 30, 2023 and 2022, respectively. All split interest agreement net assets and the respective activity are reported within net assets with donor restrictions. Upon termination of a split interest agreement, the net assets are transferred to the GOA or endowment accordingly.

The changes in split interest agreement net assets for fiscal years 2023 and 2022 were as follows (in thousands of dollars):

	2023	2022
Investment return:		
Investment income	**$ 19,760**	$ 17,152
Realized and change in unrealized appreciation/(depreciation), net	**39,925**	(158,186)
Total investment return	**59,685**	**(141,034)**
Gifts *(Note 14)*[1]	**6,279**	12,290
Payments to annuitants	**(74,072)**	(76,057)
Transfers to endowment	**(50,747)**	(18,603)
Transfers between SIA and the GOA	**(28,398)**	(25,213)
Change in liabilities and other adjustments	**20,930**	175,827
NET CHANGE DURING THE YEAR	**(66,323)**	**(72,790)**
Total split interest agreement net assets, beginning of year	**700,540**	773,330
TOTAL SPLIT INTEREST AGREEMENT NET ASSETS, END OF YEAR	**$ 634,217**	**$ 700,540**

[1] *Shown at net present value. The undiscounted value of these gifts was $12,342 and $26,626 for the years ended June 30, 2023 and 2022, respectively*

Split interest agreement net assets as of June 30, 2023 and 2022 consisted of the following (in thousands of dollars):

	2023	2022
Split interest agreement investments *(Note 3)*		
Charitable remainder trusts	**$ 1,006,615**	$ 1,039,122
Charitable lead trusts	**99,011**	101,899
Charitable gift annuities	**265,662**	305,536
Pooled income funds	**149,151**	140,000
Total split interest agreement investments[1]	**1,520,439**	**1,586,557**
Liabilities due under split interest agreements:		
Amounts due to beneficiaries	**(815,056)**	(819,802)
Amounts due to other institutions	**(71,166)**	(66,215)
Total liabilities due under split interest agreements	**(886,222)**	**(886,017)**
TOTAL SPLIT INTEREST AGREEMENT NET ASSETS, END OF YEAR	**$ 634,217**	**$ 700,540**

[1] *For the year ended June 30, 2023, $863,185 of SIA investments are held in the pooled general investment account and $657,254 of SIA investments are held in the other investments outside the general investment account. For the year ended June 30, 2022, $934,970 of SIA investments are held in the pooled general investment account and $651,587 of SIA investments are held in the other investments outside the general investment account. Refer to* Note 3.

10. BONDS AND NOTES PAYABLE

Bonds and notes payable as of June 30, 2023 and 2022 were as follows (in thousands of dollars):

	Fiscal year of issue	Fiscal year of final maturity[1]	Effective rate[2]	Outstanding principal 2023[3]	2022[3]
TAX-EXEMPT BONDS AND COMMERCIAL PAPER:					
Variable-rate demand bonds and commercial paper:					
Series R – daily	2000-2006	2032	1.7%	$ 98,300	$ 114,750
Series Y – weekly	2000	2036	2.4%	117,905	117,905
Commercial paper	2023	2024	3.0%	25,000	
Total variable-rate bonds and commercial paper			2.2%	241,205	232,655
Fixed-rate bonds:					
Series 2016A	2017	2041	4.1%	1,434,825	1,461,370
Series 2020A	2020	2031	4.3%	346,680	346,680
Series 2022B	2022	2033	4.3%	207,830	207,830
Total fixed-rate bonds			4.1%	1,989,335	2,015,880
TOTAL TAX-EXEMPT BONDS AND COMMERCIAL PAPER			**3.9%**	**2,230,540**	**2,248,535**
TAXABLE BONDS AND COMMERCIAL PAPER:					
Variable-rate bonds and commercial paper:					
Commercial paper	2023	2024	5.2%	152,296	
Total variable-rate bonds and commercial paper			5.2%	152,296	0
Fixed-rate bonds:					
Series 2008A	2008	2039	5.6%	243,000	243,000
Series 2008D	2009	2039	6.5%	500,000	500,000
Series 2010C	2011	2041	4.9%	300,000	300,000
Series 2013A	2013	2038	3.4%	402,000	402,000
Series 2016B	2017	2057	3.3%	1,000,000	1,000,000
Series 2020B	2020	2051	2.5%	500,000	500,000
Series 2022A	2022	2053	3.8%	500,000	500,000
Total fixed-rate bonds			4.1%	3,445,000	3,445,000
TOTAL TAXABLE BONDS AND COMMERCIAL PAPER			**4.1%**	**3,597,296**	**3,445,000**
Notes payable	Various	Various	Various	84,730	83,796
Unamortized original issuance premium/discount, net				321,570	360,763
Unamortized bond issuance costs				(19,402)	(20,891)
TOTAL BONDS AND NOTES PAYABLE			**4.0%**	**$ 6,214,734**	**$ 6,117,203**

[1] *The weighted average maturity of the portfolio on June 30, 2023 was 17.1 years.*
[2] *For fixed-rate bonds the effective rate is calculated as: coupon rate x (par value / book value*). For variable rate bonds the effective rate is the one-year average rate. Effective rates are exclusive of the Series Y interest rate exchange agreement, which would increase the overall portfolio rate by 0.01% (4.03% vs 4.04%).*
**Book value = par value + unamortized original issuance premium - unamortized original issuance discount, underwriter's discount, and cost of issuance.*
[3] *Par only—balances exclude original issuance premiums/discounts.*

Interest expense related to bonds and notes payable, net of amortization and accretion, was $207.4 million and $183.0 million for fiscal 2023 and 2022, respectively. The interest expense in the *Consolidated Statement of Changes in Net Assets with General Operating Account Detail* includes additional components related to finance leases. Excluding maturity of commercial paper, unamortized discounts and premiums, unamortized underwriter's discount and unamortized cost of issuance, scheduled principal payments are (in thousands of dollars):

Fiscal year	Principal payments
2024	$ 92,253
2025	41,441
2026	100,967
2027	102,795
2028	104,656
Thereafter	5,293,158
TOTAL PRINCIPAL PAYMENTS	**$ 5,735,270**

Bonds and notes payable increased from $6.1 billion to $6.2 billion in fiscal year 2023, primarily due to issuance of $25.0 million in tax-exempt commercial paper and $152.3 million in taxable commercial paper. The proceeds of the tax-exempt commercial paper were used to fund capital spending and the proceeds of the taxable commercial paper were used to fund institutional liquidity. Offsetting the commercial paper issuances were $43.0 million of principal maturities, along with $36.8 million of amortizing bond premium (net of amortizing fees and issuance discounts).

The University is rated Aaa by Moody's Investors Service and AAA by Standard & Poor's Global Ratings. The Moody's rating was re-affirmed in February 2023 and the Standard & Poor's was re-affirmed in March 2023.

The University has one unsecured, revolving credit facility with a syndicate of banks totaling $1.5 billion, which expires in December 2025. The facility was renewed in December 2022. There was no outstanding drawn balance on the credit facility at June 30, 2023.

The University has taxable commercial paper available totaling $2 billion. There was a $152.3 million drawn balance on the taxable commercial paper line at June 30, 2023.

The University has tax-exempt commercial paper available totaling $1 billion. There was a $25.0 million drawn balance on the tax-exempt commercial paper line at June 30, 2023.

At June 30, 2023, the University had $216.2 million of variable rate demand bonds outstanding (excluding commercial paper) with either a daily or weekly interest rate reset. In the event that the University receives notice of any optional tender on its variable rate demand bonds, or if the bonds become subject to mandatory tender, the purchase price of the bonds will be paid from the remarketing of such bonds. However, if the remarketing proceeds are insufficient, the University will have a general obligation to purchase the bonds tendered with cash on hand.

Interest rate exchange agreements

In fiscal 2023, the University had in place one interest rate exchange agreement, used to manage the interest cost and risk associated with a portion of its outstanding variable rate debt.

The fair value of the interest rate exchange agreement was ($3.6) million and ($8.6) million as of June 30, 2023 and 2022, respectively, and is recorded in "Other liabilities associated with the investment portfolio" on the University's *Consolidated Balance Sheets*.

11. EMPLOYEE BENEFITS

The University offers current employees a choice of health plans, a dental plan, short-term and long-term disability plans, life insurance, tuition assistance, and a variety of other benefits such as subsidized passes for public transportation and for Harvard athletic facilities. In addition, the University has retirement plans covering substantially all employees.

The University uses a measurement date of June 30 for its pension and postretirement health plans.

457(b) deferred compensation plan

The University offers a non-qualified deferred compensation plan under Internal Revenue Code 457(b) to a select group of employees. There is no University contribution related to the plan. The University has recorded both an asset and a liability related to the plan of $220.1 million as of June 30, 2023 and $191.5 million as of June 30, 2022; the assets are included in "Prepayments and deferred charges" and the liabilities are included in "Deferred revenue and other liabilities" on the University's *Consolidated Balance Sheets*.

Pension benefits

All eligible faculty members and staff are covered by retirement programs that include a defined benefit component, a defined contribution component, or a combination of the two.

In accordance with the Employee Retirement Income Security Act (ERISA) requirements, the University has established a trust to hold plan assets for its defined benefit pension plans. The fair value of the trust's assets was $793.1 million and $851.2 million as of June 30, 2023 and 2022, respectively. During fiscal years 2023 and 2022, the University made cash contributions to the defined benefit pension plan of $12.7 million and $20.0 million, respectively. The University recorded expenses for its defined contribution plans of $175.7 million for fiscal year 2023 and $155.1 million for fiscal year 2022.

Postretirement health benefits

The University provides postretirement health coverage and life insurance to substantially all of its employees. As of June 30, 2023, the University had internally designated and invested $996.9 million in the GIA to fund the postretirement health benefit accrued liability of $799.0 million. As of June 30, 2022, the University had internally designated and invested $1.0 billion to fund the postretirement health benefit accrued liability of $835.2 million.

The following table sets forth the pension and postretirement plans' funded status that is reported in the *Consolidated Balance Sheets* as of June 30, 2023 and 2022 (in thousands of dollars):

	Pension benefits		Postretirement health benefits	
	2023	2022	2023	2022
Change in benefit obligation:				
Benefit obligation, beginning of year	**$ 944,511**	$ 1,139,945	**$ 835,208**	$ 1,000,395
Service cost	**6,629**	11,208	**22,052**	32,542
Interest cost	**46,401**	34,980	**41,361**	32,643
Plan participants' contributions			**10,377**	9,527
Gross benefits paid	**(87,732)**	(52,631)	**(44,496)**	(40,664)
Actuarial gain	**(75,442)**	(188,991)	**(65,592)**	(199,211)
Plan amendments			**54**	(24)
BENEFIT OBLIGATION, END OF YEAR[1]	**834,367**	**944,511**	**798,964**	**835,208**
Change in plan assets:				
Fair value of plan assets, beginning of year	**851,205**	1,061,693		
Actual return on plan assets	**16,939**	(177,857)		
Employer contributions	**12,721**	20,000	**34,119**	31,137
Plan participants' contributions			**10,377**	9,527
Gross benefits paid	**(87,732)**	(52,631)	**(44,496)**	(40,664)
FAIR VALUE OF PLAN ASSETS, END OF YEAR	**793,133**	**851,205**	**0**	**0**
UNFUNDED STATUS[2]	**$ (41,234)**	**$ (93,306)**	**$ (798,964)**	**$ (835,208)**

[1] *Measurement of the University's pension obligation including assumed salary increases (required by GAAP).*
[2] *These amounts totaling $840,198 as of June 30, 2023 and $928,514 as of June 30, 2022 are included in the "Accrued Retirement Obligations" line in the* Consolidated Balance Sheets.

The accumulated pension benefit obligation (ABO) is a measurement of the University's pension benefit obligation, based on past and present compensation levels and does not include assumed salary increases. The ABO was $760.6 million at June 30, 2023 and $846.8 million at June 30, 2022. The funded status disclosed above has been prepared in accordance with pension accounting rules. When measured on an IRS funding basis, which informs the University's required cash contribution amount, the plan was overfunded at January 1, 2023.

Net periodic benefit cost

Components of net periodic benefit cost and other amounts recognized in the *Consolidated Statements of Changes in Net Assets with General Operating Account Detail* are summarized as follows for the years ended June 30, 2023 and 2022 (in thousands of dollars):

	Pension benefits		Postretirement health benefits	
	2023	2022	2023	2022
Components of net periodic benefit cost:				
Operating				
Service cost	**$ 6,629**	$ 11,208	**$ 22,052**	$ 32,542
Total operating activity	**6,629**	11,208	**22,052**	32,542
Non-operating				
Interest cost	**46,401**	34,980	**41,361**	32,643
Expected return on plan assets	**(42,209)**	(40,026)		
Amortization of:				
Actuarial loss/(gain)		7,242	**(19,055)**	(4,650)
Prior service cost/(credit)	**287**	287	**(7,931)**	(7,929)
Total non-operating activity[1]	**4,479**	2,483	**14,375**	20,064
Total net periodic benefit cost	**11,108**	**13,691**	**36,427**	**52,606**
Other amounts recognized in non-operating activity in unrestricted net assets:				
Current year net actuarial (gain)/loss	**(50,173)**	28,893	**(65,592)**	(199,211)
Plan amendments			**54**	(24)
Amortization of:				
Prior service (cost)/credit	**(287)**	(287)	**7,931**	7,929
Actuarial (loss)/gain		(7,242)	**19,055**	4,650
Total other amounts recognized in non-operating activity[1]	**(50,460)**	**21,364**	**(38,552)**	**(186,656)**
TOTAL RECOGNIZED IN THE *CONSOLIDATED STATEMENTS OF CHANGES IN NET ASSETS WITH GENERAL OPERATING ACCOUNT DETAIL*	**$ (39,352)**	**$ 35,055**	**$ (2,125)**	**$ (134,050)**

[1] *These amounts totaling ($70,158) in fiscal year 2023 and ($142,745) in fiscal year 2022 include gains and losses and other changes in the actuarially determined benefit obligations arising in the current period but that have not yet been reflected within net periodic benefit cost/(income) and are included in the "Change in Retirement Obligations" line in the* Consolidated Statements of Changes in Net Assets with General Operating Account Detail.

Cumulative amounts recognized as non-operating changes in net assets without donor restrictions are summarized as follows for the years ended June 30, 2023 and 2022 (in thousands of dollars):

	Pension benefits		Postretirement health benefits	
	2023	2022	2023	2022
Net actuarial loss/(gain)	**$ 12,075**	$ 62,248	**$ (409,029)**	$ (362,492)
Prior service cost/(credit)	**33**	320	**(25,779)**	(33,765)
CUMULATIVE AMOUNTS RECOGNIZED IN UNRESTRICTED NET ASSETS	**$ 12,108**	**$ 62,568**	**$ (434,808)**	**$ (396,257)**

Other assumptions and health care cost trend rates used in determining the year end obligation as well as the net periodic benefit cost of the pension and postretirement health plans are summarized as follows for fiscal years 2023 and 2022:

	Pension benefits		Postretirement health benefits	
	2023	2022	2023	2022
Weighted-average assumptions used to determine benefit obligation as of June 30:				
Discount rate	**5.70%**	5.05%	**5.60%**	4.90%
Compensation increase trend:				
Initial rate	**5.00%**	5.00%	**5.00%**	5.00%
Ultimate rate	**3.50%**	3.50%	**3.50%**	3.50%
Year of ultimate	**2025**	2025	**2025**	2025
Cash balance (or similar formula) interest crediting rate	**5.25%**	5.25%	N/A	N/A
Pension increases for in-payment benefits increase trend:				
Initial rate	**1.00%**	1.50%	N/A	N/A
Ultimate rate	**0.13%**	0.25%	N/A	N/A
Year of ultimate	**2024**	2025	N/A	N/A
Current health care cost trend rate:				
Pre-65	N/A	N/A	**7.25%**	7.00%
Post-65	N/A	N/A	**6.75%**	7.00%
EGWP	N/A	N/A	**16.00%**	7.00%
Ultimate health care cost trend rate:				
Pre-65 and Post-65	N/A	N/A	**5.00%**	5.00%
EGWP	N/A	N/A	**4.00%**	5.00%
Year of ultimate	N/A	N/A	**2029**	2029
Weighted-average assumptions used to determine net periodic benefit (income)/cost:				
Discount rate	**5.05%**	3.15%	**4.90%**	3.20%
Expected long-term rate of return on plan assets	**4.75%**	4.50%	N/A	N/A
Compensation increase trend:				
Average rate	N/A	3.50%	N/A	3.50%
Initial rate	**5.00%**	0.00%	**5.00%**	N/A
Ultimate rate	**3.50%**	N/A	**3.50%**	N/A
Year of ultimate	**2025**	N/A	**2025**	N/A
Pension increases for in-payment benefits increase trend:				
Average rate	N/A	0.25%	N/A	N/A
Initial rate	**1.50%**	N/A	N/A	N/A
Ultimate rate	**0.25%**	N/A	N/A	N/A
Year of ultimate	**2025**	N/A	N/A	N/A
Health care cost trend rate:				
Initial rate	N/A	N/A	**7.00%**	6.50%
Ultimate rate	N/A	N/A	**5.00%**	4.75%
Year of ultimate	N/A	N/A	**2029**	2025

The expected return on pension plan assets is determined by utilizing an independent advisor's capital markets model, which takes into account the expected real return, before inflation, for each of the pension portfolio's asset classes, as well as the correlation of any one asset class to every other asset class. This model calculates the real returns and correlations and derives an expected real return for the entire portfolio, given the percentage weighting allocated to each asset class. After calculating the expected real return, an assessment is made to accommodate the expected inflation rate for the forthcoming period. The final expected return on assets is the aggregate of the expected real return plus the expected inflation rate.

Plan assets

The actual asset allocation of the investment portfolio for the pension plan at June 30, 2023 and 2022, along with target allocations for June 30, 2024, is as follows:

	2024 Target	June 30, 2023	June 30, 2022
Asset allocation by category for pension plan:			
Fixed income securities	75-85%	80.4%	79.7%
Equity securities	15-25	19.5	19.6
Cash	1-5	0.1	0.7
TOTAL OF ASSET ALLOCATION CATEGORIES		**100.0%**	**100.0%**

The University's investment strategy for the pension portfolio is to manage the assets across a broad and diversified range of investment categories, both domestic and international. The objective is to achieve a risk-adjusted return that is in line with the long-term obligations that the University has to the pension plan beneficiaries. During fiscal year 2023, the University increased its allocation to fixed income securities to manage the interest rate volatility associated with its pension obligations. The University expects to keep this strategy in future years. The investment program is also managed to comply with all ERISA regulations.

The following is a summary of the levels within the fair value hierarchy for the pension plan assets subject to fair value measurement as of June 30, 2023 and 2022 (in thousands of dollars):

	2023					2022
	Level 1	Level 2	Level 3	NAV as practical expedient	Total	Total
PLAN ASSETS:						
Cash and short-term investments	$ 13,408				**$ 13,408**	$ 17,942
Domestic equity	64,305				**64,305**	87,025
Foreign equity	30,339			$ 41,876	**72,215**	62,956
Domestic fixed income				589,061	**589,061**	633,453
Emerging market equity and debt	14,776				**14,776**	12,880
Hedge funds				137	**137**	265
Private equity				1,250	**1,250**	1,368
High yield				37,974	**37,974**	35,313
PLAN ASSETS SUBJECT TO FAIR VALUE LEVELING	**$ 122,828**	**$ 0**	**$ 0**	**$ 670,298**	**$ 793,126**	**$ 851,202**
Other assets not subject to fair value					**7**	3
TOTAL PLAN ASSETS					**$ 793,133**	**$ 851,205**

Expected future benefit payments

Employer contributions of $13.3 million are expected for fiscal year 2024 to fund the pension benefit plan.

The following table summarizes expected benefit payments and subsidies for pension and other postretirement health benefits for the University (in thousands of dollars):

	Expected benefit payments	
Fiscal year	Pension	Postretirement health
2024	$ 66,508	$ 28,005
2025	66,150	29,851
2026	67,254	32,217
2027	68,262	34,674
2028	69,101	37,187
Thereafter	349,471	227,876

12. STUDENT FINANCIAL AID

Financial aid granted to students in fiscal 2023 and 2022 is summarized as follows (in thousands of dollars):

	2023	2022
Scholarships and other student awards:		
Scholarships applied to student income[1]	**$ 530,743**	$ 505,904
Scholarships and other student awards paid directly to students	**181,295**	171,312
Total scholarships and other student awards	**712,038**	**677,216**
Student employment	**101,699**	93,581
Student loans	**13,722**	14,124
Agency financial aid[2]	**23,889**	21,505
TOTAL STUDENT FINANCIAL AID	**$ 851,348**	**$ 806,426**

[1] *Includes $235,832 and $224,863 in fiscal 2023 and 2022, respectively, of undergraduate scholarships applied to student income.*
[2] *Represents aid from sponsors for which the University acts as an agent for the recipient.*

13. SPONSORED SUPPORT

Total expenditures funded by US government sponsors or by institutions that subcontract federally sponsored projects to the University were $676.1 million and $642.1 million in fiscal year 2023 and 2022, respectively. The University's principal source of federally sponsored funds is the Department of Health and Human Services. The University also has many non-federal sources of sponsored awards and grants, including corporations, foundations, state and local governments, foreign governments, and research institutes.

Sponsored grants and contracts normally provide for the recovery of direct and indirect costs. Recovery of related indirect costs is generally recorded at fixed or predetermined rates negotiated with the federal government and other sponsors. Predetermined federal indirect cost rates have been established for the University Area, the Medical School (including the School of Dental Medicine), and the T.H. Chan School of Public Health through fiscal year 2024. Funds received for federally sponsored activity are subject to audit.

14. GIFTS

Gifts are classified as net assets with or without restrictions in accordance with donor specifications.

Additionally, gifts are categorized by purpose as "Current use", "Non-federal sponsored grants", "Endowment funds", "Split interest agreements", or "Loan funds and facilities".

Gifts received for the year ended June 30, 2023 are summarized as follows (in thousands of dollars):

	2023		
	Gifts received	Donor redesignations/ other changes	Total
Current use	$ 482,107	$ 3,775	**$ 485,882**
Non-federal sponsored grants	232,226	(2,782)	**229,444**
Endowment funds	566,660	(6,053)	**560,607**
Split interest agreements[1]	6,279		**6,279**
Loan funds and facilities	96,210	(35)	**96,175**
TOTAL GIFTS	**$ 1,383,482**	**$ (5,095)**	**$ 1,378,387**

[1] *Shown at net present value. The undiscounted value of these gifts was $12,342 for the year ended June 30, 2023.*

Gifts received for the year ended June 30, 2022 are summarized as follows (in thousands of dollars):

	2022		
	Gifts received	Donor redesignations/ other changes	Total
Current use	$ 514,361	$ (9,625)	**$ 504,736**
Non-federal sponsored grants	235,481	(3,361)	**232,120**
Endowment funds	579,987	3,663	**583,650**
Split interest agreements[1]	12,290		**12,290**
Loan funds and facilities	81,943	5,931	**87,874**
TOTAL GIFTS	**$ 1,424,062**	**$ (3,392)**	**$ 1,420,670**

[1] *Shown at net present value. The undiscounted value of these gifts was $26,626 for the year ended June 30, 2022.*

15. OTHER REVENUE

The major components of other revenue for the years ended June 30, 2023 and 2022 were as follows (in thousands of dollars):

	2023	2022
Publications and royalties from copyrights	**$ 281,024**	$ 277,104
Rental and parking[1]	**141,449**	116,070
Services income	**136,811**	135,240
Health and clinic fees	**72,580**	70,214
Royalties from the commercialization of intellectual property[2]	**58,989**	152,078
Sales income	**32,376**	31,423
Interest income	**15,317**	8,373
Other student income	**5,025**	4,326
Other	**49,345**	43,495
TOTAL OTHER REVENUE	**$ 792,916**	**$ 838,323**

[1] *The University is the lessor of space and facilities under operating leases, the income from which is included in rental and parking.*
[2] *Excludes distribution to external parties.*

16. OTHER EXPENSES

The major components of other expenses for the years ended June 30, 2023 and 2022 were as follows (in thousands of dollars):

	2023	2022
Subcontract expenses under sponsored projects	**$ 179,941**	$ 179,212
Travel	**93,449**	43,737
Advertising	**65,353**	53,007
Publishing	**50,202**	45,097
Taxes and Fees	**42,196**	38,706
Insurance	**23,207**	25,669
Postage	**14,911**	14,907
Telephone	**10,971**	11,153
Fixed asset impairments	**7,394**	21,385
Other	**90,756**	61,702
TOTAL OTHER EXPENSES	**$ 578,380**	**$ 494,575**

17. FUNCTIONAL AND NATURAL CLASSIFICATION OF OPERATING EXPENSES

Operating expenses are allocated functionally on a direct basis. Operations and maintenance expenses are allocated based on square footage.

Operating expenses by functional classification for the year ended June 30, 2023 were as follows (in thousands of dollars):

	2023				
	Instruction and academic support	Research[1]	Student services and support	Institutional support and auxiliary	Total
Salaries and wages	$ 1,261,358	$ 330,493	$ 164,182	$ 665,043	**$ 2,421,076**
Employee benefits	307,980	77,943	54,257	188,124	**628,304**
Services purchased	407,481	126,438	69,973	188,049	**791,941**
Depreciation	47,043	155,078	16,595	206,093	**424,809**
Space and occupancy	128,490	68,282	33,859	163,448	**394,079**
Supplies and equipment	85,546	60,946	44,306	92,525	**283,323**
Interest	21,307	48,498	14,397	124,388	**208,590**
Scholarships and other student awards			181,295		**181,295**
Other expense and overhead allocations	37,026	442,002	35,189	64,163	**578,380**
TOTAL EXPENSES	**$ 2,296,231**	**$ 1,309,680**	**$ 614,053**	**$ 1,691,833**	**$ 5,911,797**

[1] *The methodology used to allocate expenses for financial statement purposes is different than methodologies used for other purposes, such as governmental surveys.*

Operating expenses by functional classification for the year ended June 30, 2022 were as follows (in thousands of dollars):

	2022				
	Instruction and academic support	Research[1]	Student services and support	Institutional support and auxiliary	Total
Salaries and wages	$ 1,149,598	$ 310,492	$ 144,458	$ 601,794	**$ 2,206,342**
Employee benefits	286,322	74,786	49,844	172,979	**583,931**
Services purchased	374,555	95,246	60,739	202,169	**732,709**
Depreciation	47,664	155,568	16,520	209,108	**428,860**
Space and occupancy	106,798	62,355	31,766	152,867	**353,786**
Supplies and equipment	90,926	55,364	41,906	82,888	**271,084**
Interest	18,549	43,775	13,071	112,139	**187,534**
Scholarships and other student awards			171,312		**171,312**
Other expense and overhead allocations	1,866	424,292	28,407	40,010	**494,575**
TOTAL EXPENSES	**$ 2,076,278**	**$ 1,221,878**	**$ 558,023**	**$ 1,573,954**	**$ 5,430,133**

[1] *The methodology used to allocate expenses for financial statement purposes is different than methodologies used for other purposes, such as governmental surveys.*

18. COMMITMENTS AND CONTINGENCIES

Lease commitments

The University is the lessee of equipment and space under operating (rental) and finance leases. The University determines whether a contract is a lease at inception. Identified leases are subsequently measured, classified, and recognized at lease commencement. The University categorizes leases with contractual terms longer than twelve months as either operating or finance. The University's leases generally have terms that range from one to five years for equipment and one to twenty years for property, with certain leases inclusive of renewal options if they are considered to be reasonably assured at lease commencement. Right of use assets and lease liabilities for operating leases are included in "Operating leases—right of use assets" and "Operating lease liabilities", respectively, in the *Consolidated Balance Sheets*. Finance lease right of use assets and lease liabilities are included in "Fixed assets, net" and "Deferred revenue and other liabilities", respectively, in the *Consolidated Balance Sheets*. Lease assets represent our right to use an underlying asset for the lease term and lease liabilities represent our obligation to make lease payments arising from the lease.

Operating and finance lease right of use assets and associated lease liabilities are recognized based on the present value of future minimum lease payments to be made over the expected lease term, using the collateralized incremental borrowing rate at the commencement date in determining the present value of future payments. Rent expense related to operating leases, including short-term leases and variable lease payments, was $114.0 million and $101.2 million in fiscal year 2023 and 2022, respectively.

Maturity analysis of the annual undiscounted cash flows reconciled to the carrying value of the operating and finance lease liabilities (in thousands of dollars):

	Operating	Finance
2024	$ 77,369	$ 11,524
2025	80,070	11,913
2026	75,344	21,995
2027	70,808	11,957
2028	69,720	13,018
Thereafter	573,984	98,505
TOTAL LEASE PAYMENTS	947,295	168,912
Less: Imputed Interest	(193,100)	(89,689)
PRESENT VALUE OF LEASE LIABILITIES	**$ 754,195**	**$ 79,223**

Weighted-average remaining lease term and discount rate for operating and finance leases were as follows:

	June 30, 2023
Weighted average remaining lease term	
Operating leases	15.1 YEARS
Finance leases	14.3 YEARS
Weighted average discount rate	
Operating leases	2.9%
Finance leases	2.4%

The University leases properties to customers under agreements that are classified as operating or sales-type leases. Property leased to others in operating lease arrangements are included in "Fixed assets, net" in the *Consolidated Balance Sheets*. Revenue is recognized to the extent that amounts are determined to be collectible.

Fixed asset-related commitments

The University has various commitments for capital projects involving construction and renovation of certain facilities, real estate acquisitions, and equipment purchases, for which the outstanding commitments as of June 30, 2023 totaled approximately $478.6 million.

Environmental remediation

The University is subject to laws and regulations concerning environmental remediation and has established reserves for potential obligations that management considers to be probable and for which reasonable estimates can be made. These estimates may change substantially depending on new information regarding the nature and extent of contamination, appropriate remediation technologies, and regulatory approvals. Costs of future environmental remediation have been discounted to their net present value. Management is not aware of any existing conditions that it believes are likely to have a material adverse effect on the University's financial position, changes in net assets, or cash flows.

General

The University is a defendant in various legal actions arising from the normal course of its operations. While it is not possible to predict accurately or determine the eventual outcome of such actions, management believes that the outcome of these proceedings will not have a material adverse effect on the University's financial position, changes in net assets, or cash flows.

The University has evaluated subsequent events through October 18, 2023, the date the financial statements were issued. The University has concluded that no material events have occurred that are not accounted for in the accompanying financial statements or disclosed in the accompanying notes.