JUL05'19 PM 3:59 DAS
JUL05'19 PM 3:59 DAS

25 mac

STATE OF NEW HAMPSHIRE

DEPARTMENT OF HEALTH AND HUMAN SERVICES

DIVISION FOR CHILDREN, YOUTH & FAMILIES

Jeffrey A. Meyers
Commissioner

Joseph E. Ribsam, Jr.
Director

129 PLEASANT STREET, CONCORD, NH 03301-3857
603-271-4451 1-800-852-3345 Ext. 4451
Fax: 603-271-4729 TDD Access: 1-800-735-2964 www.dhhs.nh.gov

July 2, 2019

His Excellency, Governor Christopher T. Sununu
and the Honorable Council
State House
Concord, New Hampshire 03301

REQUESTED ACTION

Authorize the Department of Health and Human Services, Division for Children, Youth and Families, to enter into a **sole source** agreement with the President and Fellows of Harvard College, acting through the Taubman Center for State and Local Government at the Harvard Kennedy School Government Performance Lab ("GPL"), of 79 John F. Kennedy Street, Taubman Building, Third Floor, Cambridge, MA 01238, to provide intensive technical assistance to improve the delivery of child protection services, at no cost to the Department, effective upon the date of approval by the Governor and Executive Council through June 30, 2021.

The agreement does not include funding information because GPL is providing the services to the Department at no cost to the State. The funding for GPL's work is supported in large part by Casey Family Programs as well as by other local and national philanthropic organizations. Casey Family Programs is providing financial support for GPL's work not only in New Hampshire but for similar projects in several states. GPL has estimated that the value of technical assistance provided through this partnership will be approximately $1.32 million dollars.

While this agreement is at no cost to the Department, the Department anticipates seeking approval in the future to enter into a separate agreement with GPL to fund an additional research project or projects. The Department anticipates the cost of the research project to be $70,000 per year for two years. The Department will finalize and present this future item following the completion of the budget process for this biennium.

EXPLANATION

This agreement is **sole source** because the Harvard Kennedy School Government Performance Lab (GPL) provides unique, intensive technical assistance to states to enhance child welfare and early childhood policies, programs and services. Since 2011, GPL has engaged in 89 government-side technical assistance projects with 65 jurisdictions spread across 30 states, using new data-driven public management tools to achieve better outcomes. Approval of this agreement will allow the Department to work with GPL to design and implement a variety of "Innovation Initiatives" to support New Hampshire's child welfare transformation efforts. "Innovation Initiatives" include improvements to procurement and contracting processes, use of data to inform service delivery and referral systems, piloting of new services or service-delivery models, establishing active contract management systems between governments and service providers, optimizing resource allocation, and other initiatives designed to improve government performance.

The Department is seeking GPL's assistance to enhance the system serving at risk children and families to prevent maltreatment, reduce the need for children to be placed outside their homes and communities, and to create connections across the Department and the community to support families before crises occur. GPL will provide services to develop the Department's capacity to strategically use data, contracts, and provider management to better meet the needs of families and produce improved outcomes.

This Agreement outlines the roles and responsibilities of the Department and the GPL team, which includes Fellows, researchers, students, and staff affiliated with the GPL, and sets forth other arrangements between the Department and GPL relating to the assistance to be provided regarding the Innovation Initiatives. The Department's Division for Children, Youth and Families has had the assistance of an embedded Fellow since the summer of 2018. The two primary projects have focused on Central Intake policy and practice and conducting an extensive review of the foster parent recruitment, licensing and retention programs to make recommendations for improvements. Through this agreement, three additional Fellows will be added, one of which will be embedded in the Department's centralized Contracts Unit to improve how solicitations and contracts are written, organized, and managed to achieve desired outcomes. Additional assistance from GPL will include:

- Strengthening the Department's upstream prevention and child abuse hotline operations to improve community connections and reduce unnecessary assessments. This will involve continuing to support improved decision-making and operations at the hotline with data-driven adjustments to supervision, decision-support, and policy about which reports require child protection responses. It will also involve strengthening the use of data to more systematically make connections to primary prevention resources – such as family resource centers, family home visiting, early childhood, economic supports, and health and wellness care for families – for screened-out families and families looking for information on community-based programs.

- Building a voluntary services array focused on family-strengthening and other community-based resources that keep children safe in their homes and communities and prevent entry into out of home care. GPL will support the Department in proactively using case and population level data to assess and identify child and family's needs, align and monitor service plans, and improve service delivery in real-time. Additionally, GPL will support development and continuous improvement of a statewide continuum of locally designed and delivered prevention services, including a System of Care to preventatively respond to youth behavioral health care needs, family home visiting, and Family Resource Centers.

- Revamping management service strategies for open child welfare cases that enable children to be safely cared for in their families and communities. This will involve helping Department staff design, test and spread needs assessment, procurement, matching, and performance management approaches to key services across its in-home and out-of-home service continuum, including as-needed coaching to improve the capacity of foster care system. It will also involve building the Department's capacity to spread and sustain these management practices to its other program areas serving children and families through template materials, sample contracts, case studies, implementation manuals, and staff trainings.

Should the Governor and Executive Council not authorize this Request, the Department will miss out on an opportunity to develop and implement initiatives to modernize and improve the delivery of services to New Hampshire's most vulnerable children. The Department's ability to better prevent child abuse and neglect, including fatalities, and to keep children safely in their homes and communities will be significantly diminished.

Area served: Statewide.

Source of Funds: No state or federal funds. Philanthropic funds supporting this Agreement are provided directly to GPL.

Respectfully submitted,

Jeffrey A. Meyers
Commissioner

Collaboration Agreement

This Collaboration Agreement ("Agreement") is entered into as of July 1, 2019 between President and Fellows of Harvard College acting through the Taubman Center for State and Local Government at the Harvard Kennedy School ("Harvard") and the State of New Hampshire (the "State"), acting through the Department of Health and Human Services ("Agency").

The purposes of this Agreement are (A) to state terms regarding the engagement and role of a Government Innovation Fellows ("Fellows") and any other Harvard Kennedy School Government Performance Lab ("GPL") researchers, students, scholars and staff who will assist the Agency in the development and implementation of Innovation Initiatives as described below; and (B) to set out other arrangements between the State and Harvard relating to the assistance the Harvard Team, as described below, will be providing to the Agency with regards to the State's Innovation Initiatives.

The "Harvard Team" means, collectively, persons from or affiliated with Harvard who provide services under this Agreement, including the four (4) Fellows, GPL Director Professor Jeffrey Liebman, other researchers, students, scholars and staff affiliated with the GPL, and other Harvard researchers.

"Innovation Initiatives" may include improvements to procurement and contracting processes, use of data to inform service delivery and referral systems, piloting of new services or service-delivery models, establishing active contract management systems between governments and service providers, pay for success and performance-based contracts, optimizing resource allocation, and other initiatives designed to improve government performance and make government programs more effective.

Effective Date: this Agreement will be effective as of July 1, 2019 or the date of approval by Governor and Council, whichever is later.

The parties agree as follows:

1. Responsibilities of Fellows. The Fellows will work with an Agency team in connection with Agency's analysis of and process for implementation of Innovation Initiatives. The Fellow's responsibilities will include general support for the Agency team; data collection and analysis and other technical support; preparation of briefing papers, reports, and procurement documents;

and assisting in communications with responsible officials of the State and external stakeholders as appropriate. The Fellow and the other members of the Harvard Team will not provide, and are not engaged or authorized by the State to provide, legal advice or services, notwithstanding that one or more may be trained as lawyers.

2. Supervision. Kimberly Crowe, a senior advisor at Agency as designated by the Agency, will give work assignments to the Fellows and generally supervise the Fellows' work at Agency. The advisor will provide mentorship and guidance to help support the Fellow's tasks, objectives, and professional development, and will provide objective feedback on the Fellow's performance. Professor Jeffrey Liebman of Harvard and other members of the Harvard Team will review and assist the Fellow with the Fellow's technical work. The advisor and a member of the Harvard Team will confer regularly on the Fellow's assignments and work. The Agency reserves the right to dismiss any fellow from the engagement with Agency at any time if the relationship is not mutually agreeable. If a fellow is dismissed, Harvard will not be required to provide a replacement.

3. No Salary and Benefits; Office Facilities. These fellowships do not establish an employee/employer relationship with the State. The State shall have no responsibility for compensation or employment benefits for the Fellow, Professor Liebman, or other members of the Harvard Team with respect to any work done pursuant to this Agreement. Agency will provide the Fellow with suitable office resources, including a desk, a computer, a phone, an email account, and appropriate access to Agency networks, servers, and printers. Agency will also provide access to general productivity software such as word and data processing and email programs. The Fellow shall sign and comply with the State's Computer Use Policy. Compliance with the Computer Use Policy is required only when the Fellow is using the State's computers/laptops, networks, servers, email program, and printers.

4. Status of Fellow. The Fellow will be treated as an intern unpaid by the State and shall be required to complete State training and other requirements for persons in said status, including the following:

(1) Prior to the start of the fellowship, the Fellow shall complete and return the State's Criminal Records Release Authorization Form, the Bureau of Elderly and Adult Services' (BEAS) State Registry Consent Form, and the Division for Children, Youth and Families (DCYF) Central Registry Name Search Authorization. The State reserves the right to reject any Fellow based upon the results of the background checks.

(2) The Fellow shall attend orientation, which will include training on the State's policies, procedures and rules, including but not limited to quality assurance and risk management, fire and safety, emergency codes and the dress code.

5. Other Support. As agreed from time to time by Professor Liebman and the Agency advisor, Professor Liebman, supported by the Fellow and by other members of the Harvard Team as Professor Liebman judges to be appropriate, will, subject to the last sentence of this paragraph, (i) assist the Agency in policy analysis; (ii) assist the Agency in the preparation of requests for proposals and other materials for third parties with respect to their possible participation in financing of or furnishing services under Innovation Initiatives for the State, and provide other technical support; and (iii) when requested by the Agency, meet with such third parties to help explain the technical aspects of Innovation Initiatives. Agency agrees that, if members of the Harvard Team shall do work relating to any Innovation Initiative contract between the State and a third party, or at the request of the Agency communicate on the State's behalf with that third party about the Innovation Initiative, said Innovation Initiative contract will include as a contract term a limitation of liability of Harvard and the Harvard Team to the same effect as is set out in section 9. The Harvard Team may also, at its discretion and as a condition of providing services relating to said contract or said third party, require the third party to agree to such limitation of liability in a separate contract with Harvard.

6. Confidential Information. In order to provide services under this Agreement, the Harvard Team will need to participate in internal discussions among State employees, and view internal State documents and written communications, including, but not limited to, confidential information under NH RSA 170-G:8, but excluding information not exempt from disclosure under NH RSA 91-A, that pertain to the Innovation Initiatives and the Harvard Team's services (such discussions, internal documents and written communications being hereinafter collectively referred to as the "Confidential Information").

All confidential information, including, but not limited to, individually identifiable health information shall be treated as confidential by the Fellow and all members of the Harvard Team in accordance with all federal, state or local laws and regulations governing the confidentiality and privacy of individually identifiable health information, including, without limitation, the Health Insurance Portability and Accountability Act of 1996 (HIPAA) and any regulation and official guidelines promulgated thereunder.

Prior to granting access to confidential information, the State shall ensure that the Fellow and relevant members of the Harvard Team have completed, signed, and returned the State's Confidentiality Agreement.

6.1 Non Disclosure of Confidential Information. Except as provided in Paragraph 6.2 below, the Harvard Team shall (i) hold the Confidential Information in confidence, and (ii) not at any time divulge, disclose, or communicate the Confidential Information to anyone other than State employees except as authorized by Agency, or use the Confidential Information for any purpose other than in connection with services under this Agreement. The Harvard Team will protect the Confidential Information by using the same degree of care, but no less than a reasonable degree of care, to prevent unauthorized disclosure or publication of the Confidential Information as the Harvard Team uses to protect Harvard's confidential information of a like nature.

6.2. Other Disclosure Provisions. Paragraph 6 and Paragraph 6.1 do not apply with respect to the Confidential Information that (a) was in the Harvard Team's possession before the effective date of this Agreement; (b) is or becomes a matter of public knowledge or publicly available other than through breach of this Section 6 by the Harvard Team; or (c) is disclosed by the Harvard Team with the prior written approval of a duly authorized representative of the State. In addition, the Harvard Team may disclose Confidential Information if such disclosure is required by any law, rule, regulation or judicial or administrative process, provided that, if permitted by applicable law or regulation, the Harvard Team shall notify Agency prior to any such required disclosure.

The State is subject to the requirements of RSA 91-A, Access to Governmental Records and Meetings, and may receive a request for public disclosure of information related to this Agreement. To the extent permitted by law, the State shall not disclose the Harvard Team's confidential information that is exempt from public disclosure under RSA 91-A:5, such as financial information, proprietary information such as research results and analysis, trade secrets, business and financial models and forecasts, and proprietary formulas. The State shall notify the Harvard Team if it receives a request for public disclosure under RSA 91-A regarding this Agreement and the Harvard Team shall have the opportunity to object to the release of the information requested.

7. Avoiding Conflicts of Interest. Members of the Harvard Team will not, at any time during the term of the Agreement, provide services to vendors or service providers in connection with transactions or proposed transactions with the State relating to the financing or implementation by the State of Innovation Initiatives that the Harvard Team advised on or assisted in developing.

Members of the Harvard Team may at any time work with and advise other states, counties, municipalities or government agencies that are undertaking similar Innovation Initiatives, including other jurisdictions that may be applying for the same federal grants that the State may be applying for. Members of the Harvard Team may also advise the U.S. federal government and governments in other countries on strategies to advance similar Innovation Initiatives.

8. No Authority. Professor Liebman, the Fellow and any other members of the Harvard Team will have no authority to negotiate any agreements for the State, to incur any obligations or expenses on behalf of the State, or to act in any other manner on behalf of the State or in its name.

9. Limitation of Liability. The State acknowledges that performance of the work described in this Agreement will involve the expression of professional ideas, judgments and opinions by the Harvard Team, and that it is in the State's interest to have such ideas, judgments and opinions expressed frankly, without concern on the part of the Harvard Team or Harvard that such ideas, judgments and opinions will be deemed representations, warranties or covenants upon which the State may claim reliance. The State further acknowledges that the Innovation Initiatives are relatively new, little-used and little-studied tools. Accordingly, the State understands and agrees that the Harvard Team and Harvard do not and will not make any warranties or representations of any kind, express or implied, concerning the accuracy of ideas, judgments, opinions, recommendations, projections, analyses or estimates which any member of the Harvard Team provides to the State under this Agreement (collectively, "Contributions"). The State further agrees that (i) any decision the State may make to rely on any Contributions shall be at its own risk; and (ii) neither Harvard nor any member of the Harvard Team shall be liable to the State for, and the State shall not make any claim against Harvard or any member of the Harvard Team relating to, any claims, liabilities, losses, damages, costs or expenses of any kind (including attorneys' fees) which State may at any time sustain or incur in connection with or arising out of any Contributions or the State's reliance thereon or use thereof, other than claims, liabilities, losses, damages, costs and expenses resulting from the gross negligence or intentional misconduct of any member of the Harvard Team. This agreement shall not be construed to limit the State's assertion of any right to sovereign immunity, including without limitation, exercise of discretionary executive or planning functions of the Agency. Without limiting the foregoing, in no event shall the State or Harvard or any member of the Harvard Team be liable for any indirect, consequential, exemplary or punitive damages whatsoever in connection with claims arising under or relating to this Agreement, whether based upon a claim or action of contract, warranty, negligence, strict liability, or any other legal theory or cause of action, even if advised of the possibility of such damages.

10. Intellectual Property and Publication Rights

10.1 Work Product and Harvard Created Materials.

The term Work Product as used herein comprises works subject to copyright, including materials, notes, designs, technical data, methodologies and know-how, research findings, reports, documentation, and other similar work product in any media or formats.

The State shall retain sole ownership of all rights, title, and interest, including all copyrights and other intellectual property rights, in and to Work Product developed or acquired by the State or on the State's behalf either prior to this Agreement or under this Agreement without the active participation of the Harvard Team.

Harvard shall be the sole owner of all rights, title, and interest, including all copyrights and other intellectual property rights, in and to the Work Product conceived, created or provided by Harvard or the Harvard Team under this Agreement ("Harvard Created Materials"), whether alone or with any contribution from the State or its personnel. To the extent the State or its personnel may acquire any right or interest in such Work Product by operation of law, the State hereby irrevocably assigns all such right and interest exclusively to Harvard.

In connection with the State's pursuit of its public purpose, Harvard hereby grants to the State a fully-paid, royalty-free, non-exclusive, worldwide, irrevocable, perpetual, assignable license to use, reproduce, distribute, modify, transmit, and sublicense the Harvard Created Materials in any media now known or hereafter developed.

The State understands and accepts that Harvard intends to share Harvard Created Materials and related analytic concepts and tools with other jurisdictions in connection with their Innovation Initiatives.

10.2 Publication Rights. In addition to providing assistance and support to the State, a main purpose of this Agreement for Harvard is as an opportunity to research, study, learn more about and make publicly known the design and implementation of Innovation Initiatives. Accordingly, Harvard and any member of the Harvard Team shall have the right to use, publish, and present publicly any findings, analyses, data and opinions based on or derived from Harvard Created Materials, from Contributions or from other work performed under this Agreement; provided that no Confidential Information shall be disclosed in such publications or presentations without the consent of the State. The Harvard Team shall provide Agency with an opportunity to review any such materials at least 30 days prior to submission for publication or presentation for the purpose of identifying any Confidential Information that is contained therein and should be removed; Agency shall perform such review within 30 days of receipt. Publications and presentations of general conclusions and analyses drawn from work with multiple jurisdictions and publications and presentations that summarize publicly available information about the State's initiatives do not have to be submitted for review.

11. Term and Termination. This Agreement will expire on June 30, 2021. Either party may terminate this Agreement upon 30 days' written notice to the other party. The provisions of this Agreement concerning confidential information, limitation of liability, intellectual property and publication rights, and publicity and use of names shall survive expiration or termination of this Agreement.

12. Publicity and Use of Names. Neither party may issue a press release or other public announcement about this Agreement, nor may it use any name, trademark or insignia of the other party (or of any school, department or unit of the other party) for promotional purposes or any other public purposes in connection with this Agreement, without the prior written approval of the other party. Without limiting the foregoing, neither party shall in any manner suggest that its programs, findings or publications have been endorsed by the other party. However, each party may identify the other in any description of the Agreement in its customary listings of activities; Harvard and the Harvard Team may identify the State and the Agency in publications about the Innovation Initiatives as described in Section 10.2; and the GPL may state on its website that it is assisting the State.

13. Other Provisions.

(a) Governing Law. This Agreement shall be governed by and interpreted in accordance with the laws of the State of New Hampshire (excluding conflict of laws rules).

(b) Severability. In the event that any provision or section of this Agreement shall be held to be invalid by any court, such holding shall not affect in any respect whatsoever the validity of the remainder of the Agreement unless the invalid provision materially affects the rights of the parties.

(c) Notices. Any notice under this Agreement may be given in person, or sent by fax, by electronic mail, by registered or certified mail, postage prepaid, or by recognized delivery service, to a party's address given from time to time by such notice, and such notice shall be deemed to have been given when so delivered, sent by fax or electronic mail, or mailed.

(d) Force Majeure. Neither party shall be liable for any delays or failures in performance due to circumstances beyond the party's reasonable control.

(e) Entire Agreement; Amendment. This Agreement constitutes the entire agreement between the parties with respect to the Innovation Initiatives which are the subject matter hereof, and supersedes all prior or contemporaneous agreements concerning such matters. This Agreement may not be amended or modified except with the written consent of both parties.

(f) This Agreement hereby revokes and replaces the prior Agreement between the parties dated June 1, 2018.

Executed as of the date first stated above.

For the State of New Hampshire,
acting through the Department of Health
and Human Services

Jeffrey Meyers

By: Jeffrey A. Meyers
Title: Commissioner, DHHS

For President and Fellows of Harvard
College acting through the Taubman Center
for State and Local Government at the
Harvard Kennedy School

By: Matthew Alper
Title: Associate Dean, HKS

The preceding Agreement, having been reviewed by this office, is approved as to form, substance, and execution.

OFFICE OF THE ATTORNEY GENERAL

7/3/2019
Date:

Name: Nancy J. Smith
Title: Sr. Asst. Attorney Gen.

I hereby certify that the foregoing Agreement was approved by the Governor and Executive Council of the State of New Hampshire at the Meeting on: _______________ (date of meeting)

OFFICE OF THE SECRETARY OF STATE

Date

Name:
Title:

HARVARD Kennedy School
JOHN F. KENNEDY SCHOOL OF GOVERNMENT

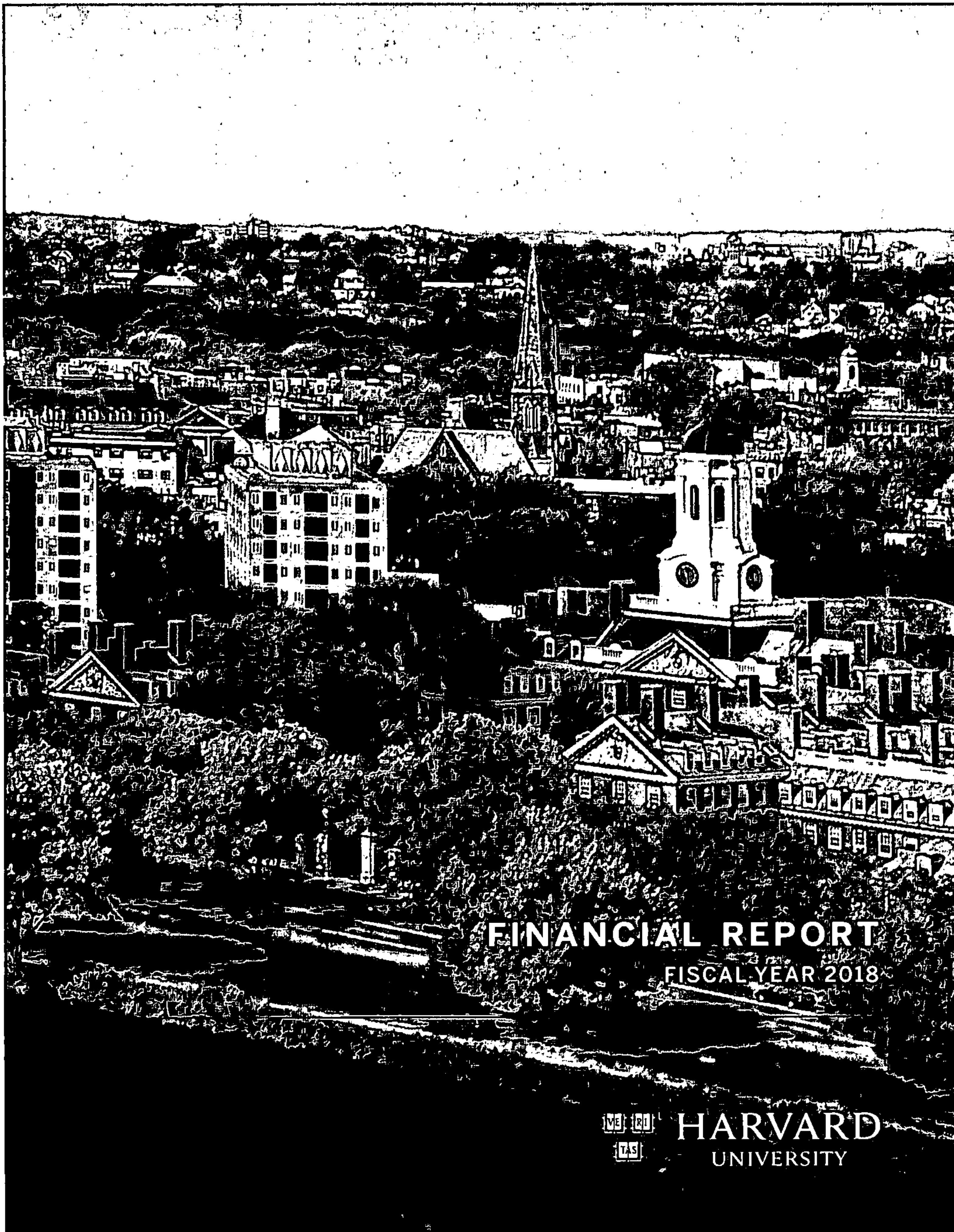
Delegation of Signing Authority – Government Performance Lab

In my capacity as Executive Dean of the Harvard Kennedy School, I, Janney Wilson, delegate to Matthew Alper, Senior Associate Dean for Research Policy and Administration at the Harvard Kennedy School, the authority to execute Memorandums of Understanding and similar agreements for technical assistance and related programs to be performed by the Harvard Kennedy School Government Performance Lab.

SIGNATURE E. Janney Wilson

DATE 6/17/19

Last updated: June 2019



FINANCIAL REPORT

FISCAL YEAR 2018

VE RI TAS HARVARD UNIVERSITY

TABLE OF CONTENTS

Message from the President

I am pleased to submit Harvard University's financial results for fiscal year 2018.

My presidency began on July 1, 2018, so my reflections are offered with admiration for my predecessor, Drew Gilpin Faust, whose many achievements strengthened the University and set it on a course for continued success. I am extraordinarily grateful to have taken the reins of an institution that thrived under her leadership—an institution driven by enduring principles and values.

When I addressed the higher education community at my inauguration on October 5, I spoke about some of the values that I see as the heart of the University: truth, excellence, and opportunity. Through the relentless pursuit of knowledge and the cultivation of wisdom, we advance human understanding in a multitude of fields and disciplines. Through constant effort to attract the most talented individuals to our campus, we enable the aspirations and accomplishments of remarkable students, faculty, and staff. And through a deep commitment to keeping the American Dream alive, we fulfill our obligation to young women and men who seek to improve their lives—and the lives of countless others—through education.

For these reasons, the financial report is so much more than the sum of its quantitative parts. It is the story of all that we do as a community to enable and advance our mission. On June 30, we concluded an outstanding fundraising campaign. All told, more than 153,000 households in 173 countries gave gifts to the University to support our education and research mission, with some $1.3 billion devoted to financial aid. Academic programs were established and expanded across our schools, and 142 endowed professorships were funded to advance the work of our faculty. At the same time, our physical campus was improved in ways that will drive progress and create community for many years to come.

Alumni and friends around the world have invested in Harvard because they have confidence in the University's mission. One of the ways in which we honor that confidence is through the prudent and thoughtful use of our resources. It is impossible for any new president to anticipate the exact challenges he or she will face, but I can say with certainty that challenges are on the horizon. Our ability to respond and adapt to changing circumstances will enable us to continue seizing opportunities, and I very much look forward to undertaking that important work with you.

All the best,

Lawrence S. Bacow
PRESIDENT

October 25, 2018

Financial Overview

From the Vice President for Finance and the Treasurer

The University's financial performance in 2018 was solid, with revenue rising to $5.2 billion based on 4% growth, an operating surplus of $196 million, and endowment returns of 10%. Consequently, the net assets of the University, the most fundamental measure of resources, increased this past year by $3 billion from $44 billion to $47 billion. This 7% increase in net assets is primarily driven by endowment returns and gifts, which enable the University to continue to advance in teaching and research.

These results were achieved through considerable care in managing resources throughout the University as evidenced by an increase in operating expenses of less than 3% during the year. Careful management of resources is necessary for Harvard, as it is for all colleges and universities, in the current environment. In last year's letter, we commented that higher education has matured as an industry. Revenues are under pressure as the number of students has plateaued, tuition costs have reached limits of affordability, federal research support is uncertain, and expectations for returns in the investment markets are muted. For these and other reasons, Moody's and Standard & Poors both issued within the last year a "Negative Outlook" for higher education in the U.S.

Harvard is well positioned to manage through this period due to a healthy balance sheet, modest recent operating surpluses, established financial discipline, and Harvard's primary strength—faculty and staff—who create one of the world's most exciting learning and research environments. Nonetheless, the University is cognizant of economic pressures, and recognizes its obligation to our students, donors, and research sponsors to ensure that every dollar under University stewardship is efficiently and effectively managed in support of our teaching and research mission. We thank our faculty and staff for wisely managing resources over the past year.

With only 22% of revenues coming from net tuition, Harvard's annual funding is deeply dependent upon its generous donors with 44% of annual revenues arising from donations, past and present: endowed distributions represent 35% of revenues and current-year gifts represent 9% of revenues. The success of the Capital Campaign has been broadly reported elsewhere, but we add our thanks as well to Harvard's thoughtful donors. From a financial perspective, philanthropy is the critical driver of the excellence to which Harvard aspires in transformative teaching and ground-breaking research.

The operating surplus of $196 million equaled 3.8% of revenues, a comparable percentage to other AAA-rated universities. Generating a surplus is helpful as it will add a small cushion to reserves in preparation for an inevitable economic downturn, particularly in light of the current extended economic expansion—one of the longest in history. At Harvard, most reserves are managed locally as every school and unit within Harvard is accountable for its own budget results, with local control over resources and decision-making. Consequently, the $196 million surplus is the consolidation of individual school and unit results—some with surpluses and others losses. As one example, the Faculty of Arts & Sciences (FAS), Harvard's largest individual enterprise, showed a surplus of $3.1 million this year, overcoming several recent years of operating losses thanks to sustained and careful stewardship.

The passage of the Tax Cuts and Jobs Act adds a new series of tax cost burdens to the University. We believe the provisions applying to higher education are bad public policy. Our country's philanthropic history has helped create leading universities, hospitals, and social service agencies that serve our communities in ways that are the envy of the world. The step of levying a federal tax on public good, non-profit charities is deeply concerning as it reduces the money available for the underlying missions of these organizations, and establishes an unsound precedent for other levels of government. The Act has added several new tax burdens on the University, the largest of which is a new tax on endowment income. Although we do not have final guidance from the U.S. Treasury, we have estimated that these related provisions will ultimately cost the University $40-$50 million on an annual basis. This policy will increase the cost of education and damage the University's teaching and research mission. In Harvard's case, the tax is approximately 25% of this past year's undergraduate financial aid grant budget. We believe these dollars are better spent enabling our educational mission.

Student aid this past year enabled one out of five undergraduates to receive 100% of their tuition, room and board paid by the University, as they come from families with annual incomes of less than $65,000. Across the student body, 54% of undergraduates receive financial aid, and on average their families paid $12,000 for tuition, room and board. The University hopes to continue this level of affordable access to a Harvard education for students.

As mentioned above, the endowment earned a 10% return for the year. This is gratifying as it is 2% above our 8% long-term target return. Similar to recent years, this result is roughly equal to the average return of larger college and university endowments, but not yet our immediate peers. We are very encouraged by the steps that Narv Narvekar and his Harvard Management Company colleagues have taken to reposition the endowment for long term success, knowing that the positive impact of these changes will take time to unfold.

With Drew Faust having stepped down as President at the end of the fiscal year, we would like to thank her for her farsighted financial stewardship—especially during times of financial constraint. During President Faust's tenure, the Corporation Committee on Finance was established, consistent budgeting practices were installed across the campus, decision-making has been guided by new multi-year financial and capital planning processes, and clear policies have been created with respect to University liquidity, operating reserves, philanthropy for capital, and facilities renewal spending. Through both her championing of sound financial practices and her leadership role in the success of the Capital Campaign, President Faust's legacy of financial stewardship will benefit the University for generations to come.

In closing, we want to again thank each and every donor to the University—past and present—for understanding that Harvard's excellence in teaching and research is made possible through your philanthropy. We also want to thank Harvard's faculty and staff for their vital contributions, on a daily basis, in making Harvard one of the world's preeminent institutions.

Thomas J. Hollister
VICE PRESIDENT FOR FINANCE

Paul J. Finnegan
TREASURER

October 25, 2018

FINANCIAL OVERVIEW

The University ended fiscal year 2018 with an operating surplus of $196 million compared to an operating surplus of $114 million in fiscal year 2017. The University's net assets increased by $2.9 billion to $47.0 billion at June 30, 2018, due to investment returns on the endowment, generous campaign contributions, and a disciplined focus on expenses.

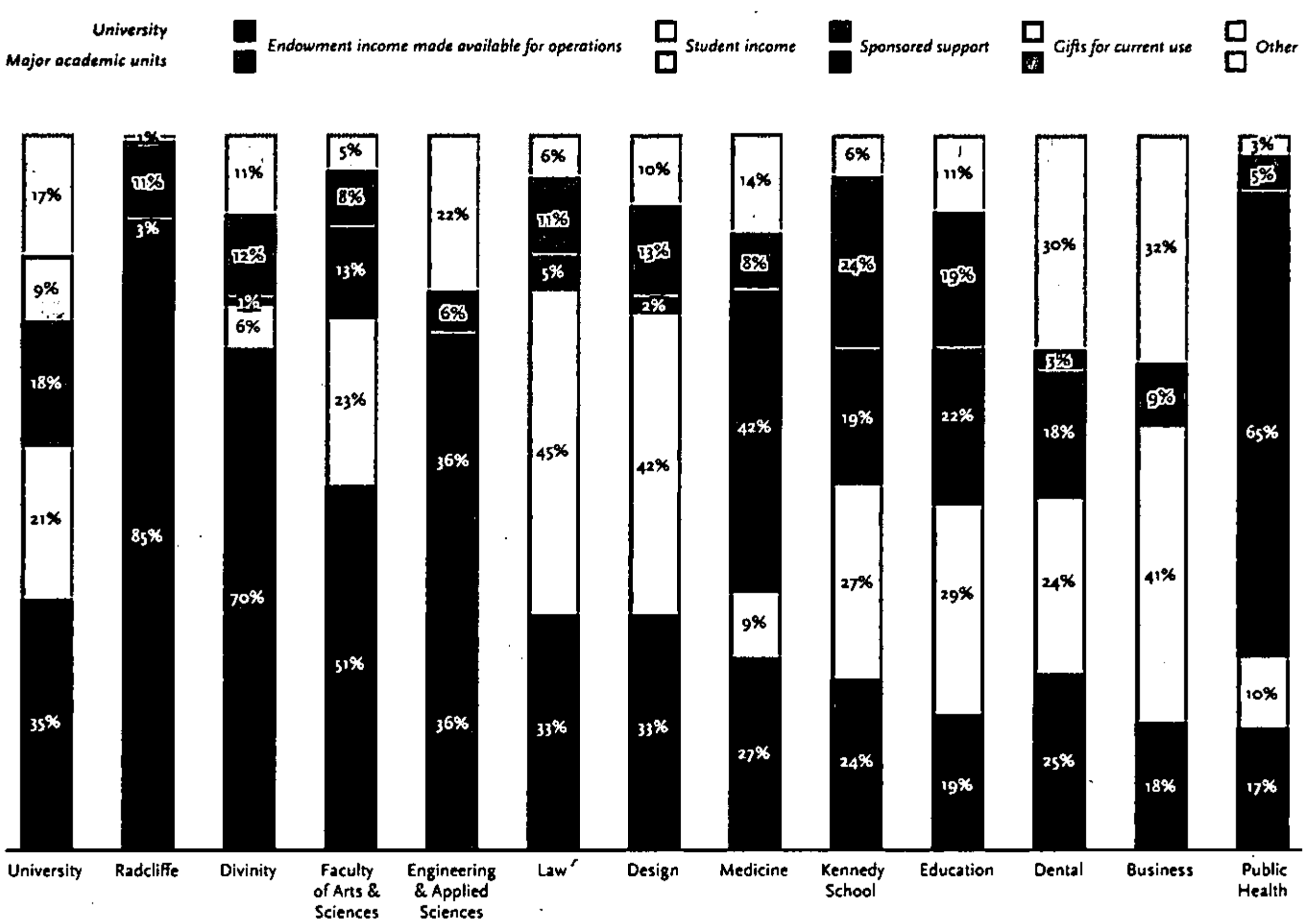
OPERATING REVENUE

Total operating revenue increased 4% rising to $5.2 billion. The largest drivers were growth in executive and continuing education, non-federal sponsored support revenues, the annual endowment distribution and current use giving.

In fiscal year 2018, the endowment distribution increased 2% to $1.8 billion. This growth was mainly the result of the impact of new gifts, given that the Corporation-approved distribution rate increase was 0%. In the aggregate, Harvard's endowment payout rate (i.e., the dollars withdrawn annually for operations as a percentage of the endowment's prior year-end market value) was 5.2% compared to the 5.3% payout rate in fiscal year 2017 and in line with the University's targeted payout rate range of 5.0-5.5%.

In the final year of the Capital Campaign, record totals in current use giving are driven by continued generosity of donors, as well as payments from donors fulfilling their earlier campaign promises. Gifts for current use were $467 million in fiscal year 2018, while total cash receipts from giving, including gifts designated as endowment, grew to $1.4 billion (see *Note 15* of the audited financial statements). The University is the grateful beneficiary of a renewed level of giving and generosity that we hope continues beyond the campaign years.

FISCAL YEAR 2018 SOURCES OF OPERATING REVENUE



In aggregate, revenue from federal and non-federal sponsored sources increased by 3% to $914 million in fiscal year 2018. Federal funding, which accounted for approximately 68% of total sponsored revenue in fiscal year 2018, increased 1% to $625 million. The University's relationships with foundations and other non-federal sponsors expanded in fiscal year 2018, resulting in an 8% increase in non-federal sponsored revenues to $289 million.

Net student revenue increased approximately 6% to $1.1 billion in fiscal year 2018, mainly driven by 12% growth in revenue from continuing and executive education programs. The University continues to experience rising demand for expanded program offerings across the University, which contributed to the anticipated growth in continuing and executive education. Net undergraduate and graduate tuition increased 3% with net undergraduate tuition contributing 2% growth due to the University's steadfast commitment to undergraduate financial aid.

OPERATING EXPENSES

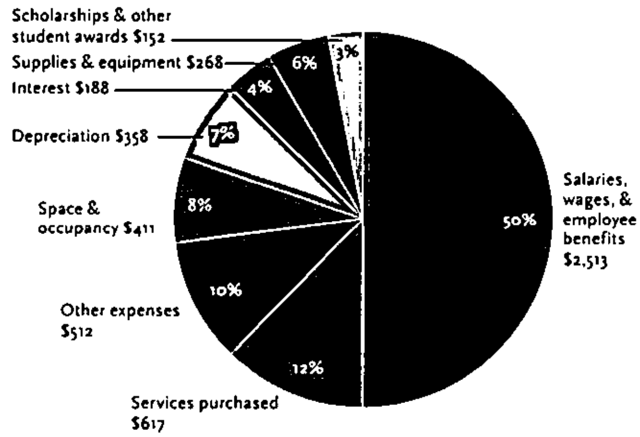
Total operating expenses increased by 3% to $5.0 billion. Compensation expense (i.e., salaries, wages and benefits), which continues to represent half the University's total operating expense, increased 2%, exceeding $2.5 billion. Salaries and wage expense grew 3% and employee benefits costs remained flat compared to fiscal year 2017. Non-compensation expenses increased by 3%, which includes a $15 million or 7% savings in interest expense.

Salaries and wages increased by 3% or $58 million to $1.9 billion in fiscal year 2018 due to the University's merit increase programs, as well as additional faculty and staff for strategic areas of focus within academic and research programs.

Employee benefits expense remained flat from fiscal year 2017 at $569 million. Active employee health expense increased 4% due to higher medical claims costs as well as plan enrollments. Defined contribution pension expense increased for active employees in line with salaries and wages. These increases were offset by favorable claims experience and a change in the discount rate at the end of fiscal year 2017 related to post-retirement and defined benefit costs.

FISCAL YEAR 2018 OPERATING EXPENSES

In millions of dollars



TOTAL OPERATING EXPENSES $5,019

BALANCE SHEET

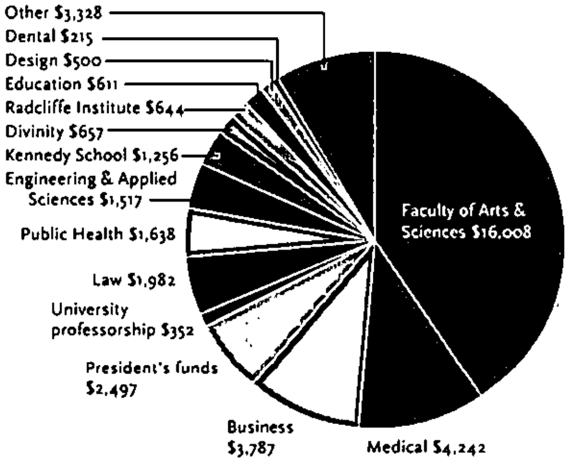
Investments

In fiscal year 2018, the return on the endowment was 10% and its value (after the net impact of distributions from the endowment for operations and the addition of new gifts to the endowment during the year) increased from $37.1 billion at the end of fiscal year 2017 to $39.2 billion at the end of fiscal year 2018. More information can be found in the Message from the CEO of Harvard Management Company, found on page 8 of this report.

The University has a policy of maintaining a cash reserve floor held outside the General Investment Account (GIA) of $800 million. The University continued to hold liquid investments (e.g., cash and treasuries) outside of the GIA consistent with policy as of June 30, 2018. These investments are primarily included in other investments as presented in *Note 3*.

MARKET VALUE OF THE ENDOWMENT AS OF JUNE 30, 2018

In millions of dollars



TOTAL MARKET VALUE $39,234

Debt

Bonds and notes payable decreased modestly from $5.4 billion at June 30, 2017 to $5.3 billion at June 30, 2018, resulting from a scheduled maturity of Series 2009A and a reduction in outstanding taxable commercial paper. In fiscal year 2018, the University's interest expense decreased by $15 million, a result of the full-year impact of the October 2016 debt refinancing. Interest expense was $252 million in fiscal year 2015 and was $188 million in fiscal year 2018 with the majority of the decrease resulting from the refinancing. The average interest rate on the debt portfolio was 4% for fiscal year 2018.

The University is rated AAA by S&P Global Ratings (re-affirmed in November 2017) and Aaa by Moody's Investors Service (re-affirmed in December 2017). Additional detail regarding the University's debt portfolio can be found in *Note 11* of the audited financial statements.

Accrued Retirement Obligations

The University's accrued retirement obligations decreased by $109 million or 10% to $984 million at June 30, 2018. The primary driver of the decrease was an improvement in postretirement claims experience and an increase in the discount rate used to calculate the obligation for both the pension and postretirement plans.

Capital Expenditures

The University invested $908 million in capital projects and acquisitions during fiscal year 2018, compared to $906 million in fiscal year 2017. This enabled significant progress on several noteworthy projects, including:

- Ongoing and finalization efforts to transform the Smith Campus Center, which opened in the Fall 2018, to support the University's goal of creating new and programmable common space for the entire community;
- Completion of Winthrop House and continued renovation of Lowell House for the undergraduate long-term house renewal initiative;
- Ongoing construction activities for the Allston Science and Engineering Complex, District Energy Facility, and related infrastructure work, which will anchor an innovation area that will lead to the development of an enterprise research campus, combining science and engineering innovation with business expertise;
- Multi-year phased renovations to the four-building Soldiers Field Housing Complex, which will update and reconfigure graduate student units to meet current housing requirements;
- Completion of Harvard Business School's Klarman Hall, which can accommodate activities ranging from intimate community forums up to large-scale events for approximately 1,000 individuals; and
- Completion of the Kennedy School's transformative Pavilions project, which includes expansion, new buildings and a raised, pedestrian-only courtyard.

This concludes the summary of the key financial highlights for fiscal year 2018. We encourage you to read the audited financial statements and related notes for more information regarding the financial position and results of the University.

HARVARD MANAGEMENT COMPANY, INC.

Message from the CEO
OCTOBER 2018

Dear Members of the Harvard Community,

For the most recent fiscal year ended June 30, 2018, the return on the Harvard endowment was 10.0% and the value of the endowment was $39.2 billion. The gain was primarily driven by private equity and public equity exposures. The endowment also distributed more than $1.8 billion toward the University's operating budget.

Performance

Asset Class	July 1, 2017 Allocation	HMC Return
Public Equity	31%	14%
Private Equity	16%	21%
Hedge Funds	21%	6%
Real Estate	13%	9%
Natural Resources	6%	(2)%
Bonds/TIPS	8%	1%
Other Real Assets & Private Debt*	2%	(1)%
Cash	3%	0%
Endowment	**100%**	**10%**

**This group comprises residual private investments of the former public internal platform, excluding natural resources. It also includes non-private equity investments of the former private equity silo.*

While we are not pleased with this performance, we are mindful that ours is an organization and a portfolio in transition. A quick look at our asset group returns makes two issues clear. First, there are certain parts of the portfolio that need work. We understand this shortcoming extends beyond a single year's performance and are hard at work to improve those asset classes for the future, as we are working to improve every part of the portfolio and will always do so. Second, looking beyond the returns of individual asset classes, asset allocation — or risk level — was the dominant factor in the overall returns. In general, the higher the risk level, the higher the return.

All of this said, as sophisticated investors well know, there are very limited conclusions that we can draw from a single year of either manager performance or asset allocation. Indeed, such superficial focus can lead to unwise or even dangerous conclusions. Had this past year's return been significantly higher or lower, it still would not be reflective of the work we are undertaking, nor change the path we are pursuing. This is a reality that will apply to the remaining years of our transition as well. As I told HMC's Board prior to accepting this position and have stated in previous letters, the significant changes we are undertaking require a five-year timeframe to reposition the organization and portfolio for subsequent strong performance. At the close of this past fiscal year, we were 19 months into the execution of the plan and we remain focused on implementing that strategy.

Review of Progress

High-quality people, culture, and investment processes drive top long-term returns, just as they did at the endowment I previously led. Short-term returns should never drive long-term strategy.

Accordingly, in addition to our focusing on the portfolio, significant attention is paid to our people, culture, and processes. Since I have discussed those at length in the past, I will not belabor them here. Rather, I will provide a brief update on what we have done to progress organizationally.

Internal Platform

- Early in fiscal year 2018, we spun-out two relative value platforms, supporting both with investment.
- As was well publicized, we spun-out our large internal real estate platform to Bain Capital. We are pleased that the former HMC real estate team is now at Bain and that they continue to manage a sizable pool of capital on HMC's behalf.
- This past spring, we also spun-out our credit platform, supporting it with investment.
- The natural resource team is now the sole internal platform at HMC. This team has made great progress in their multi-year repositioning of the portfolio, selling certain assets and improving the management of others.

The Generalist Team

The HMC Generalist Team was officially formed just prior to the start of fiscal year 2018 and has, therefore, been functioning for over a year. While some team members have been trained as generalists, others bring deep specialist experience. The investment framework and accompanying analytics we are developing serve as our common language.

While it will naturally take a few years for talented specialists to develop fully as generalists, our early progress has exceeded my expectations. Furthermore, HMC's investment and organizational cultures are evolving to foster the kind of internal discussion and debate needed to support thoughtful investment decisions.

Critical Frameworks

- We have developed our fundamental investment framework and completed most of the accompanying analytics. We continue to evolve and improve them, as we always will.
- Our portfolio liquidity framework was developed over the course of fiscal year 2018 and plays a critical role in our management of the portfolio. Importantly, we are now engaged in highly collaborative and deep discussions with Harvard's vice president for finance, Tom Hollister, his colleagues, and the HMC Board to ensure that we best serve Harvard's needs.
- Our risk framework was completed over the course of fiscal year 2018. As planned, it provides an important guidepost for our portfolio. We will soon engage the HMC board of directors in conversation to determine Harvard's risk appetite. Based on past experience, I would expect this to be at least a two-year exercise.

Looking Ahead

While my first 19 months at HMC have featured some unkind surprises, there has been one especially welcome discovery: HMC has an extraordinarily talented, skilled, and dedicated team on both the investment and support sides. If I could pick the one asset on which to build an organization, this would be it. It is therefore our opportunity, our obligation, and well within our capacity to effect this turnaround and generate long-term success for Harvard.

I often hear the opinion that HMC's endowment is too large to generate attractive returns, but as peer endowments with similar assets under management have shown, the size of the endowment is no excuse for muted returns.

As I have stated before, we are in the midst of a five-year transition. Developing our investment team into generalists, building the systems to support our investment framework, and repositioning the portfolio — reducing exposure to certain illiquid assets, while building exposure to others — takes years to complete. We are constantly looking to evolve and improve, but the basic plan has not and will not change. Therefore, observers should not expect future letters to recount dramatic changes.

Our work continues apace to position HMC for long-term success and ensure that Harvard University has the means to continue its vital role as a leader in teaching and research for future generations.

Best regards,

N.P. "Narv" Narvekar
Chief Executive Officer

pwc

Report of Independent Auditors

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

We have audited the accompanying consolidated financial statements of Harvard University (the "University"), which comprise the consolidated balance sheet as of June 30, 2018, and the related consolidated statements of changes in net assets with general operating account detail, changes in net assets of the endowment and of cash flows for the year then ended.

Management's Responsibility 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; this includes 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.

Auditors' Responsibility
Our responsibility is to express an opinion on the consolidated financial statements based on our audits. We conducted our audit in accordance with auditing standards generally accepted in the United States of America. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the consolidated financial statements are free from material misstatement.

An audit involves performing procedures to obtain audit evidence about the amounts and disclosures in the consolidated financial statements. The procedures selected depend on our judgment, including the assessment of the risks of material misstatement of the consolidated financial statements, whether due to fraud or error. In making those risk assessments, we consider internal control relevant to the University's preparation and fair presentation of the consolidated financial statements 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, we express no such opinion. An audit also includes evaluating the appropriateness of accounting policies used and the reasonableness of significant accounting estimates made by management, as well as evaluating the overall presentation of the consolidated financial statements. We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our audit opinion.

Opinion
In our opinion, the consolidated financial statements referred to above present fairly, in all material respects, the financial position of Harvard University as of June 30, 2018 and the changes in its net assets and its cash flows for the year then ended in accordance with accounting principles generally accepted in the United States of America.

Other Matter
We previously audited the consolidated balance sheet as of June 30, 2017, and the related consolidated statements of changes in net assets with general operating account detail, changes in net assets of the endowment and of cash flows for the year then ended (not presented herein), and in our report dated October 26, 2017, 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, 2017 and for the year then ended is consistent, in all material respects, with the audited consolidated financial statements from which it has been derived.

PricewaterhouseCoopers LLP

October 25, 2018

PricewaterhouseCoopers LLP, 101 Seaport Boulevard, Suite 500, Boston, MA 02210
T: (617) 530 5000, F: (617) 530 5001, www.pwc.com/us

BALANCE SHEETS

with summarized financial information as of June 30, 2017

In thousands of dollars	June 30 2018	2017
ASSETS:		
Cash	$ 144,982	$ 139,896
Receivables, net *(Note 5)*	301,258	261,841
Prepayments and deferred charges	130,925	130,701
Notes receivables, net *(Note 6)*	381,795	383,063
Pledges receivables, net *(Note 7)*	1,837,792	1,948,026
Fixed assets, net *(Note 8)*	7,732,172	7,125,898
Interests in trusts held by others *(Note 3)*	408,968	397,161
Securities pledged to counterparties, at fair value *(Notes 3 and 4)*	162,790	57,551
Investment portfolio, at fair value *(Notes 3 and 4)*	45,647,599	43,275,926
TOTAL ASSETS	$ 56,748,281	$ 53,720,063
LIABILITIES:		
Accounts payable	$ 359,847	$ 346,322
Deferred revenue and other liabilities	1,327,454	930,439
Other liabilities associated with the investment portfolio *(Notes 3, 4 and 11)*	884,501	920,558
Liabilities due under split interest agreements *(Note 10)*	862,413	840,736
Bonds and notes payable *(Note 11)*	5,300,921	5,431,090
Accrued retirement obligations *(Note 12)*	983,552	1,092,275
Government loan advances *(Note 6)*	65,409	72,564
TOTAL LIABILITIES	9,784,097	9,633,984
NET ASSETS	46,964,184	44,086,079
TOTAL LIABILITIES AND NET ASSETS	$ 56,748,281	$ 53,720,063

	Unrestricted	Temporarily restricted	Permanently restricted	June 30 2018	2017
NET ASSETS:					
General Operating Account (GOA) *(Note 9)*	$ 4,592,384	$ 2,480,144	$ 98,769	$ 7,171,297	$ 6,455,723
Endowment *(Note 9)*	6,757,253	24,125,090	8,351,393	39,233,736	37,096,474
Split interest agreements *(Note 10)*		54,781	504,370	559,151	533,882
TOTAL NET ASSETS	$ 11,349,637	$ 26,660,015	$ 8,954,532	$ 46,964,184	$ 44,086,079

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

STATEMENTS OF CHANGES IN NET ASSETS WITH GENERAL OPERATING ACCOUNT DETAIL

with summarized financial information for the year ended June 30, 2017

In thousands of dollars	Unrestricted	Temporarily Restricted	Permanently Restricted	For the year ended June 30 2018	2017
OPERATING REVENUE:					
Student income:					
Undergraduate program	$ 327,171			$ 327,171	$ 313,224
Graduate and professional degree programs	585,797			585,797	559,474
Board and lodging	190,495			190,495	184,732
Continuing education and executive programs	458,047			458,047	410,664
Scholarships applied to student income *(Note 13)*	(439,445)			(439,445)	(413,870)
Total student income	1,122,065	0	0	1,122,065	1,054,224
Sponsored support *(Note 14)*					
Federal government – direct costs	453,084			453,084	452,852
Federal government – indirect costs	172,223			172,223	165,253
Non-federal sponsors – direct costs	85,974	$ 166,023		251,997	232,446
Non-federal sponsors – indirect costs	21,882	15,050		36,932	34,984
Total sponsored support	733,163	181,073	0	914,236	885,535
Gifts for current use *(Note 15)*	141,324	325,222		466,546	449,939
Investment income:					
Endowment returns made available for operations *(Note 9)*	318,607	1,503,038		1,821,645	1,787,417
GOA returns made available for operations	176,230			176,230	164,893
Other investment income	21,060	4,813		25,873	18,462
Total investment income	515,897	1,507,851	0	2,023,748	1,970,772
Other revenue *(Note 16)*	688,724			688,724	638,310
Net assets released from restriction	1,918,360	(1,918,360)		0	0
TOTAL OPERATING REVENUE	5,119,533	95,786	0	5,215,319	4,998,780
OPERATING EXPENSES:					
Salaries and wages	1,943,836			1,943,836	1,885,692
Employee benefits *(Note 12)*	569,223			569,223	569,030
Services purchased	617,210			617,210	591,135
Space and occupancy	410,441			410,441	371,349
Depreciation *(Note 8)*	357,965			357,965	348,885
Supplies and equipment	268,200			268,200	253,163
Interest *(Note 11)*	187,883			187,883	202,547
Scholarships and other student awards *(Note 13)*	152,421			152,421	147,555
Other expenses *(Note 17)*	511,778			511,778	515,229
TOTAL OPERATING EXPENSES	5,018,957	0	0	5,018,957	4,884,585
NET OPERATING SURPLUS	100,576	95,786	0	196,362	114,195
NON-OPERATING ACTIVITIES:					
Income from GOA investments	8,751			8,751	14,630
GOA realized and change in unrealized appreciation, net *(Note 3)*	475,207			475,207	303,751
GOA returns made available for operations	(176,230)			(176,230)	(164,893)
Change in pledge balances *(Note 7)*		28,562		28,562	(136,928)
Change in interests in trusts held by others		(740)		(740)	(413)
Gifts for facilities and loan funds *(Note 15)*		108,698	$ 529	109,227	110,078
Change in retirement obligations *(Note 12)*	143,110			143,110	209,981
Other changes related to debt redemption				0	(229,357)
Other changes	1,871			1,871	(970)
Transfers between GOA and endowment *(Note 9)*	(84,607)	6,465	(5,065)	(83,207)	(23,276)
Transfers between GOA and split interest agreements *(Note 10)*		12,637	24	12,661	15,204
Non-operating net assets released from restrictions	198,865	(203,930)	5,065	0	0
TOTAL NON-OPERATING ACTIVITIES	566,967	(48,308)	553	519,212	97,807
GENERAL OPERATING ACCOUNT NET CHANGE DURING THE YEAR	667,543	47,478	553	715,574	212,002
Endowment net change during the year	609,080	1,093,046	435,136	2,137,262	1,430,731
Split interest agreements net change during the year *(Note 10)*		943	24,326	25,269	32,016
NET CHANGE DURING THE YEAR	1,276,623	1,141,467	460,015	2,878,105	1,674,749
Net assets, beginning of year	10,073,014	25,518,548	8,494,517	44,086,079	42,411,330
NET ASSETS, END OF YEAR	$ 11,349,637	$ 26,660,015	$ 8,954,532	$ 46,964,184	$ 44,086,079

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

STATEMENTS OF CHANGES IN NET ASSETS OF THE ENDOWMENT

with summarized financial information for the year ended June 30, 2017

In thousands of dollars	Unrestricted	Temporarily Restricted	Permanently Restricted	For the year ended June 30 2018	2017
Investment return *(Note 3)*:					
Income from general investments	$ 8,349	$ 39,426		$ 47,775	$ 85,465
Realized and change in unrealized appreciation/(depreciation), net	586,968	2,697,738		3,284,706	2,566,526
Total investment return	595,317	2,737,164	0	3,332,481	2,651,991
Endowment returns made available for operations	(318,607)	(1,503,038)		(1,821,645)	(1,787,417)
Net investment return	276,710	1,234,126	0	1,510,836	864,574
Gifts for endowment *(Note 15)*	41,627	247,357	$ 357,315	646,299	550,529
Transfers between endowment and the GOA *(Note 9)*	84,607	(6,465)	5,065	83,207	23,276
Capitalization of split interest agreements *(Note 10)*		5,229	20,478	25,707	29,243
Change in pledge balances *(Note 7)*		(153,808)	14,499	(139,309)	(48,892)
Change in interests in trusts held by others *(Note 9)*		(1,331)	13,878	12,547	41,739
Other changes	(3,155)	(27,576)	28,706	(2,025)	(29,738)
Net assets released from restrictions	209,291	(204,486)	(4,805)	0	0
NET CHANGE DURING THE YEAR	609,080	1,093,046	435,136	2,137,262	1,430,731
Net assets of the endowment, beginning of year	6,148,173	23,032,044	7,916,257	37,096,474	35,665,743
NET ASSETS OF THE ENDOWMENT, end of year	$ 6,757,253	$ 24,125,090	$ 8,351,393	$ 39,233,736	$ 37,096,474

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

STATEMENTS OF CASH FLOWS

with summarized financial information for the year ended June 30, 2017

In thousands of dollars	For the year ended June 30 2018	2017
CASH FLOWS FROM OPERATING ACTIVITIES:		
Change in net assets	$ 2,878,105	$ 1,674,749
Adjustments to reconcile change in net assets to net cash (used in) operating activities:		
Depreciation	357,965	348,885
Amortization of premium and discount related to bonds and notes payable	(27,265)	(55,748)
Realized and change in unrealized (appreciation)/depreciation, net	(3,829,446)	(2,956,361)
Change in fair value of interest rate exchange agreements	(6,463)	(14,212)
Change in interests in trusts held by others	(11,807)	(41,326)
Change in liabilities due under split interest agreements	46,753	58,696
Gifts of donated securities	(179,131)	(149,964)
Proceeds from the sales of gifts of unrestricted securities	14,422	47,615
Gifts for restricted purposes	(528,138)	(570,583)
Loss on redemption of debt		50,797
Loss on disposal of assets	8,281	32,274
Loss/(gain) on sale of property	1,644	(3,003)
Change in accrued retirement obligations	(108,723)	(151,571)
Changes in operating assets and liabilities:		
Receivables,net	(39,417)	(13,637)
Prepayments and deferred charges	(224)	20,352
Pledges receivable, net	110,234	186,194
Accounts payable	(30,544)	13,198
Deferred revenue and other liabilities	397,015	106,195
NET CASH (USED IN) OPERATING ACTIVITIES	(946,739)	(1,417,450)
CASH FLOWS FROM INVESTING ACTIVITIES:		
Loans made to students, faculty, and staff	(48,451)	(50,122)
Payments received on student, faculty, and staff loans	47,521	46,210
Change in other notes receivable	2,198	2,040
Proceeds from the sales and maturities of investments	15,309,908	70,540,252
Purchase of investments	(14,671,506)	(59,712,601)
Change associated with repurchase agreements	700,881	828,320
Additions to fixed assets	(937,744)	(979,169)
Proceeds from sale of property	1,293	3,649
NET CASH PROVIDED BY INVESTING ACTIVITIES	404,100	10,678,579
CASH FLOWS FROM FINANCING ACTIVITIES:		
Change in overdrafts included in accounts payable	6,356	(9,159)
Change in split interest liability from new contributions, income and payments to annuitants	(25,076)	(9,162)
Proceeds from issuance of debt	453,767	3,331,926
Debt repayments	(556,671)	(3,072,587)
Proceeds from the sales of gifts of restricted securities	164,709	102,349
Gifts restricted for capital purposes	528,138	570,583
Affiliated entity contributions and distributions, net	(16,343)	(15,411)
Change in repurchase and reverse repurchase agreements		(10,135,778)
Change in government loan advances	(7,155)	2,268
NET CASH PROVIDED BY/(USED IN) FINANCING ACTIVITIES	547,725	(9,234,971)
NET CHANGE IN CASH	5,086	26,158
Cash, beginning of year	139,896	113,738
CASH, end of year	$ 144,982	$ 139,896
Supplemental disclosure of cash flow information:		
Accounts payable related to fixed asset additions	$ 109,181	$ 71,468
Cash paid for interest	$ 215,166	$ 203,778

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 6,699 undergraduate and 13,331 graduate students. 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 *Balance Sheets* and are not included in the *Statement of Changes in Net Assets with General Operating Account Detail.*

The 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, 2017, 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 three net asset categories pursuant to any donor-imposed restrictions and applicable law. Accordingly, the net assets of the University are classified in the accompanying financial statements in the categories that follow:

UNRESTRICTED net assets are not subject to donor-imposed restrictions. Funds invested in fixed assets and unrestricted endowment funds comprise 99% of the University's unrestricted net assets as of June 30, 2018. In addition, this category includes unrestricted gifts and endowment income balances, University-designated loan funds, and other unrestricted current funds.

TEMPORARILY RESTRICTED net assets are subject to legal or donor-imposed stipulations that will be satisfied either by actions of the University, the passage of time, or both. These net assets include gifts donated for a particular purpose, amounts subject to time restrictions such as funds pledged for future payment, or amounts subject to legal restrictions such as portions of otherwise unrestricted capital appreciation and income, which must be reported as temporarily restricted net assets until appropriated for spending in accordance with Massachusetts law.

PERMANENTLY RESTRICTED net assets are subject to donor-imposed stipulations that they be 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.

Revenues from sources other than contributions are generally reported as increases in unrestricted net assets. Expenses are reported as decreases in unrestricted net assets. Gains and losses on investments are reported as increases or decreases in unrestricted net assets, unless their use is restricted by donor stipulations or by law. Investment returns earned by restricted donor funds are initially classified as temporarily restricted net assets and then reclassified to unrestricted net assets when expenses are appropriated or incurred for their intended purpose. Expirations of temporary restrictions on net assets are reported as reclassifications from temporarily restricted to unrestricted net assets and appear as "Net assets released from restrictions" and "Non-operating net assets released from restrictions" in the *Statements of Changes in Net Assets.*

Unconditional pledges are reported as increases in the appropriate categories of net assets in accordance with donor restrictions.

Net operating surplus

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 *Statement of Changes in Net Assets with General Operating Account Detail.*

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.

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 provided malpractice coverage applies 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 limit. In addition, the University 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-exempt status

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 overall impact of the Act remains uncertain until further regulatory guidance is issued. The University continues to evaluate the impact of the Act.

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

In January 2016, the Financial Accounting Standards Board (FASB) issued ASU 2016-01, *Recognition and Measurement of Financial Assets and Financial Liabilities,* which address certain aspects of recognition, measurement, presentation and disclosure of financial instruments. This guidance allows an entity to choose, investment-by-investment, to report an equity investment that neither has a readily determinable fair value, nor qualifies for the practical expedient for fair value estimation using net asset value (NAV), at its cost minus impairment (if any), plus or minus changes resulting from observable price changes in orderly transactions for the identical or similar investment of the same issue. Impairment of such investments must be assessed qualitatively at each reporting period. Entities must disclose their financial assets and liabilities by measurement category and form of asset either on the face of the statement of financial position or in the accompanying notes. The ASU is effective for fiscal year 2020 for the University. The provision to eliminate the requirement to disclose the fair value of financial instruments measured at cost (such as the fair value of debt) has been early adopted by the University for fiscal year 2016. The University is currently evaluating the impact of the remaining new guidance on the consolidated financial statements.

In August 2016, the FASB issued ASU 2016-14, *Presentation of Financial Statements for Not-for-Profit Entities,* which makes targeted changes to the not-for-profit financial reporting model. Under the new ASU, net asset reporting will be streamlined and clarified. The ASU is effective for fiscal year 2019 for the University. The University is evaluating the impact of the new guidance on the consolidated financial statements.

In May 2014, the FASB issued ASU 2014-09, *Revenue from Contracts with Customers* at the conclusion of a joint effort with the International Accounting Standards Board to create common revenue recognition guidance for U.S. GAAP and international accounting standards. This framework ensures that entities appropriately reflect the consideration to which they expect to be entitled in exchange for goods and services, by allocating transaction price to identified performance obligations, and recognizing that revenue as performance obligations are satisfied. Qualitative and quantitative disclosures will be required to enable users of financial statements to understand the nature, amount, timing, and uncertainty of revenue and cash flows arising from contracts with customers. The ASU is effective for fiscal year 2019 for the University. The University is evaluating the impact this will have on the consolidated financial statements.

In February 2016, the FASB issued ASU 2016-02, *Leases*, which, requires a lessee to recognize a right-of-use asset and a lease liability, initially measured at the present value of the lease payments, in its balance sheet. The guidance also expands the required quantitative and qualitative disclosures surrounding leases. The ASU is effective for fiscal year 2020 for the University. The University is evaluating the impact of the new guidance on the consolidated financial statements.

In March 2017, the FASB issued final guidance on ASU 2017-07, *Compensation – Retirement Benefits (Topic 715): Improving the Presentation of Net Periodic Pension Cost and Net Periodic Postretirement Benefit Cost*. Presently, net benefit cost is reported as an employee cost within operating income (or capitalized into assets where appropriate). The amendment requires the bifurcation of net benefit cost. The service cost component will be presented with other employee costs in operating income (or capitalized in assets). The other components will be reported separately outside of operations, and will not be eligible for capitalization. The ASU is effective for fiscal year 2020 for the University. The University is evaluating the impact of the new guidance on the consolidated financial statements.

In June 2018, the FASB issued ASU 2018-08, *Clarifying the Scope and the Accounting Guidance for Contributions Received and Contributions Made*. The new guidance clarifies the definition of an exchange transaction and the criteria for evaluation whether contributions are unconditional or conditional. The ASU is effective for fiscal year 2019 for the University and any changes will be implemented simultaneously with adoption of the new revenue standard. The University is 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 fund that consists primarily of endowment assets. Certain other investments are managed separately from the GIA. These other investments consist primarily of cash, short-term investments, and fixed income securities (principally US government securities) held for the University's working capital and liquidity needs; publicly-traded securities associated with split interest agreements; and public and private investments donated to the University.

The University's investment holdings as of June 30, 2018 and 2017 are summarized in the following table (in thousands of dollars):

	2018	2017
Investment portfolio, at fair value:		
Pooled general investment account assets	$ 44,113,615	$ 41,738,915
Other investments	1,533,984	1,537,011
Securities pledged to counterparties	162,790	57,551
INVESTMENT ASSETS	45,810,389	43,333,477
Pooled general investment account liabilties	869,020	898,614
Interest rate exchange agreement	15,481	21,944
INVESTMENT LIABILITIES	884,501	920,558
TOTAL INVESTMENTS, NET	$ 44,925,888	$ 42,412,919

As of June 30, 2018 and 2017, University's net investments were comprised of the following components (in thousands of dollars):

	2018	2017
POOLED GENERAL INVESTMENT ACCOUNT		
Endowment[1]	$ 37,731,389	$ 35,399,801
General operating account	4,154,494	4,066,488
Split interest agreements	820,725	789,972
Other internally designated funds	700,777	641,591
TOTAL POOLED GENERAL INVESTMENT ACCOUNT NET ASSETS	$ 43,407,385	$40,897,852
OTHER INVESTMENTS OUTSIDE THE GENERAL INVESTMENT ACCOUNT		
General operating and other investments[2]	917,664	930,421
Split interest agreements	600,839	584,646
TOTAL OTHER INVESTMENTS OUTSIDE THE GENERAL INVESTMENT ACCOUNT	$ 1,518,503	$ 1,515,067
TOTAL INVESTMENTS, NET	$ 44,925,888	$ 42,412,919

[1] *Includes only the portion of the endowment invested in the GIA and excludes pledges, interests in trusts held by others, other non-GIA investments, and GIA interest and dividends net of all internal and external management fees and expenses.*
[2] *Consists primarily of repurchase agreements and US government securities of $679,623 and $630,488 as of June 30, 2018 and 2017, respectively.*

Investment return

A summary of the University's total return on investments for fiscal years 2018 and 2017 is presented below (in thousands of dollars):

	2018	2017
Return on pooled general investment account:		
Realized and change in unrealized appreciation, net	$ 3,833,460	$ 2,923,828
Net investment income	55,199	98,912
Total return on pooled general investment account[1]	3,888,659	3,022,740
Return on other investments:		
Realized and change in unrealized (depreciation)/appreciation, net	(4,014)	32,533
Net investment income	38,585	32,944
Total return on other investments	34,571	65,477
Realized and change in unrealized appreciation on interest rate exchange agreement, net	4,010	11,234
TOTAL RETURN ON INVESTMENTS	$ 3,927,240	$ 3,099,451

[1] *Net of all internal and external management fees and expenses.*

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 measured at net asset value (as reported by external managers) as a practical expedient for the fair value 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. Transfers between levels are recognized at the beginning of the year. 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, 2018 and 2017 (in thousands of dollars):

	2018					2017
	Level 1	Level 2	Level 3	NAV as Practical Expedient	Total	Total
ASSETS:[1]						
Cash and short-term investments	$ 1,407,841				$ 1,407,841	$ 3,422,154
Repurchase agreements		$ 1,149,363			1,149,363	1,850,245
Domestic equity	490,134			$ 4,500,353	4,990,487	4,674,449
Foreign equity	857,401			1,544,369	2,401,770	1,552,165
Global equity				2,008,253	2,008,253	1,239,346
Domestic fixed income	1,505,967				1,505,967	2,067,679
Foreign fixed income	25,141				25,141	28,378
Emerging market equity and debt	419,100			2,142,935	2,562,035	1,310,664
High yield	12,105		$ 119,249		131,354	875,295
Hedge funds			81,520	12,814,216	12,895,736	7,964,081
Private equity			90,328	8,369,851	8,460,179	7,629,888
Natural resources	11,569		2,183,270	59,970	2,254,809	2,869,953
Real estate			230,214	3,774,842	4,005,056	5,392,029
Inflation-indexed bonds	847,163				847,163	825,719
Due from brokers		1,184	4,640		5,824	67,608
Other investments	6,815	3,545	1,662		12,022	19,488
INVESTMENT ASSETS SUBJECT TO FAIR VALUE LEVELING	$ 5,583,236	$ 1,154,092	$ 2,710,883	$ 35,214,789	$ 44,663,000	$ 41,789,141
Other investment assets not subject to fair value[2]					1,147,389	1,544,336
TOTAL INVESTMENT ASSETS					$ 45,810,389	$ 43,333,477
Interests in trusts held by others[3]			408,968		408,968	397,161
NON-INVESTMENT ASSETS SUBJECT TO FAIR VALUE LEVELING			$ 408,968		$ 408,968	$ 397,161
TOTAL ASSETS					$ 46,219,357	$ 43,730,638
LIABILITIES:[1]						
Due to brokers[4]	$ 6,727	$ 108,659			$ 115,386	$ 34,847
Other liabilities subject to fair value			$ 223,601		223,601	177,993
INVESTMENT LIABILITIES SUBJECT TO FAIR VALUE LEVELING	$ 6,727	$ 108,659	$ 223,601		$ 338,987	$ 212,840
Other investment liabilities not subject to fair value[5]					545,514	707,718
TOTAL INVESTMENT LIABILITIES					$ 884,501	$ 920,558
Liabilities due under split interest agreements[3]		862,413			862,413	840,736
NON-INVESTMENT LIABILITIES SUBJECT TO FAIR VALUE LEVELING		$ 862,413			$ 862,413	$ 840,736
TOTAL LIABILITIES					$ 1,746,914	$ 1,761,294

[1] *Certain prior year amounts have been reclassified to conform to current year presentation.*

[2] *As of June 30, 2018, other assets not subject to fair value consists primarily of receivables for transactions that settled subsequent to the balance sheet date of $922,438, before eliminating inter-company balances, and consolidated assets of $162,922. As of June 30, 2017, other assets not subject to fair value consist primarily of receivables for transactions that settled subsequent to the balance sheet date of $1,390,858, before eliminating inter-company balances, and consolidated assets of $116,361.*

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

[4] *Includes fair value of an interest rate exchange agreement on the University's debt portfolio of $15,481 and $21,944 as of June 30, 2018 and 2017, respectively.*

[5] *As of June 30, 2018, other liabilities not subject to fair value include consolidated liabilities of $200,631. As of June 30, 2017, other liabilities not subject to fair value consist primarily of payables for the purchase of securities of $102,479, before eliminating inter-company balances, and consolidated liabilities of $225,059.*

The following is a rollforward of Level 3 investments for the year ended June 30, 2018 and the net June 30, 2017 rollforward of Level 3 investments (in thousands of dollars):

	Beginning balance as of July 1, 2017	Net realized gains/(losses)	Net change in unrealized appreciation (depreciation)[1]	Purchases/ contributions	Sales/ distributions	Transfers into Level 3	Transfers out of Level 3	Ending balance as of June 30, 2018
INVESTMENT ASSETS:								
High yield	$ 425		$ 376	$ 118,448				$ 119,249
Hedge funds	89,471	$ (41,667)	36,799		$ (3,083)			81,520
Private equity	880,530	(517,582)	475,822	59,690	(808,132)			90,328
Natural resources	2,778,134	2,800	(126,951)	131,681	(602,394)			2,183,270
Real estate	4,292,544	(388,678)	388,284	168,611	(1,021,717)		$ (3,208,830)	230,214
Due from brokers	4,640							4,640
Other investments	2,559		(897)					1,662
INVESTMENT ASSETS SUBJECT TO FAIR VALUE LEVELING	$ 8,048,303	$ (945,127)	$ 773,433	$ 478,430	$ (2,435,326)	$ 0	$ (3,208,830)	$ 2,710,883
Interests in trusts held by others	397,161		11,807					408,968
NON-INVESTMENT ASSETS SUBJECT TO FAIR VALUE LEVELING	$ 397,161		$ 11,807					$ 408,968
TOTAL ASSETS SUBJECT TO FAIR VALUE LEVELING	$ 8,445,464	$ (945,127)	$ 785,240	$ 478,430	$ (2,435,326)	$ 0	$ (3,208,830)	$ 3,119,851
INVESTMENT LIABILITIES:								
Other liabilities subject to fair value	$ 177,993		$ (4,061)	$ (34,990)	$ 84,659			$ 223,601
TOTAL LIABILITIES SUBJECT TO FAIR VALUE LEVELING	$ 177,993	$ 0	$ (4,061)	$ (34,990)	$ 84,659	$ 0	$ 0	$ 223,601
NET ASSETS SUBJECT TO FAIR VALUE LEVELING	$ 8,267,471	$ (945,127)	$ 789,301	$ 513,420	$ (2,519,985)	$ 0	$ (3,208,830)	$ 2,896,250

[1] *Total change in unrealized appreciation/(depreciation) relating to Level 3 investment assets and investment liabilities still held by the University at June 30, 2018 is $(183,672) and is reflected in "Realized and change in unrealized appreciation/(depreciation), net" in the* Statements of Changes in Net Assets.

	Beginning balance as of July 1, 2016	Net realized gains/(losses)	Net change in unrealized appreciation (depreciation)[1]	Purchases/ contributions	Sales/ distributions	Transfers into Level 3	Transfers out of Level 3	Ending balance as of June 30, 2017
PRIOR YEAR NET ASSETS SUBJECT TO FAIR VALUE LEVELING	$ 7,552,993	$ 259,327	$ (1,379,908)	$ 1,447,770	$ (2,975,319)	$ 3,362,608	$ 0	$ 8,267,471

[1] *Total change in unrealized appreciation/(depreciation) relating to Level 3 investment assets and investment liabilities still held by the University at June 30, 2017 is $(1,117,334) and is reflected in "Realized and change in unrealized appreciation/(depreciation), net" in the* Statements of Changes in Net Assets.

During fiscal year 2018, the University sold a portion of a direct real estate investment vehicle to a third-party and engaged an external investment manager to manage the vehicle. As a result of this transaction, $3.2 billion of direct real estate investment assets were transferred out of Level 3. As of June 30, 2018, the fair value of these investments is measured at NAV as reported by the external manager and is included in investment assets measured at NAV as the practical expedient. In fiscal year 2017 certain securities, included in private equity, natural resources and real estate, were valued using a secondary sale price and were transferred into Level 3.

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 equity, fixed income, real estate, commodities, and private equity markets. Exposure to each asset class is achieved through investments in individual securities, direct investments in special purpose vehicles and/or through vehicles advised by external managers.

The investments within diverse markets involve various risks such as price, interest rate, market, sovereign, currency, liquidity, and credit risks. Additionally, the GIA's direct investments in natural resources expose the

University to a unique set of risks such as operational, environmental and geopolitical risks. Uncertain national policies and social, political and economic instability increase the potential for expropriation of assets and imposition of governmental restrictions. The University also considers manager concentration risk. As of June 30, 2018, 26% of the GIA NAV was made up of five 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.

Liquidity

Cash and short-term investments are recorded at cost, which approximates fair value, and include 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 short-term investments do not include cash balances held as collateral by the University. Cash and short-term investment balances designated for investment purposes are included in the "Investment portfolio, at fair value" in the *Balance Sheets*. Cash and short-term investments classified as Investments were $1.4 billion and $3.4 billion at June 30, 2018 and 2017, respectively.

The University has various sources of liquidity at its disposal within its investment pools, including approximately $2.6 billion in cash and short-term investments (including repurchase agreements of $1.1 billion) at June 30, 2018 in the GIA and the GOA. In addition, the University estimates that as of June 30, 2018, it could liquidate additional unencumbered US government securities of $2.1 billion within one business day (assuming typical settlement terms) to meet any immediate short-term needs of the University (unaudited).

Repurchase agreements

The University *Balance Sheets* display both the assets and corresponding liabilities 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, 2018 and 2017, the University had gross asset repurchase agreements of $1.1 billion and $1.9 billion, respectively, which were fully collateralized. Collateral is exchanged as required by fluctuations in the fair value of these instruments. In the event of a counterparty default, the University generally has the right to close out all transactions traded under such agreements and to net amounts owed or due across all transactions and offset such net payable or receivable with collateral posted by one party or the other. The University separately reports the fair value of assets for which counterparties have the right to pledge or exchange the collateral they have received; investment portfolio assets that are unencumbered are included in "Investment portfolio, at fair value" in the *Balance Sheets*. The University does not offset repurchase agreements that are subject to master netting arrangements or similar arrangements on the University's *Balance Sheets*. Refer to *Note 4* for information related to offsetting of derivatives.

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 expenses are recorded net of applicable withholding taxes on the accrual basis of accounting. 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.

Over the counter derivatives

Over the counter (OTC) derivative products classified as due to/from brokers 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.

External advisors

Investments managed by external advisors include investments in private equity, real estate, natural resources, hedge funds and other externally managed funds. The majority of these investments are not readily marketable and are reported at NAV utilizing the most current information provided by the external advisor, subject to assessments that the information is representative of fair value and in consideration of any additional factors deemed pertinent to the fair value measurement. The University evaluates its external advisors through a manager due-diligence program executed by HMC, which includes an analysis of an advisor's use of and adherence to fair value principles.

The fair value of the investments in these asset classes has generally been estimated using the University's capital account balance for each fund, unless the University has deemed the NAV to be an inappropriate representation of fair value. To evaluate the fair value of the University's externally managed investments, 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.

Distributions are received through the liquidation of the underlying assets of the fund over its remaining life. 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.

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, 2018 and 2017 are disclosed below (in thousands of dollars):

	As of June 30, 2018			As of June 30, 2017		
	Fair value[1]	Remaining unfunded commitments	Estimated remaining life[2]	Fair value[1]	Remaining unfunded commitments	Estimated remaining life[2]
Private equity funds	$ 6,848,285	$ 6,475,884	4 – 10	$ 5,845,459	$ 4,635,090	4 – 10
Real estate funds	3,900,327	1,542,336	4 – 10	1,552,640	926,382	4 – 10
Other externally managed funds[3]	2,421,899	2,868,214	2 – 8	2,352,402	1,924,219	2 – 8
TOTAL	$ 13,170,511	$ 10,886,434		$ 9,750,501	$ 7,485,691	

[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.*

Direct investments

Direct investments in real estate, natural resources and private equity are primarily valued using a combination of independent appraisals and/or one or more industry standard valuation approaches (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 in the income approach may be subjective 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. 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.

The valuation procedures performed on direct investments are based on industry standard processes for each respective asset class. The inputs utilized in any valuation model may be significant and unobservable, and require a certain degree of judgment. The University examines market data and collaborates closely with industry experts to attempt to arrive at the best estimation of fair value for each respective asset. The table below presents the ranges of significant unobservable inputs used to value the University's Level 3 assets. These ranges represent the significant unobservable inputs that were used in the valuation of each type of Level 3 asset. While the inputs described below represent the range of inputs utilized as of the measurement date, these inputs may change over time, which may have a material effect on the valuation of these types of investments in the future.

	As of June 30, 2018		As of June 30, 2017	
Significant unobservable input by asset class[1,3]	Level 3 investments subject to fair value (in thousands of dollars)[2]	Range of inputs utilized in valuation model[3]	Level 3 investments subject to fair value (in thousands of dollars)[2]	Range of inputs utilized in valuation model[3]
Natural resources:	$ 2,183,270		$ 2,695,739	
Income approach discount rate		5.0% – 16.0%		5.0% – 20.0%
Price per planted hectare		$1,386 – $158,900		$2,394 – $168,932
Price per gross hectare		$118 – $51,559		$448 – $48,560
High yield:	106,481			
Income approach discount rate		8.6%		
Shadow rating discount rate		8.4% – 9.9%		
Weighted average cost of capital		7.1% – 10.9%		
Collateral coverage market risk factor		100%		
Real estate:	40,669		3,373,294	
Income approach discount rate		13.0% – 13.5%		5.3% – 17.8%
Income approach growth rate		3.0%		
Discount for lack of marketability		15.0%		
Capitalization rate				2.3% – 8.5%
Recent financing – discount				22.5%
Loan to value				12.8% – 83.9.%
Market interest rate				2.6% – 8.3%
Private equity:	19,494		46,005	
Income approach discount rate		6.0% – 8.0%		6.0% – 8.0%
EBITDA multiple				10x
Net income multiple		5.0x		7.0x
Comparable transaction price per unit				$25 – $30
Hedge funds:	67,742		72,717	
Book value multiplier		0.8x		0.7x
Other liabilities subject to fair value	(158,008)		(177,993)	
Loan to value		8.5% – 44.0%		3.8% – 42.9%
Market interest rate		2.5% – 15.0%		2.5% – 15.0%
NET AMOUNT	$ 2,259,648		$ 6,009,762	

[1] *The fair value of investments may be determined using multiple valuation techniques.*
[2] *Included within Level 3 investments is $636,602 and $2,257,709 as of June 30, 2018 and 2017, respectively, which were valued using other inputs including, but not limited to, single source broker quotations, third party pricing and prior transactions.*
[3] *The range of inputs encompasses a variety of investment types within each asset class.*

4. 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 OTC. Certain instruments are cleared and settled through central clearing counterparties, while others are bilateral contracts between two counterparties. These instruments are used to increase or decrease exposure to a given asset class, with the goal of enhancing the returns of these asset classes. The market risk of a particular strategy is influenced by the relationship between the financial instruments with off-balance sheet risk and the offsetting positions recorded in the *Balance Sheets*. The University manages exposure to market risk through the use of industry standard analytical tools that measure the market exposure of each position within a strategy. The strategies are monitored daily, and positions are frequently adjusted in response to changes in the financial markets.

In connection with its derivative activities, the University generally 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.

The following table presents information about the University's derivatives by primary risk exposure for the years ended June 30, 2018 and 2017 (in thousands of dollars):

	As of June 30, 2018		For the year ended June 30, 2018	As of June 30, 2017		For the year ended June 30, 2017
Primary risk exposure	Gross derivative assets	Gross derivative liabilities	Net profit/(loss)[4]	Gross derivative assets	Gross derivative liabilities	Net profit/(loss)[4]
Equity instruments	$ 37,826	$ 123,157	$ 351,485	$ 94,460	$ 34,949	$ 514,977
Fixed income instruments[1]		15,481	4,010		21,944	157,210
Commodity instruments						(3,251)
Currency instruments	112,975	126,495	(91,194)	1,713,930	1,723,578	(18,609)
Credit instruments	4,770		(9)	4,842		56,111
SUBTOTAL	155,571	265,133	$ 264,292	1,813,232	1,780,471	$ 706,438
Counterparty netting[2]						
Bilateral OTC	(149,747)	(149,747)		(1,745,624)	(1,745,624)	
TOTAL COUNTERPARTY NETTING	(149,747)	(149,747)		(1,745,624)	(1,745,624)	
NET AMOUNTS INCLUDED IN THE BALANCE SHEETS[3]	5,824	115,386		67,608	34,847	
Collateral						
Cash collateral received/posted	871				6,009	
Securities collateral received/posted[5]	4,032	135,934		114,290	34,818	
TOTAL COLLATERAL	4,903	135,934		114,290	40,827	
NET AMOUNT	921	(20,548)		(46,682)	(5,980)	
NET AMOUNT IN ACCORDANCE WITH ASC 210[6]	$ 921	$ 0		$ 0	$ 0	

[1] *For the year ended June 30, 2018, balances include a gross derivative liability of $15,481 and a net gain of $4,010, related to an interest rate exchange agreement on the University's debt portfolio. For the year ended June 30, 2017, balances include a gross derivative liability of $21,944 and a net loss of $11,234 related to an interest rate exchange agreement on the University's debt portfolio. These positions are further discussed in* Note 11.

[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. Refer to* Note 3 *for information related to offsetting of certain other collateralized transactions.*

[3] *Included within the "Investment portfolio, at fair value" and "Other liabilities associated with the investment portfolio" line items of the* Balance Sheets.

[4] *Included within "Realized and change in unrealized appreciation/(depreciation), net" within the* 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.*

The following section details the accounting for each type of derivative contract, as well as the University's intended purpose for entering into each type of derivative instrument.

Options

The University purchases and sells put and call options to take advantage of expected volatility in the price of underlying instruments. When purchasing an option, the University pays a premium, which is recorded as an asset and subsequently marked-to-market to reflect the current value of the option. When the University sells (writes) an option, the premium received is recorded as a liability and subsequently marked-to-market to reflect the current fair value of the option written. Premiums paid or received from options that expire unexercised are treated as realized losses and gains, respectively. When an option is closed before expiration or exercise, the University records a realized gain or loss equal to the difference between the proceeds paid/received upon closing and the original premium paid/received.

During fiscal years 2018 and 2017, the University transacted approximately 10 and 600 equity and fixed income option trades with an average transaction size of approximately 664,000 and 78,600 contracts, respectively. During fiscal year 2018 the University did not enter into currency option contracts nor commodity option trades. During the fiscal year 2017 the University transacted approximately 100 currency option contracts with average USD equivalent notional amounts of approximately $90.4 million per contract and transacted approximately 70 commodity option trades, with an average transaction size of approximately 300 contracts.

Swap contracts

The University enters into swap contracts, which are contracts between two parties to exchange future cash flows at periodic intervals based on a notional principal amount, to increase or decrease its exposure to changes in the level of interest rates, underlying asset values and/or credit risk. Payments are exchanged at specified intervals, accrued daily commencing with the effective date of the contract and recorded as realized gains or losses. Gains or losses are realized in the event of an early termination of a swap contract. Risks of loss may include unfavorable changes in the returns of the underlying instruments or indexes, adverse fluctuations of interest rates, failure of the counterparty to perform under the terms of the agreement, and lack of liquidity in the market.

Collateral in the form of securities or cash may be posted to or received from the swap counterparty in accordance with the terms of the swap contract. Realized gains or losses are recorded relating to periodic payments received or made on swap contracts and with respect to swaps that are closed prior to termination date. When the University enters into a swap transaction, it may make or receive a payment equal to the value of the swap on the entry date and amortizes such payments to realized gain or loss over the outstanding term of the swap. The terms of the swap contracts can vary, and they are reported at fair value based on a valuation model or a counterparty provided price.

The University generally enters into credit default, interest rate, and total return swap contracts.

CREDIT DEFAULT CONTRACTS The University enters into credit derivatives to simulate long and short bond exposure that is either unavailable or considered to be less attractively priced in the bond market, or to hedge exposure obtained in the bond market. The University also uses these derivatives to reduce risk where it has exposure to the issuer, or to take an active long or short position with respect to the likelihood of an event of default. The underlying debt security on which the derivative is structured can be based on a single issuer, a "basket" of issuers, or an index. The buyer of a credit default swap is obligated to pay the seller of the credit protection a periodic stream of payments over the term of the contract in return for a contingent payment upon the occurrence of a credit event with respect to the issuer of the debt security. During fiscal year 2018 the University did not enter into credit default contracts. During fiscal year 2017, the University transacted approximately 450 credit default contracts with average notional amounts of approximately $14.0 million.

INTEREST RATE CONTRACTS The University enters into interest rate swaps to hedge certain investment positions against interest rate fluctuations; to benefit from interest rate fluctuations; to obtain better interest rate terms than it would have been able to get without the swap; or to manage the interest, cost, and risk associated with its outstanding and/or future debt. Interest rate swaps involve the exchange by the University with another party of its respective commitments to pay or receive interest at specified intervals based on a notional amount of principal. During fiscal year 2018, the University did not enter into interest rate swap nor cap/floor contracts. During fiscal year 2017, the University transacted approximately 2,800 interest rate swap and cap/floor contracts with average notional amounts of approximately $184.3 million.

TOTAL RETURN SWAPS The University enters into total return swaps to manage its exposure to market fluctuations in various asset classes. Total return swaps involve commitments to pay interest in exchange for a market linked return, both based on notional amounts. To the extent the total return of the security or index underlying the transaction exceeds or falls short of the offsetting interest rate obligation, the University will receive a payment from or make a payment to the counterparty, respectively. During fiscal year 2018, the University transacted 50 equity swap contracts with average notional amounts of approximately $30.5 million, and 39 index swap contracts with an average notional amounts of approximately $87.3 million. During fiscal year 2017, the University transacted approximately 25 commodity swap contracts with average notional amounts of approximately $33.9 million; 1,400 equity swap contracts with average notional amounts of approximately $9.4 million; 200 currency swap contracts with average notional amounts of approximately $17.8 million; and 100 credit swaps with average notional amounts of approximately $22.0 million.

Forward currency contracts

The University enters into forward currency contracts in connection with settling planned purchases or sales of securities, or to hedge the currency exposure associated with some or all of the University's portfolio securities. A forward currency contract is an agreement between two parties to buy and sell a currency at a set price on a future date. The value of a forward currency contract fluctuates with changes in forward currency exchange rates. Forward currency contracts are marked-to-market daily and the change in fair value is recorded by the University as an unrealized gain or loss. During fiscal years 2018 and 2017, the University transacted approximately 626 and 8,200 forward currency contracts with average USD equivalent notional amounts of approximately $35.7 million and $5.7 million, respectively.

Futures contracts

The University uses futures contracts to manage its exposure to financial markets, including hedging such exposures. Upon entering into a futures contract, the University is required to deposit an amount of cash or securities with its prime broker in accordance with the initial margin requirements of the broker or exchange. Futures contracts are marked-to-market daily based on settlement prices established by the board of trade or exchange on which they are traded, and an appropriate payable or receivable for the change in fair value is recorded by the University. Gains and losses are realized when the contracts expire or are closed. During fiscal years 2018 and 2017, the University transacted approximately 134 and 49,000 futures trades with an average transaction size of approximately 924 and 30 contracts, respectively.

Counterparty credit exposure

Financial instruments with off-balance sheet risk involve counterparty credit exposure. The policy of the University is to require collateral to the maximum extent possible under normal trading practices. 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. In the event of counterparty default, the University has the right to use the collateral held to offset any losses ensuing from the default event. 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. If material credit-risk-related contingency features were triggered on June 30, 2018, no additional collateral would have been due to counterparties, whereas at June 30, 2017, $8 million in additional collateral would have been due to counterparties for derivative contracts.

5. RECEIVABLES

The major components of receivables, net of reserves for doubtful accounts of $12.9 million and $10.6 million as of June 30, 2018 and 2017, respectively, were as follows (in thousands of dollars):

	2018	2017
Federal sponsored support	$ 72,148	$ 59,730
Executive education	66,837	46,824
Publications	60,424	52,280
Gift receipts	22,510	13,098
Tuition and fees	20,479	19,932
Non-federal sponsored support	14,030	21,046
Other	44,830	48,931
TOTAL RECEIVABLES, NET	$ 301,258	$ 261,841

6. 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):

	2018			2017		
	Receivable	Allowance	Net	Receivable	Allowance	Net
Student Loans:						
Government revolving	$ 59,941	$ 1,433	$ 58,508	$ 72,712	$ 1,817	$ 70,895
Institutional	87,206	2,372	84,834	87,027	2,248	84,779
Federally insured	371		371	375		375
Total student loans	147,518	3,805	143,713	160,114	4,065	156,049
Faculty and staff loans	230,335	179	230,156	217,069	179	216,890
Other loans	30,989	23,063	7,926	24,832	14,708	10,124
TOTAL	$ 408,842	$ 27,047	$ 381,795	$ 402,015	$ 18,952	$ 383,063

Government revolving loans are funded principally with federal advances to the University under the Perkins Loan Program and certain other programs. These advances totaled $65.4 million and $72.6 million as of June 30, 2018 and 2017, respectively, and are classified as liabilities in the *Balance Sheets*. The Perkins Loan Program ended during fiscal year 2018 and as a result the University made the first of its annual required repayments to the government. 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, 2018 and 2017 to be reasonable and adequate to absorb potential credit losses inherent in the loan portfolio.

7. 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 5-year taxable unsecured borrowing rate is used to discount pledges receivable upon receipt. Discounts of $91.8 million and $75.7 million for the years ended June 30, 2018 and 2017, respectively, were calculated using rates ranging from 1.3% to 3.1%.

Pledges receivable included in the financial statements as of June 30, 2018 and 2017 are expected to be realized as follows (in thousands of dollars):

	2018	2017
Within one year	$ 276,074	$ 283,376
Between one and five years	1,104,294	1,133,505
More than five years	632,340	705,632
Less: discount and allowance for uncollectible pledges	(174,916)	(174,487)
TOTAL PLEDGES RECEIVABLE, NET	**$ 1,837,792**	**$ 1,948,026**

Pledges receivable as of June 30, 2018 and 2017 have been designated for the following purposes (in thousands of dollars):

	2018	2017
General Operating Account balances:		
Gifts for current use	$ 552,268	$ 550,819
Non-federal sponsored awards	127,140	99,623
Facilities and loan funds	222,735	222,626
Total General Operating Account balances	902,143	873,068
Endowment	935,649	1,074,958
TOTAL PLEDGES RECEIVABLE, NET	**$ 1,837,792**	**$ 1,948,026**

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 $59.5 million and $49.1 million as of June 30, 2018 and 2017, respectively.

8. 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, 2018 and 2017 are summarized as follows (in thousands of dollars):

	2018	2017	Estimated useful life (in years)
Research facilities	$ 2,376,412	$ 2,302,795	*
Classroom and office facilities	2,046,484	1,831,097	35
Housing facilities	2,010,649	1,757,609	35
Other facilities	427,397	414,587	35
Service facilities	751,236	733,956	35
Libraries	487,598	483,836	35
Museums and assembly facilities	788,587	783,536	35
Athletic facilities	223,072	191,782	35
Land	968,922	967,978	N/A
Construction in progress	1,337,279	1,079,120	N/A
Equipment	1,289,975	1,288,717	**
SUBTOTAL AT COST	12,707,611	11,835,013	
Less: accumulated depreciation	(4,975,439)	(4,709,115)	
FIXED ASSETS, NET	$ 7,732,172	$ 7,125,898	

* *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 $292.8 million and $260.7 million as of June 30, 2018 and 2017, 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 of $174.4 million and $135.0 million, which are included in "Deferred revenue and other liabilities" in the *Balance Sheets* as of June 30, 2018 and 2017, respectively.

9. ENDOWMENT AND GENERAL OPERATING ACCOUNT NET ASSETS

The University's endowment consists of 13,789 separate funds established over many years for a wide variety of purposes. Endowment fund balances, including funds functioning as endowment, are classified and reported as unrestricted, temporarily restricted, or permanently restricted net assets in accordance with donor specifications and state law. Net unrealized losses on permanently restricted endowment funds are classified as a reduction to unrestricted net assets until such time as the fair value equals or exceeds historic dollar value. Unrestricted net assets were reduced by $2.6 million and $3.4 million for such losses in fiscal year 2018 and 2017, respectively. Although funds functioning as endowment are not subject to donor restrictions, decisions to spend their principal require the approval of the Corporation. All but a small fraction of the endowment is invested in the GIA *(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 endowment consisted of the following as of June 30, 2018 and 2017 (in thousands of dollars):

	2018				2017
	Unrestricted	Temporarily restricted	Permanently restricted	Total	Total
Endowment funds	$ (2,648)	$ 20,737,189	$ 7,378,054	$ 28,112,595	$ 26,615,944
Funds functioning as endowment	6,759,901	3,048,618		9,808,519	9,041,146
Pledge balances		326,769	608,880	935,649	1,074,958
Interests in trusts held by others		12,514	364,459	376,973	364,426
TOTAL ENDOWMENT	$ 6,757,253	$ 24,125,090	$ 8,351,393	$ 39,233,736	$ 37,096,474

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.

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 2018, the endowment distribution approved by the Corporation (prior to decapitalizations) was equal to 5.2% 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 $1.8 billion in both fiscal year 2018 and 2017, 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 $46.0 million and $53.5 million in fiscal year 2018 and 2017, respectively. These additional decapitalizations, in combination with the endowment distribution, resulted in an aggregate payout rate of 5.3% and 5.4% in fiscal year 2018 and 2017, 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.

The GOA consisted of the following as of June 30, 2018 and 2017 (in thousands of dollars):

	2018				2017
	Unrestricted	Temporarily restricted	Permanently restricted	Total	Total
General Operating Account	$ 4,592,384	$ 2,480,144	$ 98,769	$ 7,171,297	$ 6,455,723

The temporarily restricted net assets consist primarily of unexpended income, gifts, and pledges. The permanently restricted net assets are loan funds.

10. 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 *Balance Sheets*. Additional disclosures are included in *Note 3*. The publicly-traded securities are included as Level 1 and externally managed investments are included in investments measured using the practical expedient in the fair value hierarchy table 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 3.1% and 2.3% as of June 30, 2018 and 2017, respectively

The changes in split interest agreement net assets for fiscal years 2018 and 2017 were as follows (in thousands of dollars):

	2018			2017
	Temporarily restricted	Permanently restricted	Total	Total
Investment return:				
Investment income	$ 2,695	$ 8,670	$ 11,365	$ 13,280
Change in realized and unrealized appreciation, net	23,947	77,027	100,974	123,926
Total investment return	26,642	85,697	112,339	137,206
Gifts *(Note 15)**	6,524	5,642	12,166	19,606
Payments to annuitants	(15,588)	(50,140)	(65,728)	(64,659)
Transfers to endowment	(5,229)	(20,478)	(25,707)	(29,243)
Transfers between SIA and the GOA	(12,637)	(24)	(12,661)	(15,204)
Change in liabilities and other adjustments	1,231	3,629	4,860	(15,690)
NET CHANGE DURING THE YEAR	943	24,326	25,269	32,016
Total split interest agreement net assets, beginning of year	53,838	480,044	533,882	501,866
TOTAL SPLIT INTEREST AGREEMENT NET ASSETS, end of year	$ 54,781	$ 504,370	$ 559,151	$ 533,882

* *Shown at net present value. The undiscounted value of these gifts was $29,287 and $42,217 for the years ended June 30, 2018 and 2017, respectively.*

Split interest agreement net assets as of June 30, 2018 and 2017 consisted of the following (in thousands of dollars):

	2018	2017
Split interest agreement investments *(Note 3)*		
Charitable remainder trusts	$ 924,576	$ 896,451
Charitable lead trusts	125,341	123,396
Charitable gift annuities	250,473	230,352
Pooled income funds	121,174	124,419
Total split interest agreement investments[1]	1,421,564	1,374,618
Liabilities due under split interest agreements:		
Amounts due to beneficiaries	(801,355)	(779,885)
Amounts due to other institutions	(61,058)	(60,851)
Total liabilities due under split interest agreements	(862,413)	(840,736)
TOTAL SPLIT INTEREST AGREEMENT NET ASSETS, end of year	$ 559,151	$ 533,882

[1] *For the year ended June 30, 2018, $820,725 of SIA investments are held in the pooled general investment account and $600,839 of SIA investments are held in the other investments outside the general investment account. For the year ended June 30, 2017, $789,972 of SIA investments are held in the pooled general investment account and $584,646 of SIA investments are held in the other investments outside the general investment account. Refer to* Note 3.

11. BONDS AND NOTES PAYABLE

Bonds and notes payable as of June 30, 2018 and 2017 were as follows (in thousands of dollars):

	Fiscal year of issue	Years to final maturity[1]	One-year yield[2]	Outstanding principal 2018[3]	2017[3]
Tax-exempt bonds and notes payable:					
Variable-rate demand bonds and commercial paper:					
Series R – daily	2000-2006	14	0.9%	$ 131,200	$ 131,200
Series Y – weekly	2000	17	1.1%	117,905	117,905
Total variable-rate bonds and notes payable			1.0%	249,105	249,105
Fixed-rate bonds:					
Series N (par value, $80,000)	1992	2	6.3%	79,815	79,714
Series 2009A (par value, $22,645)	2009		4.8%	22,692	45,513
Series 2010A (par value, $49,590)	2010	3	4.6%	52,134	52,861
Series 2010B (par value, $110,235)	2011	6	4.7%	115,891	117,938
Series 2016A (par value, $1,539,720)	2017	22	3.8%	1,886,801	1,912,871
Total fixed-rate bonds			4.0%	2,157,333	2,208,897
Total tax-exempt bonds and notes payable			**3.7%**	**2,406,438**	**2,458,002**
Taxable bonds and notes payable:					
Variable-rate bonds:					
Commercial paper	2012	<1	1.6%	262,798	343,341
Total variable-rate bonds			1.6%	262,798	343,341
Fixed-rate bonds:					
Series 2008A (par value, $243,000)	2008	20	5.6%	242,875	242,869
Series 2008C (par value, $125,205)	2008		5.3%	125,205	125,205
Series 2008D (par value, $500,000)	2009	21	6.5%	498,751	498,691
Series 2010C (par value, $300,000)	2011	22	4.9%	298,506	298,439
Series 2013A (par value, $402,000)	2013	19	3.4%	402,000	402,000
Series 2016B (par value, $1,000,000)	2017	38	3.3%	995,643	995,521
Total fixed-rate bonds			4.4%	2,562,980	2,562,725
Total taxable bonds and notes payable			**4.1%**	**2,825,778**	**2,906,066**
Other notes payable	Various	Various	Various	87,057	86,773
Unamortized bond issuance costs				(18,352)	(19,751)
TOTAL BONDS AND NOTES PAYABLE			**4.0%**	**$ 5,300,921**	**$ 5,431,090**

[1] *The weighted average maturity of the portfolio on June 30, 2018 was 18.2 years.*
[2] *Exclusive of interest rate exchange agreement. Inclusive of this agreement, the overall portfolio rate was 0.04% higher.*
[3] *Balances include original issuance premiums/discounts.*

Interest expense related to bonds and notes payable was $187.5 million and $201.1 million for fiscal 2018 and 2017, respectively. The interest expense in the *Statement of Changes in Net Assets with General Operating Account Detail* includes additional components related to capital leases. The aggregate amount of scheduled principal payments, including maturing commercial paper but excluding unamortized discounts and premiums, underwriter's discount and unamortized cost of issuance fees are (in thousands of dollars):

Fiscal year	Principal payments
2019	$ 410,300
2020	117,999
2021	88,185
2022	109,619
2023	54,890
Thereafter	4,190,360
TOTAL PRINCIPAL PAYMENTS	**$ 4,971,353**

The University is rated Aaa by Moody's Investors Service and AAA by Standard & Poor's Global Ratings. The Standard & Poor's rating was re-affirmed in November 2017 and the Moody's Investors Service rating was re-affirmed in December 2017.

The University has two unsecured, revolving credit facilities totaling $1.5 billion, both of which expire in January 2020. There was no outstanding drawn balance on either of these credit facilities at June 30, 2018.

As of June 30, 2018, the University had $249.1 million of variable-rate demand bonds outstanding (excluding commercial paper) with either a daily or weekly interest rate reset, as noted in the bonds and notes payable table. 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 2018, 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 debt.

The fair value of the interest rate exchange agreement was $(15.5) million and $(21.9) million as of June 30, 2018 and 2017, respectively and is recorded in "Other liabilities associated with the investment portfolio" on the University's *Balance Sheets*.

12. 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.

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 $828.1 million and $836.5 million as of June 30, 2018 and 2017, respectively. During fiscal years 2018 and 2017, the University made cash contributions to the defined benefit pension plan of $15.5 million and $13.4 million, respectively. The University recorded expenses for its defined contribution plans of $141.5 million and $135.0 million for fiscal year 2018 and 2017, respectively.

Postretirement health benefits

The University provides postretirement health coverage and life insurance to substantially all of its employees. As of June 30, 2018, the University had internally designated and invested $692.2 million to fund the postretirement health benefit accrued liability of $806.7 million. As of June 30, 2017, the University had internally designated and invested $633.6 million to fund the postretirement health benefit accrued liability of $853.0 million.

The following table sets forth the pension and postretirement plans' funded status that is reported in the *Balance Sheets* as of June 30, 2018 and 2017 (in thousands of dollars):

	Pension benefits		Postretirement health benefits	
	2018	2017	2018	2017
Change in projected benefit obligation:				
Projected benefit obligation, beginning of year	$ 1,075,728	$ 1,105,690	$ 853,003	$ 941,815
Service cost	11,233	12,274	34,645	40,155
Interest cost	42,418	42,056	35,522	37,872
Plan participants' contributions			3,377	3,449
Plan change[1]			(193)	(5,094)
Gross benefits paid	(44,157)	(40,459)	(23,555)	(24,247)
Actuarial (gain)/loss	(80,260)	(43,833)	(96,085)	(140,947)
PROJECTED BENEFIT OBLIGATION, end of year[2]	1,004,962	1,075,728	806,714	853,003
Change in plan assets:				
Fair value of plan assets, beginning of year	836,456	803,659		
Actual return on plan assets	20,302	59,832		
Employer contributions	15,523	13,424		
Gross benefits paid	(44,157)	(40,459)		
FAIR VALUE OF PLAN ASSETS, end of year	828,124	836,456	0	0
UNFUNDED STATUS[3]	$ (176,838)	$ (239,272)	$ (806,714)	$ (853,003)

[1] *The postretirement plan change of $(193) in fiscal year 2018 and $(5,094) in fiscal year 2017, reflects plan changes for union employees, effective January 1, 2016, that increased cost-sharing and the length of service needed for the maximum subsidy.*
[2] *Measurement of the University's pension benefit obligation including assumed salary increases (required by GAAP).*
[3] *These amounts totaling $983,552 as of June 30, 2018 and $1,092,275 as of June 30, 2017 are included in the "Accrued Retirement Obligations" line in the* 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 $860.8 million and $908.7 million at June 30, 2018 and 2017, respectively. 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, 2018.

Net periodic benefit cost

Components of net periodic benefit cost recognized in operating activity and other amounts recognized in non-operating activity in unrestricted net assets in the *Statements of Changes in Net Assets with General Operating Account Detail* are summarized as follows for the years ended June 30, 2018 and 2017 (in thousands of dollars):

	Pension benefits		Postretirement health benefits	
	2018	2017	2018	2017
Components of net periodic benefit cost:				
Service cost	$ 11,233	$ 12,274	$ 34,645	$ 40,155
Interest cost	42,418	42,056	35,522	37,872
Expected return on plan assets	(50,426)	(49,030)		
Amortization of:				
Actuarial loss/(gain)	10,088	15,710	(6,564)	
Prior service cost/(credit)	288	288	(7,116)	(6,693)
Total net periodic benefit cost recognized in operating activity	13,601	21,298	56,487	71,334
Other amounts recognized in non-operating activity in unrestricted net assets:				
Current year net actuarial loss/(gain)	(50,136)	(54,635)	(96,085)	(140,947)
Current year net prior service cost			(193)	(5,094)
Amortization of:				
Prior service (cost)/credit	(288)	(288)	7,116	6,693
Actuarial (loss)/gain	(10,088)	(15,710)	6,564	
Total other amounts recognized in non-operating activity[1]	(60,512)	(70,633)	(82,598)	(139,348)
Total recognized in *Statements of Changes in Net Assets with General Operating Account Detail*	$ (46,911)	$ (49,335)	$ (26,111)	$ (68,014)

[1] *These amounts totaling $(143,110) in fiscal year 2018 and $(209,981) in fiscal year 2017 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* Statements of Changes in Net Assets with General Operating Account Detail.

Cumulative amounts recognized as non-operating changes in unrestricted net assets are summarized as follows for the years ended June 30, 2018 and 2017 (in thousands of dollars):

	Pension benefits		Postretirement health benefits	
	2018	2017	2018	2017
Net actuarial loss/(gain)	$ 97,697	$ 157,921	$ (266,133)	$ (176,612)
Prior service cost/(credit)	1,469	1,756	(53,589)	(60,512)
Cumulative amounts recognized in unrestricted net assets	$ 99,166	$ 159,677	$ (319,722)	$ (237,124)

The estimated net actuarial loss and prior service cost for the defined benefit plan that will be amortized from unrestricted net assets into net periodic benefit (income)/cost in fiscal year 2019 are \$3.3 million and \$0.3 million, respectively. The estimated net actuarial gain and estimated prior service credit for the postretirement health benefit that will be amortized from unrestricted net assets into net periodic benefit (income)/cost in fiscal year 2019 are (\$13.3) million and (\$7.1) million, respectively.

Other assumptions and health care cost trend rates used in determining the year end obligation as well as the net periodic benefit (income)/cost of the pension and postretirement health plans are summarized as follows for fiscal years 2018 and 2017:

	Pension benefits		Postretirement health benefits	
	2018	2017	2018	2017
Weighted-average assumptions used to determine benefit obligation as of June 30:				
Discount rate	4.30%	4.00%	4.20%	4.05%
Compensation increase trend:				
Initial rate	3.00%	3.00%	3.00%	3.00%
Ultimate rate	4.00%	4.00%	4.00%	4.00%
Year of ultimate	2021	2021	2021	2021
Health care cost trend rate:				
Initial rate	N/A	N/A	5.00%	5.50%
Ultimate rate	N/A	N/A	4.75%	4.75%
Year of ultimate	N/A	N/A	2023	2023
Weighted-average assumptions used to determine net periodic benefit (income)/cost:				
Discount rate	4.00%	3.85%	4.05%	3.90%
Expected long-term rate of return on plan assets	6.50%	6.50%	N/A	N/A
Compensation increase trend:				
Initial rate	3.00%	3.00%	3.00%	3.00%
Ultimate rate	4.00%	4.00%	4.00%	4.00%
Year of ultimate	2021	2021	2021	2021
Health care cost trend rate:				
Initial rate	N/A	N/A	5.50%	6.00%
Ultimate rate	N/A	N/A	4.75%	4.75%
Year of ultimate	N/A	N/A	2023	2023

As an indicator of sensitivity, a one percentage point change in assumed health care cost trend rate would affect 2018 as shown in the following table (in thousands of dollars):

	1% point increase	1% point decrease
Effect on 2018 postretirement health benefits service and interest cost	$ 20,034	$ (12,732)
Effect on postretirement health benefits obligation as of June 30, 2018	185,371	(122,899)

The expected return on pension plan assets is determined by utilizing HMC'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, 2018 and 2017, along with target allocations for June 30, 2019, is as follows:

	2019 Target	June 30, 2018	June 30, 2017
Asset allocation by category for pension plan:			
Equity securities	30-55%	38.8%	37.7%
Fixed income securities	30-50	48.9	45.3
Real estate	0-5	0.0	1.0
Hedge funds	10-30	10.9	12.9
Cash	0-5	1.4	3.1
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 2018, the University maintained its allocation to fixed income securities to manage the interest rate volatility associated with its pension obligations. The University expects to continue 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, 2018 and 2017 (in thousands of dollars):

	2018					2017
	Level 1	Level 2	Level 3	NAV as practical expedient	Total	Total
PLAN ASSETS:						
Cash and short-term investments	$ 21,951				$ 21,951	$ 34,158
Domestic equity	24			$ 145,965	145,989	128,142
Foreign equity	73,244			33,857	107,101	95,735
Domestic fixed income	99,104	$ 259,522			358,626	336,892
Foreign fixed income		21,110			21,110	20,200
Emerging market equity and debt	32,291	11,425		26,474	70,190	71,784
Hedge funds				89,505	89,505	105,391
Due from brokers	330				330	404
Buy-sell backs		25,962			25,962	0
Private equity				8,994	8,994	25,935
Real estate				34	34	8,361
PLAN ASSETS SUBJECT TO FAIR VALUE LEVELING	$ 226,944	$ 318,019	$ 0	$ 304,829	$ 849,792	$ 827,002
Other assets not subject to fair value					3,007	9,454
TOTAL PLAN ASSETS					$ 852,799	$ 836,456
PLAN LIABILITIES:						
Due to brokers		$ 22			$ 22	
Forward sale commitment		20,022			20,022	
PLAN LIABILITIES SUBJECT TO FAIR VALUE LEVELING		$ 20,044			$ 20,044	
Other liabilities not subject to fair value					4,631	
TOTAL PLAN LIABILITIES					$ 24,675	

The following is a rollforward of Level 3 investments for the year ended June 30, 2018 (in thousands of dollars):

	Beginning balance as of July 1, 2017	Net realized gains/ (losses)	Net change in unrealized appreciation (depreciation)	Purchases/ contributions	Sales/ distributions	Transfers into Level 3	Transfers out of Level 3	Ending balance as of June 30, 2018
PLAN ASSETS:								
Private equity	$ 15,445	$ (17,606)	$ 12,382	$ 7	$ (10,228)			$ 0
Real estate	8,264	(9,555)	8,755		(7,464)			0
PLAN ASSETS SUBJECT TO FAIR VALUE LEVELING	$ 23,709	$ (27,161)	$ 21,137	$ 7	$ (17,692)	$ 0	$ 0	$ 0

The following is a rollforward of Level 3 investments for the year ended June 30, 2017 (in thousands of dollars):

	Beginning balance as of July 1, 2016	Net realized gains/ (losses)	Net change in unrealized appreciation (depreciation)	Purchases/ contributions	Sales/ distributions	Transfers into Level 3[1]	Transfers out of Level 3	Ending balance as of June 30, 2017
PRIOR YEAR NET ASSETS SUBJECT TO FAIR VALUE LEVELING	$ 0	$ 4,412	$ (2,877)	$ 64	$ (9,627)	$ 31,737	$ 0	$ 23,709

[1] *Private equity and real estate investments valued using a secondary sale price were transferred into Level 3.*

Expected future benefit payments

Employer contributions of $14.9 million are expected for fiscal year 2019 to fund the pension benefit plan.

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

	Expected benefit payments	
Fiscal year	Pension	Postretirement health
2019	$ 55,212	$ 21,334
2020	55,889	23,809
2021	58,323	25,950
2022	60,646	28,030
2023	62,673	30,266
Thereafter	336,191	188,409

13. STUDENT FINANCIAL AID

Financial aid granted to students is summarized as follows for the years ended June 30, 2018 and 2017 (in thousands of dollars):

	2018	2017
Scholarships and other student awards:		
Scholarships applied to student income	$ 439,445	$ 413,870
Scholarships and other student awards paid directly to students	152,421	147,555
Total scholarships and other student awards	591,866	561,425
Student employment	76,133	74,074
Student loans	15,943	21,519
Agency financial aid[1]	19,564	19,282
TOTAL STUDENT FINANCIAL AID	$ 703,506	$ 676,300

[1] *Represents aid from sponsors for which the University acts as an agent for the recipient.*

14. SPONSORED SUPPORT

Total expenditures funded by US government sponsors or by institutions that subcontract federally-sponsored projects to the University were $625.3 million and $618.1 million in fiscal year 2018 and 2017, 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. The University recognizes revenue associated with direct costs as the related costs are incurred. 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 and the Medical School (including the School of Dental Medicine) through fiscal year 2019 and for T.H. Chan School of Public Health through fiscal year 2023. Funds received for federally-sponsored activity are subject to audit.

15. GIFTS

Gifts are classified as unrestricted, temporarily restricted, or permanently restricted net assets in accordance with donor specifications.

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

Gifts received for the year ended June 30, 2018 are summarized as follows (in thousands of dollars):

	2018		
	Gifts received	Donor redesignations/ other changes	Total
Current use	$ 466,991	$ (445)	$ 466,546
Non-federal sponsored grants	183,331	(2,258)	181,073
Endowment funds[1]	646,340	(41)	646,299
Split interest agreements[2]	12,166		12,166
Loan funds and facilities	109,410	(183)	109,227
TOTAL GIFTS	**$ 1,418,238**	**$ (2,927)**	**$ 1,415,311**

[1] *Gift receipts include non-cash gifts of $10 million for the year ended June 30, 2018.*
[2] *Shown at net present value. The undiscounted value of these gifts was $29,287 for the year ended June 30, 2018.*

Gifts received for the year ended June 30, 2017 are summarized as follows (in thousands of dollars):

	2017		
	Gifts received	Donor redesignations/ other changes	Total
Current use	$ 450,978	$ (1,039)	$ 449,939
Non-federal sponsored grants	153,566	(1,677)	151,889
Endowment funds	514,639	35,890	550,529
Split interest agreements[1]	19,606		19,606
Loan funds and facilities	142,098	(32,020)	110,078
TOTAL GIFTS	**$ 1,280,887**	**$ 1,154**	**$ 1,282,041**

[1] *Shown at net present value. The undiscounted value of these gifts was $42,217 for the year ended June 30, 2017.*

16. OTHER REVENUE

The major components of other revenue for the years ended June 30, 2018 and 2017 were as follows (in thousands of dollars):

	2018	2017
Publications and royalties from copyrights	$ 226,757	$ 216,377
Rental and parking[1]	135,529	134,974
Services income	120,309	103,463
Health and clinic fees	61,211	53,937
Royalties from the commercialization of intellectual property[2]	54,573	36,289
Sales income	29,665	31,695
Interest income	10,699	10,390
Other student income	5,421	5,463
Other	44,560	45,722
TOTAL OTHER REVENUE	**$ 688,724**	**$ 638,310**

[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 distributions to external parties.*

17. OTHER EXPENSES

The major components of other expenses for the years ended June 30, 2018 and 2017 were as follows (in thousands of dollars):

	2018	2017
Subcontract expenses under sponsored projects	$ 165,445	$ 167,416
Travel	99,555	96,199
Publishing	46,223	47,671
Advertising	36,113	29,543
Taxes and Fees	35,278	31,445
Postage	18,073	19,047
Insurance	17,182	16,977
Telephone	14,398	13,942
Other	79,511	92,989
TOTAL OTHER EXPENSES	$ 511,778	$ 515,229

18. FUNCTIONAL CLASSIFICATION OF OPERATING EXPENSES

Operating expenses are allocated functionally on a direct basis. Operations and maintenance expenses are allocated based on square footage. During the fiscal year 2017, the University adjusted certain functional expense classifications to better align with industry practice.

Operating expenses by functional classification for the years ended June 30, 2018 and 2017 were as follows (in thousands of dollars):

	2018	2017
Instruction	$ 1,263,491	$ 1,193,349
Research	1,109,831	1,077,541
Institutional support	911,993	911,811
Academic support	633,466	614,877
Auxiliary services	564,217	557,406
Student services	203,899	203,323
Libraries	179,639	178,723
Scholarships and other student awards	152,421	147,555
TOTAL EXPENSES	$ 5,018,957	$ 4,884,585

19. COMMITMENTS AND CONTINGENCIES

Lease commitments

The University is the lessee of equipment and space under operating (rental) and capital leases. Rent expense related to leases was $86.0 million and $76.5 million in fiscal year 2018 and 2017, respectively.

Future minimum lease payments under these operating and capital leases (in thousands of dollars):

	Operating	Capital
2019	$ 78,381	$ 16,431
2020	66,408	11,665
2021	59,236	10,943
2022	54,093	11,215
2023	50,342	11,276
Thereafter	321,648	163,027
TOTAL FUTURE MINIMUM PAYMENTS	$ 630,108	$ 224,557

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, 2018 totaled approximately $621.6 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.

Utilities purchase commitments

The University has entered into Power Purchase Agreements (PPAs) with a series of utilities providers to purchase natural gas and electricity for various quantities and time periods. As of June 30, 2018, future obligations under the PPAs are as follows (in thousands of dollars):

2019	$ 19,737
2020	16,595
2021	12,328
2022	6,631
2023	5,579
Thereafter	11,661
TOTAL UTILITY FUTURE PURCHASE OBLIGATIONS	$ 72,531

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 25, 2018, 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.

PRESIDENT AND FELLOWS OF HARVARD COLLEGE

LAWRENCE S. BACOW
President

PAUL J. FINNEGAN
Treasurer

JAMES W. BREYER
KENNETH I. CHENAULT
SUSAN L. GRAHAM
WILLIAM F. LEE
BIDDY MARTIN
JESSICA TUCHMAN MATHEWS
KAREN GORDON MILLS
PENNY PRITZKER
DAVID M. RUBENSTEIN
SHIRLEY M. TILGHMAN
THEODORE V. WELLS, JR.

BOARD OF OVERSEERS

GERALDINE ACUÑA-SUNSHINE
MICHAEL BROWN
SUSAN L. CARNEY
P. LINDSAY CHASE-LANSDALE
R. MARTIN CHÁVEZ
PAUL L. CHOI
MARIANO-FLORENTINO "TINO" CUÉLLAR
PHILIP HART CULLOM
DARIENNE B. DRIVER
FERNANDE R. V. DUFFLY
CHRISTOPHER B. FIELD
HELENA BUONANNO FOULKES
BRIAN GREENE
CARLA A. HARRIS
JAMES E. K. HILDRETH
MEREDITH "MAX" HODGES
MARILYN HOLIFIELD
KETANJI BROWN JACKSON
BETH Y. KARLAN
DEANNA LEE
MICHAEL LYNTON
SANJAY H. PATEL
ALEJANDRO RAMÍREZ MAGAÑA
DIEGO A. RODRIGUEZ
LESLEY FRIEDMAN ROSENTHAL
YVETTE ROUBIDEAUX
LESLIE P. TOLBERT
KENT WALKER
JOHN SILVANUS WILSON, JR. – ON LEAVE
GWILL E. YORK

OFFICERS

LAWRENCE S. BACOW
President

PAUL J. FINNEGAN
Treasurer

ALAN M. GARBER
Provost

KATHERINE N. LAPP
Executive Vice President

ROBERT W. IULIANO
Senior Vice President and General Counsel

PAUL ANDREW
Vice President for Public Affairs and Communications

MARC GOODHEART
Vice President and Secretary of the University

MARILYN HAUSAMMANN
Vice President for Human Resources

THOMAS J. HOLLISTER
Vice President for Finance and Chief Financial Officer

ANNE H. MARGULIES
Vice President and Chief Information Officer

TAMARA ELLIOTT ROGERS
Vice President for Alumni Affairs and Development

LEAH ROSOVSKY
Vice President for Strategy and Programs

SARAH E. THOMAS
Vice President for the Harvard Library

MEREDITH WEENICK
Vice President for Campus Services

About Harvard /

Harvard's President & Leadership

Harvard's leadership is responsible for the strategic vision for the University.

Lawrence S. Bacow leads Harvard, and is the 29th President of the University.

The Office of the Provost, led by Provost Alan M. Garber, fosters collaboration across the University and manages changes in policies and practices that affect the academic life of the university as a whole. The Schools are led by officers and deans, who are responsible for Harvard's academic programs and curricula.

Governance

By charter, Harvard has two governing boards—the President and Fellows of Harvard College (also known as the Corporation) and the Board of Overseers. The basic architecture of the two-board system is defined by the University's charter, which is reflected in a series of documents dating to the mid-seventeenth century. Through their complementary efforts, the two boards perform the essential roles ordinarily associated with a board of trustees, while helping to shape the University's agenda, inquiring into the quality and progress of its activities, and assuring that Harvard remains true to its mission.

Chartered in 1650, the Corporation exercises fiduciary responsibility with regard to the University's academic, financial, and physical resources and overall well-being. It consists of the President, the Treasurer, and other members known as Fellows. The Corporation is in the process of expanding from seven to thirteen members and elaborating its committee structure, in light of reforms adopted by the governing boards in December 2010. The Corporation engages with both questions of long-range strategy, policy, and planning as well as transactional matters of unusual consequence. It serves as a confidential sounding board for the President on matters of importance; meets with deans, vice presidents, and others from time to time to discuss a wide array of programs and plans; and is responsible for approving the University's budgets, major capital projects, endowment spending, tuition charges, and other matters.

The Board of Overseers is the larger of the two boards, comprising thirty elected members as well as the President and the Treasurer of the University, who serve ex officio. Members are elected by Harvard degree holders other than Corporation members and University officers. Typically, five new Overseers are elected each year to staggered six-year terms, from a slate of eight or more nominees. Drawing on the wide-ranging experience and expertise of its members, the Board exerts broad influence over the University's strategic directions, provides counsel to the University leadership on priorities and plans, and has the power of consent to certain actions of the Corporation. The Board's chief functions include superintendence of the visitation process, the principal mechanism for periodic external review of the quality and direction of the University's schools, departments, and selected other programs and activities. The Board carries out this responsibility largely through the operation of more than fifty visiting committees, whose work is overseen by and reported to the Board.

President and Fellows (Harvard Corporation)

The oldest corporation in the Western Hemisphere is the Harvard Corporation, known formally as the President and Fellows of Harvard College. It is the smaller of Harvard's two governing boards; the other is the Board of Overseers. Following are the members of the Harvard Corporation.

Lawrence S. Bacow, President

SB '72, MIT

JD '76, MPP '76, PhD '78, Harvard

Lawrence S. Bacow took office as Harvard's 29th president on July 1, 2018. For more, please visit Office of the President.

James W. Breyer

Fellow (began service in 2013)

BS '83, Stanford

MBA '87, Harvard

More: Breyer elected to Harvard Corporation

Kenneth I. Chenault

Fellow (began service in 2014)

BA '73, Bowdoin

JD '76, Harvard

More: Chenault and Mills to join Harvard Corporation

Paul J. Finnegan

Fellow (2012-2014)

Treasurer (began service in 2014)

AB '75, MBA '82, Harvard

More: Finnegan elected to Corporation

Susan L. Graham

Fellow (began service in 2011)

AB '64, Harvard

MS '66, PhD '71, Stanford

More: Three to Join Harvard Corporation

William F. Lee

Fellow (began service in 2010)

Senior Fellow (began service in 2014)

AB '72, Harvard

MBA '76, JD '76, Cornell

More: Corporation transitions planned for 2014

Biddy Martin

Fellow (began service in 2018)

BA '73, College of William and Mary

MA '74, Middlebury College

PhD '85, U. of Wisconsin, Madison

More: Harvard Corporation elects two new members

Jessica Tuchman Mathews

Fellow (began service in 2013)

AB '67, Radcliffe

PhD '73, Caltech

More: Mathews Wells elected

Karen Gordon Mills

Fellow (began service in 2014)

AB '75, MBA '77, Harvard

More: Chenault and Mills to join Harvard Corporation

Penny Pritzker

Fellow (began service in 2018)

AB '81, Harvard

JD '85, MBA '85, Stanford

More: Harvard Corporation elects two new members

David M. Rubenstein

Fellow (began service in 2017)

BA '70, Duke

JD '73, Chicago

More: New member of Harvard Corporation

Shirley M. Tilghman

Fellow (began service in 2016)

BSc '68, Queen's U.

PhD '75, Temple U.

LLD (hon.) '04, Harvard

More: Tilghman named to Harvard Corporation

Theodore V. Wells, Jr.

Fellow (began service in 2013)

BA '72, Holy Cross

JD '76, MBA '76, Harvard

More: Mathews Wells elected

https://www.harvard.edu/about-harvard/harvards-leadership/president-and-fellows-harvard-corporation

Board of Overseers

Members of the Board of Overseers are elected by Harvard degree holders. Following are the board's current members, with their terms of service shown in parentheses:

Geraldine Acuña-Sunshine (2018-2024)
Boston, MA
President, Sunshine Care Foundation for Neurological Care and Research

Michael Brown (2014-2020)
Boston, MA
CEO and Co-Founder, City Year

P. Lindsay Chase-Lansdale (2016-2022)
Evanston, IL
Frances Willard Professor of Human Development and Social Policy and Associate Provost for Faculty, Northwestern University

Alice Hm Chen (2019-2025)
San Francisco, CA
Chief Medical Officer, San Francisco Health Network; Professor of Medicine, University of California, San Francisco

R. Martin Chávez (2015-2021)
New York, NY
Vice Chairman and Global Co-Head of the Securities Division, The Goldman Sachs Group, Inc.

Paul L. Choi (2017-2023)
Chicago, IL
Partner, Sidley Austin LLP

Philip Hart Cullom (2018-2024)
Gaithersburg, MD
Vice Admiral (retired), U.S. Navy

Darienne B. Driver (2017-2023)
Milwaukee, WI
President and CEO, United Way for Southeastern Michigan

Fernande R. V. Duffly (2015-2021)
Cambridge, MA
Former Associate Justice, Massachusetts Supreme Judicial Court

Janet Echelman (2019-2023)
Brookline, MA
Visual Artist

Helena Buonanno Foulkes (2016-2022)
New York, NY
Chief Executive Officer, Hudson's Bay Company

Brian Greene (2015-2021)
New York, NY

Professor of Physics, Professor of Mathematics, and Director, Center for Theoretical Physics, Columbia University

Carla Harris (2017-2023)
New York, NY
Vice Chair of Wealth Management, Senior Client Advisor and Managing Director, Morgan Stanley

Meredith "Max" Hodges (2018-2024)
Boston, MA
Executive Director, Boston Ballet

Marilyn Holifield (2018-2024)
Miami, FL
Partner, Holland & Knight LLP

Vivian Hunt (2019-2025)
London, England
Managing Partner, McKinsey & Company, United Kingdom

Tyler Jacks (2019-2025)
Cambridge, MA
Koch Professor of Biology, Massachusetts Institute of Technology; and Director, Koch Institute for Integrative Cancer Research

Ketanji Brown Jackson (2016-2022)
Washington, DC
Judge, U.S. District Court for the District of Columbia

Beth Y. Karlan (2015-2021)
Los Angeles, CA

Professor of Obstetrics and Gynecology, David Geffen School of Medicine, and Director of Cancer Population Genetics, University of California at Los Angeles

John B. King, Jr. (2019-2025)
Washington, DC
CEO, The Education Trust

Michael M. Lynton (2012-2020)
New York, NY
Chairman, Snap Inc.

Alejandro Ramírez Magaña (2016-2022)
Mexico City, Mexico
CEO, Cinépolis

Diego A. Rodriguez (2018-2020)
Palo Alto, CA
Executive Vice President, Chief Product and Design Officer, Intuit Inc.

Lesley Friedman Rosenthal (2014-2020)
New York, NY
Chief Operating Officer and Corporate Secretary, The Juilliard School

Yvette Roubideaux (2018-2024)
Washington, DC
Director, Policy Research Center, National Congress of American Indians

Leslie P. Tolbert (2017-2023)
Tucson, AZ
Regents' Professor Emerita, Department of Neuroscience, University of Arizona

Reshma Saujani (2019-2025)
New York, NY
Founder and CEO, Girls Who Code

Kent Walker (2016-2022)
Mountain View, CA
Senior Vice President, Global Affairs, and Chief Legal Officer, Google LLC

John Silvanus Wilson, Jr. (2015-2021) - on leave
Cambridge, MA
Former President, Morehouse College

Ryan Wise (2019-2020)
Des Moines, Iowa
Director, Iowa Department of Education

Lawrence S. Bacow
President, Harvard University
Ex officio

Paul J. Finnegan
Treasurer, Harvard University
Ex officio

Mission, Vision, and History

Mission

The mission of Harvard College is to educate the citizens and citizen-leaders for our society. We do this through our commitment to the transformative power of a liberal arts and sciences education.

Beginning in the classroom with exposure to new ideas, new ways of understanding, and new ways of knowing, students embark on a journey of intellectual transformation. Through a diverse living environment, where students live with people who are studying different topics, who come from different walks of life and have evolving identities, intellectual transformation is deepened and conditions for social transformation are created. From this we hope that students will begin to fashion their lives by gaining a sense of what they want to do with their gifts and talents, assessing their values and interests, and learning how they can best serve the world.

Vision

Harvard College will set the standard for residential liberal arts and sciences education in the twenty-first century. We are committed to creating and sustaining the conditions that enable all Harvard College students to experience an unparalleled educational journey that is intellectually, socially, and personally transformative.

A Brief History

When you attend Harvard College, you become a part of the rich, storied history of the nation's oldest institutions of higher learning. Founded in 1636, Harvard has undergone countless changes over the centuries, yet has always maintained its core as a haven for the world's most ambitious scholars.

Academics

Harvard was founded in 1636 and named for its first donor, the Reverend John Harvard.

Read more ▸

Buildings

Many of Harvard's historic buildings, several of which date back to the 18th century, still stand today.

Read more ▸

Diversity and Accessibility

The 20th century saw substantial efforts to open Harvard's doors to an increasingly broad range of students.

Harvard Kennedy School Government Performance Lab

Key Personnel

Name	Job Title
Jeffrey Liebman	Professor and Director
Scott Kleiman	Program Director
Jessica Lanney	Project Leader

April 2018

JEFFREY B. LIEBMAN

Address:
John F. Kennedy School of Government
Harvard University
79 JFK Street
Cambridge, MA 02138
telephone: (617) 495-8518
email: jeffrey_liebman@harvard.edu
web: https://sites.hks.harvard.edu/jeffreyliebman/

Current Positions:

Malcolm Wiener Professor of Public Policy, Kennedy School of Government, Harvard University, 2006-present.
- Director, Taubman Center for State and Local Government, 2015-present.
- Director, Rappaport Institute for Greater Boston, 2015-present.
- Founder and Director, Harvard Kennedy School Government Performance Lab, 2011-present.

Research Associate, National Bureau of Economic Research, 2005-present.
- Co-organizer, NBER Working Group on Social Security.
- Associate Director, NBER Retirement Research Center and NBER Disability Research Center, 2011-2015.

Previous Positions:

Acting Deputy Director, Office of Management and Budget, 2010.
Executive Associate Director and Chief Economist, Office of Management and Budget, 2009.
Special Assistant to the President for Economic Policy, White House National Economic Council, 1998-1999.
Assistant Professor of Public Policy, Kennedy School of Government, Harvard University, 1996-2001.
Associate Professor of Public Policy, Kennedy School of Government, Harvard University, 2001-2005.
Professor of Public Policy, Kennedy School of Government, Harvard University, 2005-2006.
Faculty Research Fellow, National Bureau of Economic Research, 1996-2005.
Harvard Kennedy School Area Chair for Social Policy, 2005-2007.
Director, Harvard University Multidisciplinary Program in Inequality and Social Policy, 2005-2007.

Education:

Ph.D., Economics, 1996	Harvard University
B.A. *magna cum laude*, distinction in Economics and Political Science, 1989	Yale University

Honors and Fellowships:

Elected to National Academy of Social Insurance, 2002.
NBER Center for Aging, Demography Research Fellow, 2001-2002.
Alfred P. Sloan Foundation Doctoral Dissertation Fellowship, 1995-1996.
Tinker Foundation Fellowship for research in Mexico, summer 1992.
National Science Foundation Graduate Fellowship, 1991-1994.
Yale University, Ronald Meltzer Economics Award for the outstanding senior essay in major, 1989.

Research Grants:

Bloomberg Philanthropies grant to fund Government Performance Lab work on results-driven contracting, 2015-2021.
John and Laura Arnold Foundation grants to fund Government Performance Lab 2013-2020.

Rockefeller Foundation grant to expand Social Impact Bond Technical Assistance Lab, 2012-2015.
Dunham Fund grant to expand Social Impact Bond Technical Assistance Lab, 2013-2015.
Smith Richardson Foundation grant for "Building an Evidence Base for Disability Insurance Reform" (with Jack Smalligan), 2012-2013.
Rockefeller Foundation grant to establish a "Social Impact Bond Technical Assistance Lab," 2011-2013.
National Institutes of Health (NIA), "Building Integrated Models of Retirement: Three Approaches," 2007-2012.
NBER-SSA Retirement Research Center grant for "The Taxation of Social Security Benefits as an Approach to Means Testing," 2007-2008.
NBER-SSA Retirement Research Center grant for "The Perception of Social Security Incentives for Labor Supply and Retirement" (with Erzo Luttmer), 2007-2008.
NBER-SSA Retirement Research Center grant for "Labor Supply Responses to the Social Security Tax-Benefit Link" (with Erzo Luttmer), 2006-2007.
NBER-SSA Retirement Research Center grant for "How Should Changes in Population Health Affect Retirement Ages?" (with David Cutler), 2006-2007.
NBER-SSA Retirement Research Center grant for "Could Social Security Eliminate Poverty Among the Elderly?", 2005-2006.
NBER-SSA Retirement Research Center grant for "Earnings Responses to Raising the Social Security Taxable Maximum?" (with Emmanuel Saez), 2004-2005.
NBER-SSA Retirement Research Center grant for "How Fast Should the Social Security Retirement Age Rise?" (with David Cutler), 2003-2004.
National Institutes of Health (NIA) First Award for "Protecting the Poor While Reforming Social Security," 1999-2004.
Russell Sage Foundation Grant for "Reforming Tax and Transfer Programs in Order to Assist Low-skilled Workers," 1997-2000.
National Institute of Child Health and Human Development grant for "Effects of High-Poverty Neighborhoods on Youth" (with Lawrence Katz and Jeffrey Kling), 2001-2004.
Russell Sage Foundation grant for "Effects of High-Poverty Neighborhoods on Youth" (with Lawrence Katz and Jeffrey Kling), 2000-2006.
Smith Richardson Foundation grant for "Effects of High-Poverty Neighborhoods on Youth" (with Lawrence Katz and Jeffrey Kling), 2000-2003.
William T. Grant Foundation grant for "Effects of High-Poverty Neighborhoods on Youth" (with Lawrence Katz and Jeffrey Kling), 2001-2004.
MacArthur Foundation grant for "Moving to Opportunity and Family Well-being" (with Lawrence Katz, Jeffrey Kling, Jeanne Brooks-Gunn, and Greg Duncan), 2001-2002.
Robert Wood Johnson Foundation grant for "Moving to Opportunity and Family Well-being" (with Lawrence Katz, Jeffrey Kling, Jeanne Brooks-Gunn, and Greg Duncan), 2001-2002.
U.S. Department of Housing and Urban Development grant for "Expanding Moving to Opportunity Research" (with Lawrence Katz and Jeffrey Kling), 2000-2006.
US Department of Housing and Urban Development grant, 1995-2000, for "Moving to Opportunity in Boston" (with Lawrence Katz and Jeffrey Kling).
NBER-NIA Center for Aging and Health Research grant for "Health Outcomes in MTO" (with Lawrence Katz and Jeffrey Kling), 1997-1998.

Journal Articles and Book Chapters:

Research on Housing Policy and Neighborhood Effects

1. "Moving to Opportunity in Boston: Early Outcomes of a Housing Mobility Program" (with Lawrence Katz and Jeffrey Kling), *Quarterly Journal of Economics*, May 2001.

2. "Boston Site Findings: The Early Impacts of Moving to Opportunity" (with Lawrence Katz and Jeffrey Kling), in *Choosing a Better Life? Evaluating the Moving to Opportunity Social Experiment*, edited by John M. Goering and Judith D. Feins (Washington: Urban Institute Press), 2003.

3. "Bullets Don't Got No Name: Consequences of Fear in the Ghetto" (with Lawrence Katz and Jeffrey Kling), in *Discovering Successful Pathways in Children's Development: New Methods in the Study of Childhood and Family Life*, edited by Thomas S. Weisner (Chicago: University of Chicago Press), 2004.

4. "Experimental Analysis of Neighborhood Effects" (with Jeffrey Kling and Lawrence Katz), *Econometrica*, January 2007.

5. "What Can We Learn About Neighborhood Effects from the Moving to Opportunity Experiment?" (with Jens Ludwig, Jeffrey Kling, Greg Duncan, Larry Katz, Ronald Kessler, and Lisa Sanbonmatsu), *American Journal of Sociology*, 114, July 2008.

Research on Executive Compensation

5. "Are CEOs Really Paid Like Bureaucrats?" (with Brian Hall), *Quarterly Journal of Economics*, August 1998.

6. "Taxation and Executive Compensation" (with Brian Hall), *Tax Policy and the Economy*, 14, 2000.

Research on the Earned Income Tax Credit

7. "Labor Supply Response to the Earned Income Tax Credit" (with Nada Eissa), *Quarterly Journal of Economics*, May 1996. Reprinted in Alan Auerbach, editor, *Public Finance*, Worth Series in Outstanding Contributions, 2000.

8. "The Impact of the Earned Income Tax Credit on Incentives and Income Distribution," *Tax Policy and the Economy*, 12, 1998.

9. "Who are the Ineligible Earned Income Tax Credit Recipients?" *National Tax Journal*, December 2000.

10. "The Optimal Design of the Earned Income Tax Credit," in *Making Work Pay: The Earned Income Tax Credit and Its Impact on American Families*, edited by Bruce D. Meyer and Douglas Holtz-Eakin (New York: Russell Sage Foundation Press), 2002.

11. "The EITC Abroad: Implications of the British WFTC for Pay-as-you-earn Administration of the EITC," (with Janet Holtzblatt), *Proceedings of the National Tax Association*, 1999.

12. "Would People Behave Differently If They Better Understood Social Security? Evidence from a Field Experiment" (with Erzo Luttmer), *American Economic Journal: Economic Policy*, 7(1), 2015.

Research on Social Security and Social Security Reform

13. "The Perception of Social Security Incentives for Labor Supply and Retirement: The Median Voter Knows

More than You'd Think" (with Erzo Luttmer), *Tax Policy and the Economy*, 26, 2012.

14. "Labor Supply Responses to Marginal Social Security Benefits: Evidence from Discontinuities" (with Erzo Luttmer and David Seif), *Journal of Public Economics*, 93, December 2009.

15. "Redistribution in the Current U.S. Social Security System," in *The Distributional Aspects of Social Security and Social Security Reform*, edited by Martin Feldstein and Jeffrey B. Liebman (Chicago: University of Chicago Press), 2002.

16. "The Distributional Effects of an Investment-based Social Security System" (with Martin Feldstein), in *The Distributional Aspects of Social Security and Social Security Reform*, edited by Martin Feldstein and Jeffrey B. Liebman (Chicago: University of Chicago Press), 2002.

17. "Social Security" (with Martin Feldstein), in *Handbook of Public Economics*, edited by Alan J. Auerbach and Martin Feldstein (Amsterdam: Elsevier), volume 4, 2002.

Research on Tax and Budget Policy

18. "Do Expiring Budgets Lead to Wasteful Year-End Spending? Evidence from Federal Procurement" (with Neale Mahoney), *American Economic Review*, 107(11), 2017.

19. "Social Security and National Saving in an Era of Budget Surpluses" (with Douglas Elmendorf), *Brookings Papers on Economic Activity*, 2, 2000.

20. "The Middle Class Parent Penalty: Child Benefits in the U.S. Tax Code" (with David Ellwood), *Tax Policy and the Economy*, 15, 2001.

21. "Fiscal Policy and Social Security Policy During the 1990s" (with Douglas Elmendorf and David Wilcox), in *American Economic Policy in the 1990s*, edited by Jeffrey Frankel and Peter Orszag (Cambridge: MIT Press), 2002.

22. "Saving Incentives for Low- and Middle-income Families: Evidence from a Field Experiment with H&R Block (with Esther Duflo, William Gale, Peter Orszag, and Emmanuel Saez), *Quarterly Journal of Economics*, November 2006.

23. "Simple Humans, Complex Insurance, Subtle Subsidies" (with Richard Zeckhauser), in *Using Taxes to Reform Health Insurance: Pitfalls and Promises*, edited by Henry Aaron and Leonard Burman (Washington, Brookings Institution), 2008.

24. "The Deterioration in the U.S. Fiscal Outlook, 2001–2010," *Tax Policy and the Economy*, 27, 2013.

25. Forthcoming: "The Decline, Rebound, and Further Rise in SNAP Enrollment: Disentangling Business Cycle Fluctuations and Policy Changes" (with Peter Ganong), *American Economic Journal: Economic Policy.*

<u>Working Papers:</u>

26. "How Fast Should the Social Security Eligibility Age Rise?" (with David Cutler, Seamus Smyth, and Mark Shepard).

27. "Earnings Responses to Increases in Payroll Taxes" (with Emmanuel Saez).

28. "Schmeduling" (with Richard Zeckhauser).

Books Edited:

Distributional Aspects of Social Security and Social Security Reform (with Martin Feldstein), (Chicago: University of Chicago Press), 2002.

Social Security Policy in a Changing Environment (with David Wise and Jeffrey Brown), (Chicago: University of Chicago Press), 2009.

Other Writings:

Social Impact Bonds: A Guide for State and Local Governments (with Alina Sellman), Harvard SIB Lab, June 2013.

Building on Recent Advances in Evidence-Based Policymaking, Brookings Hamilton Project and America Achieves, April 2013.

"An Evidence-Based Path to Disability Insurance Reform" (with Jack Smalligan) in *15 Ways to Rethink the Federal Budget*, Brookings Hamilton Project, February 2013.

"Social Impact Bonds: Lessons Learned So Far" (with SIB Lab team) in *Community Development Investment Review*, Federal Reserve Bank of San Francisco, February 2013.

"The Baby Boom Bump" (with Kenneth Baer), *New York Times*, December 6, 2012.

"The End of Health Insurance Companies" (with Ezekiel Emanuel), *New York Times Opinionator,* January 30, 2012.

"Cut Medicare, Help Patients" (with Ezekiel Emanuel), *New York Times*, August 22, 2011.

Social Impact Bonds: A Promising New Financing Model to Accelerate Social Innovation and Improve Government Performance, Center for American Progress, February 2011.

"Social Security Meets Race," *Science*, September 23, 2005, p. 1965.

"Reforming Social Security: Not All Privatization Schemes Are Created Equal." *Harvard Magazine*, March-April, 2005.

Moving to Opportunity: Interim Impacts Evaluation (with Larry Orr, Judith Feins, Robin Jacob, Erik Beecroft, Lisa Sanbonmatsu, Jeffrey Kling, and Lawrence Katz). Washington D.C.: U.S. Department of Housing and Urban Development, 2003.

The Role of Annuities in a Reformed U.S. Social Security System. December 2002. AARP Public Policy Institute report 2002-17.

"Is Social Security Unfair to the Poor?" Op-ed, *Washington Post*, July 29, 2001.

"Personal Accounts and Social Security," Letter to the Editor, *Washington Post*, July 9, 2001.

"The Earned Income Tax Credit." Testimony provided to the Committee on Finance, United States Senate, Washington, D.C., March 7, 2001.

"The EITC Compliance Problem," *Poverty Research News*, Summer 1998, Joint Center for Poverty Research.

"Tax Credit Combines Best of Two Systems," Op-ed, *Financial Times*, March 17, 1998.

"Blair Could Learn From US Tax Credit Scheme," Letter to the Editor, *Financial Times*, June 23, 1997.

Lessons About Tax-benefit Integration from the US Earned Income Tax Credit Experience. Joseph Rowntree Foundation. York, England. 1997.

Teaching:

Public Economics (PhD field course), Harvard Economics Department. 2006, 2007, 2008, 2011.
Economic Analysis of Public Policy (public finance), Harvard Kennedy School. 1997, 2000, 2001, 2003, 2004, 2005, 2008, 2011, 2012, 2014, 2015, 2016, 2017, 2018.
Government Turnarounds, Harvard Kennedy School. 2017.
Empirical Methods II (regression analysis and program evaluation), Harvard Kennedy School. 1997, 1998.
Tax and Budget Policy, Harvard Kennedy School. 2000.
Doctoral Research Seminar, Harvard Kennedy School. 2000, 2001.
American Economic Policy, Harvard Economics Department (undergraduate) and Harvard Kennedy School. 2002, 2003, 2004, 2005, 2006, 2007, 2008, 2011, 2012, 2013, 2014, 2015, 2016, 2017.
New Members of Congress Program (presentations on Social Security and Medicare and economic outlook). 2000, 2002, 2012.
Proseminar on Inequality and Social Policy (PhD students), Harvard Department of Sociology and Harvard Kennedy School. 2005, 2007, 2010.

SCOTT KLEIMAN

EXPERIENCE

HARVARD KENNEDY SCHOOL GOVERNMENT PERFORMANCE LAB (2013-PRESENT) Cambridge, MA

Program Director (2017-present), Assistant Director (2015-2017), Innovation Fellow (2013-2015)

- Directed 18+ technical assistance performance improvement projects, including:
    - Advising a state redesign and procurement of behavioral health, parenting supports, and child placement programs for a state child welfare agency.
    - Advising a state on implementation and scaling of data-driven provider performance management strategies at public health, behavioral health, child welfare, and workforce agencies.
    - Advising a state on an interagency partnership between a departments of public health and child welfare to reduce child abuse fatalities.
    - Advising a state on a public-private partnership to improve transitions to adulthood for justice-involved foster youth.
- Co-created and delivered outcomes-based management training to 100+ senior government officials.
- Authored external publications, including flagship performance improvement playbook for leaders of public child welfare agencies, a Harvard Kennedy School teaching case, and a data analytics curriculum and simulation.
- Served on senior leadership team during growth from a 10-person start-up to an established organization of 40+ staff.
- Senior Fellow with Casey Family Programs. Advisory committee member for Results for America's Invest in What Works State Standard of Excellence. Regular guest lecturer in HKS course on government turnarounds.

BAIN & COMPANY (2012) Atlanta, GA

Summer Associate

- Diagnosed potential cost savings associated with long-term transportation infrastructure needs for major U.S. city.

CERES (2007-2011) Boston, MA

Manager, Executive and Org. Advancement (2010-2011), Exec. Associate/Fellow (2007-2010)

- Led cross-organizational team to craft framework for strategic business plan.
- Facilitated revamp of bylaws, board policies, and governance practices.
- Coordinated CEO's office and senior management team.

EDUCATION

DUKE UNIVERSITY, FUQUA SCHOOL OF BUSINESS Durham, NC

MBA, May 2013.

MIDDLEBURY COLLEGE Middlebury, VT

BA, Political Science, May 2006.

Jessica Lanney

Experience

2017-19 **GOVERNMENT PERFORMANCE LAB, HARVARD KENNEDY SCHOOL** — **Concord, NH**
Project Leader
- Supporting NH DCYF to design and implement strategies to support child welfare system transformation
- Launched GPL's multi-year work in Chicago helping the city's human services agency (Dept. of Family & Support Services) overhaul its approach to procurement and contract management to improve human service outcomes. Responsibilities included developing near- and long-term strategy, day-to-day project and team management, capacity and relationship-building

2012-17 **THE BRIDGESPAN GROUP** — **Boston, MA**
Case Team Leader (2016-17)
Managed project teams providing management consulting to large nonprofits and foundations to support strategic decision-making and organizational change. Accountable for analysis, deliverables, workflow processes, and staff development. Balanced competing priorities and deadlines while collaborating closely with clients and stakeholders.
- Developed major capacity building initiative for large nonprofit federation to strengthen local chapters and increase collaboration among chapters nationally
- Helped lead Bridgespan's multi-year initiative to improve nonprofit funding approaches and work with large nonprofit networks

Consultant (2015-16)
- Worked with major foundation's senior leaders on change management/implementation of new strategy
- Created fund strategy and investment framework for impact investing fund
- Co-authored articles on network strategy shifts in Stanford Social Innovation Review, Harvard Business Review

Senior Associate Consultant (2014-15) and **Associate Consultant** (2012-13)
- Designed and conducted portfolio analysis global foundation to recommend new policies, grantee relationship and portfolio management approaches
- Redesigned organization structure, cross-team, innovation processes for large affordable housing organization
- Developed turnaround plan for rural human services provider struggling with sustainability to improve fundraising, efficiency, and HQ services to local sites
- Identified key levers to expand service reach at minimal cost for home visitation program

2009 **BOSTON HEALTH CARE FOR THE HOMELESS PROGRAM** — **Boston, MA**
Housing Intern: Researched effects of housing interventions on health outcomes for chronically homeless patients.

2008 **CITY OF NEW ORLEANS - OFFICE OF RECOVERY & DEVELOPMENT** — **New Orleans, LA**
Policy Intern: Advised on CDBG-funded program to provide low-interest loans to retailers to increase fresh food access in low-income neighborhoods affected by Hurricane Katrina.

2007 **OFFICE OF NEW HAMPSHIRE GOVERNOR JOHN LYNCH** — **Concord, NH**
Summer Intern: Conducted research on emergency public health laws and supported citizen services office.

Education

2010-12 **LONDON SCHOOL OF ECONOMICS** — **London, UK**
Marshall Scholarship for graduate education awarded by UK government. Completed two master's degrees:
- **MSc in Regional and Urban Planning**: graduated with distinction, awarded prize for best overall performance.
- **MSc in Social Policy and Planning**: graduated with distinction, awarded prize for the best dissertation.

2006-10 **PRINCETON UNIVERSITY** — **Princeton, NJ**
AB in Public Affairs at Woodrow Wilson School of Public & International Affairs: graduated *summa cum laude*. Phi Beta Kappa. Prize for the Wilson School's best undergraduate thesis.