

Harvard Human Resources Benefits 114 Mount Auburn Street, 4th Floor Cambridge, MA 02138

TO: Harvard University Retirement Plan Participants

FROM: Harvard Human Resources—Benefits

DATE: April, 2023

SUBJECT: Annual Funding Notice

Under the Pension Protection Act of 2006 ("PPA"), employers who sponsor certain "defined benefit" pension plans, like the Harvard University Retirement Plan (the "HURP"), are required to send participants and beneficiaries an Annual Funding Notice. In keeping with these requirements, enclosed is the Annual Funding Notice for our Plan. It provides important financial and other information about your Plan for the 2022 Plan year. To help you understand the Annual Funding Notice, or AFN, this letter will provide additional background on the HURP and explain some of the key funding measurements reported in the notice. **You do not need to take any action in response to this letter.**

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Summary

Based on annual actuarial valuations performed each year, Harvard has funded the plan in accordance with all IRS funding requirements. We continually monitor the plan's funded position and have historically made contributions beyond what the IRS requires in order to better protect the plan's ability to make full payments over time to participants. In addition to monitoring the funded status of the plan, we review the investment performance of pension trust assets on a regular basis to ensure our investment objectives are being met, and contributions are adjusted accordingly.

About the HURP

The full cost of the HURP is covered through investment earnings and contributions from Harvard to a pension trust as necessary. The trust is separate from the University's general assets and cannot be used for any purpose other than to provide benefits to plan participants. The trust's assets are overseen by an Investment Committee, including senior University officers, that decides on investment strategies to pursue on its behalf by Harvard Management Company.

The benefit you receive is determined by the plan's provisions -- based on your pay and years of service at the University -- and not by the amount Harvard contributes to the plan or the investment earnings on trust assets. As of December 31, 2022, the market value of trust assets was approximately \$781 million. In 2022, the trust paid out approximately \$82 million in benefits to eligible participants and their beneficiaries.

HURP Funding

Harvard is required to fund the HURP according to IRS rules that apply to all employers who sponsor pension plans. The goal of funding is to accumulate sufficient assets over the working lifetime of participants to pay promised benefits to retirees and their beneficiaries.

To determine the funded status of the HURP and Harvard's funding requirements each year, the actuaries for the HURP estimate the current value of expected future benefits payable under the plan – called pension liabilities – and then compare these pension liabilities to the value of assets held in the pension trust.

Estimating liabilities requires making a number of assumptions. A particularly important assumption, regulated by the IRS and updated every year based on economic conditions, is the interest rate used to discount future benefit payments to the present day. Interest rates are tied to pension liabilities in an inverse manner. *Higher* interest rates result in *lower* pension liabilities. Conversely, *lower* assumed interest rates mean *higher* pension liabilities.

About the 2022 Annual Funding Notice

The first page of the AFN displays the Plan's Funding Target Attainment Percentage (FTAP) at January 1, 2022 and compares it to the FTAP for each of the two prior years. The FTAP is used to calculate the plan's required contribution and is the ratio of plan assets to plan liabilities. Importantly, assets and liabilities used for this calculation are adjusted to "smooth" the effect of recent market fluctuations. Here are key points to note:

- The gross FTAP assets are reduced by the plan's Credit Balance, which is the accumulation of
 contributions Harvard has made in past years in excess of IRS required contributions. In general, the
 Credit Balance can be used to reduce current IRS contribution requirements.
- In general, a lower FTAP results in a higher required contribution. Conversely, a higher FTAP results in a lower required contribution.
- The FTAP decreased from 89% on January 1, 2020 to 85% on January 1, 2021. This decrease was primarily due to U.S. interest rates declining over this period which was partially offset by asset performance during 2020.
- The FTAP increased from 85% on January 1, 2021 to 92% on January 1, 2022. This was primarily due to asset performance durind 2021 and due to the increase in the interest rate used to discount future benefit payments as required under the American Rescue Plan Act.

Also shown on page 2 of the AFN is an estimate of plan assets (\$781 million) and liabilities (\$800 million) as of December 31, 2022. This disclosure represents a spot in time estimate of the plan's funded position. Unlike the FTAP calculation, plan assets and liabilities have been calculated at market value and do not smooth the effect of recent market fluctuations.

For Additional Information

We recognize the complexity of these issues. If you have any questions about this message or about the Annual Funding Notice, please contact the Harvard University Retirement Center at 1-800-527-1398.

To make sure you receive your benefits and any benefit communications pertaining to the Plan, it is critical that you keep your contact information and beneficiary designation current. If you move after you terminate employment, please update your address information by contacting the Harvard University Retirement Center at 1-800-527-1398. Keeping this information up-to-date will ensure that you (or your beneficiary) receive your benefit payments as well as any important Plan communications without undue delay.

ANNUAL FUNDING NOTICE

For

Harvard University Retirement Plan

Introduction

This notice includes important information about the funding status of your single employer pension plan ("the Plan"). It also includes general information about the benefit payments guaranteed by the Pension Benefit Guaranty Corporation ("PBGC"), a federal insurance agency. All traditional pension plans (called "defined benefit pension plans") must provide this notice every year regardless of their funding status. This notice does not mean that the Plan is terminating. It is provided for informational purposes and you are not required to respond in any way. This notice is required by federal law. This notice is for the plan year beginning January 1, 2022 and ending December 31, 2022 ("Plan Year").

How Well Funded Is Your Plan

The law requires the administrator of the Plan to tell you how well the Plan is funded, using a measure called the "funding target attainment percentage". The Plan divides its Net Plan Assets by Plan Liabilities to get this percentage. In general, the higher the percentage, the better funded the plan. The Plan's Funding Target Attainment Percentage for the Plan Year and each of the two preceding plan years is shown in the chart below. The chart also shows you how the percentage was calculated.

Funding Target Attainment Percentage							
	2022	2021	2020				
1. Valuation Date	01/01/2022	01/01/2021	01/01/2020				
2. Plan Assets							
a. Total Plan Assets	\$1,033,197,902	\$1,000,324,735	\$912,460,776				
b. Funding Standard Carryover Balance	\$292,166,488	\$280,497,780	\$242,729,128				
c. Prefunding Balance	\$0	\$0	\$0				
d. Net Plan Assets = (a) - (b) - (c)	\$741,031,414	\$719,826,955	\$669,731,648				
3. Plan Liabilities	\$805,767,935	\$848,805,051	\$753,736,519				
4. Funding Target Attainment Percentage = (2d)/(3)	91.96%	84.80%	88.85%				

Plan Assets and Credit Balances

The chart above shows certain "credit balances" called the Funding Standard Carryover Balance and Prefunding Balance. A plan might have a credit balance, for example, if in a prior year an employer contributed money to the plan above the minimum level required by law. Generally, an employer may credit the excess money toward the minimum level of contributions required by law that it must make in future years. Plans must subtract these credit balances from Total Plan Assets to calculate their Funding Target Attainment Percentage.

Plan Liabilities

Plan Liabilities in line 3 of the chart above are estimates of the amount of assets the Plan needs on the Valuation Date to pay for promised benefits under the plan.

Year-End Assets and Liabilities

The asset values in the chart above are measured as of the first day of the Plan Year. They also are "actuarial values". Actuarial values differ from market values in that they do not fluctuate daily based on changes in the stock or other markets. Actuarial values smooth out those fluctuations and can allow for more predictable levels of future contributions. Despite the fluctuations, market values tend to show a clearer picture of a plan's funded status at a given point in time. As of December 31, 2022, the fair market value of the Plan's assets was \$780,869,294. On this same date, the Plan's liabilities, determined using market rates, were \$800,247,511. (Note: the above amounts do not include, for grandfathered participants that were transferred effective July 1, 2001 from the Harvard University Defined Contribution Retirement Plan to the Harvard University Retirement Plan, assets related to their defined contribution accounts. These defined contribution assets approximated \$721,000,000 at December 31, 2022.) Total Plan assets for both the defined benefit and defined contribution approximated \$1,501,900,000.

Participant Information

The total number of participants and beneficiaries covered by the Plan on the Valuation Date was 7,495. Of this number, 2,788 were current employees, 2,371 were retired and receiving benefits, and 2,336 were no longer working for the employer and have a right to future benefits.

Funding & Investment Policies

Every pension plan must have a procedure to establish a funding policy for plan objectives. A funding policy relates to how much money is needed to pay promised benefits. The funding policy of the Plan requires an annual review of the plan's minimum funding requirement and budget contributions to meet this commitment. Harvard University will periodically consider the plan's funded status and make additional contributions in excess of the minimum required contributions when deemed appropriate taking into consideration the University's financial status.

Pension plans also have investment policies. These generally are written guidelines or general instructions for making investment management decisions. 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. The investment program is also managed to comply with all ERISA regulations. The asset categories consist of equity securities, fixed income securities, real estate, and other assets such as absolute return funds, commodities, and cash.

Under the investment policy, the Plan's assets were allocated among the following categories of investments as of the end of the Plan Year. These allocations are percentages of total assets:

Stocks Investment grade debt instruments High-yield debt instruments Real Estate Other	18.4% 74.7% 0.0% 0.0% 6.9%
Total	100.0%

Right to Request a Copy of the Annual Report

Pension plans must file annual reports with the US Department of Labor. The report is called the "Form 5500". These reports contain financial and other information. You may obtain an electronic copy of your Plan's annual report by going to www.efast.dol.gov and using the search tool. Annual reports also are available from the US Department of Labor, Employee Benefits Security Administration's Public Disclosure Room at 200 Constitution Avenue, NW, Room N-1513, Washington, DC 20210, or by calling 202.693.8673. Or you may obtain a copy of the Plan's annual report by contacting Harvard University Benefits, 114 Mt. Auburn Street, 4th Floor, Cambridge, MA 02138, email: benefits@harvard.edu. The Plan's Schedule SB and attachments may be obtained through the Harvard University's intranet through hr.harvard.edu: https://hr.harvard.edu/files/humanresources/files/definedbenefitplanschedulesb.pdf

Annual reports do not contain personal information, such as the amount of your accrued benefits. You may contact your plan administrator if you want information about your accrued benefits. Your plan administrator is identified below under "Where To Get More Information."

Summary of Rules Governing Termination of Single-Employer Plans

If a plan terminates, there are specific termination rules that must be followed under federal law. A summary of these rules follows.

There are two ways an employer can terminate its pension plan. First, the employer can end a plan in a "standard termination" but only after showing the PBGC that such plan has enough money to pay all benefits owed to participants. Under a standard termination, a plan must either purchase an annuity from an insurance company (which will provide you with periodic retirement benefits, such as monthly for life or, if you elect, for a set period of time when you retire) or, if the plan allows and you elect, issue one lump-sum payment that covers your entire benefit. Your plan administrator must give you advance notice that identifies the insurance company (or companies) selected to provide the annuity. The PBGC's guarantee ends upon the purchase of an annuity or payment of the lump-sum. If the plan purchases an annuity for you from an insurance company and that company becomes unable to pay, the applicable state guaranty association guarantees the annuity to the extent authorized by that state's law.

Second, if the plan is not fully-funded, the employer may apply for a distress termination. To do so, however, the employer must be in financial distress and prove to a bankruptcy court or to the PBGC that the employer cannot remain in business unless the plan is terminated. If the application is granted, the PBGC will take over the plan as trustee and pay plan benefits, up to the legal limits, using plan assets and PBGC guarantee funds.

Under certain circumstances, the PBGC may take action on its own to end a pension plan. Most terminations initiated by the PBGC occur when the PBGC determines that plan termination is needed to protect the interests of plan participants or of the PBGC insurance program. The PBGC can do so if, for example, a plan does not have enough money to pay benefits currently due.

Benefit Payments Guaranteed by the PBGC

When the PBGC takes over a plan, it pays pension benefits through its insurance program. Only benefits that you have earned a right to receive and that cannot be forfeited (called vested benefits) are guaranteed. Most participants and beneficiaries receive all of the pension benefits they would have received under their plan, but some people may lose certain benefits that are not guaranteed.

The amount of benefits that PBGC guarantees is determined as of the plan termination date. However, if a plan terminates during a plan sponsor's bankruptcy, then the amount guaranteed is determined as of the date the sponsor entered bankruptcy.

The PBGC maximum benefit guarantee is set by law and is updated each calendar year. For a plan with a termination date or sponsor bankruptcy date, as applicable, in 2023 the maximum guarantee is \$6,750 per month, or \$81,000 per year, for a benefit paid to a 65-year-old retiree with no survivor benefit. If a

plan terminates during a plan sponsor's bankruptcy, the maximum guarantee is fixed as of the calendar year in which the sponsor entered bankruptcy. The maximum guarantee is lower for an individual who begins receiving benefits from PBGC before age 65 reflecting the fact that younger retirees are expected to receive more monthly pension checks over their lifetimes. Similarly, the maximum guarantee is higher for an individual who starts receiving benefits from PBGC after age 65. The maximum guarantee by age can be found on PBGC's website, www.pbgc.gov. The guaranteed amount is also reduced if a benefit will be provided to a survivor of the plan participant.

The PBGC guarantees "basic benefits" earned before a plan is terminated, which include:

- pension benefits at normal retirement age;
- · most early retirement benefits;
- annuity benefits for survivors of plan participants; and
- disability benefits for a disability that occurred before the date the plan terminated or the date the sponsor entered bankruptcy, as applicable.

The PBGC does not guarantee certain types of benefits:

- The PBGC does not guarantee benefits for which you do not have a vested right, usually because you have not worked enough years for the company.
- The PBGC does not guarantee benefits for which you have not met all age, service, or other requirements.
- Benefit increases and new benefits that have been in place for less than one year are not guaranteed. Those that have been in place for less than five years are only partly guaranteed.
- Early retirement payments that are greater than payments at normal retirement age may not be guaranteed. For example, a supplemental benefit that stops when you become eligible for Social Security may not be guaranteed.
- Benefits other than pension benefits, such as health insurance, life insurance, death benefits, vacation pay, or severance pay, are not guaranteed.
- The PBGC generally does not pay lump sums exceeding \$5,000.

In some circumstances, participants and beneficiaries still may receive some benefits that are not guaranteed. This depends on how much money the terminated plan has and how much the PBGC recovers from employers for plan underfunding.

For additional general information about the PBGC and the pension insurance program guarantees, go to the "General FAQs about PBGC" on PBGC's website at www.pbgc.gov/generalfaqs. Please contact your employer or plan administrator for specific information about your pension plan or pension benefit. PBGC does not have that information. See "Where to Get More Information" below.

Right to Receive Annual Pension Benefit Statement

You may request a statement summarizing your accrued benefit under the Harvard University Retirement Plan by calling the Harvard University Retirement Center at 1-800-527-1398. This statement will tell you whether you have a right to receive a pension at normal retirement age and if so, what your benefits would be at normal retirement age if you stop working under the Plan now. If you do not have a right to receive a pension, the statement will tell you how many more years you have to work to be eligible to receive a pension. This statement is not required to be given more than once every 12 months. The Plan provides the statement free of charge.

Where to Get More Information

For more information about this notice, you may contact Harvard University Benefits; 114 Mt. Auburn Street, 4th Floor; Cambridge, MA 02138; E-mail: benefits@harvard.edu. For identification purposes, the official plan number is 003 and the plan sponsor's employer identification number or "EIN" is 04-2103580.

SUPPLEMENT TO ANNUAL FUNDING NOTICE OF HARVARD UNIVERSITY RETIREMENT PLAN FOR

PLAN YEAR BEGINNING January 1, 2022 AND ENDING December 31, 2022 ("Plan Year")

This is a temporary supplement to your annual funding notice. It is required by the Moving Ahead for Progress in the 21st Century Act (MAP-21), the Highway and Transportation Funding Act of 2014 (HATFA), the Bipartisan Budget Act of 2015 (BBA15) and the American Rescue Plan Act of 2021 (ARPA). These federal laws changed how pension plans calculate their liabilities. The purpose of this supplement is to show you the effect of these changes. Prior to 2012, pension plans determined their liabilities using a two-year average of interest rates. Now pension plans also must take into account a 25-year average of interest rates. This means that interest rates likely will be higher and plan liabilities lower than they were under prior law. As a result, your employer may contribute less money to the plan at a time when market interest rates are at or near historical lows.

The "Information Table" compares the effect of using interest rates based on the 25-year average (the "adjusted interest rates") and interest rates based on a two-year average on the Plan's: (1) Funding Target Attainment Percentage, (2) Funding Shortfall, and (3) Minimum Required Contribution. The funding target attainment percentage of a plan is a measure of how well the plan is funded on a particular date. The funding shortfall is the amount by which liabilities exceed net plan assets. The minimum required contribution is the amount of money an employer is required by law to contribute to a plan for a given year. The following table shows this information determined with and without the adjusted interest rates. The information is provided for the Plan Year and for each of the two preceding plan years, if applicable.

INFORMATION TABLE								
	2022		2021		2020			
	With Adjusted Interest Rates	Without Adjusted Interest Rates	With Adjusted Interest Rates	Without Adjusted Interest Rates	With Adjusted Interest Rates	Without Adjusted Interest Rates		
Funding Target Attainment Percentage	91.96%	73.88%	84.80%	75.53%	88.85%	79.60%		
Funding Shortfall	\$64,736,521	\$261,959,913	\$128,978,096	\$233,191,171	\$84,004,871	\$171,578,378		
Minimum Required Contribution	\$13,395,044	\$18,829,093	\$13,376,116	\$16,294,596	\$15,899,457	\$19,199,241		