UCI SOM Personal Finance Session October 13, 2025

David Brownstone

Emeritus Professor of Economics UCI

UC Academic Senate Task Force on Investments and Retirements (TFIR)

UC Emeriti Association Joint Benefits Committee member

UC Emeriti and Retiree Advisory Council member

The views and any errors expressed here are my own

Topics I was asked to cover

- **Overview of UC retirement structure:** How the **UC Retirement Plan (UCRP)** integrates with **Fidelity-managed supplemental plans** (403(b), 457(b), DCP).
- **Solvency and stability of the UC Pension Plan:** Current funding status and what it means for faculty retirement planning. Not our problem, and no need to worry.
- **Fidelity investment options:** How to choose among **target-date funds, index funds, and bond funds**, considering the guaranteed UC pension baseline.
- **Portfolio diversification and risk management:** Aligning investment strategies with age, risk tolerance, and pension security.
- **Tax-efficient investing:** Basics of **tax-loss harvesting**, Roth conversions, and minimizing tax liability in retirement withdrawals.
- **Transition planning:** When and how to **roll over Fidelity accounts into IRAs** or consolidate assets as one approaches retirement.
- **UC and federal retirement income integration:** Coordination with **Social Security**, **Medicare**, and **Required Minimum Distributions (RMDs)**. Move as much as you can to Roth!
- **Common pitfalls and behavioral finance:** Avoiding emotional investment decisions, managing debt, and understanding opportunity costs.
- **Resources and tools:** UC Fidelity counseling services, retirement readiness calculators, and UC Office of the President financial planning resources? What is available to us?

RASC and Fidelity Expertise

- Most Fidelity UC advisors are OK, but they are incentivized to sell expensive Fidelity managed accounts.
- RASC has about 10 retirement counselors. All are Certified Financial Planners, and they have training on the details of UCRP. They should be your first choice for advice.
- Neither Fidelity or RASC counselors are fiduciaries, but the RASC counselors have no obvious conflicts of interest.
- Most outside advisors have incentives to get you to buy things that generate money for them, so avoid them.
- You should do basic estate planning and tax planning – ARAG provides this for UC employees.

Investment theory and implications

- It is impossible to predict returns in asset markets.
  - If you could, you could trade and make money (arbitrage)
  - If enough people trade then prices will change to remove arbitrage opportunities.
  - On US stock exchange arbitrage opportunities are removed is less than one second.
- Scientists don't like this result (Einstein – "god does not play dice with the universe"), but that doesn't mean it is wrong.
- People (and scientists and doctors) are trained to look for patterns, but the key result is that there are no predictable patterns for asset returns.
- Any investment advisor who says that they can predict asset prices are either corrupt and/or fooling themselves.

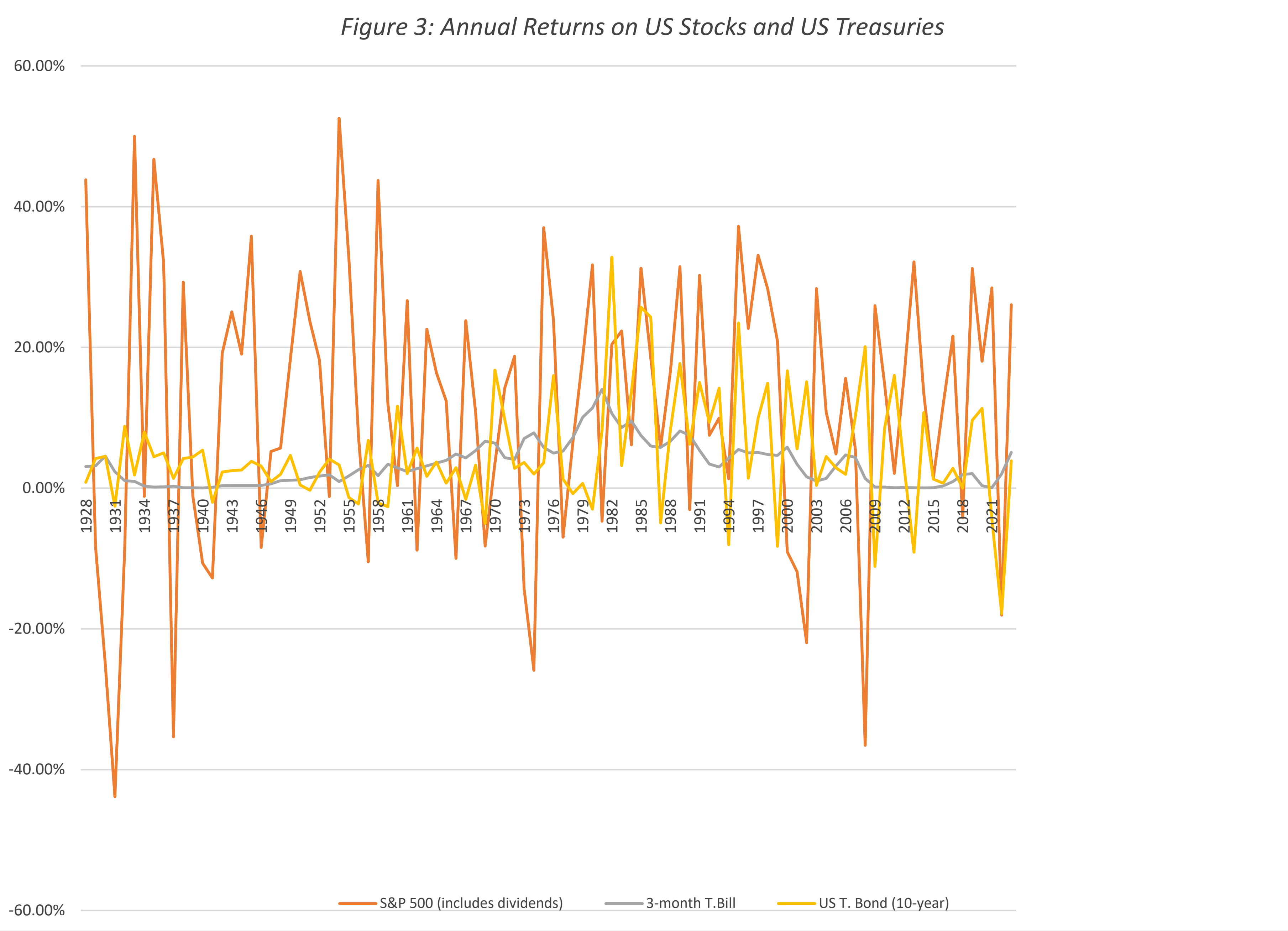


Figure 3: Annual Returns on US Stocks and US Treasuries
60.00%
40.00%
20.00%
0.00%
-20.00%
-40.00%
-60.00%
1928
1931
1934
1937
1940
1943
1946
1949
1952
1955
1958
1961
1964
1967
1970
1973
1976
1979
1982
1985
1988
1991
1994
1997
2000
2003
2006
2009
2012
2015
2018
2021
S&P 500 (includes dividends)
3-month T.Bill
US T. Bond (10-year)

Index funds and casinos

- Suppose a fair die is labelled [-25, -12, 0, 12, 25, 40]. Theory and evidence says the return for investing $1 in a particular stock is given by the number of cents from a toss of the die. The expected return is 6.67 cents.
- An index fund invests 1 cent in 100 different stocks (diversification). The expected return is still 6.67 cents, but there is much less variability.
- In the real world stock prices and firm values vary greatly, so index funds invest in each stock according to the market value of the underlying company.
- Key result of finance theory: Value-weighted index funds are efficient. Any deviation to increase return will increase risk more.

Index fund performance

- Over 75% of actively managed funds underperform the S&P 500 index over any 5-10 year or longer interval.
  - May be due to the way investment managers are compensated.
- About 75% of university endowments underperform S&P 500
  - From 1991-2024 UC Pension investments had an 8.30% annual return. An index portfolio of 60% S&P 500 and 40% US bonds had an 8.74% return with similar annual variability.
  - UC's pension investment return is in the top 25% of peers.
- The 60%/40% index portfolio satisfies the 4% rule for all starting years.
  - You can take out 4% of the portfolio after inflation without going bankrupt.

Investment Basics

- Nobody can “beat the market” over times relevant for retirement planning. See A Random Walk Down Wall Street by Burton Malkiel
- The best way to deal with investment uncertainty is diversification.
- Therefore, you should only invest in broad-based index funds. Note currently only 63% of the world equity market is in the U.S.
- Any investment that promises high returns is either very risky or a scam (see FTX and Bernie Madoff)
- Almost any broad-based mutual fund or ETF will get similar long-run returns, so you should choose one with the lowest fees.
- Narrow specialized funds are attempts to beat the market and will almost certainly fail. They certainly charge higher fees.

- The only assets that have substantial real returns are equities and corporate bonds – gold, treasury bills, and residential real estate earn much less.

Value of $100 invested in 1928 at end of 2024 and annualized returns

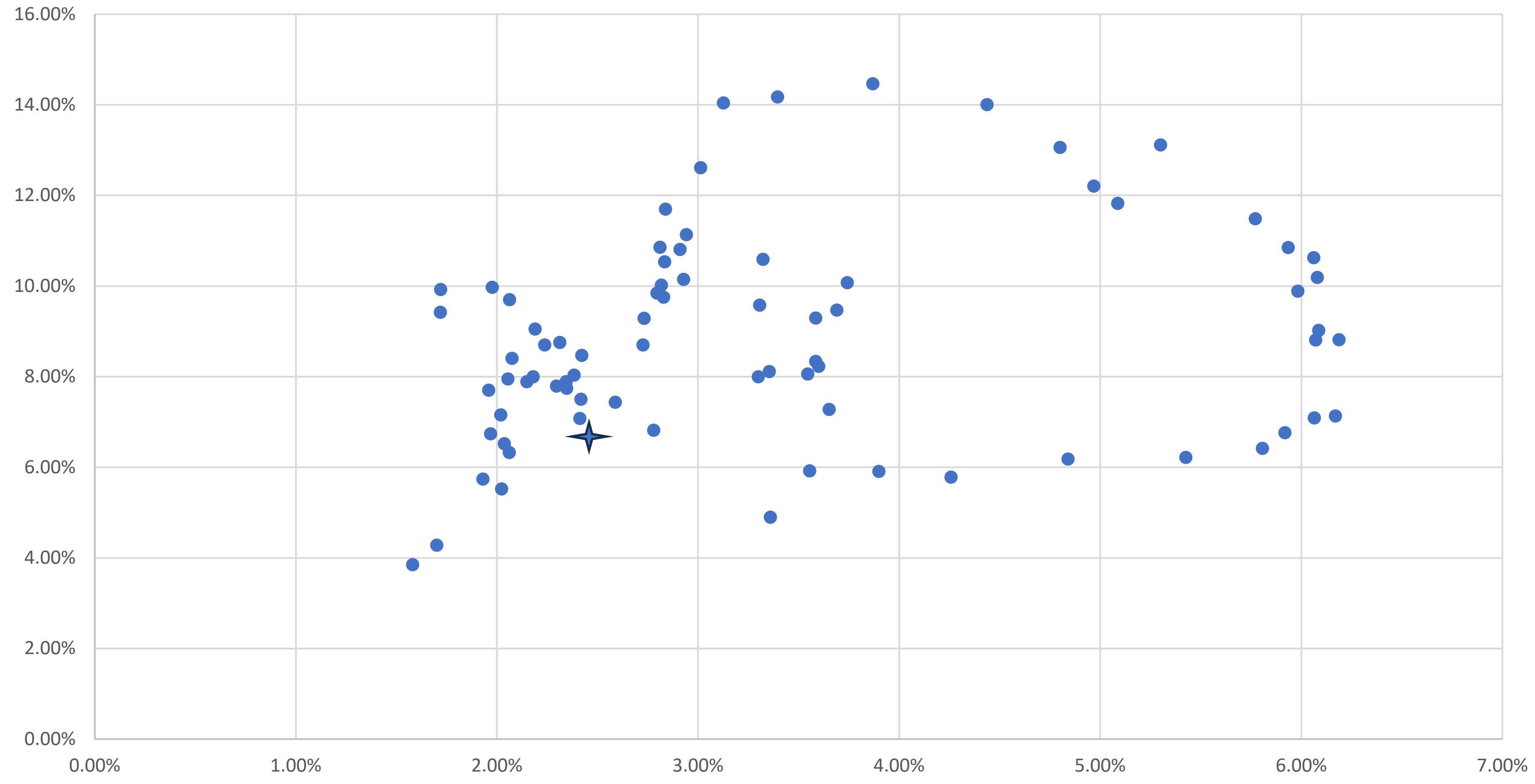
	S&P 500	US Small Stocks	3 Mo T Bill	10 Yr T Bond	Baa Bonds	Homes	Gold	Inflation
End Value	$ 982,817	$ 4,744,891	$2,360	$ 7,159	$50,385	$ 5,553	$12,649	$ 1822
1928-2024	9.94%	11.74%	3.31%	4.50%	6.62%	4.23%	5.12%	3.0%
1975-2024	12.26%	13.00%	4.25%	6.05%	8.62%	5.28%	5.42%	3.5%
2015-2024	12.98%	5.57%	1.76%	0.27%	3.44%	6.89%	8.03%	2.9%

Source: https://pages.stern.nyu.edu/~adamodar/New_Home_Page/datafile/histretSP.html

Why is the return to homes so bad?

- The investment return does not include the benefits of the housing services provided by a home.
- Home prices are set by buyers who expect highly subsidized mortgage interest rates and the ability to borrow at least 80% of home value.
- Leverage – if you buy a home for $1 million with $200,000 investment, then if you sell after a year for $1.1 million your return is likely close to $100,000 (or 50%).
- Leverage amplifies both both gains and losses, and is a key tool used in "exotic" investment products and Exchange Traded Funds. Examples include private equity, private credit, and hedge funds.
- Unlike stocks, homes are expensive (6 – 10% of home value) and slow to sell, so prices adjust very slowly.

20 Annualized year Nominal Returns versus Inflation (on Horizontal Axis)



Each dot is 20-year annualized return and inflation starting at different years from 1928 through 2005 for 60% S&P 500, 10% US Treasury Bills, 30% US Corporate Bonds. ✦ is UCRP assumed investment return and long-term inflation rate (6.75% and 2.5%).

How the UC Retirement Plan (UCRP) integrates with Fidelity-managed supplemental plans

- UC Pension + Social Security is equivalent to a Treasury Bond.
  - Multiply annual pension + SS by 25 to get equivalent bond value
- The UC Retirement Savings Plan provides very low-cost funds that are appropriate for retirement savings.
- Default Target Date funds are fine for those who do not expect to get a large pension (plus Social Security), but too conservative for almost all UC employees in the pension plan.
- The **UC Global Equity Index Fund is best for equity**, but excludes fossil fuels. A good alternative is the Vanguard Total World Index fund ETF (VT, but higher fees 0.06% vs. 0.01% for UC) that you can purchase through the Fidelity Netbenefits Brokerage Link.

Bonds

- If you need cash over the next 5-10 years it should be in inflation-protected short-term bonds. The UC Short Term TIPS Fund is a good choice, but only available inside the UC Retirement Savings Program.
  - The Vanguard Short-Term Inflation-Protected Securities ETF (VTIP) is a widely-available good choice with slightly higher fees (0.03% vs 0.01% for the UC fund).
- Money you need in less than a year is best in a money market fund.
- Long-term bond holdings use Vanguard Total World Bond ETF (BNDW) through Fidelity Netbenefits Brokerage Link.

Personal finance is easy, but tax implications are hard.

- Dividends are taxed less than interest and regular income and withdrawals from IRAs and 403B.
- Capital gains are only taxed when realized at rates generally less than dividends and regular income.
  - If you hold something until you die, then step-up rules remove all unrealized capital gains at time of death.
  - But inherited IRAs and 403Bs must be distributed within 10 years of death and are taxed as regular income to non-spouse beneficiaries.
- Tax-deferred accounts (IRA, 403b) are subject to required minimum distributions (RMD) beginning at age 73. Start at about 4% .
- Congress can (and has) changed this any time they want.

Roth versus tax-deferred savings

- Roth contributions and conversions are after paying income tax. Roth IRA distributions are not taxed after age 59.5 (or death if held more than 5 years or for buying a first home or certain education expenses).
- Low-wage and young employees should almost certainly save 100% in Roth accounts.
- Tax deferred accounts only good if you expect your tax rate to be lower in retirement – but this is not usually the case for long-term employees with large pensions, 403B/457, and social security income.
- The decision to convert existing pre-tax balances to Roth is complex, but most with current high balances and low Roth balances should likely convert at least some. Roth Conversions typically require paying additional quarterly tax to avoid IRS penalties, and only make sense if the extra tax is paid from other funds.

UC Employee Investment Advice

- Put at least 80% into indexed equity funds. This is the best hedge against inflation and the incomplete inflation indexing of UC pensions. This also makes the “4% rule” work.
- Expected pension and Social Security payouts should be treated like treasury bonds. Multiply expected annual payments by about 25 to get equivalent asset values. Those expecting substantial UC pensions should have almost all of their retirement savings invested in equities. Target-date funds are too conservative for people with large pensions – but fine for Savings Choice.
- Delay taking Social Security until age 70
- Put investments like bonds or REITs that generate regular taxable income into Roth (or at least tax-deferred) accounts.

What is the current financial status of the UC Retirement Plan, and how might this impact faculty and staff planning for retirement?

- UCRP is fine, and it is the Regents' problem, not ours!
- Regents are using quite conservative assumptions for investment returns and inflation (6.75% and 2.5%), so it is likely that actual UCRP returns will be better than expected.
- UCRP annualized nominal returns 1991 – 2024 are 8.3%, and returns to 60% S&P 500, 40% US bonds are 8.7%
- It is extremely unlikely that UC will fail to meet pension obligations, but quite likely that the value of retiree health benefits will substantially decline.
- It is very likely that inflation will erode the value of a UC pension due to the cost of living adjustment formula.

Lump-Sum Cashout (only for 1976 Tier)

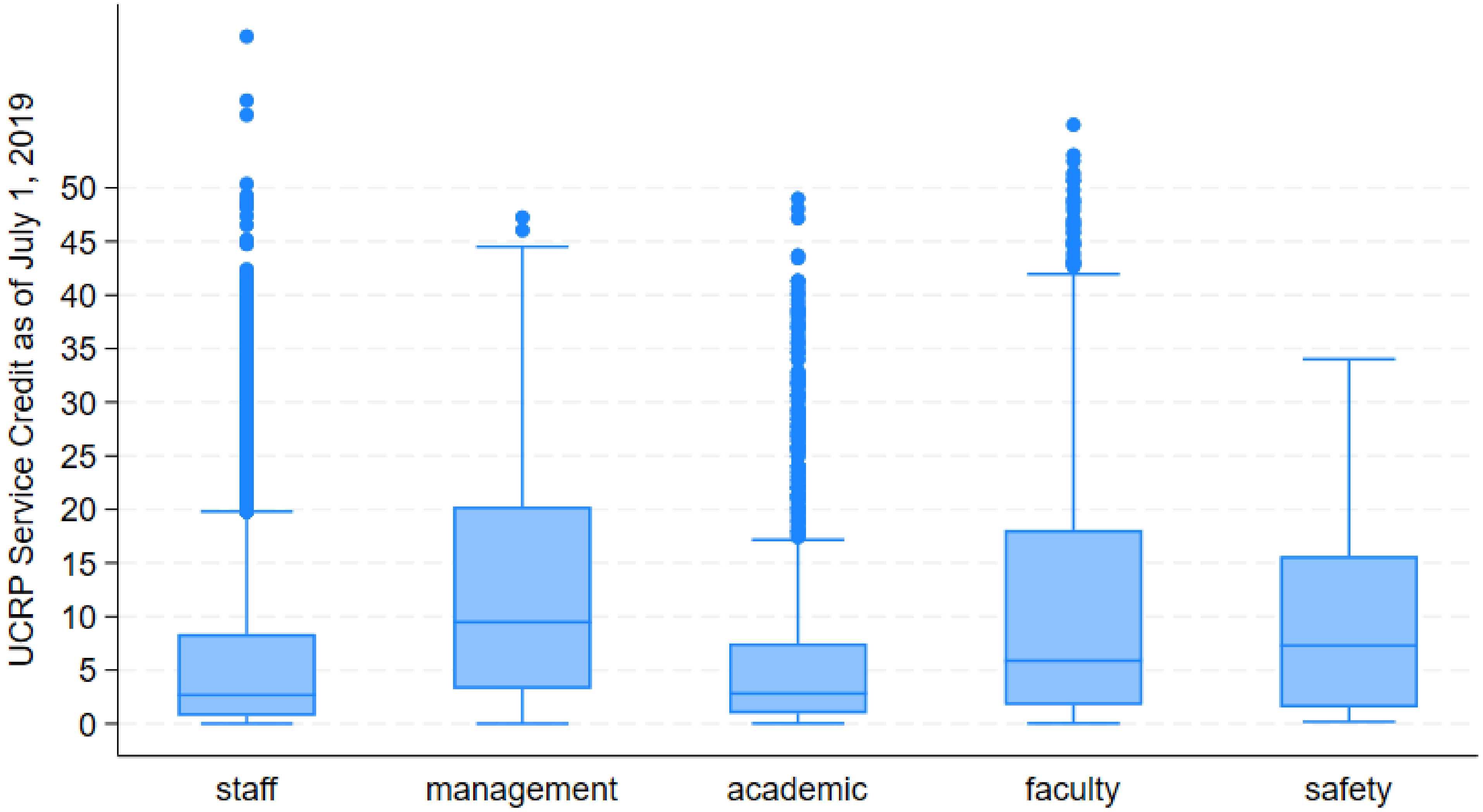
- Provides a useful benefit for a small (but substantial) number of retirees. (see Pension Experience Study: https://regents.universityofcalifornia.edu/regmeet/july23/f4attach2.pdf Section 4h)
- Particularly useful for those expecting to: die “soon,” not need health insurance, and/or expect to leave a substantial inheritance. Relatively common for one spouse (should be male) in a couple with 2 long-term UC employees.
- Lump-sum cashout typically provides more protection against inflation and higher remainder values than the pension, though this depends critically on the individual’s investment choices. Annuitization via commercially available products, for instance, would not likely do as well.
- May also be useful for those needing to go on Medicaid to afford long-term care.

Pension versus Savings Choice in 2016 Tier

see https://senate.universityofcalifornia.edu/resources/retirement-choice-model.html

- The 2016 tier consists of two plans, a traditional DC plan and a DB plan supplemented with a different DC benefit
- New employees have 90 days after initial hire to choose, and TFIR has been concerned that the default (pension choice) is wrong for most people and that employees are not getting sufficient education and advice.
- Based on TFIR's analysis, the Academic Council asked President Drake to change the default from pension to savings. UCOP agreed to make change last year, but so far nothing has happened.
- TFIR recently obtained data on years of service credit at separation from UC and found that 75% of employees who separated during FY 2018-22 had fewer than 11.3 years of service credit. 55% had less than 5 years service credit.

UCRP Service Credit at Separation



Second Choice is the best option for new employees

- For the more than 75% of employees who leave with less than about 11 years of service credit, the value of their pension will be much lower than the value of the extra contributions to their tax-deferred savings (403b).
- Once it is clear that an employee will stay for at least 20 years, then opting for switching to Pension Choice during the 5-10 year window after initial hire (Second Choice) is optimal.
- These conclusions require that tax-deferred savings balances are invested to earn a sufficient real rate of return.