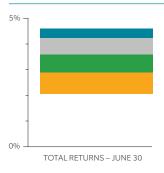


UNIVERSE SUMMARIES

ERISA

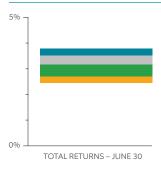


- The median ERISA pension plan returned 3.6 % in the second quarter of 2017.
- Strong returns from non-core bonds (high yield long duration and EMD) drove relative performance.
- Better returning plans tended to have larger allocations to fixed income. The median ERISA fixed income program was up 3.2% in the second quarter

35%

Corporate pension plans have increased their median allocation to bonds to 35% from 27% 10 years ago..

PUBLIC FUNDS

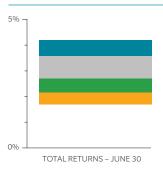


- The median Public fund was up 3.2% in the second quarter of 2017.
- A larger allocation to international equities drove relative performance.
- Better returning plans tended to have larger allocation to international equities. International equities handily out-returned other asset classes in the second guarter.

16%

Public pension plans have the largest median allocation to non-U.S. equity. That allocation has remained fairly constant over the last 10 years.

GLOBAL FAMILY OFFICE



- The median GFO returned 4.3% in the second quarter.
- Smaller allocations to fixed income drove relative performance.
- Better returning family offices tended to have a larger allocation to international equity as well as a smaller allocation to fixed income. International equities were the best returning asset class while fixed income was weaker in the second quarter.

11%

Global Family Offices median allocation to alternatives. Asset allocations have not changed much over the last three years.

FOUNDATIONS & ENDOWMENTS



- The median Foundation & Endowment returned 2.9% in the second quarter.
- The smallest allocation to fixed income drove relative performance.
- Better returning foundations & endowments tended to have smaller allocations to fixed income, which was the weakest returning asset class in the second quarter.

21%

The combined median allocation to private equity and hedge funds. Foundations & Endowments continue to increase their allocation to private equity and hedge funds. Ten years ago the allocation was about half that.

TO LEARN MORE

For more detailed universe information please contact your IRAS consultant or other Northern Trust representative.

ABOUT NORTHERN TRUST UNIVERSES

Northern Trust Universes represent the performance results of about 300 large institutional investment plans that subscribe to Northern Trust performance measurement services. These plans, with a combined asset value of approximately \$899 billion, represent a broad snapshot of overall institutional investment plan performance within the U.S. market.

Northern Trust's Investment Risk and Analytical Services give you a comprehensive array of risk management capabilities, supported by powerful technology and delivered by experienced professionals. We can help you bring all the details to focus – so you can address strategic program management issues. If you would like to participate in our universe analysis and receive more in-depth information, please contact your relationship manager.

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Returns are shown gross of fees. Index returns assume reinvestment of dividends and earnings and do not reflect the deduction of any trading costs or other expenses. It is not possible to invest directly in an index. Past performance does not indicate future results.