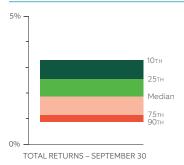
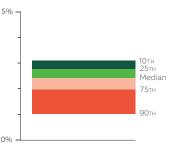


UNIVERSE SUMMARIES

ERISA

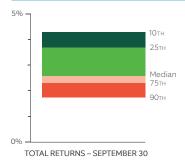


PUBLIC FUNDS



TOTAL RETURNS - SEPTEMBER 30

GLOBAL FAMILY OFFICE



- The median ERISA pension plan returned 1.9% in the third-quarter of 2018.
- Strong returns from domestic equities offset by weaker performance from longer dated bonds drove relative performance. The median U.S. equity program was up 6.8% in the third-quarter while the median ERISA fixed program was up 0.2%.
- Better returning plans tended to have smaller allocations to fixed income. The median ERISA total fixed program was off 0.2% in the third-quarter.

-0.01%

A weak twelve-month period has dragged down the five-year excess return to a negative 1 basis point annually.

- The median Public Pension fund was up 2.4% in the third-quarter of 2018.
- A larger allocation to domestic equity and shorter duration bonds drove relative performance.
- Better returning plans tended to have larger allocation to private equity. The median private equity program was up 3.8% in the third-quarter.

0.48%

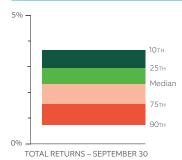
Over the last five-years the median Public Fund plan has generated 48 basis points in excess performance annually.

- The median GFO returned 2.6% in the third-quarter.
- Domestic equity and private equity drove relative performance.
- Better returning family offices tended to have a larger allocation to domestic equity as well as private equity. Domestic equity and private equity were the two best returning asset classes.

0.57%

Over the last five-years the median Global Family Office has generated 57 basis points of excess performance annually.

FOUNDATIONS & ENDOWMENTS



- The median foundation and endowment returned 2.4% in the third-quarter of 2018.
- Alternatives drove relative performance.
- Better returning foundations and endowments tended to have the largest allocations to alternatives. Private equity was the second best returning asset class in the third-quarter of 2018.



Over the last five-years the median Foundation & Endowment generated 24 basis points in excess return annually.

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.