

Third Quarter 2017

# Quarterly Commentary

Ticker	Inv Manager or Sub-Advisor	Benchmark	Morningstar Category	Investment Objective
PXASX	Multiple Sub-Advisors	S&P Target Date 2030 Index	Target-Date 2030	Balanced

## Economic Overview

The global economic recovery that began in early 2016 appears to have reached self-sustaining velocity. The consensus now recognizes the evidence: strong industrial production, robust growth, and improved capital spending. Plus, business and consumer confidence is surging to high or record levels. Bank indices had better returns than the overall market. Mildly rising interest rates also suggest that investors appreciate some of the more recent worries (i.e., risks of deflation, political turmoil in Europe, or a China hard landing) have fallen significantly.

Economic sentiment in the Eurozone is within a whisker of a 17-year high. Confidence improved in every sector and country. Even Italian CEOs have the most optimistic outlook in a decade. The final survey of manufacturing purchasing managers was the highest in over six and a half years. The flash composite of service and manufacturing indices rose. Private demand is driving growth in both consumer spending and investment. In September, inflation stayed modest. Unemployment is falling and job gains are healthy. The 5.6% jobless rate in Germany is the lowest it's been since reunification in the early 1990s. Even Brexit fears can't keep the UK economy from expanding, or household spending from growing. Purchasing manager indices from the National Bureau of Statistics suggest that both manufacturing and service businesses are improving in China. The private-sector gauge from Caixin/Markit slipped a bit, but still shows growth. The People's Bank of China revealed a targeted cut in required reserves for banks that increase lending to small and very small enterprises, so while fiscal stimulus has faded some, there will be plenty of liquidity. Growth is not accelerating, but no near-term hard landing seems anywhere in sight. The U.S. economy has been strong and steady. Real economic growth averaged 2.2%, matching the rate over the entire expansion. Confidence is high, job growth is robust, and inflation is subdued. Profit growth is rebounding, and capital spending is picking up. We expect third-quarter growth to be cut a few tenths by the tragedies that came with Hurricanes Harvey, Irma, and Maria. Rebuilding efforts could add a bit to growth in following quarters.

As the synchronized global economic expansion continues robust and unabated, central banks are re-evaluating the extraordinary policies put in place after the financial crisis. Robust world growth, higher oil prices, and rising investor confidence in the self-sustaining expansion, pushed government bond yields higher, reversing their July-August dip.

## Balanced Asset Allocation/Lifecycle

U.S. and international equities delivered strong results for the quarter. The broad U.S. equities market, as measured by the Russell 3000, returned 5.67%, while the international developed and emerging markets returned 5.59% and 8.64%, respectively. U.S. small-caps (5.96%) outperformed both U.S. large-caps (4.48%) and mid-caps (3.22%).<sup>1</sup> From a style perspective, growth outperformed value within U.S. large-caps, while value outperformed growth in U.S. mid- and small-cap equities.<sup>2</sup> Real estate investment trusts (REITs) posted positive but lower results, underperforming the broad U.S. equities and international developed markets. U.S. REITs returned 0.38% for the quarter with global REITs returning 2.47%. Most fixed income spread products performed positively during the quarter, led by high yield returning 1.64%. Core fixed income and treasury inflation protected securities (TIPS) had positive performance coming in at 0.79% and 0.87%, respectively.<sup>3</sup>

**Not FDIC or NCUA insured**

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## Performance Contributors

### Positive Contributors

#### During last quarter:

Active manager performance in the non-U.S. equity space contributed as the Diversified International (Principal Global Investors), International Emerging Markets (Principal Global Investors), Origin Emerging Markets (Origin Asset Management), International Small Company (Principal Global Investors), and Overseas (Barrow Hanley & Causeway) Funds outperformed their benchmark indices. Similarly, active manager performance among U.S. equity strategies was also strong, with MidCap (Principal Global Investors), MidCap Value III (Barrow Hanley), Equity Income (Edge Asset Management), LargeCap Value (Principal Global Investors), SmallCap Growth I (Alliance Bernstein, Brown, & Emerald), LargeCap Growth I (T. Rowe & Brown), and Blue Chip (Principal Global Investors) all providing positive excess performance. The inclusion of a diversified real asset portfolio was beneficial as many sub-asset classes outperformed the real estate investment trust (REIT) exposure of the index. Overweight to the high yield asset class contributed, both in the form of dedicated high yield exposure as well as through our diversified income portfolio.

#### During last 12 months:

Exposure to liquid alternatives contributed to the near dated portfolios, due to their minimal sensitivity to interest rate movements. This asset class outperformed core bonds. Similar to the quarter, overweight to the high yield asset class added to performance, both in the form of dedicated high yield exposure as well as through our diversified income portfolio. The inclusion of a diversified real asset portfolio was beneficial as many sub-asset classes such as global infrastructure stocks, floating rate debt, and master limited partnerships (MLPs) outperformed the U.S. REIT exposure of the index.

### Negative Contributors

#### During last quarter:

Manager performance detracted by the MidCap Growth Fund III (Baird & Eagle) and the LargeCap Value Fund III (WestWood & Barrow Hanley) as they experienced negative relative performance. Manager performance of the Global Opportunities Fund (Principal Global Investors) was a detractor. While Global Opportunities has significant U.S. equity exposure, the manager selection effect is displayed in the non-U.S. portion of attribution. Value style exposure in the U.S. large-cap space detracted on a relative basis, as returns were superior in the core space.

#### During last 12 months:

A couple U.S. equity strategies detracted as they continue to lag over the last 12 months. Most notably, SmallCap Value II (DFA, Vaughan Nelson, and LA Capital) and Blue Chip (Principal Global Investors). Similar to the quarter, manager performance of the Global Opportunities Fund (Principal Global Investors) was also a detractor. While Global Opportunities has significant U.S. equity exposure, the manager selection effect is displayed in the non-U.S. portion of attribution. Active manager performance from the Global Real Estate Securities Fund (Principal Real Estate Investors) detracted from performance. The later dated portfolios had exposure to the strategy throughout much of 2016.

#### Changes to the investment option's structure or portfolio:

No material changes occurred in the portfolio structure.

# Principal LifeTime 2030 R1 Fund

## Performance

*Investment results shown represent historical performance and do not guarantee future results. Investment returns and principal values fluctuate with changes in interest rates and other market conditions so the value, when redeemed, may be worth more or less than original costs. Current performance may be lower or higher than the performance data shown. For more performance information, including most recent month-end performance, visit [www.principal.com](http://www.principal.com), contact your representative of the Principal Financial Group®, or contact our participant contact center at 1-800-547-7754.*

*In situations where the net and gross fund expense figures are different, the investment manager has contractually agreed to limit the investment option's expense. Differences may also be shown due to the investment manager choosing to pay certain expenses that would normally be payable by the fund. The gross fund expense figure does not reflect any waivers or caps on the mutual fund. Performance shown reflects the application of net expenses of the fund.*

Average Annual Total Returns (%) as of 09/30/2017	QTR	YTD	1 Year	3 Year	5 Year	10 Year	Since Inception	Inception Date	11/01/2004
Principal LifeTime 2030 R1 Fund	4.15	12.96	12.92	5.84	8.02	3.71	5.19	Ext. Perf. Inc. Date	03/01/2001
S&P Target Date 2030 Index	3.60	11.46	12.79	7.07	9.17	5.02	-	Total Inv. Exp Gross	1.61
Target-Date 2030 Category	3.69	12.11	12.52	6.49	8.23	4.45	-	Total Inv Exp Net	1.61
Morningstar Percentile Ranking	-	-	53	77	63	82	-	Waiver Date	-
Total Funds in Category	254	245	239	188	155	89	-	Contractual Cap Date	-

**Past performance is no guarantee of future results.** Market indices have been provided for comparison purposes only. They are unmanaged and do not reflect fees or expenses. Individuals cannot invest directly in an index.

These calculated returns reflect the historical performance of the oldest share class of the fund, adjusted to reflect a portion of the fees and expenses of this share class. For time periods prior to inception date of the fund, predecessor performance is reflected. Please see the fund's prospectus for more information on specific expenses, and the fund's most recent shareholder report for actual date of first sale. Expenses are deducted from income earned by the fund. As a result, dividends and investment results will differ for each share class.

# Principal LifeTime 2030 R1 Fund

## Statistics Summary as of 09/30/2017

	Risk and Return Statistics Summary						Upside/Downside Capture Ratio					
	Alpha	Beta	R2	Sharpe Ratio	Info Ratio	Std Dev	# of Months		Avg Returns %		Benchmark %	
							Up	Down	Up	Down	Up	Down
	3 Year						3 Year					
Principal LifeTime 2030 R1 Fund	-1.25	1.02	98.37	0.77	-1.32	7.29	24	12	1.45	-1.99	95.98	110.21
S&P Target Date 2030 Index	N/A	N/A	N/A	N/A	N/A	N/A	26	10	1.51	-1.80	100.00	100.00
	5 Year						5 Year					
Principal LifeTime 2030 R1 Fund	-1.22	1.02	98.31	1.07	-1.21	7.26	-	-	-	-	-	-
S&P Target Date 2030 Index	N/A	N/A	N/A	N/A	N/A	N/A	-	-	-	-	-	-

Risk and return statistical data is calculated by Morningstar, Inc. Please see Important Notes section for definitions of Risk and Return Statistics.

## Top Ten Holdings as of 08/31/2017

Security	Net Assets (%)
Principal Core Plus Bond Inst	11.49
Principal Diversified Intl Inst	9.13
Principal Overseas Instl	8.87
Principal Large Cap S&P 500 Index Inst	8.69
Principal Global Opportunities Instl	6.58
Principal LargeCap Growth I R6	6.22
Principal Bond Market Index Instl	5.18
Principal Global Div Inc R-6	4.59
Principal MidCap R-6	4.54
Principal Large Cap Value III Inst	4.51
<b>Total % in Top 10</b>	<b>69.79</b>

## Principal LifeTime 2030 R1 Fund

Manager(s)	Start Date	Degree	Alma Mater
James W. Fennessey	06/01/2007	B.S.	Truman State University
Randy L. Welch	06/01/2007	M.B.A.	Drake University
Jeffrey R. Tyler	03/01/2011	Master	Northwestern University
Matthew Annenberg	03/01/2013	B.A.	Harvard College
Scott W. Smith	05/02/2017	B.S.	Iowa State University

### Investment Strategy

The investment seeks a total return consisting of long-term growth of capital and current income. The fund operates as a "target date fund" that invests according to an asset allocation strategy designed for investors having a retirement investment goal close to the year in 2030. It is a fund of funds and invests in underlying funds of Principal Funds, Inc. ("PFI"). Its underlying funds consist of domestic and foreign equity funds, fixed-income funds, real asset funds, and other funds that aim to offer diversification beyond traditional equity and fixed-income securities.

### About Principal Global Investors

Principal Global Investors - the institutional asset management affiliate of the Principal Financial Group - the firm focuses on delivering consistently competitive investment performance and superior service on behalf of its clients. Principal Global Investors has expertise in equities, fixed income and real estate investments, as well as specialized overlay and advisory services. The firm upholds the highest standards of excellence in investment research, risk management, ethics, fiduciary responsibility and client service. (Principal Global Investors is the asset management arm of the Principal Financial Group® (The Principal®) and includes the asset management operations of the following subsidiaries of The Principal: Principal Global Investors, LLC; Principal Real Estate Investors, LLC; Spectrum Asset Management, Inc.; Post Advisory Group, LLC; Columbus Circle Investors; Edge Asset Management, Inc.; Principal Global Investors (Europe) Limited; Principal Global Investors (Singapore) Ltd.; Principal Global Investors (Australia) Ltd.; and the majority owned affiliates of Principal International, Inc.).

### About Principal LifeTime

The Principal LifeTime portfolios, which are target date portfolios, invest in underlying Principal Funds. Each Principal LifeTime portfolio is managed toward a particular target (retirement) date, or the approximate date the participant or investor starts withdrawing money. As each Principal LifeTime portfolio approaches its target date, the investment mix becomes more conservative by increasing exposure to generally more conservative investment options and reducing exposure to typically more aggressive investment options. The asset allocation for each Principal LifeTime portfolio is regularly re-adjusted within a time frame that extends 10-15 years beyond the target date, at which point it reaches its most conservative allocation. Principal LifeTime portfolios assume the value of the investor's account will be withdrawn gradually during retirement.

Neither the principal nor the underlying assets of the Principal LifeTime portfolios are guaranteed at any time, including the target date. Investment risk remains at all times.

## Important Notes

Insurance products and plan administrative services, if applicable, are provided by Principal Life Insurance Company. Principal mutual funds are part of the Principal Funds, Inc. series. Principal Funds, Inc. is distributed by Principal Funds Distributor, Inc. Securities are offered through Principal Securities Inc., 800-547-7754, member SIPC and/or independent brokers/dealers. Principal Funds Distributor, Principal Securities and Principal Life are members of the Principal Financial Group®, Des Moines, IA 50392. Certain investment options may not be available in all states or U.S. commonwealths.

**Investors should carefully consider a mutual fund's investment objectives, risks, charges, and expenses prior to investing. A prospectus, or summary prospectus if available, containing this and other information can be obtained by contacting a financial professional, visiting [principal.com](http://principal.com), or calling 1-800-547-7754. Read the prospectus carefully before investing.**

The value of the investment options will fluctuate so that when redeemed, shares or units may be worth more or less than the original cost.

Returns shown for periods of less than one year are not annualized. All returns displayed here are after Total Investment Expense of the investment option. Any operating expenses of a mutual fund or underlying mutual fund that are part of net Total Investment Expense are obtained from the mutual fund's most recent prospectus. The operating expenses shown as part of the Total Investment Expense include voluntary expense limits and fee credit.

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These calculated returns reflect the historical performance of the oldest share class of the fund, adjusted to reflect a portion of the fees and expenses of this share class. For time periods prior to inception date of the fund, predecessor performance is reflected. Please see the fund's prospectus for more information on specific expenses, and the fund's most recent shareholder report for actual date of first sale. Expenses are deducted from income earned by the fund. As a result, dividends and investment results will differ for each share class.

International and global investing involves greater risks such as currency fluctuations, political/social instability and differing accounting standards.

Fixed-income and asset allocation investment options that invest in mortgage securities are subject to increased risk due to real estate exposure.

Equity investment options involve greater risk, including heightened volatility, than fixed-income investment options. Fixed-income investment options are subject to interest rate risk, and their value will decline as interest rates rise.

### About Principal Financial Group



The Principal Financial Group® (The Principal®) is a leading global financial company offering businesses, individuals and institutional clients a wide range of financial products and services. Our range of products and services includes retirement solutions, life and health insurance, wellness programs, and investment and banking products through our diverse family of financial services companies and national network of financial professionals.

## Important Notes

Asset allocation and diversification do not ensure a profit or protect against a loss. Additionally there is no guarantee this investment option will provide adequate income at or through retirement.

This Principal LifeTime Fund indirectly bears its pro rata share of the management fees incurred by the underlying Principal Funds in which this fund invests. Based on the asset allocation of the Principal LifeTime Funds outlined in the prospectus dated March 1, 2017, the weighted average operating expenses of the underlying funds are: Principal LifeTime Strategic Income, 0.61%; Principal LifeTime 2010, 0.65%; Principal LifeTime 2015, 0.67%; Principal LifeTime 2020, 0.70%; Principal LifeTime 2025, 0.72%; Principal LifeTime 2030, 0.72%; Principal LifeTime 2035, 0.68%; Principal LifeTime 2040, 0.70%; Principal LifeTime 2045, 0.71%; Principal LifeTime 2050, 0.72%; Principal LifeTime 2055, 0.72%; Principal LifeTime 2060, 0.73%. While the operating expenses of the underlying mutual funds are not part of the Principal LifeTime Fund's operating expenses they are included in the Total Investment Expense. Performance results shown for the Principal LifeTime Fund reflect the application of these expenses.

The Investment Advisor will display "Multiple Sub-Advisors" for certain target-date, target-risk and specialty investment options where the assets are directed by the Investment Manager to multiple underlying investment options. These underlying investment options may use multiple sub-advisors who are responsible for the day-to-day management responsibilities.

S&P Target Date 2030 Index provides varying levels of exposure to equities and fixed income. Each target date allocation is created and retired according to a pre-determined schedule related to the respective target date.

Extended Performance Inception Date (Ext. Perf. Inc. Date) - Inception date of the oldest share class of the fund, or underlying fund of the Separate Account.



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## Important Notes

### **Risk and Return Statistics:**

**Alpha** - The difference between an investment's actual returns and its expected performance, given its level of risk (as measured by beta).

**Beta** - An investment's sensitivity to market movements.

**R-squared** - Ranges from 0 to 100 and reveals how closely an investment's returns track those of a benchmark index.

**Standard Deviation** - Measures how much an investment's returns are likely to fluctuate.

**Sharpe Ratio** - Measures how an investment balances risks and rewards. The higher the Sharpe ratio, the better the investment's historical risk-adjusted performance.

**Information Ratio** - A risk-adjusted measure commonly used to evaluate an active manager's involvement skill. It's defined as the manager's excess return divided by the variability or standard deviation of the excess return.

**Up-Market Capture Ratio** - A statistical measure of an investment option's performance relative to a comparative index in months in which that index has risen. An up-market capture ratio of greater than 100 would indicate that the investment option performed better than the comparative index during months in which the index had risen over a specified time period.

**Down-Market Capture Ratio** - A statistical measure of an investment option's performance relative to a comparative index in months in which that index has fallen. A down-market capture ratio of greater than 100 would indicate that the investment option performed worse than the comparative index during months in which the index had fallen over a specified time period.

The individual Principal LifeTime Funds may be combined with the Principal LifeTime Strategic Income Fund if the Board of Directors of Principal Funds, Inc., determines at the time that the combination is in the best interests of Fund shareholders.

\*Unless otherwise stated, all data from Bloomberg

<sup>1</sup>U.S. equities: Russell 3000 Index, U.S. large-cap stocks: S&P 500 Index, U.S. mid-cap stocks: S&P MidCap 400 Index, U.S. small-cap stocks: S&P SmallCap 600 Index, Developed Markets Index; S&P Developed Ex US BMI, international emerging markets equities: S&P Emerging BMI



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## Important Notes

<sup>2</sup>large-cap growth stocks: S&P 500 Growth Index; U.S. large-cap value stocks: S&P 500 Value Index, U.S. mid-cap growth stocks: S&P MidCap 400 Growth Index; U.S. mid-cap value stocks: S&P MidCap 400 Value Index; U.S. small-cap growth stocks: S&P SmallCap 600 Growth Index; U.S. small-cap value stocks: S&P SmallCap 600 Value Index: U.S.

<sup>3</sup>High Yield Corporate Bonds: S&P 500 High Yield Corporate Bond Index; Core Fixed Income: S&P US Aggregate Bond TR USD; TIPS: S&P US Treasury TIPS Index TR

This report is not complete unless all pages, as noted below, are included.



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