



Item 7

DATE: December 19, 2019

TO: Deferred Compensation Management Council

FROM: Brent Petty, NWCM, Inc.

SUBJECT: Third Quarter Investment Performance Report (Executive Summary)

Capital Markets

Name	YTD (10/31/2019)	Q3 2019	1-Year (10/31/2019)
S&P 500 TR USD	23.16	1.70	14.33
S&P MidCap 400 TR	19.20	-0.09	9.02
S&P SmallCap 600 TR USD	15.67	-0.20	3.24
MSCI EAFE NR USD	16.86	-1.07	11.04
MSCI EM NR USD	10.35	-4.25	11.86
BBgBarc US Agg Bond TR USD	8.85	2.27	11.51

	10/31/2019	6/28/2019	10/31/2018
10-Year Treasury Yield	1.69%	2.00%	3.15%

Third Quarter (Complete Quarterly Investment Report is provided as **Exhibit A**)

- The third quarter was characterized by a mix of ongoing trade tension, geopolitical instability, and slowing global economic growth, mitigated by efforts made by central banks to stabilize and support the global economy.
- **U.S. Equities** were mixed for the quarter. Large-cap stocks posted positive returns while small and mid-cap stocks posted slight negative returns. Additionally, value stocks outpaced growth.
- **International Equities** struggled in the third quarter. Protests in Hong Kong and turmoil in the US-China trade war weighed on the market, contributing to relative underperformance.
- The **Fixed Income** market generated relatively strong returns in the third quarter, driven mainly by lowered interest rates and tame credit spreads. Global central bank easing, and the trade tensions drove demand for U.S. Treasury bonds.

Economic Factors

- Second quarter GDP grew at a slow but steady rate of 2%. Exports and business investment weighed on growth, while consumer spending remained strong.
- The labor market remains strong with historically low unemployment and consistent job gains, but growth appears to be slowing.
- Overall inflation remains manageable as various headline CPI rose 1.7%. The PCE index remained soft at 1.77% below the Fed's target of 2%.
- Looking ahead, trade conflicts and geopolitical tensions are likely to result in continued market volatility. **Update:** On 10/30/2019, the Fed lowered rates to 1.5%-1.75%. No more rate cuts are expected this year.

Investments

The Great-West Lifetime Trusts 2020, 2030, 2040, 2050 were added on September 16, 2019. Ivy International scored a 4 this quarter and remains on watch. The remaining investment options are compliant with the County's investment policy performance criteria.

- An updated fund watch report has been included as **Exhibit B**.
- Ivy International (IINCX) remains on watch, an in-depth fund review is included as **Exhibit C**.
- Great-West Lifetime Funds Q3 2019 Commentary is included as **Exhibit D**.

Recommended Actions

1. **Approve maintaining the Ivy International Core Equity Fund – Class N on the Watch List.**

Item 10 - Exhibit A



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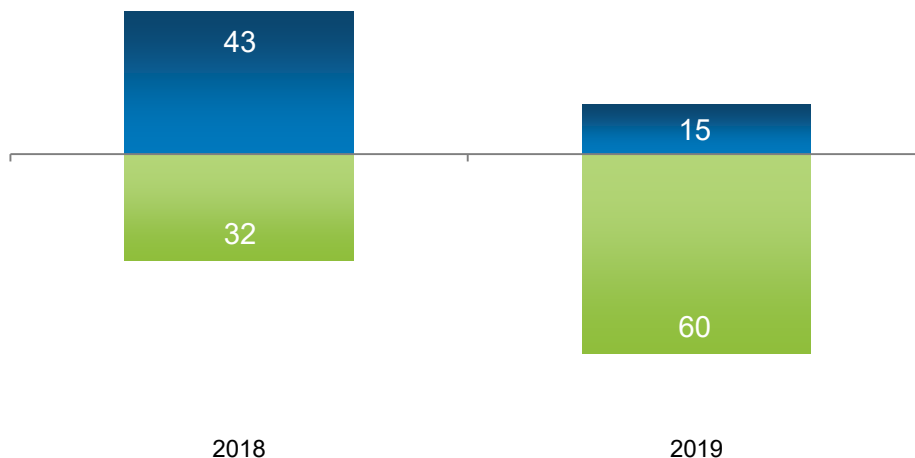
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Central Banks Take Center Stage

Global Central Bank Policy Action

Number of central banks

■ Hiked Interest Rates
■ Cut Interest Rates

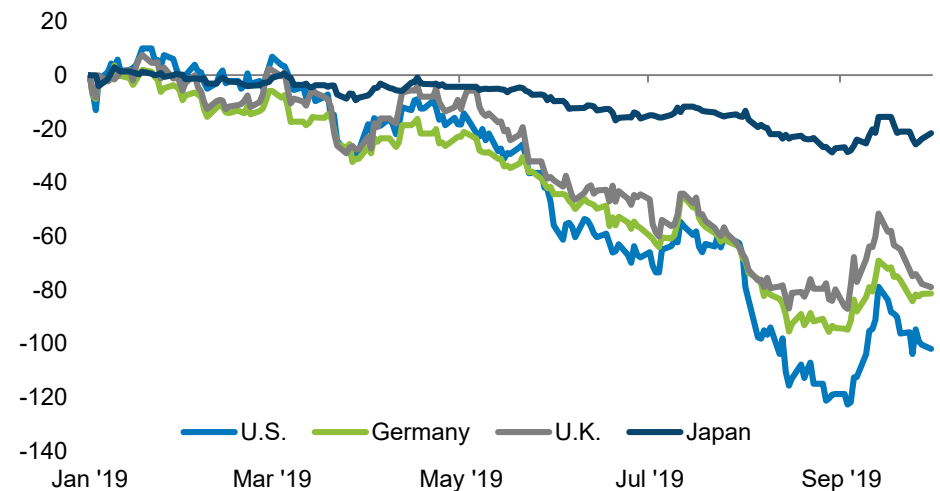


The global economy is being buffeted by a tug-of-war. A series of geopolitical shocks in an already aged expansion are being tempered by a broad-based shift to accommodative monetary policies. The path of easing accelerated during the year as the U.S. administration's efforts to reshape the global trading system disrupted cross-border supply chains and undermined business confidence and investment.

Of the 46 central banks that slashed rates during the quarter, 18 central banks, including the U.S., Brazil and Russia, cut rates twice while two central banks, Indonesia and Paraguay, cut rates three times. Central banks also turned to other tools to stimulate the economy as the threat of inflation remained manageable around the world as waning demand undermined energy and commodity prices.

Year-to-Date Change in 10-Year Government Bond Yields

(basis points, 1 bp = 0.01%)



Sovereign bond markets responded to policy easing with yields falling globally. Demand for U.S. Treasuries pushed the 10-year yield 34 bps lower in the quarter, to 1.66%. Long-term bonds, as proxied by the Bloomberg Barclays U.S. Aggregate 10+ Yr, rallied 6.6% in Q3. Mixed economic data and a continuation of trade tensions led most fixed income indices to outperform equities during the quarter.

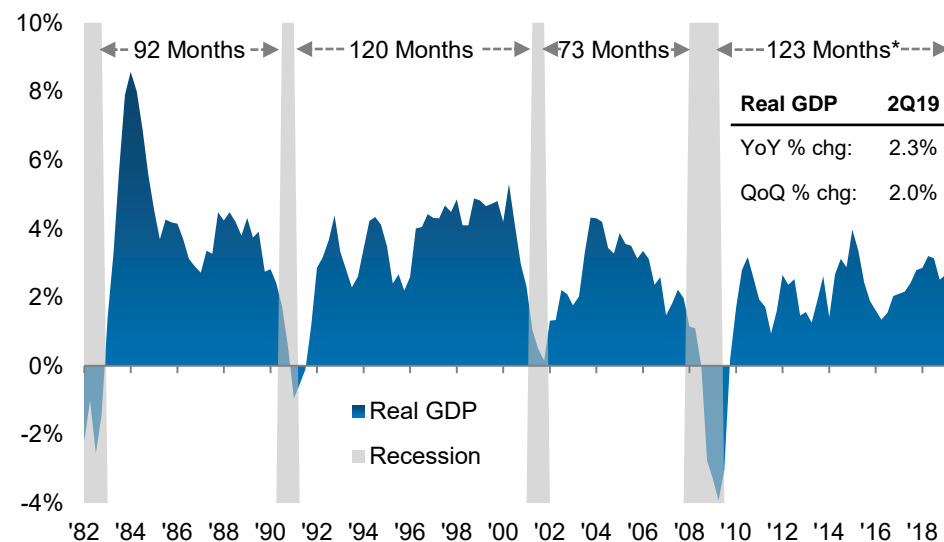
U.S. equity outperformed international equities as the strong U.S. dollar knocked off 2% of returns for both international developed and emerging markets equities. Trade escalation, along with seasonal summer low liquidity, caused August to be a volatile month that ended down 1.6%. In whipsaw fashion, equities recovered most of their previous losses in September helped by expectations of further Fed easing and an improvement in U.S.-China trade negotiations.

Sources: Bloomberg, Northwest Capital Management. Past performance does not guarantee future results. For illustrative purposes only. A basis point equals 0.01%. Central Banks in the sample include Angola, Argentina, Armenia, Australia, Azerbaijan, Bahrain, Botswana, Brazil, Belarus, Chile, China, Democratic Republic of Congo, Costa Rica, Czech Republic, Denmark, Dominican Republic, Egypt, European Central Bank (ECB), Gambia, Georgia, Ghana, Honduras, Hungary, Hong Kong, Iceland, India, Indonesia, Jamaica, Jordan, Kazakhstan, Kyrgyz Republic, Lesotho, Macao, Macedonia, Malaysia, Malawi, Mauritius, Mexico, Moldova, Morocco, Mozambique, Namibia, New Zealand, Nigeria, Norway, Pakistan, Paraguay, Peru, Philippines, Qatar, Russia, Rwanda, Saudi Arabia, Serbia, Sri Lanka, South Africa, South Korea, Swaziland, Tajikistan, Tanzania, Thailand, Tunisia, Turkey, Uganda, United Arab Emirates, United States of America, Ukraine, Vietnam, and Zambia. Data are as of September 30, 2019.

Labor Markets Remain Strong

The Longest U.S. Economic Expansion On Record

% Year-Over-Year

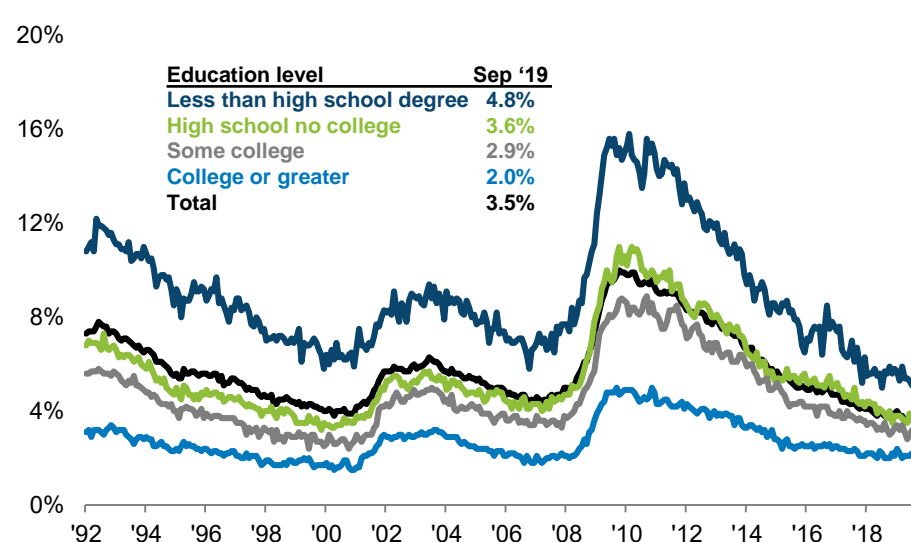


GDP: The U.S. economy grew at a slower, but steady rate of 2% in the second quarter. The consumer remained resilient and drove the bulk of the advance despite weak exports and business investment weighing on growth.

Fed Speak: As market participants expected, the U.S. Federal Reserve cut interest rates for the first time in over a decade. Following the two quarter point rate cuts last quarter, the target federal funds range is currently between 1.75%-2.00%. The rate reductions were driven by the global slowdown and trade turmoil. Chairman Powell indicated that these cuts were a “mid-cycle adjustment” rather than a trend for the future. Committee members are divided on whether further cuts are warranted even though the market is indicating a greater than 75% chance for another cut in October.

Unemployment Rate by Education Level

%



Labor Market: The big picture remains one of a labor market, and an economy, whose growth is slowing but not collapsing. Job gains for September were close to expectations at 136,000, wages grew 2.9% year-over-year, and the unemployment rate dropped to the lowest level since 1969 at 3.5%. The participation rate remained unchanged at 63.2% causing the employment-to-population ratio to tick up to up a new cycle high of 61.0%.

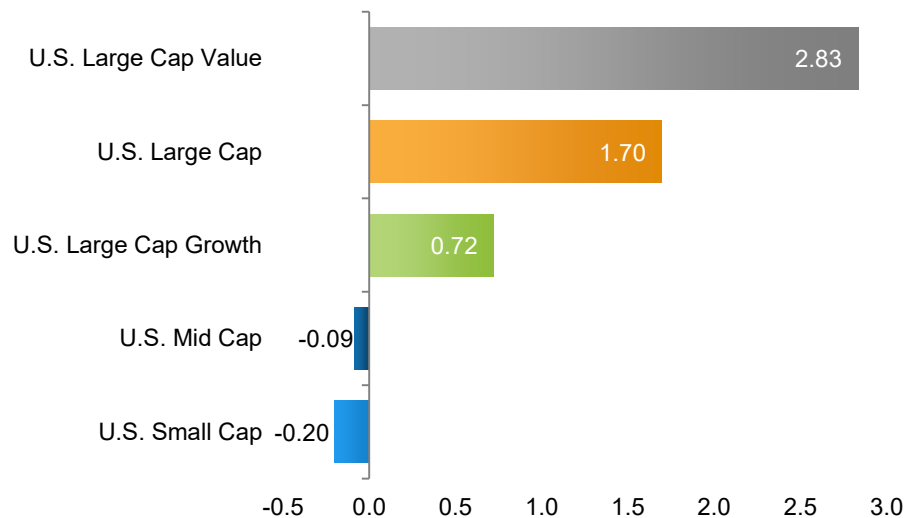
Inflation: Inflation remains manageable, as headline CPI rose 1.7% and core CPI (excluding food and energy) rose 2.4%. The Fed's closely monitored core PCE index remained soft at 1.77% below the Fed's target of 2%.

Asset Class Performance

Markets at a Glance

U.S. Equity Quarterly Performance

% Total Return USD

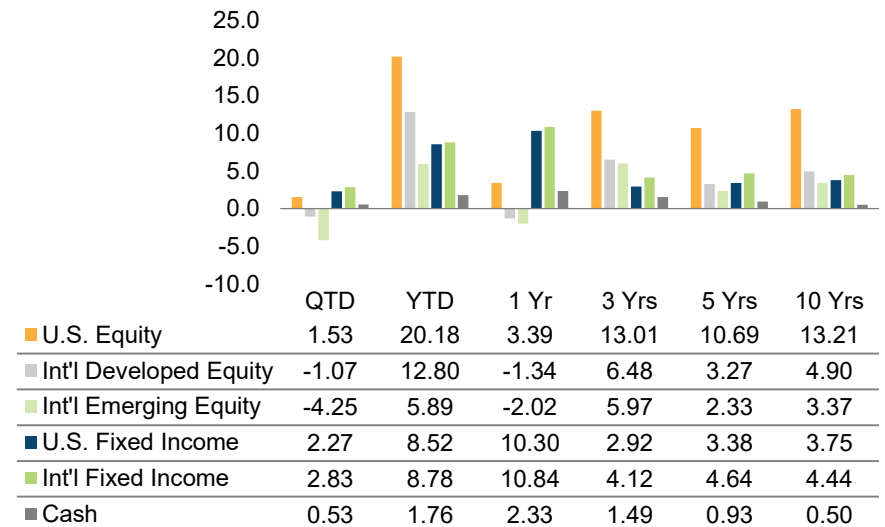


U.S. Equities: Domestic equity markets were mixed for the quarter. Value outpaced growth for the quarter, as the S&P 500 Value Index rallied 2.83% thanks to Apple, AT&T, and JP Morgan. Small Cap stocks were negative for the quarter due to domestic growth concerns and lack of leverage over suppliers.

International Equities: International equities struggled in the third quarter. Developed markets declined 1.1%, with Japan (+3.1%) as the best performer while Hong Kong slumped 12% as protests took their toll on the economy. German markets also dropped 4% as disappointing economic data persisted. The primary detractor for the emerging markets was China, which fell 4.67%. The resumption of trade conflict and questions over policy supports contributed to relative underperformance.

Trailing Returns

% Total Return USD



Fixed Income: Declining interest rates and tame credit spreads drove fixed income markets higher across the board in the second quarter. Global central bank easing along with heightened uncertainties drove demand for U.S. Treasury bonds. Investment grade and high yield corporates delivered solid returns in Q3, gaining 3.1% and 1.2% respectively.

Source: Morningstar Direct as of September 30, 2019. Performance greater than one year is annualized. Past performance does not guarantee future results. Asset classes are represented by the following benchmarks: U.S. Equity (S&P 1500 Index), Int'l. Developed Equity (MSCI EAFE), Int'l Emerging Equity (MSCI EM), U.S. Large Cap (S&P 500), U.S. Large Cap Growth (S&P 500 Growth), U.S. Large Cap Value (S&P 500 Value), U.S. Mid Cap (S&P MidCap 400), U.S. Small Cap (S&P SmallCap 600), U.S. Fixed Income (BBGBarc US Agg Bond), Int'l. Fixed Income (BBGBarc Gbl Agg Ex USD Hdg USD), Cash (ICE BofAML 0-3 M US Trsy Bill). Total Return in USD.

ERISA Plan Legislative and Regulatory Update



Secure Act Stalled in Senate

The SECURE Act continues to have an uncertain future. It passed through the House of Representatives with a bipartisan 417-3 vote earlier this year but has been stuck in the Senate ever since. There was speculation that the SECURE Act could be included in a larger spending bill passed at the end of September. However, due to Congress voting on a 'clean' bill (with no 'ride-along' legislation) and holds by several Republican lawmakers, the act failed to become law. A few of its key components are:

- more flexibility for small businesses to offer multiple employer plans
- increase the age for required minimum distributions from 70^{1/2} to 72
- allow long-term, part-time workers eligibility for retirement benefits

Another spending bill is on the docket for Congress later this year, and it looks likely that the fate of the SECURE Act will be determined then.^{1,2}

2019 Q4 Compliance Calendar

November 15th – Recommended distribution of annual notices to participants. Off-calendar plans, notice distribution 45 days before plan year end

December 1st – Deadline for sending annual 401(k) notices to participants: Safe Harbor notice, Qualified Default Investment Alternative (QDIA) notice, Automatic Contribution Arrangement (ACA) notice

December 15th – Summary Annual Report (SAR) deadline for extended 5500 filing

December 31st – Deadline for:

- eligible participants to receive Required Minimum Distribution (RMD) for the current year
- processing corrective distributions for failed ADP/ACP test for previous year with 10% excise tax
- correcting a failed ADP/ACP test for previous year with qualified nonelective contributions (QNEC)
- amendment to convert existing 401(k) plan to safe harbor design or remove safe harbor design for next plan year
- amending plan for discretionary changes implemented during plan year (certain exceptions apply, e.g. adding salary deferrals, cutting back accrued benefits)

SEC vs. Six States & the District of Columbia

The lawsuit, which was filed on September 9th, 2019, in a Manhattan Federal Court, claims that the Securities & Exchange Commission (SEC) has placed investors in financial danger due to a change in rules regulating broker-client relationships.

The 2010 Dodd-Frank Act had mandated the SEC to produce a clearer fiduciary standard. According to the lawsuit, the updated measure, which was voted on earlier this year, instead relaxes these regulations.^{3,4}

As a fiduciary, NWCM's staff puts our clients' interest first. Our Code of Ethics complies with Rule 204a-1 of the Investment Advisers Act. We seek to avoid conflicts of interest. Our staff's personal investment transactions are subject to pre-approval from our Compliance Officer.

IRS Finalizes Hardship Withdrawal Rules



On September 23rd, the IRS published its finalized rules on hardship withdrawals from 401(k) and other qualified retirement plans. They allow the easing of stipulations on withdrawing early from a retirement plan due to an immediate financial need, such as a real estate foreclosure or eviction, the purchase of a home, or repairing damage after a disaster. It also includes rules for emergency withdrawals due to a medical, educational, or funeral expense. Before these new rules go into effect in individual plans, their plan documents must be amended.⁵

¹Godbout, Ted. "Will the SECURE Act Finally Make it Over the Finish Line?" *NAPA*, 10 September 2019.

²Anderson, Brian. "Ohio's Portman Urges Senate to Pass SECURE Act, Other Retirement Bills" *401Specialist*, 26 September 2019.

³AP and KTVZ.COM news sources. "Oregon, other states sue SEC, claim investors left behind by new rules" *KTVZ*, 10 September 2019.

⁴Menickella, Brian. "The Return of the DOL's Fiduciary Rule" *Forbes*, 29 May 2019.

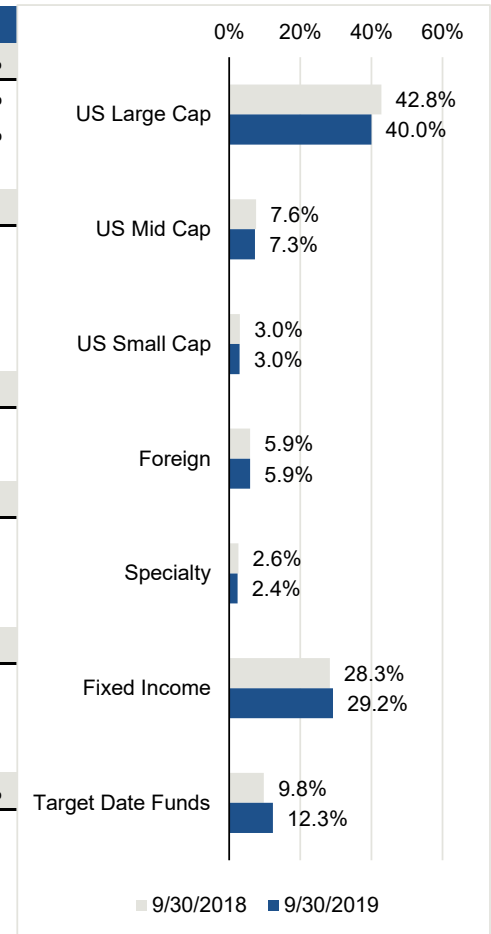
⁵Thornton, Nick. "Treasury finalizes new rules on hardship 401(k) plan withdrawals" *BenefitsPRO*, 20 September 2019.

County of Fresno 457 DC Plan

Summary of Assets

As of 09/30/2019

Asset Class	Ticker	%	9/30/2018	Net Increases/Decreases	9/30/2019	%
US Large Cap		42.82%	\$110,365,006	-\$4,784,954	\$105,580,052	40.03%
BlackRock Equity Index - Collective M	02cff1	18.96%	\$48,875,826	(\$1,167,647)	\$47,708,179	18.09%
Alger Spectra Z	aspzx	18.40%	\$47,432,724	(\$3,969,846)	\$43,462,878	16.48%
Columbia Dividend Income Inst3	cddyx	5.45%	\$14,056,456	\$352,539	\$14,408,994	5.46%
US Mid Cap		7.57%	\$19,504,165	-\$379,897	\$19,124,268	7.25%
BlackRock Russell 2000 Index Coll M	03cff3	1.74%	\$4,493,185	(\$365,086)	\$4,128,099	1.57%
BlackRock MidCap Idx - Collective M	03cff2	3.63%	\$9,366,418	(\$446,059)	\$8,920,359	3.38%
T. Rowe Price Mid-Cap Growth I	rptix	0.00%	\$0	\$6,075,811	\$6,075,811	2.30%
Hennessy Focus Institutional	hfcix	2.19%	\$5,644,562	(\$5,644,562)	\$0	0.00%
US Small Cap		3.02%	\$7,781,066	\$2,276	\$7,783,342	2.95%
Nicholas Limited Edition I	nclex	2.48%	\$6,394,964	(\$197,903)	\$6,197,061	2.35%
Janus Henderson Small Cap Value N	jdsnx	0.54%	\$1,386,102	\$200,179	\$1,586,281	0.60%
Foreign		5.93%	\$15,279,034	\$234,915	\$15,513,949	5.88%
BlackRock EAFE Equity Index Coll T	10cff5	1.34%	\$3,456,077	\$463,056	\$3,919,132	1.49%
Ivy International Core Equity N	iincx	3.88%	\$9,987,272	(\$566,322)	\$9,420,950	3.57%
Invesco Oppenheimer Developing Mkts R6	odvix	0.71%	\$1,835,685	\$338,182	\$2,173,867	0.82%
Specialty		2.58%	\$6,653,422	-\$373,268	\$6,280,154	2.38%
Fidelity Advisor Real Estate Income I	frirx	0.38%	\$972,548	\$1,010,341	\$1,982,889	0.75%
Franklin Utilities R6	fufx	1.34%	\$3,451,903	\$845,362	\$4,297,265	1.63%
Oakmark Equity And Income Investor	oakbx	0.86%	\$2,228,971	(\$2,228,971)	\$0	0.00%
Fixed Income		28.31%	\$72,948,773	\$4,135,610	\$77,084,382	29.22%
BlackRock US Debt Index Fund Coll W	04cff4	1.74%	\$4,480,328	\$568,318	\$5,048,646	1.91%
Templeton Global Bond R6	fbnrx	0.65%	\$1,685,164	\$343,212	\$2,028,376	0.77%
Virtus Seix Total Return Bond R6	samzx	1.42%	\$3,666,048	(\$3,666,048)	\$0	0.00%
Metropolitan West Total Return Bd Plan	mwtsx	0.00%	\$0	\$4,964,349	\$4,964,349	1.88%
Fresno County Stable Value	fressv	24.49%	\$63,117,234	\$1,925,778	\$65,043,012	24.66%
Target Date Funds		9.77%	\$25,189,531	\$7,219,387	\$32,408,917	12.29%
Great-West Lifetime 2015 Trust	grwl15	1.36%	\$3,510,815	\$764,057	\$4,274,871	1.62%
Great-West Lifetime 2025 Trust	grwl25	3.21%	\$8,277,681	\$2,873,890	\$11,151,571	4.23%
Great-West Lifetime 2030 Trust	grwl30	0.00%	\$0	\$352,942	\$352,942	0.13%
Great-West Lifetime 2035 Trust	grwl35	2.10%	\$5,402,741	\$1,296,556	\$6,699,297	2.54%
Great-West Lifetime 2040 Trust	grwl40	0.00%	\$0	\$9,998	\$9,998	0.00%
Great-West Lifetime 2045 Trust	grwl45	2.10%	\$5,403,660	\$899,034	\$6,302,694	2.39%
Great-West Lifetime 2050 Trust	grwl50	0.00%	\$0	\$9,998	\$9,998	0.00%
Great-West Lifetime 2055 Trust	grwl55	1.01%	\$2,594,634	\$1,012,912	\$3,607,546	1.37%
Total		100.0%	\$257,720,996	\$6,054,068	\$263,775,065	100.0%



County of Fresno 457 DC Plan

Investment Summary

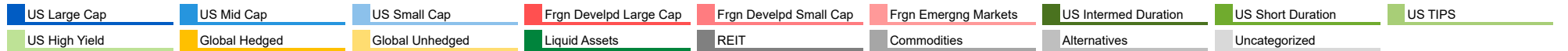
As of 9/30/2019

Passively-Managed and Cash Funds

Passively-Managed and Cash Funds		Equities										Fixed Income					Liquid	Other																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																												
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Actively-Managed Funds

Style	Investment	Ticker	L	M	S	L	S	E	I	S	T	Y	H	U	C	R	C	A	U	Exp	Qtr	YTD	1 Yr	2 Yr	3 Yr	4 Yr	5 Yr	10 Yr
Income	Columbia Dividend Income Inst3	CDDYX	89	3		2									5	1				0.58	3.16	20.33	8.73	10.99	13.43	14.23	10.80	12.80
Growth	Alger Spectra Z	ASPZX	86	6	1	1		3							1	1			1	0.94	-1.22	20.74	1.04	13.19	15.62	14.48	11.99	14.50
Utilities	Franklin Utilities R6	FUFRX	68	25		3													4	0.50	8.22	26.78	27.90	14.20	13.02	14.38	11.89	12.69
Growth	T. Rowe Price Mid-Cap Growth I	RPTIX	37	49	4	2		1							6				1	0.62	-0.69	23.46	7.27	12.48	15.03	14.10	13.29	14.93
Growth	Nicholas Limited Edition I	NCLEX		28	60	2	4								6					0.86	-0.72	18.39	0.58	9.93	13.06	13.42	11.14	13.03
Blend	Janus Henderson Small Cap Value N	JDSNX		33	53	1	3								4				6	0.81	1.26	18.04	1.63	3.93	8.55	10.93	8.96	10.23
Global Blend	Ivy International Core Equity N	IINCX	5	1		74	1	9	2						6		1		1	0.79	-0.40	11.56	-5.46	-2.03	4.37	5.00	2.45	5.18
Emerging Gr	Invesco Oppenheimer Developing Mkts R6	ODVIX				22		64							4				10	0.85	-3.75	11.31	2.65	1.60	8.05	10.56	2.83	5.87
Intermediate	Metropolitan West Total Return Bd Plan	MWTSX							74	12	3	6		3	2					0.37	2.25	8.92	10.55	4.72	3.25	3.65	3.37	5.23
Global Bond	Templeton Global Bond R6	FBNRX							3	1		1	49	1	40				5	0.57	-3.31	-0.58	1.17	-0.41	3.98	3.19	0.94	3.82
Real Estate	Fidelity Advisor Real Estate Income I	FRIRX							6	1		28		1	7	35		22		0.75	4.22	16.26	12.76	7.72	7.09	8.65	7.69	9.85



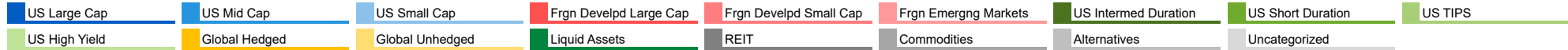
County of Fresno 457 DC Plan

Investment Summary









As of 9/30/2019

Target-Date Funds

Target-Date Funds			Equities						Fixed Income						Liquid	Other													
			US			Foreign			US				Foreign																
			L	M	S	L	S	E	I	S	T	Y	H	U		C	R	C	A										
Style	Investment	Ticker																											
Target Date	Great-West Lifetime 2015 Trust	GRWL15	17	8	4	10		3	20	8	13	5	5		4	3				0.40	1.02	11.68	5.30	5.31	6.45	7.30	5.78		
Target Date	Great-West Lifetime 2020 Trust	GRWL20	19	8	5	12		4	21	6	9	5	5		3	3				0.40	1.02	12.50	5.23	5.65	7.02				
Target Date	Great-West Lifetime 2025 Trust	GRWL25	22	9	6	14		5	19	5	6	5	4		2	3				0.40	0.83	13.28	4.77	5.86	7.70	8.59	6.70		
Target Date	Great-West Lifetime 2030 Trust	GRWL30	25	11	7	17		6	16	3	4	4	3		1	3				0.41	0.74	14.36	4.23	5.82	8.26				
Target Date	Great-West Lifetime 2035 Trust	GRWL35	29	12	8	21		7	11	1	2	2	2		1	4				0.41	0.50	15.33	3.55	6.43	9.24	10.12	7.70		
Target Date	Great-West Lifetime 2040 Trust	GRWL40	30	13	10	23		9	8	1		2	1			3				0.41	0.29	15.91	2.85	5.95	9.27				
Target Date	Great-West Lifetime 2045 Trust	GRWL45	31	13	10	24		10	6			1	1			4				0.41	0.14	16.20	2.45	6.41	9.79	10.67	7.95		
Target Date	Great-West Lifetime 2050 Trust	GRWL50	30	13	11	25		10	5			1	1			4				0.41	0.14	16.28	2.39	5.71	9.33				
Target Date	Great-West Lifetime 2055 Trust	GRWL55	29	13	11	25		11	5			1	1			4				0.42	0.00	16.09	2.17	6.18	9.66	10.61	7.80		



CALCULATION METHODOLOGY OF OVERALL FUND1 (Worst) — 10 (Best)

Factor	Weight	Explanation		Score Calculation	
<div>RETURNS</div> <div>Summary compliance report shows the average peer group quartile rank for all time periods (no credit for bottom quartile performance)</div>	<div><div>40% Overall</div></div>	<div>Absolute Returns</div> <div>Peer Group Percentile Rankings: 3,5,10 Year Periods</div>		<div>Proportional Score</div> <div>Ranks in the top 75% of Peer Group</div>	<div>No Score</div> <div>Ranks in the bottom 25% of Peer Group</div>
<div>RISK ADJUSTED RETURNS</div> <div>Summary compliance report shows the average peer group quartile rank for all time periods (no credit for bottom quartile performance)</div>	<div><div>20% Overall</div></div>	<div>Sharpe Ratio</div> <div>Peer Group Percentile Rankings: 3,5,10 Year Periods</div>		<div>Proportional Score</div> <div>Ranks in top 75% of Peer Group</div>	<div>No Score</div> <div>Ranks in bottom 25% of Peer Group</div>
<div>RISK</div> <div>Summary compliance report shows the average peer group quartile rank for all time periods (no credit for bottom quartile performance)</div>	<div><div>30% Overall</div></div>	<div><div>10% Overall</div></div>	<div>Standard Deviation</div> <div>Peer Group Percentile Rankings: 3,5,10 Year Periods</div>	<div>Proportional Score</div> <div>Ranks in top 75% of Peer Group</div>	<div>No Score</div> <div>Ranks in bottom 25% of Peer Group</div>
		<div><div>20% Overall</div></div>	<div>Upside/Downside Capture</div> <div>Peer Group Percentile Rankings: 3,5,10 Year Periods</div>	<div>Proportional Score</div> <div>Ranks in top 75% of Peer Group</div>	<div>No Score</div> <div>Ranks in bottom 25% of Peer Group</div>
<div>OTHER</div> <div>Fund expense quartile rank</div> <div>Manager tenure is greater than 3 years</div>	<div><div>10% Overall</div></div>	<div><div>5% Overall</div></div>	<div>Expense Ratio</div> <div>For current period</div>	<div>Proportional Score</div> <div>Ranks in top 75% of Peer Group</div>	<div>No Score</div> <div>Ranks in bottom 25% of Peer Group</div>
		<div><div>5% Overall</div></div>	<div>Average Tenure</div> <div>Number of years</div>	<div>Full Score</div> <div>Manager Tenure more than 3 years</div>	<div>No Score</div> <div>Manager Tenure less than 3 years</div>

For peer group rankings, a rank of 1-50 indicates the manager performed favorably and ranked in the top half of its peer group for that metric. For example: when measuring risk, a rank of 1 would mean the manager had a very low standard deviation compared to its peer group, whereas when measuring return, a rank of 1 would mean the manager had a very high return compared to its peer group.

County of Fresno 457 DC Plan

Fund Policy Compliance

As of 9/30/2019

Summary of Fund Compliance

Passively-Managed and Cash Funds

Type	Assets %	Fund Name	Ticker
LC Index	18.09%	BlackRock Equity Index - Collective M	02cff1
MC Index	3.38%	BlackRock MidCap Idx - Collective M	03cff2
SC Index	1.57%	BlackRock Russell 2000 Index Coll M	03cff3
GI Index	1.49%	BlackRock EAFE Equity Index Coll T	10cff5
TB Index	1.91%	BlackRock US Debt Index Fund Coll W	04cff4
Stable Value	24.66%	Fresno County Stable Value	fressv

Actively-Managed Funds

Status	Assets %	Fund Name	Ticker	Return (40%)	Risk Adjusted Return (20%)	Risk (30%)	Expense (5%)	Tenure (5%)
Pass	5.46%	Columbia Dividend Income Inst3	CDDYX	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>
Pass	16.48%	Alger Spectra Z	ASPZX	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>
Pass	1.63%	Franklin Utilities R6	FUFRX	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>
Pass	2.30%	T. Rowe Price Mid-Cap Growth I	RPTIX	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>
Pass	2.35%	Nicholas Limited Edition I	NCLEX	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>
Pass	0.60%	Janus Henderson Small Cap Value N	JDSNX	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>
Watch	3.57%	Ivy International Core Equity N	IINCX	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>
Pass	0.82%	Invesco Oppenheimer Developing Mkts R6	ODVIX	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>
Pass	1.88%	Metropolitan West Total Return Bd Plan	MWTSX	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>
Pass	0.77%	Templeton Global Bond R6	FBNRX	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>
Pass	0.75%	Fidelity Advisor Real Estate Income I	FRIRX	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>

Underperforming ◀ ▶ Outperforming

Target-Date Funds

Status	Assets %	Fund Name	Ticker	Return (40%)	Risk Adjusted Return (20%)	Risk (30%)	Expense (5%)	Tenure (5%)
Pass	1.62%	Great-West Lifetime 2015 Trust	GRWL15	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>
Pass	n/a	Great-West Lifetime 2020 Trust	GRWL20	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>
Pass	4.23%	Great-West Lifetime 2025 Trust	GRWL25	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>
Pass	0.13%	Great-West Lifetime 2030 Trust	GRWL30	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>
Pass	2.54%	Great-West Lifetime 2035 Trust	GRWL35	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>
Pass	0.00%	Great-West Lifetime 2040 Trust	GRWL40	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>
Pass	2.39%	Great-West Lifetime 2045 Trust	GRWL45	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>
Pass	0.00%	Great-West Lifetime 2050 Trust	GRWL50	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>
Pass	1.37%	Great-West Lifetime 2055 Trust	GRWL55	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>

Underperforming ◀ ▶ Outperforming

Passively-Managed and Cash Funds

Type of Fund	Assets %	Ticker	Fund Name	Return vs Peer Group (40%)			Risk Adjusted Return Sharpe (20%)			Standard Deviation			Risk (30%) Up Capture			Down Capture			Other (10%) Expense	Tenure
				3Y	5Y	10Y	3Y	5Y	10Y	3Y	5Y	10Y	3Y	5Y	10Y	3Y	5Y	10Y	Peer Rank %	Avg Yrs
LC Index	18.09%	02cff1	BlackRock Equity Index - Collective M	14	8	5	19	13	6	39	39	33	14	12	26	36	30	22	1	5
MC Index	3.38%	03cff2	BlackRock MidCap Idx - Collective M	40	18	11	46	21	18	68	64	67	10	8	11	74	66	65	1	5
SC Index	1.57%	03cff3	BlackRock Russell 2000 Index Coll M	11	13	20	14	17	33	45	58	66	23	12	11	33	51	70	2	5
GI Index	1.49%	10cff5	BlackRock EAFE Equity Index Coll T	11	20	23	9	18	23	20	51	48	26	31	26	23	39	47	5	5
TB Index	1.91%	04cff4	BlackRock US Debt Index Fund Coll W	1	1		10	18		86	84		5	7		52	49		1	5
table Valu	24.66%	fressv	Fresno County Stable Value	1	1	1	1	1	1	2	1	19	1	1	1	n/a	1	1	40	6

Actively-Managed Funds

Overall Fund Score	Assets %	Ticker	Fund Name	Return vs Peer Group (40%)			Risk Adjusted Return Sharpe (20%)			Standard Deviation			Risk (30%) Up Capture			Down Capture			Other (10%) Expense	Tenure
				3Y	5Y	10Y	3Y	5Y	10Y	3Y	5Y	10Y	3Y	5Y	10Y	3Y	5Y	10Y	Peer Rank %	Avg Yrs
9	5.46%	CDDYX	Columbia Dividend Income Inst3	1	1	3	1	2	2	14	13	10	53	52	78	9	8	9	16	10
6	16.48%	ASPZX	Alger Spectra Z	38	40	18	45	42	28	70	69	62	21	25	11	71	73	68	45	9
7	1.63%	FUFRX	Franklin Utilities R6	25	11	14	44	15	8	83	70	24	10	10	29	73	70	21	15	15
8	2.30%	RPTIX	T. Rowe Price Mid-Cap Growth I	32	10	9	14	7	6	9	8	12	60	35	45	20	11	15	6	27
7	2.35%	NCLEX	Nicholas Limited Edition I	41	27	39	7	8	4	1	1	2	90	85	91	2	3	5	17	14
8	0.60%	JDSNX	Janus Henderson Small Cap Value N	7	5	33	4	3	1	3	3	3	89	80	93	3	3	2	12	6
4	3.57%	IINCX	Ivy International Core Equity N	73	63	24	77	66	26	87	80	61	50	30	29	82	74	46	30	8
8	0.82%	ODVIX	Invesco Oppenheimer Developing Mkts R6	12	33	6	10	31	8	35	43	28	40	57	51	17	33	18	12	12
7	1.88%	MWTSX	Metropolitan West Total Return Bd Plan	31	34	7	40	31	6	69	35	55	30	44	12	47	35	17	12	20
5	0.77%	FBNRX	Templeton Global Bond R6	14	76	32	49	76	49	88	86	93	98	96	94	1	1	1	14	9
6	0.75%	FRIRX	Fidelity Advisor Real Estate Income I	45	82	91	4	1	1	5	2	2	94	95	97	6	2	1	18	8

Target-Date Funds

Overall Fund Score	Assets %	Ticker	Fund Name	Return vs Peer Group (40%)			Risk Adjusted Return Sharpe (20%)			Standard Deviation			Risk (30%) Up Capture			Down Capture			Other (10%) Expense	Tenure
				3Y	5Y	10Y	3Y	5Y	10Y	3Y	5Y	10Y	3Y	5Y	10Y	3Y	5Y	10Y	Peer Rank %	Avg Yrs
8	1.62%	GRWL15	Great-West Lifetime 2015 Trust	22	2		29	3		43	43		28	30		42	21		26	5
7	n/a	GRWL20	Great-West Lifetime 2020 Trust	15			27			65			23			58			19	
8	4.23%	GRWL25	Great-West Lifetime 2025 Trust	18	1		16	1		43	31		34	34		32	22		19	5
7	0.13%	GRWL30	Great-West Lifetime 2030 Trust	28			n/a			40									19	
9	2.54%	GRWL35	Great-West Lifetime 2035 Trust	11	2		11	1		44	30		24	30		44	17		20	5
7	0.00%	GRWL40	Great-West Lifetime 2040 Trust	21			n/a			56									19	
8	2.39%	GRWL45	Great-West Lifetime 2045 Trust	10	4		14	8		50	42		12	16		49	28		19	5
6	0.00%	GRWL50	Great-West Lifetime 2050 Trust	29			31			54			34			51			18	
8	1.37%	GRWL55	Great-West Lifetime 2055 Trust	18	7		21	9		54	40		18	13		51	33		19	5

All data except for 'Tenure - Average Years' are listed as a peer rank percentage

All Funds remain in compliance with Investment Policy and no action need be taken other than indicated in the Fund Compliance Commentary section of this report.



Northwest Capital Management, Inc. 10/30/2019

This report, along with more detailed performance data on Plan Investment Options, was reviewed by the Plan's Trustee and/or Investment Committee.

Trustee / Committee Member Date

BlackRock Equity Index - Collective M (02cff1)

Fund Type: LC Index

US Large Cap

The fund seeks to replicate the performance of U.S. Large Cap Stocks

Trailing Returns	1 Qtr	1 Yr	3 Yr	5 Yr	10 Yr
02cff1	1.70%	4.35%	13.47%	10.91%	13.32%
S&P 500 TR USD	1.70%	4.26%	13.40%	10.84%	13.24%
Out/(Under) Performing	0.00%	0.09%	0.07%	0.07%	0.07%
Peer Group Ranking	36	31	14	8	5

BlackRock MidCap Idx - Collective M (03cff2)

Fund Type: MC Index

US Mid Cap

The fund seeks to replicate the performance of U.S. Mid Cap Stocks

Trailing Returns	1 Qtr	1 Yr	3 Yr	5 Yr	10 Yr
03cff2	-0.07%	-2.42%	9.32%	8.73%	12.50%
S&P MidCap 400 TR	-0.08%	-2.50%	9.38%	8.88%	12.56%
Out/(Under) Performing	0.02%	0.08%	-0.06%	-0.15%	-0.06%
Peer Group Ranking	57	54	40	18	11

BlackRock Russell 2000 Index Coll M (03cff3)

Fund Type: SC Index

US Small Cap

The fund seeks to replicate the performance of U.S. Small Cap Stocks

Trailing Returns	1 Qtr	1 Yr	3 Yr	5 Yr	10 Yr
03cff3	1.13%	-5.53%	9.69%	9.18%	11.82%
Russell 2000 TR USD	-2.40%	-8.88%	8.23%	8.19%	11.19%
Out/(Under) Performing	3.53%	3.36%	1.46%	0.99%	0.62%
Peer Group Ranking	8	28	11	13	20

BlackRock EAFE Equity Index Coll T (10cff5)

Fund Type: GI Index

Frngn Developd Large Cap

The fund seeks to replicate performance of Foreign stock represented by the MSCI EAFE Index

Trailing Returns	1 Qtr	1 Yr	3 Yr	5 Yr	10 Yr
10cff5	-1.05%	-0.99%	6.86%	3.61%	5.21%
MSCI ACWI Ex USA NR USD	-1.80%	-1.23%	6.33%	2.90%	4.45%
Out/(Under) Performing	0.75%	0.24%	0.53%	0.71%	0.76%
Peer Group Ranking	35	29	11	20	23

BlackRock US Debt Index Fund Coll W (04cff4)

Fund Type: TB Index

US Intermed Duration

The fund seeks to replicate the performance of the U.S. Bond Market

Trailing Returns	1 Qtr	1 Yr	3 Yr	5 Yr	10 Yr
04cff4	2.30%	10.34%	2.99%	3.50%	
BBgBarc US Govt Interim TR USD	1.18%	7.53%	1.81%	2.18%	2.34%
Out/(Under) Performing	1.12%	2.81%	1.17%	1.32%	
Peer Group Ranking	3	3	1	1	

Fresno County Stable Value (fressv)

Fund Type: Stable Value

Liquid Assets

Trailing Returns	1 Qtr	1 Yr	3 Yr	5 Yr	10 Yr
fressv	0.58%	2.27%	2.10%	2.12%	2.43%
ICE BofAML 0-3 M US Trsy Bill TR USD	0.54%	2.33%	1.49%	0.94%	0.50%
Out/(Under) Performing	0.04%	-0.07%	0.60%	1.18%	1.92%
Peer Group Ranking	1	10	1	1	1

Columbia Dividend Income Inst3 (CDDYX)

Fund Score: 9 (Status: Pass)

US Large Cap

The investment seeks total return, consisting of current income and capital appreciation.

The fund invests at least 80% of its net assets (including the amount of any borrowings for investment purposes) in a diversified portfolio of income-producing (dividend-paying) equity securities, which will consist primarily of common stocks but also may include preferred stocks and convertible securities. It invests principally in securities of companies believed to be undervalued but also may invest in securities of companies believed to have the potential for long-term growth. The fund may invest in companies that have market capitalizations of any size.

Trailing Returns	1 Qtr	1 Yr	3 Yr	5 Yr	10 Yr
CDDYX	3.16%	8.73%	13.43%	10.80%	12.80%
S&P 500 Value TR USD	2.83%	5.54%	10.60%	8.47%	11.56%
Out/(Under) Performing	0.33%	3.20%	2.83%	2.33%	1.24%
Peer Group Ranking	8	4	1	1	3

Alger Spectra Z (ASPZX)

Fund Score: 6 (Status: Pass)

US Large Cap

The investment seeks long-term capital appreciation.

The fund invests primarily in the equity securities of companies of any size that the manager believes demonstrate promising growth potential. Equity securities include common or preferred stocks that are listed on U.S. or foreign exchanges. It may invest a significant portion of its assets in securities of companies conducting business within a single sector, including the information technology, consumer discretionary, and health care sectors.

Trailing Returns	1 Qtr	1 Yr	3 Yr	5 Yr	10 Yr
ASPZX	-1.22%	1.04%	15.62%	11.99%	14.50%
S&P 500 Growth TR USD	0.73%	3.26%	15.74%	12.83%	14.72%
Out/(Under) Performing	-1.95%	-2.22%	-0.12%	-0.84%	-0.22%
Peer Group Ranking	66	58	38	40	18

Alger Spectra returned -1.2% in Q3 2019 compared to 0.7% for its benchmark (S&P 500 Growth). Year-to-date, the fund returned 20.7% compared to 21.1% for the benchmark. Alger's overweight to Healthcare as well as poor stock selection within the sector hampered relative performance. Its performance in Technology was mixed. Several positions in big name stocks, like Alphabet, Apple, and Microsoft provided tailwinds to performance, but others like Facebook and Adobe served as detractors. The fund's manager, Patrick Kelly, continues to find companies poised for growth: emerging firms, those with high unit volume growth, and those going through positive life-cycle changes (a management shake-up or product advancements). The fund's investment in the Technology, Healthcare, and Consumer Cyclical sectors, has progressed over the past three years. The fund currently scores a 6 under our methodology. Its risk-adjusted returns rank in the top half relative to peers for the trailing three-, five- and ten-year periods.

Franklin Utilities R6 (FUFRX)

Fund Score: 7 (Status: Pass)

US Large Cap

The investment seeks capital appreciation and current income.

The fund normally invests at least 80% of its net assets in the securities of public utilities companies. These are companies that provide electricity, natural gas, water, and communications services to the public and companies that provide services to public utilities companies. It concentrates (invests more than 25% of its total assets) in companies operating in the utilities industry. The fund invests primarily in equity securities, which consist mainly of common stocks.

Trailing Returns	1 Qtr	1 Yr	3 Yr	5 Yr	10 Yr
FUFRX	8.22%	27.90%	13.02%	11.89%	12.69%
MSCI World/Utilities NR USD	6.44%	20.62%	10.45%	7.55%	5.95%
Out/(Under) Performing	1.77%	7.28%	2.57%	4.34%	6.74%
Peer Group Ranking	12	1	25	11	14

T. Rowe Price Mid-Cap Growth I (RPTIX)

Fund Score: 8 (Status: Pass)

US Mid Cap

The investment seeks long-term capital appreciation.

The fund normally invests at least 80% of its net assets (including any borrowings for investment purposes) in a diversified portfolio of common stocks of mid-cap companies whose earnings T. Rowe Price expects to grow at a faster rate than the average company. The advisor defines mid-cap companies as those whose market capitalization falls within the range of either the S&P MidCap 400 Index or the Russell Midcap Growth Index. While most assets will typically be invested in U.S. common stocks, the fund may invest in foreign stocks in keeping with the fund's objectives.

Trailing Returns	1 Qtr	1 Yr	3 Yr	5 Yr	10 Yr
RPTIX	-0.69%	7.27%	15.03%	13.29%	14.93%
S&P MidCap 400 Growth TR USD	-0.61%	-2.54%	10.04%	9.53%	13.05%
Out/(Under) Performing	-0.08%	9.81%	4.99%	3.75%	1.89%
Peer Group Ranking	34	21	32	10	9

T. Rowe Price Mid-Cap Growth returned -0.7% for the quarter (23.4% year-to-date). This was compared to its benchmark, the S&P MidCap 400 Growth, which returned -0.6% (18.3% year-to-date). The fund did exceedingly well in its stock selections in the Consumer Defensive, Financial Services, and Industrials sectors. However, the fund's Healthcare selections, and its underweight position in the outperforming Real Estate sector, hampered performance. The fund's top contributors for the quarter were Dollar General Corp, L3Harris Technologies Inc, and Burlington Stores Inc. These less cyclical names provided a tailwind on performance for the quarter. Management is cautious with the current market going forward and contends that the fund is well-positioned to weather future turbulence. T. Rowe Price Mid-Cap Growth scores an 8 under our scoring methodology and the trailing risk-adjusted returns rank in the top half of peers over the trailing three-, five-, and ten-year periods, respectively.

Nicholas Limited Edition I (NCLEX)

Fund Score: 7 (Status: Pass)

US Small Cap

The investment seeks to increase the value of the investment over the long-term.

The fund primarily invests in common stocks of domestic corporations with small- and medium-sized market capitalizations believed to have growth potential. The advisor believes a company's annual sales volume and market capitalization are the factors most illustrative of a company's size. The advisor generally considers companies with market capitalizations up to \$3 billion as "small", between \$3 billion and \$25 billion as "medium," and greater than \$25 billion as "large."

Trailing Returns	1 Qtr	1 Yr	3 Yr	5 Yr	10 Yr
NCLEX	-0.72%	0.58%	13.06%	11.14%	13.03%
Russell 2000 Growth TR USD	-4.17%	-9.62%	9.80%	9.08%	12.25%
Out/(Under) Performing	3.46%	10.21%	3.26%	2.06%	0.78%
Peer Group Ranking	8	11	41	27	39

Janus Henderson Small Cap Value N (JDSNX)

Fund Score: 8 (Status: Pass)

US Small Cap

The investment seeks capital appreciation.

The fund pursues its investment objective by investing primarily in the common stocks of small companies whose stock prices are believed to be undervalued by the fund's portfolio managers. It invests, under normal circumstances, at least 80% of its net assets (plus any borrowings for investment purposes) in equity securities of small companies whose market capitalization, at the time of initial purchase, is less than the 12-month average of the maximum market capitalization for companies included in the Russell 2000 Value Index. The fund may invest up to 20% of its net assets in cash or similar investments.

Trailing Returns	1 Qtr	1 Yr	3 Yr	5 Yr	10 Yr
JDSNX	1.26%	1.63%	8.55%	8.96%	10.23%
Russell 2000 Value TR USD	-0.58%	-8.25%	6.54%	7.17%	10.06%
Out/(Under) Performing	1.84%	9.88%	2.02%	1.79%	0.17%
Peer Group Ranking	17	1	7	5	33

Ivy International Core Equity N (IINCX)

Fund Score: 4 (Status: Watch)

Frgn Developd Large Cap

The investment seeks to provide capital growth and appreciation.

The fund invests, under normal circumstances, at least 80% of its net assets in equity securities of companies primarily located in, or principally traded in, developed European and Asian/Pacific Basin markets. In seeking to enhance potential return, it also may invest in issuers located or doing business in emerging market countries. The fund may invest up to 100% of its total assets in foreign securities.

Trailing Returns	1 Qtr	1 Yr	3 Yr	5 Yr	10 Yr
IINCX	-0.40%	-5.46%	4.37%	2.45%	5.18%
MSCI ACWI Ex USA NR USD	-1.80%	-1.23%	6.33%	2.90%	4.45%
Out/(Under) Performing	1.40%	-4.23%	-1.96%	-0.45%	0.73%
Peer Group Ranking	18	87	73	63	24

Shifting market dynamics and increased volatility fared favorably for the fund relative to its benchmark during the quarter. The fund was down on an absolute basis, but outperformed the MSCI ACWI Ex USA Index. Most of the fund's relative return was gained during July and August when volatility took hold of markets and many of the widely owned stocks, most of which the fund does not own, fell the most. The fund's tilt toward a defensive posture, resulting from a combination of defensively oriented stocks, currency positions and cash, contributed to performance, though stock selection was the key driver. The fund's score maintained a 4 under our methodology. As such, the fund is remaining on watch and we will continue to closely monitor performance. Given its moderate level of stock diversification and core style classification it remains suitable as a standalone international equity manager. Over the long-term, we remain confident in management's ability to add value to shareholders.

Invesco Oppenheimer Developing Mkts R6 (ODVIX)

Fund Score: 8 (Status: Pass)

Frng Emergng Markets

The investment seeks capital appreciation.

The fund mainly invests in common stocks of issuers in developing and emerging markets throughout the world and at times it may invest up to 100% of its total assets in foreign securities. Under normal market conditions, it will invest at least 80% of its net assets, plus borrowings for investment purposes, in equity securities of issuers whose principal activities are in a developing market, i.e. are in a developing market or are economically tied to a developing market country, and in derivatives and other instruments that have economic characteristics similar to such securities.

Trailing Returns	1 Qtr	1 Yr	3 Yr	5 Yr	10 Yr
ODVIX	-3.75%	2.65%	8.05%	2.83%	5.87%
MSCI EM NR USD	-4.25%	-2.02%	5.98%	2.33%	3.37%
Out/(Under) Performing	0.50%	4.68%	2.07%	0.50%	2.49%
Peer Group Ranking	57	32	12	33	6

Oppenheimer Developing Markets returned -3.8% for the quarter, while its benchmark returned -4.3% (MSCI Emerging Markets). The fund's year-to-date return was 11.3%, with the benchmark returning 5.9% for the same period. The fund had another strong quarter compared to its benchmark. It did especially well in China with a strong stock selection but missed out on returns in Taiwan by not allocating as highly compared to the benchmark. The fund's manager doesn't consider Taiwan an emerging market and therefore withholds from investing heavily in the contested area. Overall, the fund's best returns by country were in China, Brazil, and Turkey, while its leading detractors were in Hong Kong, France, and Taiwan. Hong Kong is embroiled in tensions with the Chinese mainland, and the fund's top four worst-performing stocks were all headquartered in the special administrative region. As far as sectors are concerned, the fund allocated well in the Consumer Cyclical sector and chose stocks in Financial Services and Technology that overperformed overall, though they were underweight in the Technology sector. The fund currently scores an 8 under our methodology. Its risk-adjusted returns rank in the top quartile of peers for the trailing three- and ten-year periods, and in the top half for the trailing five-year period.

Metropolitan West Total Return Bd Plan (MWT SX)

Fund Score: 7 (Status: Pass)

US Intermed Duration

The investment seeks to maximize long-term total return.

The fund pursues its objective by investing, under normal circumstances, at least 80% of its net assets in investment grade fixed income securities or unrated securities that are determined by the Adviser to be of comparable quality. Up to 20% of the fund's net assets may be invested in securities rated below investment grade. The fund also invests at least 80% of its net assets plus borrowings for investment purposes in fixed income securities it regards as bonds.

Trailing Returns	1 Qtr	1 Yr	3 Yr	5 Yr	10 Yr
MWT SX	2.25%	10.55%	3.25%	3.37%	5.23%
BBgBarc US Agg Bond TR USD	2.27%	10.31%	2.93%	3.38%	3.75%
Out/(Under) Performing	-0.02%	0.24%	0.31%	-0.02%	1.48%
Peer Group Ranking	32	12	31	34	7

The MetWest Total Return Bond fund gained 2.3% for the quarter, trailing the Bloomberg Barclays Aggregate index by 2bps. Year-to-date, the fund is outperforming with a total return of 8.9% versus 8.5% for its benchmark. Selective excess exposure to emerging market, asset-backed, commercial mortgage-backed fixed income detracted from relative performance. Given neutral duration positioning, the shift down in the curve had a minimal impact on relative returns. Looking forward, the fund maintains its late-cycle theme by being selective within credit. The fund retains its neutral duration positioning but maintains a slight bias for curve steepening. The fund scores a 7 under our scoring methodology and performance ranks in the top half relative to peers over the trailing 3-, 5- and 10-year periods.

Templeton Global Bond R6 (FBNRX)

Fund Score: 5 (Status: Pass)

Global Hedged

The investment seeks current income with capital appreciation and growth of income.

Under normal market conditions, the fund invests at least 80% of its net assets in "bonds." Bonds include debt obligations of any maturity, such as bonds, notes, bills and debentures. It invests predominantly in bonds issued by governments, government-related entities and government agencies located around the world. The fund may invest up to 25% of its total assets in bonds that are rated below investment grade or, if unrated determined by the investment manager to be of comparable quality. It is non-diversified.

Trailing Returns	1 Qtr	1 Yr	3 Yr	5 Yr	10 Yr
FBNRX	-3.31%	1.17%	3.98%	0.94%	3.82%
BBgBarc Global Aggregate TR Hdg USD	2.60%	10.65%	3.65%	4.12%	4.16%
Out/(Under) Performing	-5.92%	-9.48%	0.33%	-3.18%	-0.35%
Peer Group Ranking	98	94	14	76	32

The Templeton Global Bond fund returned -3.31% for the quarter, relative to 2.60% for the Bloomberg Barclays Global Aggregate U.S. Dollar Hedged Index. Currency positions in Latin America detracted from absolute results. Additionally, negative duration exposure to U.S. Treasuries detracted from absolute fund performance as the yield on the 10-year note decreased 34 bps. Looking forward, management is focused on specific emerging markets that are less externally vulnerable to trade policy and more domestically driven. The fund scores a 5 under our methodology and trailing returns rank in the top half for the trailing 3- and 10-year periods, respectively.

Great-West Lifetime 2015 Trust (GRWL15)

Fund Score: 8 (Status: Pass)

Uncategorized

Trailing Returns	1 Qtr	1 Yr	3 Yr	5 Yr	10 Yr
GRWL15	1.02%	5.30%	6.45%	5.78%	
DJ Target 2015 TR USD	1.03%	5.70%	3.44%	3.65%	5.05%
Out/(Under) Performing	-0.01%	-0.40%	3.01%	2.13%	
Peer Group Ranking	39	40	22	2	

Fidelity Advisor Real Estate Income I (FRIRX)

Fund Score: 6 (Status: Pass)

REIT

The investment seeks higher than average income; and capital growth is the secondary objective.

The fund normally invests primarily in preferred and common stocks of REITs; debt securities of real estate entities; and commercial and other mortgage-backed securities, with an emphasis on lower-quality debt securities (those of less than investment-grade quality, also referred to as high yield debt securities or junk bonds). It invests at least 80% of assets in securities of companies principally engaged in the real estate industry and other real estate related investments. The fund invests in domestic and foreign issuers.

Trailing Returns	1 Qtr	1 Yr	3 Yr	5 Yr	10 Yr
FRIRX	4.22%	12.76%	7.09%	7.69%	9.85%
FTSE Nareit Equity REITs TR USD	7.79%	18.41%	7.20%	10.16%	12.99%
Out/(Under) Performing	-3.57%	-5.65%	-0.10%	-2.47%	-3.14%
Peer Group Ranking	87	81	45	82	91

Fidelity Advisor Real Estate Income I returned 4.2% in Q3 2019, compared to 7.8% for its benchmark (FTSE Nareit Equity REITs). For the trailing year, the fund returned 12.8%, compared to 18.4% for the benchmark. However, the benchmark is 100% invested in equity REITs, while the fund contains both preferred and common stock of REITs, debt securities of real estate entities and various mortgage-backed securities to dampen volatility over the long-term. Over the quarter, the fund's real estate bond investments and 7% cash allocation dragged on overall performance during a strong market environment. Looking forward, management has lowered the fund's cash stake from 7% to 6%. Management plans to remain consistent with their philosophy of limiting the fund's interest rate risk. According to management, generating favorable performance through intelligent credit risk will remain priority. The fund scores a 6 under our methodology and its trailing risk-adjusted returns rank in the top decile of its peers over the trailing three-, five- and ten-year periods.

County of Fresno 457 DC Plan

Fund Comments

As of 9/30/2019

Great-West Lifetime 2020 Trust (GRWL20)

Fund Score: 7 (Status: Pass)

Uncategorized

Trailing Returns	1 Qtr	1 Yr	3 Yr	5 Yr	10 Yr
GRWL20	1.02%	5.23%	7.02%		
DJ Target 2020 TR USD	1.00%	6.22%	4.49%	4.35%	5.98%
Out/(Under) Performing	0.02%	-0.99%	2.53%		
Peer Group Ranking	48	34	15		

Great-West Lifetime 2025 Trust (GRWL25)

Fund Score: 8 (Status: Pass)

Uncategorized

Trailing Returns	1 Qtr	1 Yr	3 Yr	5 Yr	10 Yr
GRWL25	0.83%	4.77%	7.70%	6.70%	
DJ Target 2025 TR USD	0.80%	5.48%	5.53%	5.05%	6.94%
Out/(Under) Performing	0.03%	-0.71%	2.17%	1.65%	
Peer Group Ranking	56	34	18	1	

Great-West Lifetime 2030 Trust (GRWL30)

Fund Score: 7 (Status: Pass)

Uncategorized

Trailing Returns	1 Qtr	1 Yr	3 Yr	5 Yr	10 Yr
GRWL30	0.74%	4.23%	8.26%		
DJ Target 2030 TR USD	0.58%	4.50%	6.73%	5.80%	7.86%
Out/(Under) Performing	0.17%	-0.27%	1.54%		
Peer Group Ranking	47	32	28		

Great-West Lifetime 2035 Trust (GRWL35)

Fund Score: 9 (Status: Pass)

Uncategorized

Trailing Returns	1 Qtr	1 Yr	3 Yr	5 Yr	10 Yr
GRWL35	0.50%	3.55%	9.24%	7.70%	
DJ Target 2035 TR USD	0.36%	3.37%	7.70%	6.35%	8.59%
Out/(Under) Performing	0.15%	0.18%	1.54%	1.35%	
Peer Group Ranking	53	27	11	2	

Great-West Lifetime 2040 Trust (GRWL40)

Fund Score: 7 (Status: Pass)

Uncategorized

Trailing Returns	1 Qtr	1 Yr	3 Yr	5 Yr	10 Yr
GRWL40	0.29%	2.85%	9.27%		
DJ Target 2040 TR USD	0.17%	2.43%	8.51%	6.80%	9.13%
Out/(Under) Performing	0.11%	0.42%	0.76%		
Peer Group Ranking	59	33	21		

Great-West Lifetime 2045 Trust (GRWL45)

Fund Score: 8 (Status: Pass)

Uncategorized

Trailing Returns	1 Qtr	1 Yr	3 Yr	5 Yr	10 Yr
GRWL45	0.14%	2.45%	9.79%	7.95%	
DJ Target 2045 TR USD	0.01%	1.66%	9.02%	7.08%	9.42%
Out/(Under) Performing	0.13%	0.80%	0.76%	0.87%	
Peer Group Ranking	61	33	10	4	

Great-West Lifetime 2050 Trust (GRWL50)
Fund Score: 6 (Status: Pass)

Uncategorized

Trailing Returns	1 Qtr	1 Yr	3 Yr	5 Yr	10 Yr
GRWL50	0.14%	2.39%	9.33%		
DJ Target 2050 TR USD	-0.07%	1.22%	9.24%	7.20%	9.50%
Out/(Under) Performing	0.21%	1.17%	0.09%		
Peer Group Ranking	57	32	29		

Great-West Lifetime 2055 Trust (GRWL55)
Fund Score: 8 (Status: Pass)

Uncategorized

Trailing Returns	1 Qtr	1 Yr	3 Yr	5 Yr	10 Yr
GRWL55	0.00%	2.17%	9.66%	7.80%	
DJ Target 2055 TR USD	-0.09%	1.16%	9.24%	7.21%	9.50%
Out/(Under) Performing	0.09%	1.01%	0.42%	0.60%	
Peer Group Ranking	62	36	18	7	

County of Fresno 457 DC Plan

Expense Ratio Report

As of 9/30/2019

Passively-Managed and Cash Funds

Investment		Ticker	Expense Ratio▲	Peer Rank	Range of Peer Group Expense Ratios						
					0%	0.5%	1%	1.5%	2%	2.5%	3%
47,708,179	BlackRock Equity Index - Collective M	02cff1	0.02%	1	▲						
8,920,359	BlackRock MidCap Idx - Collective M	03cff2	0.03%	1	▲						
4,128,099	BlackRock Russell 2000 Index Coll M	03cff3	0.03%	2	▲						
3,919,132	BlackRock EAFE Equity Index Coll T	10cff5	0.10%	5	▲						
5,048,646	BlackRock US Debt Index Fund Coll W	04cff4	0.04%	1	▲						
65,043,012	Fresno County Stable Value	fressv	0.34%	40		▲					

Actively-Managed Funds

14,408,994	Columbia Dividend Income Inst3	CDDYX	0.58%	16		▲					
43,462,878	Alger Spectra Z	ASPZX	0.94%	45			▲				
4,297,265	Franklin Utilities R6	FUFRX	0.50%	15		▲					
6,075,811	T. Rowe Price Mid-Cap Growth I	RPTIX	0.62%	6		▲					
6,197,061	Nicholas Limited Edition I	NCLEX	0.86%	17			▲				
1,586,281	Janus Henderson Small Cap Value N	JDSNX	0.81%	12			▲				
9,420,950	Ivy International Core Equity N	IINCX	0.79%	30			▲				
2,173,867	Invesco Oppenheimer Developing Mkts R6	ODVIX	0.85%	12			▲				
4,964,349	Metropolitan West Total Return Bd Plan	MWTSX	0.37%	12		▲					
2,028,376	Templeton Global Bond R6	FBNRX	0.57%	14		▲					
1,982,889	Fidelity Advisor Real Estate Income I	FRIRX	0.75%	18			▲				

Target-Date Funds

4,274,871	Great-West Lifetime 2015 Trust	3RWL15	0.40%	26		▲					
	Great-West Lifetime 2020 Trust	3RWL20	0.40%	19		▲					
11,151,571	Great-West Lifetime 2025 Trust	3RWL25	0.40%	19		▲					
352,942	Great-West Lifetime 2030 Trust	3RWL30	0.41%	19		▲					
6,699,297	Great-West Lifetime 2035 Trust	3RWL35	0.41%	20		▲					
9,998	Great-West Lifetime 2040 Trust	3RWL40	0.41%	19		▲					
6,302,694	Great-West Lifetime 2045 Trust	3RWL45	0.41%	19		▲					
9,998	Great-West Lifetime 2050 Trust	3RWL50	0.41%	18		▲					
3,607,546	Great-West Lifetime 2055 Trust	3RWL55	0.42%	19		▲					

263,775,065

Expense Ratio Averages

0.46%

16

Weighted Average Gross Expense Ratio: 0.43%

Your Plan

Expense Ratio	Bal Weighted Avg	1st Quartile	2nd Quartile	3rd Quartile	4th Quartile
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0.43%

88.5%(23)

11.5%(3)

-

-

County of Fresno 457 DC Plan

As of: 09/30/2019

Investment Fund Performance Report

Retirement Date	Investment	3-Mo	1 Yr	2 Yr *	3 Yr *	5 Yr *	Expense Ratio
2015							
	Great-West Lifetime 2015 Trust	1.02	5.3	5.31	6.45	5.78	0.40
	Morningstar Lifetime Mod 2015 TR USD	1.33	6.45	5.70	6.19	5.16	
	Benchmark +/-	-0.31	-1.15	-0.39	0.26	0.62	
2020							
	Great-West Lifetime 2020 Trust	1.02	5.23	5.65	7.02		0.40
	Morningstar Lifetime Mod 2020 TR USD	1.41	6.53	6.02	6.79		
	Benchmark +/-	-0.39	-1.30	-0.37	0.23		
2025							
	Great-West Lifetime 2025 Trust	0.83	4.77	5.86	7.7	6.7	0.40
	Morningstar Lifetime Mod 2025 TR USD	1.38	6.22	6.28	7.52	6.04	
	Benchmark +/-	-0.55	-1.45	-0.42	0.18	0.66	
2030							
	Great-West Lifetime 2030 Trust	0.74	4.23	5.82	8.26		0.41
	Morningstar Lifetime Mod 2030 TR USD	1.22	5.40	6.44	8.32		
	Benchmark +/-	-0.48	-1.17	-0.62	-0.06		
2035							
	Great-West Lifetime 2035 Trust	0.5	3.55	6.43	9.24	7.70	0.41
	Morningstar Lifetime Mod 2035 TR USD	0.93	4.24	6.43	8.96	6.84	
	Benchmark +/-	-0.43	-0.69	0.00	0.28	0.86	
2040							
	Great-West Lifetime 2040 Trust	0.29	2.85	5.95	9.27		0.41
	Morningstar Lifetime Mod 2040 TR USD	0.66	3.23	6.28	9.31		
	Benchmark +/-	-0.37	-0.38	-0.33	-0.04		
2045							
	Great-West Lifetime 2045 Trust	0.14	2.45	6.41	9.79	7.95	0.41
	Morningstar Lifetime Mod 2045 TR USD	0.46	2.62	6.10	9.38	6.97	
	Benchmark +/-	-0.32	-0.17	0.31	0.41	0.98	
2050							
	Great-West Lifetime 2050 Trust	0.14	2.39	5.71	9.33		0.41
	Morningstar Lifetime Mod 2050 TR USD	0.37	2.39	5.95	9.32		
	Benchmark +/-	-0.23	0.00	-0.24	0.01		
2055							
	Great-West Lifetime 2055 Trust	0	2.17	6.18	9.66	7.80	0.42
	Morningstar Lifetime Mod 2055 TR USD	0.31	2.29	5.83	9.26	6.81	
	Benchmark +/-	-0.31	-0.12	0.35	0.40	0.99	

*Returns are annualized after 1 year

**Great West Lifetime Trust Series replaced Great West Lifetime Trust Series II in June 2016. Return data prior to June 2016 reflects Great West Lifetime Trust Series II

*** Great West Lifetime Trust Series expense ratios were reduced to 0.40%-0.42% in Q1 2019

**** The following Lifetime Trusts were added in Q3 2019: 2020, 2030, 2040, 2050

Great-West Lifetime Attribution – Trailing 12 Months

Fund: Great-West Lifetime 2020 Trust

Benchmark: Morningstar Lifetime Mod 2020 TR

	Positioning	Market Action	Effect
Glidepath	The fund was overweight equity on average over the trailing 12-months.	The equity market corrected from October '18 through December '18, with the S&P 500 falling roughly 20%. Despite regaining lost ground through 2019, the S&P 500 only returned 4.25% over the trailing 12-months. In October 2018, 10-Year Treasury yields peaked at 3.25%. Rates then reversed course ultimately ending the third quarter of 2019 at 1.67%. The decline in interest rates and the increase in bond prices resulted in fixed income as proxied by the Bloomberg Barclays US Aggregate to return 10.3% over the trailing 12-months.	Negative
Asset Allocation	<ul style="list-style-type: none"> Overweight Mid- and Small-Cap U.S. Equity. No allocation to commodities despite being included in the benchmark. Out-of-benchmark allocation to global real estate and high yield. Shorter duration profile / less fixed income interest rate sensitivity. 	<ul style="list-style-type: none"> Stocks in the lower capitalization range lagged due to domestic growth concerns and lack bargaining power over suppliers. Commodities largely underperformed as a result of oversupply issues while facing waning demand. As a bond proxy, U.S. real estate equities outperformed their international peers as the relative interest rate decline was much larger domestically. The attractive carry profile and decline in benchmark rates allowed high yield fixed income to outperform equities and cash, but underperformed broader fixed income where long-duration securities rallied most. 	Slightly Negative
Manager Selection	Greater allocation to active in the international equity and fixed income asset classes, while allocating more to passive in the more efficient U.S. Equity asset class.	<ul style="list-style-type: none"> MFS International Growth Equity and MFS International Intrinsic Value Equity significantly outperformed the international developed benchmarks. 	Positive

Source: Northwest Capital Management with data from Morningstar. As of 9/30/2019

Great-West County of Fresno Separate Account

STRATEGY

The Great-West County of Fresno Stable Value Separate Account is constructed using a diversified mix of high-quality government and corporate securities where significant effort is dedicated to deep credit research and disciplined risk management. The fund typically generates excess return as a result of security and sector selection and do not generate significant alpha as a result of interest rate or duration calls. The fund holds cash primarily in order to facilitate cash-flow management and intends to keep the portfolio fully invested at all times.

PUT OPTION DETAILS

No put provision is allowed for separate accounts. Upon 60 days written notice to either, the Group Policyholder or the Company (great-West Life & Annuity Insurance Company) may terminate the contract and elect to receive market value of the account at any time.

FUND INFORMATION

		PEER MEDIAN
AUM (\$mm)	\$66.20	\$4,693.42
Portfolio manager	Jack Brown	-
Manager tenure	4	15
Avg Duration (years)	2.80	2.58
Avg Maturity (years)	3.50	3.62
Avg Credit Qlty (Moody's)	AA	AA
Current Yield	2.68%	2.45%

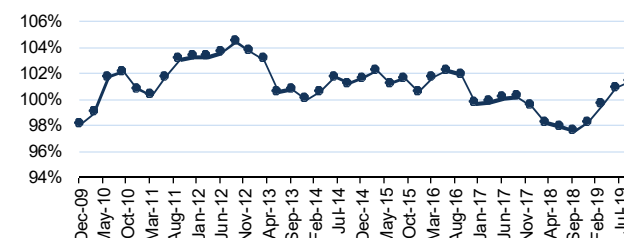
EXPENSES

		PEER MEDIAN
Wrap Fee:	0.15%	0.17%
Inv. Mgmt Fee:	0.19%	0.17%
Trustee Fee/Other:	0.00%	0.00%
Total Expense Ratio	0.34%	0.40%

PERFORMANCE

		PEER MEDIAN
QTD:	0.59%	0.58%
YTD:	1.70%	1.69%
1 Year:	2.25%	2.25%
3 Year:	2.09%	1.95%
5 Year:	2.12%	1.81%
10 Year:	-	2.01%

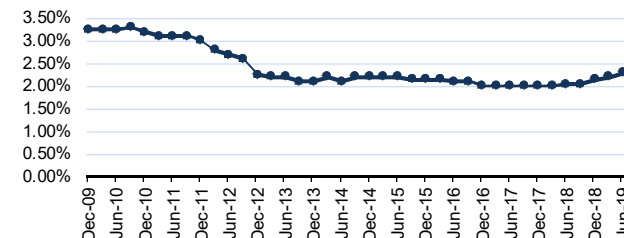
MARKET-TO-BOOK



Current: 101.40%

Peer Median: 101.46%

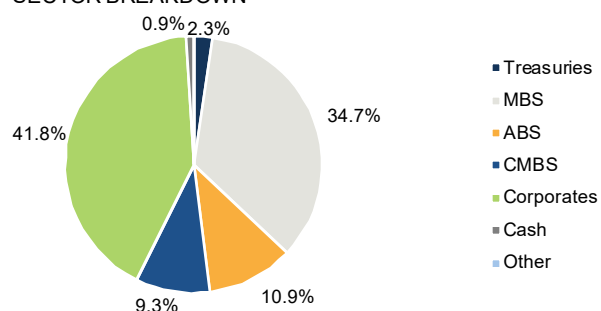
CREDITING RATE



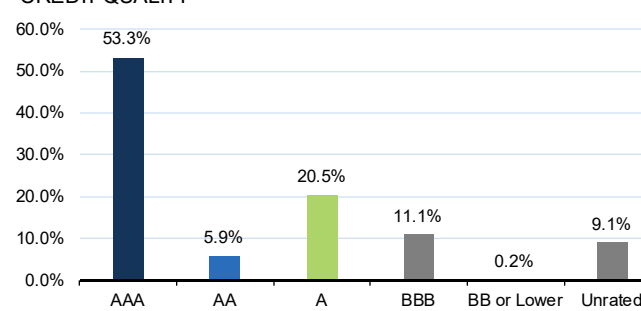
Current: 2.35%

Peer Median: 2.28%

SECTOR BREAKDOWN



CREDIT QUALITY



PORTFOLIO INFORMATION

		PEER MEDIAN
Crediting Rate Reset Period	Quarterly	-
Number of Underlying Managers	1	1
Cash Flows QTD	-	\$33,605,991
Cash Flows YTD	-	\$77,717,844
Cash Flows 1Yr	-	\$278,915,869

High Yield Policy

The guidelines permit only securities rated investment grade or better at time of purchase. Securities downgraded below investment grade will be evaluated on a case by case basis and will be documented in quarterly reporting.

WRAP PROVIDERS

Provider	Wgt %	Credit Qlty
Great-West Life & Annuity Ins. Co.	100.00%	AA
Total Number of Wrap Providers	1	
% Traditional GIC:	0.00%	-
% Synthetic GIC:	100.00%	AA

The performance analysis displayed is reflective of past performance. Past performance does not guarantee future results. The investment return and principal value of an investment will fluctuate over time. Data supplied by investment advisor/vendor. The information contained herein: (1) is proprietary to Northwest Capital Management (NWCM), and/or its content providers; (2) may not be copied or distributed; and (3) is not warranted to be accurate, complete or timely. Neither NWCM nor investment advisor/vendor are responsible for any damages or losses arising from any use of this information.

Current Lineup Status

Asset Class		Current Status	Placed On Watch	Asset Class		Current Status	Placed On Watch
US Large Cap				Fixed Income			
02cff1	BlackRock Equity Index - Collective M	Pass	-	04cff4	BlackRock US Debt Index Fund Coll W	Pass	-
ASPZX	Alger Spectra Z	Pass	-	MWTSX	Metropolitan West Total Return Bd Plan	Pass	-
CDDYX	Columbia Dividend Income Inst3	Pass	-	fressv	Fresno County Stable Value	Pass	-
US Mid Cap				Target Date Funds			
03cff2	BlackRock MidCap Idx - Collective M	Pass	-	GRWL15	Great-West Lifetime 2015 Trust	Pass	-
03cff3	BlackRock Russell 2000 Index Coll M	Pass	-	GRWL20	Great-West Lifetime 2020 Trust	Pass	-
RPTIX	T. Rowe Price Mid-Cap Growth I	Pass	-	GRWL25	Great-West Lifetime 2025 Trust	Pass	-
US Small Cap				GRWL30	Great-West Lifetime 2030 Trust	Pass	-
NCLEX	Nicholas Limited Edition I	Pass	-	GRWL35	Great-West Lifetime 2035 Trust	Pass	-
JDSNX	Janus Henderson Small Cap Value N	Pass	-	GRWL40	Great-West Lifetime 2040 Trust	Pass	-
Foreign				GRWL45	Great-West Lifetime 2045 Trust	Pass	-
10cff5	BlackRock EAFE Equity Index Coll T	Pass	-	GRWL50	Great-West Lifetime 2050 Trust	Pass	-
IINCX	Ivy International Core Equity N	Watch	2019 - Q2	GRWL55	Great-West Lifetime 2055 Trust	Pass	-
ODVIX	Invesco Oppenheimer Developing Mkts R6	Pass	-				
Specialty							
FRIRX	Fidelity Advisor Real Estate Income I	Pass	-				
FUFRX	Franklin Utilities R6	Pass	-				

Watch List History

		Status	Most Recent Time on Watch		Previous Time on Watch		Previous Time on Watch	
			Placed	Removed	Placed	Removed	Placed	Removed
IINCX	Ivy International Core Equity R6	In Plan	2019 - Q2	-				
FRESSV	County Of Fresno Stable Value Fund	In Plan	2017 - Q1	2018 - Q1				
GRWL15	Great-West Lifetime 2015 Trust	In Plan	2017 - Q1	2018 - Q1				
GRWL25	Great-West Lifetime 2025 Trust	In Plan	2017 - Q1	2018 - Q1				
GRWL35	Great-West Lifetime 2035 Trust	In Plan	2017 - Q1	2018 - Q1				
GRWL45	Great-West Lifetime 2045 Trust	In Plan	2017 - Q1	2018 - Q1				
GRWL55	Great-West Lifetime 2055 Trust	In Plan	2017 - Q1	2018 - Q1				
NCLEX	Nicholas Limited Edition N	In Plan	2013 - Q4	2015 - Q2				
CDDYX	Columbia Dividend Income Z	In Plan	2013 - Q4	2014 - Q4				
HFCIX	Hennessy Focus Institutional	Removed	2018 - Q3	2019 - Q2				
OAKBX	Oakmark Equity and Income Investor	Removed	2018 - Q3	2019 - Q2	2012 - Q1	2012 - Q3		
SAMZX	Virtus Seix Total Return Bond R6	Removed	2018 - Q3	2019 - Q2	2013 - Q4	2015 - Q2		
FBNRX	Templeton Global Bond R6	Removed	2016 - Q2	2017 - Q1				
SEGSX	Sentinel Government Securities A	Removed	2014 - Q2	2015 - Q2				
JMCVX	Perkins Mid Cap Value T	Removed	2013 - Q4	2015 - Q2	2012 - Q1	2012 - Q3		
MSIIX	MainStay International Equity I	Removed	2012 - Q4	2015 - Q2				
PAXIX	Pax Balanced Institutional	Removed	2012 - Q4	2013 - Q2				
GTAVX	Invesco Mid Cap Core Equity R5	Removed	2012 - Q1	2013 - Q2				
NBGNX	Neuberger Berman Genesis Inv	Removed	2012 - Q1	2012 - Q3				
SDGTX	Deutsche Capital Growth I	Removed	2012 - Q1	2012 - Q3				

* Watch List History displays all funds that have been on watch in the plan since 2012

Ivy Investments: International Core

Date	August 2019	Net expense ratio	0.79
Firm-wide assets	\$57.56 Billion	Asset class	International Equity
Inception year	1997	Most suitable bench	MSCI ACWI Ex USA
Fund assets	\$5.13 Billion	Sub-style exposure	Core
Estimated capacity	\$10 Billion	# of equity holdings	73

OVERVIEW

The strategy benefits from the investment acumen and leadership of lead Portfolio Manager John Maxwell and the support staff of assistant Portfolio Manager, Catherine Murray, and a bench of global sector analysts. The team is tasked with finding companies at reasonable valuations with strong cash flows and exposure to the top-down global investment themes. Using a combined top-down and bottom-up approach to investing, they apply a core-style approach using a 30%-40%-30% combination of country analysis, industry dynamics, and individual stock selection, respectively. The strategy is more focused (60-80 stocks) and conviction-based on sector, country, or theme level bets.

As of September 2019, the fund scored a 4 under our methodology. The fund is remaining on watch and we will continue to closely monitor performance. The relative underperformance for the trailing three- and five-year periods has dropped the fund score lower. The long-term prospects remain in tact and we note that its dislocation capture approach requires patience for discount realization. Given its moderate level of stock diversification and core style classification it remains suitable as a standalone international equity manager. Over the long-term, we remain confident in Mr. Maxwell's ability to add value to shareholders.

INVESTMENT PROCESS

The fund's portfolio managers, John Maxwell and Catherine Murray, follow a combined top-down and bottom-up approach to investing. They look for overseas companies with strong free cash flow in healthy industries that they believe may benefit from their broad top-down themes of the rising incomes of Emerging Market consumers, dividend yielders, global infrastructure, and technological disruptions. Maxwell follows a strict management discipline of investing in primarily large companies and applies a core-style approach using a 30%-40%-30% combination of country analysis, industry dynamics and individual stock selection. The first step, which consists of approximately 30% of the process, is analyzing the region and country for possible global macroeconomic themes, including economic growth and financial leverage, money flows, business cycle, interest rates, political climate, and currencies. After the country and regional overview, the portfolio managers focus on the sector and industry allocation. This represents approximately 40% of the investment process. Sector and industry trends include competitive dynamics, cyclical sensitivity, and economic returns. From this macro-economic analysis, the portfolio managers then employ the bottom-up security selection process within these themes.

The result of this extensive analytical process is a portfolio of 60 to 80 stocks of what they feel are best positioned. No more than 30% of the portfolio may be selected exclusively on the bottom-up analysis, independent of macro themes. The team's philosophy of being early, opportunistic buyers when dislocations present themselves can lead to contrarian bets in the portfolio that require investor patience. The high-quality bias should act as a buffer/margin of safety in these circumstances, but the risk exists

that the strategy will experience periods of underperformance until the market recognizes the opportunity. Returns do not significantly deviate from the benchmark (tracking-error) as a result of portfolio-level risk controls including a 5% max investing in any single stock, various benchmark excess sector and regional exposure constraints, and no more than 15% in emerging markets equities.

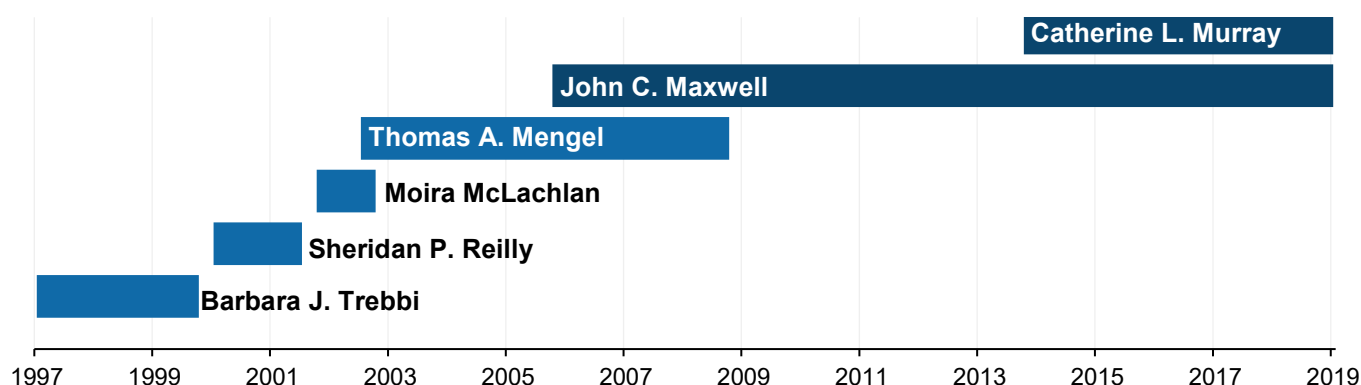
FUND MANAGEMENT

Founded in 1937, Waddell & Reed (WR) stakes a claim as one of the oldest mutual fund complexes in the country. In 1998, WR became a publicly-traded stock on the New York Stock Exchange (ticker: WDR). In 2002, WR acquired the investment adviser to the Ivy Funds from MacKenzie Investment Management and launched the fund family for the firm's wholesale channel. Both WR Investment Management Company and Ivy Investment Management Company are wholly-owned, indirect subsidiaries of WR Financial. The firm recently went through a renaming/rebranding campaign to combine the entities under the Ivy Investments umbrella. The firm is based in Overland Park, Kansas and manages total assets of approximately ~\$60B across domestic equity, international equity, and fixed income. WR employees own approximately 14% of WDR common stock.

Over the past few years, Ivy has experienced several organizational changes. In May 2016 WR announced the retirement of Henry Hermann, chairman of the board and chief executive officer. WR promoted Philip Sanders, CIO, to succeed Herman. In April 2016, WR announced a 10% reduction in its workforce as a result of declining assets under management. The reduction had a limited impact on the investment division relative to other departments. The firm is now stabilizing and has beefed up its analyst staff under a dedicated research chief, while naming comanagers to most strategies for succession needs.

Portfolio Manager John Maxwell leads the international strategy. He joined Ivy/WR in 1998 as an analyst and joined the international team in 2004. He was named Co-PM on the strategy in mid-2006 along with PM Thomas Mengel. Mengel was formally removed as a named PM on International Core in June 2009. Catherine Murray was named Assistant PM in January of 2014 as Robert Nightingale moved from the role to manage his own strategies (European Opportunities and Global Equity Income). Murray had been a sector analyst with the firm since 2011 and retains research coverage of International Financials. A team of 19 global sector analysts supports all of Ivy's/WR's equity strategies, with 11 of those more focused on the international equity strategies.

Manager Timeline



FEES

Based on the N share class (IINCX), Ivy's expense ratio of 0.79 ranks below the peer group average and appears reasonable in relation to the objective of the strategy.

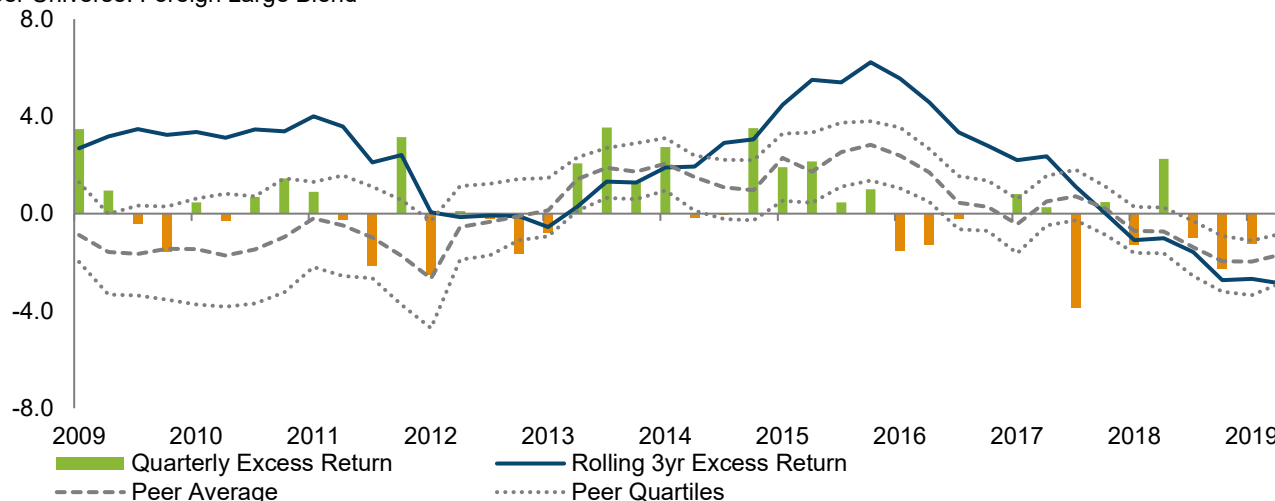
PERFORMANCE

Over the past 10 years (through June 30, 2019), Ivy International Core was up an annualized 7.02% while ranking in the 30th percentile of the Morningstar Foreign Large Blend category peer group. The strategy's performance compared favorably to the MSCI ACWI Ex U.S. (Net) index, which was up an annualized 6.54% over the same period. The fund's disciplined risk management process is reflected in the fund's below peer average tracking error and near benchmark up/down capture over the same period. Since the process drives the team to look for opportunities during market dislocations, the strategy has tended to perform well coming out of market bottoms. The willingness to invest in out-of-favor stocks may require patience for intrinsic value to be recognized by the market. These exposures may influence relative performance.

Quarterly Excess Return vs. MSCI ACWI Ex USA (Net)

Rolling 3 yr over 10yrs ending June 30 2019

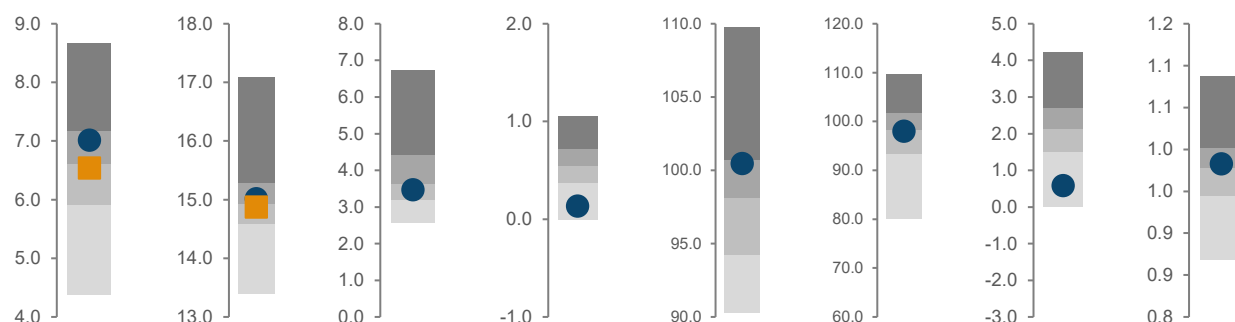
Peer Universe: Foreign Large Blend



Performance Analytics vs. MSCI ACWI Ex USA (Net)

10 years ending June 30 2019

Peer Universe: Foreign Large Blend



	Return	Std Dev	Tracking Error	Info Ratio	Up Capture	Down Capture	Alpha	Beta
IINCX	7.02	15.02	3.47	0.14	100.49	98.05	0.59	0.98
Index	6.54	14.88	0.00	—	100.00	100.00	0.00	1.00
5th	8.66	17.08	6.74	0.51	109.75	109.67	2.34	1.09
25th	7.17	15.29	4.43	0.18	100.73	101.84	0.81	1.00
50th	6.62	14.93	3.62	0.02	98.16	98.21	0.23	0.98
75th	5.91	14.58	3.20	-0.16	94.23	93.39	-0.38	0.94
95th	4.39	13.40	2.57	-0.54	90.28	80.10	-1.89	0.87
Count	493	493	493	493	493	493	493	493









Source: Morningstar. Extended performance is utilized for periods prior to the share class inception date of 7/31/2014. Extended performance is an estimate based on the performance of the fund's oldest share class adjusted for fees.

Fund Policy Compliance

Overall Fund Score	Fund Name	Return vs Peer Group			Risk Adjusted Return Sharpe			Risk									Other		Ticker
		Peer Rank (%)			Peer Rank (%)			Standard Deviation			Up Capture			Down Capture			Expense	Tenure	
		3Y	5Y	10Y	3Y	5Y	10Y	3Y	5Y	10Y	3Y	5Y	10Y	3Y	5Y	10Y	Expense Rank	Avg Mgr Tenure	
4	Ivy Intl Core Equity	75	63	29	84	65	33	86	80	58	32	29	28	89	77	49	30	7.71	IINCX

Fund score less than 5 = Watch

Fund Compliance Methodology

CALCULATION METHODOLOGY OF OVERALL FUND						1 (Worst) — 10 (Best)	
Factor	Weight	Explanation		Score Calculation			
RETURNS	 40% Overall	Absolute Returns Peer Group Percentile Rankings: 3,5,10 Year Periods		Proportional Score	No Score		
				Ranks in the top 75% of Peer Group	Ranks in the bottom 25% of Peer Group		
RISK ADJUSTED RETURNS	 20% Overall	Sharpe Ratio Peer Group Percentile Rankings: 3,5,10 Year Periods		Proportional Score	No Score		
				Ranks in top 75% of Peer Group	Ranks in bottom 25% of Peer Group		
RISK	 30% Overall	 10% Overall	Standard Deviation Peer Group Percentile Rankings: 3,5,10 Year Periods		Proportional Score	No Score	
					Ranks in top 75% of Peer Group	Ranks in bottom 25% of Peer Group	
		 20% Overall	Upside/Downside Capture Peer Group Percentile Rankings: 3,5,10 Year Periods		Proportional Score	No Score	
					Ranks in top 75% of Peer Group	Ranks in bottom 25% of Peer Group	
OTHER	 10% Overall	 5% Overall	Expense Ratio For current period		Proportional Score	No Score	
					Ranks in top 75% of Peer Group	Ranks in bottom 25% of Peer Group	
		 5% Overall	Average Tenure Number of years		Full Score	No Score	
					Manager Tenure more than 3 years	Manager Tenure less than 3 years	

For peer group rankings, a rank of 1-50 indicates the manager performed favorably and ranked in the top half of its peer group for that metric. For example: when measuring risk, a rank of 1 would mean the manager had a very low standard deviation compared to its peer group, whereas when measuring return, a rank of 1 would mean the manager had a very high return compared to its peer group.

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Item 10 - Exhibit D

Great-West Lifetime Funds third quarter 2019



Thomas Nun, CFA
*Portfolio Strategist,
Great-West Investments™*

Hail to the tweet

The current economic narrative runs something like this:

1. Global economic growth is slowing noticeably, but the U.S. is holding up better than most.
2. A trade-related slowdown in manufacturing lies at the center of this weakness.
3. Despite this, the U.S. jobs market has remained almost freakishly strong and consumers are still spending.
4. Inflation is still pretty much a no-show, which has global central banks (like the Fed) feeling frisky.

This is all pretty well-known, and has been for some time. Taken together, these conditions make it equally easy to build a credible case for continued expansion on one hand and economic contraction on the other. This durable but somewhat uneasy détente between economic optimism and recessionary pessimism leaves geopolitics — specifically, anything related to trade — in the driver's seat with regard to short-term market performance. That dynamic was on full (and slightly embarrassing) display toward the end of the third quarter when none other than the Montana Farm Bureau assumed control of the tape.

This probably requires some explanation. On a recent Friday in late September, news broke that a planned visit to a handful of Montana farms by Chinese trade delegation had been canceled. That news was quickly echoed by a similar group in Nebraska, which had just been similarly snubbed by the Chinese. Traders naturally took that to mean that trade negotiations had once again worsened between the U.S. and China, and markets dropped sharply as a result.

By itself, this isn't necessarily all that surprising — especially given that trade tensions are at the very center of the global slowdown in growth. But what stands out about this particular incident are a few of the things that failed to move the market quite so dramatically in the days surrounding the Montana announcement: namely, a 0.25% cut in rates by the Federal Reserve; a huge spike in oil prices related to a sophisticated drone attack inside Saudi Arabia against one of the world's most significant pieces of oil infrastructure; word that the Fed needed to inject "emergency liquidity" into the overnight funding system to forestall a spike in short-term rates, and finally, a dramatic earnings miss by worldwide logistics giant



Remember when?

For the time being the U.S. economy remains on a stable footing, supported by low rates, strong consumer spending and a robust job market. However, one thing that has become increasingly common in economic reports is the phrase “the weakest since...” (or some derivation thereof).

Among the most notable is the decline of the JP Morgan Global Composite purchasing manager’s index (or PMI), which fell to its lowest level since mid-2016 and is now flirting with outright contraction. There are literally a dozen or more examples in just the last few weeks, covering areas ranging from jobs (Challenger layoffs “highest first-half total since 2009), to manufacturing (ISM-manufacturing lowest in 10 years), to the yield curve (first inversion of the 10y/2m spread since 2007).

There were other, more positive “firsts” as well, like the historic crossing of the 3,000 mark by the S&P 500® Index for the first time in mid-July. That example aside, if this “weakest since” trend continues, there may be a reckoning ahead — tweets or no tweets.

FedEx that the company in turn blamed on a dramatic slowdown in global economic growth. No offense to the fine people of Montana and Nebraska, but it seems unlikely that an itinerary change by a group of Chinese eco-tourists (eco-nomic tourists, that is), rises to quite the same level of impact as some of the other things on the list above.

This experience underscores how sensitive markets are right now to any mention of the U.S.-China trade war. That, frankly, might not be as big an issue as it is right now if we didn’t have a Commander-in-Chief

who was quite so quick on the Twitter trigger. To his credit, the President recognizes the immense power of this modern version of the bully pulpit and has not been shy about using it, especially when waging trade wars. That’s probably not all bad (and in any case was likely inevitable), but in an environment like this, it unfortunately means that we are always just a tweet away from a big move on Wall Street. Said another way, things were a little unsettled during the third quarter and seem likely to remain that way — at least until the debate between recession and growth gets resolved or the U.S. and China strike a deal.

Performance of the Great-West Lifetime Funds

What all of this meant for investors during the third quarter of 2019 is “more of the same.” In particular, U.S. stocks and bonds continued to outperform their overseas counterparts (a reaction to the durability of the U.S. economy relative to the rest of the world), and larger stocks outperformed smaller ones (a risk-aware nod to the still-unsettled debate between growth and contraction). Like last quarter, these trends were reflected in the performance of the Great-West Lifetime Funds, which tend to carry slightly more exposure to international assets than their benchmarks and peers. Similarly, our funds tend to emphasize smaller-capitalization stocks over larger ones, especially within the longer-dated funds (where investors are further out from retirement and can therefore afford to take on higher levels of risk in exchange for higher potential returns in the future). One hopeful sign, however, is the fact that the value’s extended period of underperformance relative to growth paused during the quarter, removing one of the headwinds we’ve faced recently.

As a result, performance for the funds in the Lifetime series was essentially in line with to slightly below their benchmarks during the quarter. As in previous periods, the investment teams we have selected to manage the funds’ various asset class exposures continued to



largely meet or surpass our expectations, providing a positive contribution to performance and helping to mitigate headwinds related to the market environment. For example, each of our international equity investments declined slightly during the quarter even though most performed quite well when compared to their benchmarks and peers. On the fixed-income side, our investment in global bonds remained disappointing. Regardless of this setback, the diversification benefits provided by non-U.S. investments are absolutely crucial to our long-term strategy. We remain confident that our international exposure — in both equity and bonds — will prove valuable when global growth trends inevitably shift away from the U.S. and toward foreign shores.

Meanwhile, the disparity in performance between large and small stocks was obvious within our U.S.-focused investments. Exposure to U.S. large-cap stocks continued to rank among our biggest contributors to returns during the third quarter, and each of the managers we utilize in the space performed very well on a peer-relative basis. In the small- and mid-capitalization ranges, though, performance was less upbeat. This is largely a reflection of the nervousness in the market that has accompanied the recent rise in stocks, which in turn translated into a preference for larger and more established companies over smaller and more speculative firms. That said, we remain generally satisfied with the performance of the majority of the managers we have chosen in the mid- and small-cap space.

Turning to fixed income, inflation-linked bonds have lagged so-called nominal bonds in recent periods, owing to a near-complete lack of inflationary pressures or expectations across the landscape — something that we see as a unique (and curious) feature of the economic environment, especially so late in the cycle. We maintain exposure to inflation-linked bonds in the nearer-dated funds as a hedge against a sudden rise in prices, with the understanding that inflationary risks loom largest for those nearest to retirement. Elsewhere,

our investment in the Great-West Short Duration Bond deserves special mention given that fund's exceptionally strong performance during the quarter and on a year-to-date basis. This is particularly noteworthy given the market's very strong preference for longer dated bonds over shorter dated ones during the quarter.

Finally, our exposure to real-estate related investments was a particular bright spot for the funds during the third quarter. Real estate equities enjoy something of a unique place in an asset allocation framework and often benefit when markets are uncertain. The income-generating characteristics of real estate are also appealing when interest rates earned by fixed income investments are low, as they are now. Real estate is another area we tend to emphasize more than our peers, and the decision paid off this period.

As is typical for us, we have made only modest changes to the funds in recent months. Among the most notable was our annual glidepath update. Each year, we review our strategic positioning with fund consultant Morningstar to determine whether any changes to strategic positioning are warranted by the current environment. This year's changes are again modest, consisting primarily of a small increase in value-oriented equities (at the expense of growth) as well as a slightly greater emphasis on international stocks over those domiciled in the U.S. On the fixed income side, we increased our exposure to inflation-linked treasury bonds (or TIPS) in funds that maintain exposure to that asset class. In every case, the changes are consistent with our view regarding long-term asset class returns and recent market trends as discussed above. In July, we replaced our investment in Invesco Small Cap Discovery with Great-West Small Cap Growth Fund, a multi-managed strategy directed by small-cap growth specialist Peregrine, who represents 85% of the exposure, and micro-cap manager Lord Abbett (15%). We made this change because we ultimately think a multi-manager framework will lead to a more consistent performance experience for our shareholders over time.



The other notable change also occurred within a multi-managed strategy: Great-West Core Bond. Here, the allocation between the two subadvisers utilized inside the fund were changed in an effort to more closely align the fund with the core bond category. Specifically, Wellington — a relatively conservative and constrained core bond manager compared to its more aggressive co-manager, Federated Investors — was given a 10% increase in allocation within the Great-West Core Bond Fund. That leaves Wellington's slice of the core bond fund at 40% (up from 30%) and should reduce the overall fund's exposure to high yield and other "plus-sector" bonds at the margin.

Performance of the Great-West Conservative Lifetime Funds

The Great-West Conservative Lifetime Funds performed well during the third quarter relative to their peer groups as a result of their lower relative equity exposures, consistent with their positioning as relatively conservative options for investors. In fact, each fund finished ahead of its peer median, with the exception of the 2015 vintage, which fell almost precisely in the middle of its competitive universe during the quarter.

Outlook

As mentioned above, it seems as if we're always just a tweet away from a big market move in either direction — a state of affairs that's likely to persist until either the economic picture clarifies a little bit or until some of the risks currently influencing investor sentiment abate.

To be sure, that list is long: trade uncertainty, Brexit, Iran and a slowdown in corporate earnings are just a few of the things currently weighing on the minds of investors. Add to that the newly announced impeachment inquiry and the potential disruption associated with a bare-knuckle election in 2020, and it's little wonder that things have felt a little unsettled recently.

But at the same time, the U.S. job market remains robust and consumers are still willing to spend. Moreover, inflation has remained almost completely at bay, allowing the Federal Reserve to lower rates and signal its willingness to do what it can to keep the U.S. economy growing — echoing a similar actions taken recently by its European counterpart, the ECB. These things could go a long way toward defusing the tensions that are currently keeping markets on edge.

Regardless of which direction the markets and economy ultimately break, we continue to believe — as always — that a well-diversified portfolio that invests across asset classes and utilizes experienced, high-quality investment managers from across the entire landscape of talent is the best way to deal with whatever the market has in store.



Morningstar ratings and rankings as of September 30, 2019

Rating based on risk-adjusted returns and ranking based on total return

FUND NAME	TICKER	INCEPTION	CATEGORY	OVERALL	RATING/ TOTAL # OF FUNDS		RANK' /# OF FUNDS
					3-YEAR	5-YEAR	1-YEAR
Great-West Lifetime 2015 Instl	MXNYX	5/1/15	U.S. Fund Target-Date 2015	★★★ 129	★★★ 95	★★★★ 68	89/129
Great-West Lifetime 2020 Instl	MXAKX	4/28/16	U.S. Fund Target-Date 2020	★★★ 246	★★★ 205	N/A	156/246
Great-West Lifetime 2025 Instl	MXQBX	5/1/15	U.S. Fund Target-Date 2025	★★★ 232	★★★ 191	★★★★ 147	149/232
Great-West Lifetime 2030 Instl	MXAYX	4/28/16	U.S. Fund Target-Date 2030	★★★ 241	★★★ 201	N/A	143/241
Great-West Lifetime 2035 Instl	MXTBX	5/1/15	U.S. Fund Target-Date 2035	★★★ 229	★★★ 188	★★★★ 144	125/229
Great-West Lifetime 2040 Instl	MXBGX	4/28/16	U.S. Fund Target-Date 2040	★★★ 241	★★★ 201	N/A	130/241
Great-West Lifetime 2045 Instl	MXWEX	5/1/15	U.S. Fund Target-Date 2045	★★★ 229	★★★ 188	★★★ 144	134/229
Great-West Lifetime 2050 Instl	MXBSX	4/28/16	U.S. Fund Target-Date 2050	★★★ 241	★★★ 201	N/A	153/241
Great-West Lifetime 2055 Instl	MXZHX	5/1/15	U.S. Fund Target-Date 2055	★★★ 229	★★★ 186	★★★ 138	144/229
Great-West Lifetime 2060 Instl	MXGUX	5/1/19	U.S. Fund Target-Date 2060+	N/A	N/A	N/A	N/A
Great-West Lifetime Cnsrv 2015 Instl	MXMAX	5/1/15	U.S. Fund Target-Date 2015	★★ 129	★★ 95	★★ 68	56/129
Great-West Lifetime Cnsrv 2020 Instl	MXAFX	4/28/16	U.S. Fund Target-Date 2020	★★ 246	★★ 205	N/A	102/246
Great-West Lifetime Cnsrv 2025 Instl	MXOZX	5/1/15	U.S. Fund Target-Date 2025	★★ 232	★★ 191	★★★ 147	52/232
Great-West Lifetime Cnsrv 2030 Instl	MXARX	4/28/16	U.S. Fund Target-Date 2030	★★ 241	★★ 201	N/A	36/241
Great-West Lifetime Cnsrv 2035 Instl	MXRCX	5/1/15	U.S. Fund Target-Date 2035	★★ 229	★★ 188	★★★ 144	23/229
Great-West Lifetime Cnsrv 2040 Instl	MXBCX	4/28/16	U.S. Fund Target-Date 2040	★★★ 241	★★★ 201	N/A	42/241
Great-West Lifetime Cnsrv 2045 Instl	MXUCX	5/1/15	U.S. Fund Target-Date 2045	★★ 229	★★ 188	★★★ 144	48/229
Great-West Lifetime Cnsrv 2050 Instl	MXBNX	4/28/16	U.S. Fund Target-Date 2050	★★★ 241	★★★ 201	N/A	81/241
Great-West Lifetime Cnsrv 2055 Instl	MXXFX	5/1/15	U.S. Fund Target-Date 2055	★★ 229	★★ 186	★★★ 138	76/229
Great-West Lifetime Cnsrv 2060 Instl	MXGKX	5/1/19	U.S. Fund Target-Date 2060+	N/A	N/A	N/A	N/A

1 A lower percentile ranking is more favorable (higher relative returns).



Fund performance as of September 30, 2019

FUND NAME	TICKER	INCEPTION	NET EXPENSE RATIO ² (%)	GROSS EXPENSE RATIO ² (%)	1-YEAR RETURN (%)	3-YEAR RETURN (%)	5-YEAR RETURN (%)	SINCE INCEPTION RETURN (%)
Great-West Lifetime 2015 Instl	MXNYX	5/1/15	0.47	0.50	4.66	6.20	5.41	5.04
Great-West Lifetime 2020 Instl	MXAKX	4/28/16	0.53	0.55	4.38	6.63	N/A	7.18
Great-West Lifetime 2025 Instl	MXQBX	5/1/15	0.51	0.53	4.08	7.30	6.22	5.66
Great-West Lifetime 2030 Instl	MXAYX	4/28/16	0.54	0.55	3.47	8.00	N/A	8.58
Great-West Lifetime 2035 Instl	MXTBX	5/1/15	0.55	0.56	2.73	8.63	7.09	6.46
Great-West Lifetime 2040 Instl	MXBGX	4/28/16	0.56	0.57	2.20	8.92	N/A	9.58
Great-West Lifetime 2045 Instl	MXWEX	5/1/15	0.57	0.58	1.72	9.07	7.20	6.69
Great-West Lifetime 2050 Instl	MXBSX	4/28/16	0.58	0.58	1.54	9.04	N/A	9.74
Great-West Lifetime 2055 Instl	MXZHX	5/1/15	0.58	0.59	1.40	8.98	7.07	6.52
Great-West Lifetime 2060 Instl	MXGUX	5/1/19	0.59	0.60	N/A	N/A	N/A	0.95
Great-West Lifetime Cnsrv 2015 Instl	MXMAX	5/1/15	0.43	0.47	5.25	5.04	4.55	4.30
Great-West Lifetime Cnsrv 2020 Instl	MXAFX	4/28/16	0.46	0.49	5.10	5.51	N/A	6.02
Great-West Lifetime Cnsrv 2025 Instl	MXOZX	5/1/15	0.47	0.50	5.15	5.98	5.23	4.91
Great-West Lifetime Cnsrv 2030 Instl	MXARX	4/28/16	0.50	0.52	4.79	6.60	N/A	7.15
Great-West Lifetime Cnsrv 2035 Instl	MXRCX	5/1/15	0.53	0.54	4.29	7.35	6.17	5.74
Great-West Lifetime Cnsrv 2040 Instl	MXBCX	4/28/16	0.55	0.56	3.49	8.00	N/A	8.59
Great-West Lifetime Cnsrv 2045 Instl	MXUCX	5/1/15	0.56	0.57	2.90	8.40	6.84	6.35
Great-West Lifetime Cnsrv 2050 Instl	MXBNX	4/28/16	0.57	0.58	2.36	8.49	N/A	9.16
Great-West Lifetime Cnsrv 2055 Instl	MXXFX	5/1/15	0.57	0.58	2.22	8.53	6.81	6.34
Great-West Lifetime Cnsrv 2060 Instl	MXGKX	5/1/19	0.58	0.59	N/A	N/A	N/A	1.21

Generally, the asset allocation of each target date fund will gradually become more conservative as the fund nears the target retirement date. The date in a target date fund's name is the approximate date when investors are expected to start withdrawing their money (generally assumed to be at age 65). The principal value of the fund(s) is not guaranteed at any time, including at the time of the target date and/or withdrawal.

² Gross expense ratios are the funds' total annual operating costs expressed as a percentage of the funds' average net assets over a given time period. They are gross of any fee waivers or expense reimbursements. Net expense ratios are the expense ratios after the application of any voluntary or contractual waivers or reimbursements and are the actual ratios that investors paid during the funds' most recent fiscal year. Expense ratios are subject to change. All contractual fee waivers for the Great-West Lifetime Funds expire on April 30, 2020. Absent waivers or reimbursements, the performance would have been lower.



Performance for institutional class shares before their inception is derived from the historical performance of initial class shares, which has not been adjusted for the lower expenses; had it, returns would have been higher.

Current performance may be lower or higher than performance data shown. Performance data quoted represents past performance and is not a guarantee or prediction of future results. For performance data current to the most recent month-end, please visit greatwestfunds.com. The investment return and principal value of an investment will fluctuate so that, when redeemed, shares/units may be worth more or less than their original cost.

Please consider the investment objectives, risks, fees and expenses carefully before investing. For this and other important information, you may obtain mutual fund prospectuses from your registered representative or by visiting greatwestfunds.com. Read them carefully before investing.

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