



Item 7

DATE: March 11, 2020

TO: Deferred Compensation Management Council

FROM: Brent Petty, NWCM, Inc.

SUBJECT: Fourth Quarter Investment Performance Report (Executive Summary)

Capital Markets

Name	YTD (01/31/2020)	Q4 2019	1-Year (01/31/2020)
S&P 500 TR USD	-0.04	9.07	21.68
S&P MidCap 400 TR	-2.61	7.06	11.27
S&P SmallCap 600 TR USD	-3.97	8.21	6.57
MSCI EAFE NR USD	-2.09	8.17	12.10
MSCI EM NR USD	-4.66	11.84	3.81
BBgBarc US Agg Bond TR USD	1.92	0.18	9.64

	1/30/2020	12/31/2019	1/31/2019
10-Year Treasury Yield	1.57%	1.92%	2.63%

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

The fourth quarter was characterized by declining recession fears and renewed optimism, with global equity markets up double digits. Trade conflict de-escalated, as Phase 1 of the US-China trade deal was reached. Favorable policy conditions, including further monetary easing by the Federal Reserve and accommodative central banks provided additional momentum.

- **U.S. Equities** made strong gains amid positive geopolitical developments. Growth outpaced value and small cap stocks were positive for the quarter. The S&P 500 rose 9% during the quarter and was up 31.5% for the year, marking the S&P 500's largest annual gain since 2013.
- **International Equities** rallied as trade negotiations advanced. A weakened U.S. dollar also contributed to returns. Emerging markets outpaced U.S. and developed international. Chinese equities benefited from the decreasing trade uncertainty, with tech conglomerate, Alibaba, landing as the top contributor.

- In **Fixed Income**, riskier credit categories outperformed this quarter and had strong full-year results, while demand for safe-haven assets declined. As global market sentiment improved, the US Treasury Yield Curve steepened and is no longer inverted. The easing of global central banks and benign credit conditions have pushed bond yields to their lowest decile relative to history.

Economic Factors

- GDP grew at a slower, but steady rate of 2.1% in the third quarter. A moderation in government spending and personal consumption growth was offset by a drag from inventories and net exports.
- Fourth quarter job gains remained at a healthy pace, with the unemployment rate dipping to a 50-year low of 3.5%. Overall, the labor market continues to be consistent with demand-side data suggesting a moderate pace of economic growth.
- Overall inflation remains manageable as various headline CPI rose 2.3%. The PCE index remained soft at 1.6% below the Fed's target of 2%.
- Looking ahead, some of the positive effects spurred by Fed rate easing and fiscal stimulus could be offset in 2020 by the uncertainty surrounding the Phase 2 US-China trade negotiations, the emerging coronavirus pandemic, as well as a contentious electoral season. We expect periodic bouts of volatility given heightened policy uncertainties, late-cycle risks, and elevated valuations. Following an exceptional year, we expect modest returns in 2020 as equities are already pricing in a broad economic recovery.
- The SECURE Act was signed into law in December 2019. This landmark legislation includes several provisions addressing annuities and other lifetime income products. A memo on the three major lifetime income-related provisions is provided as **Exhibit B**.

Investments

An investment lineup review was completed for potential share class changes. Ivy International and Templeton Global Bond scored a 3 and 4 this quarter and are now listed as To Be Removed. The remaining investment options are compliant with the County's investment policy performance criteria.

- An updated fund watch report has been included as **Exhibit C**.
- A summary of proposed investment changes is provided as **Exhibit D**.
- Ivy International Core Equity Fund – Class N (IINCX) is listed as To Be Removed. An in-depth fund review and recommendation is included as **Exhibit E**.
- Templeton Global Bond R6 (FBNRX) has been listed as To Be Removed. An in-depth fund review and recommendation is included as **Exhibit F**.
- An in-depth review on County of Fresno Stable Value (FREESV) is included as **Exhibit G**.

Recommended Actions

1. **Classify Ivy International Core Equity Fund – Class N (IINCX) and Templeton Global Bond fund (FBNRX) as To Be Removed;**
2. **Add the following funds: T. Rowe Price Overseas (TROIX) and Alger Spectra – Class Y (ASPYX);**
3. **Remove the Ivy International Core Equity Fund – Class N (IINCX) and map all assets to the T. Rowe Price Overseas (TROIX) fund;**
4. **Remove the Alger Spectra Z (ASPZX) fund and map all assets to the Alger Spectra Y (ASPYX) fund;**
5. **Remove the Templeton Global Bond R6 fund (FBNRX) and map all assets to either: a participant's age-appropriate Great West Lifetime Target Date fund or the Vanguard Total International Bond Index fund (VTABX);**
6. **Pursuant to direction in Item 7.f, add the Vanguard Total International Bond Index fund (VTABX).**

Item - Exhibit A



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Decade Closes with a Bang

Global Stock Annual Performance

2019 Cumulative Return %

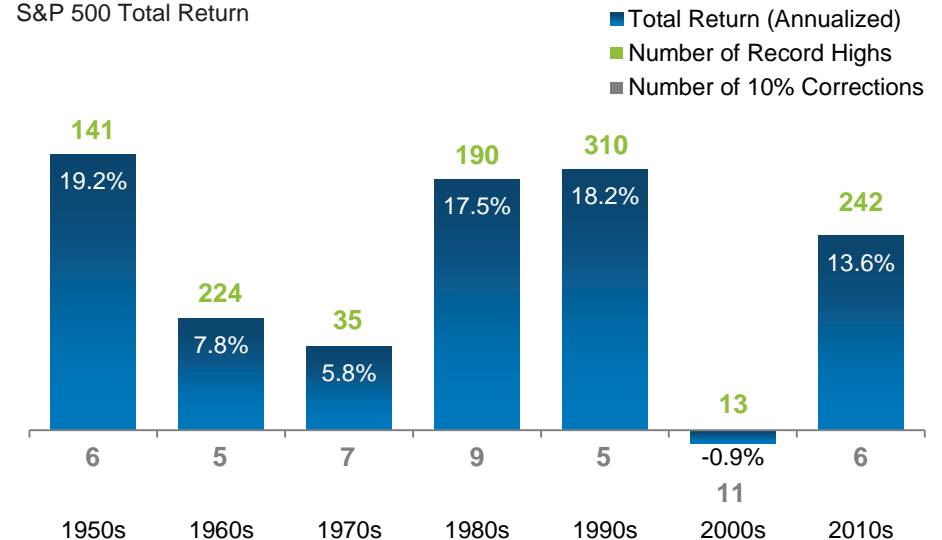


As 2019 drew to a close, the central bank induced rally ended with global equity markets up double digits as recession fears that pervaded at the end of 2018 were replaced by renewed optimism. Emerging Market equities led the fourth quarter finish after the announcement of a framework agreement between the U.S. and China brought relief from trade war anxiety.

Dubbed Phase I, the signed trade agreement rolled back a portion of U.S. tariffs on imported Chinese goods initiated earlier this year and removed planned increases on a range of consumer-focused products that were set to take effect on December 15th. In exchange, China agreed to purchase U.S. goods and services, refrain from currency manipulation, protect intellectual property and curtail forced technology transfers, as well as open up U.S. companies' participation in China's financial markets. President Trump stated that the existing tariffs will be removed only as part of a Phase two deal.

U.S. Equity Returns By Decade

S&P 500 Total Return



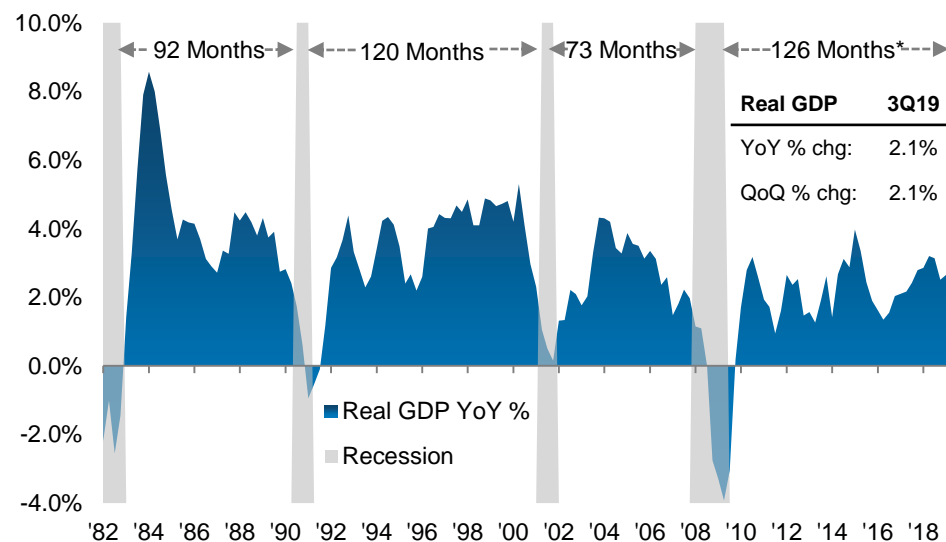
Following the 2000's, one of the worst decades on record, the S&P 500 returned with a vengeance on both an absolute and relative basis. The index outpaced most other asset classes and was in positive territory in 9 of the 10 years, with 2018 serving as the single down year. The same annual batting averages occurred during the 80s and 90s, although those decades saw higher annual returns.

The 10-year Treasury yield began the decade just shy of 4%, and touched an all-time low of 1.37% in July, 2015. Generally, rates remained in a range between 1.5% and 3.5% for the majority of the decade. The Federal Reserve launched quantitative easing and left policy rates near 0% from the depths of the Financial Crisis in December 2008 through December 2015. Then, the Fed embarked on a series of hikes, pauses, and cuts, ending the decade at a midpoint of 1.63%. Despite global political turmoil and economic angst, this marks the first decade in American history without a recession.

Growth and Fed Policy Rate Sync Lower

The Longest U.S. Economic Expansion On Record

% Year-Over-Year

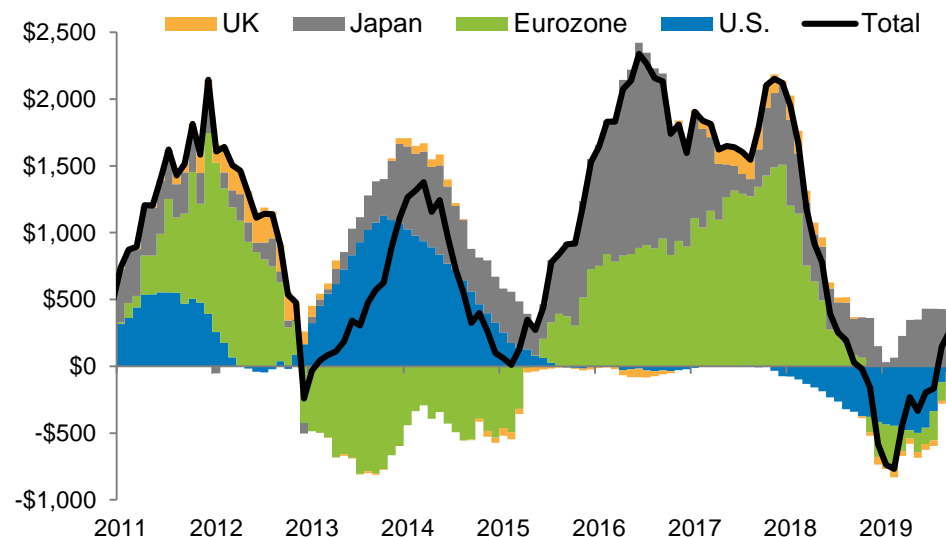


GDP: The U.S. economy grew at a slower, but steady rate of 2.1% in the third quarter. The data showed a moderation in government spending and personal consumption growth, but was offset by a smaller drag from inventories and net exports.

Labor Market: Job gains for December were 145,000, putting the fourth quarter average pace at a healthy 184,000 per month. The unemployment rate dipped back down to a 50-year low of 3.5%. The year-ago gain in average hourly earnings eased to 2.9%, well off the cycle high of 3.4% reached back in February of 2019. At a lighter 34.5 hours, the average workweek last quarter indicated less intensive business utilization of labor resources. Overall, the labor market continues to be consistent with demand-side data suggesting a moderate pace of economic growth.

Central Bank Balance Sheets

USD Billions (12-Month Change)



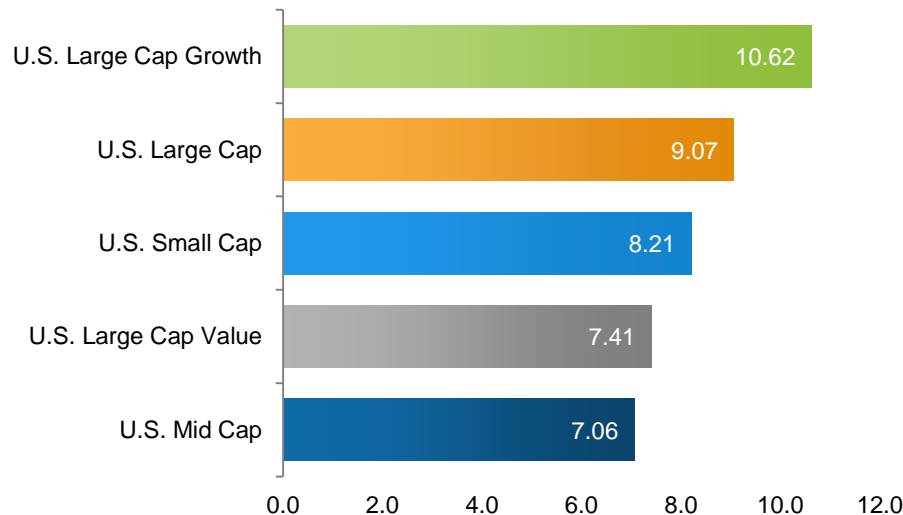
Inflation: Inflation remains manageable, as headline CPI rose 2.3% and core CPI (excluding food and energy) held steady at 2.3% in December. The Fed's closely monitored core PCE index remained soft at 1.6% in November below the Fed's target of 2%.

Fed Speak: The U.S. Federal Reserve cut interest rates for the third time this year in October, with the target federal funds range currently between 1.5%-1.75%. Federal Reserve Chair Jerome Powell indicated that the Committee was comfortable with a pause in cuts and left rates unchanged in their December meeting. Major central banks re-engaged in extraordinary monetary policy in 2019. The ECB restarted QE with 20 billion euros of monthly security purchases, and the Fed began buying \$60B of Treasury bills monthly and expanded its repo operations to relieve money market stress. These actions helped provide a positive liquidity environment to close 2019.

Markets at a Glance

U.S. Equity Quarterly Performance

% Total Return USD

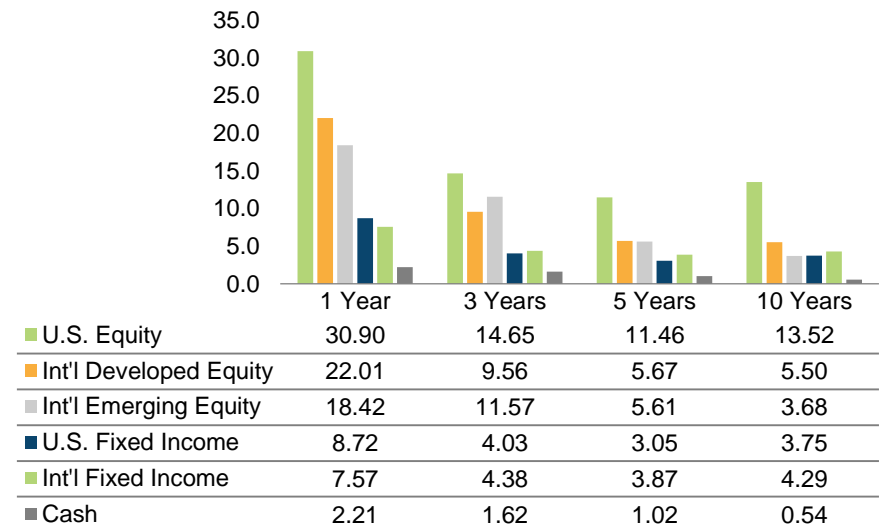


U.S. Equities: The S&P 500 (U.S. Large Cap) rose 9% during the quarter and 31.5% for the year, marking the best annual performance for the index since 2013. Growth outpaced value for the quarter, as the Russell 1000 Growth Index rallied 10.6%. Within growth, Tesla was the top performer returning 73.7% for the quarter. Small Cap stocks were positive for the quarter as investors increased risk appetite following constructive geopolitical developments.

International Equities: The improved economic and trade outlook sparked a rally in international equities and a weakening of the U.S. dollar. Emerging Markets rose 11.8%, outpacing its U.S. and international developed counterparts. Alleviation in trade concerns boosted Chinese equities 15.3%, with tech conglomerate, Alibaba, as the top contributor up 26.8%.

Trailing Returns

% Total Return USD



Fixed Income: Demand for safe haven assets waned during the quarter. Revived economic hopefulness lifted U.S. Treasury rates and steepened the yield curve, which alleviated inversion concerns. Riskier credit categories such as high yield corporates and emerging market debt outperformed in Q4 and had strong full-year results. As a result of accommodative global central banks and benign credit conditions, bond yields generally remain in their lowest decile relative to history. With a long-term average of 5.1% and a high of 16.5% in 1981, broad U.S. fixed income* ended the quarter with a yield of 2.3%.

*Bloomberg Barclays U.S. Aggregate Index yield to worst 1/30/1976-12/31/2019. The index is a broad-based flagship benchmark that measures the investment grade, U.S. dollar-denominated, fixed-rate taxable bond market. Yield to worst is the lowest yield of either the yield to maturity, yield to call, or yield to refunding.

Source: Bloomberg, Morningstar Direct as of December 31, 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 (Russell 1000 Growth), U.S. Large Cap Value (Russell 1000 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.

Plan Legislative and Regulatory Update



The SECURE Act Becomes Law

In December, the SECURE Act passed through both chambers of Congress as part of a bipartisan spending bill and was signed into law by President Trump on December 20, 2019. The bill has been described as the most impactful retirement plan legislation since the Pension Protection Act of 2006.¹ The provisions contained in the SECURE Act aim to expand and protect retirement savings options, improve plan administration, and reform existing rules.

Some of the notable provisions included in the spending bill²:

- Allows more flexibility for small businesses to offer multiple employer plans ("MEPs")
- Increases the age for required minimum distributions from 70^{1/2} to 72
- Eliminates the age limit for traditional IRA contributions
- Allows in-service distributions from defined benefit plans and governmental 457(b) plans at age 59^{1/2}
- Increases the eligibility of long-term, part-time workers to participate in retirement plans
- Creates a safe harbor provision for annuities and increases the portability of annuities offered in plans
- Provides a tax credit up to \$500 per year for small employers (100 or fewer employees) who implement automatic enrollment
- Allows automatic-enrollment safe harbor plans to increase the cap on raising payroll contributions from 10% to 15% of wages
- Allows the use of 529 accounts for qualified student loan repayment (lifetime limit of \$10,000 per 529 plan beneficiary)
- Accelerates the timeframe for distributions and taxes on inherited IRAs, also known as "stretch IRAs"

Many of the SECURE Act provisions will go into effect on January 1, 2020. While most of the changes apply only to private sector plans covered by the Employee Retirement Income Security Act of 1974 (ERISA), the provisions can provide best practices for non-ERISA government plans as well. In the coming months, plan sponsors should review how the SECURE Act will impact their plans, particularly when it comes to the administration and compliance requirements associated with the new legislation.



¹Anderson, Brian. "It's In! SECURE Act Included in 2020 Spending Package" *401KSpecialist*, 19 December 2019.

²LaBrecque, Leon. "The SECURE Act And Your 401(k) & IRA: 5 Things You Need To Know Right Now" *Forbes*, 21 December 2019.

³Associated Press. "Rand Paul to offer bill allowing families to use 401(k), IRA savings on student loans" *MarketWatch*, 4 December 2019.

⁴Senator Rand Paul Official Website. "Dr. Rand Paul Introduces HELPER Act to Reduce Student Loan Debt and Increase Retirement Savings" *Senator Rand Paul Official Website*, 3 December 2019.

⁵Umpierrez, Amanda. "Addressing Employees' Student Loan Debt in 2020" *Plansponsor*, 30 December 2019.

⁶Lazzarotti, Joseph. "DOL Proposed NEW Electronic Disclosures Rule" *JDSUPRA*, 23 October 2019.

Proposed Bill Would Help Students Save for Retirement

Senator Rand Paul, R-Kentucky, has introduced legislation which would allow the use of retirement funds for tuition and student loan repayment.



The Higher Education Loan Payment and Enhanced Retirement (HELPER) Act would allow participants to withdraw up to \$5,250 annually from a 401(k) or IRA to pay for qualified educational expenses, tax and penalty free. Additionally, under the proposed bill, participants could elect to take employer contributions as Roth contributions, in order to receive tax-free withdrawals after retirement.^{3,4}

Student loan repayment remains a bipartisan concern. Last year, Senator Ron Wyden, D-Oregon, re-introduced the Retirement Parity for Student Loans Act. If passed, the bill would allow 401(k), 403(b), and SIMPLE retirement plans to make matching contributions based on qualified student loan payments.⁵

DOL Proposes New Electronic Disclosure Rules

In October, the Department of Labor (DOL) proposed new regulations that would allow plan documents to be delivered electronically. Under the proposed electronic disclosure safe harbor rule, employers will have the option to make retirement plan disclosures of "covered documents" accessible online to "covered individuals". Participants can opt out of e-delivery if they prefer paper notices.⁶

2020 Compliance Calendar for ERISA Governed Retirement Plans

2020 January

Sun	Mon	Tue	Wed	Thu	Fri	Sat
			01	02	03	04
05	06	07	08	09	10	11
12	13	14	15	16	17	18
19	20	21	22	23	24	25
26	27	28	29	30	31	

01 Reminder for all payroll runs: participant contributions should be made no later than 3-5 days past the employee pay date.

31 Deadline to mail IRS Forms 1099-R to participants who received distributions the previous year. NOTE: 1099's for distributions are typically handled by the plan's trust company or record keeper.

31 Census data should be submitted to Record keepers for calculation that 402(g) limit has not been exceeded for previous plan year. **Off-calendar plans within 3 days following plan year end.**

2020 February

Sun	Mon	Tue	Wed	Thu	Fri	Sat
						01
02	03	04	05	06	07	08
09	10	11	12	13	14	15
16	17	18	19	20	21	22
23	24	25	26	27	28	29

28 Form 1099-R information transmitted to IRS.

2020 March

Sun	Mon	Tue	Wed	Thu	Fri	Sat
01	02	03	04	05	06	07
08	09	10	11	12	13	14
15	16	17	18	19	20	21
22	23	24	25	26	27	28
29	30	31				

15 Deadline for processing corrective distributions for nondiscrimination test failures of ADP (ave deferral %) / ACP (ave contribution %) for Highly Compensated Employees (HCEs). **Off-calendar plans corrections must be made 2 1/2 months following the end of the plan year.**

16 Deadline for employers to submit profit sharing or matching contributions in order to take a deduction for previous year taxes (unless corporate extension is filed). **Off-calendar plans 2 1/2 months following plan year end, unless extension filed.**

31 Deadline for electronic filing of Form 1099-R to report distributions for previous year.

2020 April

Sun	Mon	Tue	Wed	Thu	Fri	Sat
			01	02	03	04
05	06	07	08	09	10	11
12	13	14	15	16	17	18
19	20	21	22	23	24	25
26	27	28	29	30		

01 Initial age 70 1/2 Required Minimum Distributions (RMDs) due to inactive participants who turned age 70 1/2 during previous year.

15 Deadline for processing corrective distributions for previous plan year 402(g) excess deferral amounts.

2020 May

- No key deadlines.

2020 June

Sun	Mon	Tue	Wed	Thu	Fri	Sat
	01	02	03	04	05	06
07	08	09	10	11	12	13
14	15	16	17	18	19	20
21	22	23	24	25	26	27
28	29	30				

30 Deadline for processing corrective distributions for failed ADP/ACP test for plans with EACA (Eligible Automatic Contribution Arrangement) without 10% excise tax.

*This chart is intended to provide plan sponsors with a list of notable deadlines and is not a substitute for consultation with ERISA counsel and in no way represents legal advice.

2020 July

Sun	Mon	Tue	Wed	Thu	Fri	Sat
			01	02	03	04
05	06	07	08	09	10	11
12	13	14	15	16	17	18
19	20	21	22	23	24	25
26	27	28	29	30	31	

2020 August

2020 September

Sun	Mon	Tue	Wed	Thu	Fri	Sat
		01	02	03	04	05
06	07	08	09	10	11	12
13	14	15	16	17	18	19
20	21	22	23	24	25	26
27	28	29	30			

2020 October

Sun	Mon	Tue	Wed	Thu	Fri	Sat
				01	02	03
04	05	06	07	08	09	10
11	12	13	14	15	16	17
18	19	20	21	22	23	24
25	26	27	28	29	30	31

2020 November

Sun	Mon	Tue	Wed	Thu	Fri	Sat
01	02	03	04	05	06	07
08	09	10	11	12	13	14
15	16	17	18	19	20	21
22	23	24	25	26	27	28
29	30					

2020 December

Sun	Mon	Tue	Wed	Thu	Fri	Sat
		01	02	03	04	05
06	07	08	09	10	11	12
13	14	15	16	17	18	19
20	21	22	23	24	25	26
27	28	29	30	31		

31 Deadline for filing Form 5500 (without extension). Off-calendar plans, last day of the 7th month after the plan year end.

31 Last day to submit Form 5558 to request automatic extension to file Form 5500 October 15th (2 1/2 months). **Off-calendar plans, last day of the 7th month after the plan year end.**

- No key deadlines.

15 Extended deadline for filing corporate tax returns and contribution deadline for deductibility.

30 Deadline for distributing Summary Annual Report (SAR) to participants if Form 5500 submission was not extended, December 15 if 5500 extended. Rule is the later of 9 months after close of plan year or 2 months after due date of Form 5500).

01 If plan sponsor is considering a plan design change for the coming plan year, requested changes should be delivered to your record keeper by Nov 1 to ensure processing and 30-day participant notice requirement.

15 Extended deadline for filing Form 5500 for plans that requested a Form 5558 extension. **Off-calendar plans, extension deadline is 2 1/2 months following extension filing or 9 1/2 months following plan year end.**

01 Sponsors with terminated participants who have turned 70 1/2 should be contacted by your record keeper (typically in November) with a list of participants due to receive RMDs (Required Minimum Distributions).

20 Recommended distribution of annual notices to participants. **Off-calendar plans, notice distribution 45 days before plan year end.**

01 Deadline for sending annual 401(k) notices to participants: Safe Harbor notice, Qualified Default Investment Alternative (QDIA) notice, Automatic Contribution Arrangement (ACA) notice, Summary Annual Report (SAR) deadline is December 15, for extended 5500 filing. For administrative ease, a combined notice may be provided for these notices. **Off-calendar plans, 30 days prior to the end of the plan year.**

15 Summary Annual Report (SAR) deadline for extended 5500 filing.

31 Deadline for eligible participants to receive Required Minimum Distribution (RMD) for the current year.

31 Deadline for processing corrective distributions for failed ADP/ACP test for previous year with 10% excise tax.

31 Deadline for correcting a failed ADP/ACP test for previous year with qualified nonelective contributions (QNEC).

31 Deadline for amendment to convert existing 401(k) plan to safe harbor design or remove safe harbor design for next plan year.

31 Deadline for amending plan for discretionary changes implemented during plan year (certain exceptions apply, e.g. adding salary deferrals, cutting back accrued benefits).

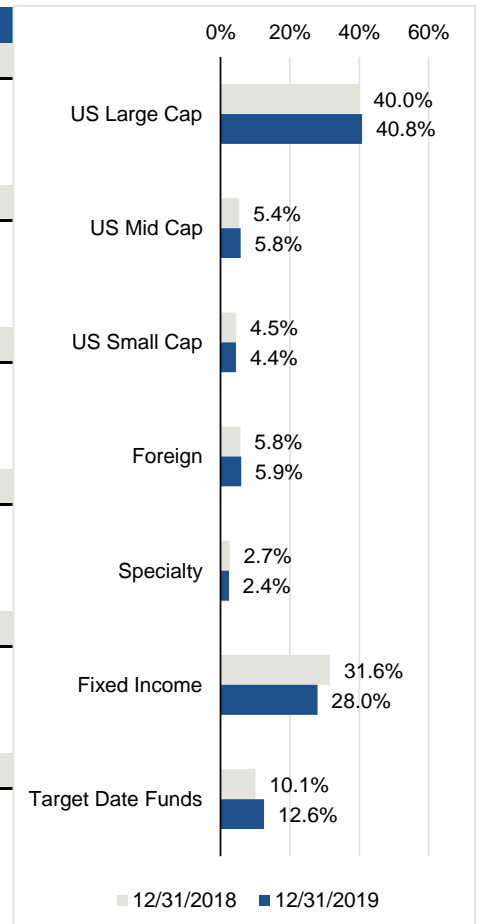
*This chart is intended to provide plan sponsors with a list of notable deadlines and is not a substitute for consultation with ERISA counsel and in no way represents legal advice.

County of Fresno 457 DC Plan

Summary of Assets

As of 12/31/2019

Asset Class	Ticker	%	12/31/2018	Net Increases/Decreases	12/31/2019	%
US Large Cap		40.04%	\$93,176,292	\$20,287,967	\$113,464,259	40.84%
BlackRock Equity Index - Collective M	02cff1	17.99%	\$41,853,359	\$9,282,983	\$51,136,343	18.40%
Alger Spectra Z	aspzx	16.77%	\$39,016,009	\$8,058,369	\$47,074,377	16.94%
Columbia Dividend Income Inst3	cddyx	5.29%	\$12,306,924	\$2,946,615	\$15,253,539	5.49%
US Mid Cap		5.38%	\$12,523,348	\$3,609,051	\$16,132,399	5.81%
BlackRock MidCap Idx - Collective M	03cff2	3.32%	\$7,719,246	\$1,608,392	\$9,327,638	3.36%
T. Rowe Price Mid-Cap Growth I	rptix	0.00%	\$0	\$6,804,761	\$6,804,761	2.45%
Hennessy Focus Institutional	hfcix	2.06%	\$4,804,102	(\$4,804,102)	\$0	0.00%
US Small Cap		4.50%	\$10,460,272	\$1,902,758	\$12,363,030	4.45%
BlackRock Russell 2000 Index Coll M	03cff3	1.60%	\$3,712,450	\$631,987	\$4,344,438	1.56%
Nicholas Limited Edition I	nclex	2.39%	\$5,552,562	\$853,398	\$6,405,959	2.31%
Janus Henderson Small Cap Value N	jdsnx	0.51%	\$1,195,260	\$417,373	\$1,612,633	0.58%
Foreign		5.76%	\$13,403,912	\$3,106,364	\$16,510,275	5.94%
BlackRock EAFE Equity Index Coll T	10cff5	1.34%	\$3,127,893	\$1,079,728	\$4,207,621	1.51%
Ivy International Core Equity N	iincx	3.62%	\$8,413,438	\$1,599,697	\$10,013,135	3.60%
Invesco Oppenheimer Developing Mkts R6	odvix	0.80%	\$1,862,580	\$426,939	\$2,289,519	0.82%
Specialty		2.66%	\$6,185,953	\$507,441	\$6,693,393	2.41%
Fidelity Advisor Real Estate Income I	frirx	0.40%	\$941,021	\$1,053,845	\$1,994,866	0.72%
Franklin Utilities R6	fufrx	1.42%	\$3,303,158	\$1,395,369	\$4,698,527	1.69%
Oakmark Equity And Income Investor	oakbx	0.83%	\$1,941,773	(\$1,941,773)	\$0	0.00%
Fixed Income		31.58%	\$73,483,152	\$4,283,279	\$77,766,431	27.99%
BlackRock US Debt Index Fund Coll W	04cff4	2.00%	\$4,658,706	\$536,069	\$5,194,775	1.87%
Templeton Global Bond R6	fbnrx	0.73%	\$1,697,007	\$420,390	\$2,117,397	0.76%
Virtus Seix Total Return Bond R6	samzx	1.64%	\$3,821,062	(\$3,821,062)	\$0	0.00%
Metropolitan West Total Return Bd Plan	mwtsx	0.00%	\$0	\$5,297,627	\$5,297,627	1.91%
Fresno County Stable Value	fressv	27.21%	\$63,306,377	\$1,850,255	\$65,156,632	23.45%
Target Date Funds		10.08%	\$23,448,291	\$11,470,426	\$34,918,717	12.57%
Great-West Lifetime 2015 Trust	grwl15	1.35%	\$3,145,342	\$1,211,530	\$4,356,872	1.57%
Great-West Lifetime 2020 Trust	grwl20	0.00%	\$0	\$3,129	\$3,129	0.00%
Great-West Lifetime 2025 Trust	grwl25	3.34%	\$7,762,368	\$3,966,330	\$11,728,698	4.22%
Great-West Lifetime 2030 Trust	grwl30	0.00%	\$0	\$371,751	\$371,751	0.13%
Great-West Lifetime 2035 Trust	grwl35	2.29%	\$5,334,206	\$1,903,036	\$7,237,242	2.60%
Great-West Lifetime 2040 Trust	grwl40	0.00%	\$0	\$1,025	\$1,025	0.00%
Great-West Lifetime 2045 Trust	grwl45	2.04%	\$4,746,278	\$2,258,671	\$7,004,948	2.52%
Great-West Lifetime 2050 Trust	grwl50	0.00%	\$0	\$86	\$86	0.00%
Great-West Lifetime 2055 Trust	grwl55	1.06%	\$2,460,098	\$1,754,867	\$4,214,966	1.52%
Total		100.0%	\$232,681,220	\$45,167,284	\$277,848,504	100.0%



County of Fresno 457 DC Plan

Investment Summary

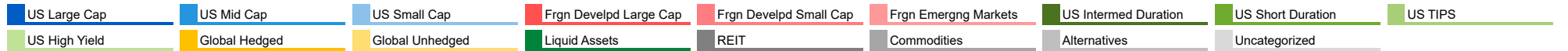
As of 12/31/2019

Passively-Managed and Cash Funds

Passively-Managed and Cash Funds		Equities						Fixed Income						Liquid	Other																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																													
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		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																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																						
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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	92	3		2									3					0.58	6.64	28.33	28.33	10.83	14.11	13.99	11.23	12.78
Growth	Alger Spectra Z	ASPZX	88	5		1		5											1	0.94	9.84	32.61	32.61	14.82	20.12	14.79	13.27	14.71
Utilities	Franklin Utilities R6	FUFRX	69	23	3	4									1					0.50	0.26	27.10	27.10	14.38	13.20	14.41	9.73	11.85
Growth	T. Rowe Price Mid-Cap Growth I	RPTIX	35	51	4	2		1							6				1	0.62	6.67	31.69	31.69	13.66	17.33	14.51	12.88	15.13
Growth	Nicholas Limited Edition I	NCLEX		32	57	2	4								5					0.86	7.59	27.38	27.38	12.31	14.79	14.18	10.78	13.33
Blend	Janus Henderson Small Cap Value N	JDSNX		38	53	2	2								4	1				0.68	7.00	26.30	26.30	4.85	7.47	11.96	8.93	10.36
Global Blend	Ivy International Core Equity N	IINCX	6	1		74	1	7	2						6		1		2	0.79	6.70	19.03	19.03	-0.92	6.57	5.35	4.15	5.51
Emerging Gr	Invesco Oppenheimer Developing Mkts R6	ODVIX	1			24		64							5				6	0.83	11.88	24.53	24.53	4.81	14.13	12.40	6.63	6.12
Intermediate	Metropolitan West Total Return Bd Plan	MWTSX							77	9	3	5		3	3					0.37	0.28	9.23	9.23	4.66	4.27	3.84	3.11	4.96
Real Estate	Fidelity Advisor Real Estate Income I	FRIRX	6	8	7				6	1		28		1	8	9		24	2	0.75	1.41	17.90	17.90	8.24	7.94	8.50	7.13	9.37
Global Bond	Templeton Global Bond R6	FBNRX							8	7		4	43	15	23					0.57	1.60	1.01	1.01	1.29	1.79	3.01	1.59	3.71



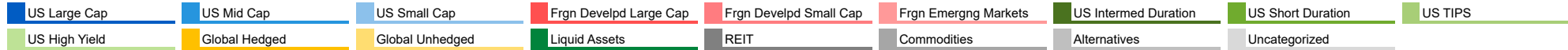
County of Fresno 457 DC Plan

Investment Summary

As of 12/31/2019









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										
Target Date	Great-West Lifetime 2015 Trust	GRWL15	17	8	4	10		3	20	8	13	5	5		4	3				0.40	3.49	15.57	15.57	5.65	7.74	7.81	6.00		
Target Date	Great-West Lifetime 2020 Trust	GRWL20	19	8	5	12		4	21	6	9	5	5		3	3				0.40	3.88	16.87	16.87	6.00	8.42				
Target Date	Great-West Lifetime 2025 Trust	GRWL25	22	9	6	14		5	19	5	6	5	4		2	3				0.40	4.56	18.44	18.44	6.35	9.25	9.18	7.07		
Target Date	Great-West Lifetime 2030 Trust	GRWL30	25	11	7	17		6	16	3	4	4	3		1	3				0.41	5.32	20.44	20.44	6.45	9.94				
Target Date	Great-West Lifetime 2035 Trust	GRWL35	29	12	8	21		7	11	1	2	2	2		1	4				0.41	6.22	22.51	22.51	7.21	11.12	10.88	8.35		
Target Date	Great-West Lifetime 2040 Trust	GRWL40	30	13	10	23		9	8	1		2	1			3				0.41	6.97	23.99	23.99	6.90	11.37				
Target Date	Great-West Lifetime 2045 Trust	GRWL45	31	13	10	24		10	6			1	1			4				0.41	7.39	24.80	24.80	7.53	11.98	11.59	8.86		
Target Date	Great-West Lifetime 2050 Trust	GRWL50	30	13	11	25		10	5			1	1			4				0.41	7.50	25.00	25.00	6.82	11.58				
Target Date	Great-West Lifetime 2055 Trust	GRWL55	29	13	11	25		11	5			1	1			4				0.42	7.64	24.96	24.96	7.34	12.00	11.60	8.82		



CALCULATION METHODOLOGY OF OVERALL FUND

1 (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.

Summary of Fund Compliance

Passively-Managed and Cash Funds

Type	Assets %	Fund Name	Ticker
LC Index	18.40%	BlackRock Equity Index - Collective M	02cff1
MC Index	3.36%	BlackRock MidCap Idx - Collective M	03cff2
SC Index	1.56%	BlackRock Russell 2000 Index Coll M	03cff3
GI Index	1.51%	BlackRock EAFE Equity Index Coll T	10cff5
TB Index	1.87%	BlackRock US Debt Index Fund Coll W	04cff4
Stable Value	23.45%	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	5.49%	Columbia Dividend Income Inst3	CDDYX	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>
Pass	16.94%	Alger Spectra Z	ASPZX	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>
Pass	1.69%	Franklin Utilities R6	FUFRX	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>
Pass	2.45%	T. Rowe Price Mid-Cap Growth I	RPTIX	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>
Pass	2.31%	Nicholas Limited Edition I	NCLEX	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>
Pass	0.58%	Janus Henderson Small Cap Value N	JDSNX	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>
To Be Removed	3.60%	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	1.91%	Metropolitan West Total Return Bd Plan	MWTSX	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>
Pass	0.72%	Fidelity Advisor Real Estate Income I	FRIRX	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>
To Be Removed	0.76%	Templeton Global Bond R6	FBNRX	<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	1.57%	Great-West Lifetime 2015 Trust	GRWL15	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>
Pass	0.00%	Great-West Lifetime 2020 Trust	GRWL20	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>
Pass	4.22%	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	2.60%	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	2.52%	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	1.52%	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	18.40%	02cff1	BlackRock Equity Index - Collective M	13	6	4	20	11	6	42	40	35	12	14	25	39	31	23	2	5
MC Index	3.36%	03cff2	BlackRock MidCap Idx - Collective M	49	23	12	56	23	17	66	64	62	16	10	12	75	65	67	1	5
SC Index	1.56%	03cff3	BlackRock Russell 2000 Index Coll M	10	13	17	11	17	28	40	57	64	19	10	10	29	54	71	1	5
GI Index	1.51%	10cff5	BlackRock EAFE Equity Index Coll T	27	19	24	18	18	24	19	46	49	49	33	27	26	35	47	5	5
TB Index	1.87%	04cff4	BlackRock US Debt Index Fund Coll W	1	1		8	18		83	82		4	7		41	50		1	5
table Valu	23.45%	fressv	Fresno County Stable Value	1	1	1	1	1	1	12	3	22	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	5.49%	CDDYX	Columbia Dividend Income Inst3	2	1	5	2	1	2	14	13	10	43	55	78	9	8	9	16	11
6	16.94%	ASPZX	Alger Spectra Z	32	35	17	38	39	25	70	69	59	21	20	15	70	74	64	46	10
7	1.69%	FUFRX	Franklin Utilities R6	37	11	20	57	23	13	87	79	37	11	12	25	68	68	39	15	16
8	2.45%	RPTIX	T. Rowe Price Mid-Cap Growth I	37	17	9	16	9	6	9	8	13	62	51	44	19	11	13	6	28
7	2.31%	NCLEX	Nicholas Limited Edition I	45	35	42	11	9	4	1	1	2	85	88	90	2	3	5	16	15
8	0.58%	JDSNX	Janus Henderson Small Cap Value N	6	5	40	4	3	2	3	3	3	88	85	92	2	3	2	9	7
3	3.60%	IINCX	Ivy International Core Equity N	91	79	37	93	81	36	82	79	59	72	52	39	88	80	45	31	8
8	0.82%	ODVIX	Invesco Oppenheimer Developing Mkts R6	15	23	7	9	17	9	33	37	28	45	57	58	14	22	18	12	13
7	1.91%	MWTSX	Metropolitan West Total Return Bd Plan	26	40	8	45	37	8	73	36	55	23	50	14	52	36	18	12	21
6	0.72%	FRIRX	Fidelity Advisor Real Estate Income I	52	36	90	4	1	1	6	2	2	93	94	97	7	4	1	18	9
4	0.76%	FBNRX	Templeton Global Bond R6	96	70	30	97	78	52	91	86	91	98	97	93	1	1	1	14	10

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	1.57%	GRWL15	Great-West Lifetime 2015 Trust	23	18		36	2		45	39		32	36		45	23		26	5
7	0.00%	GRWL20	Great-West Lifetime 2020 Trust	16			30			64			26			59			18	
8	4.22%	GRWL25	Great-West Lifetime 2025 Trust	23	9		21	3		44	30		34	37		37	23		20	5
6	0.13%	GRWL30	Great-West Lifetime 2030 Trust	33			29			43			52			38			19	
8	2.60%	GRWL35	Great-West Lifetime 2035 Trust	19	13		20	3		45	33		33	37		29	18		20	5
6	0.00%	GRWL40	Great-West Lifetime 2040 Trust	27			27			51			37			43			19	
8	2.52%	GRWL45	Great-West Lifetime 2045 Trust	19	9		19	9		49	45		26	27		38	30		19	5
6	0.00%	GRWL50	Great-West Lifetime 2050 Trust	33			31			46			46			42			18	
8	1.52%	GRWL55	Great-West Lifetime 2055 Trust	24	13		23	13		53	43		29	29		42	32		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. 02/03/2020

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	9.07%	31.54%	15.35%	11.77%	13.64%
S&P 500 TR USD	9.08%	31.50%	15.28%	11.70%	13.56%
Out/(Under) Performing	-0.01%	0.04%	0.07%	0.07%	0.07%
Peer Group Ranking	28	20	13	6	4

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	7.08%	26.23%	9.24%	8.87%	12.67%
S&P MidCap 400 TR	7.07%	26.21%	9.26%	9.03%	12.72%
Out/(Under) Performing	0.01%	0.02%	-0.02%	-0.15%	-0.05%
Peer Group Ranking	37	55	49	23	12

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	9.97%	30.18%	10.05%	9.21%	12.45%
Russell 2000 TR USD	9.94%	25.53%	8.59%	8.23%	11.83%
Out/(Under) Performing	0.04%	4.65%	1.46%	0.99%	0.63%
Peer Group Ranking	15	6	10	13	17

BlackRock EAFE Equity Index Coll T (10cff5)

Fund Type: GI Index

Frng 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	8.21%	22.49%	9.95%	6.18%	5.81%
MSCI ACWI Ex USA NR USD	8.92%	21.50%	9.86%	5.50%	4.97%
Out/(Under) Performing	-0.71%	0.99%	0.09%	0.67%	0.85%
Peer Group Ranking	65	41	27	19	24

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	0.18%	8.77%	4.09%	3.16%	
BBgBarc US Govt Interim TR USD	0.02%	5.21%	2.57%	1.99%	2.38%
Out/(Under) Performing	0.16%	3.56%	1.52%	1.18%	
Peer Group Ranking	31	1	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	0.41%	2.13%	2.06%	2.09%	2.38%
ICE BofAML 0-3 M US Trsy Bill TR USD	0.44%	2.22%	1.62%	1.02%	0.54%
Out/(Under) Performing	-0.03%	-0.09%	0.45%	1.07%	1.84%
Peer Group Ranking	23	11	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	6.64%	28.33%	14.11%	11.23%	12.78%
S&P 500 Value TR USD	9.94%	31.92%	11.48%	9.52%	12.16%
Out/(Under) Performing	-3.30%	-3.60%	2.63%	1.71%	0.63%
Peer Group Ranking	63	17	2	1	5

Columbia Dividend Income returned 6.6% in Q4 2019, compared to 9.9% for its benchmark (S&P 500 Value). For the year, the fund returned 28.3%, while the benchmark posted a 31.9% return. Relative to the benchmark, technology was the biggest detractor due to an underweight in Apple. Apple surged in 2019 due to the success of the wearables category (e.g., AirPods, Apple Watch, Beats headphones). Overweight positions in IBM and Cisco Systems contributed to relative underperformance. Additionally, the fund's position in Baxter International detracted from relative performance. Baxter, an American health care company, is facing challenges following the discovery of an accounting error dating back to 2014, which has prompted an internal investigation. In the Financials sector, JPMorgan Chase and Bank of America were solid contributors, both benefiting from the Fed holding interest rates steady at its meeting in December. Looking forward, management plans to maintain focus on companies with strong free cash flow and balance sheet strength. The fund currently scores a 9 under our methodology, and its risk-adjusted returns rank in the top decile over the trailing three-, five- and ten-year periods.

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	9.84%	32.61%	20.12%	13.27%	14.71%
S&P 500 Growth TR USD	8.31%	31.15%	18.67%	13.52%	14.78%
Out/(Under) Performing	1.52%	1.47%	1.45%	-0.25%	-0.07%
Peer Group Ranking	41	47	32	35	17

Alger Spectra returned 9.8% in Q4 2019 compared to 8.3% for its benchmark (S&P 500 Growth). For the year, the fund returned 32.6% compared to 31.1% for the benchmark. Alger's stock selection in Technology stocks like Apple, Microsoft, and Alibaba boosted relative performance for the quarter. Alger's overweight positions in Technology and Consumer Discretionary sectors also aided to performance. The fund's co-managers, Patrick Kelly and Ankur Crawford, continue to shift their strategy to more large- and mega-cap companies. The fund currently scores a 6 under our methodology. Its returns rank in the top half relative to peers for the trailing three- and five-year periods, and in the top quartile for the trailing ten-year period.

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	0.26%	27.10%	13.20%	9.73%	11.85%
MSCI World/Utilities NR USD	2.06%	22.53%	12.40%	7.04%	5.93%
Out/(Under) Performing	-1.80%	4.57%	0.80%	2.69%	5.92%
Peer Group Ranking	75	12	37	11	20

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	6.67%	31.69%	17.33%	12.88%	15.13%
S&P MidCap 400 Growth TR USD	6.73%	26.28%	10.73%	9.72%	13.16%
Out/(Under) Performing	-0.06%	5.42%	6.60%	3.16%	1.96%
Peer Group Ranking	71	65	37	17	9

T. Rowe Price Mid-Cap Growth returned 6.7% in Q4 2019 in line with its benchmark (S&P MidCap 400 Growth). For the year, the fund returned 31.7% compared to 26.3% for the benchmark. Security selection in Industrials and information technology were the largest detractors on relative performance. Shares of Textron, which makes Cessna business jets and Bell helicopters, underperformed amid a slower-than-expected recovery in the aerospace cycle and struggling subsidiaries. While the exuberant 4Q19 environment does not suit the valuation-sensitive, fundamentals-driven, growth-at-a-reasonable-price investment philosophy that has underpinned the Mid-Cap Growth strategy since its inception, Management believes that their approach to growth investing will continue to reward investors in the long run. The fund currently scores an 8 under our methodology. Its risk-adjusted returns rank in the top quartile relative to peers for the trailing three-year period, and in the top decile for the trailing five-and ten-year periods.

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	7.59%	27.38%	14.79%	10.78%	13.33%
Russell 2000 Growth TR USD	11.40%	28.50%	12.50%	9.35%	13.01%
Out/(Under) Performing	-3.81%	-1.12%	2.29%	1.44%	0.32%
Peer Group Ranking	76	53	45	35	42

Nicholas Limited Edition returned 7.6% in Q4 2019, compared to 11.4% for its benchmark (Russell 2000 Growth). Year-to-date, the fund returned 27.4%, underperforming its benchmark which returned 28.5%. Overweight positions in the Industrials and Technology sectors were the primary tailwind on Q4 performance. Looking ahead, the fund's overall sector positioning remains largely unchanged. Management tends not to focus their decisions on short-term market swings but instead on preserving gains and minimizing losses using long-term, fundamental valuation techniques. Management remains confident in their bottom-up, fundamental analysis approach. The fund currently scores a 7 under our methodology, and its risk-adjusted returns rank in the top quartile over the three-, five-, and ten-year periods.

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	7.00%	26.30%	7.47%	8.93%	10.36%
Russell 2000 Value TR USD	8.49%	22.39%	4.77%	6.99%	10.56%
Out/(Under) Performing	-1.48%	3.91%	2.70%	1.94%	-0.20%
Peer Group Ranking	74	16	6	5	40

Ivy International Core Equity N (IINCX)

Fund Score: 3 (Status: To Be Removed)

Frng 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	6.70%	19.03%	6.57%	4.15%	5.51%
MSCI ACWI Ex USA NR USD	8.92%	21.50%	9.86%	5.50%	4.97%
Out/(Under) Performing	-2.22%	-2.47%	-3.30%	-1.35%	0.55%
Peer Group Ranking	91	82	91	79	37

Ivy International Core returned 6.7% in Q4 2019, compared to 8.9% for its benchmark (MSCI ACWI ex USA). For the year, the fund returned 19.0%, while its benchmark returned 21.5%. Underperformance for the Fund was largely driven by poor stock selection in the Consumer Discretionary and Information Technology sectors as well as the Fund's relatively large cash allocation in a rising market. Of note, top relative detractors to performance included Subaru Corp., Zozo, Inc. and Newcrest Mining Ltd. Management believes Subaru, a Japanese auto company, is still well positioned looking forward as they expect their current product cycle to be successful. Management continues to believe there is opportunity in developed international markets. They believe valuations remain attractive, particularly in the companies they own, and growth prospects are brightening. The fund's score dropped to a 3 under our methodology and ranks in the bottom quartile based off risk-adjusted returns over the trailing three- and five-year periods. As such, the fund is listed as To Be Removed and we are recommending that the fund be removed from the lineup.

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	11.88%	24.53%	14.13%	6.63%	6.12%
MSCI EM NR USD	11.84%	18.43%	11.58%	5.62%	3.68%
Out/(Under) Performing	0.04%	6.10%	2.55%	1.01%	2.44%
Peer Group Ranking	28	24	15	23	7

Oppenheimer Developing Markets returned 11.9% in Q4 2019 compared to 11.8% for its benchmark (MSCI Emerging Markets). In 2019, the fund returned 24.5% compared to 18.4% for the benchmark. The fund was underweight in the Technology sector but benefited from its position in Alibaba, which had a strong quarter due to the growth in cloud computing. The fund's strategy of capturing emerging market growth through both revenue exposure and/or domicile has contributed to the fund's success. Despite missing out on direct gains in China, the fund's positions in developed markets such as France, Hong Kong, and Italy bolstered performance. The fund currently scores an 8 under our methodology. Its risk-adjusted returns rank in the top quartile relative to peers for the trailing three-, five-, and ten-year periods.

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	0.28%	9.23%	4.27%	3.11%	4.96%
BBgBarc US Agg Bond TR USD	0.18%	8.73%	4.04%	3.05%	3.75%
Out/(Under) Performing	0.10%	0.50%	0.24%	0.06%	1.21%
Peer Group Ranking	44	37	26	40	8

The MetWest Total Return Bond Fund gained 0.3% in the fourth quarter of 2019, performing largely in line with the Bloomberg Barclays U.S. Aggregate Index, and 9.2% for the year, roughly 50 bps ahead of the index. The fund benefited from sector allocation and security selection within the corporate credit space. The fund's emphasis on Consumer Non-Cyclicals, Communications, and Finance companies further boosted performance. The fund's duration position remains roughly neutral relative to the benchmark since the Fed is unlikely to raise rates anytime soon. The fund maintains its yield advantage versus the benchmark via overweight positioning to defensive corporate credits and securitized sectors rather than U.S. Treasuries. The fund scores a 7 under our scoring methodology and performance ranks in the top half relative to peers over the trailing three-, five- and ten-year periods.

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	1.41%	17.90%	7.94%	7.13%	9.37%
FTSE Nareit Equity REITs TR USD	-0.76%	25.99%	7.97%	7.11%	11.89%
Out/(Under) Performing	2.17%	-8.09%	-0.03%	0.02%	-2.52%
Peer Group Ranking	16	90	52	36	90

Fidelity Advisor Real Estate Income returned 1.4% in Q4 2019, compared to -0.8% for its benchmark (FTSE NAREIT Equity REITs Index). Year-to-date, the fund returned 17.9%, underperforming its benchmark which returned 26.0%. Security selection among real estate preferred stocks and common stocks contributed to the fund's performance this quarter. Cash represented about 8% of the portfolio this quarter, which has detracted from relative performance for the year, due to the strong market environment. The fund's notable cash stake reflects management's desire to pursue investment opportunities as they arise. Moving forward, management maintains confidence in their fundamental research-based approach. Consistent with their overall strategy, management seeks to boost returns through credit risk based on fundamental research, rather than interest rate risk. Management is currently looking to pockets of opportunity among health care property stocks and mortgage REITs. The fund scores a 6 under our methodology, and its risk-adjusted returns rank in the top decile over the trailing three-, five- and ten-year periods.

Templeton Global Bond R6 (FBNRX)

Fund Score: 4 (Status: To Be Removed)

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	1.60%	1.01%	1.79%	1.59%	3.71%
BBgBarc Global Aggregate TR Hdg USD	-0.50%	8.22%	4.30%	3.56%	4.08%
Out/(Under) Performing	2.10%	-7.20%	-2.51%	-1.97%	-0.38%
Peer Group Ranking	21	96	96	70	30

The Templeton Global Bond fund returned 1.6% for the quarter, relative to -0.5% for the Bloomberg Barclays Global Aggregate U.S. Dollar Hedged Index. Negative duration exposure to U.S. Treasuries contributed to absolute fund performance as the yield on the 10-year note rose 25 bps. Additionally, currency positions in Latin America (the Brazilian real) contributed to absolute fund performance. Looking forward, management maintains negative duration exposure to long-term US Treasuries to hedge rate risks, and they continue to pursue attractive risk-adjusted return opportunities in select Emerging Markets. Poor performance, primarily due to negative duration exposure, has dropped the fund's score to a 4 under our scoring methodology. As a result, the fund is being listed as To Be Removed.

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	3.49%	15.57%	7.74%	6.00%	
DJ Target 2015 TR USD	1.76%	9.54%	5.18%	3.79%	5.07%
Out/(Under) Performing	1.73%	6.04%	2.57%	2.22%	
Peer Group Ranking	70	42	23	18	

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	3.88%	16.87%	8.42%		
DJ Target 2020 TR USD	2.50%	11.98%	6.32%	4.60%	6.01%
Out/(Under) Performing	1.39%	4.89%	2.11%		
Peer Group Ranking	51	33	16		

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	4.56%	18.44%	9.25%	7.07%	
DJ Target 2025 TR USD	3.59%	14.38%	7.43%	5.46%	7.01%
Out/(Under) Performing	0.96%	4.07%	1.82%	1.61%	
Peer Group Ranking	65	45	23	9	

Great-West Lifetime 2030 Trust (GRWL30)

Fund Score: 6 (Status: Pass)

Uncategorized

Trailing Returns	1 Qtr	1 Yr	3 Yr	5 Yr	10 Yr
GRWL30	5.32%	20.44%	9.94%		
DJ Target 2030 TR USD	4.66%	17.07%	8.65%	6.38%	7.98%
Out/(Under) Performing	0.66%	3.37%	1.29%		
Peer Group Ranking	64	45	33		

Great-West Lifetime 2035 Trust (GRWL35)

Fund Score: 8 (Status: Pass)

Uncategorized

Trailing Returns	1 Qtr	1 Yr	3 Yr	5 Yr	10 Yr
GRWL35	6.22%	22.51%	11.12%	8.35%	
DJ Target 2035 TR USD	5.71%	19.69%	9.68%	7.09%	8.76%
Out/(Under) Performing	0.50%	2.82%	1.44%	1.26%	
Peer Group Ranking	68	42	19	13	

Great-West Lifetime 2040 Trust (GRWL40)

Fund Score: 6 (Status: Pass)

Uncategorized

Trailing Returns	1 Qtr	1 Yr	3 Yr	5 Yr	10 Yr
GRWL40	6.97%	23.99%	11.37%		
DJ Target 2040 TR USD	6.66%	22.03%	10.55%	7.69%	9.37%
Out/(Under) Performing	0.31%	1.96%	0.82%		
Peer Group Ranking	57	37	27		

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	7.39%	24.80%	11.98%	8.86%	
DJ Target 2045 TR USD	7.39%	23.71%	11.15%	8.10%	9.73%
Out/(Under) Performing	0.00%	1.08%	0.83%	0.77%	
Peer Group Ranking	64	40	19	9	

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	7.50%	25.00%	11.58%		
DJ Target 2050 TR USD	7.83%	24.68%	11.44%	8.30%	9.86%
Out/(Under) Performing	-0.34%	0.32%	0.14%		
Peer Group Ranking	64	39	33		

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	7.64%	24.96%	12.00%	8.82%	
DJ Target 2055 TR USD	7.94%	24.90%	11.48%	8.32%	9.87%
Out/(Under) Performing	-0.30%	0.06%	0.52%	0.49%	
Peer Group Ranking	63	44	24	13	

County of Fresno 457 DC Plan

Expense Ratio Report

As of 12/31/2019

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%
51,136,343	BlackRock Equity Index - Collective M	02cff1	0.02%	2	▲						
9,327,638	BlackRock MidCap Idx - Collective M	03cff2	0.03%	1	▲						
4,344,438	BlackRock Russell 2000 Index Coll M	03cff3	0.03%	1	▲						
4,207,621	BlackRock EAFE Equity Index Coll T	10cff5	0.10%	5	▲						
5,194,775	BlackRock US Debt Index Fund Coll W	04cff4	0.04%	1	▲						
65,156,632	Fresno County Stable Value	fressv	0.34%	40		▲					
Actively-Managed Funds											
15,253,539	Columbia Dividend Income Inst3	CDDYX	0.58%	16		▲					
47,074,377	Alger Spectra Z	ASPZX	0.94%	46			▲				
4,698,527	Franklin Utilities R6	FUFRX	0.50%	15		▲					
6,804,761	T. Rowe Price Mid-Cap Growth I	RPTIX	0.62%	6		▲					
6,405,959	Nicholas Limited Edition I	NCLEX	0.86%	16			▲				
1,612,633	Janus Henderson Small Cap Value N	JDSNX	0.68%	9		▲					
10,013,135	Ivy International Core Equity N	IINCX	0.79%	31			▲				
2,289,519	Invesco Oppenheimer Developing Mkts R6	ODVIX	0.83%	12			▲				
5,297,627	Metropolitan West Total Return Bd Plan	MWTSX	0.37%	12		▲					
1,994,866	Fidelity Advisor Real Estate Income I	FRIRX	0.75%	18			▲				
2,117,397	Templeton Global Bond R6	FBNRX	0.57%	14		▲					
Target-Date Funds											
4,356,872	Great-West Lifetime 2015 Trust	3RWL15	0.40%	26		▲					
3,129	Great-West Lifetime 2020 Trust	3RWL20	0.40%	18		▲					
11,728,698	Great-West Lifetime 2025 Trust	3RWL25	0.40%	20		▲					
371,751	Great-West Lifetime 2030 Trust	3RWL30	0.41%	19		▲					
7,237,242	Great-West Lifetime 2035 Trust	3RWL35	0.41%	20		▲					
1,025	Great-West Lifetime 2040 Trust	3RWL40	0.41%	19		▲					
7,004,948	Great-West Lifetime 2045 Trust	3RWL45	0.41%	19		▲					
86	Great-West Lifetime 2050 Trust	3RWL50	0.41%	18		▲					
4,214,966	Great-West Lifetime 2055 Trust	3RWL55	0.42%	19		▲					
277,848,504	Expense Ratio Averages		0.45%	16	Weighted Average Gross Expense Ratio: 0.43%						

Your Plan

	Bal Weighted Avg	1st Quartile	2nd Quartile	3rd Quartile	4th Quartile
Expense Ratio	0.43%	88.5%(23)	11.5%(3)	-	-

County of Fresno 457 DC Plan

As of: 12/31/2019

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	3.49	15.57	5.65	7.74	6.00	0.4
	Morningstar Lifetime Mod 2015 TR USD	3.57	16.29	5.92	7.71	5.63	
	Benchmark +/-	-0.08	-0.72	-0.27	0.03	0.37	
2020							
	Great-West Lifetime 2020 Trust	3.88	16.87	6.00	8.42		0.4
	Morningstar Lifetime Mod 2020 TR USD	3.93	17.73	6.23	8.37		
	Benchmark +/-	-0.05	-0.86	-0.23	0.05		
2025							
	Great-West Lifetime 2025 Trust	4.56	18.44	6.35	9.25	7.07	0.4
	Morningstar Lifetime Mod 2025 TR USD	4.50	19.36	6.55	9.15	6.66	
	Benchmark +/-	0.06	-0.92	-0.20	0.10	0.41	
2030							
	Great-West Lifetime 2030 Trust	5.32	20.44	6.45	9.94		0.41
	Morningstar Lifetime Mod 2030 TR USD	5.32	21.24	6.86	10.01		
	Benchmark +/-	0.00	-0.80	-0.41	-0.07		
2035							
	Great-West Lifetime 2035 Trust	6.22	22.51	7.21	11.12	8.35	0.41
	Morningstar Lifetime Mod 2035 TR USD	6.29	23.04	7.08	10.77	7.82	
	Benchmark +/-	-0.07	-0.53	0.13	0.35	0.53	
2040							
	Great-West Lifetime 2040 Trust	6.97	23.99	6.90	11.37		0.41
	Morningstar Lifetime Mod 2040 TR USD	7.10	24.35	7.17	11.25		
	Benchmark +/-	-0.13	-0.36	-0.27	0.12		
2045							
	Great-West Lifetime 2045 Trust	7.39	24.8	7.53	11.98	8.86	0.41
	Morningstar Lifetime Mod 2045 TR USD	7.57	24.97	7.13	11.43	8.26	
	Benchmark +/-	-0.18	-0.17	0.40	0.55	0.60	
2050							
	Great-West Lifetime 2050 Trust	7.5	25.00	6.82	11.58		0.41
	Morningstar Lifetime Mod 2050 TR USD	7.73	25.09	7.04	11.44		
	Benchmark +/-	-0.23	-0.09	-0.22	0.14		
2055							
	Great-West Lifetime 2055 Trust	7.64	24.96	7.34	12.00	8.82	0.42
	Morningstar Lifetime Mod 2055 TR USD	7.78	25.05	6.93	11.42	8.19	
	Benchmark +/-	-0.14	-0.09	0.41	0.58	0.63	

*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 0.43%-0.45% in Q2 2018

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

Item - Exhibit B

SECURE Act
Lifetime Income Options

Title	SECURE Act: Lifetime Income Options
Category	Legislative Update
Date	February 2020

SECURE Act: Lifetime Income Options

The SECURE Act includes three lifetime income-related provisions. Broadly, these provisions include a safe harbor for the selection of lifetime income products, a new lifetime income portability design feature, and a new disclosure requirement. Below is a summary of the three relevant sections:

Section 204. Fiduciary Safe Harbor for the Selection of Lifetime Income Provider

Section 204 of the SECURE Act establishes a new, optional, safe harbor for the selection and purchase of annuity products. The safe harbor will reduce the potential liability faced when selecting a lifetime income provider. The safe harbor does not require the selection of the lowest cost contract, the value of the contract in terms of features and benefits may also be considered, in addition to cost. Additionally, the fiduciary is not liable for losses that may result due to an insurer's inability in the future to satisfy its obligations. Under the new safe harbor, a fiduciary will be deemed to have met the prudence standard in selecting an insurer for a guaranteed income contract by meeting the following requirements:

Engaging in an “objective, thorough, and analytical search” when selecting an annuity provider by reviewing the “financial capability of [an] insurer to satisfy its obligations” and determining that “at the time of the selection, the insurer is financially capable of satisfying its obligations”.

A fiduciary will be deemed to have met the safe harbor requirement by obtaining written representations from the insurer, at the time of selection, confirming that the insurer can meet its financial obligations. Such representations include that the insurer:

- Is properly licensed;
- Has met certain State insurance requirements for the year in question, along with the previous seven years;
- Undergoes appropriate financial examination no less than once every five years; and
- Will notify the fiduciary of any changes to the above.

Section 109. Portability of Lifetime Income Options

Many lifetime income products can only be supported by select platform providers. In the event that a lifetime income investment option is no longer available under the plan, Section 109 of the SECURE act permits a plan provision to be added allowing a direct transfer to another employer-sponsored plan or IRA. The qualified distribution must be made within 90-days following the date the investment is no longer an option under the plan. Prior to the SECURE Act, plans that had allowed participants to invest in lifetime income products often encountered challenges when switching recordkeeping platforms. Allowing plans to include this portability provision in their plan design is an attempt to remedy this issue.

Section 203. Disclosure Regarding Lifetime Income

Section 203 of the SECURE Act requires that employers include a “lifetime income disclosure” in at least one participant benefit statement issued during any 12-month period. The purpose of this disclosure is to provide an estimate of what the participant could receive from the plan if their benefits were paid in the form of an annuity. The DOL has been directed to develop a model disclosure.

References:

- Groom Benefits Brief. (2020, February 6). Lifetime Income Provisions Under the SECURE Act. Retrieved from <https://www.groom.com/resources/lifetime-income-provisions-under-the-secure-act/>
- Heagy, J. (2020, January 28). SECURE Act: Lifetime Income Options (Sections 109, 203 and 204). Retrieved from <https://www.schneiderdowns.com/our-thoughts-on/secure-act-sections-109-203-204>
- Krieg, T. (2019, December 23). Summary of Secure Act 2019 retirement savings law provisions. Retrieved from <https://www.wipfil.com/insights/articles/hcm-secure-act-becomes-law-retirement-savings>
- Text - H.R. 1994 - 116th Congress (2019-2020): Setting Every Community Up for Retirement Enhancement Act of 2019. (2019, June 3). Retrieved from [https://www.congress.gov/bill/116th-congress/house-bill/1994/text](https://www.congress.gov/bills/116/house-bill/1994/text)

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	-	FBNRX	Templeton Global Bond R6	Watch	2019 - Q4
ASPZX	Alger Spectra Z	Pass	-	04cff4	BlackRock US Debt Index Fund Coll W	Pass	-
CDDYX	Columbia Dividend Income Inst3	Pass	-	MWTSX	Metropolitan West Total Return Bd Plan	Pass	-
US Mid Cap				fressv	Fresno County Stable Value	Pass	-
03cff2	BlackRock MidCap Idx - Collective M	Pass	-	Target Date Funds			
RPTIX	T. Rowe Price Mid-Cap Growth I	Pass	-	GRWL15	Great-West Lifetime 2015 Trust	Pass	-
US Small Cap				GRWL20	Great-West Lifetime 2020 Trust	Pass	-
03cff3	BlackRock Russell 2000 Index Coll M	Pass	-	GRWL25	Great-West Lifetime 2025 Trust	Pass	-
NCLEX	Nicholas Limited Edition I	Pass	-	GRWL30	Great-West Lifetime 2030 Trust	Pass	-
JDSNX	Janus Henderson Small Cap Value N	Pass	-	GRWL35	Great-West Lifetime 2035 Trust	Pass	-
Foreign				GRWL40	Great-West Lifetime 2040 Trust	Pass	-
10cff5	BlackRock EAFE Equity Index Coll T	Pass	-	GRWL45	Great-West Lifetime 2045 Trust	Pass	-
IINCX	Ivy International Core Equity N	Watch	2019 - Q2	GRWL50	Great-West Lifetime 2050 Trust	Pass	-
ODVIX	Invesco Oppenheimer Developing Mkts R6	Pass	-	GRWL55	Great-West Lifetime 2055 Trust	Pass	-
Specialty							
FRIRX	Fidelity Advisor Real Estate Income I	Pass	-				
FUFRX	Franklin Utilities R6	Pass	-				

Watch List History

		Status	Most Recent Time on Watch Placed	Most Recent Time on Watch Removed	Previous Time on Watch Placed	Previous Time on Watch Removed
FBNRX	Templeton Global Bond R6	In Plan	2019 - Q4	-	2016 - Q2	2017 - Q1
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	2016 - Q2	2017 - Q1
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
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.

Item - Exhibit D

County of Fresno 457 DC Plan

Summary of Proposed Investment Changes

Data as of 12/31/2019

Legend	
Keep	Fund Change
Share Class Change	Add

Current Lineup						Proposed Lineup				
Fund Name	% of Assets	Assets	Gross Exp Ratio	Revenue Share	Net Exp Ratio	Action	Fund Name	Gross Exp Ratio	Revenue Share	Net Exp Ratio
US Large Cap							US Large Cap			
Alger Spectra Z (aspx)	16.94%	\$47,074,377	0.94%	0.00%	0.94%	Share Class Change	Alger Spectra Y (aspyx)	0.89%	0.00%	0.89%
Columbia Dividend Income Inst3 (cddyx)	5.49%	\$15,253,539	0.58%	0.00%	0.58%	Keep	Columbia Dividend Income Inst3 (cddyx)	0.58%	0.00%	0.58%
Blackrock Equity Index Fund M (02cff1)	18.40%	\$51,136,343	0.02%	0.00%	0.02%	Keep	Blackrock Equity Index Fund M (02cff1)	0.02%	0.00%	0.02%
US Mid Cap							US Mid Cap			
T. Rowe Price Mid-Cap Growth I (rptix)	2.45%	\$6,804,761	0.62%	0.00%	0.62%	Keep	T. Rowe Price Mid-Cap Growth I (rptix)	0.62%	0.00%	0.62%
Blackrock Mid Cap Equity Index - Fund M (03cff2)	3.36%	\$9,327,638	0.03%	0.00%	0.03%	Keep	Blackrock Mid Cap Equity Index - Fund M (03cff2)	0.03%	0.00%	0.03%
US Small Cap							US Small Cap			
Nicholas Limited Edition I (nclex)	2.31%	\$6,405,959	0.86%	0.00%	0.86%	Keep	Nicholas Limited Edition I (nclex)	0.86%	0.00%	0.86%
Perkins Small Cap Value N (jdsnx)	0.58%	\$1,612,633	0.68%	0.00%	0.68%	Keep	Perkins Small Cap Value N (jdsnx)	0.68%	0.00%	0.68%
Blackrock Russell 2000 Index Fund M (03cff3)	1.56%	\$4,344,438	0.03%	0.00%	0.03%	Keep	Blackrock Russell 2000 Index Fund M (03cff3)	0.03%	0.00%	0.03%
International - Developed							International - Developed			
Ivy International Core Equity R6 (iincx)	3.60%	\$10,013,135	0.79%	0.00%	0.79%	Fund Change	T. Rowe Price Overseas Stock I (troix)	0.66%	0.00%	0.66%
Blackrock Eafe Equity Index Fund T (10cff5)	1.51%	\$4,207,621	0.10%	0.00%	0.10%	Keep	Blackrock Eafe Equity Index Fund T (10cff5)	0.10%	0.00%	0.10%
International - Emerging							International - Emerging			
Invesco Oppenheimer Developing Markets I (odvix)	0.82%	\$2,289,519	0.83%	0.00%	0.83%	Keep	Invesco Oppenheimer Developing Markets I (odvix)	0.83%	0.00%	0.83%
Specialty							Specialty			
Fidelity Advisor Real Estate Income I (frirx)	0.72%	\$1,994,866	0.75%	0.25%	0.50%	Keep	Fidelity Advisor Real Estate Income I (frirx)	0.75%	0.25%	0.75%
Franklin Utilities R6 (fufrx)	1.69%	\$4,698,527	0.50%	0.00%	0.50%	Keep	Franklin Utilities R6 (fufrx)	0.50%	0.00%	0.50%
Fixed Income							Fixed Income			
Blackrock US Debt Index Fund W (04cff4)	1.87%	\$5,194,775	0.04%	0.00%	0.04%	Keep	Blackrock US Debt Index Fund W (04cff4)	0.04%	0.00%	0.04%
County Of Fresno Stable Value Fund (fressv)	23.45%	\$65,156,632	0.34%	0.00%	0.34%	Keep	County Of Fresno Stable Value Fund (fressv)	0.34%	0.00%	0.34%
Metropolitan West Total Return Bond Plan (mwtsx)	1.91%	\$5,297,627	0.37%	0.00%	0.37%	Keep	Metropolitan West Total Return Bond Plan (mwtsx)	0.37%	0.00%	0.37%
Templeton Global Bond R6 (fbnrx)	0.76%	\$2,117,397	0.57%	0.00%	0.57%	Fund Change or Fund Change	QDIA (Great-West Trust Lifetime Series) or Vanguard Total Intl Bd Idx Admiral™ (vtabx)	0.41% 0.11%	0.00%	0.41% 0.11%
Target Date							Target Date			
Great-West Lifetime 2015 Trust (grwl15)	1.57%	\$4,356,872	0.40%	0.00%	0.40%	Keep	Great-West Lifetime 2015 Trust (grwl15)	0.40%	0.00%	0.40%
Great-West Lifetime 2020 Trust (grwl20)	0.00%	\$3,129	0.40%	0.00%	0.40%	Keep	Great-West Lifetime 2020 Trust (grwl20)	0.40%	0.00%	0.40%
Great-West Lifetime 2025 Trust (grwl25)	4.22%	\$11,728,698	0.40%	0.00%	0.40%	Keep	Great-West Lifetime 2025 Trust (grwl25)	0.40%	0.00%	0.40%
Great-West Lifetime 2030 Trust (grwl30)	0.13%	\$371,751	0.41%	0.00%	0.41%	Keep	Great-West Lifetime 2030 Trust (grwl30)	0.41%	0.00%	0.41%
Great-West Lifetime 2035 Trust (grwl35)	2.60%	\$7,237,242	0.41%	0.00%	0.41%	Keep	Great-West Lifetime 2035 Trust (grwl35)	0.41%	0.00%	0.41%
Great-West Lifetime 2040 Trust (grwl40)	0.00%	\$1,025	0.41%	0.00%	0.41%	Keep	Great-West Lifetime 2040 Trust (grwl40)	0.41%	0.00%	0.41%
Great-West Lifetime 2045 Trust (grwl45)	2.52%	\$7,004,948	0.41%	0.00%	0.41%	Keep	Great-West Lifetime 2045 Trust (grwl45)	0.41%	0.00%	0.41%
Great-West Lifetime 2050 Trust (grwl50)	0.00%	\$86	0.41%	0.00%	0.41%	Keep	Great-West Lifetime 2050 Trust (grwl50)	0.41%	0.00%	0.41%
Great-West Lifetime 2055 Trust (grwl55)	1.52%	\$4,214,966	0.42%	0.00%	0.42%	Keep	Great-West Lifetime 2055 Trust (grwl55)	0.42%	0.00%	0.42%
Total	100%	\$277,848,504	0.429%	0.002%	0.427%			0.414% / 0.412%	0.002%	0.413% / 0.410%



Ivy International Review

County of Fresno 457 Deferred Compensation Plan

Brent Petty
503-597-1641 | brentp@nwcm.com
Northwest Capital Management, Inc.
March 2020

Executive Summary

This document has been prepared to provide analysis of several potential replacement candidates in the Foreign Developed Blend asset class. The current option, Ivy International Core Equity N, has worsened in the Foreign Developed Blend space due to continued underperformance relative to the benchmark and peer group, and the availability of more competitive options in the Foreign Developed Blend category.

Northwest Capital Management (NWCM) has conducted a manager search in the Foreign Developed Blend space to find appropriate replacements. The candidates presented generally include management teams that have satisfied the following criteria:

1. Investment track record of no less than three years
2. Expense ratio below Foreign Developed Blend category average
3. Fund performance ranked within top 50th percentile of category peers over the trailing three- and five-year periods.
4. Reasonable portfolio diversification and risk (volatility) characteristics
5. Investment Style consistency over evaluation periods

We have provided the top two alternative candidates in the Foreign Developed Blend asset class category along with the incumbent investment option for review. NWCM has determined that T. Rowe Price Overseas Stock I is a prudent replacement candidate. In making the investment recommendation, NWCM analyzed the following traits:

- Historical performance - T. Rowe Price Overseas Stock I substantially outperforms the MSCI ACWI Ex USA NR USD for the trailing three-, five-, and ten-year periods.
- Risk adjusted returns - T. Rowe Price Overseas Stock I has a greater sharpe ratio (return / standard deviation) over each trailing period.
- Peer group rankings - T. Rowe Price Overseas Stock I is in the top half of its peer group for trailing one-, three-, five-, and ten-year periods.
- Upside / downside capture - T. Rowe Price Overseas Stock I has participated to the upside while limiting the downside.

We believe the best strategies have consistently impressive performance, established management with a proven track record, and appear best-suited to perform well in the spaces they are being slotted to fill. **From our universe of over 26,000 managers, we recommend replacing Ivy International Core Equity N with T. Rowe Price Overseas Stock I.**

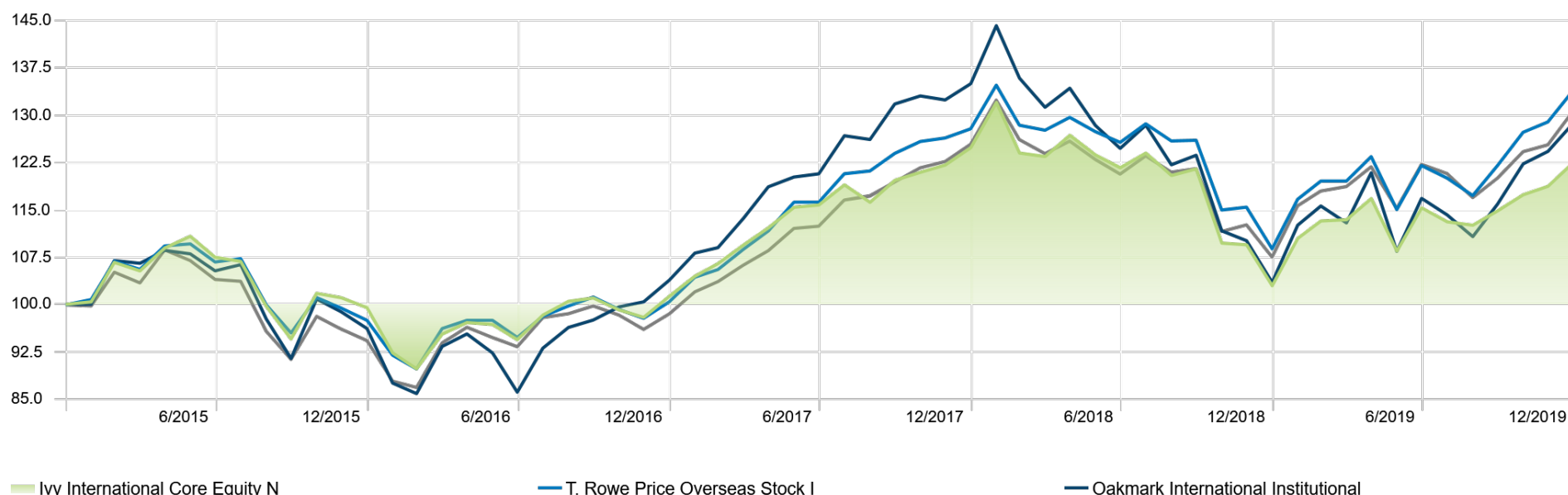
Foreign Large Blend Manager Search Report

	Ivy International Core Equity N	T. Rowe Price Overseas Stock I	Oakmark International Institutional
Firm City	Overland Park	Baltimore	Chicago
Year Firm Founded	1/1/1937	1/1/1937	1/1/1976
Firm % Owned by Employees	14.00	13.00	0.00
GIPS Compliance	Yes	Yes	Yes
Firm Total Assets	57,560,000,000.00	1,206,800,000,000.00	120,000,000,000.00
Fund Size	3,938,424,731.00	17,927,436,425.00	31,272,962,575.00
Turnover Ratio %	52.00	18.20	35.00
Turnover Ratio % Date	3/31/2019	10/31/2019	9/30/2019
Investment Type	Open-End Fund	Open-End Fund	Open-End Fund
Minimum Investment (Base Currency)	1,000,000	1,000,000	1,000,000
Prospectus Net Expense Ratio	0.79	0.66	0.81
Portfolio Manager(s)	John C. Maxwell since 2/17/2006 Catherine L. Murray since 1/25/2017	Raymond A. Mills since 12/29/2006	David G. Herro since 9/30/1992 Michael L. Manelli since 11/30/2016

Foreign Large Blend Manager Search Report

Investment Growth

Time Period: 1/1/2015 to 12/31/2019



Performance

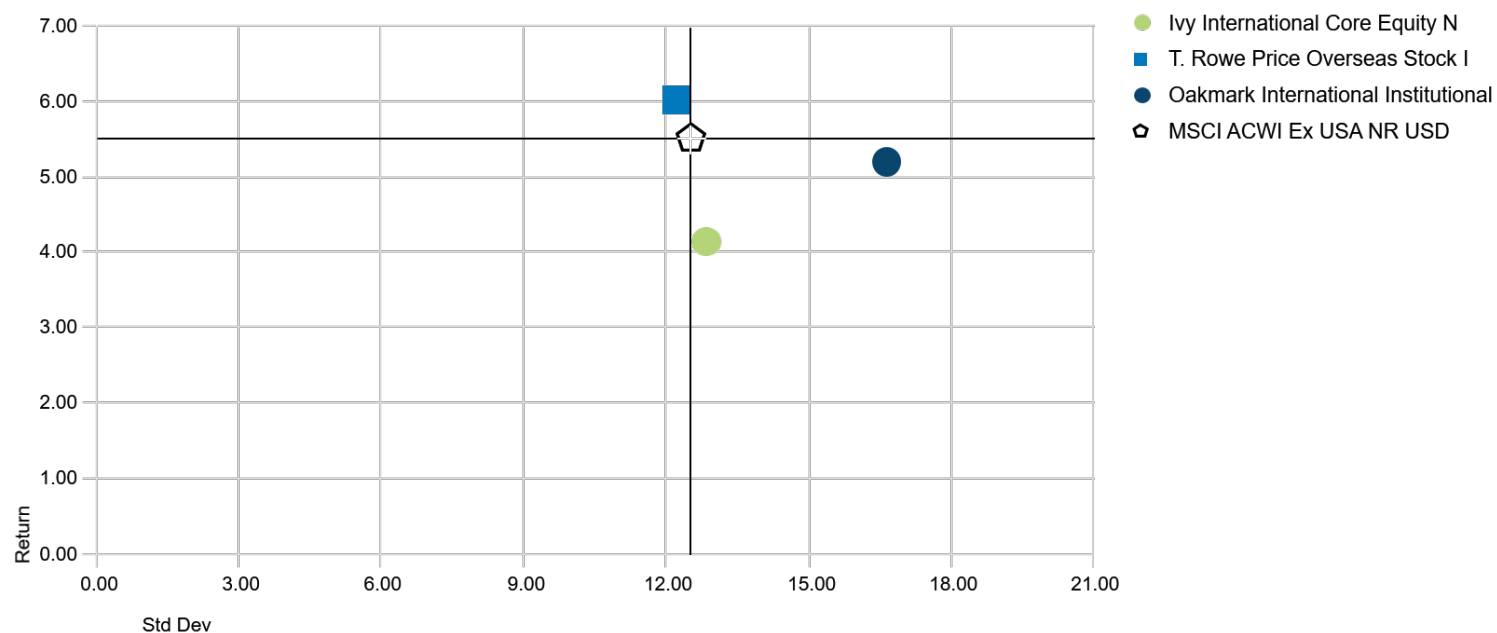
Time Period: 1/1/2015 to 12/31/2019 Calculation Benchmark: MSCI ACWI Ex USA NR USD

	Return	Std Dev	Alpha	Beta	Sharpe Ratio	Treynor Ratio (arith)	Information Ratio (arith)	R2
Ivy International Core Equity N	4.15	12.84	-1.15	0.98	0.29	3.11	-0.36	91.29
T. Rowe Price Overseas Stock I	6.02	12.23	0.71	0.95	0.45	5.17	0.18	94.90
Oakmark International Institutional	5.19	16.67	-0.91	1.24	0.32	3.30	-0.05	86.60
MSCI ACWI Ex USA NR USD	5.51	12.53	0.00	1.00	0.40	4.40		100.00

Foreign Large Blend Manager Search Report

Risk-Reward

Time Period: 1/1/2015 to 12/31/2019



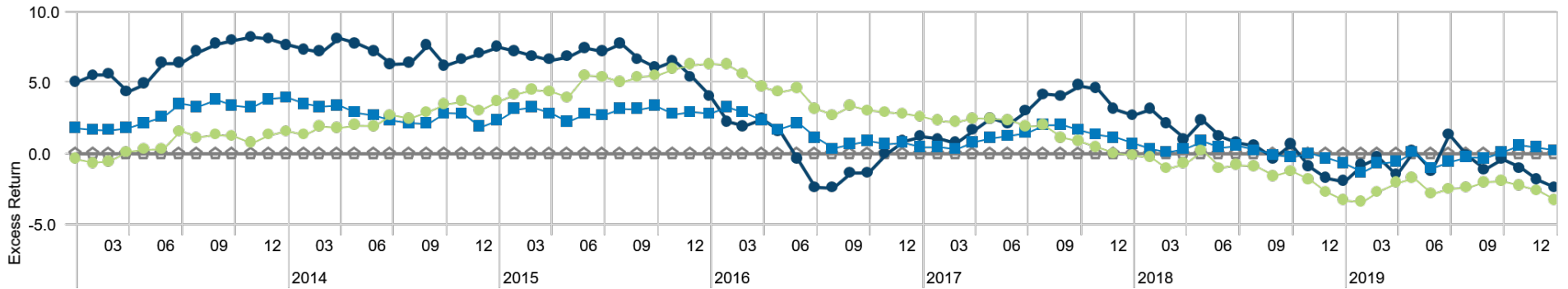
Risk

Time Period: 1/1/2015 to 12/31/2019

	Return	Std Dev	Downside Deviation	Upside Std Dev	Value at Risk	Excess Return	Gain/Loss Ratio	Tracking Error
Ivy International Core Equity N	4.15	12.84	2.76	2.64	7.91	-1.36	1.32	3.80
T. Rowe Price Overseas Stock I	6.02	12.23	1.97	1.59		0.52	1.48	2.83
Oakmark International Institutional	5.19	16.67	4.86	3.91		-0.32	1.32	6.81
MSCI ACWI Ex USA NR USD	5.51	12.53	0.00		7.62	0.00	1.42	0.00

Foreign Large Blend Manager Search Report

36 Month Rolling Excess Returns



Ivy International Core Equity N

T. Rowe Price Overseas Stock I

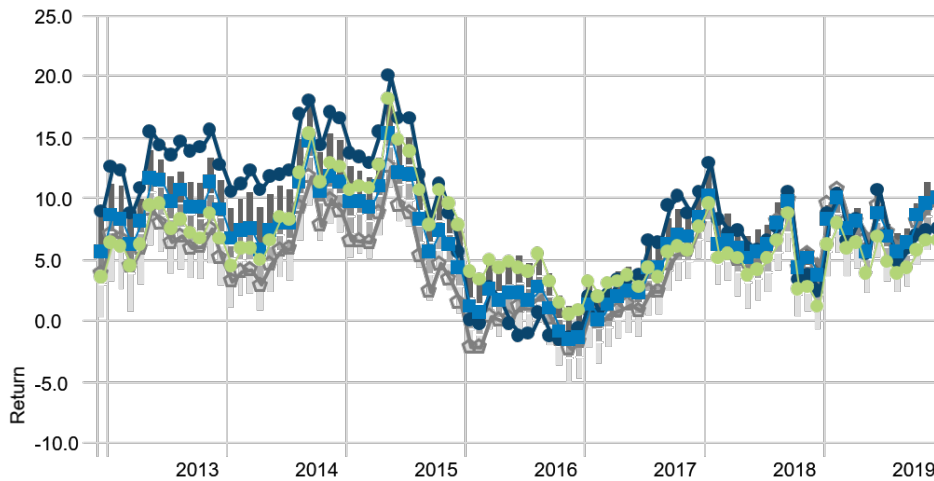
Oakmark International Institutional

MSCI ACWI Ex USA NR USD

Rolling Returns vs. Peer Group

Peer Group (5-95%): Open End Funds - U.S. - Foreign Large Blend

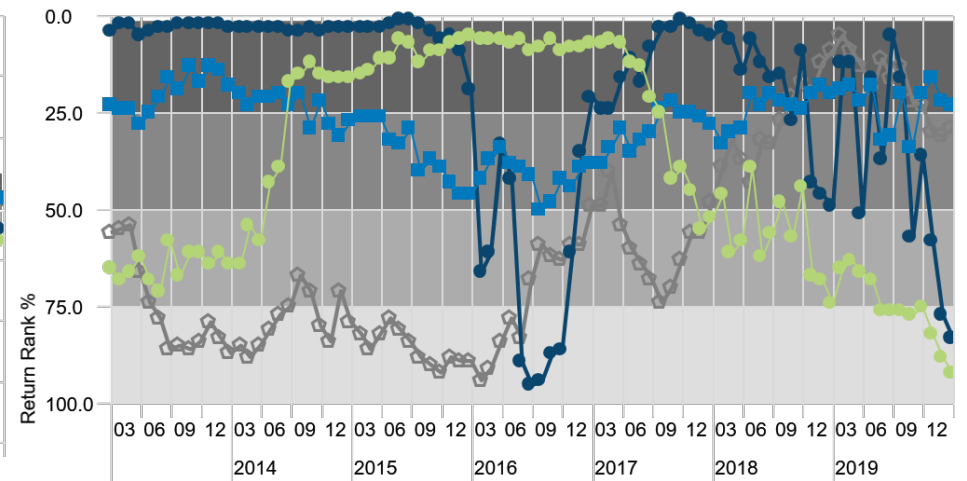
Top Quartile 2nd Quartile 3rd Quartile Bottom Quartile



Rolling Return Quartiles

Peer Group (5-95%): Open End Funds - U.S. - Foreign Large Blend

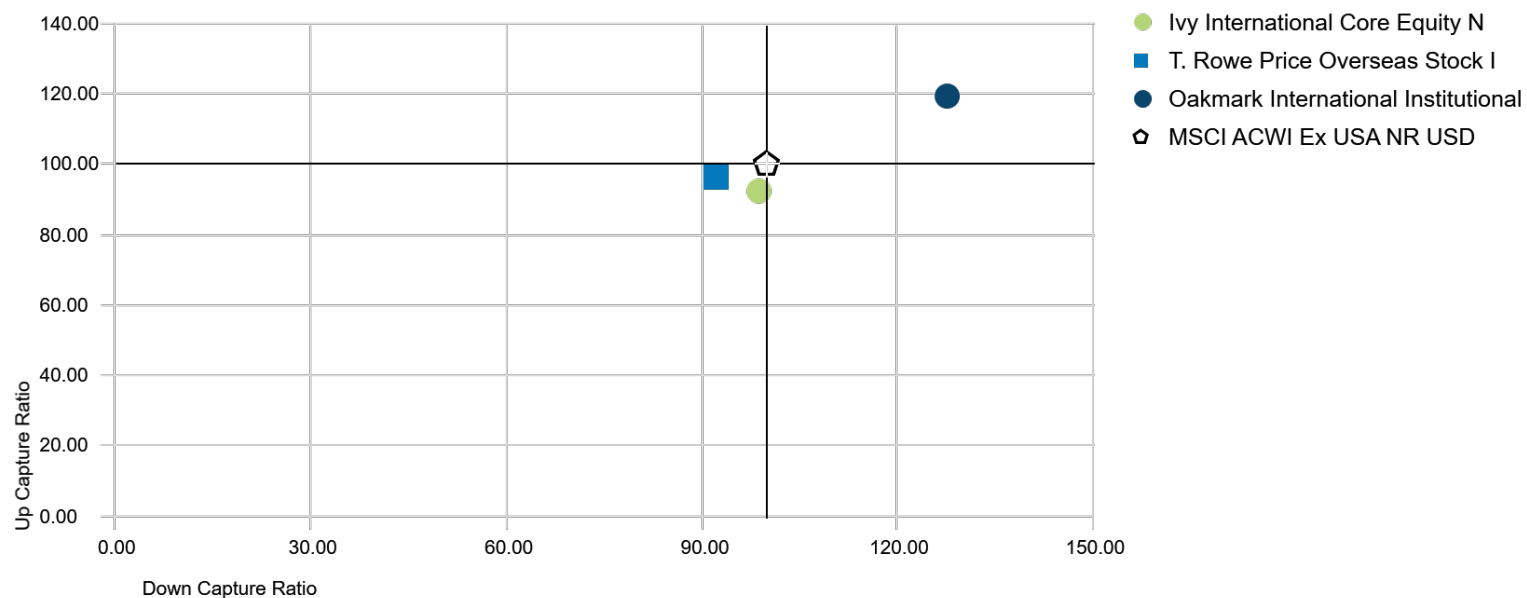
1st to 25th Percentile 26th to Median 51st to 75th Percentile 76th to 100th Percentile



Foreign Large Blend Manager Search Report

Upside-Downside Capture

Time Period: 1/1/2015 to 12/31/2019



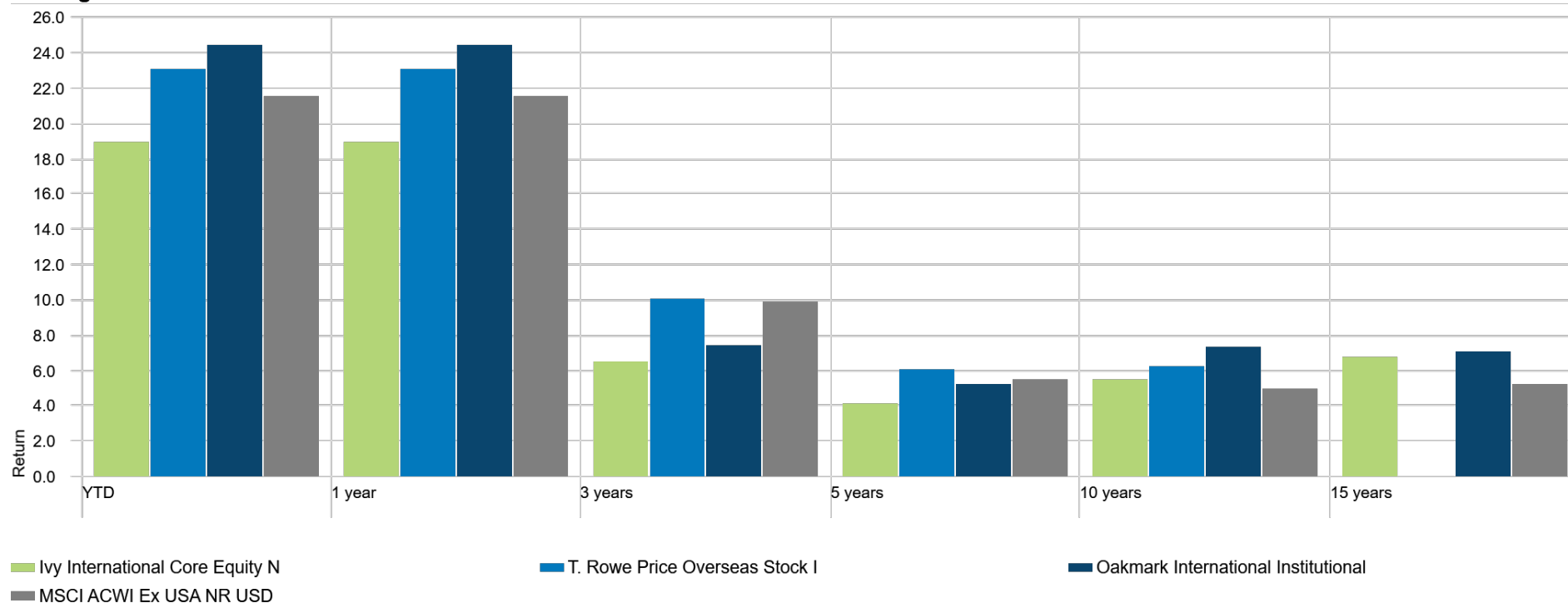
Market Performance

Time Period: 1/1/2015 to 12/31/2019

	Up Period Percent	Down Period Percent	Best Month	Worst Month	Best Quarter	Worst Quarter	Up Capture Ratio	Down Capture Ratio	R2
Ivy International Core Equity N	58.33	41.67	7.66	-9.69	10.16	-15.25	92.56	98.74	91.29
T. Rowe Price Overseas Stock I	65.00	35.00	7.21	-8.72	9.81	-13.60	96.62	92.27	94.90
Oakmark International Institutional	58.33	41.67	10.31	-10.31	13.28	-16.30	119.59	127.69	86.60
MSCI ACWI Ex USA NR USD	58.33	41.67	8.13	-8.13	10.31	-12.17	100.00	100.00	100.00

Foreign Large Blend Manager Search Report

Trailing Returns

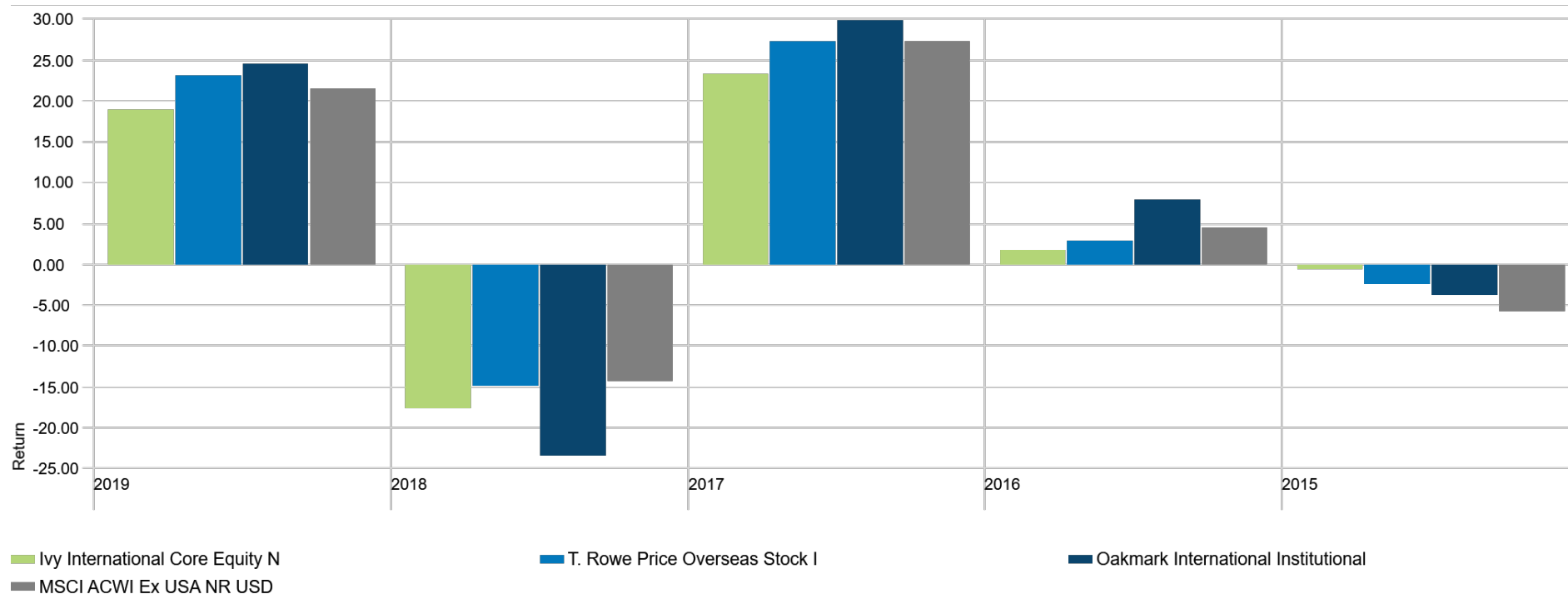


Trailing Returns

	YTD	1 year	3 years	5 years	10 years	15 years
Ivy International Core Equity N	19.01	19.01	6.56	4.15	5.51	6.80
T. Rowe Price Overseas Stock I	23.05	23.05	10.06	6.02	6.27	
Oakmark International Institutional	24.43	24.43	7.44	5.19	7.35	7.05
MSCI ACWI Ex USA NR USD	21.51	21.51	9.87	5.51	4.97	5.25

Foreign Large Blend Manager Search Report

Calendar Year Returns

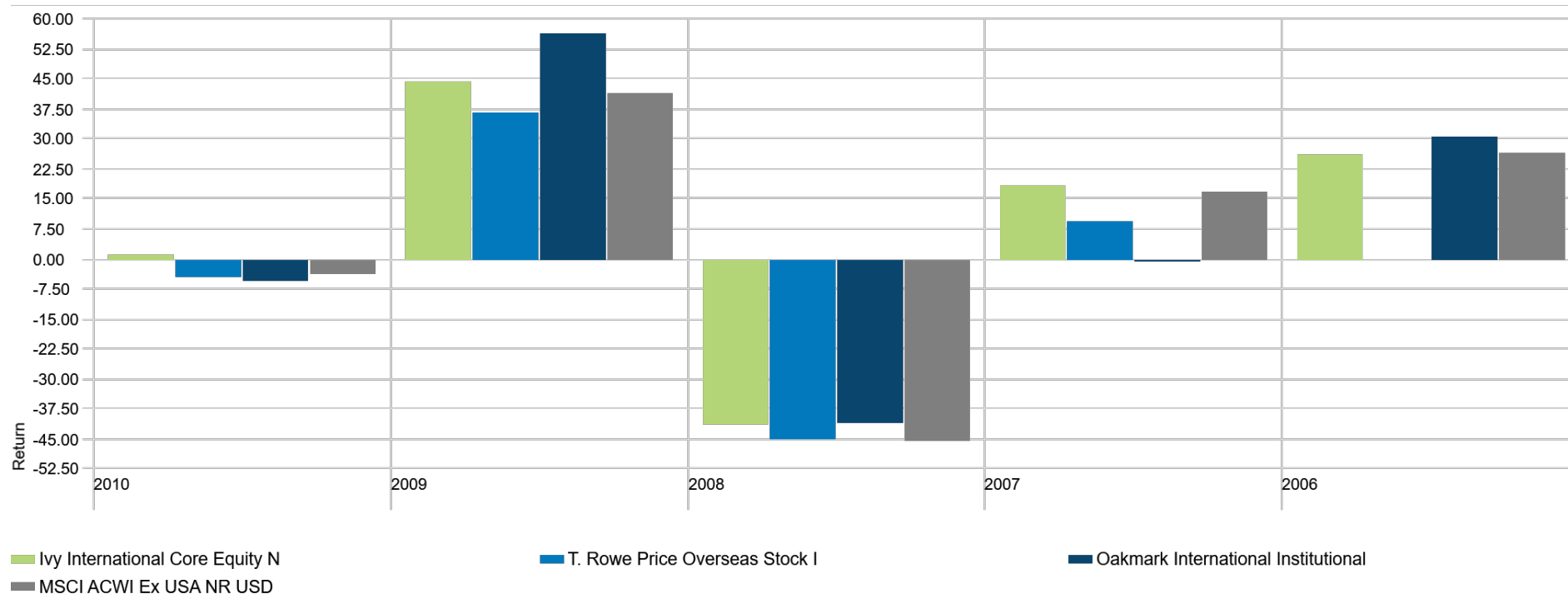


Calendar Year Returns

	2019	2018	2017	2016	2015
Ivy International Core Equity N	19.01	-17.53	23.28	1.79	-0.52
T. Rowe Price Overseas Stock I	23.05	-14.83	27.22	3.01	-2.45
Oakmark International Institutional	24.43	-23.32	30.00	7.96	-3.83
MSCI ACWI Ex USA NR USD	21.51	-14.20	27.19	4.50	-5.66

Foreign Large Blend Manager Search Report

Calendar Year Returns

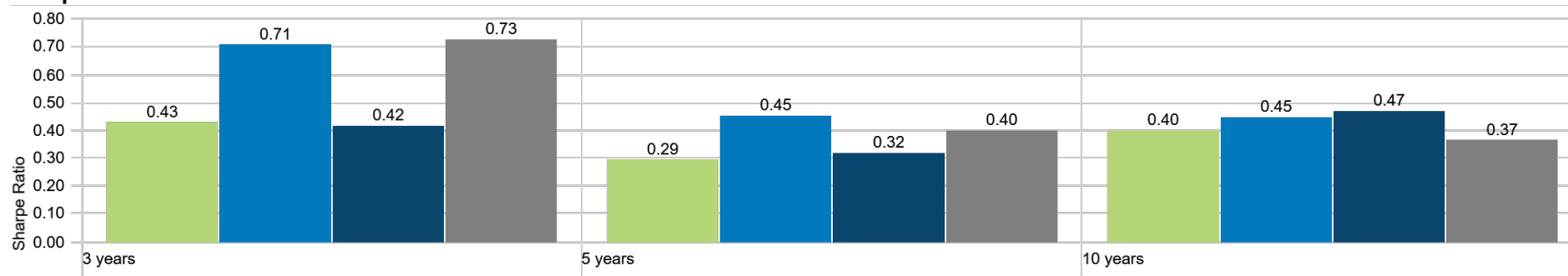


Calendar Year Returns

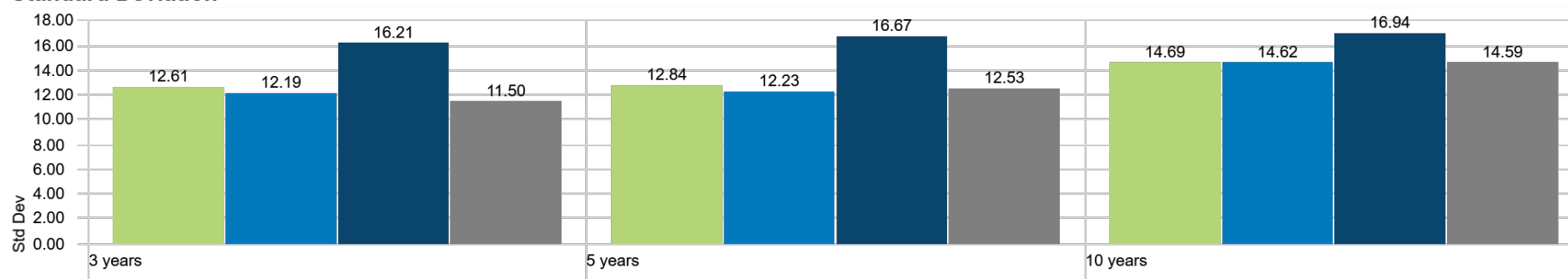
	2010	2009	2008	2007	2006
Ivy International Core Equity N	1.19	44.24	-41.50	18.36	26.13
T. Rowe Price Overseas Stock I	-4.49	36.70	-45.06	9.43	
Oakmark International Institutional	-5.41	56.30	-41.06	-0.51	30.60
MSCI ACWI Ex USA NR USD	-3.87	41.45	-45.53	16.65	26.65

Foreign Large Blend Manager Search Report

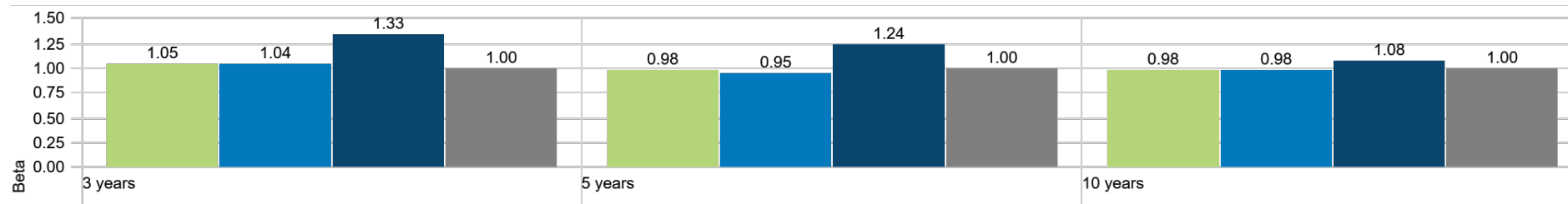
Sharpe Ratio



Standard Deviation



Beta



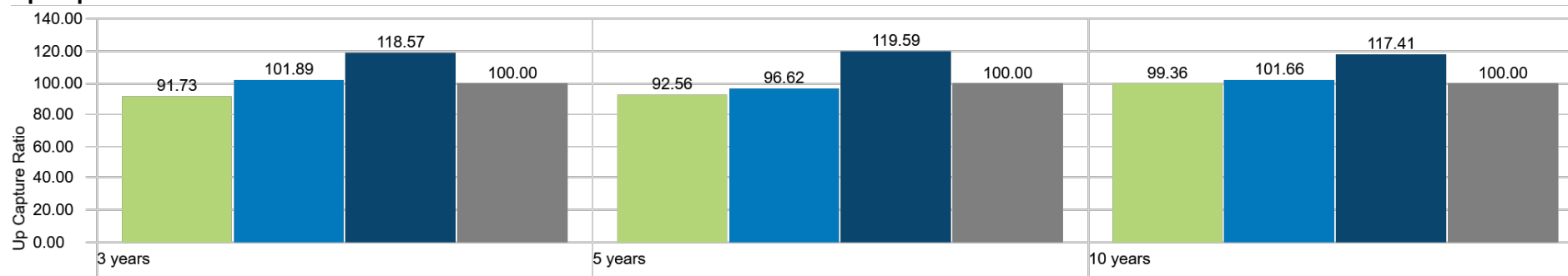
Ivy International Core Equity N
MSCI ACWI Ex USA NR USD

T. Rowe Price Overseas Stock I

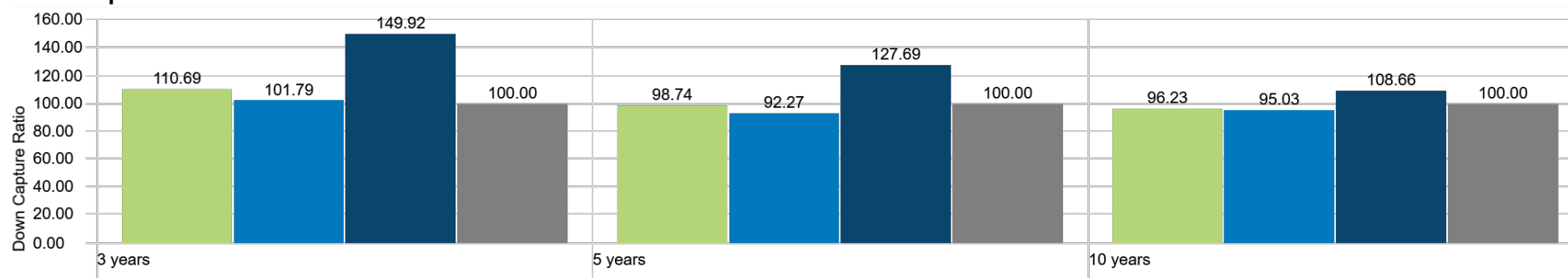
Oakmark International Institutional

Foreign Large Blend Manager Search Report

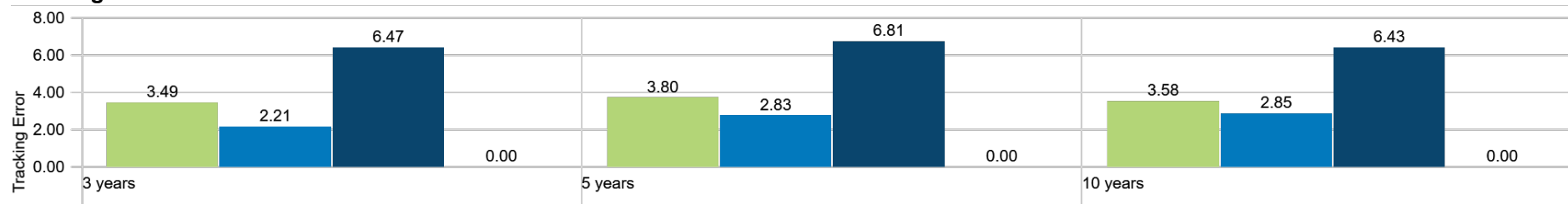
Up Capture Ratio



Down Capture Ratio



Tracking Error

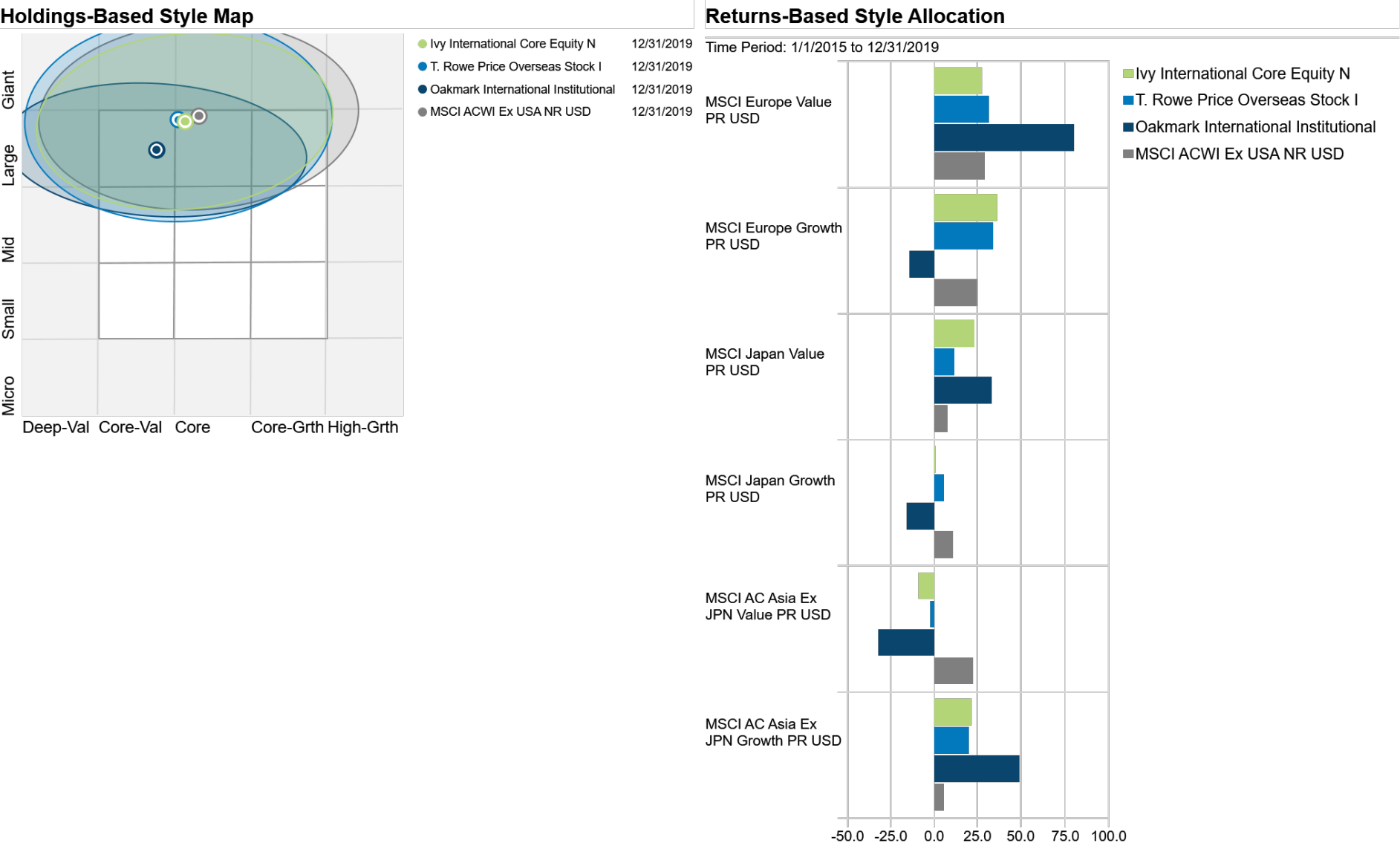


Ivy International Core Equity N
MSCI ACWI Ex USA NR USD

T. Rowe Price Overseas Stock I

Oakmark International Institutional

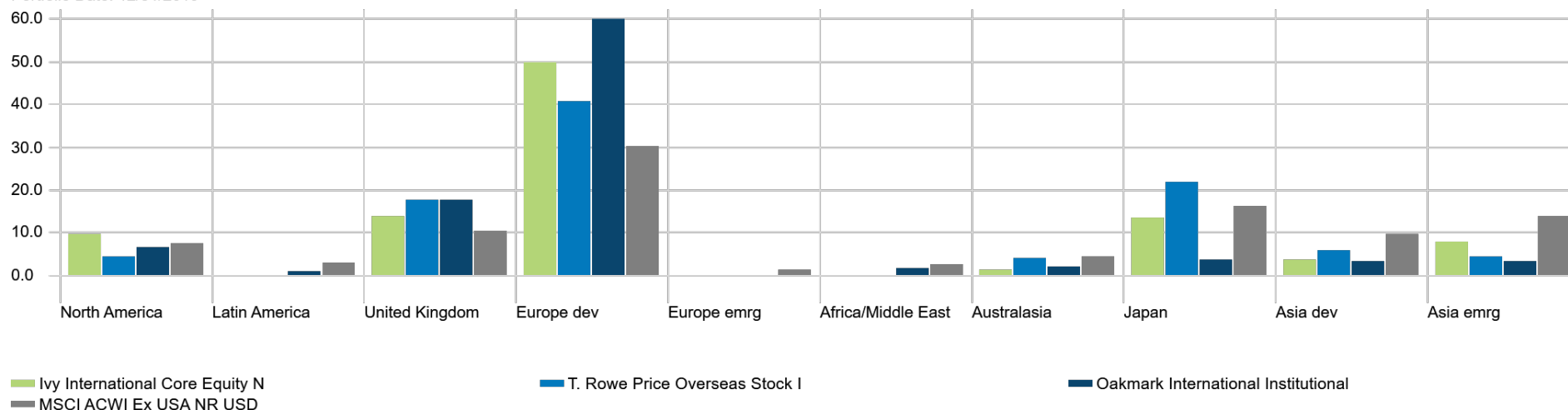
Foreign Large Blend Manager Search Report



Foreign Large Blend Manager Search Report

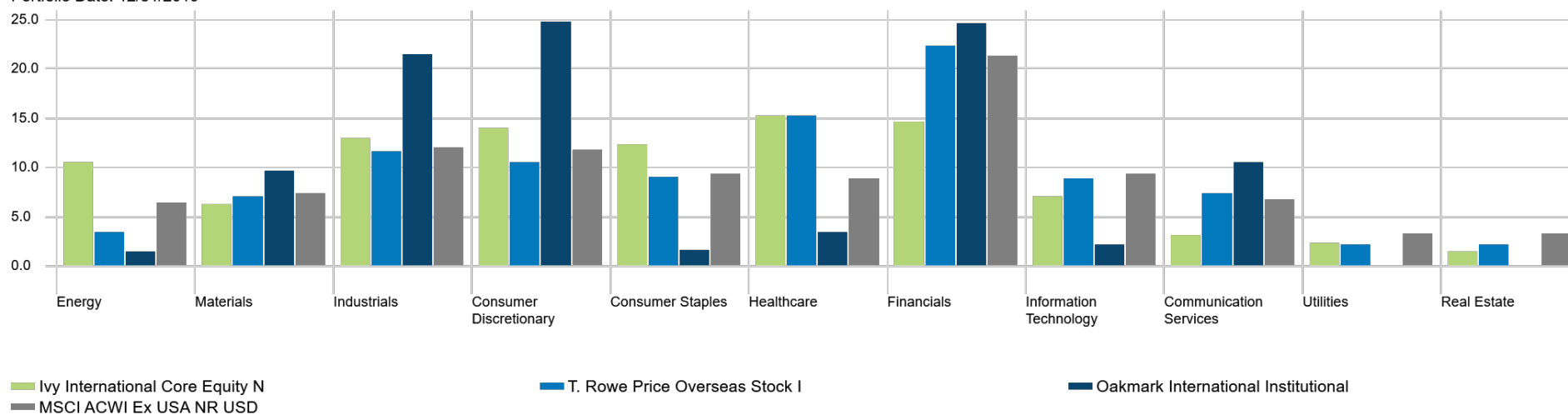
Region Exposure

Portfolio Date: 12/31/2019



Sector Exposure

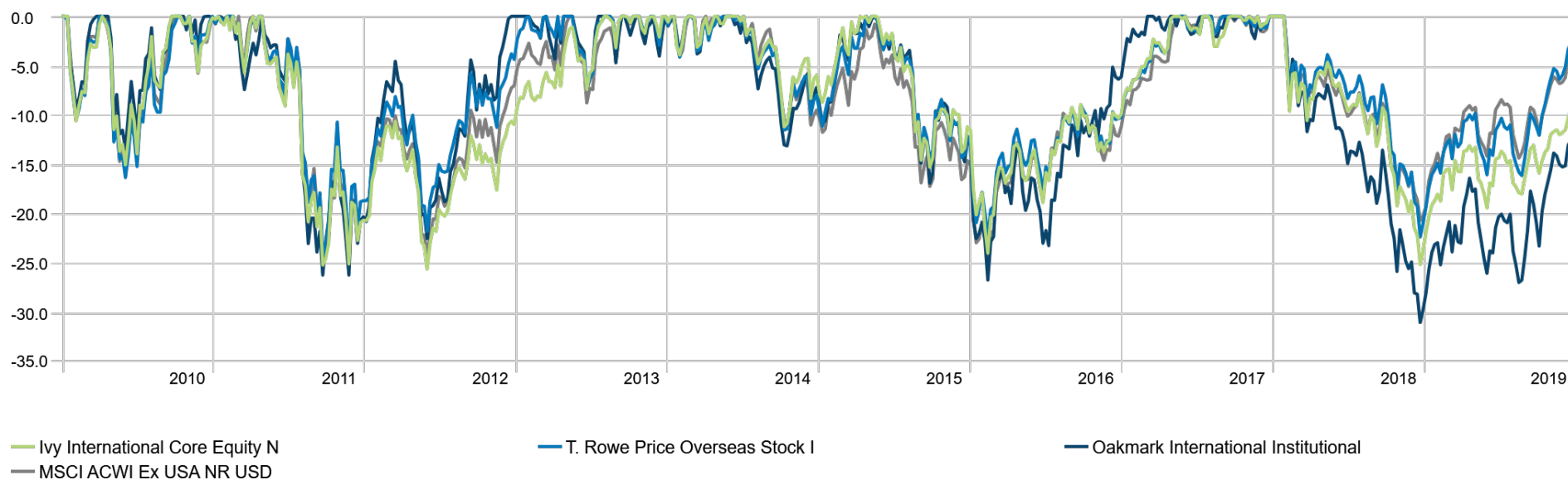
Portfolio Date: 12/31/2019



Foreign Large Blend Manager Search Report

Drawdown

Time Period: 1/3/2010 to 12/28/2019



Drawdown

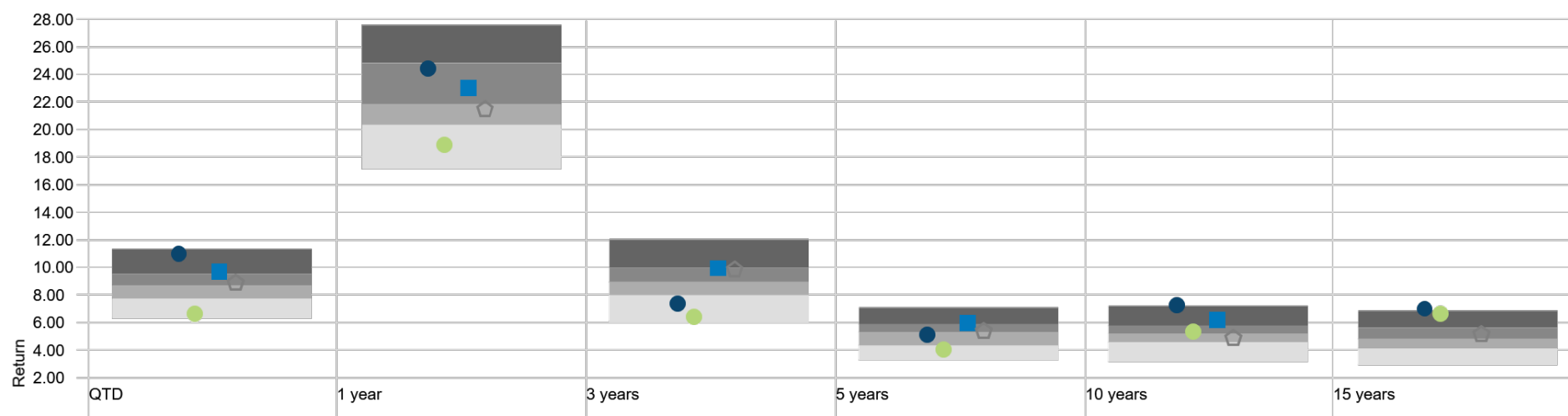
Time Period: 1/1/2010 to 12/31/2019

	Max Drawdown	Max Drawdown # of Periods	Max Drawdown Peak Date	Max Drawdown Valley Date	Omega
Ivy International Core Equity N	-24.58	5	5/1/2011	9/30/2011	1.29
T. Rowe Price Overseas Stock I	-23.21	5	5/1/2011	9/30/2011	1.35
Oakmark International Institutional	-28.22	11	2/1/2018	12/31/2018	1.34
MSCI ACWI Ex USA NR USD	-23.29	5	5/1/2011	9/30/2011	1.26

Foreign Large Blend Manager Search Report

Performance Relative to Peer Group

Peer Group (5-95%): Open End Funds - U.S. - Foreign Large Blend



● Ivy International Core Equity N

■ T. Rowe Price Overseas Stock I

● Oakmark International Institutional

⬠ MSCI ACWI Ex USA NR USD

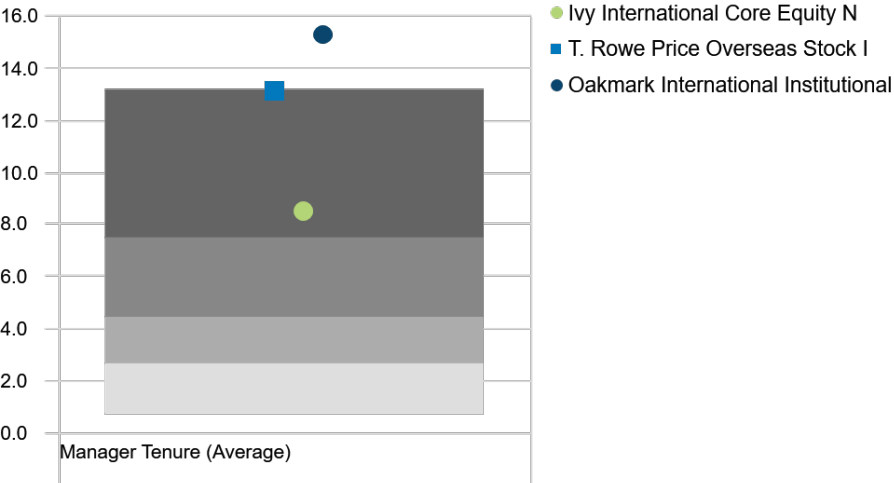
Trailing Peer Group Performance

	QTD	% rank	1 year	% rank	3 years	% rank	5 years	% rank	10 years	% rank	15 years	% rank
Ivy International Core Equity N	6.71	92	19.01	84	6.56	92	4.15	81	5.51	39	6.80	6
T. Rowe Price Overseas Stock I	9.81	20	23.05	36	10.06	23	6.02	22	6.27	11		
Oakmark International Institutional	11.11	8	24.43	28	7.44	83	5.19	54	7.35	4	7.05	4
MSCI ACWI Ex USA NR USD	8.92	43	21.51	58	9.87	29	5.51	42	4.97	64	5.25	35
5th Percentile	11.38		27.57		12.08		7.07		7.23		6.90	
25th Percentile	9.57		24.81		10.00		5.90		5.83		5.74	
50th Percentile	8.78		21.87		9.01		5.30		5.26		4.83	
75th Percentile	7.85		20.40		8.01		4.40		4.67		4.15	
95th Percentile	6.37		17.23		6.12		3.37		3.18		2.97	

Foreign Large Blend Manager Search Report

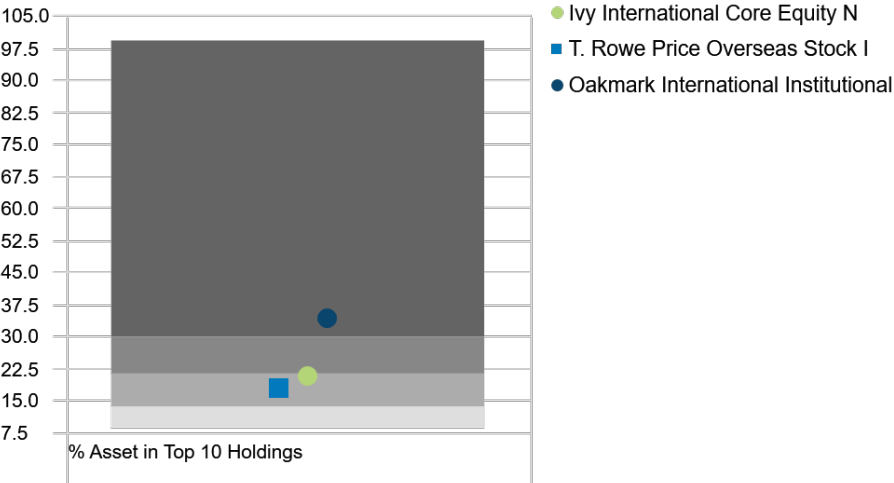
Manager Tenure (Years) Relative to Peer Group

Peer Group (5-95%): Open End Funds - U.S. - Foreign Large Blend



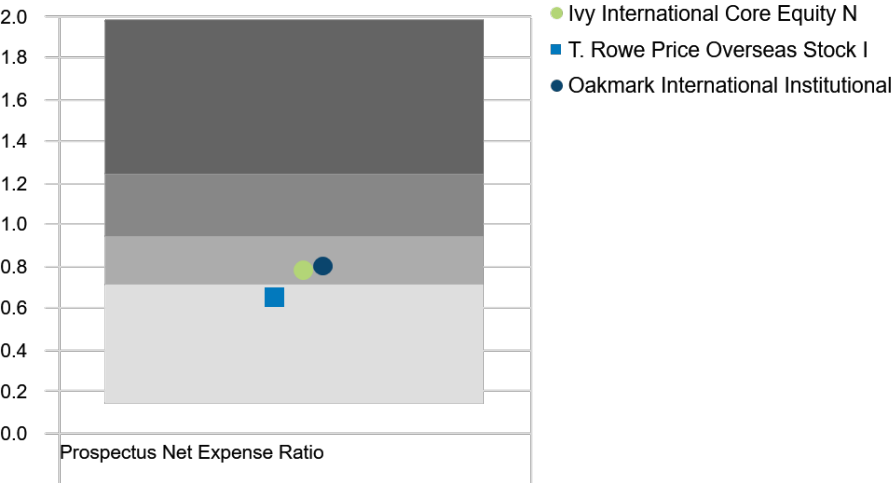
Portfolio Concentration Relative to Peer Group

Peer Group (5-95%): Open End Funds - U.S. - Foreign Large Blend



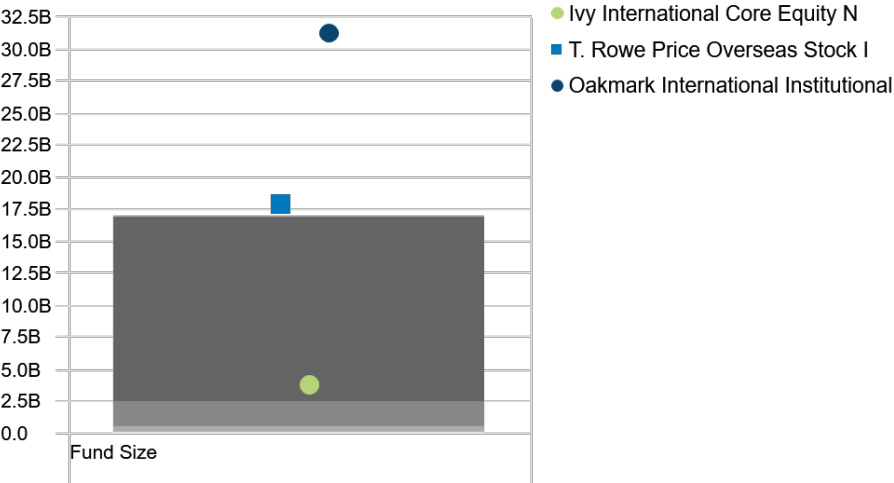
Expense Ratio Relative to Peer Group

Peer Group (5-95%): Open End Funds - U.S. - Foreign Large Blend



Fund Size Relative to Peer Group

Peer Group (5-95%): Open End Funds - U.S. - Foreign Large Blend



Foreign Large Blend Manager Search Report

Snapshot

	Ticker	Morningstar Category	Fixed Inc Style Box	Fund Size	Closed to New Inv	Prospectus Net Expense Ratio
Ivy International Core Equity N	IINCX	US Fund Foreign Large Blend		3,938,424,731.00	No	0.79
T. Rowe Price Overseas Stock I	TROIX	US Fund Foreign Large Blend		17,927,436,425.00	No	0.66
Oakmark International Institutional	OANIX	US Fund Foreign Large Blend		31,272,962,575.00	No	0.81

NWCM Fund Score

Overall Fund Score	Fund Name	Return vs Peer Group			Risk Adjusted Return Sharpe			Risk									Other	
		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
3	Ivy International Core Equity N	91	79	37	93	81	36	82	79	59	72	52	39	88	80	45	31	8
7	T. Rowe Price Overseas Stock I	29	27	12	43	28	14	73	60	53	18	28	21	65	54	40	33	13

Foreign Large Blend Manager Search Report

Ivy International Core Equity N's performance has deteriorated relative to its benchmark and has not performed well in supportive environments for the strategy. The following areas were assessed to determine Ivy International Core Equity N's prudence to be offered in an investment menu.

Status	Criteria	Comment
Underperform	Composite Performance	Underperformance relative to benchmark over the trailing 3- and 5-years
Underperform	Performance versus Foreign Large Blend Peer Group	Has performed in the bottom half of peers over the trailing 3- and 5-year periods
Neutral	Investment Approach	Poor top-down bets, was coupled with disappointing bottom-up selection which may derive from prior organizational changes and talent disruption
Pass	Stability of Management	Seasoned team, with the lead PM running the fund since 2006

Concluding Thoughts

An underperform rating of Ivy International Core Equity N's performance versus its benchmark exists due to the fund's inability to outperform over multiple periods. Their strategy offers active management to discover attractive opportunities in the marketplace and add value on a risk-adjusted basis. However, Ivy International Core Equity's sector allocations and poor security selection have detracted from relative returns. Given its poor relative performance and higher fees, we recommend replacing with T. Rowe Price Overseas Stock I.

Strategy Overview

T. Rowe Price Overseas

Strategy Overview

T. Rowe Price Overseas Stock I (TROIX)

Firm	Ownership Structure	Asset Class	Portfolio Details	Benchmark
T. Rowe Price, 100 East Pratt Street, Baltimore MD 21202	13.00% Employee Owned Founded 1/1/1937	Primary: Equity Sub-Style: US Fund Foreign Large Blend	Inception Date: 8/28/2015 # Holdings: 160 25.00% From External Research	MSCI ACWI Ex USA NR USD

Strategy Summary

T. Rowe Price Overseas has personnel and other advantages over its rivals. Ray Mills has been at the helm of this fund for 13 years; he has been in charge of a foreign large-blend separate account for two decades; and he managed a foreign large-value fund from late 2002 through mid-2010. Thus, he has more portfolio-management experience than most foreign large-cap skippers. He has delivered superior long-term total and risk-adjusted returns at the foreign large-value fund during his tenure there, so he is talented as well as experienced. The process that Mills uses here--which is similar to the one he followed at the foreign large-value fund and the same as the one he uses at his foreign large-blend separate account--is diversified and risk-conscious without being dull or too cautious. Mills invests across the style spectrum by buying a healthy mix of traditional bargain stocks, classic core holdings, and mainstream growth names. He takes a moderate approach to emerging-markets stocks. He permits his stock selection to lead to moderate country and sector overweightings and underweightings but avoids sizable ones. He pays ample attention to issue diversification as well. Mills has earned good results with this approach in various investment climates over the years here, and this fund has posted strong total returns and risk-adjusted returns since opening at the end of 2006. He has exceptional resources to draw on for investment research and support. And T. Rowe Price is an excellent asset manager that has enjoyed ample success with its international-stock funds. This fund is a good source of foreign-stock exposure for the long haul.

Investment Philosophy

Ray Mills pursues companies with fundamental strengths and long-term prospects that are better than their stock prices indicate. He looks for attributes such as accelerating earnings and cash flows, healthy financials, barriers to entry, and managements with sound strategic and operational vision. When it comes to valuations, he examines a variety of earnings, cash flow, sales, and asset-based metrics; he emphasizes different metrics for different industries and stocks, and he evaluates them from historical, relative, and absolute perspectives.

Meanwhile, Mills spreads the portfolio across 140 to 180 names, and he consistently makes full use of the style spectrum. Indeed, the portfolio usually includes some deep-value stocks and fast growers, as well as a plethora of classic core equities. He allows his stock selection to drive the portfolio's sector, country, and regional weightings, but he tends to avoid sizable over- and underweightings and cannot deviate more than 10 percentage points from the weightings of this fund's MSCI EAFE benchmark. Although that index does not include any emerging-markets stocks, he has the freedom to invest in such names and regularly puts about 4% to 8% of the portfolio in such issues. As such, we believe it is more appropriate to benchmark the fund to the MSCI ACWI Ex USA, which includes emerging-markets equities.

While the material contained herein is believed to be reasonable, no guarantee can be provided to its accuracy or completeness. Data included in this document is as of indicated date and subject to change. Past performance does not guarantee future results. Any investment and/or asset allocation, no matter how conservative, can lose money. See disclosure at the end of this document regarding other important information

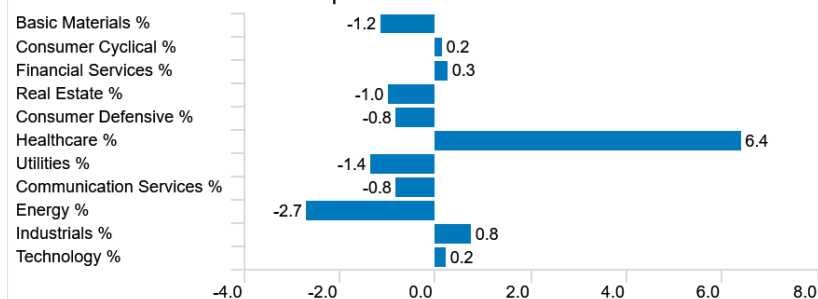
Morningstar Style Box

Portfolio Date: 12/31/2019

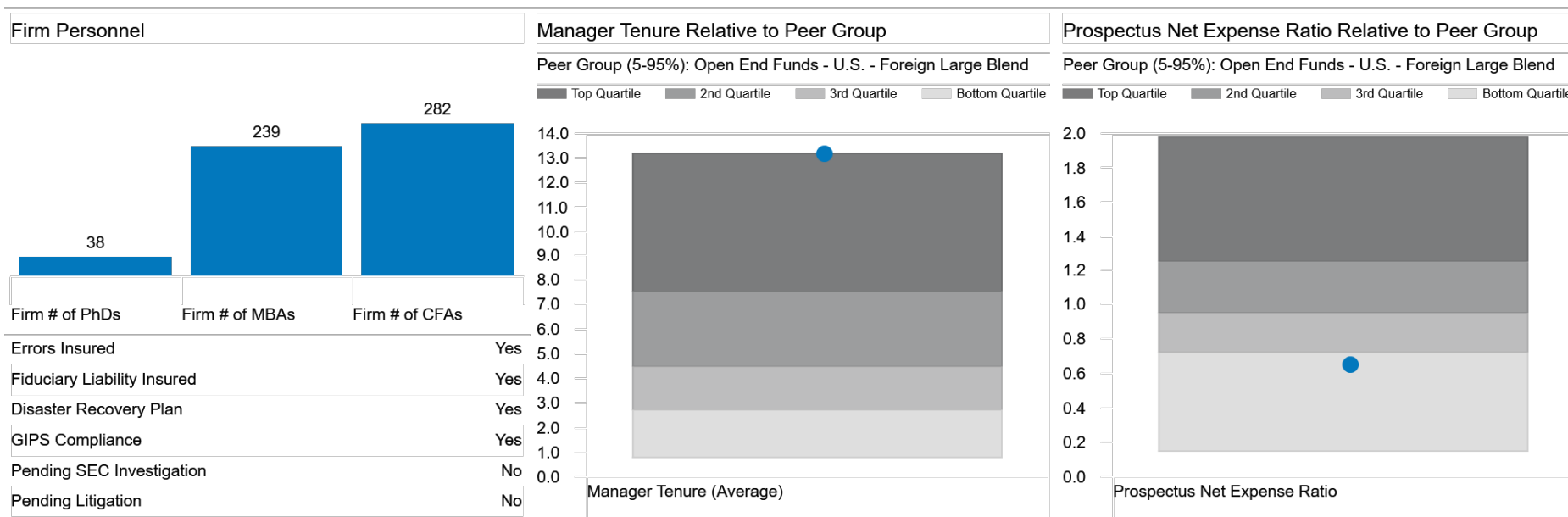
	Value	Blend	Growth
Large	33.7	36.6	10.6
Mid	6.3	5.7	6.1
Small	0.5	0.0	0.4

Market Cap	%
Market Cap Giant %	48.5
Market Cap Large %	32.7
Market Cap Mid %	17.9
Market Cap Small %	0.9
Market Cap Micro %	0.0

Benchmark Relative Sector Exposure



T. Rowe Price Overseas Stock I (TROIX)



Fund Management

T. Rowe Price's success is rooted in its fundamental approach to active management and deep analyst bench. Investors benefit from managers' generally long tenures at the firm, well-planned manager transitions, reasonable costs, and attention to capacity. Many top executives, including CEO Bill Stromberg, rose from the analyst ranks, which helps keep a focus on investors at the forefront, even as the firm expands its distribution footprint outside the United States and bolsters its technology resources. The investment side has received resources, too. The multi-asset team has grown in size, reflecting its importance to the firm's future beyond the esteemed target-date lineup. Despite headwinds facing active managers, T. Rowe remains a powerhouse within U.S. and international equities.

Lead manager Ray Mills has managed this foreign large-blend fund since it opened at the end of 2006 and its younger clone since it opened in 2010. Mills, who is based in Baltimore and has a doctorate in aeronautical and astronautical engineering from Stanford, joined T. Rowe Price in 1997 and started off as a generalist in equity analysis. He managed T. Rowe Price International Value Equity TRIGX from December 2002 through June 2010 using a similar but more value-oriented strategy and produced good results there. He has 21 years of investment experience overall. Mill's collaborates with the firm's 18 other foreign-stock managers, and also makes use of T. Rowe Price's team of more than 160 sector managers, equity analysts, and regional specialist who are spread across six offices around the globe.

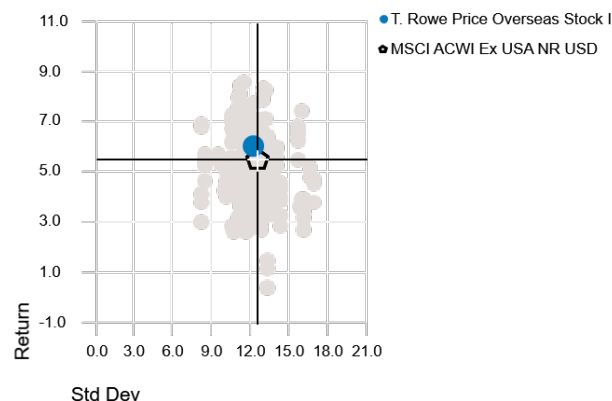
Fees

The share class on this report levies a fee that ranks in category's cheapest quintile. Given the other positive considerations, we believe the lower fees boost the prospects of positive alpha relative to peers.

T. Rowe Price Overseas Stock I (TROIX)

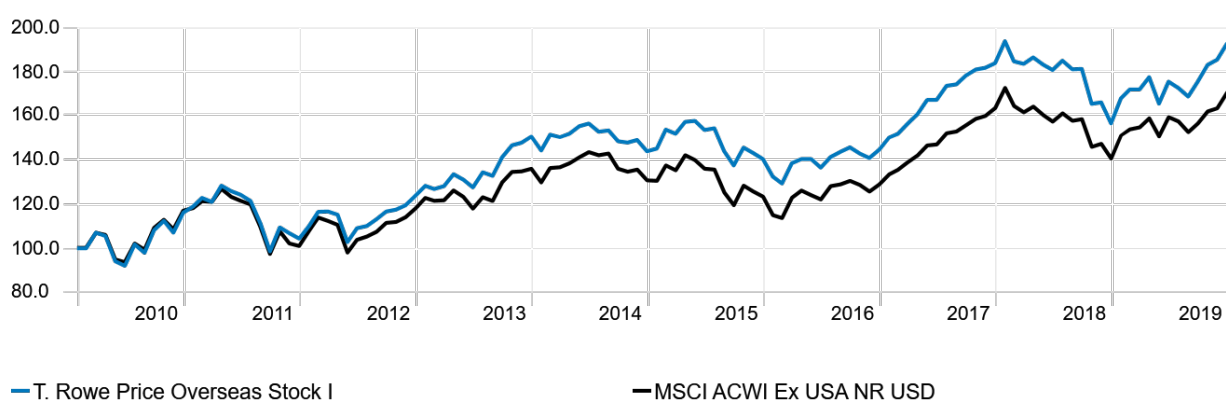
Risk-Reward

Time Period: 1/1/2015 to 12/31/2019



Investment Growth

Time Period: 2/1/2010 to 1/31/2020



Performance Statistics

Time Period: 1/1/2015 to 12/31/2019 Calculation Benchmark: MSCI ACWI Ex USA NR USD

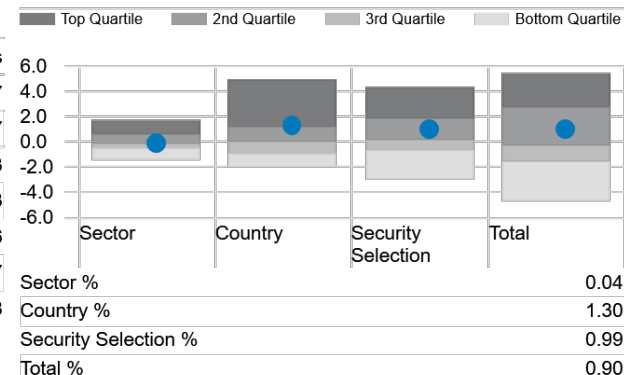
	T. Rowe Price Overseas Stock I	MSCI ACWI Ex USA NR USD	US Fund Foreign Large Blend
Return	6.02	5.51	5.20
Std Dev	12.23	12.53	11.65
Sharpe Ratio	0.45	0.40	0.40
Information Ratio (arith)	0.18	—	-0.14
Beta	0.95	1.00	0.92
Tracking Error	2.83	0.00	2.29

Trailing Peer Group Performance

Peer Group: Open End Funds - U.S. - Foreign Large Blend

	1 Year	3 Years	5 Years	10 Years
T. Rowe Price Overseas Stock I	23.05	10.06	6.02	6.27
MSCI ACWI Ex USA NR USD	21.51	9.87	5.51	4.97
5th Percentile	27.57	12.08	7.07	7.23
25th Percentile	24.81	10.00	5.90	5.83
50th Percentile	21.87	9.01	5.30	5.26
75th Percentile	20.40	8.01	4.40	4.67
95th Percentile	17.23	6.12	3.37	3.18

1-Year Performance Attribution



Performance

This foreign large-blend fund posted mixed results as most international markets earned nice gains over the past 12 months. Several of manager Ray Mills' technology and other picks flourished during the period, but a number of his communication-services and other holdings languished. All told, this share class of this fund returned 23.05% for the year ended Dec. 31, 2019, while the typical foreign large-blend fund gained 21.87.0%, the MSCI EAFE Index returned 22.01% and the MSCI ACWI ex USA Index gained 21.51%.

This fund has earned solid and consistent results over the middle run as well. It has comfortably outpaced the average foreign large blend offering over the three- and five-year periods, but investors should not expect large bouts of out- or underperformance relative to the benchmark. This fund remains risk controlled around the benchmark generating consistent incremental excess returns that compounds and benefits investors for the long haul.

While the material contained herein is believed to be reasonable, no guarantee can be provided as to its accuracy or completeness. The data, methodologies, and conclusions presented in this document may change over time without notice. There can be no assurance that the investments and/or asset classes referred to in this document will perform in a manner consistent with their historical performance and/or any forward-looking assumptions or opinions stated verbally or in this document. Any investment and/or asset allocation, no matter how conservative, can lose money. Historical performance results do not reflect the deduction of transaction fees, custodial charges, and/or investment management fees, which would serve to decrease historical performance results. This report in and of itself does not constitute a recommendation or investment advice offered by Northwest Capital Management, Inc. This report is provided solely for informational purposes and therefore is not an offer to buy or sell a security. Unless Northwest Capital Management, Inc. is making a separate, written recommendation to its client, or is exercising discretionary authority to affect a transaction involving this security for its clients, Northwest Capital Management, Inc. shall not be responsible for any trading decisions, damages or other losses resulting from, or related to, this information, data, analyses or opinions or their use. The extent of liability Northwest Capital Management, Inc. may have, if any, to its clients will be determined by applicable law. Some of the data contained within this report has been provided by third party sources including but not limited to Morningstar and Lipper.



Global Fixed Income Review

**County of Fresno
457 Deferred Compensation Plan**

Brent Petty
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Northwest Capital Management, Inc.
March 2020

Global Fixed Income

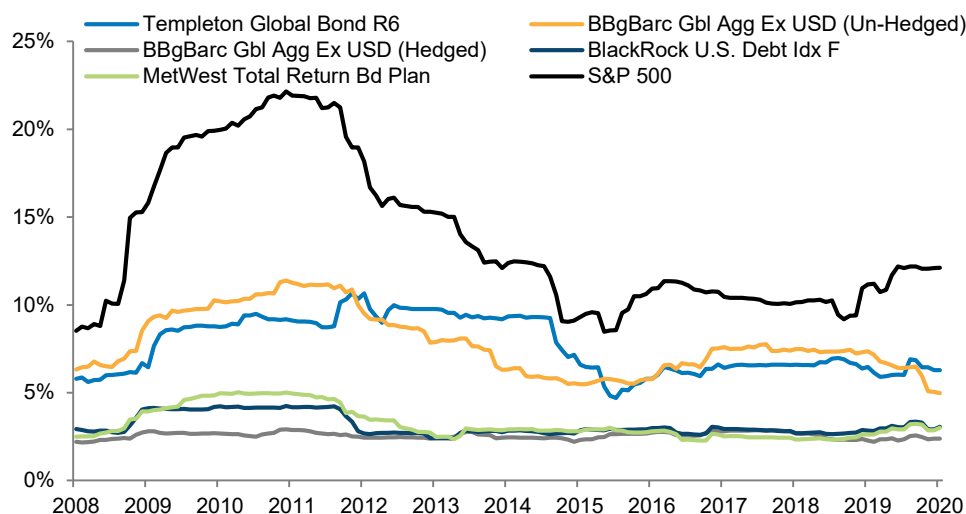
As of December 31, 2019

This document has been prepared to provide an analysis of the incumbent option, Templeton Global Bond, and whether to replace with a passive currency hedged manager or eliminate the asset class from the menu.

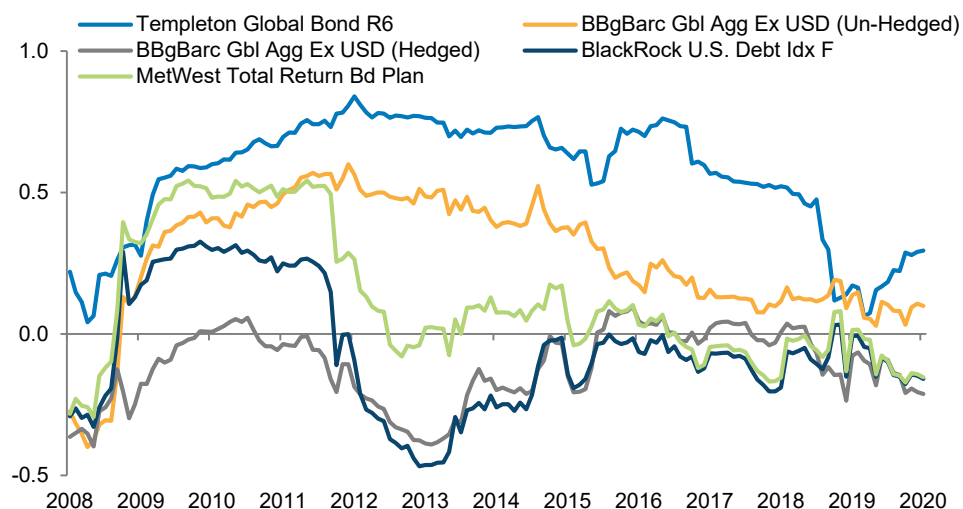
UPDATE OF TEMPLETON GLOBAL BOND

- The Global Bond Fund was reclassified to Nontraditional from World Bond under Morningstar's categorization methodology due to its aggressive negative interest rate and currency positioning. The parent company, Franklin Resources, cited the fund's reclassification as a major contributor to the significant outflows of \$27.3 billion in 2019.
- We do not mark this reclassification as a change in strategy since management has maintained its unconstrained approach. However, given the fund's high correlation to equity and high volatility profile, we do not believe that this fund offers participants an equity diversifier nor a typical fixed income generator.
- The fund's poor performance metrics have brought the fund's score down to a 4 under our scoring methodology. The strategy has recovered lost ground quickly in the past, but the team's contrarian calls have made for a volatile ride. One that participants may not recognize in a fixed income fund.

Rolling 3-Year Volatility (St. Dev.)



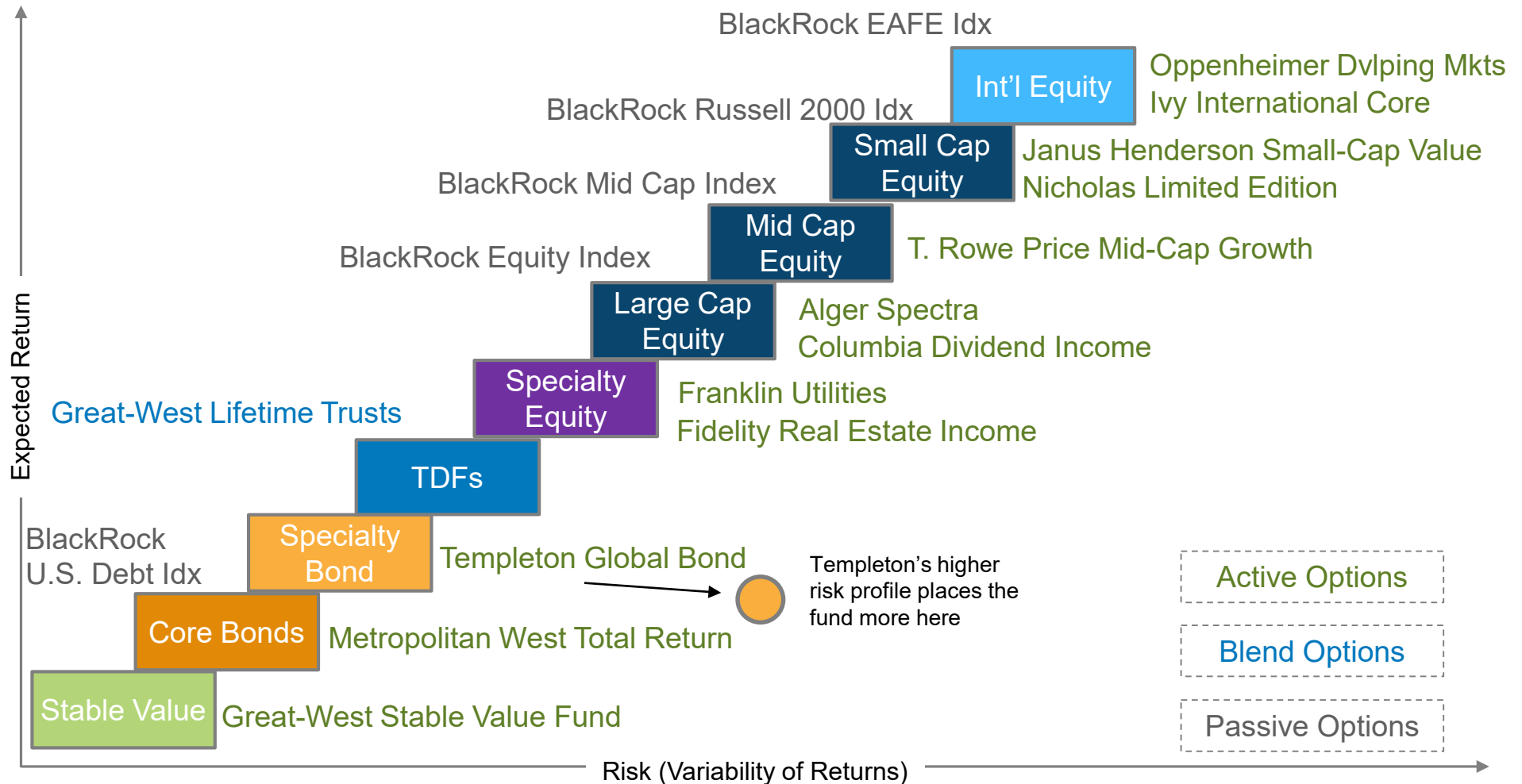
Rolling 3-Year Correlation With S&P 500



Source: Morningstar, NWCM

Fresno Investment Menu Risk/Return Spectrum

As of December 31, 2019



Fund Scoring

As of December 31, 2019

- Templeton's fund score dropped to a 4 in the fourth quarter as a result of underperformance that can be contributed to its negative duration positioning.
- Additionally, the fund's tactical currency positioning have created a bumping ride leading the fund to rank amongst the top in volatility and lowest for risk-adjusted returns relative to peers.

Trailing Fund Scores

4Q19	3Q19	2Q19	1Q19	4Q18	3Q18	2Q18	1Q18	4Q17
4	5	7	6	6	7	5	6	6

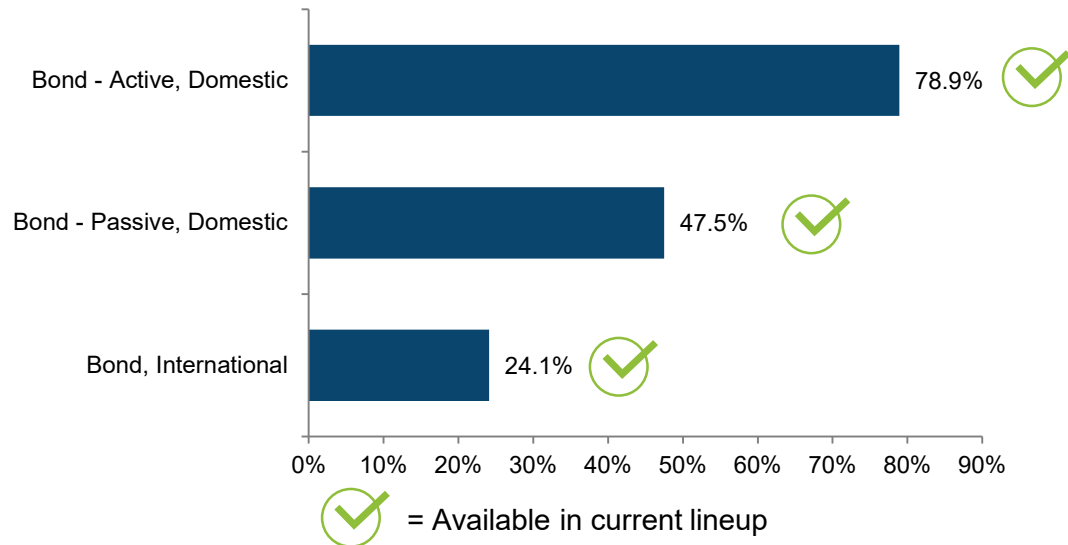
	Overall Fund Score	Return			Risk Adjusted Return (Sharpe)			Standard Deviation			Up Capture			Down Capture			Expense	Tenure
		3Y	5Y	10Y	3Y	5Y	10Y	3Y	5Y	10Y	3Y	5Y	10Y	3Y	5Y	10Y	Expense Rank	Avg Mgr Tenure
Peer ranking →	4	96	70	30	97	78	52	91	86	91	98	97	93	1	1	1	14	10
Absolute		1.79	1.59	3.71	0.04	0.11	0.44	6.28	6.70	7.50	-39.47	-17.75	39.90	-211.15	-102.22	-58.39	0.57	18.17

Source: Morningstar, NWCM

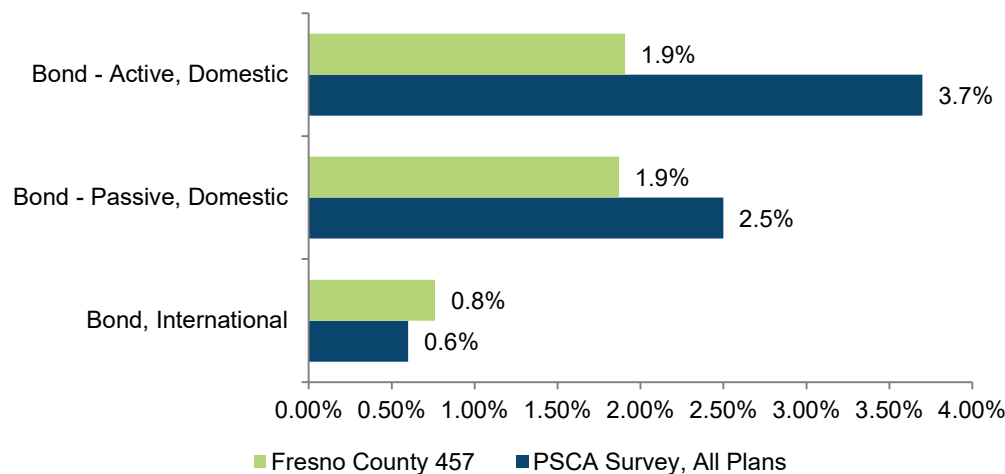
Fixed Income Menu Trends

As of December 31, 2019

Percentage of Plans Offering



Asset Allocation When Offered



- Most commonly, DC plans offer an active U.S. fixed income option.
- Passive fixed income funds have also become more prevalent as a component of the passive tier
- International or specialty bond funds (high yield, unconstrained, etc.) can often be misunderstood or misused
- NWCM continues to recommend the plan's current domestic fixed income strategy (MetWest) to opportunistically invest in high yield and other US dollar issues the core active fixed income offering.
- The County of Fresno offers passive high-quality, active-core plus strategies, and active global unconstrained.

Source: Plan Sponsor Council of America "61st Annual Survey – PSCA's Annual Survey of Profit Sharing and 401(k) Plans." 2018.

Benefits of Global Fixed Income

As of December 31, 2019

- An allocation to global bond markets gives investors exposure to a greater number of securities, markets, and economic and inflation environments than they would have with a portfolio composed purely of local market fixed income.
- In theory, this diversification can help reduce a portfolio's volatility without necessarily decreasing its total return.
- We have found the best way to realize the diversification potential of global bonds is to hedge the currency exposure back to the investor's local currency.
- Vanguard Total International Bond Index (VTABX) tracks a similar index as displayed in the column to the right of Templeton in the correlation table. This index composes of international bonds while hedging currency exposure back to the U.S. dollar.

10-Year Correlation

Monthly returns
12/31/2009 – 12/31/2019

		Higher Correlation to U.S. and International Equities		Negative Correlation to Core Equities	
		Templeton Global Bond R6	Int'l Fixed Income (USD Hedged)*	BlackRock U.S. Debt Index	Metropolitan West Total Return Bd Plan
Large Cap	BlackRock Equity Index	0.59	-0.18	-0.22	-0.05
	Alger Spectra Z	0.52	-0.16	-0.17	-0.02
	Columbia Dividend Income Inst3	0.60	-0.12	-0.18	-0.05
Mid Cap	T. Rowe Price Mid-Cap Growth I	0.52	-0.20	-0.22	-0.06
	Blackrock Mid Cap Eq Idx Fund	0.58	-0.18	-0.21	-0.05
Small Cap	BlackRock Russell 2000® Index	0.53	-0.26	-0.28	-0.12
	Nicholas Limited Edition I	0.48	-0.27	-0.27	-0.12
	Janus Henderson Small Cap Value N	0.55	-0.25	-0.28	-0.13
Int'l Equity	BlackRock EAFE® Equity Index	0.68	-0.14	-0.10	0.07
	Ivy International Core Equity N	0.67	-0.17	-0.13	0.03
	Invesco Oppenheimer Dvloping Mkts R6	0.70	-0.10	-0.02	0.12

Name	Templeton Global Bond R6	Vanguard Total Intl Bd Idx Admiral™
Ticker	FBNRX	VTABX
NWCM Category	Global Bonds Hedged	Global Bonds Hedged
Morningstar Category	US Fund Nontraditional Bond	US Fund World Bond-USD Hedged
Index Fund	No	Yes
Prospectus Benchmark	FTSE WGBI USD	BBgBarc Gbl Agg x USD FI Aj RIC TR HUSD
Fund Size USD	26,312,736,685	26,091,608,692
Prospectus Net Expense	0.57	0.11
US Bond %	18.84	3.18
Non-US Bond %	57.63	96.52
Cash %	22.87	0.04

*Bloomberg Barclays Global Aggregate ex USD Hedged USD
Source: Morningstar

Poor interest rate and currency decisions has led to Templeton Global Bond being recommended to be listed as To Be Removed. As a fixed income fund, the volatility embedded in Templeton may not be properly understood by participants. Many plan sponsors do not offer international fixed income within plan lineups. If they do, like the County of Fresno, the fund does not receive much allocation from participants. However, Global fixed income, particularly when hedged, has demonstrated diversification benefits with core equities that have domestic-like volatility. Below lays out the pros and cons of (1) replacing the fund with Vanguard Total International Bond Index or (2) eliminating the asset class by mapping to age-appropriate QDIA.

1 Replace Templeton with Vanguard Total International Bond Index

Pros

- Eliminates poor performing fund that is recommended To Be Removed.
- Allows participants to continue to access global fixed! income markets.
- Reduces fund expenses for some participants.
- All fixed income options will offer diversification benefits for! participants.

Cons

- The current passive suite is managed by BlackRock, which may confuse participants – BlackRock does not offer a mutual fund or CIT of hedged international fixed income.

2 Eliminate asset class and map assets to age-appropriate QDIA.

Pros

- Eliminates poor performing fund that is recommended To Be Removed.
- Eliminates asset classes that only nearly 1 in 4 plan sponsors offer, and when offered, participants typically do not utilize.
- Slims menu down to reduce participant confusion or selection paralysis.
- Participants mapped to the QDIA still receive the benefits of global fixed income inside the target-date funds.

Cons

- Participants cannot chose their allocation to global bonds and may only invest in foreign fixed income within the target-date funds.

Strategy Overview

Strategy Overview

Vanguard Total Intl Bd Idx Admiral™ (VTABX)

Firm	Ownership Structure	Asset Class	Portfolio Details	Benchmark
Vanguard, 100 Vanguard Boulevard, Malvern, PA 19355, USA	'Mutual' ownership structure owned by its funds, which are owned by fund investors	Primary: Fixed Income Sub-Style: US Fund World Bond-USD Hedged	Inception Date: 5/31/2013 # Holdings: 5,605	BBgBarc Gbl Agg x USD FI Aj RIC TR HUSD

Strategy Summary

This strategy will invest by sampling the index to provide returns consistent with the performance of the index, a market-weighted index of global government, government-related agencies, corporate, and securitized fixed income investments. The objective of the fund is to target a tracking error of zero while seeking returns in line with the benchmark, after fees. Vanguard's global approach to passive management is logical and pragmatic, the manager's scale, depth and experience provide a competitive advantage relative to peers in the passive arena. The experience and stability of the team have permitted continuous refinement of techniques for reducing tracking error. The group uses proprietary tools to maintain close correlation with index performance and to implement fund flows efficiently. Vanguard has built on its long-time success in passive management and is now one of the largest investment management companies offering a range of active and passive products for both the institutional and retail market.

Investment Philosophy

To Vanguard, "passive" does not mean "no decisions". The firm believes that active decisions, where the risk taken is deemed sufficiently low, are made to reduce tracking error and transaction costs, not to add alpha. Vanguard's approach to managing assets by geography is sensible. Trading takes place around the clock across three regions, (Asia Pacific, UK, and US) allowing local traders to make timely decisions. Vanguard believes that local portfolio management allows for a better understanding of local broker/bank axes (i.e. interest shown in buying/selling a bond), and regional nuances which aid implementation.

The team matches the benchmark for all primary and secondary risk factors, and maintains duration and yield curve positioning in line with the Index. Sector weights and various other key risk factors are kept roughly in line with the Index. The firm monitors sector, industry, and quality exposure based on spread duration, contribution to duration (CTD), and duration times spread (DTS), in addition to market value weights, which provides better tracking fit.

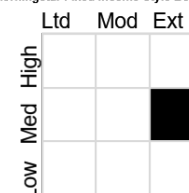
Vanguard uses some techniques to gain a very slight performance advantage relative to the benchmark (in an effort to offset expenses). For example, within the corporate sector, the team tilts toward bonds that are rated highly by its internal credit research team while tilting away from lower rated issuers. That said, the corporate basis is constructed with only modest sampling, as the portfolio is built to mirror the quality, sub-sector classification, and spread distribution of the Index. The trading team is encouraged to provide liquidity when it is to the firm's advantage and replacement securities can be easily purchased to maintain neutrality versus the Index.

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Morningstar Style Box

Portfolio Date: 12/31/2019

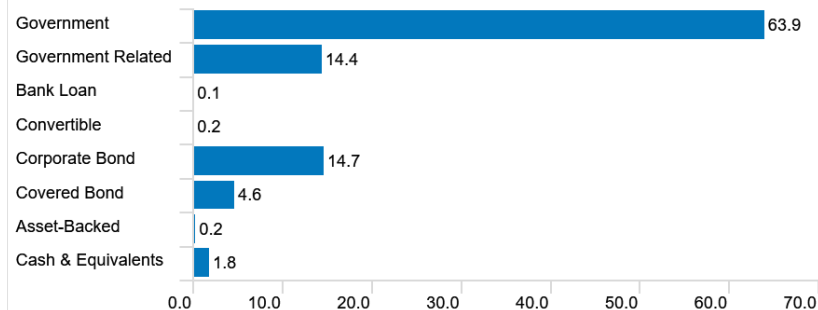
Morningstar Fixed Income Style Box™



Fixed-Income Stats

Average Eff Duration	8.3
Average Eff Maturity	9.9
Average Coupon	2.2
Average Price	108.4

Fund Sector Exposure



Vanguard Total Intl Bd Idx Admiral™ (VTABX)

Manager Tenure Relative to Peer Group

Peer Group (5-95%): Open End Funds - U.S. - World Bond-USD Hedged

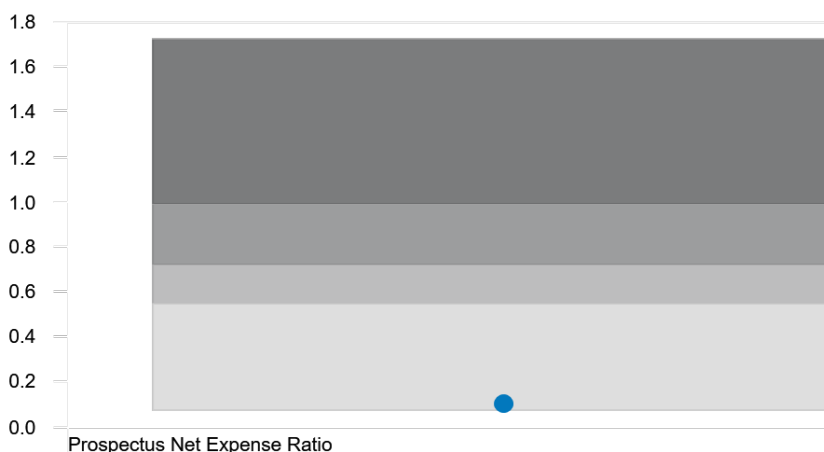
■ Top Quartile ■ 2nd Quartile ■ 3rd Quartile ■ Bottom Quartile



Prospectus Net Expense Ratio Relative to Peer Group

Peer Group (5-95%): Open End Funds - U.S. - World Bond-USD Hedged

■ Top Quartile ■ 2nd Quartile ■ 3rd Quartile ■ Bottom Quartile



Fund Management

Vanguard was founded in 1975 as a part of Wellington Management, which continues to sub-advise a large portion of assets for Vanguard. Vanguard is one of the largest investment management companies with over \$4 trillion in assets under management. The firm is headquartered in Malvern, PA with investment offices across North America, Europe, Australia and Asia. Instead of being publicly traded or owned by a small group of individuals, Vanguard is owned by the Vanguard family of mutual funds. The Vanguard funds, in turn, are owned by their shareholders—or client-owners. We believe this aligns interest with clients and should enable the firm to keep the costs of funds at the lowest reasonable level. Vanguard is currently unable to replicate this mutual ownership structure outside the US for legal reasons but they apply the same cultural and philosophical principles of not pursuing short term asset growth or generating profits for third party owners. Economies of scale at a firm-wide level should help with keeping costs down everywhere they do business.

Joshua Barrickman was named as manager in 2013. He has worked in investment management at Vanguard since 1999 and managed investment portfolios since 2005. In 2013, he was promoted to head of Vanguard's bond index group. Portfolio management at Vanguard is a team effort, so key-person risk is not a concern. A team of over 20 portfolio managers / traders dedicated to managing fixed income index funds are responsible for the management of funds that track a series of US and non-US indices. Vanguard's portfolio manager/trader model allows for most portfolio managers to also execute trades, resulting in strong ownership and familiarity between portfolio managers and portfolio trades. Vanguard has over 150 investment professionals in the Fixed Income Group, separate from the firm's extensive Risk Management Group.

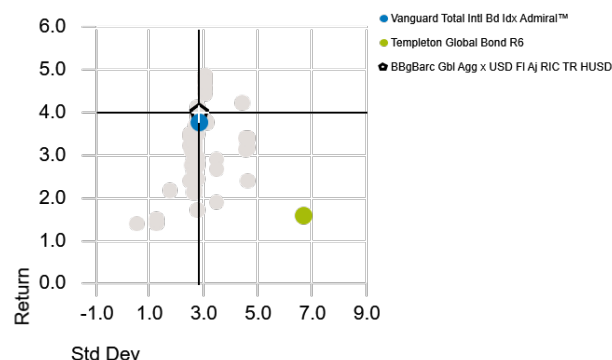
Fees

The fees charged by Vanguard on its passive products are largely in line with passive competitors. The firm uses its breadth, asset base and unique ownership structure to reduce transaction costs, maximize efficiency and pass savings on to its investors. We note that Vanguard's preference is for mutual/pooled funds rather than segregated accounts although they will consider this for very large mandates. This ties-in with Vanguard wanting to capitalize as much as possible on economies of scale and keep running costs low. Given Vanguard's lack of other higher margin business and securities lending handled by third-parties rather than in house, we recognize that they could lose out on passive business because its rivals are able to undercut pricing in order to capture higher margin areas of clients' portfolio or receive less transparent revenue through securities lending.

Vanguard Total Intl Bd Idx Admiral™ (VTABX)

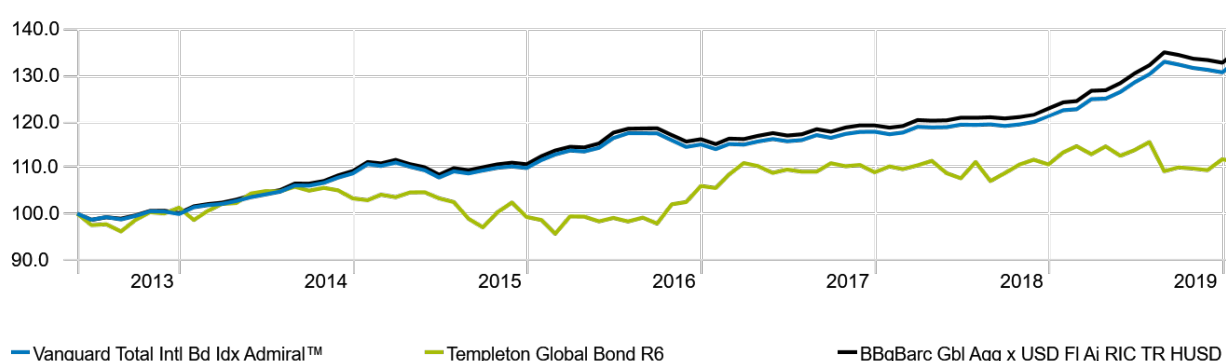
Risk-Reward

Time Period: 1/1/2015 to 12/31/2019



Investment Growth

Time Period: 6/1/2013 to 1/31/2020



Performance Statistics

Time Period: 1/1/2015 to 12/31/2019

	Vanguard Total Intl Bd Idx Admiral™	Templeton Global Bond R6	BBGBarc Gbl Agg x USD FI Aj RIC TR HUSD
Return	3.76	1.59	3.98
Std Dev	2.82	6.70	2.84
Sharpe Ratio	0.95	0.10	1.02
Information Ratio (arith)	-1.34	-0.31	—
Beta	0.99	-0.47	1.00
Tracking Error	0.17	7.75	0.00

Trailing Peer Group Performance

Peer Group: Open End Funds - U.S. - World Bond-USD Hedged

	1 Year	3 Years	5 Years	10 Years
Vanguard Total Intl Bd Idx Admiral™	7.88	4.37	3.76	—
Templeton Global Bond R6	1.01	1.79	1.59	3.71
BBGBarc Gbl Agg x USD FI Aj RIC TR HUSD	8.06	4.57	3.98	—
5th Percentile	14.56	6.66	4.72	5.77
25th Percentile	9.85	5.14	3.75	5.17
50th Percentile	8.60	4.09	3.23	4.13
75th Percentile	7.40	3.50	2.81	3.70
95th Percentile	6.01	2.56	1.79	1.56

Trailing Peer Group Sharpe Ratio

Peer Group: Open End Funds - U.S. - World Bond-USD Hedged

	1 Year	3 Years	5 Years	10 Years
Vanguard Total Intl Bd Idx Admiral™	1.66	1.07	0.95	—
Templeton Global Bond R6	-0.11	0.04	0.10	0.44
BBGBarc Gbl Agg x USD FI Aj RIC TR HUSD	1.71	1.14	1.02	—
5th Percentile	3.55	1.54	1.18	1.65
25th Percentile	2.61	1.26	0.95	1.36
50th Percentile	2.04	0.98	0.79	1.22
75th Percentile	1.77	0.79	0.59	1.09
95th Percentile	1.47	0.43	0.31	0.54

Performance

The strategy's returns have been in-line with its respective benchmark and has been strong compared with its category peers. The fund's longer-than-peer-average duration helped performance, as interest rates have decline in major markets during global central bank easing. The fund does take less credit risk than most of its category active peers, owing to its benchmark weight position in government bonds. This has helped it hold up better in turbulent periods such as the fourth quarter of 2019, when the fund outpaced the category average by 100 basis points.

Tracking error has been solid over trailing periods and we like that benchmark out-performance is treated with the same enquiry as underperformance. The portfolio managers may only seek to add incremental value in order to offset transaction costs when the active risk is deemed sufficiently small. Vanguard's primary method of adding value is via participating in primary issuance ahead of inclusion in a bond index. We believe Vanguard to have the necessary experience and ability to take marginal active risk in portfolios in order to help negate some degree of transaction costs. However, in order to ensure that any risk taking is truly margins, we like that out-performance is treated with the same enquiry as underperformance. Vanguard lends securities only from its equity funds. They lent securities from their fixed income funds until 2009, when market conditions made the risk-reward unattractive, they continually monitor market conditions and other factoring, periodically reevaluating their securities lending program to ensure they are proving clients the best chance of investing success.

Appendix

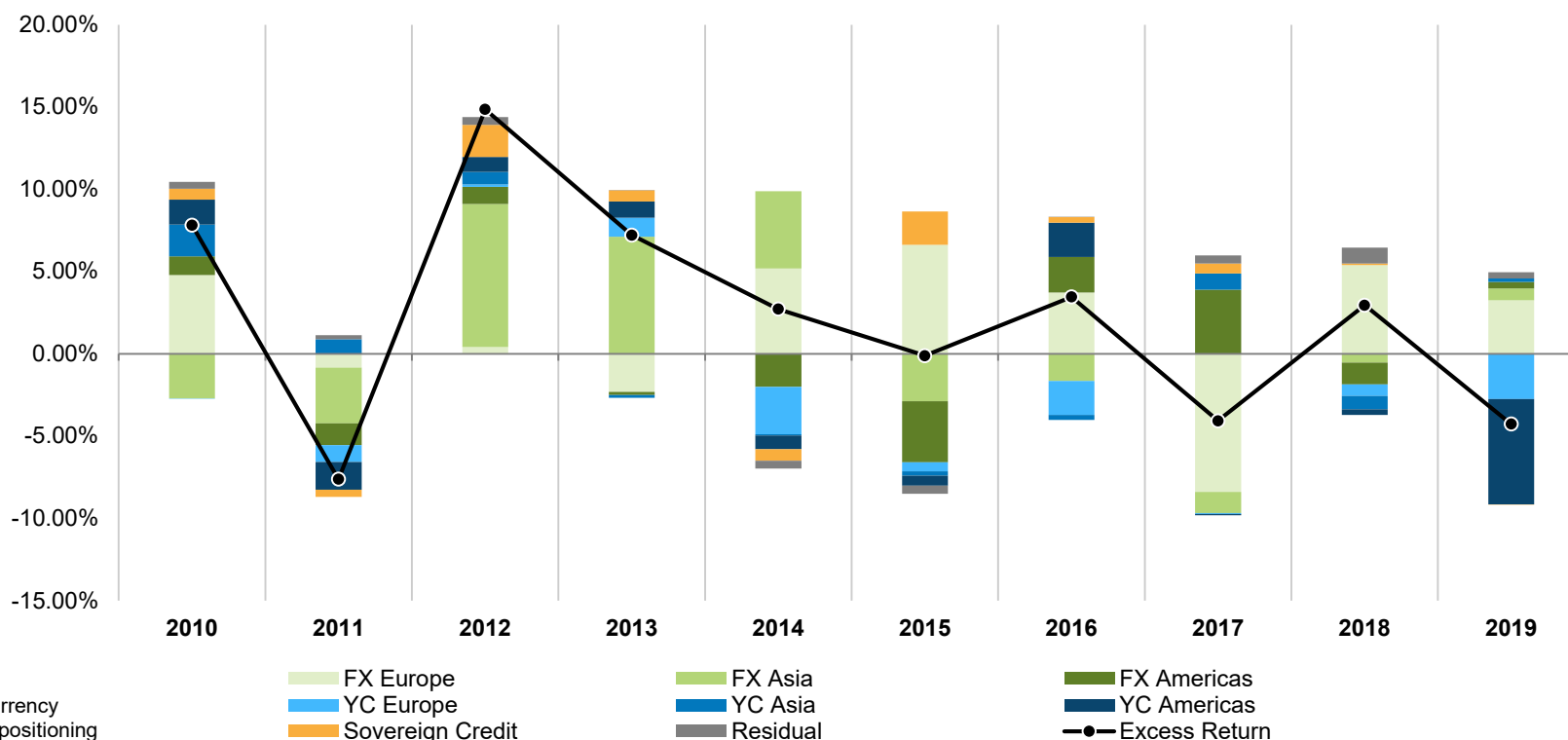
Performance Attribution

As of December 31, 2019

Annual Total Return (%)	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
Templeton Global Bond R6	12.68	-2.37	15.81	2.36	1.97	-3.91	6.78	2.79	1.57	1.01
FTSE WGBI USD	5.17	6.35	1.65	-4.00	-0.48	-3.57	1.60	7.49	-0.84	5.90
Peer: Global Bond Unhedged	6.80	3.29	7.75	-2.88	1.69	-4.13	3.80	6.88	-1.41	6.83
Peer: Global Bond Hedged	6.38	3.00	7.47	-0.75	5.86	-0.05	4.15	3.77	0.77	8.70

Fixed Income Attribution

Benchmark: FTSE World Government Bond Index (WGBI)



FX: Foreign exchange / currency
YC: Yield curve / duration positioning

Source: Morningstar, Franklin Templeton Investments (via Barclays POINT), and NWCM. Fund returns in italics indicate Extended Performance. Extended performance is an estimate based on the performance of the fund's oldest share class, adjusted for fees. The data is presumed to be accurate although Franklin Templeton Investments makes no guarantee of such. The performance attribution shown is calculated based on end-of-day portfolio holdings and not on specific fund portfolio transactions. As a result, the performance shown will differ from that shown in third party sources and reported by Franklin Templeton Investments which is calculated on the basis of specific fund transaction data. Past performance does not guarantee future results.

While the material contained herein is believed to be reasonable, no guarantee can be provided as to its accuracy or completeness. The data, methodologies, and conclusions presented in this document may change over time without notice. There can be no assurance that the investments and/or asset classes referred to in this document will perform in a manner consistent with their historical performance and/or any forward-looking assumptions or opinions stated verbally or in this document. Any investment and/or asset allocation, no matter how conservative, can lose money. Historical performance results do not reflect the deduction of transaction fees, custodial charges, and/or investment management fees, which would serve to decrease historical performance results. This report in and of itself does not constitute a recommendation or investment advice offered by Northwest Capital Management, Inc. This report is provided solely for informational purposes and therefore is not an offer to buy or sell a security. Unless Northwest Capital Management, Inc. is making a separate, written recommendation to its client, or is exercising discretionary authority to affect a transaction involving this security for its clients, Northwest Capital Management, Inc. shall not be responsible for any trading decisions, damages or other losses resulting from, or related to, this information, data, analyses or opinions or their use. The extent of liability Northwest Capital Management, Inc. may have, if any, to its clients will be determined by applicable law. Some of the data contained within this report has been provided by third party sources including but not limited to Morningstar and Lipper.

Great-West Separate Account Stable Value Review

**County of Fresno
457 Deferred Compensation Plan**

Brent Petty
503-597-1641 | brentp@nwcm.com
Northwest Capital Management
March 2020

Country of Fresno Stable Value Fund

As of December 31, 2019

NWCM, Inc. confirms that, as of 12/31/2019, the Great-West County of Fresno Stable Value Separate Account remains a prudent option for the County's plan. The fund's performance remains appropriate with the stated investment objectives and portfolio construction methodology.

The following analysis enables the County to compare its offering relative to the current stable value universe collected by NWCM.

OVERVIEW OF GREAT-WEST STABLE VALUE

OWNERSHIP

- Great-West has offered stable value for over 40 years and operates as a wholly-owned subsidiary of Power Financial Corporation. As the sole wrap provider, Great-West's high credit quality plays an important role but remains exposed to inherent risks of the insurance industry.
- Great-West Capital Management serves as the investment adviser to Great-West Funds, Inc; and supports a variety of solutions, including risk-based funds, target date funds, lifetime income products, and custom stable value funds.

INVESTMENT PHILOSOPHY

- Value added is primarily derived from sector emphasis and individual utilization of a bottom up fundamental valuation process integrated with a top-down macro-economic approach.
- Great-West focuses on an above average yield, not positioning the portfolio based on anticipated interest rate movements. The strategy does not anticipate excess return as a result of interest rate and duration calls.

STRENGTHS

- Great-West's relatively smaller assets under management and strong relationships on the street help them get smaller, yet still meaningful, allocations that allow them to add value.
- Diverse approach to finding value in spread sectors and emphasis on downside risk protection makes it ideal for risk averse investors.
- The Firm benefits from its emphasis on stable value with a focus on principal protection.

Stable Value Environment

As of December 31, 2019

The following information was gathered by NWCM from 16 stable value collective trusts. These stable value providers collectively manage over \$146.3 billion. The following trends occurred in the fourth quarter of 2019:

- The average **Market-to-Book** ratio declined (deteriorated) by 0.12% during the fourth quarter to 101.3%. Overall, rates fell throughout 2019 raising most Market-to-Book ratios to over 100%.
- The average **Gross Crediting Rate** (before fees) decreased 0.07% from the previous quarter to 2.4%
- Wrap capacity has continued to improve as the economy has stabilized. Banks and insurance companies have become more willing to negotiate less restrictive investment guidelines and lower wrap fees.
- **Wrap fees** have in many cases been moving deeper into the sub-20 basis point range (0.20%) with most funds between 16 to 23 bps (0.16 to 0.23%).
- **Average Stable Value Fees** for accounts over \$50M were 0.42%.

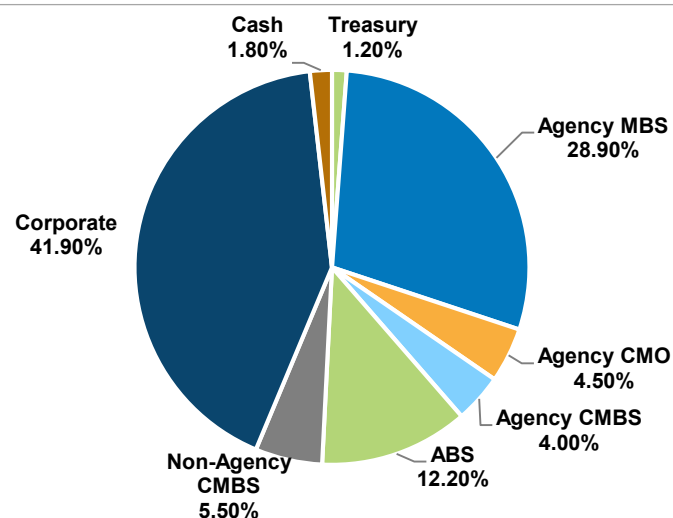
Gross crediting rate is gross of investment management fees and net of wrap fees

Source: NWCM. The data gathered from the collective trusts are all known in the institutional retirement industry. Statistics are reported by the investment managers and there may be differences in calculation methodologies among managers. The above information is not a complete analysis of every material fact concerning any market, industry, or investment. Data has been obtained from sources considered reliable, but NWCM makes no representation as to the completeness or accuracy of such information.

County of Fresno Stable Value Fund

As of December 31, 2019

Sector Allocation



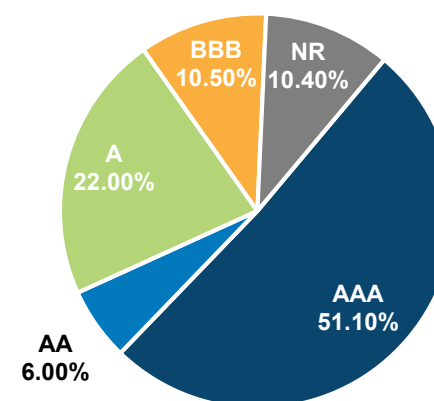
Fund Characteristics

	Fresno SV	Universe
Market Value of Assets	\$66.10M	
Average Credit Quality (S&P/Moody's)	AA-/AA	
Net Crediting Rate	2.35%	
Gross Crediting Rate	2.49%	2.43%
Average Duration	2.8	2.6
Market-to-Book	101.40%	101.28%

Fee Breakdown

	Fresno SV	Universe >\$50M
Investment Management Fees	0.14%	0.22%
Wrap Fees	0.20%	0.17%
Other Expenses	0.00%	0.03%
Total Annual Fund Operating Expenses	0.34%	0.42%

Portfolio Quality (Moody's)



*County of Fresno Stable Value Fund net crediting rate is net of fees of 0.34% of assets, which consist of (1) investment management fees of 0.14% of assets; and (2) and wrap fees of 0.20% of assets.

**County of Fresno Stable Value Fund gross crediting rate is calculated by NWCM and are for illustrative purposes only. The gross crediting rate is net of wrap fees of 0.20%, but exclude investment management fees for comparison purposes.

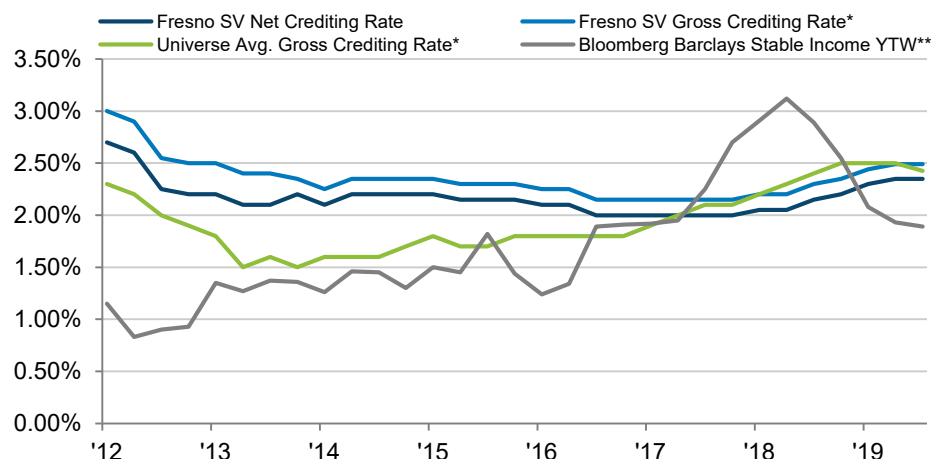
Statistics are reported by the investment managers; there may be differences in calculation methodology among managers. NWCM does not confirm or validate the results reported by the managers

Source: NWCM, Great-West, as of 12/31/2019

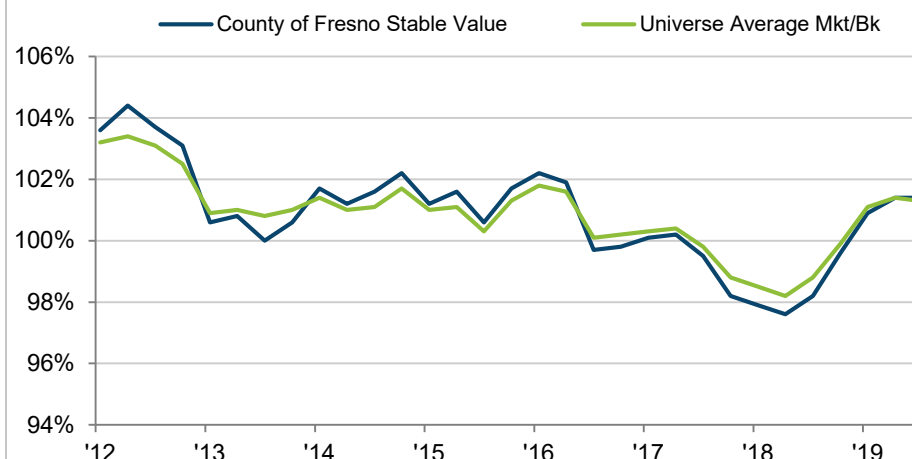
Crediting Rate and Market-to-Book Value

As of December 31, 2019

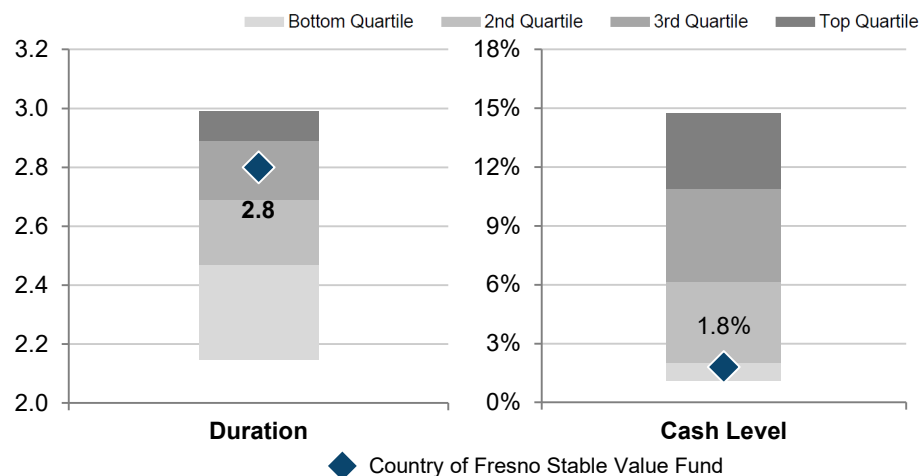
Crediting Rate



Market-to-Book Value



Duration and Cash



Observations

Crediting Rate

- Great-West's Net Crediting rate held steady at 2.35% (2.49% gross*) over 4Q19.
- The average Gross crediting rate decreased to 2.43% over the quarter. Universe gross crediting rates range from 1.94% to 2.71% for the fourth quarter.

Market-to-Book Value

- Great-West's Market-to-Book ratio stayed at 101.4% over 4Q19.
- The average Market-to-Book ratio crept 12 basis points lower to 101.3% as Treasury yields crept higher.

*Crediting rate is gross of investment management fees and net of wrap fees. County of Fresno Stable Value Fund gross crediting rate is calculated by NWCM and are for illustrative purposes only. The gross crediting rate is net of wrap fees of 0.20%, but exclude investment management fees and administrative/recordkeeping offsets for comparison purposes.

**Yield to worst (YTW) is the lowest yield of either the yield to maturity, yield to call, or yield to refunding.

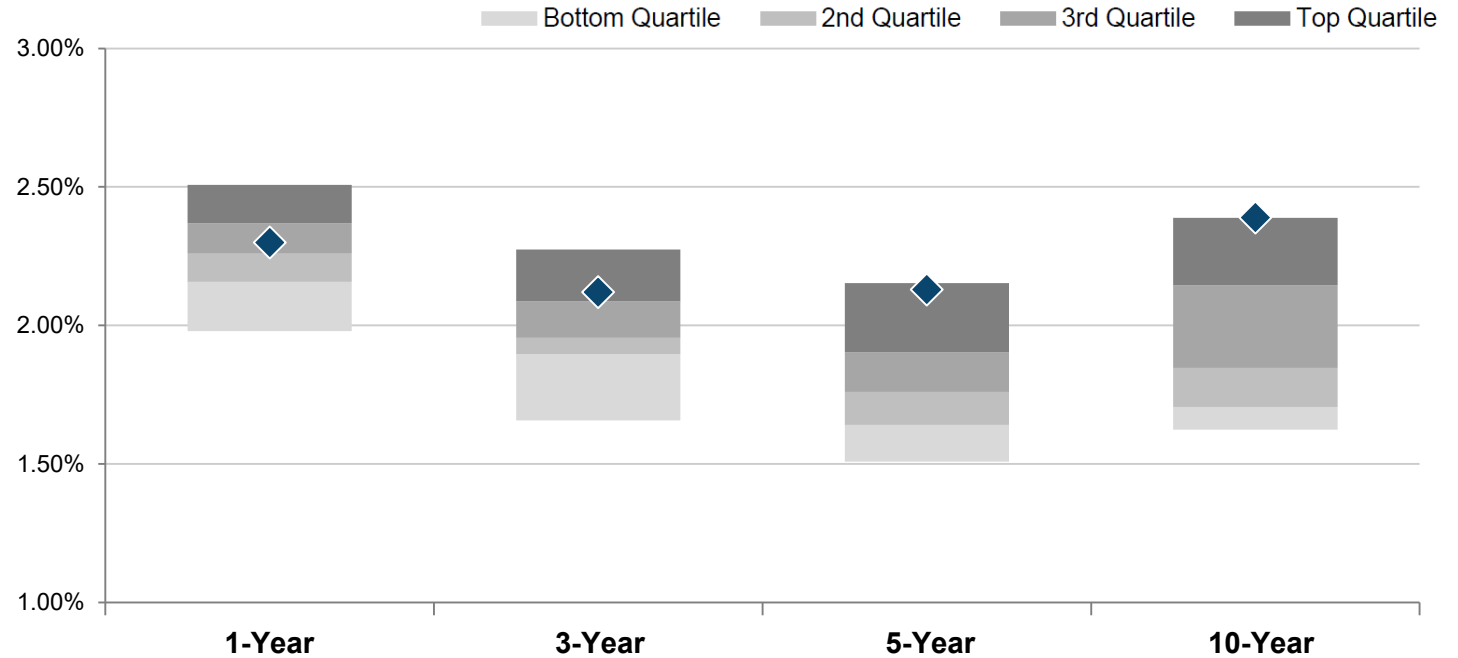
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Source: NWCM, Great-West, as of 12/31/2019

Performance Comparison

As of December 31, 2019

Universe: Stable Value CITs >\$50M Net Returns



◆ Fresno Stable Value Fund*	2.30%	2.12%	2.13%	2.39%
# of Funds in Stable Value Peer Group	16	16	16	14
25th Percentile	2.37%	2.09%	1.90%	2.14%
50th Percentile	2.26%	1.96%	1.76%	1.85%
75th Percentile	2.16%	1.90%	1.64%	1.71%

*County of Fresno Stable Value Fund net returns are net of fees of 0.34% of assets, which consist of (1) investment management fees of 0.14% of assets; and (2) and wrap fees of 0.20% of assets.

Periods greater than one year represent annualized performance and past performance, as shown is no guarantee of future results. Net returns used in the universe do not include plan administration fees – actual performance experience by participants would be commensurately lower.

Source: NWCM, Great-West, as of 12/31/2019

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