UN-MEASURED
IS
UN-MANAGED

A Story About
UNCOMPENSATED RISK
The Orphan of Modern Portfolio Theory

http://precisionfiduciary.com/orphan

Presented on November 28, 2018
Professional Fiduciary Association of California
Silicon Valley Chapter

Through Investment Policy Statements and implementation of their resulting asset allocation, a portfolio's Compensated (aka non-diversifiable) Risk strategies are usually well managed, while the management of Uncompensated (aka diversifiable) Risk has been usually ignored. This is because of not being able to measure uncompensated risk reduction. The result has been non-management of Uncompensated Risk. Big Math has changed that. Now we can fulfill the fiduciary duty to monitor, measure & manage!

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WHAT THEY LEFT ON THE TABLE <u>OR</u>
THE POTENTIAL CLAWBACK LIABILITY AWARDED BENEFICIARIES?

THE ANATOMY OF A BREACHED DUTY

TO PRUDENTLY & REASONABLY REDUCE UNCOMPENSATED RISK (UCR)

Presentations to PFAC Chapters and Convention in April, May, September, November 2018

By J. Ben Vernazza CPA/PFS TEP emeritus & Stewart Frank CPA/PFS AIFA

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					AMOUNT of 'chips' LEFT ON THE TABLE				
		% Return/Yr.			One Year		?6 Yr Statute Limitations?		
Attach.	Total Value	Actual	***Reas***.	MaxUCR	**Reasonable**	MaxUCR	**Reasonable**	MaxUCR	
C	$40,000,000*	NO UCR; ONLY HIGH FEES			$240,000	$320,000	$1,400,000	$1,920,000	

*This family office had an overall asset allocation similar to one of its entities – a limited partnership with $10 million. For test purpose it was representative of the entire $40 million. The portfolio had 515 securities. The Max UCR reduction portfolio had 65 securities and produced an annualized net return 2.9% higher due to a higher Sharpe Ratio. No UCR left on the table was calculated because the 515 security portfolio was reasonable diversified, albeit at a cost.

Attach.	Total Value	Actual	Reas.	MaxUCR	One Year Reasonable	One Year MaxUCR	6 Yr Reasonable	6 Yr MaxUCR	
F (2 adv)	**$1,000,000**	**8.4**	**9.4**	**9.4**	**$ 10,000**	**$10,000 --→**			**2 ADV SPLIT A BREACH IF**
F (UCR)	**$2,000,000**	**9.4**	**12.3**	**13.3**	**58,000**	**78,000**			**NO INV POL ST**
					$ 68,000	**$ 88,000**	**$ 408,000**	**$ 528,000**	**INSTRUCTIONS**
G2 Ann	$ 500,000	2.1	8.4	9.2	$ 30,000	$ 36,000			
G3 Bkr.	$ 500,000	8.9	11.1	12.0	11,000	17,000			
					$ 41,000	$ 53,000	$ 246,000	$ 317,000	
B	$ 2,000,000	5.4	7.0	7.4	$ 32,000	$ 40,000	$ 192,000	$ 240,000	
E	$ 600,000	6.2	8.1	9.5	$ 12,000	$ 20,000	$ 68,000	$ 119,000	
D	$ 900,000	7.0	7.9	8.2	$ 8,000	$ 11,000	$ 48,000	$ 66,000	

<u>**Note #1:**</u> The so-called clawbacks (with the exception of Attachment C) should be looked at as a lost opportunity cost which could have been retained in the portfolio, but, because there was no procedural process to prudently and reasonably reduce UCR, was left on the table.

<u>**Note #2**</u>**:** The 6 year Statute of Limitations amount is 6 times the one year amount. In reality C and G would be much higher because each year beginning with the 6th year back would have gotten bigger each year. The rest would have been less because the portfolios were less the 6th year back meaning the amount left on the table would have been less. The main point here is the numbers are significant in some cases (B,C,F & G), marginal with others (E & D), and C is large in total, but the fee overcharge is a small percentage of the total portfolio.

<u>**Note #3**</u>**: If there were a proven breach of fiduciary duties in the litigation, then, in accordance with the U.S. Supreme Court 9-0 decision in Tibble vs. Edison, there would be unlimited clawback since that decision states that the statute of limitations does not start to run until the breach is stopped.**

<u>**Note #4:**</u> There is no intent to make comparisons between the portfolios. Each portfolio is a different scenario. They all share the same deficiency in that there was no procedural process to prudently and reasonably reduce UCR

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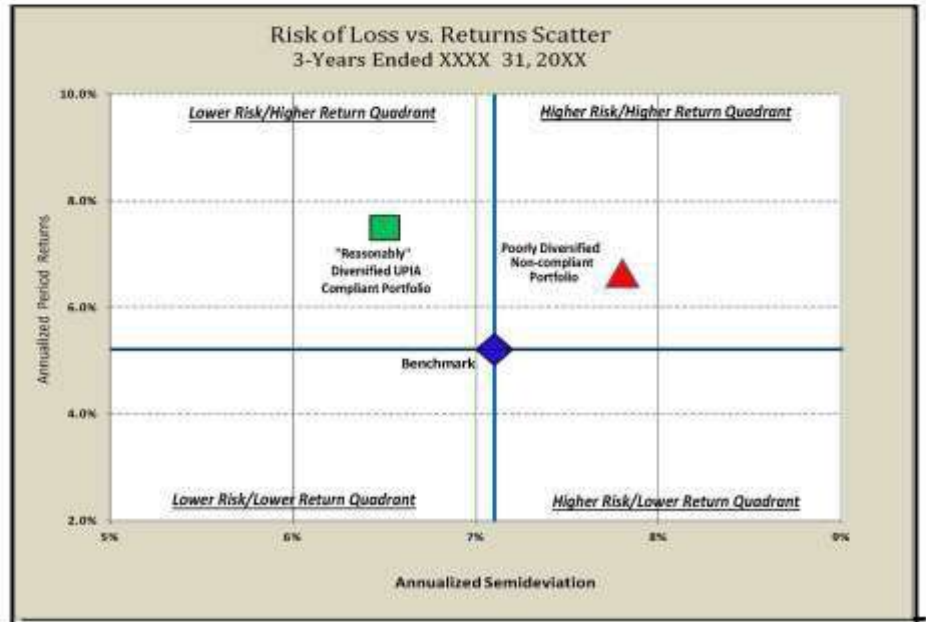
ANALYTICS

Sample Scatter Graph Illustration

Risk of Loss vs. Returns Scatter Graph
For the Period Ended on XXX XX, 20XX



REMOVE UNCOMPENSATED RISK FROM YOUR PORTFOLIO OR BE IN *BREACH* OF YOUR <u>FIDUCIARY DUTIES!</u>

<u>Risk that can be eliminated by adding unlike investments is uncompensated risk and the objective of diversification is to minimize uncompensated risk.*</u>

Scatter charts are a tool that can greatly facilitate the management of fiduciary accounts in accordance with the mandates of Uniform Prudent Investors Act (UPIA) which is based on the 3rd Restatement of Trusts 1992. The simplicity of oversight made possible by scatter charts is demonstrated by a mere glimpse.

<u>However, before anything can be managed, it must first be identified</u>. <u>The Scatter Graph is a useful tool that easily identifies portfolios that contain more uncompensated risk than their portfolio's benchmark and allows all observers (including stakeholders, fiduciaries, attorneys, jurors, and judges) to simultaneously see the historical risk of loss assumed by a given portfolios when compared to the benchmark and achieved return.</u>

In the above Scatter Graph, the data pointofthe appropriate benchmark is represented by the purple diamond. The red triangle sits on the data point of an “improperly” diversified portfolio while the green square sits on the data point of a "reasonably" diversified portfolio. The crosshairs centered on the purple diamond mark the risk and return of the “benchmark.”

The further right a portfolio’s risk point is located anywhere on the graph, the greater is its risk of incurring loss. The crosshairs break the scatter plot into four convenient quadrants. The upper-left quadrant can appropriately be called the “prudent quadrant” since portfolios falling into that quadrant have exhibited higher returns yet they have exposed investors to less risk of loss than the benchmark.

The “Poorly Diversified Portfolio” is deeply into the upper-right (high-risk, high-return) quadrant. Occasionally, one finds a portfolio in the lower right-hand corner which is even worse.

Finally, even more rewarding performance risk reduction can be achieved by removing the uncompensated risk that may still remain in a portfolio. We often find results further north and west of a ‘compliant’ portfolio when the portfolio is designed to eliminate a majority of the uncompensated risk.

* <u>RESTATEMENT OF TRUSTS 3rd VOL. 8 1992</u>

“In understanding a trustee's duties with respect to the management of risk, it is useful to distinguish between diversifiable (or "uncompensated") risk and market (or non- diversifiable) risk that is, in effect, compensated through pricing in the marketplace. Failure to diversify on a reasonable basis in order to reduce uncompensated risk is ordinarily a violation of both the duty of caution and duties of care and skill.”
<u>www.precisionfiduciary.com/restatement/</u>

Where Does Your Portfolio Reside
On The Scatter Chart?
Find Out FOR SURE
<u>www.precisionfiduciary.com/ForSure/</u>

Assistance by email <u>ben@benvcpa.com</u>
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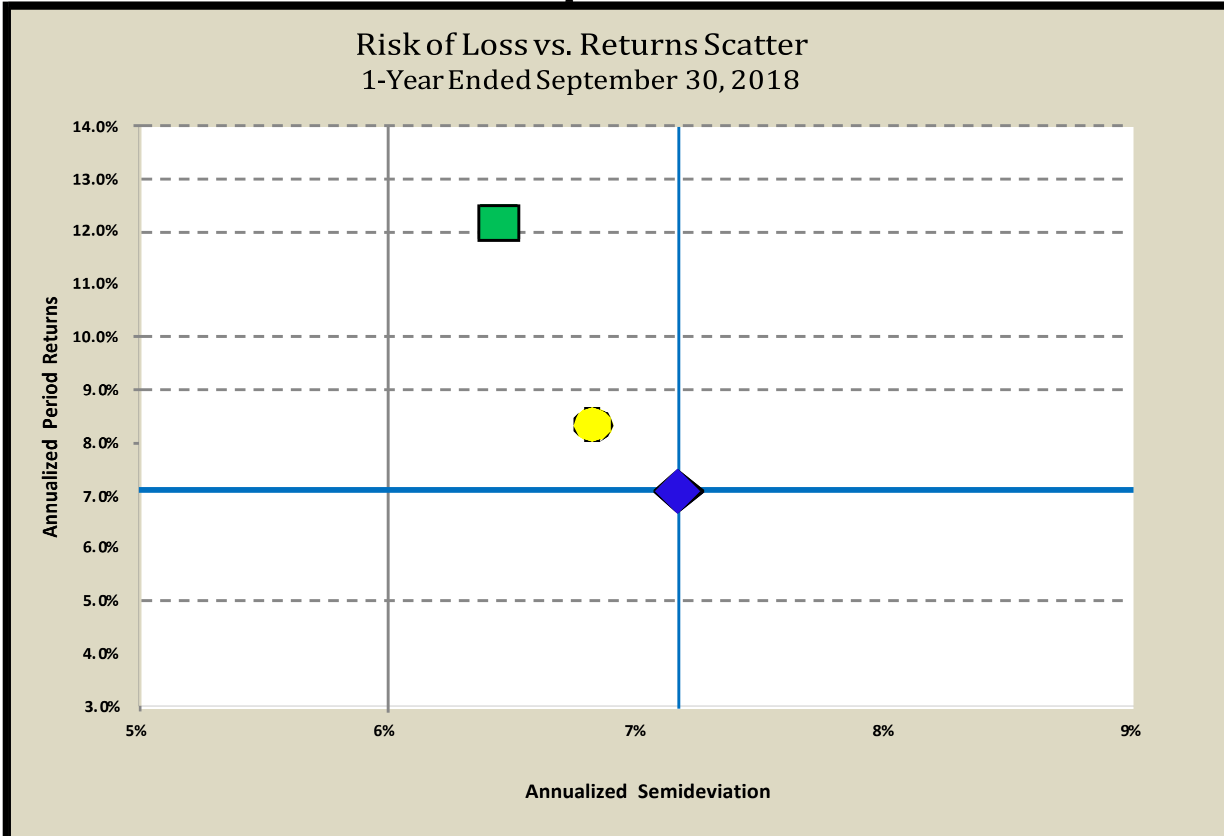
RIA Mid-West $7mil ROR vs SemiDeviation

Comparative Risk of Loss vs. Return Analysis
For the 1-Year Period Ended on September 30, 2018



Indices & Portfolios:	FTSE ALL Cap Global Index	MACRO Asset Allocation	Actual Portfolio	Max UCR Unconstrain Portfolio
Beginning of Period Asset Allocation Data				
Growth Assets	*100.0%*	*68.8%*	*68.8%*	*68.8%*
Risk Reduction Assets	*-*	*31.2%*	*31.2%*	*31.2%*
TOTALS	*100.0%*	*100.0%*	*100.0%*	*100.0%*
Risk/Return Data				
→ROR	9.65%	7.11%	8.36%	12.20%
Standard Deviation	11.56%	8.11%	7.82%	8.46%
→Semideviation	10.21%	7.17%	6.82%	6.45%
→Sharpe Ratio	0.0000	0.2178	0.2710	0.5435
→Maximum Drawdown	-13.15%	8.95%	-8.43%	-7.91%
Largest 1-Day Loss	-3.92%	-2.73%	-2.55%	-2.40%
Portfolio Metrics				
Correlation	1.00	1.00	0.98	0.92
R-Squared	1.00	1.00	0.95	0.85
Beta	1.00	0.70	0.66	0.67
Reciprocal Cross Correlation %	N/A	42%	67%	60%
→Alpha	0.00%	0.39%	1.90%	3.09%
Uncompensated Risk Measurements				
Total Number of Holdings	N/A	2	26	65
Concentration Coefficient (CC)	N/A	2	17	60
No. of Uncorrelated Equally Weighted Holdings	N/A	2	8	55
→Uncompensated Risk Remaining in Portfolio	N/A	100%	79%	0%
Added Diversification Return	N/A	0.00%	0.15%	0.80%

Semideviation is a measure of dispersion for the values of a data set falling below the observed mean or target value. Semideviation is the square root of semivariance, which is found by averaging the deviations of observed values that have a result that is below the mean.

Opinion Regarding Compensated and Uncompensated Risk
As Specified in the Restatement of Trusts 3rd Full Text & Updates 1992-2018*

by Stewart Frank CPA/PFS AIFA
A Subject Matter Expert in the area of Investment Fiduciary
Compliance by the Center for Fiduciary Studies
and Special Consultant to the AICPA Fiduciary Task Force

Modern Portfolio Theory and The Restatement (3rd) of Trusts (Prudent Investor Rule) identify two types of equity risk that fiduciaries must manage:

1. Compensated Risk, a/k/a non-diversifiable risk and
2. Uncompensated Risk, a/k/a diversifiable risk.

Each type of risk embodies different exposures to risk requiring different managed approaches.

Compensated Risk is unavoidable; its impact is economy-wide affecting all participants within a given market and cannot be changed with diversification (the reason it is also known as non-diversifiable risk). It changes only when market conditions change. It is considered to be the price of entry one must pay to participate in the equity markets.

This type of risk is compensated through market pricing/dividends, so that the expected return from a portfolio is directly affected by the level of these risks that cannot be diversified away. Accordingly, management of compensated risk consists of determining the appropriate degree of risk to take in a portfolio (through asset allocation) in pursuit of a pre-determined level of expected return.

Uncompensated Risk has the following unique qualities:

1. It can be reduced by proper diversification of the portfolio in which it resides (the reason it is also known as diversifiable risk).
2. Changes to its level within a portfolio do not alter the original portfolio's expected returns.

Because prudent diversification not only moderates risks that are inherent to investing but also reduces risks that are not justified by some prospect of gain, allowing (even by default) uncompensated risk to reside, unmanaged in a portfolio is a breach of the fiduciary duties of care, skill, and caution.

> "Failure to diversify on a reasonable basis in order to reduce uncompensated risk is ordinarily a violation of both the duty of caution and the duties of care and skill."
> [*Restatement (3rd) of Trusts* §227, "Comment on Basic Duties of Prudent Investor," p. 23]

The ultimate goal of diversification is to achieve a portfolio that has only the rewarded or "compensated" element of risk. Management of uncompensated risk is achieved by adding the right balance of diversification to a portfolio's asset allocation. The usual result is a reduction in volatility and an increase in the Sharpe Ratio.

AND

Management of uncompensated risk is achieved through prudent diversification, defined as the right number, degree, and weightings, of asymmetrically correlated portfolio constituents (not the overall level of portfolio variance), added to a portfolio's asset allocation.

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* This work provides a contemporary treatment of trust law, offering authoritative guidance to legislators, judges, and those who counsel trustees and beneficiaries or endeavor to draft instruments that accurately reflect the lawful intentions of donors. See www.precisionfiduciary.com/restatement/ NOTE: Restatement updates sometimes affect UPIA since UPIA was originally based on 3rd Restatement. For instance, See 9-0 Supreme Court decision Tibble vs. Edison.

Opinion Regarding Safe Haven for Delegation to an Investment Advisor Probate Code 16052(c)

by Stewart Frank CPA/PFS AIFA
A Subject Matter Expert in the area of Investment Fiduciary Compliance
by the Center for Fiduciary Studies and
Special Consultant to the AICPA Fiduciary Task Force

According to Probate Code section 16048, a Trustee " …has a fiduciary duty to diversify the investments of the trusteeship…". Just like all other investment management duties, diversification is quite complicated and not something a non-expert should be tasked with. Thus, delegating responsibility for the diversification functions for your Trusteeship's portfolio to an investment professional is the prudent thing to do for a Trusteeship as well as the Trustee.

The California Uniform Prudent Investor Act, grants Trustees power to delegate investment management duties to a professional investment manager, and provided the delegation is accomplished in a "prudent" manner it also transfers fiduciary liability from the Trustee to the agent for decisions and actions of the agent [see Probate Code section 16052(c)]. But making an imprudent delegation, even one you sincerely believe to be prudent, can be disastrous. So before you hand off diversification responsibilities, you better be sure the hand-off is done prudently.

Probate Code section 16052(a) states that "… "A trustee may delegate…" [If] "The trustee shall exercise prudence in the following:" and then goes on to lists 3 basic duties that can only be performed by the delegating Trustee. If left to the delegee, or worse not performed at all, the delegation is deemed imprudent causing fiduciary liability to remain with the Trustee.

(1) Selecting an agent.
(2) Establishing the scope and terms of the delegation.
(3) Periodically reviewing the agent's overall performance.

Exercising prudence requires selecting an agent who is capable of being held to an "expert's standard of care". Otherwise, the delegation will be imprudent. An "expert's standard of care" in reasonably reducing Uncompensated Risk (UCR) matters begins with an in depth knowledge of all of the UCR metrics. It also requires the requisite technology and knowledge for applying diversification metrics to quantify the absolute amount of UCR present in a portfolio and measure the effectiveness of both absolute and relative UCR removal. At a minimum, a delegating Trustee must confirm that his/her agent's technology is capable of calculating and quantifying those diversification metrics and the agent is capable applying the results. A third party expert opinion is also desirable.

Close coordination between Trustee and a knowledgeable agent is required under sub section (2) to successfully establish the scope and terms for delegation of uncompensated risk management. Without an expert's assistance, it is impossible for most Trustees to meet this high standard.

Some trustees mistakenly believe that sub-section (3) can be easily satisfied with a signed, written memo, delivered annually by the agent stating that it is his/her professional opinion that the Trusteed portfolio reasonably satisfies the standards for diversification and the removal of Uncompensated Risk of Modern Portfolio Theory. But because the memo lacks any detail, the agent's signed memo only proves that the Trustee's required periodic performance and compliance reviews never took place, which is, ipso facto, imprudent. In fact, suggesting that a signed diversification memo satisfies the requirements for achieving a compliant delegation is a bad faith failure to ascertain certain facts, which for a Trustee, is by itself, another breach of fiduciary duty.

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This opinion is a GAME Changer
Find Out FOR SURE about Uncompensated Risk
Share with your adviser
http://precisionfiduciary.com/ForSure/

IT AIN'T A FABLE
LEAVIN' CHIPS ON THE TABLE

You think it's just been swell
That they've been doin' so well

You overlook double-check
And just say 'what the heck'

But, while you're relaxin' on the beach
You get a letter sayin' you're in breach

So you look to the person that gave their avowal
But that doesn't do much to help you now

All the while you've been thinkin' it's just a fable
That you've been leavin' these chips on the table

They add all those chips up for all of the years
And come up with a figure that gives you tears

And you're the one they can easily reach
'Cause you're the one that's been in breach

You wish you'd done that easy one screening
It would've kept you from all this screaming

J. Ben Vernazza Sept 2018

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(p.s. hopefully not a breach, but it's important to find out: JBV+SF)

What can you do to protect yourself now?

You can get an Uncompensated Risk (UCR) reduction screening for $375
Find Out FOR SURE download the worksheet http://precisionfiduciary.com/ForSure/
Follow instructions & send it in Get the results within 3 days
Share with your adviser. Have a three way 20 minute conference call.
Answer your questions and theirs.

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OverWatch

Fiduciary Liability Exposure Check-up

Questionnaire for Trustees, Fiduciaries, Non-Profits, Retirement Plans, Family Investments

Report ID (for internal use):____________________Date: ___________

Investment Policy Statement

s

Do you have a written investment policy statement? (IPS) ☐ Yes ☐ No

If "Yes", when was the IPSlast reviewed/updated? Date: __________________

Are written policies/guidelines in place for the following?:

Investment Management

Initial vetting of financial advisor(s)	☐ Yes	☐ No	☐ Don't Know
Investment objective(s)	☐ Yes	☐ No	☐ Don't Know
Return objectives/target return	☐ Yes	☐ No	☐ Don't Know
Target asset allocation (with upper/lower thresholds)	☐ Yes	☐ No	☐ Don't Know
Risk policy (metrics for measuring risk)	☐ Yes	☐ No	☐ Don't Know
Diversification strategy (in accordance w/risk policy)	☐ Yes	☐ No	☐ Don't Know
Investment constraints (if applicable)	☐ Yes	☐ No	☐ Don't Know
Periodic investigation into other investment options	☐ Yes	☐ No	☐ Don't Know
Tax implications of trust investments	☐ Yes	☐ No	☐ Don't Know
Rebalancing to target asset allocation	☐ Yes	☐ No	☐ Don't Know

Monitoring

Performance reporting and benchmarking returns	☐ Yes	☐ No	☐ Don't Know
Schedule to review investment objectives, time horizon asset allocation, risk policy and diversification strategy	☐ Yes	☐ No	☐ Don't Know
Annual due diligence on investment advisor(s)	☐ Yes	☐ No	☐ Don't Know
Total fees/commissions and underlying expenses associated with trust brokerage/advisory accounts	☐ Yes	☐ No	☐ Don't Know
Distributions from trust broker/advisory account(s)	☐ Yes	☐ No	☐ Don't Know

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Does Your Portfolio Prudently Reduce

Uncompensated Risk? Find Out FOR SURE

$375

Assistance is available by email ben@benvcpa.com

www.precisionfiduciary.com/ForSure/