**VRP**

**BAM Alliance**

<http://thebamalliance.com/blog/the-volatility-risk-premium-and-asset-allocation-strategies/>

Makes insurance analogy.

Expected payout + risk premium.

Markets crash down, not up.

“Unique risk premium”

Heavily reference Fallon, Park & Yu 2015 (EQ, FI, FX, CM…CMs don’t fare well)

https://www.cfapubs.org/doi/abs/10.2469/faj.v71.n5.4

It’s important to note that Fallon, Park and Yu found that “on average, that transaction costs reduce gross returns by 47%, a significant reduction.” Thus, to successfully implement the strategy, patient trading is critical, as investors should want to be a seller, not a buyer, of liquidity. That means accepting tracking-error risk.

**Aon (2014)**

<http://www.aon.com/attachments/human-capital-consulting/harvesting-equity-insurance-risk-premium.pdf>

“Equity insurance risk premium”

References paper by Geissinger that I can’t find.

Primarily concerning equity call-writing.

Insurance and casino analogy.

“The small number of high-quality offerings indicates that this return premium remains relatively unexploited, leaving ample opportunity for the strong historical performance to continue in the future.”

**Rampart** (2016)

<https://www.virtus.com/assets/files/2l/rampart_volatility_risk_premium_5178.pdf>

Makes intro from vantage of ‘volatility’ factor.

Is too deliberate explaining how options work, Black Scholes, iron condors, monthly example, etc.

Compares VIX to realized vol!

Finds compelling VRP in GLD and USO (not clear on how it is calculated).

Makes nice summary point that there are risks, but every return source comes with risks.

Generally shoddy and pedestrian.

**Allianz** (2015)

<http://www.cboe.com/rmc/2015/day-1-session-2-bernhard-brunner.pdf>

“Volatility risk premium follows the same logic as equity risk premium but is much more attractive over the last 15 years”

Mathy…but references VSTOXX – realized vol.

80-20 periods are winners but with long tail of losses.

Some return due to selling ATM options…more return by selling variance swap (skew and kurtosis)

Find that (for Eurostoxx?) expected return not dependent on maturity, but stdev of return goes down with longer variance swaps. But next graph and bullet point seems to disagree!

Finds that USD/EUR VRP information ration is very high?

Gold IR is low, Oil IR is high.

Volatility (1) returns to long-term mean (2) jumps and (3) forms clusters.

When vol is high, VRP is high but volatile.

Equity VRP has “nonlinear” correlation to equity returns.

Nice graphic of efficient frontier for portfolio with and without VRP.

**Towers Watson** (2014)

<https://www.towerswatson.com/DownloadMedia.aspx?media=%7B6BA9036E-3724-4A2D-81A5-C93395B6EE56%7D>

Good 3-page summary…or not so good.

Makes insurance analogy.

Compares VIX to realized vol!

Options and variance swaps mentioned. Primarily equities.

Reference made to an “anonymous asset manager” on chart showing diversified VRP including commodities.

Mention made of the difficulty of hedging option portfolio close to expiration.

“Total expense ration” of 50-70bps.

*Given the fundamental risks involved in the strategy, we believe there is an ‘economic’ risk premium for the strategy rather than it relying on behavioural or structural effects.*

**AQR** (2015)

<https://www.aqr.com/~/media/files/papers/alternative-thinking-embracing-downside-risk.pdf>

Show VIX vs. realized vol!  
Decompose return of underlying asset into asset risk premium and insurance risk premium.

Show that generally calls have no expected return because insurance risk premium offsets asset risk premium.

Don’t buy puts, sell some delta.

If more aggressive, consider selling options (VRP).