Reviewing Principle Protected Securities (PPS) With a WARF Methodology

Charles Therriault

October 23, 2020
What is WARF?

- Weighted Average Rating Factor (WARF)
- The “factors” are numbers reflecting the relative credit risk for each credit quality.
- The “factors” exponentially increase as the credit rating for the investment goes from the highest credit quality (AAA) to a lowest credit quality (CCC) or default (D or ND).
- A “factor” is determined for each underlying investment based upon its credit quality or risk.
- The market value of that investment is used to “weight” the “factor”.
- The sum of the individual “weighted rating factors” \( \frac{\text{sum (investment market value \times factor)}}{\text{Total PPS market value}} \) is the WARF factor for the PPS.
The WARF rating factors range from a 10 for an NAIC 1.A (AAA) to 37,500 for an NAIC 5.C/6 (CCC/-D).

The Ratings Factors are from S&P Global Ratings, “Fund Credit Quality Ratings Methodology” (June 26, 2017)

The factors are informed by S&P’s historical default and transition data of long-term and short-term ratings.
324. Principal Protected Securities (PPSs) are a type of security that repackages one or more underlying investments and for which contractually promised payments according to a fixed schedule are satisfied by proceeds from an underlying bond(s) (including principal and, if applicable, interest, make whole payments and fees thereon) that if purchased by an insurance company on a stand-alone basis would be eligible for Filing Exemption, but for which:

(i)

a. the repackaged security structure enables potential returns from the underlying investments in addition to the contractually promised cash flows paid to such repackaged security according to a fixed schedule;

OR

b. the contractual interest rate paid by the PPS is zero, below market or, in any case, equal to or below the comparable risk-free rate;

AND

(ii)

the insurer would obtain a more favorable Risk Based Capital charge or regulatory treatment for the PPS through Filing Exemption than it would were it to separately file the underlying investments in accordance with the policies in this Manual.
• Exclusions
325. For the avoidance of doubt, PPSs shall not include defeased or pre-refunded securities which have separate instructions in this Manual; broadly syndicated securitizations, such as collateralized loan obligations (CLOs) (including middle market CLOs) and asset backed securities (ABS), except as described in the examples in this section; or CLO or ABS issuances held for purposes of risk retention as required by a governing law or regulation.

• Filing Requirements
326. Investments in PPSs must be submitted to the SVO for review because they may possess Other Non-Payment Risks that the SVO must assess under its Subscript S authority. If the SVO determines in its judgement that there are not any Other Non-Payment Risks, the SVO will permit the security to benefit from Filing Exemption, if it is otherwise eligible.

327. In addition to Filing Process and Required Documents outlined in Part Two of this manual, the following additional information is required for PPSs:

- Disclosure of any Subsidiary, Controlled or Affiliated relationship between the PPS or any of the underlying investments and the insurer; including, how the underlying investments were acquired.
- Prior four quarterly financial statements, if produced, trustee or collateral agent reports from the entity issuing the PPS sufficient to identify; security specific details of each underlying investment (security identifier, descriptive information, all Eligible NAIC CRP Credit Ratings (if any), par value, market value, and explanation as to how the market value was determined).
“Principal Protected Securities...would be eligible for Filing Exemption, but for which: ... the insurer would obtain a more favorable Risk Based Capital charge or regulatory treatment for the PPS through Filing Exemption than it would were it to separately file the underlying investments in accordance with the policies in this Manual. “

(P&P Manual, Part Three, paragraph 324, adopted 5/14/2020)
• The SVO’s WARF review is not intended to “model” the cashflows from the underlying investments.

• Applying WARF permits the SVO to determine a single NAIC Designation Category for the PPS that is based upon the relatives risks of the individual components.

• The single NAIC Designation Category for the PPS should incur approximately the same Risk Based Capital charge as would the underlying investments if they were each reported separately.
Example #1:
A $10m PPS is purchased on 6/30/2020.

The PPS consists of a $10m par zero-coupon U.S. Treasury with a price at purchase of $63.97 maturing in 30-years with the remainder, $3.603m, invested in common stock.

The U.S. Treasury has the highest credit rating and receives the lowest ratings factor.

The common stock receives the rating factor equivalent to the lowest credit rating (e.g. NAIC 6).

\[
\frac{(10 \times 6,397,000) + (37,500 \times 3,630,000)}{10,000,000} = 13,518
\]
**Example #1:**
The value of the $10m par U.S. Treasury accretes up until it matures at par value in 2050.

The market value of the U.S. Treasury and common stock can vary over time.
**Example #2:**

$22m par Baa2/BBB+ corporate bond is purchased on 9/30/2019 at a price of $100.00 with a coupon rate of 4.50% maturing in 30-years with $25m invested in other undefined assets (assumed to be equivalent to common stock or NAIC 6) for a total investment in the PPS of $47m.

The PPS pays a coupon rate of 0.80% from the corporate bond’s 4.50% coupon payments with the excess interest from the corporate bond paying down the principal balance of the PPS. For this example, the market value was assumed to remain unchanged.

\[
\frac{(400 \times 22,000,000) + (37,500 \times 25,000,000)}{47,000,000} = 20,134
\]
Example #3:
A CLO Combo Note, which is a type of PPS, is purchased for $52.25 million and consists of four CLO tranches: $9.0m Class B Notes rated A, $13.75m Class C Notes rated BBB, $12.5m Class D Notes rated BB- and $17.0m Equity/Subordinated Notes (assumed to be equivalent common stock or NAIC 6).

\[
\frac{(130 \times 9,000,000) + (800 \times 13,750,000) + (3,700 \times 12,500,000) + (37,500 \times 17,000,000)}{52,250,000} = 13,319
\]
The prior examples all showed the quantitative WARF score and implied NAIC Designation

The SVO may also notch +/- the implied NAIC Designation for things such as: market value fluctuations, ratings changes, principal repayments or losses.
• These examples reflect the core regulatory concern, that there are other non-payment risks associated with PPS beyond the contractually promised payments that may not be reflected in a rating.

• The examples do not encompass all possible PPS variants.

• PPS must be submitted to the SVO for review because they may possess Other Non-Payment Risks that the SVO must assess under its Subscript S authority.

• If the SVO determines in its judgement that there are not any Other Non-Payment Risks, the SVO will permit the security to benefit from Filing Exemption, if it is otherwise eligible.
Questions?