

Adding an indicator to SMC EA

I want to add additional logic that allows the EA to leverage an additional indicator to filter for high quality trades.

Indicator

<https://www.tradingview.com/script/fYuHYGLD-Supreme-Valuation/>

Convert the above indicator into MT5 logic and allow the management of that indicator from within the EA. We need to ensure Gold and Dxy are leverageable.

DXY isn't available so allow me to map the correct currency pairs to the logic like this:

$$\text{DXY} = 50.14348112 \times \text{EURUSD}^{-0.576} \times \text{USDJPY}^{0.136} \times \text{GBPUSD}^{-0.119} \times \text{USDCAD}^{0.091} \times \text{USDSEK}^{0.042} \times \text{USDCHF}^{0.036}$$

Gold can map to XAUUSD.

EA Logic update:

Like we included the trend feature, allow me to filter out better trades and layer in the logic. When enabled, we'd short if overvalued and long if undervalued. This would be in addition to the other logic that is currently present.

Allow me to configure for each pair:

1. Configure it on/off
2. Set if gold, Dxy or both are leveraged
3. Configure period length and rescale
4. Configure over and under value thresholds

If both gold and DXY are determined to be required, we'd look for both values to be above or below the percent thresholds to support opening a trade.

Additional Considerations:

- Update valuation determination on bar close.
- Include logic to check for availability of required symbols (EURUSD, USDJPY, GBPUSD, USDCAD, USDSEK, USDCHF, XAUUSD) and fail gracefully if not found. Pop an alert to the user.
- Add an optional debug/logging toggle to output calculated valuation levels for DXY and Gold during strategy evaluation.
- Consider caching DXY values to reduce performance overhead (e.g., only recalculate on candle close).
- Structure the valuation logic as a separate module (e.g., ValuationFilter.mqh) for easier testing and maintenance.

- Add visual feedback (e.g., chart labels or objects) to show current valuation levels, ensuring no interference with existing overlays.