Key ConvexValue Metrics for Darkpool Analysis

Based on the provided ConvexValue data parameters, the following metrics are most valuable for identifying and analyzing darkpool activity:

Primary Metrics

1. **gxoi (Gamma multiplied by Open Interest)**
2. Critical for identifying key support/resistance levels
3. Large concentrations indicate price levels where market makers must hedge
4. Darkpool transactions often occur near these levels to minimize market impact
5. **dxoi (Delta multiplied by Open Interest)**
6. Reveals directional hedging pressure
7. Significant imbalances can indicate institutional positioning
8. Changes in dxoi can signal darkpool activity completion
9. **volmbs metrics (Volume of Buys minus Sells)**
10. Available across different timeframes (5m, 15m, 30m, 60m)
11. Tracks momentum and flow
12. Sudden divergences between price action and volmbs can indicate darkpool activity
13. **charmxoi (Charm multiplied by Open Interest)**
14. Measures expiration-related delta decay effects
15. Important for identifying time-sensitive darkpool positioning
16. Often correlates with end-of-day or pre-expiration darkpool activity
17. **vannaxoi (Vanna multiplied by Open Interest)**
18. Assesses volatility regime changes
19. Darkpool participants often exploit vanna effects for positioning
20. Key for identifying volatility-sensitive darkpool levels

21. **vommaxoi (Vomma multiplied by Open Interest)**

22. Measures volatility of volatility exposure
23. Important for identifying complex volatility-based darkpool strategies

24. Often indicates sophisticated institutional positioning

25. **gxvolm (Gamma multiplied by Volume)**

26. Identifies active hedging zones
27. Spikes can indicate real-time darkpool execution

28. Useful for detecting ongoing darkpool activity

29. **value_bs (Buy Value minus Sell Value)**

30. Measures directional sentiment
31. Large imbalances can indicate institutional positioning
32. Useful for confirming darkpool activity intent

Secondary Metrics

1. **flownet**
2. (Value of Call Buys + Value of Put Sells - Value of Call Sells - Value of Put Buys)
3. Comprehensive measure of directional sentiment

4. Useful for identifying complex darkpool strategies involving both calls and puts

5. **vflowratio**

    - (Volume of Call Buys + Volume of Put Sells) / (Volume of Put Buys + Volume of Call Sells)
    - Ratio-based measure of directional sentiment
    - Useful for normalizing flow data across different market conditions

6. **put_call_ratio**

    - Traditional sentiment indicator
    - Extreme values often coincide with darkpool positioning
    - Useful as a confirmatory metric

7. **call_gxoi and put_gxoi**

    - Gamma multiplied by Open Interest for calls and puts separately
    - Allows for more granular analysis of options positioning

- Helps identify option-type specific darkpool activity

Timeframe-Specific Metrics

1. **volmbs_5m, volmbs_15m, volmbs_30m, volmbs_60m**
    - Volume of Buys minus Sells across different timeframes
    - Useful for identifying the timeframe of darkpool activity
    - Divergences across timeframes can indicate sophisticated darkpool execution strategies
2. **valuebs_5m, valuebs_15m, valuebs_30m, valuebs_60m**
    - Value of Buys minus Sells across different timeframes
    - Provides dollar-weighted flow information
    - Useful for identifying high-value darkpool transactions

Call/Put Specific Metrics

1. **value_call_bs and value_put_bs**
    - Value of Buys minus Sells for calls and puts separately
    - Helps identify option-type specific darkpool positioning
    - Useful for complex darkpool strategies involving both calls and puts
2. **volm_call_bs and volm_put_bs**
    - Volume of Buys minus Sells for calls and puts separately
    - Provides contract-count flow information by option type
    - Useful for identifying option-type specific darkpool activity