

Beyond the Bottom Line: A Guide to Reading MT5 Backtests

When looking at a strategy report, it is easy to get hypnotized by the **Total Net Profit**. However, profit only tells you *what* happened, not *how* it happened. To determine if a strategy is robust or just lucky, you need to look beyond the vanity metrics and focus on the health metrics that define stability and risk.

1. The "Big Four" Efficiency Metrics

These four numbers are the vital signs of your strategy. They describe the quality of the edge.

- **Profit Factor:** This is your Gross Profit divided by Gross Loss. It answers: *For every dollar I lose, how many do I make?*
 - *Interpretation:* A value below 1.0 is a losing strategy. A value between **1.5 and 2.0** is generally considered healthy. Anything above 3.0 over a long period is often "too good to be true" (likely curve-fitted).
- **Recovery Factor:** This compares your Net Profit to your **Max Equity Drawdown**. It measures resilience.
 - *Interpretation:* It tells you how fast the strategy recovers from a loss. A higher number is better. If a strategy makes \$10,000 but had an equity drawdown of \$5,000, the factor is 2.0. If it makes \$10,000 with only \$1,000 equity drawdown, the factor is 10.0—indicating a much smoother, less stressful equity curve.
- **Expected Payoff:** This is the average profit per trade.
 - *Interpretation:* This number is critical because it must cover your trading costs (spread, commission, and swap). If your expected payoff is very low (e.g., barely larger than the spread), the strategy will likely fail in a live environment due to slippage and variable spreads.
- **Sharpe Ratio:** This measures risk-adjusted return. It penalizes instability.
 - *Interpretation:* It calculates the return relative to the volatility (risk) taken to get it. A high Sharpe Ratio means the equity curve is a smooth line upwards; a low ratio means the graph is jagged and psychologically difficult to trade.

2. The Hidden Risk: Holding Times

In the "Trades" section of the report, look at the **Average Holding Time**. This is often overlooked but represents your "exposure risk."

- **Why it matters:** Money at rest is safe; money in the market is at risk. A strategy that holds trades for days is exposed to overnight news, geopolitical events, and gap risks. A strategy that gets in and out quickly reduces the window of opportunity for a "Black Swan" event to impact the account.

3. The Law of Large Numbers: Quantity of Trades

When comparing two sets over the same period, the number of trades acts as your "Statistical Confidence Level."

- **The Problem of Few Trades:** If Set A has 50 trades and Set B has 500 trades, Set A's metrics are unreliable. A high win rate or high profit factor over only 50 trades could easily be luck or a specific market anomaly.
- **The Power of Many Trades:** A strategy with 500+ trades has survived many different market conditions (sessions, news events, spreads).
- **The Decision:** If Set A has slightly better profit but only 50 trades, and Set B has slightly lower profit but 500 trades, **always choose Set B**. The statistical probability of Set B continuing to perform in the future is much higher.

4. Garbage In, Garbage Out: Data Quality

The credibility of any backtest relies entirely on the quality of the data used.

- **Every Tick Based on Real Ticks:** This is the gold standard in MT5. It uses actual historical tick data (bid/ask prices) rather than generating simulated ticks inside a candle.
 - **Why it matters:** Lower quality modes (like "1 Minute OHLC") guess how price moved inside the minute. "Real Ticks" simulates actual spread widening and price spikes. If a backtest looks great on "OHLC" but fails on "Real Ticks," the strategy was relying on fake data artifacts to make money.
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5. Smart Scaling: How to Target a <10% Drawdown

Many traders fail because they guess their lot size. To keep your **Floating Equity Drawdown** controlled (specifically below 10%), you must reverse-engineer your lot size based on the **worst-case scenario** found in your backtest.

The Calculation Step-by-Step

For most strategies (especially Grids or Martingales), risk scales linearly with your **Start Lot**. If you double the start lot, you usually double the drawdown.

1. **Find the "Unit Risk":** Run a backtest with the minimum start lot (usually **0.01**). Look at the **Equity Drawdown Maximal** in currency terms (not percentage). Let's assume the report shows a Max Equity Drawdown of **\$400**.
2. **Define Your Limit:** You want this \$400 drop to represent only **10%** of your account.
3. **Calculate the Required Capital:** Divide the Drawdown Amount by your Target Percentage (0.10).

Formula: Max Equity Drawdown (\$) / Target % = Minimum Balance for 0.01 lots

- *Example:* $400 / 0.10 = \$4,000$

The Golden Rule

In this example, you need **\$4,000 of balance for every 0.01 lot** to keep your historical risk at 10%.

- Balance **\$4,000** → Start Lot **0.01**
- Balance **\$8,000** → Start Lot **0.02**
- Balance **\$2,000** → **Do Not Trade** (Drawdown would be 20%, breaking your safety rule).

Note: For maximum safety, apply a 1.5x multiplier to the historical Equity Drawdown to account for future market variance.

6. Synthesis: How to Weigh the Metrics

You have all the numbers, but they often contradict each other. How do you choose the "Best" set? You must weigh them in a specific hierarchy.

Tier 1: Disqualifiers (Must Pass)

- **Total Trades:** If the sample size is too small (<100 for a long period), discard the set. It is not statistically significant.
- **Expected Payoff:** If the average profit is near the spread cost, discard the set. It will die in the real world.

Tier 2: Robustness (The Quality Filter)

- **Recovery Factor (Resilience):** This is your primary filter. A strategy that recovers quickly is safer. If Set A has a Recovery Factor of 8.0 and Set B has 4.0, Set A is vastly superior because it spends less time "underwater."
- **Sharpe Ratio (Consistency):** This is your secondary filter. While Recovery Factor measures the depth of pain, Sharpe measures the "smoothness" of the ride. A high Sharpe Ratio indicates that the returns are consistent and not just the result of one or two lucky giant trades.

Tier 3: Performance (The "Greed" Filter)

- **Profit Factor & Total Net Profit:** Look at these *last*. High profit with a low Recovery Factor or low Sharpe Ratio is a trap. It usually means the strategy takes massive risks or endures long painful periods to achieve those gains.

Summary Decision Matrix:

When comparing two similar sets, choose the one with:

1. **More Trades** (Statistical Confidence)
 2. **Higher Recovery Factor** (Resilience)
 3. **Higher Sharpe Ratio** (Consistency)
 4. **Lower Holding Time** (Less Exposure)
 5. ...and *then* check if the Profit is acceptable.
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7. Critical Warnings

The "Illusion of Safety" Trap

One of the most dangerous mistakes a trader can make is to look at a recent period of smooth performance and think, *"This strategy is safer than I thought, I can increase my lot size."*

Do not fall for this.

- **Low Drawdown \neq Low Risk:** A prolonged period of very low drawdown usually just means the market conditions were perfect for your strategy *at that specific time*. It does not mean the strategy has become "better."
- **The Volatility Cycle:** Markets move in cycles. A calm, ranging market (where grid strategies thrive) is almost always followed by a violent breakout. If you increase your lot size during the calm because you feel safe, you are maximizing your exposure right before the market conditions likely flip against you.
- **Stick to the Math:** Your lot size should be anchored to the **Max Equity Drawdown** (as calculated above), not your recent "easy" months.

The Reality Check

Remember that a backtest is a historical simulation, not a crystal ball.

- **Market Regimes Change:** A strategy might perform perfectly in a trending market but fail miserably in a ranging market.
 - **The Unseen:** Backtests cannot account for events that haven't happened yet—broker server disconnects, regulatory leverage changes, or unprecedented global economic shifts.
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8. Backtest Safety Checklist

✓ MT5 Backtest Safety Check

Data Mode	Must be Every Tick Based on Real Ticks
Trade Count	300+ Trades (Avoid small samples)
Profit Factor	1.5 – 2.0 (Above 3.0 is suspicious)
Expected Payoff	Must be > Spread + Commissions
Recovery Factor	Higher is better (Fast recovery)
Sharpe Ratio	Higher is better (Smooth consistency)
Holding Time	Lower is better (Less exposure risk)
Safe Lot Size	$\text{Max Equity DD (\$)} / 0.10 = \text{Capital for } 0.01$
Red Flag	▶ Never increase risk after a "lucky streak"