3. Application of the martingale strategy in trading

3.1. Principles of martingale – popularity and disappointment.

The Martingale strategy is one of the most popular yet controversial trading methods. Its core principle involves increasing the size of each subsequent lot opened by the robot, which at first glance seems very simple. This simplicity is what attracts many followers among users of trading robots. Unfortunately, however, it is also associated with *numerous cases of lost deposits.*

Nevertheless, with the correct parameter settings and precise mathematical calculations, this strategy can provide stable and long-term profits. We will now dive deeper and explore how to properly apply the Martingale strategy in trading *to minimize risks and maximize results.*

3.2. Adapting the strategy for automated trading.

For automated Forex trading, our abstract Martingale trading robot will use the following interdependent parameters, some of which have default preset values to be used in the calculations:

Table 9-1

Parameter Name	Value	Parameter Function Description
Initial Lot size (LotSize)	0,01	The initial trading lot is the smallest possible lot size, which serves as the foundation for building the strategy.
First Step Pips (StepPips)	10	The distance for opening the first lot means that after each 10-pip movement against the current position, the robot will open a new trade.
Dynamic Step (DynamicStep)	1 – 1,5	The multiplier for the distance of opening the next lot is intended to adjust the distance by a set coefficient with each subsequent order. This helps control the frequency of opening new positions and the overall trading range.
Maximum Orders (MaxOrders)	5 - 21	This is the maximum number of positions that can be opened in one series of trades. This limitation helps reduce the risks associated with endlessly increasing lot sizes and allows better control of the trading range.
The Multiplier Factor (Factor)	1 - 2	The multiplier for the size of each subsequent lot adjusts the size of each new position according to a set coefficient. This allows the trader to compensate for losses from previous positions.

Table 9-2

Parameter Name	Value	Parameter Function Description
Leverage (Leverage)	1 : 500	The leverage increases the trader's buying power by 500 times, enabling them to control significant market volumes with relatively small capital.
Deposit Capital	100 - 400	The collateral capital for 1 lot of an open position for each currency pair is calculated as follows. For EUR/USD at a rate of 1.11, the formula is: $DC = \frac{100\,000}{500} \times 1.11 = 222$ USD
Moving Lim	320 - 550	The size of the probabilistic non-retraceable movement of the currency pair, which we calculated earlier, is accepted as the critical price movement that could result in the loss of trading capital.
Trading Capital	3000 USD	The trading capital that must ensure safe trading based on the given parameters.
Open last lot	180 - 280	The size of the trading range within which the robot will be able to open positions from the 1st to the Nth lot for each currency pair.

Within the selected strategy for minimizing risks and preserving capital, let's calculate the parameters for sustainable trading with the *EUR/USD* currency pair. To start, we will visually represent how the key parameters appear on a chart, illustrating the price movement ranges and the functionality tied to capital management based on these ranges.

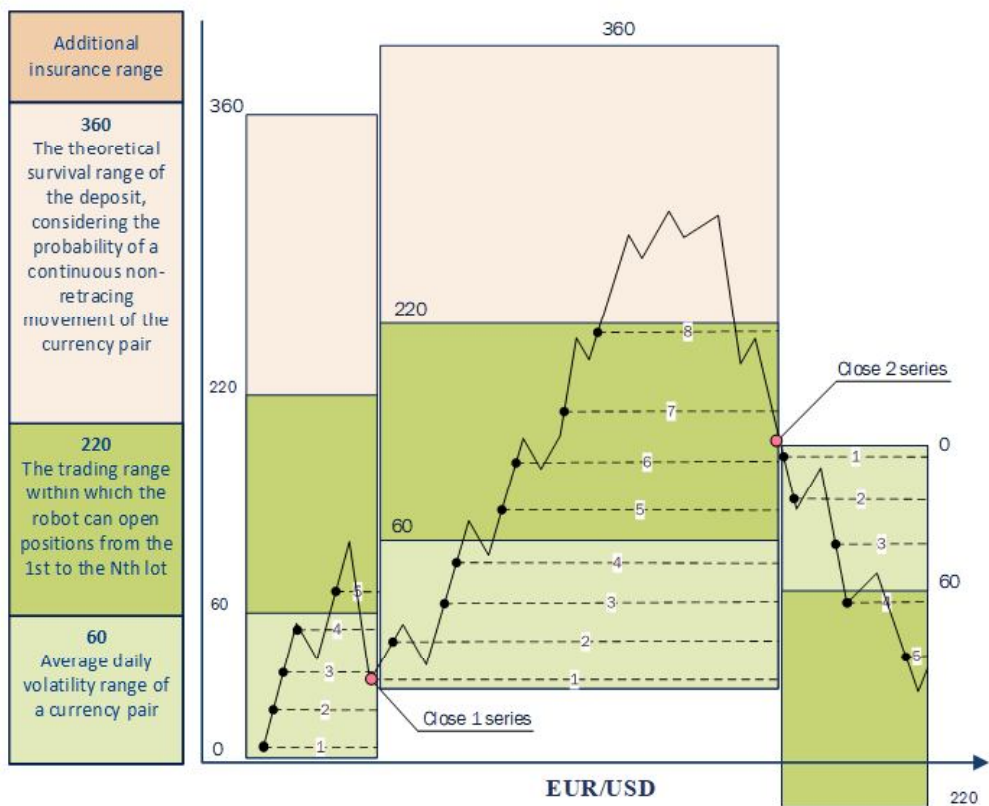| Parameter Name	Value	Parameter Function Description
Moving Lim	360	Size of Probabilistic Non-Retraceable Movement of the Currency Pair.
Open last lot	220	Trading Range Size for the Robot.
Day moving	60	Average Daily Volatility Indicators.

Figure 8