### **Blessing Advanced Features**

#### **Topics**

Money Management Philosophy
Safe Trading Contract Table
Blessing Money Management
Lot Adjustment Factor
Equity Protection
Portion Control
Trade Tracking and Security
Automatic Grid Adjustment
Conclusion

## **Money Management Philosophy**

A wise man once sad, "The safest way to trade is to not trade at all". That being said, trading in any market, especially FOREX is very risky. One way or another, whether or not we are new, we are reading this because we want to make money. Well, Blessing is an Expert Advisor designed to help us automate our trading and unlike the previous quote, trading involves risk.

How much does someone risk to trade? That's a great question and I'm still searching for the perfect amount of money to trade. Whether we trade a lot or a little, if we trade FOREX, dangerous waters are right around the corner if we risk more than we should. This small talking-paper will discuss a philosophy I've adopted and put into practice.

I won't discuss the finer details of Blessing as I am not the designer or writer of this Expert Advisor. I did add this money management feature to Blessing to help us determine how many lots we *should* be trading with a Martingale Hedge Expert Advisor. Blessing trades in a Grid fashion using a Martingale Hedge routine. In addition, I have added an equity protection routine to Blessing to make it a more viable and safe Martingale Hedge trader. I want to discuss why I have come up with the money management routine I use on all Martingale Hedge routines.

First and foremost, how much should we trade? Should we trade 1% or 10%? How about 2% to 3% of our account balance or available equity? Everyone seems to have the right answer. Here is the simple and safe philosophy I use: I simply move the decimal place to the left four times for a standard account and three times for a micro account. What does that give us? That gives us the total "contract" we *should* have in open trades on our account. That amount is highest we should be trading. If we traded manually, one trade for this amount is it. If we wanted to trade two manual trades we take that figure, divide by 2 and trade those two trades at that new amount. Our contract with our broker is the total of those two trades.

What is a contract? It is simply the total number of trades we have out on our account. That is our contract with our broker. Here is what that looks like:

# **Safe Trading Contract Table**

Account Size in \$	Standard Account Contracts	Mini/Micro Account Contracts
1,000,000	100	-
500,000	50	-
100,000	10	-
50,000	5	50
10,000	1	10
5,000	.5	5
1,000	.1	1
500	.05	.5
100	.01	.1
50	-	.05
10	-	.01

Using this chart will help us in our trading. On our \$5,000 account, we shouldn't have any more than .5 standard contracts or 5 mini contracts (micro account) out on trades. This is safe trading, this is smart trading and it's the approach I take for trading my money. It doesn't seem like a lot but it can make me money *over time*. If we trade this philosophy on a Martingale Hedge Expert Advisor, we have a more complicated issue to contend with.

A Martingale Hedge is a way of "doubling up to catch up". It isn't exactly like that but it does use a multiplier to calculate its next trade based on the current trade. Blessing uses this trading method. It uses many levels and total profit calculation to make us money. If we let it run, it has the potential of completely wiping out our account (or making us wealthy). How do we trade Blessing using the previous contract strategy and protect ourselves from complete disaster? We first must understand how the hedge works then we protect our account.

# **Blessing Money Management**

First and foremost, we must make an assumption. Blessing continues to take out trades using its levels and in rare cases, it could trade up to 12 trades (or more) at any one time. But Blessing rarely goes past 7 levels and most of the time, it trades 4 to 5 levels. It only goes higher if the market isn't helping out Blessing's trading strategy. This is how accounts are blown up. For the next section I will assume, at worst, Blessing goes to 7 levels each and every time. A small percentage of the time is may go higher and if it decides to run away, I will use my equity protection feature to simply stop trading. I'll provide more on equity protection in a minute.

With an assumption of 7 levels, we can actually calculate what Blessing will do to us, our trades and more importantly, how many trades we have out (contract). Here's the math:

x = lot

y = Multiplier (amount you are willing to increase each new trade)

```
Level 1 = x

Level 2 = xy

Level 3 = xy^2

Level 4 = xy^3

Level 5 = xy^4

Level 6 = xy^5

Level 7 = xy^6
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Contract = 
$$x + xy + xy^2 + xy^3 + xy^4 + xy^5 + xy^6$$

Using simple algebra here's the formula for finding the number of base lots to trade on a standard account:

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Contracts = Account Balance * (.0001) (the safe trading method selection, standard) (.001) (used if a micro account)

Factor = (y + y^2 + y^3 + y^4 + y^5 + y^6) (the 7 level assumption)

\mathbf{x} = \mathbf{Contracts}/(\mathbf{1} + \mathbf{Factor}) (equation for base number of lots)
```

It's simple to see the elegance of the math and how we can get the base lots knowing Blessing might run the levels up to and past 7. Our hedge multiplier has a HUGE affect on our Martingale Hedge trading strategy!

Doing the math on, say, a \$5,000 account will give us the following:

### Multiplier of 1.4

Level 1 = .02

Level 2 = .03

Level 3 = .04

Level 5 = .05

Level 6 = .08

Level 7 = .11

Level 8 = .15

This is a total of .48 trades out on contract which is less than our .5 from our table above. We can see if Blessing decided to go higher, the next level of lot would be a factor of 1.4 greater and so on. If Blessing did this and went all the way up to 12 levels, there's a possibility of a huge negative P/L and probably, equity protection would be hit (depends on your tolerance). We need to know this math to trade smarter and safer with Blessing. All this assumed a standard account. We can simply multiply these numbers by 10 (if our account size was \$500, the numbers above would be divided by 10) for a micro account and we can see that we're still within our parameters for safe trading. Intuitively, we should have at least \$500 on a micro account to trade Blessing safely.

With these numbers in mind we can see that if we want the base lot to be .01, we back out a contract size of .2385 or \$2385 (\$2500 for rounding sake) minimum required on a

standard account and \$239 (\$250) on a mini account using a Martingale Hedge trading strategy.

### **Lot Adjustment Factor**

We now have an idea of how much we can actually trade safely and an even a better idea of how much we actually need to trade. \$2500 on a standard account and \$250 on a mini/micro account is what we need to trade one pair using a Martingale Hedge trading routine. What if we wanted to trade \$50,000 or \$500,000? Using the chart above, the contract size for Martingale Hedging is 5 contracts and 50 contracts respectively on a standard account. The base lot size would be .2 lots and 2 lots respectively but maybe we don't want to trade even that much! First of all, good for us since we have done something correct in our lives to have this much money to trade FOREX. Or, maybe we are managing a large account for a group of people. Whatever the case may be, we may not want to trade even the smallest/safest contract from the table.

In this case, we want to be even more conservative so we need a way to adjust the money management calculated base lot size for this contingency. The lot adjustment factor will do this for us. In the example above, on a \$50,000 account trading one pair, money management will calculate a base lot of .2 lots. We simply set our lot adjustment factor in Blessing to reduce this amount even further. Today, we want to only trade with .02 base lots on this account so we input .1 as our lot adjustment factor and our base lot comes out to be .02 lots. Maybe we are feeling good and we want to throw caution to the wind. Although not recommended, we could set the lot adjustment factor higher than 1. If we set it to 2, our base lots would be .04. Based on the previous discussion, this is asking for trouble but the lot adjustment factor allows us to do this. In a few moments, I will discuss how portion control can assist us in not only portioning out this large amount by setting and using money management, but also adjusting the lot size to be even more conservative.

Now, all of us who have traded demo accounts for a while have seen a demo blow up. Why is that? Because Martingale Hedge trading is inherently dangerous for the reasons we read about earlier and when we are new to this strategy, we want to see bigger gains. So, on our \$500 account, we put in a micro lot of .5 lots. We can see now how dangerous this thinking can be. Maybe we only have \$50 on a micro account. Doing the math, Blessing will blow that account in short order because the smallest micro lot contract we should be trading is .05. The trade levels with a Martingale Hedge will kill this account fast. If we put Blessing on many charts on a \$500 account, Blessing will kill it. We simply must do the math to see. But what if we were all smart and actually used the smallest lot available manually, .01. Blessing could still run away because of the market so we need equity protection.

# **Equity Protection**

Equity protection was developed to prevent a total blowout of our account. Knowing what we now know about Blessing and "the hedge", we can see if Blessing started taking out higher levels of trades, our P/L would continue to go negative. That's good and bad.

Blessing needs room to breathe and huge P/Ls are common to Martingale Hedge strategies but how much is too much? That's entirely a personal choice. Blessing needs at least 50% of our account balance before we should consider shutting it down. This new feature is programmed into Blessing.

If we set 50%, Blessing will use up to 50% of our account balance, if it needs to continue to trade. If it goes beyond that, it closes all trades and stops trading if that loss takes us below the account balance we had started with initially. That feature is added into the initial menu setting as well. Here's an example:

Our initial account Balance is \$500.

Blessing starts to hedge big and it's been working great so our balance is up to \$800. Blessing hits a -\$400 P/L and closes all trades because we set our protection at 50% Our account balance is now \$400, below \$500 so Blessing stops trading. If our account balance were up to \$1001, the loss would have been -\$500. Blessing would have continued trading because our balance is \$501.

Equity protection is simply a must with this trading routine. Can we trade Blessing on multiple pairs? Sure, if our account balance is multiplied by the number of pairs we trade. This is the safest way to trade! So, the minimum amount we need on a 4 pair Blessing account (mini/micro) would be \$1000. On a standard account, a 4 pair Blessing would need \$10,000. Enable the feature of "portion set" in Blessing and we've just told Blessing we are trading it on more than one pair. If we had a \$1000 micro account, money management would tell us to trade no more than 1 contract. If we told Blessing we were trading 4 pairs, it would take that 1 contract and divide by 4 then use the .25 contract as its number to go into the lot determination routine. As we might have guessed, the total base lot would be .01 lots for each of the 4 pairs in this case. If we didn't identify to Blessing that we were trading 4 pairs (left at one), the base lot for all four pairs would be .04 lots. That could destroy our balance. Or, we could simply trade manually with .01 or .02 base lots per pair. We always have this option. Just simply do the math and follow the safe trading practice. Enabling money management correctly will do the work for us.

# **Portion Control**

I touched on the portion set feature in the previous paragraph. This new feature gives our trading even more control than previously imagined. Not only will it identify to Blessing that we want to take our account a divide it proportionally to calculate the proper lot size but it also manages equity protection even better. Just think, with this feature, we now can trade Blessing without the worry of complete account blowout! How does this new feature truly work?

As mentioned earlier, if we have money management enabled, it will properly identify the correct base lot size. If we want to trade multiple pairs on our account, we would want to make sure we have the proper minimum balance for each pair. 4 pairs on a mini account would be \$1000. With money management enabled, the base lot would be calculated on \$250 for that pair if "portion set" was set to 4. From the previous chart and math, that base lot would be .01 for that pair. Again, if we left it at 1, not only would the

base lot be calculated on \$1000 (.04) lots, we are allowing Blessing on this pair complete access to the full account. If that pair ran away, it could hit the 50% EP draining our account to \$500 or less. That is where portion control now kicks in with a radically new change!

Portion control controls not just the base lot calculation in money management, it sets the amount of our account we want to trade with this pair. It does this simply by dividing your account into "portions". We can use any portion number we desire. 1 would be the whole account, 2 would be half of the account, and 3 would be a third and so on. This has a great potential for us in so many ways.

Let's go through a few examples and you'll see what I mean. We have \$1000 on a mini account and we want to trade Blessing on this account on 4 pairs. We know that we need a minimum of \$250 to trade one pair so we are set with our \$1000. If we know each of these pairs are stable, we simply place Blessing on each pair, set the initial account balance in each instance of \$1000 and set the portion control to 4. Blessing, on that pair, will calculate the proper lot size for that pair and use equity protection on that pair alone! How does it do it? Blessing knows the profit for its pair. From that it will know its portion of account balance to use (portion set 4). From that, Blessing can determine the pair's own equity (its own P/L) and compare it to the allowable account portion you gave it (portion control). Example:

```
$1000/4 = $250 allowed to use on that pair Blessing's current pair profit = $30 Blessing's current pair equity = $280 Equity Protection logic: 250 - 580 > 50\% * $250 (will close trades on that pair if this logic is true!)
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If that pair went crazy and lost \$150, it will close those trades and stop trading that pair because the account portion you told it was 4 and \$250 - \$150 = \$100 and \$100 is not greater than \$250 so Blessing stops on that pair. If that pair's balance were to increase to \$1000 and the same thing happened, \$850 is greater than \$250 so that pair will continue to trade. Here's the beauty of this strategy. One pair may earn more than another and they all contribute to total account balance. Blessing, on that pair uses total account balance to determine its account portion so it is a living function.

Right now I'm sure you're saying, "what if I lose right away"? You've set your protections in each instance of Blessing and it determines whether it continues to trade based on the account balance you have set. Everything just stops. "What if I have a volatile pair that I like and want to trade?" you ask. Simply change the proportion size on that pair to a higher number and it will divide the account by that higher number thus using a lower balance for its trading. Example:

```
Pair 1 $3000/4 = $750 allowed to use on that pair
Pair 2 $3000/6 = $500 allowed to use on that pair
Pair 3 $3000/2 = $1500 allowed to use on that pair
Pair 4 $3000/4 = $750 allowed to use on that pair
```

The numbers all don't add up to \$3000 though. It doesn't matter because through portion control, we are allowing that pair access to that amount. If there is overlap, our gut tells us the USDJPY is the safest so we give it the portion of 2 while the AUDCAD is the most volatile so we give it the portion of 6. See the potential? What about expert advisors other than Blessing?

We must do the math before we even begin to trade and set our controls based on our assessment of the volatility of each pair and each expert advisor. One account with 5 pairs and 3 expert advisors could yield this:

\$5000 base mini account

Blessing is going to be used on 3 pairs

EA 1 will be used on one pair

EA 2 will be used on another pair

Total of 5 pairs

Blessing 1 pair is volatile so we will give it a portion of 10 = \$500 to trade

Blessing 2 is wonderful and we think it will perform well. We give it a portion of 2 = \$2500 to trade

Blessing 3 is unknown but tests have shown it works well so we give it a portion of 5 = \$1000 to trade

EA 1 trades OK. We can control its portion with whatever means we can, we set its risk with manual lots or money management and use stop losses or equity protection to protect our account.

EA 2 principles are the same as EA 1.

Portion control gives us wonderful capabilities with Blessing and protects us from ourselves and our hard earned money. This latest feature gives Blessing that one control we needed to successfully employ complete money management and equity control.

# **Trade Tracking and Security**

A security feature is added for our convenience. Blessing sent a trade comment with each trade to the broker. This feature helped us track our trade in the MT4 platform by showing which EA took out which trade in the comments section of our terminal section. If you don't see the comments section in the terminal area of your MT4 platform, right click in the gray bar in the terminal and select "comment". It will show the comment of each trade. This feature is not without concern.

There are rumors that brokers shut off expert advisors that perform too well. Whether or not Blessing performs well, we still have a security risk by sending trade comment information to the broker. We do want to track that trade though so how do we do it?

The trade comment is now a user settable feature via the menu. We put in whatever we want to secure that trade and still track it in our MT4 platform. Simply type in our words, numbers or anything else and we have trade security and tracking available.

### **Automatic Grid Adjustment**

This feature is added for additional control over the number of pips we would like to use for a profit taking feature. Blessing has a "set default" of 25, 50, 100 and 200 for its grid adjustment and profit taking features. This may or may not be what we want to use depending on the pair we select to trade. It could take an eternity determining what pips and levels we want to use manually so instead this feature does this for us.

Using the Average True Range (ATR indicator) of this pair over a period of one month, we calculate a base grid number and use that as our grid starting point. From that, this feature adjusts the levels of the "Take Profit" and next "Grid Level" in the same fashion as our "set default". This gives us the ability to change the grid as the monthly range changes. Maybe this grid is still not right.

A Grid adjustment factor is utilized to either increase or decrease the base grid number calculated by the ATR indicator. This factor simply uses a percentage in its calculating ability. This factor is multiplied by the value calculated by the iATR to either increase or decrease the start point. This in turn increases or decreases the size of the grid proportionally. It is just another way to "curve fit" the optimization of a pair. To date, the default settings have proved worth while but this feature will add even more flexibility to Blessing's profit taking logic. I encourage you to experiment with this feature as a method of improving Blessing's performance.

## **Conclusion**

Blessing now has a complete set of features programmed. If we turn money management on, make sure the account type is set, standard or micro. As we can see, the math is simple and money management will increase our base lot size as we get a higher balance. Make sure equity protection is enabled. 50% is great. Turn on portion control and limit that pair's access to your total account. If you have a lot of money (good for you), adjust down the base lot size even further using the lot adjustment factor. Yes, we may lose money but then why are we trading in the first place? We risk money to make money.

I certainly hope this didn't insult anyone's intelligence or sensibilities. I hope I provided insight on basic money management principles using "the hedge". I programmed Blessing to trade using these money management and equity protection concepts. If we want to trade another way, simply turn those features off!

Happy Trading!

respectfully,

Jeff Hubbard

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