Plan to Win
Gaining the Professional Edge
Richard (Doc) Ahrens, May 2002

It has been estimated that only 10% of investors consistently make money. It has also been estimated that only 10% of investors have a clearly defined investing plan. Coincidence? Not likely. As one market veteran said, "There are two kinds of investors, amateurs and professionals. The amateurs supply the money."

Just as a good builder has to plan many different aspects before starting construction, a good investor must consider a variety of factors before entering an investment. And some of these things may not be immediately obvious.

For a homebuilder, failing to plan efficient drainage from a property may never cause a problem. On the other hand, the first big rainstorm that comes along could destroy the house. In the same way, failing to consider all the elements of an investment may not lead to ruin, but it certainly stacks the odds against you.

Professionals know that successful investing depends on making sure the odds are as much in your favor as possible on every investment. And the only way to do that is to have a complete plan in place for every investment before you put your money on the table.

There are many elements to a well-planned investment. At a minimum you need to determine:

1. What and when to buy or sell
2. Why you think this investment has potential
3. What to do if the investment goes against you
4. What to do if the investment goes for you
5. How much to risk

Without knowing at least these five things, you do not have a complete plan and you are not ready to enter the investment. [For the sake of simplicity, only long positions will be discussed. But the reader is reminded that the successful investor does not favor long positions over short, and lets the market tell him or her which direction to investment.]

1. What and when to buy

Your choice of what to buy may be based on fundamental criteria, technical conditions, or a combination of the two. For some people, the decision about what to buy is as far as their "planning" goes. They forget that potential comes from a good entry but profit comes from a good exit. It takes both a buy AND a sell to put money in your pocket.

Hopefully you employ an entry method that has been proven to identify potentially profitable opportunities, but whatever method you choose, it should be applied consistently. If it ultimately turns out that the method is not working, then it is time to withdraw from investing for a while to figure out what is going wrong and how to fix it.

The decision about what to buy may include an entry condition. For example, stock XYZ has failed to break the psychological resistance level of $50 several times, but it seems to decline less after each attempt. Based on these facts, your entry plan might be to buy XYZ if it closes above $50 two days in a row.

2. Why you think this investment has potential

If you don't have a clear, well-defined reason for entering a investment, don't do it. This step is important for two reasons. First, if you haven't thought about why you should get into the investment, then you have probably given even less thought to why you shouldn't.

An investment occurs when someone holding a stock and someone desiring that stock agree on the current price and disagree on what the future price is likely to be. Why does the seller want to get rid of it? (Sometimes the seller just needs the cash or is rebalancing their portfolio...but don't count on it.)

Has the seller noticed something that you haven't? One or the other of you is probably wrong. Think about the reasons why this might not be a good idea. Roland Barach[1] advises:

> Look for some danger signs. If none come to mind, this itself is a danger sign. Every situation has some problems or issues of concern. If you feel no anxiety or concern about an investment, you may be denying problems or just closing yourself off from potentially useful information.

Second, once you are in the investment, your reason for getting into it can serve as a weather vane. As the investment develops, if new information shows that your reason for taking it is no longer valid, then exit immediately. Don't wait for other people to notice and don't wait for the market to react. Get out as fast as you can. If you wait until prices start to turn, you could suffer a huge loss.

3. What to do if the investment goes against you

One of the hardest things to do is to remain objective when an investment moves against you and to calmly exit the investment while it is in the red. For the fragile human ego, there is only a tiny difference between losing on an investment and thinking of yourself as a loser. The affective mind will go through all sorts of contortions to avoid the trauma of losing, starting with a subtle but compelling biasing of your perceptions about how the investment is going. This is called confirmation bias. Perry Kaufman[2] described it in the following words, "Judgment tends to interpret all news in favor of the position being held until it shows a profit."

As such, your decisions about what conditions mark the breaking point of the investment must be made before you enter it. Once you are in the investment, your ability to be objective about what is taking place is seriously compromised.

The technical investor has many tools for establishing exit points. Falling through a support level, trend line, or trailing stop can be used to identify the breakdown of an investment. If you are going to use a trailing stop, use a method that takes volatility into account as opposed to using some arbitrarily chosen fixed percentage that will be too tight for some conditions and too loose for others. The lowest low of the last N days is one way to create a simple but effective trailing stop.

Longer term investors might use fundamental conditions to signal that it's time to get out. Some of these conditions might be waning sales, eroding market share, departure of key players from the company, sudden emergence of a disruptive technology in the company's niche market, or significant insider selling.

It doesn't matter what method you use to determine when an investment has gone bad as long as it gives you enough notice so you can cut your losses short. The really critical issue is having the discipline to act on the warning as soon as it arrives. When the market starts to move against you, a lot of novice investors tend to freeze. (I know. I did.)

Experience is a good teacher, but the tuition can be quite expensive. When I was a novice investor, I had three pat excuses for not exiting as soon as I knew the market had turned against me:

1. As soon as the market comes back a little, then I'll exit. (In other words, my ego can't deal with taking this much of a loss.)
2. I'm sure this is just a temporary reversal. (My ego won't let me believe I am wrong.)
3. Hey! It's coming back! (Which conveniently lets me forget the promise I made while using excuse #1.)

After watching a few 10% losses turn into 50% losses, you either learn to pay attention to your exit signals or you blow out your account.

4. What to do if the investment goes for you

An investment that moves in your favor can be just as hard on your objectivity as one that moves against you. This is why you have to plan your winning exit before the investment, just as you must plan your losing exit. And once the winning exit signal comes, you must have the discipline to act on it. Getting greedy almost always ends up costing you money.

The same technical and fundamental tools that are used to determine when an investment has gone against you can be used to tell you when a winning investment has run its course. The way the tools are applied may be somewhat different but the principles remain the same.

One of the reasons to exit a winning investment is that the price has reached its technical or fundamental objective. Some commonly used technical indications that the current move is over (or is about to be) are a confirmed trendline break, lagging relative strength, or decreasing advances accompanied by decreasing volume.

5. How much to risk

How much to risk on any given investment - what Van Tharp refers to as "position size"[4] - is a vital question. Risking too much can turn a winning system into a losing one. There are a variety of approaches for optimizing position size for improving system returns. Ralph Vince, Fred Gehm, and others have written extensively on the subject. But before pursuing optimization, it is wise to address an even more essential issue: survival.

The first rule for survival is to always treat investing as a business. One of the most common causes of business failure is undercapitalization. People starting businesses frequently miscalculate how much money it will take to operate until the business starts to show a profit. This can either be the result of overestimating income or underestimating expenses.

For investors, the biggest expense is almost always the cost of losing investments. And most beginning investors fail to take into account the probability of long runs of losing investments. The key value for determining the probability of runs of losses is found in the equation for system expectancy:

$$E = (AW \times PW) - (AL \times PL)$$

where E is expectancy
AW is average value of winning investments
PW is probability of winning ($0 \le PW \le 1$)
AL is average value of losing investments
PL is probability of losing ($0 \le PL \le 1$)

Before calculating the averages of gains and losses, normalize the value of each individual investment by applying the formula:

$$\text{normalized_value} = \frac{|\,\text{entry_price} - \text{exit_price}\,|}{\text{entry_price}}$$

<<< use absolute value

It takes data from at least 25 investments before a useful estimate of expectancy begins to emerge. If you don't have enough data from real investments, paper investments may be substituted (but it should be remembered that paper investments seldom provide an accurate picture of how a system will perform under the pressures of real investing). A system expectancy of less than 1.5 is a warning flag, especially if commissions and slippage have not been factored into your gains and losses.

The probability of runs of losses comes directly from PL. For a system with a 50/50 win to loss ratio, PL equals 0.5. The chance of two losses in a row is PL squared. The chance of three losses in a row is PL to the third, etc. The probability table looks like this:

Losses	Probability
2	1 out of 4
3	1 out of 8
4	1 out of 16
5	1 out of 32
6	1 out of 64
7	1 out of 128
8	1 out of 256
9	1 out of 512
10	1 out of 1024
11	1 out of 2048
12	1 out of 4196
13	1 out of 8192
14	1 out of 16384
15	1 out of 32768

In my opinion, any chance greater than 1 in 10,000 represents a significant danger, so I look for this point in the table. For a PL of 0.5, it isn't until we reach 14 consecutive losses that the odds drop below 1 in 10,000. Therefore, I consider the chances of seeing 13 or 14 losses in a row as being a very real possibility.

If you are using a system with a 40/60 win to loss ratio (which is actually quite common), PL equals 0.6. In this case, the probabilities do not get below 1 in 10,000 until you reach 18 to 19 consecutive losses.

Losses	Probability
2	1 out of 3
3	1 out of 5
4	1 out of 8
5	1 out of 13
6	1 out of 21
7	1 out of 36
8	1 out of 60
9	1 out of 99
10	1 out of 165
11	1 out of 276

12	1 out of 459
13	1 out of 766
14	1 out of 1276
15	1 out of 2127
16	1 out of 3545
17	1 out of 5908
18	1 out of 9846
19	1 out of 16411
20	1 out of 27351

Once the probability of runs of losses is known, the next thing to think about is your "threshold of pain" - i.e., how much of your investing capital you can tolerate losing during a run of losses. If you don't want to lose more than 25% and you feel that the worst run of losses you are likely to see is 14, then you should not risk more than about 2% on any one investment.

$$PS = 1 - n \sqrt{Cm}$$

where PS is position size
n is consecutive losses
Cm minimum capital

This approach to determining position size is referred to as a "fixed percentage method" because the amount risked on each position is a set amount of your total capital when you enter the investment. There are a variety of other methods but no matter you choose, make sure you check its effect on your principal during long runs of losses.

Putting It All Together

The first time you go through all the steps, it will seem like a great deal of work. But with practice, the time it takes will shrink and its value will grow. Eventually, you will automatically evaluate investments this way.

Having a consistent method for planning investments provides a number of solid advantages. First, going through each of the steps serves the same purpose as a pilot's pre-flight checklist. It helps you to make sure everything is in order before the investment is in motion.

Second, consciously reviewing each aspect of a possible investment can bring hazy doubts into focus. Once you've done a step by step analysis of an investment, you may find that the risk/reward ratio is not as favorable as it may have seemed at first. It also provides a method of comparing investments on an equal basis.

Third, by developing a detailed plan before you enter the investment, you eliminate - or at least greatly reduce - the element of surprise. This is one of the reasons why it is so important for you to work out your entire plan before entering the investment. It prepares you for each of the things that might happen. Then, no matter what the market does, you already know what you are going to do.

The other reason it is necessary to complete your plan before entering the investment is that once you're involved in the investment, you are really _involved_ in it. Before the investment it is relatively easy to be objective. But once you put your money on the table, your desire for the investment to succeed skews your judgment.

Professional investors keep a journal of their investments. They record their entire plan for each investment plus impressions they may have about the investment or the market in general. This is a very useful practice. Putting your plan in writing makes it easier to avoid omissions in the planning process and it makes it easier to spot flaws in the plan when you see it in writing.

A written plan also helps you keep your exit rules in focus. You need to review each of your investments-in-progress at some regular interval. Doing your review with your exit rules in front of you helps remind you of what you had in mind when you entered the investment. This can be useful when changing market conditions have altered your view.

A journal provides an excellent way of reviewing past investments to find out what you've been doing right and what you've been doing wrong. Memory is seldom a reliable tool for reviewing your own performance.

In my personal investing, I have essentially one entry rule but many exit rules. I am a short-term position investor and seldom hold a position for more than five days.

Each day I scan the markets for entries using an adaptive trend indicator, a tool I developed. It alerts me to stocks that may be starting to move. I evaluate the charts of each of these stocks for warning or confirming technical signs.

One of the warning signs is if the previous day had a greater than average investing range. Wide-ranging advances are often followed by wide-ranging declines. I prefer entries where the entire day's investing range is above the moving average.

Once I am in an investment, I re-evaluate the position an hour before the close of the market each day and exit if:

1. The price has fallen below the most recent support level prior to my entry, or
2. The 5-day moving average has started to decline, or
3. The price has stalled and gone into an investing range, or
4. There has been bad news about the stock that day, or
5. The answer to the question, "Would you buy it today?" is not a solid "Yes"

The central idea in my system is to get out rapidly when things go wrong or even if they are simply failing to go right. Money that is standing still can be applied better by transferring it to stocks that are moving up.

In Closing

No one is completely immune from the EFGH monster (Ego, Fear, Greed, and Hope). Your best chance for keeping it under control is to have a complete plan worked out in advance, and then have the discipline to stick to it. Sure, there will be times when the market will back right over you, or times when the market will go blazing off in the direction you predicted - 10 minutes after you have given up your position, but that doesn't mean there is anything wrong with your system. A good investment is not just one where you make money. A good investment is one where you stick to your rules.

Investing to win is neither glamorous nor exciting. It is a lot of hard work and demands constant discipline. The goal of the professional investor is to preserve capital by minimizing losses and to make small, steady gains to keep it growing. Investors who swing for the fences also strike out a lot. If you want to make 50% a year, set your sights on consistently making 1% every week.

References:

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