

*Most Important Of All Is Money Management***David Stendahl**

David Stendahl is an author, a sometime contributor to STOCKS & COMMODITIES, and an authority in the field of portfolio construction and system design. He has lectured at numerous national and international conferences and written articles on evaluation and money management techniques. Stendahl also cocreated various performance analysis software packages, including Performance Summary

Plus (now incorporated into TradeStation). Currently, Stendahl comanages Landmark Asset Management, an investment firm that specializes in investing in the global futures markets.

STOCKS & COMMODITIES Editor Jayanthi Gopalakrishnan interviewed Stendahl on July 3, 2002, via telephone.

How did you get started trading?

I've always been interested in trading, and I realized a long time ago I wanted to be systematic in my approach. So over the last 15 years I've developed a lot of trading systems based on my own work. I took a hiatus from trading while I was trying to improve the analysis of my performance. I thought I had good systems, but I lacked the confidence to actually trade them at certain stages.

If you weren't trading, what did you do?

I started to develop a number of software applications that would allow me to evaluate my systems in greater detail. Most notably, I cocreated the system backtester that you can find in TradeStation. Soon, though, I got hungry to trade full-time again.

So what are you doing now?

I'm a trading principal with Landmark Asset Management, a firm that specializes in trading the global futures markets. Along with my partners, Mark Helweg and Gary Knutsen, I've finally implemented the trading plan I've been presenting at national conferences for the past six years.

Can you tell me about it?

In a nutshell, I've been constructing a variety of trading systems, analyzing

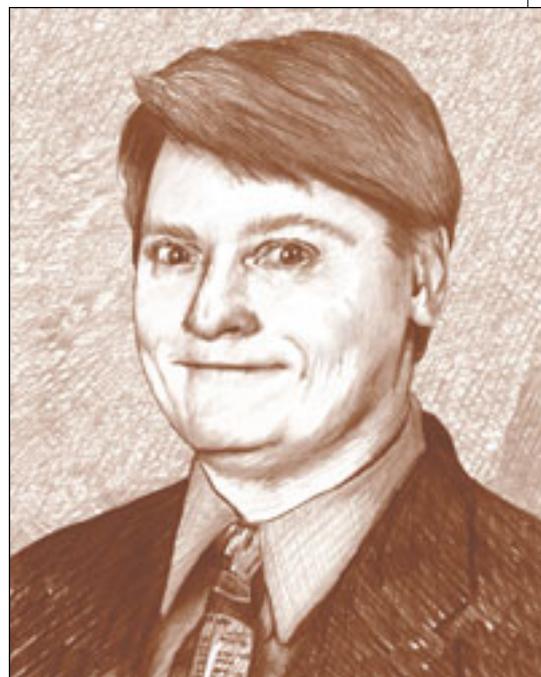
the systems in great detail, and then creating diversified portfolios based on those systems.

What's the most important thing you've learned?

The most important thing in trading is money management. Over the last 15 years, I've continued to pound out intelligent non-curve-fit systems that should work well in virtually any market. I've been improving a process that allows trading systems to work well together. I take different trading methodologies and combine them to construct strong, well-balanced portfolios that are receptive to money management strategies. That's what I've learned and that's what I think is the key to successful trading.

Why is money management so important?

Money management is something everyone talks about, or *thinks* they talk about, but rarely implement. The term "money management" itself is misleading. I think a more appropriate term would be "position sizing." Most systems tell you when to buy and when to sell, but trading isn't black and white. You need some type of formula or algorithm that allows you to adjust for how many contracts or shares to trade. Some-



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times, even a good trading system can hit an environment that's not conducive to its trading style. The system may get whipsawed and lose money for a time, but it's still a good system. If that happened, I would continue to follow the system, but at some point I'd need to increase or decrease the number of contracts or shares traded to accommodate for a changing trading environment.

What kind of formula are you talking about?

There are a lot of algorithms that a person can use to increase or decrease position size applied to a system or methodology. A person who continually traded 100 shares of XYZ stock, or a single contract here or there in any commodity, would be missing a key element in their trading plan.

How so?

Systems ebb and flow; sometimes they do well and sometimes they do poorly. Rather than continually trading the same number of shares or contracts, traders should apply some position-sizing strategies to allow the system and portfolio to dictate when to increase and decrease positions. *That's* where the money is made. Everyone centers on the system, but in reality, it's more the portfolio construction and ultimately the money management that will make or break the account. But people fixate on the system and miss the big picture.

So people should develop a trading system and a money management system and incorporate the two.

Absolutely. The first step is to develop the system and understand its strengths and weaknesses, and then determine its stability. Once you've evaluated that system, you've got to apply an appropriate position-sizing or money management algorithm and allow the two to work together. That way, you don't get an erratic system with big drawdowns. Of course, you might be able to handle the drawdowns; you may even feel comfortable with the erratic nature of the system's performance. But if you go out and apply an aggressive money management algorithm to an erratic trading system, your whole trading plan could implode.

What should you do, then?

What you really want to do is match the money management strategy to the performance of the system and ultimately to the character of the trader, which is why it's not "one size fits all." You have to look at the system and evaluate it. For all intents and purposes,

it's a fairly easy process to match a system with a person's trading style. It's just a matter of taking the time to go through the process.

So if you have a trend-following system that works really well when you're in a trend, and then all of a sudden the market becomes volatile and goes into a trading range, that money management system would kick in?

Absolutely. In fact, there are two ways it can be done. You can apply the money management strategy to the portfolio of multiple systems and multiple markets, or you can apply it to the individual system. A trend-trading type of system would, in many cases, be conducive to a strategy called *maximum favorable excursion*†, which was originally developed by [STOCKS & COMMODITIES' former Editor] John Sweeney. That would be a very applicable strategy to a system looking for trend-oriented markets.

**What are other strategies you'd use?**

Ultimately, when you apply multiple trend-oriented systems across multiple markets, there are other strategies that can increase and decrease positions, such as fixed fractions, at both the portfolio level and the system level. That way, you don't attempt to correct the trending system to avoid a consolidating market. Instead, you improve the system by applying money management.

What you're essentially doing with money management strategies is minimizing the bad times when you're in a consolidating period, and maximizing the good when you're in a trending period.

So what should traders do?

Rather than fixating on how you can change your system, take a step back and look at the big picture. Figure out what improvements could be made on the diversification and money management side, at both the portfolio and the system level. That, to me, is the key.

How do you go about constructing a trading system?

We use the *performance analysis process*, which has five steps. The first step is designing the methodology by coding it with a trading platform like TradeStation or MetaStock. The second step is what we refer to as *robustness analysis*, which attempts to determine whether the system is curve-fitted. The third step is a thorough and deep evaluation of the individual system. Step 4 is when you apply money management at the system level, using something like maximum adverse excursion, maximum favorable excursion, or any formula that adjusts position size.

And the fifth?

The final step involves bringing the different systems together into a single portfolio with an appropriate money management strategy like a fixed fractional strategy. This type of strategy will adjust position size for the overall portfolio by market. It took the better part of five years to accomplish this kind of portfolio construction for my trading, but it's been worth the time and effort.

How much of those five years had to do with the development of the software?

Although the software development process was part of the trading solution, I spent most of my time zeroing in on what makes for an intelligent system. What markets do we want to trade? How much capital do we need to trade the markets? It was a long, laborious process we had to go through. But because everything is systematic, the daily trading and the *emotions* associated with trading are now substantially easier to deal with than if we had not gone through the process. The testing process has given us the confidence necessary to effectively trade the markets. It's extremely helpful if traders go through the five-step performance analysis process, although maybe not at the magnitude my firm has done with 70-plus systems applied to 30-plus markets.

Basically, traders need confidence in what they do.

Yes. Traders need to gain confidence so when they're in the heat of the battle, they can react properly and not allow emotions to override what common sense tells them to do. This type of analysis will help build that confidence in a system. Inevitably, when you're trading, you want to question what's taking place, because no system is perfect. But I've been smacked around enough to know my systems are going to be more correct than I am. I'm just as good a trader as anybody else, but I'm willing to admit character flaws in my own trading, and I need my systems to do what they're supposed to, because they don't ride that emotional roller-coaster.

So what should traders do?

The key is to go through a process so you can match the system with the individual and his or her capital base. A system has to be developed until you can have confidence in it, so when bad things happen to the system or portfolio, you won't bail on it.

In your most recent book, Dynamic Trading Indicators, you paid a lot of attention to low risk exposure. How does someone identify what low risk exposure is before entering a position?

Mark Helweg and I use a concept called *Value Charts*, and also something we call the *Price Action Profile*, which is a statistical analysis used in Value Charts. All we're trying to do is statistically evaluate the market and have that analysis continually change with the market environment. To determine what's overbought and oversold requires using an indicator that is dynamic and ever changing. We want to have the ability to say that in a specific environment, for example, a 10-point selloff is truly oversold.

Depending on environment?

Yes. But in a different environment, a 10-point swing might be very small, and would not be considered oversold. So we need to come up with a statistical analysis or recharting method instead of using traditional open-high-low-close (OHLC) charts to determine something like that.

What do you use?

We use Value Charts. They normalize how the charts are viewed, help determine what is overbought and oversold in different markets. That way, you don't have people looking at different time horizons and different environments. The only way is to use effective analysis methods and statistical charts that are forever evolving with the markets to help evaluate different environments. This will enable you to determine when to get into or out of a particular position.

Does that mean it's all based on value? If something is at a certain price, and you think it's the right value, do you enter a long position?

There's a ton of things you can do, but Value Charts can be used from a money management perspective, since that's the focus. Trends don't always go straight up; there are always hiccups along the way. So if you're a longer-term trader and you get a signal to enter a long position, and during that trend there's a small dip, the Value Charts will indicate the security is oversold.

Then what do you do?

You can use it as an opportunity to leg into more and more positions based on market dips, and you can use that as a mechanism to increase your position size intelligently rather than acting on greed or fear. People are always jumping in, afraid they're going to miss something. They inevitably get into their positions too late. So this is a perfect form of a money management strategy to make some really good money, rather than thinking in terms of buy and sell. You can increase and decrease position sizes during those trades, to maximize some of these trends that others may not be taking full advantage of, because when the market goes into a consolidation phase, their system is no longer working for them.

You mentioned Price Action Profile earlier. What is that and how is it relevant?

The Price Action Profile is another way to view what's overbought and

oversold. It's displayed as a histogram — the bell-shaped curve — and it helps you determine the levels specifically. When we actually construct Value Charts, we use +/-4 and +/-8 as levels that identify significantly or moderately overbought or oversold. Anything between 4 and -4 is considered fair value. The Price Action Profile is just a tool to statistically determine what those particular levels are and define the actual overbought and oversold levels.

Do you mostly enter and exit at the overbought and oversold levels, or do you look for fair value?

We don't look for fair value to enter and exit. We use other indicators. I've got 70 systems applied across 30-plus markets that we're actually trading right now. So we've got trend-oriented systems, momentum-based systems, and a whole lot of money management type formulas. It comes down to the markets and what they typically do. We don't forecast market direction; we simply react to whatever the markets give us.

You use different systems to trade different markets, don't you?

Pretty much. Certain markets are receptive to Value Charts directly, assuming they oscillate between overbought and oversold levels, while other markets use Value Charts more as a position sizing strategy. It's one of these things that, the more you trade, the more you can gauge the kind of a market you're trying to trade. Then you can say that a given market particularly likes trend-oriented systems. The trends are so strong that we would apply Value Charts to those markets to increase and decrease position size appropriately.

Then there are markets like the S&P and the Nasdaq, which are often at overbought and oversold extremes, and in those instances we use Value Charts alone. You can use Value Charts as a system, as a filter, or as a money management-type algorithm. The bottom line is, you need to backtest your Value Chart system or money management application to verify, if nothing else, that there is an improvement in your risk-reward calculations.

Unfortunately, many people don't believe in backtesting. What are your thoughts on that?

If you're using intelligent systems, those capable of adjusting to evolving markets, you can test the results historically. But would you go back as far as the 1700s in testing the results?

No, because that data wouldn't be relevant.

No. I tell people the rule of thumb is to go back just far enough in your testing that you have a similar market. Suppose you want to trade gold. Prior to 1973 and 1974, the environment was totally different from what we are in now because of the gold standard. So you can only go back so far in your testing there.

But pertinent testing serves a purpose.

Of course. Testing can gauge how an idea has worked in the past — what kinds of strengths and weaknesses are evident from historical data, to help the system be better prepared for possibilities. When you're in the process of trading, your emotions change, your demeanor changes, and your mindset changes. Knowing what is good and bad about your system, knowing that market environment changes, and knowing that your performance quality will resemble the system's historical results — these things will prepare you for better trading.

You have to be aware of all the possibilities and keep an open mind.

If you start trading a system you *think* is conservative, then find out it was actually volatile and aggressive, your mindset's not going to match your system. People are doomed to fail if they don't go through an evaluation process. On the other hand, if you believe that your tested numbers are set in stone, then you are fooling yourself. What you're trying to get an idea of is the kind of system you're dealing with, and historical testing certainly helps with that.

It all comes back to the building blocks of what you're testing. If you're

working with intelligent systems, then backtesting is 100% valid. If, on the other hand, you're dealing with curve-fitted systems, the information from the historical testing would be invalid going forward, because you've tweaked and adjusted the system to maximize performance. That's not an intelligent system, therefore the historical testing means nothing. All of our systems are what I would consider to be intelligent: They're not curve-fitted, they're not trying to refine anything. I trade for a living, so I'm not trying to impress anybody with historical results. I need to make money, and the historical testing gives me perspective that the average person who doesn't go through it lacks.

When markets change, do your systems make drastic adjustments?

Our systems don't require adjustments, because they have the internal qualities to be able to subtly adjust their parameter settings — and I'm talking *very* subtly — over two- and three-year time periods. The average person may not have access to as many markets and systems as Landmark. So many traders are forced to trade just a few systems and only a few markets, and will probably feel compelled to make adjustments. But when you have enough money to do it properly, and you've created enough systems and traded enough markets, you don't need adjustments.

I take it you're very much a systems trader.

I'm 100% systematic in my approach, so I am trading the same systems today as I will 10 years from now, because my systems have dynamic qualities. Now, if something dramatic should happen, nuclear war or maybe just a radical new technology, then obviously we'll all have to look at our systems. But with these strategies, what you end up doing is simply adding new systems into the

portfolio, not necessarily adjusting the systems themselves. You constantly increase the number of systems as you make more money, so there is no reason to tweak or adjust the individual systems themselves.

Do you prefer trading trending markets or choppy markets?

Trading trending markets is boring, but that's where the money is. So I'm probably as susceptible as anybody. I get bored by the markets that are trending, but I trade them, and then I get my excitement by trading the S&Ps here and there, and typically end up making just a *little* money. It's a great deal of time and effort, but there's the excitement. Still, the bulk of the money we make at Landmark comes from our trend-oriented systems.

We've got to wrap up. What are your thoughts on the current market?

On the commodities side, things have been slow for a while, but they're beginning to pick up. We've got something we call the *Market Price Movement Index* that we'll be introducing to the public soon, and that's at historically low levels. That means the market for the most part has been pretty choppy, but things can only remain choppy for so long before they explode. We're beginning to see some legitimate trends start, and once we see those trends become better established, we're going to see some huge moves coming from the commodities side. The general indexes are going to weigh in a little, and they're not going to perform as well.

We started Landmark when we did to take full advantage of the inevitable turnaround on the commodities side. That's under way right now, but it's in the early stages. We were up 8.95% in June, in a single month, so the trends are certainly returning, and we feel very comfortable with the direction of the market.

Thanks for talking with me today, Dave.

David Stendahl may be reached at 866 536-7825 or on the web at www.LandmarkAssetManagement.com.



SUGGESTED READING

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†See Traders' Glossary for definition



