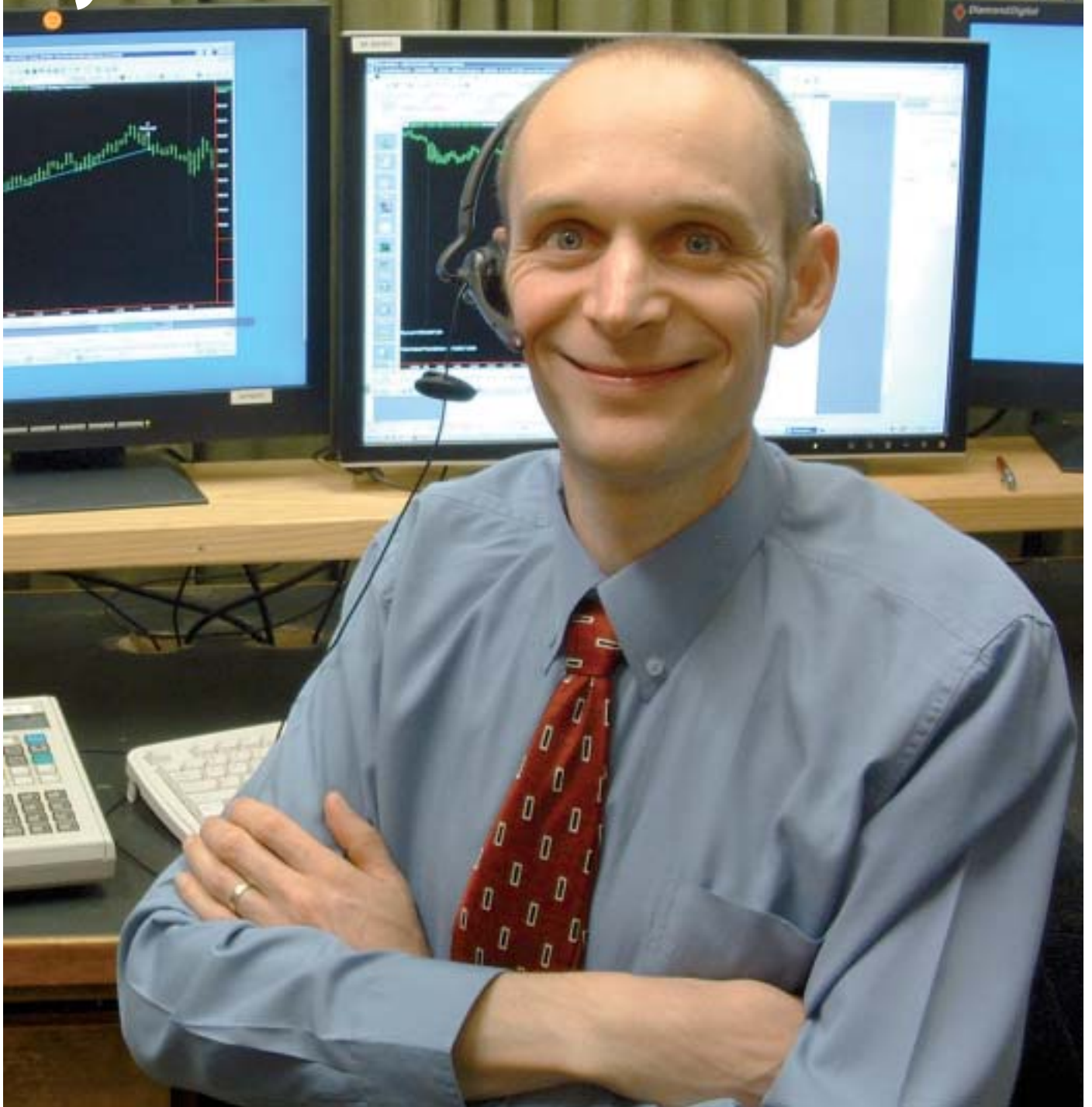


TRADERS' Interview

**Peter Zwag**

# System-Power Down Under



■ Peter Zwag started trading to get away from the typical 9 to 5 work schedule. As a child of Dutch immigrants he grew up in New Zealand and now lives in Australia. In 1985 Zwag began his career as a computer engineer at IBM New Zealand. Today, his mechanical trading systems give him enough time for his family and his two children. Zwag is also involved in mentoring disadvantaged children and adults. He believes in allowing the poor the dignity of work. Giving them a fishing rod, rather than a fish. That's how he sees trading: Work and fight for your food.

**TRADERS':** What did you think about trading before you got involved?

**Peter Zwag:** I knew nothing. I looked at some charts 10 years earlier and couldn't spot any patterns, so I gave up.

**TRADERS':** What enticed you to start trading?

**Zwag:** Trading has great potential to make lots of money. It also frees you from the dollar for time rat race. Any other professional activity had a firm ceiling on my income. My wife and I wanted a passive income. A friend, who had been trading for a while, said it was easy, and he was going to teach me. Elliott Wave Theory was the magic solution.

**TRADERS':** Were you successful at the beginning?

**Zwag:** If we had done the opposite of what the Elliott Wave theorists said, we would have made some good money. It felt like we tried everything. Some things worked, but getting up at 1:30 am to look at charts was not a family friendly option, and it was even worse staying up the entire night, only to lose money. You have got to remember that most people lose money trading, so if you are doing what everyone else does, you are going to lose. You can only have success with a fairly unique system or concept.

**TRADERS':** So, what is your unique system? Can you please explain what you are doing differently than all the losers?

**Zwag:** My systems must remain secret, but I can explain my concepts. I look for simple entry techniques that are validated by my very large number of trades, which must typically include a 30% group of trades that is out of sample. What the losers sometimes do is go to a web page that creates lots of hype with statements like: "I made a few thousand dollars on my first trade". It's hype that sells systems, not real time results. What most people buy is marketing hype. They had a saying at IBM, if something does not sell, more money into marketing.

The loser also sees the magic indicator that picks some nice winning trades. What people have no idea of is the huge volume of trades required to be statistically robust. For example, I found a concept on the QQQ that bought on a limit price well below the market price. It got out on a limit a few days later, or about a week later as a stop. I put this on the E-mini NASDAQ and found it could make 100 trades with not one loss. Your readers are now impressed, will pay me \$10,000 for the course, it was three lines of code, and will find out the hard way - as I did - that it fell apart in live trading. Hundred trades are just not a big enough sample. Most system vendors are probably rather

naive and sincere than dishonest. What I found most scary in the last few years were the good, honest system vendors who knew what they were doing failed. A lot of this was due to decline in market volatility of unprecedented levels. At the same time a lot of the commodities that trend well also stopped trending. Smart people like me who had diversified into commodities got hurt on both markets at the same time. Of course, the people who didn't know what they were doing disappeared even faster.

**TRADERS':** Did you commence trading with a small or large account size?

**Zwag:** We started with just a few tens of thousands, but later put in a lot more money. The problem with small amounts of capital is it leaves you not enough capital to reduce risk diversifying over multiple systems and markets. For a beginner, it is perhaps better to start small because if you blow a big trading account, you have lost the trading game.

**TRADERS':** How many different trading systems do you trade? On how many markets?

**Zwag:** I have about four families of systems. I mostly trade the E-mini Russell 2000, E-mini S&P MidCap, and do a little bit on the DAX and Euro Futures.

**TRADERS':** Do you trade the same systems at different markets with the same setting or with different settings?

**Zwag:** About three quarters of my code would be identical settings or extremely close, with no changes in parameters. There could be minor differences. For example, I might exit the S&P 500 five minutes later at market close, or have a different fixed exit stop price.

**TRADERS':** Do you use the risk and money management rules for all markets or do they vary depending from different market characteristics?

**Zwag:** My risk management is almost always a fixed stop with a market on close exit.

**TRADERS':** Many traders who start with small accounts are blown out of the market in a few weeks or months. You started with a very small account and trade full-time now. Do you think that's a feat that many traders can duplicate?

**Zwag:** I think about ninety-five percent of the people blow their

## F1) Different Markets, Identical Entries



Here you can see identical entries on three indices, as the entry was based on leading indicators, not price action on the chart.

The trades of figure 3 are from a later variant of Turbo Trader called Turbo Trader Ultimate. Date shown is March 5 2007. The system was designed to trade three indices with no changes in parameters. Note that all entries were identical, as the entry technique was to trigger on leading indicators, not the price action of the symbol traded – only the stops key of the symbol being traded. Note also the dramatically different exit on the E-Mini Russell 2000 compared to the other indices. A lot of traders put all their money in one system and one market. The greater the diversity, the lower is the chance of drawdown. The results of Turbo Ultimate across the indices were correlated, but still gave significantly different monthly returns.

accounts out in six months. Most people are either following a bad method or people who can't make money. Most do not know they are following losers until they learn the hard way by blowing out their accounts. Every one I have spoken to went down this path. Few people survive. Ninety-five percent or more do not have the skills to work out a good system from the bad. The basic thing they can do is to only trade something with a real track record.

Many educators and system developers don't trade their own stuff, and do not publish their own broker statements. The traders who win and create their own methods normally blow one or two-hundred thousand and take many years of losses. I met one guy who lost lots of money seven years in a row and then came good.

There are also many systems that make money in theory only, but

not in practice. I could give many examples, but it is often because liquidity is bad, system results claim they are filled on limit orders, but the price touches the limit orders, but does not fill. Other times, profit per trade is so low, slippage takes all the profit. Even trading one contract you are always going to get an average of one tick round turn slippage on E-mini contracts.

**TRADERS':** Do you believe that people have to lose first in order to become good/better traders?

**Zwag:** That's like saying, do you believe a toddler can walk with having never fallen over. It's possible in theory, but never happens. New traders would not have a clue how hard it is, and the amount of pitfalls.

**TRADERS':** How do you overcome the problem with systems that work in theory, but not in actual trading? Does it make sense – for example – to eliminate a certain percentage of trades, winning trades, in order to get more reliable results?

**Zwag:** Take the stock buying system as an example. I made a system that bought on about 5,000 US-stocks at roughly fifteen percent below the current trading price. Exit one or two days later on a limit, else four days later at close. In theory it was awesome. In practice it bought stock that went bankrupt, stock where trading was halted, stock that gave share splits. It was a nightmare getting stuck in trades you could never get out. It was like going fishing. Isn't it easier to catch the dead fish floating on the water, rather than the fish that are swimming! More insight showed that the dead fish were dead for a good reason, and should not be eaten. Prices might touch your limits, but you might not get in or out. I spent about three months of work on this and lost just a few thousand dollars.

**TRADERS':** What kind of trader are you?

**Zwag:** I have tried almost everything, but now I am hundred percent a mechanical system trader. I primarily trade the US-Market, so all my trading occurs when I'm asleep. This is very good for family life as I don't need to be glued to the computer. It does require a large investment in infrastructure as there are so many things that can and do go wrong with technology. But there is one positive side: No emotions are included when you trade completely mechanically and when you are physically away from the market.

**TRADERS':** What does that mean for your work? Just press the button or does it involve a process in order to improve the system, reevaluate them, etc.?

**Zwag:** I am not one for changing systems after they are released. Often after a year or so, I might see if improvements can be made, but more often than not I do not change things. I am not in the school of thought that likes to re-optimize systems often.

**TRADERS':** How does a typical day then look like?

**Zwag:** After the children are asleep, I remotely log on to my servers located in various parts of the USA. These execute and monitor all my trading. I check if everything looks well, respond to emails from Europe as they wake up. This is valuable family time so I try to be as quick as possible. I then retire with my pager next to my bed, and a speaker for alerts wired to my bedroom. Most nights I do not get woken up, and I get up around the close of US-markets. I then check trades, respond

to US clients etc. Then it's time to pray, read the bible, have breakfast, go on my rowing machine. About now my four-year-old wanders down and gives her daddy a nice hug. By then my wife is up and we feed the children. In the mornings my mind is sharper, so I try to spend the first few hours doing development work and research.

**TRADERS:** What are some of your market concepts or trading ideas?

**Zwag:** I work on finding entry techniques that work across many indices, ideally with no changes in parameters. My exit techniques are always simple: market on close, protective stop, profit target and on a few occasions a trailing stop. My favourite market is the E-mini Russell 2000, followed by the E-mini S&P MidCap. I think the Russell 2000 is the best market in the world as it trends well, and there are trading opportunities every day. The MidCap 400 is a little less volatile and liquid, but still good. A lot of people start with the E-mini S&P 500. This is a mistake. While the liquidity is perfect, it trends very badly.

**TRADERS:** Are you talking about intraday trends?

**Zwag:** Yes, especially the Russell 2000 is a good trender. I do not do much daily trend systems as I cannot get the sample size I require to make a robust model.

**TRADERS:** How long are your typical trades?

**Zwag:** Most are a few hours. Perhaps one percent are over night. I like highly active systems, as they give big sample sizes to statistically validate a trading system. The risk is also lower if no overnight trades are held.

**TRADERS:** When does an intraday trade become an overnight position?

**Zwag:** I have only one system that results in just a small percentage of trades that are over night. It exits fifty percent of its positions at close, and, on rare occasions if it sees a bullish market, holds overnight.

**TRADERS:** Are you a systematic trader?

**Zwag:** Yes, one hundred percent. This is partly because I am not willing to watch computer screens all night. It also removes the subjective element in trading. There are subjective trading systems, but I would never trust one, unless I saw a real live broker statement.

**TRADERS:** Where does discretion come in?

**Zwag:** Never in trading, a little in money management. I'm aware that from November to the end of January are my worst months, and June and October are often the best months. For example I will never increase position size from November to January.

**TRADERS:** How important do you consider statistics about your trading results?

**Zwag:** They are critical. I like to see a sample size of over 1,000 trades ideally, with a linear profit curve and profit per trade of at least \$ 80, less slippage and commissions.

**TRADERS:** Besides your November to January pattern, are there any other lessons you've learnt from your statistics?

**Zwag:** I learnt from a simple cheap package called Market System Analyser that my trades are more profitable when I am in a drawdown.

If I'm in a 10 point moving average, which means I'm in a drawdown, and my average trade might be, let's say \$120. If my equity is above the moving average, my average trade might be \$70. I don't use this much for position management, apart from increasing position size when I am in a drawdown, but still have the cash to allow for the minimum capital requirement, four times max past historical drawdown.

**TRADERS:** Do you mix time frames?

**Zwag:** My systems sometimes look at many time frames and often look at multiple markets or leading indicators outside the price chart I am trading. In a few systems I can trade multiple markets without keying off the market I am trading. For example, Elite system can trade about five indices, without even needing to key off the index I'm trading. That's like saying you can make money selling real estate, without looking at the particular house you end up buying. You make your decisions to buy a property by the leading indicators of the property market, then just go and buy a house you have never seen. This is one of the secrets why Elite could trade so many markets with no changes in parameters.

**TRADERS:** Do you have an example for such a leading indicator?

**Zwag:** That is a good question. It took me years to figure that out and gives me a competitive edge. I'm not telling.

**TRADERS:** Do you work more with indicators or with chart patterns?

**Zwag:** I look at specific entry setups, but never use indicators.

**TRADERS:** Does volume play a role in your trading approach?

**Zwag:** Never. On futures I do not think volume is a leading indicator. To tell the truth, I've never put a lot of work in this one.

**TRADERS:** How do you test your trading ideas?

**Zwag:** See if it works on one index – often the Russell 2000, and then try with no changes in settings the E-mini MidCap and the other indices. I will also try it on the pit Russell 2000 and S&P MidCap 400, although nowadays the pit contract is very thinly traded. It at least gives you an out of sample size going back many more years. Elite ES gave almost identical results keying off the big SP pit contract as the E-mini, so that was a healthy sign. If results fell apart going to the big SP pit contract, I would think the system was not robust. I then run some analysis for walk forwards tests, and optimise over multiple indices, rather than one index. I tend to optimise on settings that give the biggest profit factor, but make sure it's the best overall – not peak variable setting. I then test for a month or two and will release a system if it made new highs in equity.

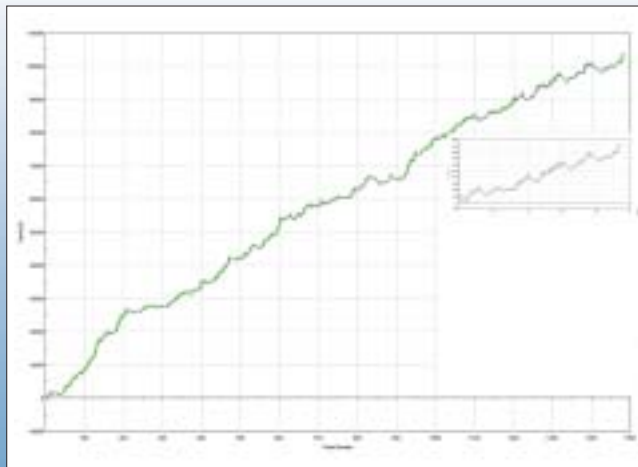
**TRADERS:** Are you still looking for new setups?

**Zwag:** Always. Good systems can and do fail. Bad ones fail very quickly. Good setups are hard to find.

I'm a full-time system trader and I went through 8 months full-time work without coming up with one system. What a discouraging time! Do you wonder why I think people who want to make their own system in a week - and have a job - have no idea what they are doing! The more you know about good systems vs. bad, the longer it takes to



## F2) Peter Zwag's Turbo System Performance



The hypothetical curve of Turbo Trader 2/2/2002 to 3/7/2007. The second small graph is the live trading result of his test account. Real trading started 9/27/2005. Out of sample trading on the live account gave similar results to in-sample trading. Zwag: "Sadly this is not often the case is real trading, but is normally assumed by traders."

build one that meets your criteria. After eight months, Turbo Trader was born. This has been one of my three best products ever. Released in Sept 28, 2005 it has clocked up real time profits of \$18,157.60 today, with a recommended account size of \$10,000. Subscribers profits would be significantly down from this if brokerage, lease fees and higher slippage took its toll on profits. The negative to E-mini Russell 2000 and E-mini S&P 400 is that you can only go to a max on roughly 50 contracts before slippage is too high. That's why I am excited about Elite ES that, from my perspective, still has unlimited liquidity. For liquidity reasons I will never allow anyone to trade unlimited contracts. In the past I have had means of execution that couldn't control the amount of contracts clients' trade, with painful implications to slippage. Ask yourself, what is fair and a good business sense? To allow everyone to trade unlimited contracts, and allow slippage to cream everyone's profits, or allow one person to trade 50 contracts, or allow 50 people to trade one contract.

This is also why I don't give code out to anyone. I would then lose control of how many contracts are traded. In the USA, I also found a few brokers who illegally traded their own house and other clients' accounts without telling the system vendor. This is bad news for the client and brokerage industry as a whole. The clients get high slippage and the system vendors don't give out code to the brokers, as they can't take the risk of getting a dishonest broker. The beauty of the strategy runner is that it lets the vendor give out signals, without giving away code. It allows complete control over the amount of contracts traded, and is passive for the client. Once the client sets up a system, he can turn off his computer. There are a few exceptions or things to go wrong, but they are rare.

**TRADERS':** How many different setups do you use for your trading?

**Zwag:** I have a number of systems, but many are identical, they just trade the same system on multiple indices. It's the systems that trade multiple indices with no changes in parameters that seem to last over time.

**TRADERS':** How do you manage your risk?

**Zwag:** Fixed risk normally per trade, and allow four times max historical drawdown for capital requirement.

I assume a system will hit twice its max past historical drawdown. If you're not willing to take this risk don't trade. Look at Turbo Trader. It had about two 3k drawdowns in its sample results. It then got about four similar size drawdowns in the next year and a half. Some people stopped trading at the bottom of the drawdown, to miss the rapid run up of profits. Others increased position size at the peak of new equity highs, to wipe out their profits twice over. See F2. That's the REAL profit on my personal account and on the account from customers at Futures.de.

But everybody should know: The day will come and drawdowns will be topped. In such a case, many traders get nervous. I go a different way. In drawdowns I mostly increase the lot size.

**TRADERS':** How big is the fixed risk? Is it a percentage of the equity?

**Zwag:** Fixed risk is whatever value the system gave for best results. This is nearly always fixed at between \$300 to \$700 at my Russell systems. It is definitely not a percentage of the equity. Some people trade on exchange minimum ratings. If I did this I would blow out my account very soon. And I live from my systems. Trading my systems is my income. It's the income for me and my family. So I take care of every trade. Additionally, I have customers who trade my systems over Strategy Runner on Futures.de. So risk and money management are primary points that lead to success or to a blown account.

**TRADERS':** How do you determine when you are wrong in a trade?

**Zwag:** I got stopped out or exit the market on close at a loss. Happens 50% of the time. I wake up to find I've made or lost a fair bit of money.

**TRADERS':** So your win/loss ratio is 1 to 1. How is the relation between the average size of winners and losers?

**Zwag:** My win/loss is not 1 to 1, its higher depending on the system, but my winning percentage would be a little over fifty percent.

**TRADERS':** Is money management an independent topic?

**Zwag:** It's very, very important.

**TRADERS':** How much of your equity do you risk per trade?

**Zwag:** \$300 to \$800. About \$300 is most common. A few systems can trade up to four contracts.

People wrongly assume that it's four times riskier to trade four contracts. While that's technically true, if you get the same entry on multiple indices, the probability of the trade winning is much higher. If it's a false breakout, just one contract is more likely to enter.

**TRADERS':** How do you manage your open trades?

**Zwag:** My computers manage this. No emotions. I have multiple servers in multiple data centers checking on each other. I verify my theoretical positions with real positions. If they are out of sync for more than a minute, I get woken up. I have a few computers in different parts of the USA that do this checking, so it's very solid checking.

**TRADERS':** What kind of stops and/or profit targets do you use?

**Zwag:** Fixed stops and fixed profit targets. My comment is profit targets and profit locks rarely improve performance. Stops are critical.

**TRADERS':** In terms of executing trades, is that a subjective process or do you do that mechanically?

**Zwag:** All 100% mechanical. As I mentioned before: Emotions should be banned from trading.

**TRADERS':** What is the relation between your winning and your losing trades?

**Zwag:** My wins tend to be bigger than losses. Systems that have 90% plus win rates tend to have massive stops compared to wins. I don't like them. They often get very nasty when out of sample performance fails compared to in-sample performance.

**TRADERS':** What was your worst drawdown?

**Zwag:** In the first few years, I had a good dent taken out of my account. We had no debt of any kind and traded with money we could afford to lose, but obviously didn't want to. Trading is dangerous; especially when you consider most people will fail. I've seen courses where the guy says: get a big credit card, and pull the money out for your trading account. That's crazy. We live in a society that is comfortable with debt, and poor in personal financial management. If we traded and lost money that would lead to our bankruptcy the stress would have been even worse. If a system hits a drawdown twice its previous historical drawdown, I consider it busted.

**TRADERS':** What do you find most frustrating with trading?

**Zwag:** Clients and other traders who don't know what they are doing, who make bad decisions. I see this all around me all the time.

**TRADERS':** When did you realise that trading wasn't going to be just an attempt in the markets, but was going to be a full-time career for you? Or did you sense that from the beginning?

**Zwag:** It was always a full-time profession from the beginning. My wife and I had a dream or vision to have a passive income to fund various causes. We now have a good income and can fund things we feel are important. The income however is not at all passive. I can at least say I work less hours than I used to. Australians work longer hours than most other nations in the developed world. This is a bad thing and is not good for family and quality of life.

**TRADERS':** Where does the psychological element come into play?

**Zwag:** Nowadays when I'm in euphoria because of wins, I tell myself a nasty drawdown is a month away, and when I'm in a drawdown I tell myself new account highs are a month or two away. I look at my account balances every three months. If I added up all my fortunes each day, I would be an emotional yoyo. In saying that, I only get perhaps two bad months a year. This is perhaps not a good concept for novices. Psychology is a big issue for subscribers. I tend to enter in a drawdown and not increase position size, while clients tend to enter on new equity highs, and increase contracts on new highs. This difference alone can make people lose money overall on systems that make money overall. I am slow to increase position size. This means I take less and less risks as my account grows, and have less and less stress.

**TRADERS':** Any words about fear, greed and self-esteem?

**Zwag:** People are greedy, so they tend to over-trade their capital. I see myself as a steward of God's money, so if I make or lose it, it's not mine anyway. The purpose of wealth creation is to supply the needs of ones family and to empower those who need money to fulfill their vision. If your emotional state is linked to the days trading, you might be better off putting your money in the bank at a fixed interest.

**TRADERS':** What do think is the difference between you and so many other traders who were kicked out of the game?

**Zwag:** I learnt a few important lessons. Everyone falsely assumes that the past trading performance of a system will be the same as the future performance. While this is one of the best measures of a trading system, it is a false assumption. This also applies to money management. Previously, I spoke of the neat programme Market System Analyser. The weakness of this programme is that the user wrongly assumes his system will continue in the future as it did in the past. My other lesson I learned was that the probability of future success is directly related to the sample size of trades and years. I always look at samples over the full length of the contracts being traded, and wouldn't dream of trading anything with less than 300 trades. I prefer a sample of 1000 or more. I also like a system to work over multiple indices with little or no changes in parameters.

The other lesson was in money management. If a system made its 100 percent profit in time, we would just double up our position size after a sharp run-up in equity. A good rule is that if a system has made a lot of money in a short period, it is due for a sizable correction. This is because markets have seasons, and you don't stay in the ideal season forever. This is why people who chase the system of the month tend to always lose money more often than not. Most traders simply do not have the patience to wait for a good system to make money. Drawdowns and lack of new highs for a period is part of trading. Traditionally, we make lots of money in October, then double position sizes to wipe out our profits twice over in November or December. Nowadays, we increase position size very, very slowly, and diversify across more and more systems. For my own systems, I'm also aware of season trends. We like volatility and good liquidity, so we are very cautious from November to late January. Nowadays, with numerous systems, it's fairly uncommon for me to have a bad month trading, and I am wise enough to know that drawdowns will always come and go.

**TRADERS':** So when you're not trading, how do you enjoy your free time?

**Zwag:** Going for walks with the family, parks, social get-togethers etc. I used to work very long hours, but now I'm more disciplined, focussed on other important relationships, and no longer have financial pressures. Trading for me is not a passive income, mainly because I spend a lot of time on making sure execution of trades is as good as possible, and I work on new trading concepts. If you trade professionally, and if you live from trading, then it is a full-time job. Not 8 hours, you live with it 24 hours a day.