AmalgaTrader MAGAZINE

INVEST | TRADE | PROFIT

Trailing Stops: TURBOCHARGE YOUR RETURNS

BLACK BOX TRADING A New Investing Paradigm

Oil, Gas, Nuclear: WHERE DO WE GO FROM HERE?

Chris Vermeulen Interview BIG RETURNS USING AN AUTOMATED SYSTEM

Experts Share Their 2014 Predictions ...& MORE

AmalgaTrader MAGAZINE

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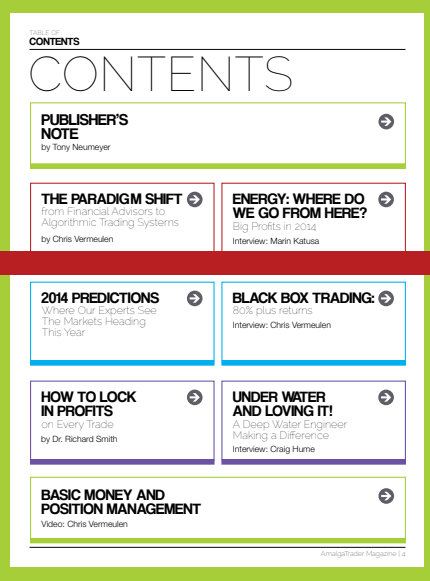

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PUBLISHER'S NOTE

Happy 2014!

Welcome to AmalgaTrader magazine, where we cut through the clutter to bring you relevant and actionable insights from professionals that will elevate your investment and trading strategies to a whole new level.

In this, our third issue, we interview Chris Vermeulen. Some of you may know Chris from TheGoldandOilGuy.com. He's an extremely accomplished trader and investor who began trading professionally as soon as he was legally able to - not many of us can lay claim to that degree of passion! We talk to Chris about an amazing Black Box trading system that's showing annual returns of 80%. His system is so impressive, that I've decided to personally invest $50,000 in an automated account. I'm really looking forward to reporting the results to our readers in each issue, once the system gets started.

With energy prices remaining high and seemingly greater controversy at every turn (green, fracking, nuclear?) Marin Katusa looks at the reality of the market today and gives us some insight as to where we might maximize our investing profits in the New Year and beyond. Marin's track record in picking winners is unprecedented. In our exclusive interview, we cover the entire energy spectrum with the latest developments in oil, gas, nuclear and green.

We also have a fascinating interview with Craig Hume, a Subsea Systems and Hardware Engineer, about deep water oil in the Gulf of Mexico, the challenges and opportunities, now and in the future. He shares some interesting and perhaps different perspectives about the Deepwater Horizon disaster. And, he talks about extraordinary technologies that are transforming the deep water oil recovery scene. Did you know that one of the best ways to maximize your investment gains is to use 'trailing stops'? Our article from Tradestops will enlighten you to the truth of this superficially simple, yet very powerful method of managing your risk and increasing your returns.

And lastly, a few of our expert contributors have shared their 2014 predictions for gold, the S&P and other markets. It's always interesting to try and predict where these markets will be a year from now.

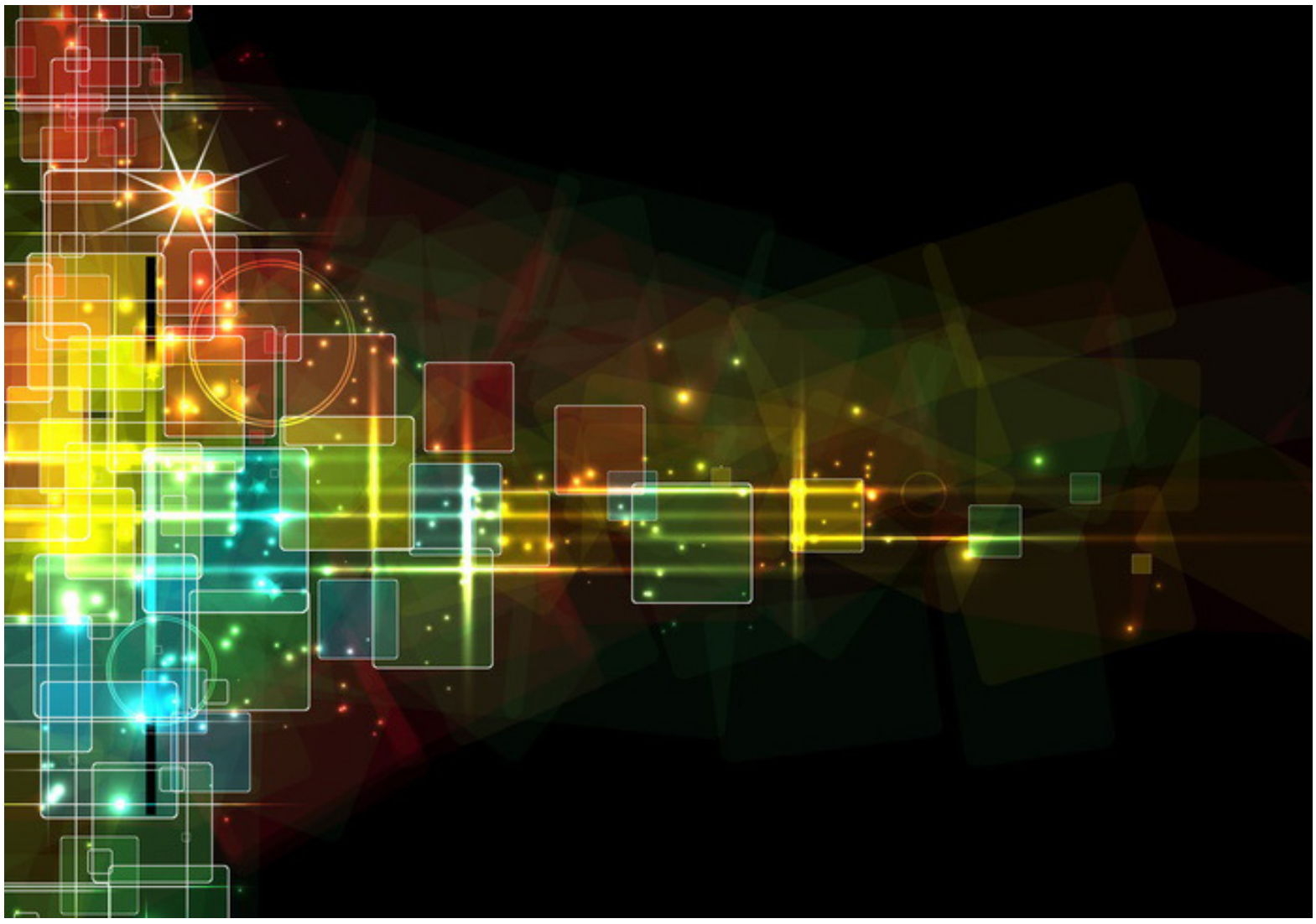
We hope you enjoy and profit from this issue of AmalgaTrader Magazine. We have some extraordinary plans for the magazine in the coming months. So stay in touch, and keep an eye on your Newsstand.

Very best wishes for a healthy and profitable 2014.

Tony Neumeyer

Publisher
AmalgaTrader Magazine

THE PARADIGM SHIFT
from Financial Advisors to Algorithmic Trading Systems



Over the past 50 plus years, people have been using the same methods of investing for their future; not much has really changed. The norm of hiring a financial advisor to put your money into generic mutual funds, RYDEX funds and insurance plans (while taking a two percent annual fee on your life savings) has been good enough for the masses. Because it's the norm and what everyone has and is doing, we naturally think that it's the right thing to do with our money. But is good enough really GOOD ENOUGH for you?

Think about it. You work hard, save money, plan for your future and hire a financial advisor to guide you through the shark-infested waters of investing so you can live your dream. But what really happens? You hand over your money, and you put your trust and future into the hands of someone who simply follows an old-school way of investing. This method is loaded with front-end fees, back-end fees and annual

fees. And in most cases, it does not make you money during market downturns!

Your retirement money isn't protected in the event of a market crash or multi-year bear market. So what happens? You end up riding the financial roller coaster, which is something you don't really want to do (or do again for that matter). But you do it because it's the only way you know and the way everyone else has done it.

The industry average is roughly one percent, but fees can range from 0.80 percent to two percent in the U.S. and Canada. Typically the more assets you have, the lower the fee. While that may not sound like much up front, don't forget that most of these funds they put your money into also have roughly another one percent annual fee. This extra percent you pay makes a big difference to your long-term return.

For example, an investor with a $250,000 portfolio earning seven percent per year would be sitting on $967,000 after 20 years. Had they paid an advisor using mutual funds with a two percent fee of their assets during those years, however, their account value would fall to $663,000 - a difference of $304,000.

So, the financial advisor who likely didn't protect or make you money (although he or she might be a perfectly nice, competent professional with excellent intentions) during the multiple bear markets that you would have encountered, made away with a good chunk of your nest egg. They did this with virtually no downside risk to them; they get paid every year no matter what the financial market does, whether they made you any money or not.

Does that sound like a plan you want to stick with going forward?

It doesn't to me.

The two most important things you can do to improve the performance of your portfolio is to reduce your trading fees and to have a proven strategy that makes money in a bear market.
The old-school way of investing for your future, without downside protection and without a trading strategy for your money during market crashes and bear markets, is just that: old school.

YOU CAN USE PROVEN ALGORITHMIC TRADING AND INVESTING STRATEGIES.

Today, you can do things differently. You can use proven algorithmic trading and investing strategies. This not only allows you to potentially avoid market crashes and multi-year bear markets, but you can actually profit from them handsomely. Algorithmic trading systems are starting to gain traction with the average investor because the old way of doing things just doesn't make sense anymore.

People are finally starting to share more about their financial situation and experiences, and they're realizing that they've

had the exact same financial outcome and ridden the exact same emotional roller coaster. This realization has compelled individuals to gain a better understanding of what has happened, and to investigate new ways money can and should be managed. In short, they're having an epiphany. Epiphanies are relatively rare occurrences, and they generally follow a process of significant thought about a problem. They're often triggered by new information, processes and tools that become available.

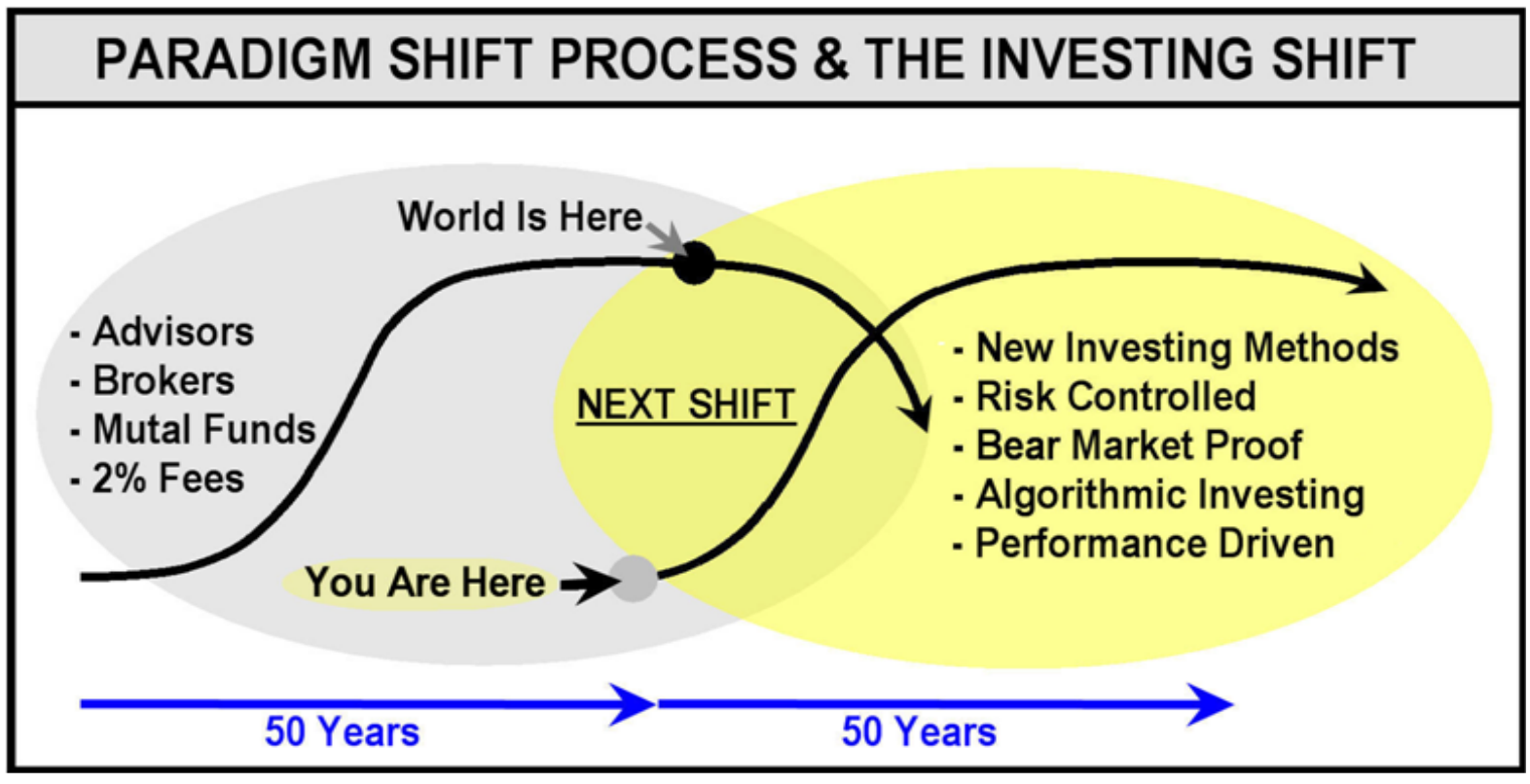
So what does all this mean?

The investment world is about to have a paradigm shift. It means the old-school model of investing is being challenged with newer, more sophisticated and proven rule-based strategies that perform well in all market conditions. These systems also automatically manage positions and risk for maximum benefit and income potential.

In order to truly understand 'Boom and Bust Cycles', you'll need to review the work of Carlota Perez (especially her book Technological Revolutions and Financial Capital). In this work, you can see how economic paradigms rise and fall.

Perez explains an interesting phenomenon: every 50 years or so, there have been new economic structures that caused the collapse of what came before. Perez identified five economic paradigms (or "Great Surges") throughout this period:

- Industrial Revolution in Britain (1770-1830)
- Age of Steam and Railways (1830-1870)
- Age of Steel, Electricity and Heavy Engineering (1870-1920)
- Age of Oil, Automobiles and Mass Production (1920-1975)
- Age of Information and Telecommunications (1975-20??)
- **The use of Financial Advisors and Mutual Funds (1970-20??)**



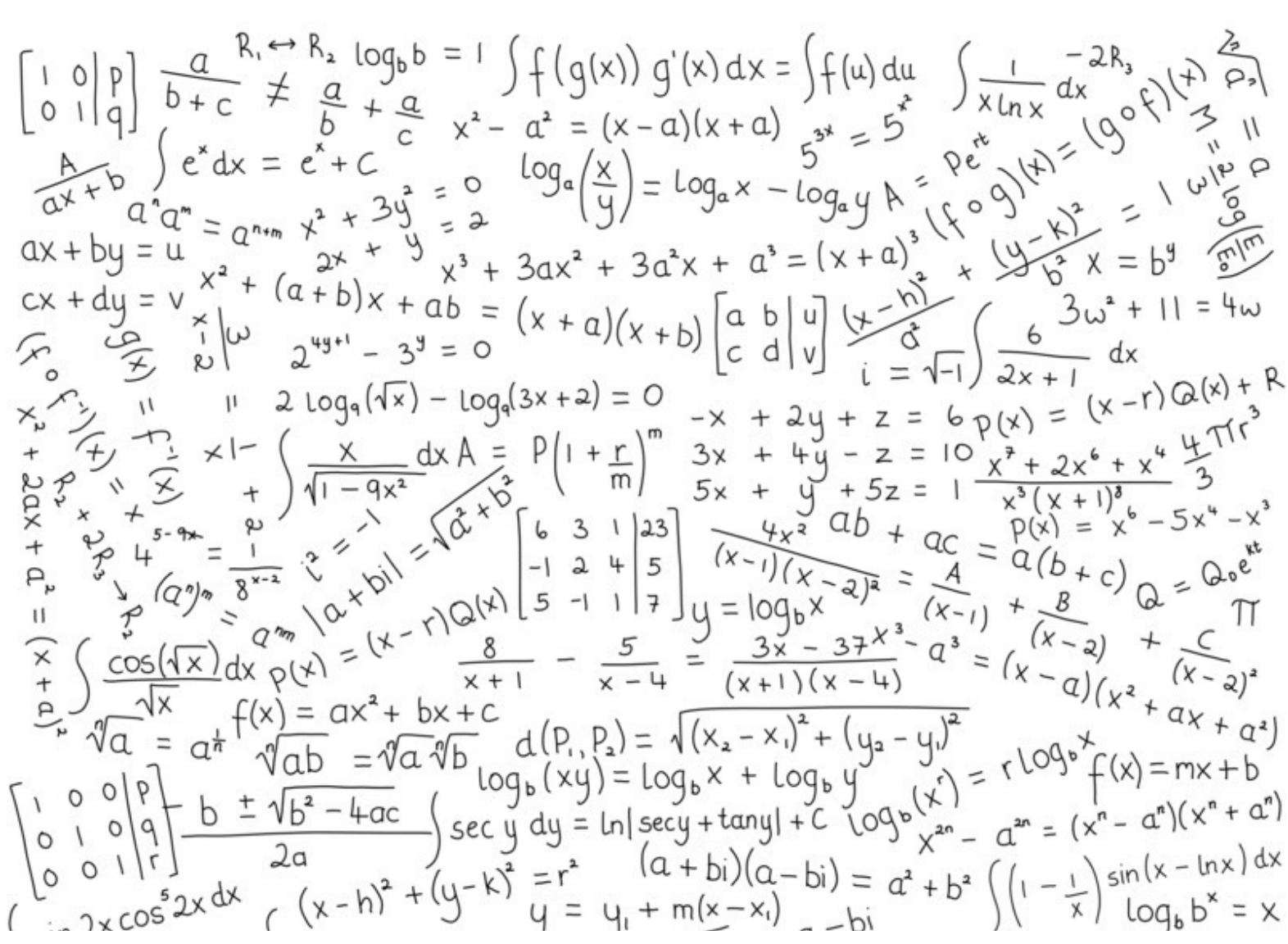
Be aware of paradigm paralysis

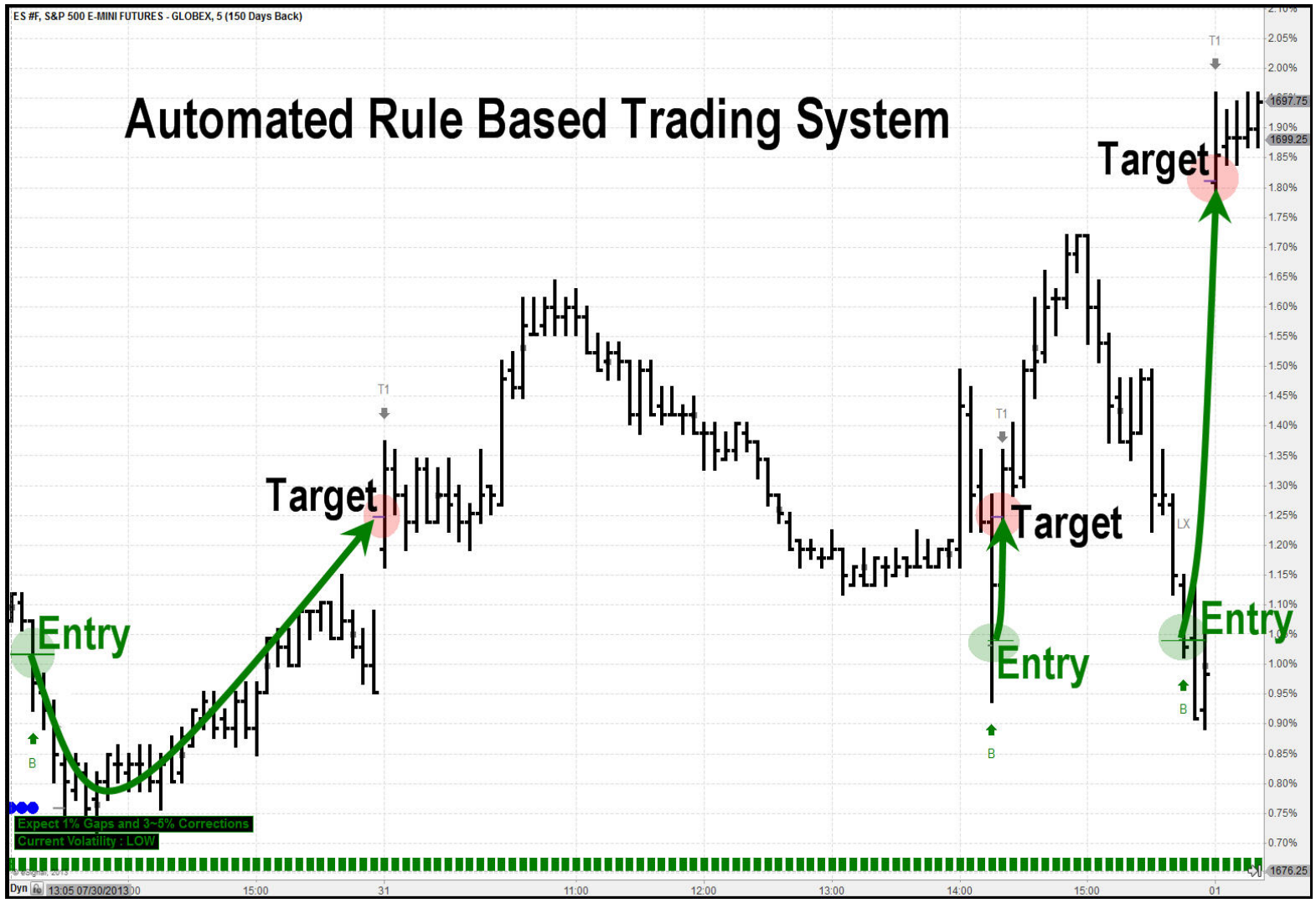
Each of these times represents a major technological breakthrough. These breakthroughs resulted in a fundamental restructuring of how things were done. Each of these periods had its own paradigms for wealth-generation, institutional structures, regulatory environments and desired trajectories for society. The technologies themselves were only one piece of the vital inputs that ultimately defined each era.

Perhaps the greatest barrier to a paradigm shift is the reality of paradigm paralysis. This is the inability or refusal to see beyond the current models of thinking, and is similar to what psychologists call 'confirmation bias'. A couple of examples would be the rejection of Galileo's theory of a heliocentric universe and the discovery of electrostatic photography. Across history, there have been many errors in thinking and many traditional processes that were maintained by the crowd simply because there wasn't yet a better way. Then along came a Henry Ford or some other innovative individual, and one was created. There is a better way to investing, and now is the time to get on the path.

The shift is happening now.

In the year 2010, more than 70 percent of the shares traded on the NYSE and NASDAQ were generated from automated trading systems. Today it's much higher, and it's continuing to grow. Most of these systems are run by large institutions, but individuals with their own trading systems are a category growing at an incredible rate each year.





Traders and investors can now turn precise entry, exit and money management rules into automated trading systems. This allows computers to execute, monitor and manage positions.

The biggest attraction of automated strategies is that it eliminates some of the emotion from trading. Since trades are automatically executed once a specific criterion has been met, emotion is taken out of the equation. This next section will educate and explain some of the advantages and disadvantages, as well as the realities, of automated trading systems.

WHAT IS AN AUTOMATED TRADING SYSTEM?

Automated trading systems - also referred to as mechanical trading systems, algorithmic trading, automated trading, block-box trading or system trading - allow traders to create specific sets of rules for both trade entries and exits that, once programmed, can be automatically executed via a computer. Each trade rule can be based on simple conditions, such as a moving average crossover, or each trade can be more complicated by using an individual's proprietary indicator, ratios and data points. Automated trading systems typically require the use of trading software capable of running the trading system's code and trade execution.

Once the system rules have been established, the trading platform can monitor the market or a specific investment you intend to trade for entry and exit points based on the trading strategy specifications. In general, when a trade is executed, orders for protective stop losses and

profit targets will automatically be created and executed. During volatile fast moving markets, automated order entry can mean the difference between a profit and a loss.

ADVANTAGES OF AUTOMATED TRADING SYSTEMS

Ability to Backtest: Backtesting allows us to apply trading rules to historical market data. This allows us to determine the viability of an idea. When building a system for automated trading, all rules need to be absolute, with no room for interpretation. Computers cannot make guesses and must be told exactly what to do for each and every possible scenario. Careful backtesting allows us to evaluate and fine-tune a trading idea. Backtesting also determines the system's expectancy going forward. Important data points you should track are your average maximum dollar drawdown, your average winning trade amount, your average losing trade amount and your percentage of trades that are winners.

Achieve Consistency: One of the biggest challenges in trading is to plan the trade and to trade the plan. Even if a trading plan has the potential to be profitable, traders who ignore the rules are altering any expectancy the system would have had. Losing trades can be psychologically traumatizing, so a trader who has two or three losing trades in a row might decide to skip the next trade. Automated trading systems allow traders to achieve consistency by trading the plan.

Improved Order Entry Speed: Since computers can respond instantly, automated systems are able to trigger orders as soon as a set of trade rules are met. Getting in or out of a trade a few seconds earlier can make a big difference in the trade's outcome. This is especially true over a long period of time when hundreds or even thousands of trades have been taken.

Minimize Emotions: Automated trading systems minimize emotions throughout the trading process. By keeping their emotions in check, traders typically have an easier time sticking to the plan. Because trades are executed automatically, you won't be able to hesitate or question the trade. Those who are either afraid to pull the trigger and those who are more apt to overtrade benefit greatly from an automated system.

Preserve Discipline: With trading rules already established and trade execution performed automatically, discipline is preserved even during volatile market conditions. Discipline in most cases is lost due to the factors of fear and greed. The fear of taking a loss, or the desire to squeeze out a little more profit from a trade, hurts discipline. In addition, pilot error is minimized: an order to buy 500 shares will not be incorrectly entered as an order to buy 5000 shares, for example.

Diversify Trading: Automated trading systems allow us to trade multiple accounts and various strategies at the same time. This has the potential to spread risk over various instruments and timeframes. What would be incredibly difficult for a trader to accomplish can be efficiently executed by a computer in a matter of milliseconds.

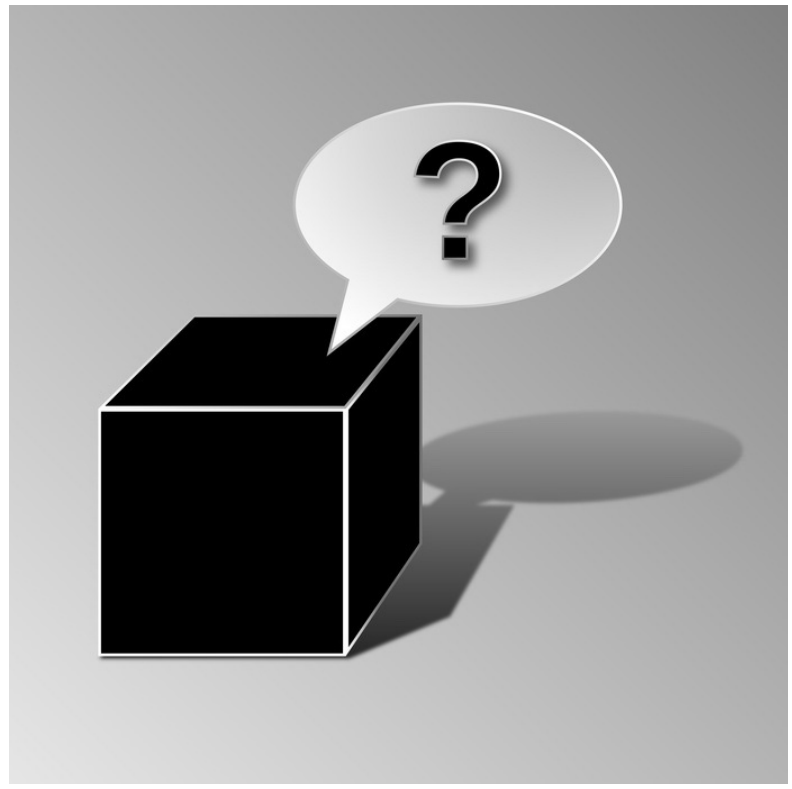
Disadvantages and realities of automated trading systems

Automated trading systems boast many advantages, but there are some downfalls and realties of which you should be aware.

Mechanical Failures: Automated trading in theory seems simple: set up the trading software, program the rules and watch it trade. The reality, however, is that while automated trading is a sophisticated method of trading, it's not infallible. Depending on how the system creator has the entire process set up, a trade order could reside on an individual computer and not a server. If this is the case, an order might not be sent to the market when an internet connection is lost. There could also be a discrepancy between the "theoretical trades" generated by the strategy and the order-entry platform component that turns them into real trades.

Individuals new to automated trading should expect a learning curve when building, testing and running their first few systems. It's generally a good idea to start with small trade sizes while the process is refined.

System Monitoring: Although it would be great to turn on the computer in the morning and walk away for the day, automated trading systems do require monitoring. Because of the potential for mechanical failures, such as internet-connectivity issues, power losses, computer crashes or system idiosyncrasies, it's possible for an automated trading system to experience anomalies. These could result in errant orders, missing orders or duplicate orders. If the system is monitored,



these events can be identified and resolved quickly.

Over-Optimization: Though not specific to automated trading systems, traders who employ backtesting techniques can create systems that look great on paper but perform terribly in a live market.

Over-optimization refers to excessive curve-fitting that produces a trading strategy that's unreliable. It's easy to create and tweak a strategy that achieves exceptional results on historical data. You must be aware of all the known issues with backtesting to be sure your new plan has been built to work within the backtesting guidelines for accuracy. If you don't, you may end up with over optimized systems that look good on paper only.

Server-Based Automated Systems: Traders do have the option to run their automated trading systems with a server-based host. Operating your trading platform and system on a dedicated server provides you with a potentially faster and more reliable platform. This minimizes un-

necessary platform crashes and server failure or loss of internet, and it improves your order execution times.

Being able to leave your trading software running 24/7, not worrying about restarting applications, reloading strategies or filling in missing tick data, is a huge benefit if you plan to operate your own automated trading system.

How to take advantage of the trading and investing shift

Power lies in the masses. And you and millions of others like you who've been using the old-school method of trading and investing (and are reaching their breaking point) should say enough is enough!

With so much information available, it's just a matter of time before average investors start demanding performance from their advisors. Most advisors are not technical analysts and cannot read into charts, nor can they provide you with automated trading systems that are both backtested and forward tested. Most do not have multiple trading strategies to profitably trade bull, bear and sideways trending markets.

Automated trading is about to explode, and when it does, the doors will open for investors around the world to allocate portions of their trading accounts or investment capital to specific systems and strategies traded for them in their brokerage accounts. Get ready to do things a better way.

For more information about algorithmic trading systems for traders and investors, click here: www.Algotrades.net

BIO Chris Vermeulen is an experienced and successful trader, educator and author. Involved in the markets since 1997, he is the author of several financial trading and educational newsletters. He is also the founder of Technical Traders Ltd. As an active trader and investor, Chris soon recognized the huge potential that online investing and algorithmic trading systems held for individual investors. The development of Chris' Technical Trading Mastery resulted from his obsession with the market. Through years of research and testing, he created the AlgoTrades Investing system.

Chris has been described as a "gifted technical analyst" who can navigate the financial markets in any market condition. His list of personal and professional relationships approaches 25,000 people with whom he connects and nourishes out of his passion for trading.

Chris has been interviewed, published or written about in *Futures Magazine*, *The Street*, *Trader Interview*, *Kitco*, *Financial Sense*, *Dick Davis Investment Digest* and hundreds of online sites.

ENERGY:

Where Do We Go From Here?

AN INTERVIEW WITH MARIN KATUSA OF CASEY RESEARCH

AT: I'm here today with Marin Katusa. He's the Senior Energy Analyst at Casey Research. Marin, tell us a little bit about yourself and how you got started as an analyst.

MK: I had the luck or the benefit of being born in Vancouver, which is the hub of the Junior Resource Sector globally. My background is in advanced mathematics, early on was teaching post-secondary calculus. In about 2004, I got involved quite early in some tungsten companies of which there were very few, and then latterly in some uranium companies. Around the same time I came across Casey Research. By 2006, David Galland, Olivier Garrett and Doug Casey, with whom I had kept in touch with for many months, wanted me to get involved in their firm and one thing lead to another; eight years later and here I am.

PEOPLE, PEOPLE, PEOPLE. IT IS MORE IMPORTANT THAN THE COMMODITY

AT: I know you've had some great successes. Tell us a little bit about how, as an analyst, you go about finding companies that are worth investing in?

MK: Doug Casey came up with his now famous Casey 8Ps in speculation, which is the foundation of all my investments. 'People' is one of those. I think the number one takeaway for any investor looking to invest in the resource sector is people, people, people. It is more important than the commodity. It's more important than the jurisdiction. It's more important than the project, because great people will create and find great projects.

That's where I start with any analysis. But even the best people make mistakes so then I go through the rest of the Casey Eight Ps: it really is a fantastic metric that guides us through the different types of hurdles in order to find successful investments. We go through those metrics, conduct site visits, and look at the politics, the jurisdiction, and the financing ability of the project itself. But first and foremost, we start with people - it's very important to invest in only the best people.

AT: It does seems that successful people have successful track records for a reason, and they're often able to repeat that, correct?

MK: Yes, it's Pareto's Law. If you apply Pareto's Law again on the first subset of the top 20, you get the top 4% of the people in the resource sector who have roughly two thirds of the successes in the markets. It's no different than any other standard distribution. No one can possibly know every single aspect of every deal in the market, but you can quickly vet these deals by looking at the people. A lot of people are unblemished with success; you want to avoid the people who have never had any successes. There's a great list, the Casey Explorers' League, available free on our website. These are

individuals that have had at least three major successes under their belt and they're still going.

But, there is a problem in the resource sector and that's demographics. Because the sector went into hibernation in the 1980s, there's a large gap between people entering the resource sector and those that were attracted to sectors like technology, the internet, computers. The resource sector is on the verge of a demographic cliff, where it's running out of qualified people who actually know what they're doing.

This was something that Doug Casey, myself and Rick Rule discussed intensely in 2010, and because I'm a generation under Rick and Doug, they instructed me to go find the next batch of superstars in the resource sector. They challenged me to go out and find the next Lukas Lundin, Ross Beaty or Robert Friedland.

My search resulted in the Casey NextTen List. These are individuals under 40 who have had major successes already. These are the type of people that you want to invest in. They have another 25 to 30 years ahead of them of making big wins. Anyone interested in the resource sector needs to focus on the best people. We've done the homework for investors in the Casey Explorers League and the NexTen list, which is available on our website at www.caseyresearch.com.

AT: Unlike a brokerage house that's offering up IPOs and financings to their clients, you're an independent. How does what you offer as an analyst differ?

MK: There is a big difference. Casey research is 100% independent; we work for our subscribers who pay us for our newsletters. We're independent researchers. I believe we're the largest independent

research firm in the junior resource sector. We now have over 50 people on staff involved in making our junior resource research the best in the world. Somewhere in the world, there's a Casey Research analyst onsite, kicking rocks at all times.

What we do is try to provide our subscribers the best research that we can. We don't always get it right and make money, but we have a very strong track record. We've been around for over 30 years. My own recommendations in the Casey Energy Report have not just beaten the TSX Venture and the Energy Index every year, but every quarter for the last seven years. I'm quite proud of that. Every single recommendation and research report I have ever written is also available to subscribers on our website.

AT: That's certainly a strong track record, for sure. Let's talk about some different commodities. We'll start with oil. There was a lot of talk about peak oil a few years ago; the notion that we're running out of oil. Where do you stand on the concept of peak oil?

MK: We've always said peak oil talk is nonsense because it was based on the natural declines of a well and deposit. New technologies have proven that by re-vitalizing oil fields. New technologies will continue to unlock the oil trapped in shale deposits. In 2010, the U.S. was producing about five million barrels of oil. In 2013, they've reached over eight million barrels. That's just in three years, and that's all because of hydraulic fracking. I believe in Peak Cheap Oil, but that's a fundamentally different argument to Peak Oil.

This isn't just isolated to the U.S. Canada has also had great success. This will eventually extend to other regions in the world including Europe. The notion of peak oil exists purely because Hubbert (Marion King), who came up with all this, didn't realize that there'd be new future technologies. Horizontal drilling was not something that even existed back in 1956 when peak oil was hypothesized He was using statistics related to conventional oil wells. When you bring in new modern technology such as hydraulic fracking that changes the game.

THERE'S A CASEY RESEARCH ANALYST ONSITE, KICKING ROCKS AT ALL TIMES

That said, hydraulic fracking is not cheap oil. You don't find gushers in the Bakken or the Eagle Ford regions. A gusher is an oil well that produces over 10,000 barrels of oil a day. The decline rates on these unconventional wells are also massive: over 50% in the first year. What's important is they've got to keep drilling more wells to keep up with the decline rates and that, they can do, but it is expensive oil. Unconventional shale oil needs north of $65 a barrel to break even in North America.

AT: That isn't cheap oil then, as you say. Prices overall have gone up and so has the cost of retrieving oil.

MK: It's the same situation as in the Canadian Oil Sands. There's a lot of oil once they build more pipeline capacity, which they will. The sector finds solutions. Look at the increase of rail tankers, for example: in 2007, there were 500 tankers shipping oil across Canada; now there's over 14,000. That's a 2700% increase in rail tankers.

Again, there's a lot of oil trapped in the Oil Sands but it is expensive oil. Technology will unlock this oil, but it's not going to bring back the cheap oil where you're drilling a 10,000 barrel a day gusher in North America. Those days are gone. It's expensive oil but it's there. The question is: at what price can the economy keep growing with oil? It seems that the global economy has adjusted to the reality of the new normal oil price, which is north of US$80 per barrel. We've found a range where the economy can handle oil prices between $90 and $105. That's the new reality.

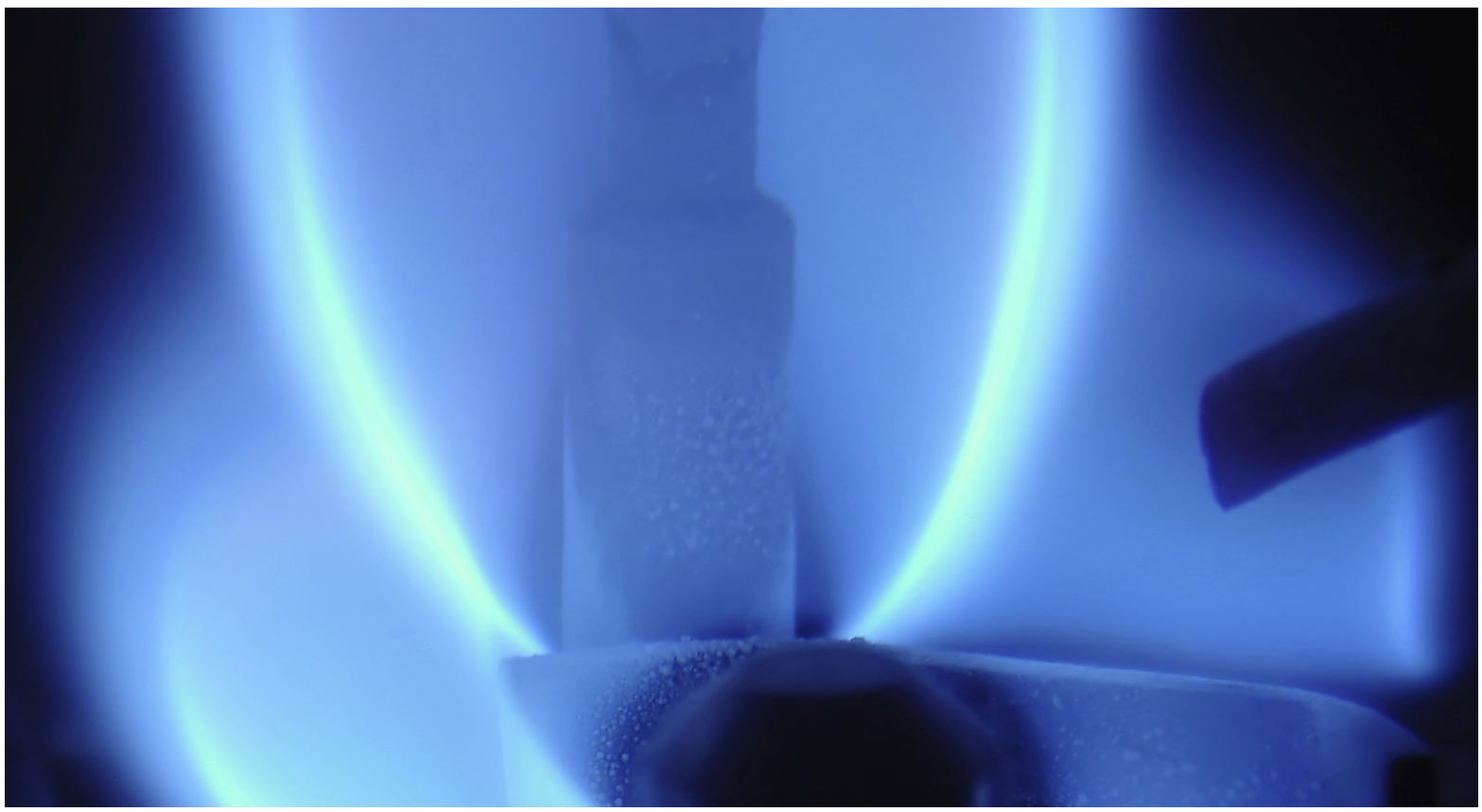
OIL COMPANIES HAVE DONE A FANTASTIC JOB CLEANING UP THE DISTURBED AREAS

North America's been very successful with its technology and you'll see China benefit from that too. That's been a huge area for oil services companies bringing North American technologies to areas such as the Sichuan Basin. Look what's going on in Australia, New Zealand and Europe.

Moving forward, one of the great areas to invest in will be the service sector technologies. I think those IPs (Intellectual Properties) are going to be worth more than a lot of the pharmaceutical IPs or even Apple's or Microsoft IPs, because without these new technologies, we won't get the oil flowing. Without this new technology, Europe and North America will be dependent on Russia and the Middle East. Europe needs to make a choice: start unconventional oil and gas production or be dependent on Russian oil and gas imports.

AT: That's very interesting. You've bounced around the world and talked about several different countries and you started by mentioning the Canadian Oil Sands. So let's talk about that first. What do you think about the Canadian Oil Sands? Some people have said they're dirty, they should be shut down. What's your take on that?

MK: You'll always have people against any development, but the reality is if you go up to Fort McMurray you'll see that the reclamation lands look better now than they did before. The oil companies have done a fantastic job cleaning up the disturbed areas, number one. Number two, Canadian oil is much cleaner than some of the African oil production or what's going on in Russia and in areas in the Middle East. The Canadians are producing oil at a very high standard. This is what I call maple leaf oil and it's much, much more ethically produced than in other parts of the world like Africa, the Middle East



or Russia where that oil is funding regimes that are very, let's say, un-North American.

There are a lot of positives to the Canadian Oil Sands and it gets a bad rap from the media, but the reality is, it's very safe. I debated the founder of Greenpeace specifically on this topic and the reality is that the world needs the Canadian Oil Sands; you will see a pipeline built to the south. You'll see a pipeline built to the west to take Canadian oil to China, Asia and you will see a pipeline built to the east also.

It will happen. It's going to happen slowly, but it's not going to go away as the environmentalists may think. It's here to stay and it's only going to increase.

AT: It needs to be done safely. That's the key, isn't it?

MK: It is and, let's face it, whether you want to build a copper mine or a pipeline Canada or the U.S., you're always going to have protestors in North America, because that's what protestors do; they're in business to protest. That's why they get funded. But the reality is, if these protestors went anywhere else in the world they'd realize how much higher our standards are in producing commodities in North America than anywhere else. But that would take too much effort on their part, so it's easier to stall development in North America, and our governments have enabled illogical protest to stall development.

They should really take a different approach: in the same way we're taking our technology to extract resources elsewhere in the world, we should take our North American standards, our high levels of environmentalism and care to other parts of the world. If you go to the Niger Delta, where there's major OPEC oil production, you'll see major oil spills along the water. Who's going to clean that up? But, you see, it's a lot easier to protest in North America than it is in Niger or Russia or the Middle East.

AT: You've mentioned Russia a few times. What's going on there? What impact are they having to the world?

MK: A lot of people don't realize that Russia is at the center of the energy matrix globally, not just for oil or natural gas, but also for uranium. The Russians are very major players in the resource sector. They're the number one producer of oil in the world. Their conventional gas reserves make them one of the world's largest players. 25% of all the natural gas consumed in Europe's is from Russia.

If you include their unconventional natural gas, they're the largest holder of natural gas in the world. They have within their sphere of influence all the former USSR states. They are the largest holder of uranium in the world. They have about half of the world's entire uranium resources and half of its enrichment capacity

Put it this way: one in every five homes in America is powered by nuclear energy; 20% of base load electricity is generated in the U.S. via nuclear energy. Half of that comes from Russia. Effectively, 10% of all homes in the U.S. are powered by Russian nuclear fuel. Here's another interesting stat: last year, in 2012, more uranium was produced on American soil by a Russian company than all the U.S uranium production companies combined. The Russians are the largest producer of uranium in the U.S. Shocking, but true.

AT: That's an amazing and surprising statistic. I'd like to talk more about nuclear; let's just finish off with a couple more questions on oil before we do that. Some people talk about reduced production in the Saudi oil fields. Do you feel that they're really running out of oil at this point?

MK: No. The Saudis have had the benefit of the great Ghawar oil field, which is the holy grail of oil deposits. That one field of Ghawar produces more oil than any other member of OPEC. This is a massive oil field and the Saudis have been very, very good at reinvesting into their fields.

While they're not necessarily running out of oil, the risk there right now is that by pumping so much water back into the reservoir, there's an engineering shift. It's a fine balance between how much they can swing the production up and bring it down because they're always trying to meet demand. But remember, in all of these conventional deposits, they will be able to bring in modern technology to unlock the source rock.

So, no, Saudi Arabia will not be running out of oil anytime soon. But there is significant social risk. The eastern portion

ONE IN EVERY FIVE HOMES IN AMERICA IS POWERED BY NUCLEAR ENERGY

of Saudi Arabia is where all the oil production comes from. That area is also where the majority of the Shi'a are, and about 50% of the Shi'a male population in that region are unemployed. The rest of Saudi Arabia is made up of the majority Sunni's, and the two don't exactly live in harmony. This has all the makings of a social revolution.

What is more interesting is looking at areas like the North Sea, Venezuela or Mexico: the Cantarell Field for example, which was at one time producing over three million barrels of oil a day. But because governments tried to fund their social programs, they didn't take the profits from the oil fields and reinvest them back into the oil fields. They'd rather pay for their social programs and then those fields suffer significant reduction in production levels; they've really harmed the reservoir density and the reservoir itself.

Places like Cantarell are down over 50% in production. Even in Alaska, the North Slope is down over 50% in production, as is the North Sea in the UK. That's because with these oil fields, you have to reinvest to keep the oil going. That's something that people have to understand with unconventional shale oil fields in the U.S. - the Bakken or Eagle Ford or the Marcellus shale - you're always reinvesting back into the field to keep your production going because of the rates of decline.

That's why cheap oil is gone, but we're not going to run out of oil. It's just going to get more expensive to produce.

AT: You were in Iraq not too long ago, correct?

MK: Yes. Iraq is a fascinating place, especially with what's going on in Kurdistan. They're bringing in modern technology to some recently drilled oil wells. These are some of the best wells I've seen in years, anywhere in the world; they are oil gushers.

AT: That's amazing and they have quite a bit of oil there, I believe, do they not?

MK: Oh, definitely. An independent Kurdistan would have one of the top ten largest oil reserves in the world.

AT: Did you find anything worth investing in?

MK: We did. We just recommended it in the most recent Casey Energy Report and it's a company that's run by a very successful, very well-known executive from a major international oil company, backed by one of the world's most famous families in finance. They have almost a billion dollars in cash. They've hit one of the best oil wells in the world that I've seen in the last ten years and they have a three billion dollar market cap.

AT: That's worth reading about in the Energy Report, definitely.

MK: Yes. It's a strong buy and we're up on it already. I see that as being one of the hot stories of 2014 and 2015.

AT: What about China, India and other emerging markets? Oil availability sounds like it really isn't a problem except for the cheap stuff. Do you see any sort of squeeze coming that will be affecting price?

MK: China buys most of its oil from Russia and secondly from Iran, believe it or not; it has somewhat ignored U.S. sanctions! They're investing heavily in Africa for future oil supply and they've been big buyers of Canadian oil. They've recently bought out some major firms in Canada; look at what's just happened with Nexen. Because they're backed by the government of China, it's unlike an international oil company such as Exxon, where they have a limited time to show their shareholders that it was a good investment. China takes a multi-decade view

They're much more aggressive and much more advanced than India is currently. They're really about five or ten years ahead of India on the energy matrix as far as diversifying themselves. The Chinese have built pipelines to get oil from Russia. They're doing LNG deals with Canada and Australia right now. They're major buyers of Middle Eastern oil. They've diversified themselves. What they're doing is getting rid of their huge hoard of U.S. dollars and buying tangible assets that their country needs. China needs oil. China needs gas. China needs commodities such as copper and iron. They don't need U.S. dollars. So they're trading their U.S. dollars for hard tangible commodities.

GAS RIGS ARE DECREASING SIGNIFICANTLY WHILE OIL RIGS CONTINUE TO GROW IN NUMBER

AT: Yes, that's going on definitely and more than with just oil. As you said, all sorts of different commodities. What about the effect of new oil discoveries in the U.S.? There's talk about self-sufficiency in the next three to six years. Is that possible?

MK: Well again, at what price? What we have to understand is the high rate of oil field decline. It's like running on a treadmill, and as you're running, the inclination of your treadmill is rising, and as you're running, you're getting more and more tired. So you've got to push harder and harder. How that translates into the shale field is you have to drill more and more wells to keep the production increasing. Interestingly, as gas has become more of a byproduct of shale oil production, gas rigs are decreasing significantly while oil rigs continue to grow in number.

The question is, at what price can the growth continue? Bakken, Eagle Ford, Marcellus; they need the equivalent of over $65 or $75 oil to breakeven. The technologies are getting to the point where Canada just recently drilled 52 wells from the same pad. That was unheard of just three or four years ago. So the technologies are getting better at extracting the maximum amount of the expected ultimate recovery of an oil well.

But, energy self-sufficiency in the next few years? No. We actually paid for the recent 335 page International Energy Authority (IEA) Report. We read the whole thing and the report actually never said (by 2022) America would become energy self-sufficient. What it said was: if all of these assumptions happen, America would become almost energy self-suf-

ficient. But the media takes those little clips, the summaries of these reports, and they've got to sensationalize it to get the attention of the public. They change the actual thesis of the report.

Some of the major theses of the report were, number one that electricity generation from green power will triple in the next ten years. Well, that's proven false because at what cost will you need to triple that?

Number two, they needed all the cars and vehicles on the road to increase their efficiency by over 35% in the next ten years. Well, that hasn't happened in the last 30 years, so that's a huge estimation, but you never know.

Number three was they needed all long haul trucks - those big 18 wheelers - to convert to compressed natural gas. They didn't even talk about nuclear energy. What about nuclear in the U.S.? In short, a lot of these assumptions and timeframes were unrealistic. Moreover, the report clearly stated that even if these assumptions occur, America will become almost energy self-sufficient. So, the answer to your question: self-sufficiency in three to six years, no.

AT: It looks like they're going to need Canadian oil for a while then.

MK: Exactly.

AT: Let's talk about the natural gas being found in the United States and Canada. Really, much of this is happening around the world, but you've also said that the rig count for gas is down. I expect that's obviously be-

cause the price of gas is so low. Do you anticipate this continuing?

MK: We wrote an article five years ago talking about the shadow wells in North America. There's tens of thousands of wells that have been drilled. They've been fracked and they need less than 72 hours to be tied in and completed; what they need is the right natural gas price. There's a lot of supply piped in that's waiting for that price. The reason why there are fewer gas rigs is because of new hydraulic fracking technologies. They're going four or five kilometers in horizontal wells, whereas five years ago, they didn't do anything like that. They're extracting so much more gas per well than they were five to ten years ago.

THERE'S A LOT OF UPSIDE FOR UNCONVENTIONAL NATURAL GAS EXPLORATION

AT: Now, moving forward, how do you play as an investor?

MK: I think if you're going to invest in gas in North America, you have to be very careful because we're talking about very small margins on the pure gas players.

If you're going to invest in the gas sector, you want to stick with wet gas because then you get liquid rich gas and that's worth a lot more than dry gas. But, I think there's a bigger upside elsewhere in the world. Look at Europe: they're paying three times more for natural gas than they are in North America.

Cuadrilla is a perfect example of bringing modern technology to a proven field and now it's a national treasure. They've proved over 200 tcf (trillion cubic feet) in the Bowland Shales in the UK. 200 tcf in BC, Alberta or the U.S. would be worth tens of billions of dollars to a company. I do believe investors should look elsewhere for the bigger upside, especially if you speculate in the smaller exploring companies in New Zealand or Europe. There's a lot of upside for unconventional natural gas exploration. In the U.S., because land is so expensive, acreage in the Marcellus shale is costing north of $15,000. Not much room for error when you're paying that cost upfront for land. I'm very bullish on the potential in Europe, and I've penned the potential as the Coming European Energy Renaissance.

AT: And they're actually doing fracking there too. Is that correct?

MK: Correct. They are.

AT: A lot of people have said that fracking won't happen in Europe.

MK: Fracking has been happening in Europe since the 1950s. Tens of thousands of fracks have happened. The Russians have been drilling horizontal wells and fracking for many, many decades. The North American service companies were bringing horizontal and fracking technologies to Russia in the mid-1990s. Long before fracking was a buzzword in North America, the Russians were already doing it. The Russians are so underestimated globally for their technologies and abilities in the global energy scene.

ENERGY: WHERE DO WE GO FROM HERE?

AT: There's a lot of controversy in North America and elsewhere about fracking. There have been reports about people being able to light their tap water on fire. Some are blaming fracking for this not to mention other safety issues. What are your thoughts?

MK: I've written a very detailed scientific argument (on our website) about all the misconceptions and false assertions in Gasland. Gasland is very well known for lighting tap water; as they turn on the tap, it flares up. That occurs because of naturally occurring methane. It was a clever marketing ploy that completely misrepresented the facts.

Whether fracking happened or not, that would occur, and methane just evaporates in the environment. From a media standpoint, it's no different than when Vice President Al Gore came out with An Inconvenient Truth, which, let's face it, was more of an inconvenient lie. Gasland certainly garnered media and public attention as did doubtless the movie that was supposed to build on the momentum of Gasland, the Promised Land that Matt Damon did against shale development and hydraulic fracking in North America. We wrote an article about it, "Well, here's the truth", which pointed out what nobody else talked about: it was actually financed by an entity controlled by the government of the UAE. Similarly, I'm willing to bet that Gazprom finances NGO activity against of unconventional energy development in the rest of Europe.

Gazprom is the natural gas company of Russia and the largest producer of natural gas in the world. So why would the Russians and the UAE finance Hollywood movies or NGO's?

They don't want these new technologies to spread because Russia needs to sell its oil and gas to the rest of Europe. Because the Europeans are paying three times more to Russia for their natural gas than the Americans are selling it for. The Russians get 25% more from the Europeans selling their oil than the oil selling in the Bakken. Places in Germany are paying 100% more for their oil than the companies in the Canadian Oil Sands are selling their oil to the US for.

The Russians don't want to lose that advantage over Europe. And the UAE, which is a major oil and gas exporter, doesn't want America and Canada to get into the export game for LNG, hence why they're financing a Hollywood film. So it's almost like a reverse NGO against development. It's highly ironic that Gazprom is pushing the anti-shale fracking story, yet they've done thousands of fracks in Russia.

AT: That's quite shocking really, isn't it? I don't know of any other way to put it. What do you think will happen with U.S. and Canadian gas when it comes to exporting it as LNG?

MK: Right now, both the U.S. and Canada are about three to five years behind Australia's development of exporting LNG. On top of that, if you look at the globe, the largest consumer of LNG today in the world is not China, it's Japan. What people need to understand is because of the Fukushima disaster in 2011 and the resultant nuclear meltdown, Japan shut down all 54 nuclear reactors. Overnight they doubled their imports of LNG. Currently, 50% of the world's LNG production is exported to just two countries: 38% to Japan and 12% to South Korea.

Everyone's making this mad rush to LNG, but Australia is much closer to Asia than British Columbia, on the west coast of Canada, or the U.S. is. If Japan brings their nuclear reactors back online, which I believe they will slowly during 2014, with perhaps half up and running by the end of 2015, it will decrease their LNG demand by 50%.

These massive LNG liquefaction plants that export LNG are condensing natural gas by 600 times to compress it into a liquid and ship it. These cost tens of billions of dollars and take many years to build and, more importantly, many years to permit. Right now, in the LNG game, Russia has two large exporting LNG plants. And, they've just signed deals with China.

QATAR HAS THE LARGEST LNG CAPACITY IN THE WORLD RIGHT NOW

Qatar has the largest LNG capacity in the world right now and they're expanding it. Australia is signing major deals. Yes, the potential is there for the U.S. and Canada but unfortunately, the cost to ship LNG from the U.S. or Canada is twice as much as it is from Russia, Qatar, or Australia to Asia.

It might happen, but it's going to be slow and I think investors have to be very careful because most of the demand that has increased in LNG is because of Korea and Japan shutting down their nuclear

reactors. When they do bring back those reactors back, there'll be a lot of excess supply and the prices for LNG will go down. I think it's a bubble waiting for a pin to burst it.

NUCLEAR - IT'S ACTUALLY THE CLEANEST FORM OF ENERGY

AT: Does that mean, if tens of billions of dollars are invested in LNG plants in North America, they could become dinosaurs?

MK: No. I think what's going to happen is before you build your LNG plant, you'll have offtake agreements. The profits that people are expecting today, by the time these offtake agreements are signed, won't be as high as people expect.

Secondly, the dark horse in the LNG game is something called FLNG, that's Floating LNG. Shell is one of the world leaders in LNG have now built something called Floating LNG where they can move around the world to stranded gas deposits. They could probably produce the gas for less than a dollar per Mcf (1,000 cubic feet). In the U.S and Canada, they need about $3.00 per McF, so the likes of Shell are very advanced in this area.

With FLNG, if anything happens, whether politics or taxes change, you simply lift anchor and move to the next stranded deposit. Because the ocean covers 70% of the globe, there are many more stranded gas deposits in the ocean than there are on land. The CAPEX of onshore LNG plants are in the tens of billions of dollars. And, you may have union or first nation issues, environmentalists, the government wanting a bigger take; not so with FLNG - I think it's going to be a big game-changer for the LNG sector.

AT: That's great insight. We'll definitely be keeping our eyes open for developments and reading your newsletter. Let's talk a bit about nuclear. To a lot of people, it's a four letter word. You mentioned Fukushima and the fact that Korea and Japan have both shut down all of their reactors. Is nuclear really a viable option to power the world?

MK: It is, and if you look at, more people have died in coal or natural gas plants than they have in nuclear power plants. However, from a media standpoint, it's an easy target. It's like hydraulic fracking, right? When you think about nuclear energy, you think of the Jane Fonda project, The China Syndrome. You think of Homer Simpson working at a nuclear facility and the evil Mr. Burns. Nuclear may have a very ugly taste to it yet, it's actually the cleanest form of energy.

20% of America's electricity comes from nuclear energy and that's not going to change. Saudi Arabia, the second largest producer of oil in the world, is planning to build 16 nuclear reactors; they wouldn't do that without faith in the viability of nuclear. UAE is building nuclear reactors and Kuwait is looking at it. You simply have to look at what's going on in China.

The reality is that uranium is such an unloved commodity and sector that it's what I call the ultimate contrarian profit opportunity right now. It's by far the cheapest commodity in the world. It's gone down to the point where producers are losing money at current spot prices. That's where the opportunity is because the cure for low prices are low prices; eventually you'll see a big pop because the world needs nuclear energy.

For example, the U.S. is the largest consumer of uranium in the world today, yet it imports over 95% of the uranium that it consumes. Half of that comes from Russia. Canada is the second largest supplier. In 1960, the U.S. produced over 35 million pounds of uranium. Last year, they produced a little over 3.5 million pounds. That's a huge decrease in production.

When you build a nuclear power plant that is the big cost. If natural gas doubled, the cost of electricity will probably go up by 85%, because the fuel for a coal or a natural gas plant is the biggest cost. For a nuclear power plant, however, if the price of uranium tripled, it would result in less than a 15% increase to the cost of electricity generation. The biggest cost for a nuclear power plant is actually building the nuclear power plant in the first place. So whether uranium is $50 or $200, it's irrelevant to the nuclear reactor; to the actual utility that is creating the generation. The key is a secure long term supply of the uranium fuel. The Russians have been the biggest buyers of uranium producers and deposits in the world – they're trying to corner the uranium market right now.

AT: That's interesting and maybe a little frightening too. I would think that certain governments would step in to prevent that possibly. But the Russians have a historical agreement with the U.S.: megatons for megawatts. How's that working out?

MK: The HEU Agreement was signed in 1992 and, at that time, Russia was on its knees. The USSR had just collapsed. The country was going bankrupt and Bill Clinton was the US President. America was the strongest country in the world. Let's fast forward to now, 20 years later. Vladimir Putin is in power in Russia; who would you rather bet on, Obama or Putin? The reality is the last shipment of the

THE RUSSIANS HAVE BEEN THE BIGGEST BUYERS OF URANIUM PRODUCERS AND DEPOSITS

HEU Agreement happened on November 12th. That's it. The HEU Agreement is over. Now they're in something called a Transitional Agreement where the Americans are still going to be provided nuclear fuel by the Russians, but they don't know at what price. And, they can't guarantee to meet 100% of demand, because the Russians are also looking at selling to China, Saudi Arabia, Japan and other countries. Conversely, when the HEU Agreement was originally signed in 1992, the price was fixed along with the quantity and an agreement to only sell to the U.S.

What people and investors fail to understand is: the Russians are not only buying uranium deposits, they're going to countries (one in the Middle East already)

and building the nuclear reactor for them, they've financed it for the country, they're operating it with the country, and they've given the country a life of mine guarantee of uranium fuel for that mine. They have vertically integrated the sector completely, whereas the Americans don't have that.

GE tries to build nuclear reactors but they can't provide the fuel. If you see what's happened now in Niger in the Arlet Basin, where the French Areva got most of their production from; remember the French are almost 80% nuclear energy. As we all know, there are huge problems in Africa. Now the French are looking for fuel and they're looking at the Russians. So Putin controls the uranium dynamics in the world and the US, which unfortunately, had such a good deal with the HEU Agreement, they ended up becoming so ambivalent about it, they haven't prepared for what's going to happen after. That's why we think uranium right now is the biggest no-brainer of all in the energy sector.

AT: Well it sounds to me like you're saying we're definitely in for some increase in prices. Any thoughts on where they could go from here, considering how low they are?

MK: If you look at your lowest cost producers, right now they do not make money in the uranium market. Cameco, is the largest independent uranium producer in North America (only Kazakhstan produces more). They have a major deposit called Cigar Lake and it is a massive deposit. It's one of the highest grade deposits in the world, next to McArthur River, which they also operate. But they've basically come out and said: "We're putting it on hold", and the real reason is, at current prices, they can't make money.

In 2007, uranium hit over $135 per pound. Right now, it's trading in the low $40s. That's the spot market. The longer term market is touching $50 right now and the future trades on it right now in the 2020s, if you want delivery, you've got to pay over $65 for it. By the end of 2015, you'll probably see $60 uranium and, at that point, you'll see a big increase in the uranium producers.

AT: That'll be something to look forward to and we definitely want to get into some of those ahead of time. I know I'm in a few myself. So I'm looking forward to that. Let's talk a little bit about renewables and green energy. Which ones do you like?

PUTIN CONTROLS THE URANIUM DYNAMICS IN THE WORLD

MK: Well, let's first say, we all want to believe in green energy. It's a great concept, but then reality steps in. Myself, I was a big investor in geothermal. We were the largest shareholders of America's largest geothermal plant built in the last 20 years. Unfortunately, the shale gas revolution has really changed the game for green energy and I'll explain why. When you go and build a geothermal power plant, and geothermal really is, on paper, the best green

energy because it's base load power; base load power means it runs 24/7, it's a constant source of electricity. The problem with a windmill is when it's not windy, you don't get generation. So that's secondary generation. That's not base load. The problem with solar is nighttime obviously, that's why it's not base load power. So those are all secondary.

Run-of-river is a good green energy. Unfortunately, the river doesn't flow at the same rate all year round; you can't capitalize on the seasonal differences so you're running it at perhaps a third of capacity. There's a negative to that. Geothermal, on paper, is supposed to be the best green energy. The problem is when you build these big power plants, you need to sign a 20 year PPA (Purchase Price Agreement) with the utility. Because of natural gas prices, no utilities want to sign up to the big commitment of the expense of green energy and drilling these deep geothermal wells. None of the geothermal companies have been able to produce the megawatts the engineers said that they would be able to. It's been a really awful sector to invest in; it was a major investment disaster for myself.

So green energy without government subsidies does not work currently and investing in a sector based on governments and politicians is a disaster waiting to happen. They think in a four year term and all they care about is political lip service. Obama came in with the whole green energy dream. Now, that was as successful as Obamacare and now Obama's trying to take credit for the shale revolution. The reality is, the green energy sector has not been the place to be.

AT: Are there promising green technologies that could take over or certainly replace some of the other energies if oil prices go significantly higher?

MK: The technology will hopefully get to the point where it will be more efficient. To achieve growth, efficiency will have to increase. Solar panels are much more efficient today than they were ten years ago and considerably less expensive. With better drilling techniques, geothermal will become better but all of that is still in the implementation. Oil will have to go over $200 per barrel for the money to come into research and development to make green energy economic. Until oil skyrockets north of $200, I don't see the green energy revolution replacing natural gas, coal or uranium.

AT: That's a big number that we're quite a way from today, so we'll have to wait for that to happen. How do you think 2014 is shaping up from an investment point?

MK: The Middle East risk premium isn't going anywhere: there won't be a peaceful solution in 2014; the Syrian War will continue; negotiations between Iran and U.S. will remain shaky at best.

If anything happened at Ghawar you'd wake up and the price of oil would be up 50%. If Ghawar shut down, oil would be $150 overnight. Saudi Arabia produces ten million barrels of oil a day. The world consumes about 87 million barrels a day. If that shut down, oil would instantly skyrocket. If the Straits of Hormuz, where half of the world's demand goes straight through from the Middle East, were to

shut down, you'd be looking at $150 oil overnight.

Moving forward, what are the risks? Well, if the U.S. economy blows up and we have another major meltdown as we did in late 2008, I could see oil perhaps going down to maybe $50 a barrel short term. But that's only a given if there's a major stock market crash and the economy blows up.

Where I'd say you should be invested if you're looking to U.S. companies, are the oil and gas service providers who are going to be drilling more horizontal oil wells, doing more fracks, drilling the ultra-deep Gulf of Mexico oil wells; you want to be exposed to some of these solid service companies that have absolutely fantastic technologies and whose IP is going to create more cash flow without the risk of the exploration of the EMP companies.

Bringing North American technologies to Europe is going to start penetrating in 2014 and there's going to be big wins there. They've already started. I think that pattern's going to continue to Australia and New Zealand, where fracking is just starting. There's a lot of promise and the reality is, countries such as Venezuela and Mexico are decreasing their oil production. They are exporting less oil because they've had to increase domestic demand. Same as in the Middle East. The cheap days of oil are gone and it's a great sector to be invested in.

AT: Well thanks for that and I know you have numerous recommendations on an ongoing basis in your newsletters. I know one of the good things is you not only tell people when to get in, but you also tell them when to get out, which is a very good way for people to profit. So thank you very much, Marin, for taking the time with us today and hopefully we'll be able to do this again in the future and look forward to further successes.

MK: Thanks a lot, Tony. All the best.

For information of the Casey Energy Report click here: http://bit.ly/1epjFn6

BIO Marin Katusa, an accomplished investment analyst, is the senior editor of Casey Energy Dividends, Casey Energy Confidential, and Casey Energy Report. He left a successful teaching career to pursue analyzing and investing in junior resource companies. He is a regular commentator on Canada's Business News Network and is a member of the Vancouver Angel Forum where he and his colleagues evaluate early seed investment opportunities. Using advanced mathematical skills, he has created a diagnostic resource market tool that analyzes and compares hundreds of investment variables. Through his own investments, Marin has established a network of relationships with many of the key players in the junior resource sector in Vancouver.

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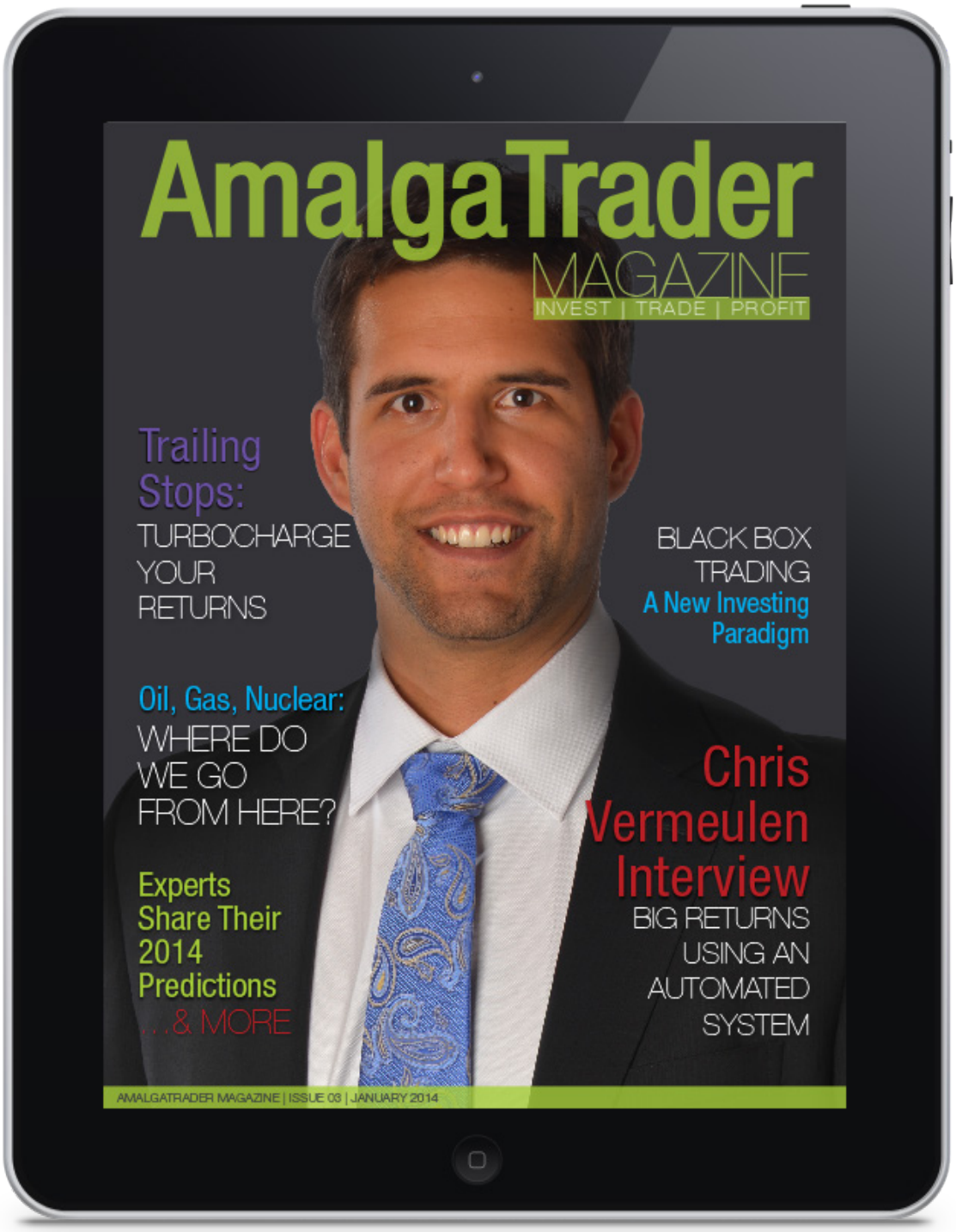

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2014 PREDICTIONS:

WE'VE ASKED A FEW INVESTMENT AND TRADING PROFESSIONALS THEIR OPINIONS OF HOW 2014 MIGHT UNFOLD.

OF COURSE, IN THESE VOLATILE TIMES, THERE ARE NO CERTAINTIES. HOWEVER, OUR FOLLOWING CONTRIBUTORS - ALL VERY WELL RESPECTED WITH EXCELLENT TRACK RECORDS - HAVE PROVED TO BE REMARKABLY PERCEPTIVE IN THE PAST.

Gold: US$ 2,000+
Silver: at least US$ 50

The 2-year price correction of the precious metals is ending, and both gold and silver will be driven higher in 2014 because of the ongoing demand for physical metal. A detailed discussion of the potential for gold and silver are discussed in my new book, “The Money Bubble: What To Do Before It Pops”, which will be available on Amazon later in December.

Goldmoney.com
By James Turk

James Turk is the founder of GoldMoney, and co-author of “The Collapse of the Dollar” and “The Money Bubble”.

James Turk has over 40 years’ experience in international banking, finance and investments. He began his career at The Chase Manhattan Bank where he worked on assignments in Thailand, the Phiippines and Hong Kong. In 1983, he was appointed as manager of the Commodity Department of the Abu Dhabi Investment Authority. After leaving that post in 1987, he went on to hold various advisory roles in money management. In 2001 he co-founded GoldMoney and remains a director of the group.

www.goldmoney.com

Gold: $1600
Silver: $30
S&P 500: 1800
DJIA: 16000
TSE: 12500
USD index: 86
EUR/USD: 1.27
USD/CAD: 1.10

Black Swan Capital Forecast
By: JR Crooks III, Vice President

John Ross (JR) has notched up seven years researching economics, analyzing capital markets and editing financial news and investment publications. His specialty is in global macroeconomic analysis and his major investment focus is on the commodities market.

JR has written for publications covering commodities, stock indices, and currencies. Those publications centered on his trading recommendations where he used options, ETFs and equities to earn speculative profits. He has a B.S. in finance from Florida State University.

http://www.blackswantrading.com/

Gold: $1700
Silver: $30 - $34
S&P 500: 1400
DJIA: 13,720
TSE: 15000
TSC.V (Venture): 1300
USD index: 74-76

2014 could be a rebuilding year for hard assets and a weakening of the USD thus putting pressure on the U.S. stock market. A large economic event could take place moving all markets significantly, but this is a low to medium probability. Silver and gold will regain what they gave up over the past year and perhaps somewhat more, but the overhead resistance is significant unless the market sees a game changer such as a 'fail to deliver' notice. Forecasting is always difficult at best, but with so much going on in the geopolitical front, the unforeseen event is much more of a probability than a decade ago.

Silver-Investor.com Forecast By: David Morgan

Seduced by silver at the tender age of 11, David Morgan started investing in the stock market while still a teenager. A precious metals aficionado, armed with degrees in finance and economics as well as engineering, he created the Silver-Investor.com website and originated The Morgan Report, a monthly newsletter that covers economic news, overall financial health of the global economy, currency problems, and the key reasons for investing in precious metals.

David considers himself a big-picture macroeconomist whose main job is education - educating people about

honest money and the benefits of a sound financial system - and his second job is teaching people to be patient and have conviction in their investment holdings.

A dynamic, much-in-demand speaker all over the globe, David's educational mission also makes him a prolific author having penned "Get the Skinny on Silver Investing" available as an e-book or through Amazon.com.

You can sign up below for his free publication which starts you off with the Ten Rules of Silver Investing where he was published almost a decade ago after being recognized as one of the top authorities in the arena of Silver Investing.

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Casey Research's Outlook for 2014. By Olivier Garret, CEO

Prior to joining Casey Research in January 2007, Olivier Garret was a principal at Kemp Management, a management consulting firm focused on merger and acquisition due diligence, restructuring, and turnaround activities for a variety of private equity firms and financial institutions. In this capacity, he led and participated in dozens of merger and acquisition and restructuring deals in a variety of industries. In the 1990's, Olivier was CEO and general manager of a number of industrial businesses ranging from entrepreneurial start-ups to divisions of a Fortune 500 company. He earned an MBA from the Amos Tuck School of Business Administration at Dartmouth College and a Master's in Business from

1. QE will continue throughout 2014 at a pace similar to 2013 ($1 Tillion). While talks about tapering will continue, the Fed is caught in between a rock and a hard place: lower purchase of Treasury bonds by foreigners and continuing deficits. Yellen will have no choice but to continue or see markets take a hit and long rates rise sharply.

2. In spite of a likely and healthy short term correction, the S&P is likely to end the year above 2,000. We will continue to see cash moving out of fixed income into stocks in search for yield.

3. While gold is likely to experience further weakness over the coming month, continuing worldwide fiat currency debasement, supply constraints and continued purchases by China and other developing countries will push gold back to $1,600 by year end.

4. Long term interest rates will continue to rise and the 10 year Treasuries will end the year near 4%. While QE will keep suppressing short-term yields, markets will put a premium on longer term yields.

5. Housing will continue its recovery unless long term rates spike. The Case-Shiller index is likely to rise by 8%.

6. GDP will rise a modest 2%.

7. We're likely to see unemployment numbers drop to 6.5% as employers continue to create part-time jobs to circumvent Obamacare and more Americans drop out of the official labor force. The more meaningful employment-to-population ratio will continue to show no signs of improvement, demonstrating that the real economy remains weak

Of course, at some point governments will no longer be able to keep our markets and economy on life support with regular injections of QE and fundamentals will take over. At that point we will re-enter another crisis that is likely to make the 2008 crisis look like the good-old-days. It's our opinion that the Fed's and other central banks concerted efforts to prep the economy will succeed in pushing the day of reckoning beyond 2014. Investors should remain extremely cautious and apply defensive strategies to protect their invested assets.

For more information, check out the year end issue of the Casey Report; you can subscribe risk free at www.caseyresearch.com

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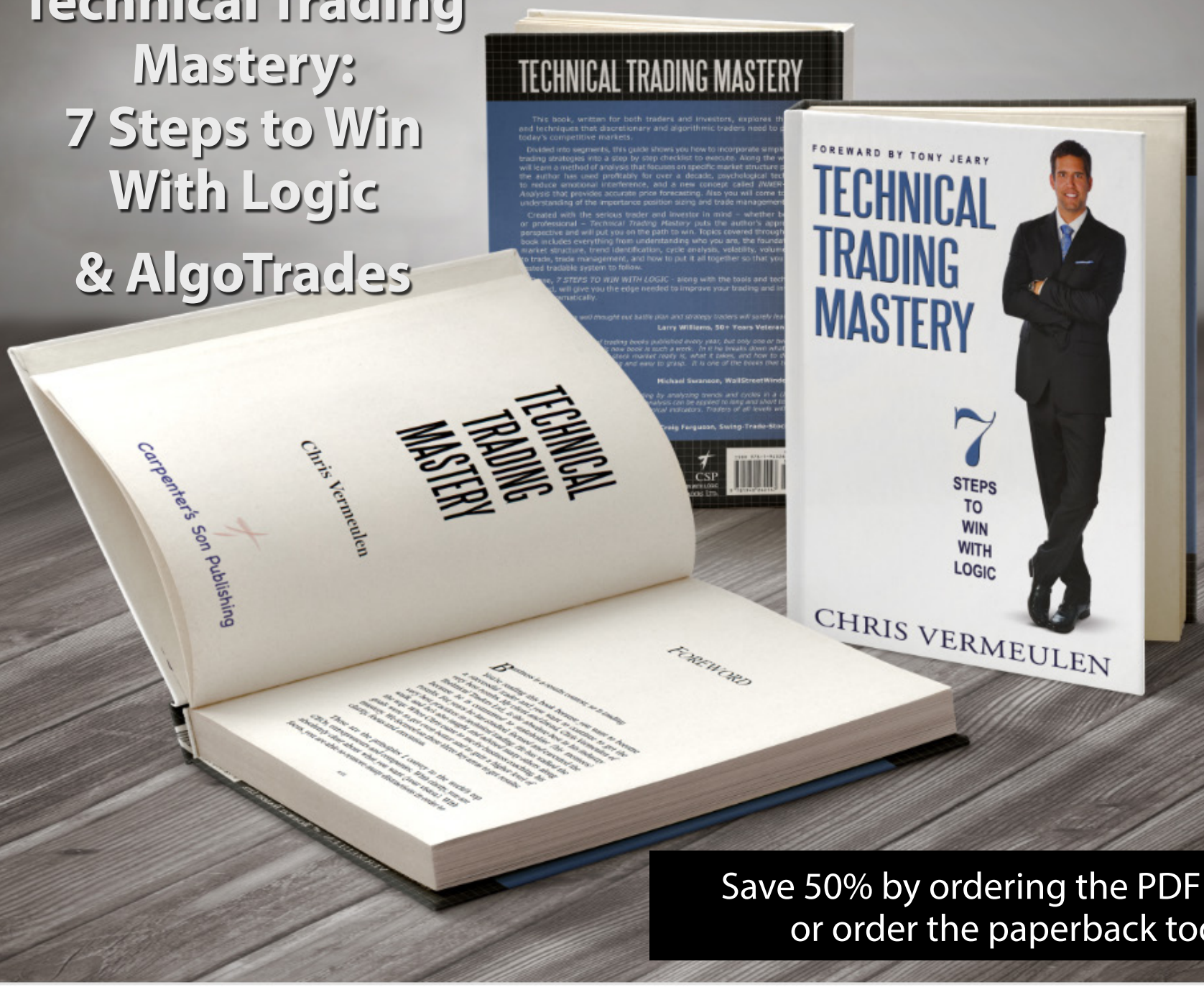

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CHRIS VERMEULEN OF TECHNICAL TRADERS

INTERVIEW WITH:

Chris Vermeulen of Technical Traders

AT: We're here today with Chris Vermeulen of Technical Traders and he's going to talk with us about a couple of different aspects of the markets and how we can profit from them. So, before we get into those, Chris, tell us a little bit about yourself and how you got started trading.

CV: I'd be happy to. When I was 16, I got hooked on a small booklet I found in my dad's mailbox. It was from Larry Williams on futures trading. I read that little booklet several times and it really got me hooked on the idea of trading for a living; and that when I was only 16!

Coming from an entrepreneurial family, I ran it by my dad. I said: "Let's open an account; let's trade." Of course, he said: "No way; I've got my own business and don't need to get into any of that stuff." Over the following two years, I literally studied everything and learnt everything I could. When I turned 18, as soon as I legally could, I opened a trading account and started trading-I've never looked back since.

AT: It's great to find a passion at such a young age and to be able to turn it into a career. That's fantastic.

CV: Yes, for sure.

AT: Now you're a little different from many traders out there in that you trade stocks, options, ETFs and futures. Is that correct?

CV: Yes and no. I've traded pretty much everything. I'm always of the mindset that I won't go in one direction unless I know what the other direction is. So, I learned the basics and intermediate stuff on all those different investment types. I did them all for a while to try and find out what fit my personality, what I liked and what I understood. I think it's really important that every trader should try all these different things because you just never really know what's going to fit your personality type, your available timeframe and what you enjoy trading. Currently, I just trade ETFs and futures. I find they work best with my strategy and with my mindset, and I can trade large portions of money without too much fear of the downside.

YOU CAN'T WAKE UP THE NEXT MORNING DOWN 20% OR 30%

AT: Is it the ability to manage risk that helps you or pushed you toward ETFs and Futures more than anything?

CV: It is, for sure. I don't like volatility. While I like to play volatility, I want to play with investments that are as stable as possible. With ETFs, being a basket of assets, you can't wake up the next morning down 20% or 30% on some news, insider trading or something like that. So I like to go with something that is broad: a large basket with relatively low volatility in the underlying investments. That way you can put more money to work and, of course, once you have a strategy that works well in all market conditions, you can just jack up the leverage.

AT: You have a daily market commentary that you offer to subscrib-

ers plus you have an alert service as well. I've seen you in that room, and it sounds to me like you're also trying to teach people to trade for themselves. Is that correct?

CV: Yes, I have a daily morning routine that I always do. I record it and I provide it to subscribers of the newsletter at TheGoldandOilGuy.com. I try and make it as educational as possible. I really put a lot of effort into explaining situations; what I'm thinking and why. I draw on the charts and I do a lot of calculations with technical analysis; I really try to 'paint' every picture that I'm talking about, live every morning. I cover a broad market: gold, silver, miners, precious metals, oil. I package it all up into a morning premarket video so that clients can follow it and try and learn from everything that goes on. That being said, trying to teach people online is fairly difficult.

Trading isn't something you can really just teach over the internet. It requires serious dedication, a plan. It requires a lot of time, mentoring and coaching because the problem is people have difficulties following rules. Most people really don't have very good self-discipline and you can't teach somebody self-discipline. That's up to them. That's why it's called self-discipline.

You can give them all the tools and walk them through it but when it comes to what they're doing on their computer: are they pushing that button, are they pulling the trigger and executing or getting out when they should, are they placing their stops, have they done their research? I can only help somebody so far.

ALGOTRADES IS A UNIQUE AUTOMATED INVESTING STRATEGY

AT: Having been a long time trader myself, I know exactly what you mean. Certainly I've fallen into, I think, virtually every trap that you can as a trader and learned, hopefully, from them. That said, I want to talk about something that's really interesting to me, and that's the complete opposite of doing it yourself, which is your latest venture AlgoTrades. I'd call it a Black Box trading system; an algorithmic trading system. Tell me a little bit about that. What type of trading is this exactly?

CV: AlgoTrades is a unique automated investing strategy. It generates trades on a monthly basis and it focuses on trading pretty much every market condition. Whether the market's up, down, or sideways, there's a strategy within the system that is trying to take advantage of it. The system trades based off the S&P 500 Index. That's my go-to; that's my bread and butter. That's the best investment that I've found to track and trade and it trades either the ES-Mini futures or the three times leveraged ETF.

Really, it's simply a swing trading strategy that has a momentum strategy blended into it. It's somewhat of a complicated

system because it does actually have about 12 different trading strategies embedded within it. AlgoTrades naturally flips from one strategy to another and as it switches to one strategy, the position and money management settings adjust; it's a very complete hands-off system.

I've been providing newsletters since 2001. From that, I've learned that people really just need to get themselves out of the equation; they need a proven system that just runs and does everything for them. That's how my thinking evolved into turning my strategy into more of an automated system. It started to evolve over time, over several years, and now we're at the point where we've got all the strategies built into one system; everything is managed completely hands-free for myself and the end user.

I'M FOCUSING ON INNER-MARKET ANALYSIS

AT: With a lot of these trading systems you have to enter your own rules, you have to back-test them and then create something that is hopefully successful. What you're saying, if I'm not mistaken, is that a person doesn't have to do this. This is already done for them.

CV: Yes. It's more or less a complete hands-free system. I just finished doing a series on my blog. It was a four part series talking about how algorithmic trading worked itself into my trading strategy and how I found the major issue with traders is actually the trader! Once you remove yourself from a trading strategy, it's amazing how much more consistent and profitable a strategy can be, simply because you're eliminating all these minor things that humans do: we like to cherry-pick trades; we like to get out a little early if we're getting close to a target; we get out a little early just to be sure we can lock in some profits.

All these factors have huge repercussions on long term performance. What I've done is put all my strategies together and built them into a system so that everything is done automatically; the end user doesn't have to struggle with their emotions, worry about pulling the trigger and so on. It really is a true hands-free system.

AT: That's interesting. Now, you've said you've got about 12 strategies built into this. Do you mind just giving us a hint of what a couple of them might be?

CV: Well generally the market is going either up, down, or sideways. There's multiple strategies for each of those. The system works using a new type of analysis that I've created called inner-market analysis. My book, which is going to be published here in about a week and a half, goes into in-depth detail. Some might get it confused with inter-market analysis, which is how other markets relate to each other. But what I'm focusing on is inner-market analysis: everything inside that one investment from cycles to outer flow to momentum to standard deviations; all those things within one investment.

If you can completely fine-tune and understand every moving part within one

CHRIS VERMEULEN OF TECHNICAL TRADERS

instrument, you stand an extremely good chance of knowing where and how far it's going to go next. The system's strategies are all based on inner-market analysis along various time frames for each different market condition. Whether it's up, down or sideways, the system actively applies this inner-market analysis. It naturally expands and contracts with the market so that it's constantly adjusting as the market evolves from one condition to another.

AT: You mentioned that it's trading the futures of the S&P and the S&P Minis, correct?

CV: Yes, the ES Mini is what the system was really designed and built for, but it also works on the three times leveraged ETF. That's what we're making the service available for, simply because a lot of people don't want to touch futures and the ETFs are extremely simple to trade. Everybody has access to trade them, so we focus on the three times leveraged ETFs which are still powered by futures. The signals, the timing, is all still the same; it's just the underlying investment that you're trading is different.

AT: How often does the system trade and how long does it generally hold an asset?

CV: It trades about 30 to 40 times a year. I think the average works out to be about 34 times a year. As the system is running different strategies, some trades may only last a day, or they might last two or three days. If you were to average it out, about ten days is typical from one position being opened to it completely being closed out. I say completely, because the system has

a lot of money and position management built into it. It's scaling in and scaling out of positions on a regular basis. Sometimes one trade could last 30, 60, even 90 days with one contract or a portion from the initial long trade running.

The system will eventually continue to build positions over time. You'll have these runners involved, which is a very important part in managing risk, meaning that you've got a position with the major underlying trend always in play. No matter what, if for some reason you don't get any more trades, at least you've got a runner in there and you've got a part of the market and you're at least catching something.

AT: A lot of auto-trading systems require adjustments as the market adjusts. How do these occur?

CV: Yes, there's a lot of problems with automated trading systems and people having problems with them not working over a long period of time. It's kind of hard to explain but in really simple form, it's simply that people over-optimize. Everybody always talks about: "You can't over-optimize. You can't over-optimize". But it's really hard to know what over-optimizing is and a lot of systems only allow you to back-test for only two years.

It's amazing how many people are building systems and trading them, and within a few months, they just completely crash and die. They haven't experienced all the different market conditions that you have to be in and all the different volatility and volume levels; all these different things that come into play.

IT'S BREATHING WITH THE MARKET, IS WHAT REALLY MAKES ALGOTRADE SO UNIQUE

The way my system runs is simply on this inner-market analysis strategy that I've built, which naturally breathes with the market. It's expanding and contracting. It's reading all the different cycles in the market on various time frames. It's reading the volatility. It's doing all kinds of stuff, managing the order flows pouring into and out of the NYSE. That's the big board. It carries all the big brand name stocks and you want to know what the money flow into those major stocks is, because it's those major stocks that give you a great feel for what market sentiment is.

This strategy, the way it naturally adjusts on its own; It's breathing with the market, is what really makes AlgoTrade so unique and has made it very consistent for the six and a half years that we've had the strategy up and running.

AT: That's really interesting. What size of account does someone need to utilize your system?

CV: The system requires a $35,000 account minimum investment and that can be tough, because when it comes to trading, the average person doesn't have $35,000. I think the national average is about $10,000 for a trading account and, unfortunately, your trading account size plays a huge role in if you're going to be profitable or not as a trader. Of course, there are other factors such as money

management. But being under-capitalized has so many disadvantages and so much negative impact on your trading, simply because you almost have to put all your money into every trade to make enough money to cover your costs.

There are lot of fees and expenses with trading. You've got commissions, trading platforms, data feeds, newsletter subscriptions, and auto-trade subscriptions.

MADE $60,000, ARE YOU REFERRING TO A $35,000 ACCOUNT

People with small accounts usually end up churning their account or they blow it up. This system is really designed for investors, people who have some money and want it to be properly managed and traded. That's what this system does. It has enough money that it can trade proper position sizes. It can scale in and out of positions. It can take some drawdowns and not affect anything and still properly manage going forward.

AT: You just mentioned drawdowns. What sort of drawdowns should I be prepared for?

CV: I think the worst drawdown we've seen so far is about 27%. It really depends when you join the service, the system, because every year, there's always a sweet spot where the market takes off, a trend. Sometimes there's a couple, but you can make most of your money within a month or three and the rest of the year, your account could be chopping around, going sideways or having a drawdown.

The worst case scenario for somebody using the system who joined at the ultimate worst possible moment, just before some of the biggest losses, is around 27%. Going back to the stats, the average win rate is 81%. The biggest losing streak was about $10,000 or $11,000 in chains, actually, and that was on two losing trades back to back. That happened to be a market that flipped and flopped pretty quickly during a highly volatile time. On the positive side, it had a winning streak of 22 trades and made about $60,000 on that winning streak. It's a high winning percentage system. The losers are bigger than the winners but we win so much more than we lose trade-wise that it compensates.

AT: When you say it had 22 winning trades and made $60,000, are you referring to a $35,000 account?

CV: I am, yes. That's with the futures system. Of course, with futures, you get lots of leverage, lots of juice with your strategy. So that's why you can have so much upside potential with futures.

AT: Okay. What sort of returns on your testing have you had in percentages terms?

CV: Over the last six and a half years since we created the strategy, it's averaged about 80% return a year on a $35,000 investment. That's after you take away the trading commissions. So it's a pretty solid system. Usually every year or so, there's about a three or six month window where you kind of get chopped around in the market. The market doesn't know what it's doing or it's flipping from an up or down

trend or similar. Not a whole lot goes on; you might just be trading sideways. It is more of an investing system. The system has to be traded or invested in, I should say, for a year really. Everything is based over a year. You can't just cherry-pick a time frame and say: "I'm going to try it for three months or six months". It is an investment and you have to let the system do its thing. And you have to give it time because time is money; it's pretty much that simple.

AT: Who should consider getting involved with this system? As an investor, active trader, who do you think this best suits?

CV: I think the ideal clients will be traders who more or less have been trying to trade their own money or their own retirement fund and they're not making any money at it. Or investors who are tired of having a large nest egg sitting there making a paltry 1% a year. Those are the people who are either tired of trading and they just want it done for them or they're tired of

THIS IS FOR PEOPLE WHO WANT THEIR MONEY TRADED IN A MORE AGGRESSIVE WAY

their advisor not really doing anything for them and not making their money work. I think those are the ones who are going to get off the fence and say: "You know what, I'm going to go put $35,000 of my capital to work. They can leave the rest wherever while they see how that $35,000 will perform.

If you have, say, a $250,000 retirement account or nest egg and you put $35,000 into this system, it's a very small percentage of your overall account. But, if you can make on average $24,000 a year from the system, you're almost making 10% on your entire account. You have $250,000 per year and you've only got $35,000 at risk in total. So it's kind of a no-brainer for an investor and someone who doesn't really want to be in there trading. Now, I know a lot of traders. I know how traders work. I am one. It's like a casino. It's highly addicting. I love to trade and it's not going to be for those people who want action, who want to be in there and pulling the trigger. It's not for those. This is for people who want their money managed and traded in an aggressive way with the least amount of downside possible.

AT: Well, I like making money. It doesn't matter if I'm trading it or a machine's trading it, as long as I'm making money, I'm a happy camper myself.

CV: Yes, for sure.

AT: Now, do I have to open an account with you or how does that work?

CV: How it works is right now we're getting set up with a few more brokers for various clients. There's a lot of loopholes that we have to kind of go through, depending if you're a Canadian client, what province you're in, if you're American or if you're in the U.K. or Australia. So we've got partnerships set up that we can take clients in U.S., Canada, U.K., Australia. So it's just a matter of getting set up with that brokerage account and then getting the systems linked together so our

system automatically sends the signals through to your broker and then the broker executes in your account. So we never see your account, we never touch your account, we never have access to any money. We simply are a digital link that the broker connects with and you have to sign a little waiver saying the broker can execute the trades in your account and then pretty much we flick the switch and everything starts automatically trading in your account.

AT: And so when you say the broker is authorized, the broker themselves isn't actually making the trade. The machine is automated, correct?

CV: Correct, yes.

AT: When will this be live?

CV: We're planning to open the doors to clients at the end of January. So in about a month and a half from now, we're planning on opening the doors and starting to work with some new clients.

AT: It sounds great. You know, Chris, we talked about this prior to this interview and I'm so impressed with the idea of the system and what's taking place and what you're doing that I've decided I'm going to put $50,000 of my own money into an account and trade the system and let AlgoTrades just work its way and I'm going to report on it each issue of AmalgaTrader Magazine as well, so people can follow along, see exactly what's going on with my account, and they'll be able to see it live each and every issue. So I'm pretty excited about that, to bring that to the readers.

THE SYSTEM IS MORE OR LESS MY DREAM MACHINE

CV: Yeah, I think it's great. I'm extremely excited to get the system running live for fellow clients and followers. It is great. It's a system I trade myself. I love it. I get to watch it run live. I'm constantly watching our server. It is really mind-blowing how technology and things have changed from when I started training. It still blows my mind when I sit down in the morning and look at the computer screen and what is happening and the process and steps it took to get here. It really is amazing and the system is more or less my dream machine. This is everything that I've ever learned and mastered all bundled into one thing and it took me years to get it programmed. I've gone through several programmers to build various parts and rebuild parts. It's very exciting. This is it. This is something that I truly believe in, I trade, and I'm looking forward to an amazing future.

AT: Congratulations on getting to this stage and wishing you all the best success and definitely want success because my money's going to be in there too.

CV: For sure. That sounds great, Tony.

AT: Thank you. I appreciate your time, Chris, and we'll look forward to talking about this again and bringing you back.

CV: Sounds great. Talk to you later.

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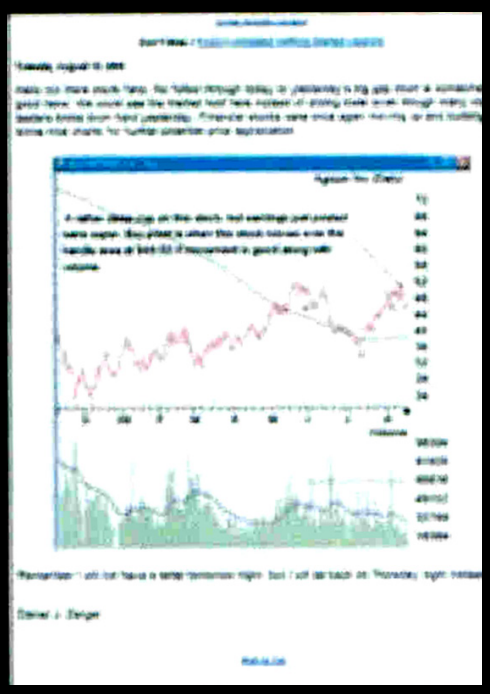

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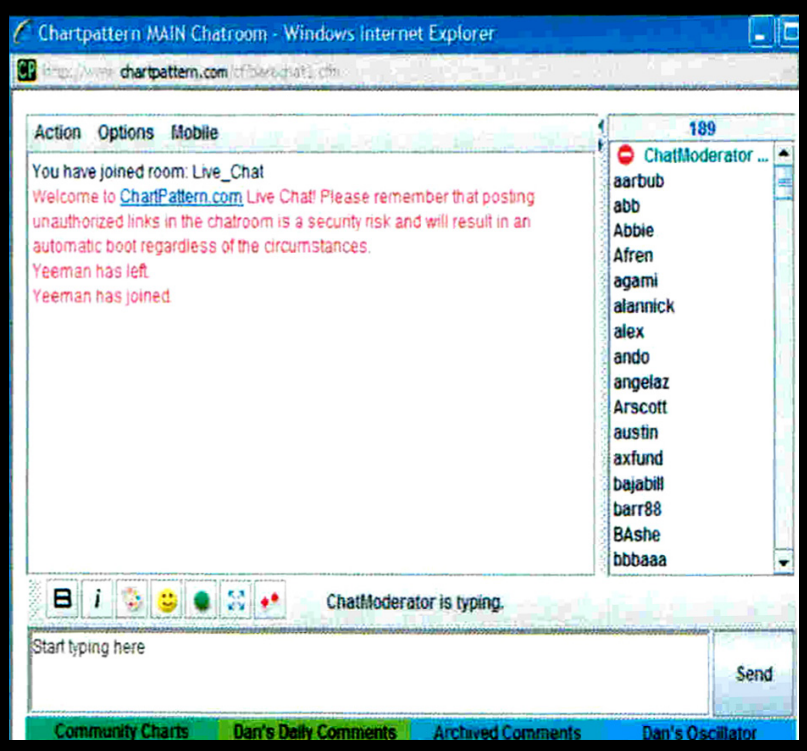

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WHICH DO YOU PREFER?

To truly understand the importance of trailing stops and the impact they can have on the success of your portfolio, I first want to talk to you about the decisions people make.

Let's start out by looking at some hypothetical betting scenarios.

BET #1: YOU HAVE A CHOICE OF TWO WAGERS:

A. YOU HAVE AN 80% CHANCE OF WINNING $4000, OR

B. YOU HAVE A 100% CHANCE OF WINNING $3000

Which would you choose? Before we discuss the first bet further, let's consider another scenario.

BET #2: I NOW PRESENT YOU WITH ANOTHER SET OF WAGERS:

A. YOU HAVE AN 80% CHANCE OF LOSING $4000, OR

B. YOU HAVE A 100% CHANCE OF LOSING $3000

Which option would you choose this time? Take note of your answers, and we'll come back to them in a moment.

COMMON OBSTACLES TO SUCCESS

"The investor's chief problem—and even his worst enemy—is likely to be himself."
Benjamin Graham, mentor of Warren Buffet

"There is one important caveat to the notion that we live in a new economy, and that is human psychology … which appears essentially immutable."
Alan Greenspan

In other words, an investor's psychology is one of his or her own biggest obstacles. Let's examine some of the research that supports this position.

Terrance Odean and Brad Barber (Haas School of Business, UC Berkeley) have shared with us some enlightening research from their studies on how investors actually behave—not how rational man should behave—when faced with choices about their investments. Here are some key findings:

• According to their study of 88,000 investors, people are one-and-a-half times more likely to sell a winning stock than a losing stock, and the losing stocks they do cling to underperform the winners they sell by an average of 3.5%. Remember—that's just an average. Imagine what 3.5% on all of your investments could mean over the lifetime of your portfolio.

• A study of 10,000 investors by the University of California's Graduate School of Management similarly finds that the two most common mistakes investors make are that they "disproportionately hold onto their losing investments and sell their winners too early."

• In November 2006, universities from around the world jointly analyzed all trading activity on the Taiwan Stock Exchange (TSE) and found that investors are about "twice as likely to sell a stock if they are holding that stock for a gain rather than a loss."

To summarize Barber and Odean's synopsis of their research -

Investors in their studies:

• Traded too actively;
• Were under-diversified;
• Clung to their losers; and
• Bought the stocks that happened to grab their attention.

Moreover, investors were motivated by:

• Overconfidence
• The desire to avoid regret
• And the difficulty of evaluating thousands of investment alternatives

These studies apply to "average" investors, but even if you're an above-average, these are still statistics and trends that may apply to all of us. These are tendencies that are present in everyone, and acknowledging weaknesses is essential in turning them into strengths.

BACK TO THE HYPOTHETICAL QUESTIONNAIRE…

Now, let's go back and talk more about the hypothetical betting options I presented to you earlier. To refresh:

Bet #1: Choose one:

A. You have an 80% chance of WINNING $4000, or

B. You have a 100% chance of WINNING $3000

If we make these bets again and again, an expected value emerges. In this situation, the expected value—or average payoff—you would expect would be:

A. $3,200
B. $3,000

In this case, Option A has a higher expected value—a bigger payoff—making it the "rational choice". However, only 20% of individuals presented with this choice selected Option A, while a full 80% took the safer route of Option B. When it comes to gains, we want the bird in the hand.

The second scenario, as you should recall, deals with our preference towards losses.

Bet #2: Choose one:

A. You have an 80% chance of LOSING $4000, or

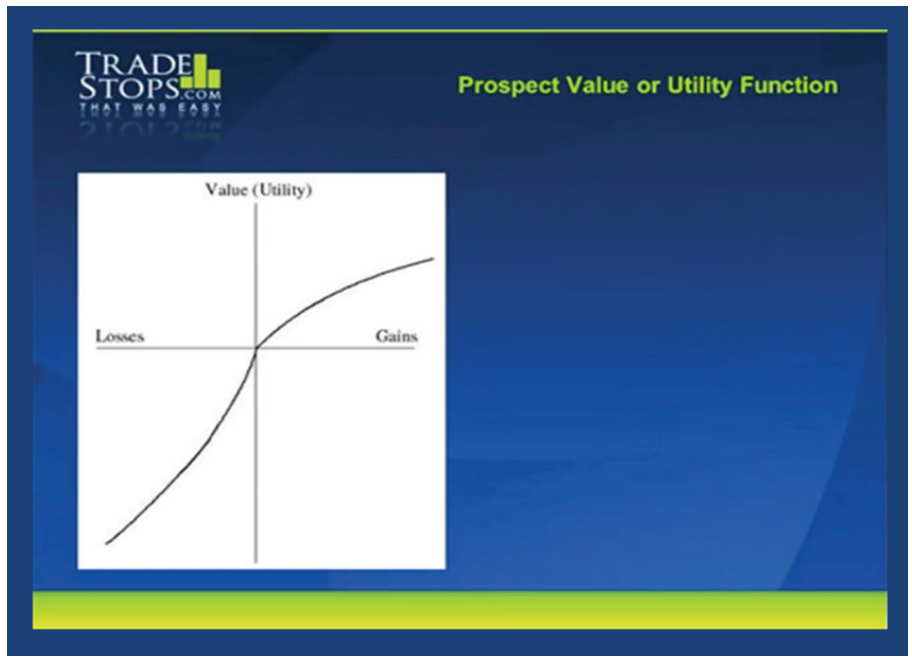
B. You have a 100% chance of LOSING $3000

For this scenario, the expected values would be:

A. - $3,200
B. - $3,000

In this case, 92% of people prefer the choice of taking the chance of a bigger loss in exchange for a small chance of preventing the loss all together, while only 8% of people choose the smaller, but definite, loss. When it comes to losses, we'll keep the two in the bush.

The results show us that, the vast majority of the time, people choose options that appear safer—but are really of lesser value. Why is there a tendency to do this? And what does this pattern of behavior mean for us? Let's take a closer look.



A Prospect Value or Utility FunctionStops Case Study

Let's take, for instance, this chart designed by behavioral economists called the Value (Utility) Chart. Gains increase as you move to the right, and losses increase as you move to the left. The vertical measure is of the value, or utility. So what does this chart—and the line it depicts—mean? As gains get larger, the impact they have on us is less. As losses get bigger, however, the impact continues to increase. It's much more difficult to let the losses go—we're so preoccupied with them, and want to hold on to them. The gains, on the other hand, are less important to us—somehow, we actually seem to prefer the losses.

So if we hold two stocks—one a winner and the other a loser—and we need to sell one, which are we going to hold on to? The loser! We MUST reverse this pattern! We have to learn to cling to our gains rather than cling to our losses.

Again, remember: nobody, regardless of experience, is completely immune to these mistakes.

WHAT IT TAKES TO GET EVEN AFTER A BIG LOSS

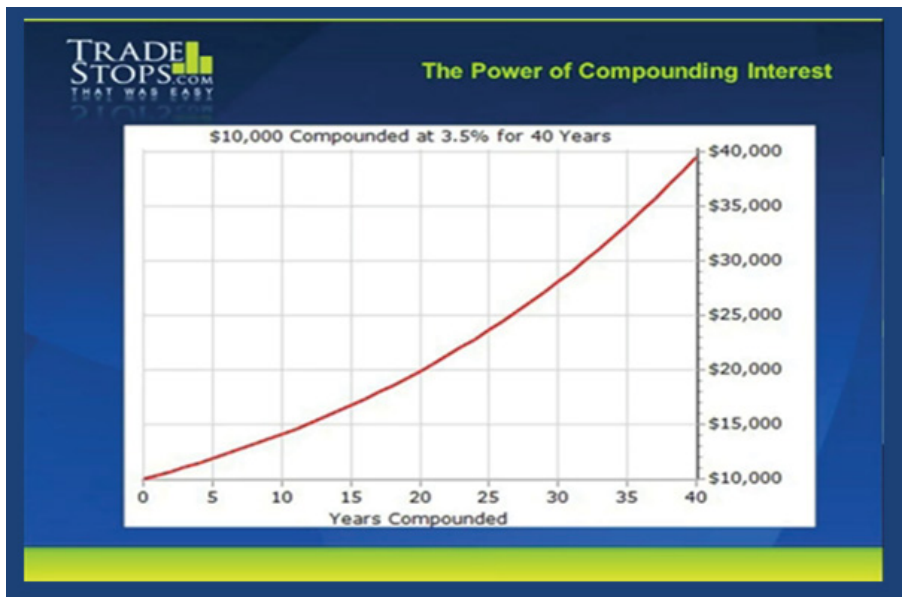
Have you ever heard yourself say, "I'm going to get out when I get back to even?" Any time you find yourself thinking this, that should be a red alert that it's time to sell. As I'm about to show you, the further away you get from your purchase price, the more difficult it will be to get back to where you started from.

Percent fall in share price	Percent gain required to get back to break even
10%	11%
20%	25%
50%	100%
75%	300%
90%	900%

The table above shows us what it would take to get back to the mythical "break even" point after a loss, using a starting point of $100. How bad does it get? From a 10% loss—$90—a 10% gain is only $99—so we actually need 11% to break even. While not unmanageable, that's still a significant climb.

However, it gets exponentially worse. At a point of 50% loss, or $50, we would need another $50 to break even—so we'd need a 100% gain!

As the table shows, some of these numbers are very difficult to overcome. Moreover, our natural patterns of behavior are working against us; remember, as our losses get bigger, we are more attached to them, and they're harder to let go of. We can be our own worst enemies.



THE POWER OF COMPOUNDING INTEREST

Don't forget about the future earning potential—in compounding interest—that the money we give away could be earning for us. Using Odean and Barber's 3.5%, take a look at what $10,000 could become when compounded over 40 years. That $10,000 turns into $40,000 over the 40-year period. So when you're considering putting your money into speculative bets, remember that you're not only risking your money, but you're risking your future earnings from that money. Up to this point, I've been discussing and emphasizing the impact of what's called the loss-aversion bias.

However, it's not the only cognitive bias that behavioral economists have identified and that can interfere with smart trading decisions:

The bandwagon effect: "It must be the right thing to do because everyone else is doing it." This is how bubbles get started, and how tech stocks can have an unbelievable price/earnings ratio, that everyone once believed.

Loss aversion: We prefer avoiding losses more than making gains.

Outcome bias: Judging a decision by its outcome rather than the quality of the decision at the time that it was made.

Sunken costs: Money that has already been spent is more valuable than money that may be spent in the future. The idea that if I sell at a loss, I'm wasting money is simply not true.

Recency bias: Weighting recent data more heavily than earlier experiences

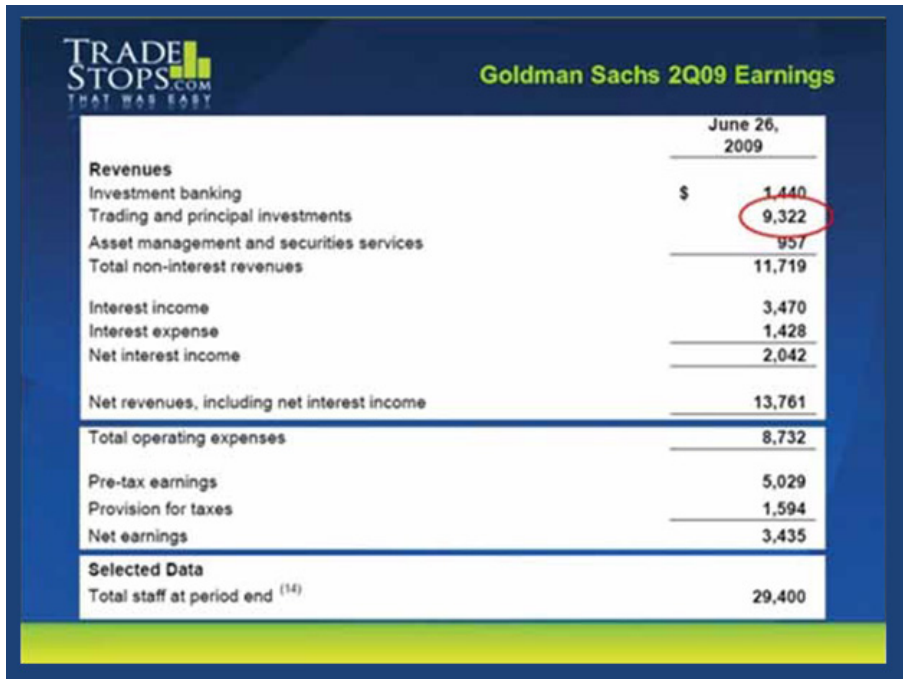
Anchoring: Relying too heavily on readily-available information when making a decision. Have you ever watched CNBC and been tempting to go buy a stock you heard about, or read a newsletter and wanted to push the "buy" button right away?

Belief in the Law of Small Numbers: Making mountains out of molehills

Endowment effect: Valuing something more once we own it

Disconfirmation bias: Being critical of information which contradicts our beliefs while uncritically accepting information that is in line with them—we hear what we want to hear.

Post-purchase rationalization: If a decision needs to be rationalized after the fact, it is probably wrong! If you hear yourself trying to talk yourself into why you made a good decision, it's a warning sign to take another look.



	June 26, 2009
Revenues	
Investment banking	$ 1,440
Trading and principal investments	9,322
Asset management and securities services	957
Total non-interest revenues	11,719
Interest income	3,470
Interest expense	1,428
Net interest income	2,042
Net revenues, including net interest income	13,761
Total operating expenses	8,732
Pre-tax earnings	5,029
Provision for taxes	1,594
Net earnings	3,435
Selected Data	
Total staff at period end [14]	29,400

CASE STUDY: GOLDMAN SACHS 2009 EARNINGS

Above are Goldman Sachs' second-quarter earnings for 2009. I want to draw attention to one number: their profits from trading and principal investments for the single quarter were $9,322,000,000. They did not have a single losing day in that quarter—on average they made $100M per day trading in the markets.

Houston, we've got a problem!

To summarize what we've discussed so far, we have a number of major factors working against us:

- We're biased against selling our losers and holding our winners.
- We have other cognitive biases as well. It's difficult to recover from losses.
- Compounded interest is looking pretty darn good.
- Goldman Sachs is taking the other side of our trades.

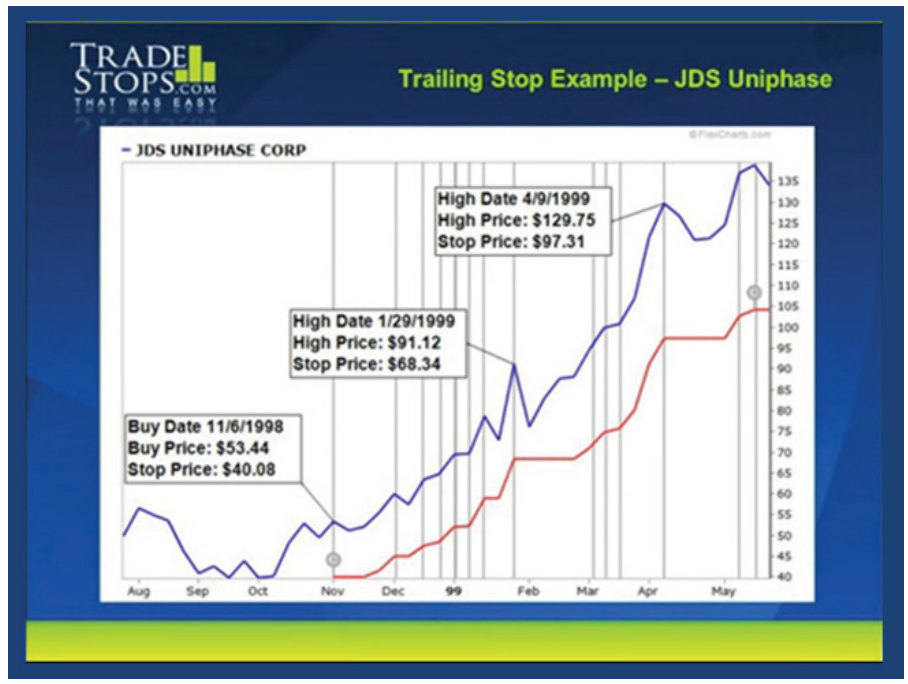
So what's the solution? It's time to talk about trailing stops...

TRAILING STOPS

Trailing stops are the simplest and most intuitive method for reversing the tendency to hold on to your losers and sell your winners. Of course, it's not the only solution, by any means. However, I firmly believe that it is the simplest and most intuitive solution to the issues I've discussed so far.

TRAILING STOP EXAMPLE—JDS UNIPHASE

Let me begin to explain trailing stops by starting with an example. In the chart here, the blue line represents JDS Uniphase's price, and the gray lines are points where it reached a new high. The red line is the chart of the trailing stop. This is a stock I invested in back in the 1990s, and I wasn't alone. In November of 1998, you could buy JDS Uniphase for $53.44 Using a 25% trailing stop, the first stop is $40.08—25% below the initial price. As the price rose, so did the trailing stop. In January of 1999, the stock hit a new high



price of $91.12, moving the trailing stop price up to $68.34 (25% below the new price). The price dropped a bit afterwards, but only 15%, so the trailing stop point was not reached, and the trailing stop price did not change. As it continued to rise, it hit $129.75 in April 1999, with a new stop price of $97.31. Here, investors would have locked over $40 in gains—and the gains can only go up.

The trailing stop had protected gains up to this point; we were still in the trade, and still giving the stock room to run. This is as important as cutting our losses. The point is, it's not easy to stay in these trades that make historic gains—the temptation to sell quickly can be strong. But some of the most wildly successful investors in the world will tell you that it's the few major winners in their portfolios that make a difference—"irrational profits". Of course, there will be losers, too. But if you stick with this plan, you can make the most out of your winners and minimize your losses.

So what happened with JDSU? Over the next 15 months, it made it up to a high point of $1,120 in March of 2000, setting a new stop price at $840. However, the

stock quickly fell apart, falling nearly in half before climbing slightly back up and then crashing all the way back down. Many people clung to the trade, riding it all the way down to the point of taking a loss—and unfortunately, I was one of those people. But if you had been using a trailing stop, you would have cashed out in April of 2000 at $637 per share. By October of 2002, the stock was down under $10 per share. Even though the volatility of this stock and its sudden drop blew through the higher stop price of $840, having a trailing stop in place still made the difference between cashing out at $637 a share—more than $580 in profit—and potentially losing everything by riding out the stock's fall.

To summarize: What is a Trailing Stop?

- We're setting a stop-loss at a fixed percentage below your initial purchase price. If you bought at $100 and you are using a 25% trailing stop, then your stop starts at $75.
- Check each evening to see if the latest close is below your stop or if a new high has been made.
- If your stop was penetrated, then we close the trade the next morning.
- If a new high was made, then we adjust the stop. If the new high is $102, then the new stop is now 25% below that: 0.75 * $102 = $76.50.

HOW TRAILING STOPS BEAT PROFESSIONAL JUDGMENT

Does it sound like trailing stops are just too simple? Take a look at this study that I was commissioned to do. A major company came to me and said, "We want to know how our flagship value investment newsletter would have performed if we had used trailing stops instead of relying on our margin of safety."

The black line in the chart above represents the performance of the portfolio without trailing stops. So over the ten-year period from 2002 to early 2011, this portfolio—if you had invested equally in all 100 recommendations—would have made a 140% gain. Over the same time period, the S&P 500 only made a 45% gain, so that's an impressive performance.

The other lines on the chart show what the portfolio would have done with different levels of trailing stops. The 10% trailing stop still beat the S&P 500, but did not do as well as the actual performance. Why? Because a 10% trailing stop point is generally too small—it doesn't give your winners enough room to unfold without being taken out by market volatility.

However, the other trailing stop points—20%, 30%, 40% and 50%—all would have handily beaten the performance of the advisor with no trailing stops. Remember, this represents

the portfolio of someone whose entire professional career is spent looking at which stocks to buy, reading over all 10-Qs and talking to CEOs—more than most of us will ever do to identify which stocks to buy. And look what happens when you add trailing stops to the performance: in this case, the 20% and 30% stops added on nearly another 100 percentage points to the overall gain of the portfolio.

TO SUMMARIZE: WHY WE LOVE TRAILING STOPS

1. They're sophisticated enough to do the trick of cutting losses and maximizing gains.

2. They're simple enough to be understood by all investors—this understanding is critical because it gives us confidence to execute the system in the heat of a crisis. If you're trying to follow some fancy black box mathematical formula about the right time to get out, you won't have the confidence to know that it's really the right thing to do.

3. World-class investors and traders use them.

4. Failure to plan is a plan to fail. You've got to have a plan! Unfortunately, many individual investors don't.

HOW TRADESTOPS.COM WORKS

TradeStops' Trailing Stops Only service allows you to just track percentage-gain trailing stops. It's set up to be the simplest possible way to track trailing stops on stocks that you own. To create alerts, simply set up a portfolio, and enter a percentage trailing stop that you want to use; enter the symbol, the purchase price, purchase date, whether you're long or short, and the number of shares that you hold.

TRADESTOPS COMPLETE

We also offer TradeStops Complete—it does everything the Trailing Stops Only service does, but also includes additional types of alerts. For instance, you can set up an alert that lets you know when the close is a certain percentage above your entry price. You can also set up time-based alerts, such as notifications on a specific calendar day (like right before earnings, perhaps) to remind yourself to look at your position. There are also moving average triggers, moving average crossovers, and also volume triggers—for instance a 100% spike in volume above the average ten-day volume tells me that I should take a look and see if anything significant happened that day.

TO SUMMARIZE: BENEFITS OF TRADESTOPS.COM

- Tracks your trailing stops for you
- Can track other alert types for you as well
- Adjusts your alerts for dividends and splits
- Covers US equities, Canadian equities, London equities, US Mutual Funds, US indices, foreign indices, and even options
- Alerts never expire—they can be left open indefinitely.
- Stops are never visible to anyone even remotely affiliated with the market-makers.

WHAT ABOUT OTHER ONLINE BROKERS' TRAILING STOPS?

Key differences:

- Unlike other services, TradeStops doesn't look at intra-day movement and automatically place an order; it looks at close only prices and alerts you at the end of the day as to whether you need to make a move the next day. Why does that matter? Because intra-day movement can be volatile, and automatically selling may not get you the results you want.

- TradeStops alerts are extremely easy to set up.

- TradeStops lets you leave an alert active for as long as you are an account holder. Online brokers make you cancel them after 60 days.

- TradeStops automatically adjust alerts for dividends and splits. Online brokers cancel alerts after corporate actions.

- TradeStops will never execute an order for you—you're not subject to market volatility the way you would be with an intra-day order.

TradeStops is simple to use, and you always know what you will get.

HERE ARE SOME ADDITIONAL NEW FEATURES

One of the main features of the new release is the Portfolio Tracker—it's not just an alert system, but also allows you to track positions that you might be holding but may not want to put an alert on. You can also tag and organize your positions, searching using filters and status indicators. Different views will provide different information, always giving you the data you want to see.

BY DR. RICHARD SMITH

HOW TO LOCK IN PROFITS ON EVERY TRADE

THE "ALERTS ONLY" VIEW

THE "POSITION ONLY" VIEW

THE "ALERTS BY POSITION" VIEW

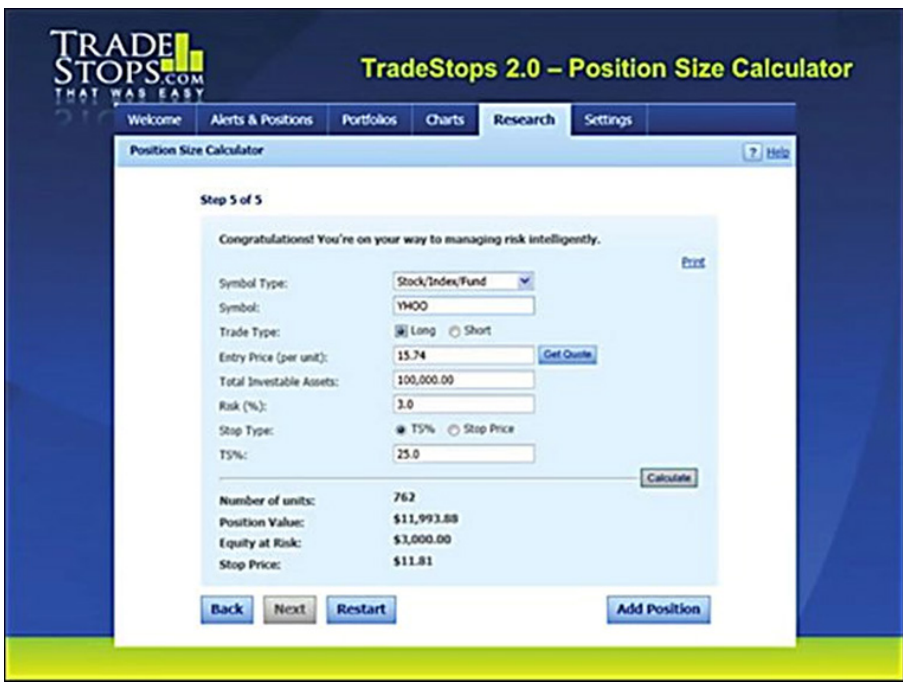
- TradeStops also includes improved charting with more interactivity, based on our Right Way Charts product that we've spent years developing.

- You can perform "what-if" scenarios in the new Research Charts section

THE RESEARCH SECTION

The Research section gives you tools to do analysis on your portfolios and calculate key metrics—including a Position Size Calculator.

EVENT HISTORY



The Event History page will allow you to view historical events in your portfolio—alerts triggered, dividends paid, positions opened, positions closed, etc.

TO SUMMARIZE: WHAT WE'VE LEARNED

- The most important key: Learn to cling to your winners!
- Use a tool like trailing stops to help you avoid the tendency to hold losers and sell winners.
- Staying in your winners is HUGE. Often it is even more difficult to do than cutting your losses.
- Have a plan to "navigate the dip". This refers to "The Dip", by blogger Seth Godin. The key take-away is that in all endeavors in life, any time you set a goal for yourself, there is this invariable "valley of death"—a time when the goal seems to be moving further and further away. To get through this, you must have a plan.
- Those who do have a plan are more likely to get to the other side. You must have a clear idea of what you're doing, and this is especially true in trading.
- Remember that YOU are part of the equation and must be involved in the management of your money because no one cares about your money more than you.

QUOTES FROM TRADESSTOPS WE'LL LEAVE YOU WITH

"I can calculate the motion of heavenly bodies but not the madness of people."
Sir Isaac Newton (who lost a lot of money in the South Seas bubble)

"Our sector concentration is predicated on blackjack and investments. Professional blackjack is being played in this trading room from the standpoint of risk management, and that ultimately is a big part of our success."
Bill Gross, conservative bond investor

"The game of professional investing is intolerably boring and over exacting to anyone who is entirely exempt from the gambling instinct; whilst he who has it must pay to this propensity the appropriate toll."
John Maynard Keynes

www.tradestops.com

BIO

Dr Richard M. Smith—founder of TradeStops.com

Dr. Smith studied mathematics at U.C. Berkeley and went on to complete his PhD in Systems Science at the Watson School of Engineering at SUNY Binghamton. Since completing his PhD, Dr. Smith has applied his research skills in the private sector to a variety of problems. The common thread connecting all of his work is providing simple solutions to complex problems.

Because his dissertation was on mathematical measures of uncertainty, after he graduated he was deemed a "Doctor of Uncertainty". This title, as it turns out, is quite appropriate. Uncertainty is fundamental in our lives, and how we deal with uncertainty has a major impact on the success we realize in our lives—and in the market. Dr. Smith's professional goal is to use the tools he's developed to help individual investors understand and address the uncertainties that we all face in the financial markets.

More recently, Dr. Smith has brought his passion for simplifying the complex to the financial markets by developing several Web -based services for investors and traders. With his background in mathematical theories of uncertainty, combined with his own personal investing and trading experience, he has an acute sense of the critical roles that risk and money management play in successfully navigating the financial markets.

When Dr. Smith discovered that many of the world's top private investment advisors and richest traders had been using a mathematical formula for years to determine when to buy and sell with incredible results, he decided to try it out. After running some numbers on his previous trades, the results were clear: no matter whether the market rose or fell, the investment formula would have earned him bigger and faster gains on all his trades.

Applying this formula to an entire investment portfolio by hand was difficult, so he developed a program to do that work automatically—and TradeStops was born.

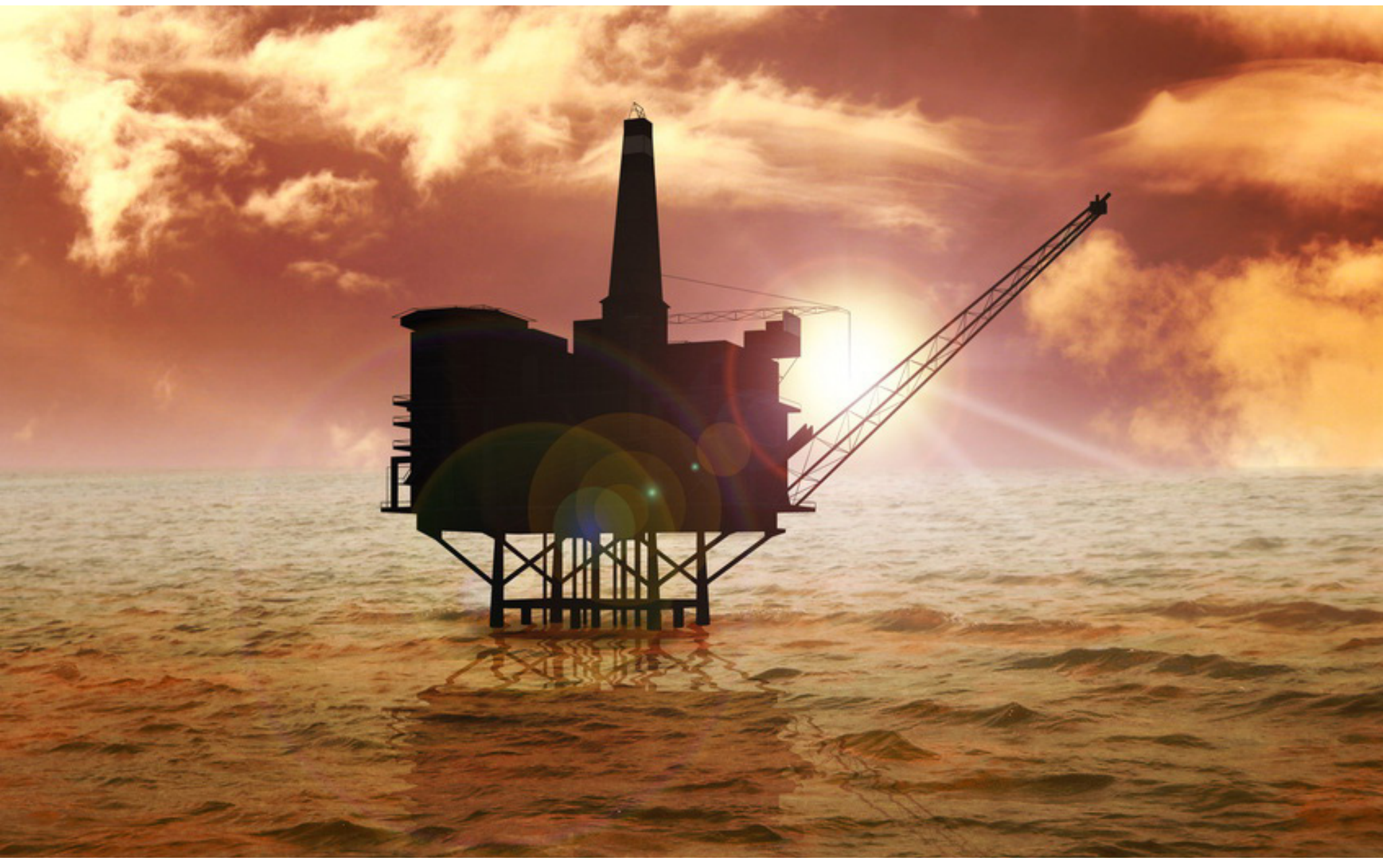
BY CHRIS VERMEULEN

VIDEO: BASIC MONEY & POSITION MANAGEMENT

Chris has been featured in this issue of the Magazine so we won't go into his bio here. In this ten minute video, Chris talks about entry and exit points as well as how and when to take profits. Click the video above to watch.

IN DEEP WATER AND LOVING IT!

EXTRAORDINARY ADVANCES IN DEEP-WATER DRILLING



INTERVIEW WITH CRAIG HUME

AT: Tell us a little bit about yourself.

CH: I'm a 33 year old consultant Subsea Engineer in the oil and gas upstream production industry. I'm originally from the United Kingdom, and now live in Houston, Texas.

I've worked in the oil and gas industry for over 10 years now, after graduating with an engineering master's degree from the University of Newcastle upon Tyne in England. Growing up, I was always adventurous and loved the outdoors and travel. I was particularly interested in the mountains and oceans, and had a great interest in natural sciences, in particular oceanography and geology. I loved the oceans, and spent many a day in, on or near them enjoying various water sports.

When looking towards careers and what to do with my life, I was always torn between a love of outdoor sports and adventure, and a career based on my passion for science, technology and the natural world. I remember having an older friend whom I would go climbing, hiking and surfing with. I was still at University, but I remember he worked in the offshore oil and gas industry and was always in far flung places around the world; going to work in helicopters, having a lot of adventures (both good and bad!) and being well paid for it all at the same time. That's where I guess it all started for me – it ticked all my boxes shall we say.

AT: How did you end up going to Houston?

CH: My career to date has taken me all over the world on short term projects and business trips. I started out in my career living in Aberdeen, Scotland. However, by the mid 2000's I was living in London, working on a huge subsea project for BP in Azerbaijan. In 2008 the project phase I was working on was successfully completed and I had some decisions to make about what to do next. I had the option to stay in London and work on future phases of the development project for BP, or I could take that opportunity to move away from London; a new adventure shall we say.

HOUSTON IS A GREAT HUB FOR EXPLORING BOTH NORTH AND SOUTH AMERICA

I wanted to move somewhere that would both appeal to me personally and provide me with a lot of career opportunity.

Houston seemed to be the obvious choice at the time. I had several university friends that moved to the United States and I had always enjoyed being in the US. Houston is a great hub for exploring both North and South America, and the cost of living was considerably lower than London. So in August 2008, I was offered a job with a major EPIC (Engineering, Procurement, Installation and Construction) company based in Houston. I finished up on my final Friday at my existing company and was on a plane to Houston on Sunday.

AT: How do you find it in comparison to the UK?

CH: Considerably warmer!

I enjoy it. For my career it has really been a huge catalyst. London is a financial city at heart, and although all the major oil and engineering companies have a presence there, it was certainly a more difficult city to network in. It was also considerably more expensive! I personally still consider Aberdeen in Scotland to be the real center of excellence technically for the UK oil and gas industry, especially for the harsh North Sea region, but that is slowly migrating south to London.

I also think I am representative of a significant "brain drain" the UK is currently experiencing, especially from my generation, with many intelligent and talented young technical professionals emigrating, which is a concern given the rich engineering history the UK has. It's certainly a big factor in the oil and gas industry. You just have to look at how many British oil and gas professionals now live in Houston and around the world.

AT: Your expertise is in underwater engineering for the oil and gas business, and I expect currently in the Gulf of Mexico mostly?

CH: Houston is certainly where all the major Gulf of Mexico (GoM) projects are executed. However, many projects in West Africa, Brazil and even the Far East and Australia have some involvement from Houston. The industry in this city is a global center of excellence for the offshore industry, so it's almost inevitable that any major offshore development globally can have some connection to Houston in its lifecycle.

One of the main reasons I chose to come to Houston, however, was to get that experience in the GoM, especially in deep and ultra-deep-water engineering, where there are significant challenges to bringing a discovery into production. It's also of huge importance to the United States in terms of domestic energy production.

AT: Is there much oil to be found in, or more important, to be extracted from the Gulf of Mexico?

CH: You make an intelligent and significant differentiation in your question there. There is an ever increasing challenge to extracting these resources above and beyond discovery and evaluation, which I will speak to further later on.

NEW SIGNIFICANT DISCOVERIES OCCUR EVERY YEAR

It's difficult to put numbers to how much oil may yet be discovered in the GoM, but certainly as an industry, new significant discoveries occur every year. So let me try and walk through where we are today and where we're going in the future.

With continuously developing exploration technology, such as advanced seismic imaging techniques, we're able to "look" deeper than before, thus investigate deeper and older geological trends, and also to "see through" more difficult

geological features, such as complex salt canopies that traditionally could cause large seismic attenuation, effectively hiding potential pay structures beneath these zones. These salt canopies also presented complex drilling challenges

DEEPER WELLS, THE PRODUCTION PRESSURES AND TEMPERATURES INCREASE

(some of these salt deposits can be thousands of feet thick) and with added drilling complexity comes added well cost, which significantly impacts the cost of exploration and development. However, now with advanced techniques, experience and technology, many of these challenges have been, and continue to be, overcome. Exploration and drilling has become a very advanced technological part of the industry.

Most of the major deep-water oil and gas producing facilities in the GoM to-date are producing from geological regions known as the Miocene (~23million yrs. to ~5 million yrs. before present) and Pliocene (~5million yrs. to 2 million yrs. before present), collectively known as the upper Tertiary. With the advancing sub-salt imaging and drilling technology I discussed above, these zones can be split into the Conventional Pliocene/Miocene and Sub-Salt Pliocene/Miocene.

The Miocene is certainly still the big producer for the near term. Opening up the sub-salt Miocene discoveries generally allows us to utilize existing production technology as the pressures and temperatures are generally within the boundaries of today's standard, qualified subsea production equipment, although some sub-salt discoveries are much deeper which creates challenges I'll discuss later. Recent developments in the lower Miocene in particular have proved to be great producers, and certainly still represent big "bang for your buck" for the operators, which is why the sub-salt discoveries are so important in the GoM.

Looking to the future however, as mentioned, we are now able to evaluate geological trends that are older and deeper than the current major hydrocarbon bearing zones in the GoM. Below the Miocene we have the Lower Tertiary or Paleogene (~65 million yrs. to ~23 million yrs. before present). Once thought to not contain any oil or gas, recent discoveries (such as BP's Tiber) have shown, there is huge potential – thought to be around $1.5 trillion of potential.

All of the major operators are now exploring this trend, and some of the shallower discoveries in the lower tertiary are already producing (e.g. the Royal Dutch Shell operated Perdido development which started up in 2010, in over 8,000ft of water). Over the next 15 to 20 years, this will become the dominant source of oil in the GoM.

The challenge however is that as we drill the deeper wells, the production pressures and temperatures increase, and go beyond the boundaries of current technology. We are now drilling to such extreme reservoir depths (up to 35,000 ft. below the

seabed, or 6.6 miles into the earth's crust) that pressures and temperatures exceed the current maximum rated production equipment of 15,000 pounds per square inch and 250 degrees Fahrenheit. So right now, a huge investment is underway across the industry to qualify higher rated drilling and production equipment that will safely allow the industry to produce from these reservoirs.

It's an exciting time in the industry, and we're seeing some fascinating enabling technology development by the equipment vendors and the operators. The lower tertiary plays of the US GoM are new frontiers, both technologically and commercially. They're very important for the future US domestic energy production portfolio. So, I don't think we'll see oil and gas production cease from the US GoM in our lifetimes.

AT: Which oil companies might benefit most from 'lower tertiary' drilling?

CH: The short answer: all of them. However, for the most technologically challenging discoveries, it will be those committed to the high capital investment for the successful qualification of the necessary technology to safely, and efficiently, bring these discoveries in to production. Even drilling appraisal wells can be considerably more expensive, if not currently impossible, compared to more traditional GoM wells due to the greater depths and complexities of the interest zones within the earth's crust.

Several major oil companies, including BP, are actively pursuing the development and qualification of complete suites of 20,000 psi pressure rated production equipment

to enable them to explore, appraise and develop these reserves safely. That in itself is a huge and complex project undertaking that may take years yet to complete.

There is a wealth of information, including technical papers and press releases available in the public domain about individual operators and vendor's development efforts to go to deeper depths, with higher pressures and temperatures. Hopefully, this article will provide a head start on what to look for when researching the industry and its future, especially in deep-water.

AT: You've pointed out some of the enormous challenges when you're in deep water. Have there been any that you didn't expect or are most of the situations similar?

CH: Fundamentally no two reservoirs, or subsea development scenarios are identical. Also, every reservoir's fluid composition is slightly different and this has a fundamental impact on the production system and operating requirements needed to produce the field, not only for year one but for the life of field, which could be up to 25-30 years. Conditions also change with time during production, sometimes significantly and you need to anticipate that during the engineering design and selection of equipment at the front end of the project. However, you are always limited by the data available; so you to make educated assumptions and are mindful of redundancy and contingency in your design, all whilst minimizing project CAPEX.

The aim as an engineer is to avoid any nasty surprises during operation and minimize OPEX, as any intervention subsea is hugely expensive. A standard construction vessel, with remotely operated vehicles (ROVs - underwater robots that perform the "hands-on" work in deep-water) will currently run around $250,000 to $300,000 a day and a mobile offshore floating drilling rig is currently $1 to $1.5 million a day. So a huge investment is made in front end engineering to make sure we have selected everything correctly, and optimized the design. We also need to allow for future expansion if potentially anticipated by reservoir evaluations.

But engineering time is cheap relatively speaking and I don't think it can ever be underestimated. There needs to be sufficient front-end engineering work to make sure that when you start to cut steel and drill wells, you're doing it right and safely the first time.

Some of the biggest challenges in deep-water from a production aspect are flow assurance related, essentially making sure that the produced fluids will flow from the wells to the topside receiving facility. This is obviously very important to the project economics also. The sheer weight of the column of fluid at these water depths

YOU ARE ALWAYS LIMITED BY THE DATA AVAILABLE

places very high back pressures on the wells (thousands of pounds per square inch) and needs to be fully assessed so that the reservoir pressures are always sufficient to maintain an economically viable production flow rate. We often inject gas into the flowline risers or well bore to reduce the fluid density in the vertical column, thus reducing the back pressure on the wells. This is known as gas lifting the wells.

OIL DISCOVERED OR PRODUCED IN MEXICO HAS BEEN OWNED BY THE STATE

That is one of the common challenges in operating all deep-water wells, along with phenomena such as gas hydrate blockages, which are ice like blockages that form from natural gas when in the presence of water, low temperatures and high pressures (essentially every deep-water production environment!). Formation can occur rapidly and can completely block flowlines and tubing rendering a production system inoperable. These can be very difficult, and in some cases, impossible to remediate.

AT: Does Mexico play into the equation in the Gulf?

CH: Interesting timing for this question, as it could be about to have a significant part to play potentially.

Historically though, the answer is no as far as the US is concerned, or any private entity for that matter, because Mexico's oil and gas is constitutionally owned by the state and produced by the state operated oil company PEMEX. In 1938, President Lazaro Cardenas sought to protect Mexican oil and gas reserves in the GoM from a rapidly growing American oil exploration boom on the US GoM continental shelf by nationalizing the oil and gas sector. Since then every drop of oil discovered or produced in Mexico has been owned by the state and there has been a long standing moratorium on drilling in the western Gulf of Mexico around the disputed offshore trans-boundary region between the US and Mexico. Over the majority of the past 75 years this has worked out fairly well for Mexico.

However, significant changes could be afoot. Over the last decade, PEMEX's production output has dropped by about 25%. With a comparative lack of technical experience that has been developed by the heavily investing operators in the US GoM, especially in deep-water, PEMEX are substantially challenged to realize the deep-water potential that is on their doorstep. PEMEX funds about 33% of the Mexican federal budget, which significantly limits the capital investment and R&D investment funds available to develop the necessary technologies required to being these major deep-water discoveries in to production.

By the end of the year however, it's anticipated that a constitutional amendment in Mexico will be completed that allows development partnership agreements with external investors. The

details of how any agreements would be structured still seem a little unclear and I would imagine much due diligence is still required by any potential investors to fully understand the terms of any deal. But the prize is potentially huge for both Mexico and external development partners.

Additionally, in October this year the US Senate unanimously voted in favor to approve legislation enacting a 2012 accord with Mexico that expands offshore drilling development by approximately 1.5 million acres along the western GoM trans-boundary region of the continental shelf.

PEMEX AND US LEASEHOLDERS TO JOINTLY DEVELOP TRANS-BOUNDARY RESERVOIRS

The deal essentially allows PEMEX and US leaseholders to jointly develop trans-boundary reservoirs through unitization agreements that will need to be reviewed by both governments prior to approval. This should also ensure the necessary safety and environmental regulations are adhered to.

So the future is potentially exciting in this area. For oil companies with experience in the US GoM it could be attractive due to an existing understanding of the regional geology, drilling, equipment and infrastructure requirements, which may increase the executional certainty of a project. This definitely could be an area to watch. Also, from an investor's point of view, the changes in Mexico may also bring in to play huge untapped shale reserves onshore; similar to those seen in tight oil and gas plays like the Eagle Ford in South Texas. Those geological trends don't necessarily stop at the border, and to date there are very few shale wells in Mexico; so certainly, it's a case of watch this space.

AT: You worked on the Deepwater Horizon oil spill in the Gulf. That must have been a difficult and hectic time?

CH: Very much so. I remember clearly hearing about the incident on my way into the office that morning as I was working on a BP project at the time.

I remember growing up in the UK and hearing about the Piper Alpha disaster in the North Sea as a youngster. That was a horrific explosion and fire that killed 167 offshore workers in 1988, and to date is still the worst disaster in the industry. Hearing about the Deepwater Horizon that morning was a very similar feeling. Any incident involving fire and an uncontrolled release of hydrocarbon is always very serious.

Our initial thoughts and concerns were with the search and rescue operation. I obviously wasn't really involved in that; just watching from afar with everyone else. It wasn't really apparent to me what had happened subsea, or what the condition of the well was. It was only after the Horizon sank and in the following days that I found out that there was a serious problem with the well, which was probably about the same time everyone else in the world found out.

Those 87 days were some of the busiest, longest and most stressful I've ever been through, but also some of the most eye opening. I saw an industry come together and perform some of the most incredible engineering I've ever witnessed.

AT: Why did it take so long to cap the well?

CH: It's difficult for me to go in to detail here, as I wasn't part of the team that directly worked on the final capping solution. But for context, the whole operation was run in lots of mini-projects with dedicated teams, hundreds of teams. Typically, subsea oil and gas projects take years, even decades, to design, manufacture and install. In this situation, teams managed to turn around a lot of incredible solutions in a matter of weeks, which is testament to the ability of the whole industry to cooperate and come together unconditionally.

IT WAS A VERY COMPLEX AND DANGEROUS OPERATION

There was, of course, a desire to end the well flow as quickly as possible; however, it was a very complex and dangerous operation. It was very difficult to appraise what damage had been done to the well bore, and if it could even take the pressures of rapidly shutting in the well. If it had been rushed, and failed, then the consequences would have been even more catastrophic.

There were two relief well drilling operations underway simultaneously at the site which ultimately would kill the well at the reservoir itself. However the duration taken to drill the relief wells (to a total depth of around 18,000ft below the seabed) meant that every effort had to be taken to stop flow from the well beforehand. A real concern was what would happen if a tropical storm, or worse a hurricane, entered the GoM during the response effort. There was a lot of focus on how to temporarily abandon the site and contain flow from the well. We were very lucky that no storms threatened the operations, but we were well in to hurricane season before the flow was finally halted.

Ultimately, the capping stack solution was a success and a huge testament to the abilities of the engineering teams working on that equipment. That technology has now been developed and is part of all deep-water operators emergency response equipment, fully maintained and stored at nearby shore-bases, ready to go if ever (hopefully never) needed again. That was one of the key enhancements to come out of the incident for the deep-water industry; equipment that can implement a mechanical shut-in of a deep-water well subject to a catastrophic loss of containment.

AT: Will they be able to go back and extract the oil from that field or the well?

THE DECLINE IN THE STOCK WAS SOMEWHAT ENHANCED BY THE 24HR COVERAGE

CH: It's hard for me to say, as I'm not a reservoir engineer. Theoretically yes, I'm sure it's possible, however I'm not sure BP would.

AT: How was the media coverage in your opinion?

CH: It was eye opening for me. It became such a huge story, and quite rightly so. We had access to all the 24hr media outlets during the incident and it was interesting to see how the commentary developed from the outside looking in.

Overall, I personally think BP was very transparent. It was a bold decision to provide streaming coverage from the ocean floor, via the ROVs, of the well flowing and intervention activities. I think they did everything they could to let the public see the reality of the situation and what was actively being done to solve the problem at hand 24/7. I'm not sure all operators would do the same. Looking back, at the time I didn't really appreciate how big a media event it turned out to be.

That said though, I ask myself, is access to so much information necessarily a good thing? It gave the media the opportunity to commentate freely on what they interpreted was going on. This was eye opening for me, as a lot of statements and assumptions were factually incorrect at the time. I remember thinking how I was getting a very transparent view of how media networks operate, and also how much of a powerful tool it really is; maybe it's made me take the news with a bit more of a grain of salt today. As I begin to dabble in trading myself, one rule I come across that strikes a chord here is "don't trade the news". By the time information is in the news, it's either too late, or not necessarily as accurate as one would assume.

My question back to you guys would be: "how much do you think the media coverage influenced the perception of BP by the markets"? I can't help feeling the decline in the stock was somewhat enhanced by the 24hr coverage for those 87 days; BP PLC on the NYSE effectively lost half of its value during the incident.

AT: What's changed since then? Are the waters and people safer now since this happened?

CH: A lot has changed as a result of findings from the Deepwater Horizon incident. There have been significant changes at the regulatory level in the US with the splitting of the MMS (Minerals Management Service) into three new distinct departments with dedicated roles:

1. The Office of Natural Resource Revenue; responsible for the collection and distribution of revenue from offshore and onshore production.

2. The Bureau of Ocean Energy Management, Regulation and Enforcement (BOEMRE); which conducts and manages lease sales, reviews and supervises exploration plans.

3. The Bureau of Safety and Environmental Enforcement (BSEE); which enforces safety regulations and performs regular inspections of offshore operations.

There's an increased focus on safety now post incident, especially at a regulatory level, to the point that the permitting process for drilling applications is now longer and more involved, and subject to even greater scrutiny.

There are new safety rules regarding the inspection and testing of critical safety equipment, such as blow-out preventers (BOPs) and the inspection, testing and sign off procedure for cementing jobs performed on all wells; it's all now very transparent with added rigor.

Also, as I mentioned previously, all of the operators drilling in the gulf now have access to an advanced array of subsea equipment developed during the response, such as the capping stack technology, ready to be deployed if ever required and within hours of any offshore location in the GoM.

I still firmly believe we are a very safe industry. The safety record is very good in comparison to some other heavy industries, especially when you understand just how many operations go on daily around the globe in the oil and gas production business without incident. There is a genuine culture of safety - both for personnel and the environment - throughout the industry and this incident has certainly provided significant lessons that serve to make it even safer.

SAFETY RECORD IS VERY GOOD IN COMPARISON TO SOME OTHER HEAVY INDUSTRIES

AT: Are there new technologies that will make the extraction of underwater oil easier and less expensive?

CH: I'm not sure that "easier" and "less expensive" are necessarily the right terms to use here. But, technology development is critical to the future of oil and gas production subsea. New technology today is enabling the development of discoveries made decades ago, that only

HUNDREDS OF MILLIONS OF DOLLARS TO SIMPLY DE-RISK A DESIGN

now are viable to produce safely and economically, as well as allowing us to go deeper and produce more marginal fields.

I've already mentioned the push for new high pressure, high temperature (HPHT) equipment; up to 20,000 pounds per square inch (psi) and 350 degrees Fahrenheit. To put that into context, that's the equivalent pressure of between 5 to 7 family sized cars pressing on every square inch of the internal pressure containing surface of that equipment, at a temperature you could set your kitchen oven at to bake a chicken.

This is a hugely complex challenge, costing hundreds of millions of dollars to simply de-risk a design and qualify equipment as safe and reliable to use in these kinds of conditions, remotely and over 1.5 miles beneath the ocean surface. The prize however is vital, as I discussed before with the deeper, lower tertiary discoveries in the GoM. These efforts are being driven by both the major oil companies and the major equipment vendors in many joint industry development projects.

What really interests me is the application of subsea technology that enhances or accelerates the production from a well. There are some really innovative solutions that have been and are being developed now that can significantly enhance the economics of a deep-water project.

One of these technology areas is the application of subsea boosting in deep-water developments: essentially, the utilization of large, high powered electrical pumps installed on the seabed that literally pump the produced well fluids towards the surface production facility and help draw down the flowing pressure at the wellhead. This results in lower back pressure on the wells allowing more oil to flow, which not only accelerates recovery from the wells, but also lowers the abandonment pressure of the reservoir (effectively leaving less of the resource in place) increasing the overall recovery factor. The effect of this technology on a deep-water project's economics can be significant. Some of these deeper reservoirs have a very short primary production lifecycle (i.e. the natural depletion of reservoir pressure) despite having very high peak pressures initially. So the application of boosting has huge potential to extend the life of these types of reservoirs in the deep-water GoM.

The technology is rapidly advancing, and several of the major oil companies are evaluating and deploying the use of high powered subsea pumps in deep-water GoM fields. There are only a handful of manufacturers out there that are experienced in this technology, with others aggressively developing their own in-house technologies to break into the market.

So easier, no. But if the application of a technology can significantly improve life of field recovery, then a lot of marginal discoveries suddenly become economically viable to develop. The proof will be in the execution. A lot of new technologies are complex, and may require a higher OPEX to maintain availability during field life. And, as with anything 10,000ft below the ocean surface, there is no cheap fix if something fails prematurely.

SULZER HAVE A HUGE AMOUNT OF EXPERIENCE IN PUMPING HYDROCARBONS

AT: Who are the big players in developing 'boosting' technology?

CH: There are really only a handful of companies who are involved here; it's a highly specialized sector. What's been happening with these companies over the last few years though is fascinating.

The manufacturer with the most subsea pumps installed today are a Norwegian company known, or formerly known, as Framo Engineering established in 1983. Framo were acquired by the oilfield services giant Schlumberger in 2011. In 2012 Schlumberger signed an agreement with the major subsea hardware manufacturer and integrator Cameron International to jointly develop products, systems and services together. The new joint venture is called One-Subsea and Schlumberger has a 40% interest in the venture, which includes the Schlumberger subsidiary Framo pumps. Cameron maintain a 60% interest and will manage the joint venture. This new organization represents a major player in the subsea pump industry, and is already working on several projects in the deep-water GoM for major oil companies.

One of Cameron's (or OneSubsea's) main competitors, FMC Technologies, are also heavily developing subsea boosting technology solutions, themselves having entered in to a long term and exclusive collaboration agreement with the surface oil and gas industry pump giant Sulzer Pumps. Sulzer have a huge amount of experience in pumping hydrocarbons all over the world and combined with FMC Technologies subsea hardware and systems integration/solutions business, this is another other major player.

They are not alone however, and other large subsea equipment companies are rapidly developing their own technologies in-house, for example, Aker Solutions. It'll be interesting to see how this market develops in the next 5 to 10 years as more operators employ these technologies in deep-water developments, thus increasing the demand in a relatively niche market.

AT: Where do you see the future of offshore vs. onshore drilling?

CH: Subsea oil and gas production is vital to the future of US domestic energy.

Even with the recent surge of onshore unconventional tight oil and gas developments (shale for example), these are still difficult to produce and not to mention contentious in the socio-political environment.

The era of cheap oil, in my opinion, is over. Large scale, complex deep-water projects are seeing breakeven costs as high as $70-$80/barrel. Global demand is surging, and the major deep-water finds in the GoM and around the world in emerging markets are the key to the future of global oil and gas supply.

Looking at the US GoM today, the rig count is back above where it was on the day of the Deepwater Horizon incident. All the major players are investing heavily, and even smaller operators are branching out into deeper water fields that traditionally would have been prohibitively expensive to develop. The industry is incredibly fast paced in terms of technology and very forward thinking, because reservoirs that start producing today are immediately in decline. The industry never stands still; it simply can't afford to and neither can we afford to allow it.

AT: Thank you Craig for taking the time for this interview. Your insights are very interesting and there's a lot of food for thought when it comes to investing in offshore oil and gas projects. Thanks again.

BIO Craig Hume is a Subsea Systems and Hardware Engineer. He's been involved in the engineering side of the oil and gas industry for over ten years, working and consulting for the likes of BP and ExxonMobil, from Aberdeen to Azerbaijan. He's a Chartered Engineer (CEng), Chartered Marine Engineer (CMarEng) and a Member of the Institute or Marine Engineering, Science & Technology (MIMarEST).

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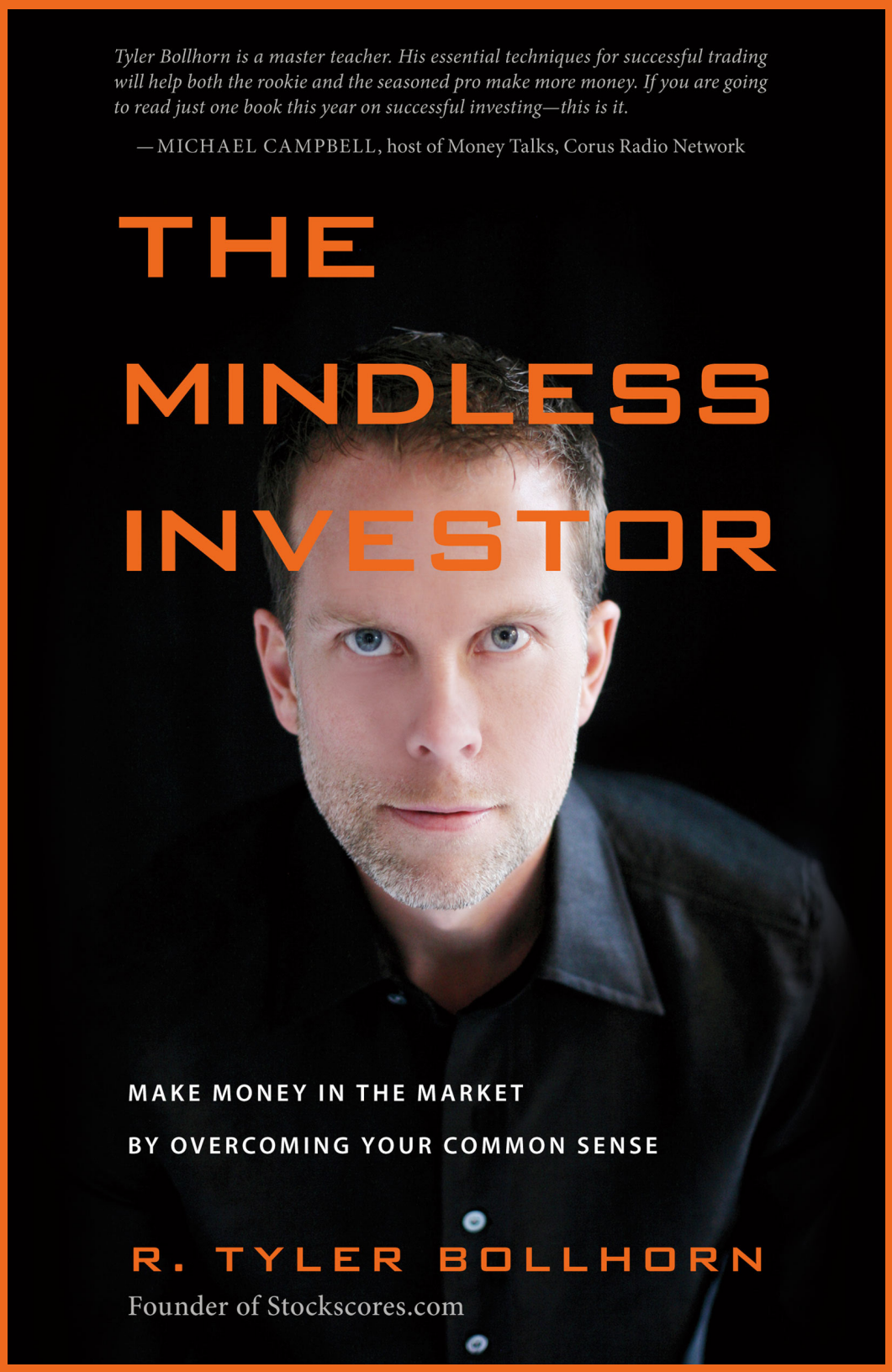

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