Market Ideas: Fact or Fiction?

Always remember to;
#1. Welcome all ideas in trading, and
#2 Reserve your opinion until you have independently validated the idea!

Working Paper: The January Barometer

Working Paper
Since its January I thought it would be appropriate to review a popular market observation that usually gets rolled out this time of the year called the January Barometer.

The January Barometer phrase was first coined and discussed by Yale Hirsch in 1972. It refers to using January's performance to predict the sharemarket's annual performance. If January is a positive month the trend is expected to continue throughout the year. If January is negative then it expects the market to be down.

At the moment global sharemarkets are up strongly. If the January Barometer exists then it augurs well for SP500 this year. If the SP500 is up then it will provide a positive backdrop for world markets. If it's fiction then January's performance will provide no insight. Global markets will not be able to take any comfort from the SP500's strong performance.

So what should we expect for 2019 if the January Barometer is correct and January does close above its open? Well according to the January Barometer the market should finish up for the year.

Well the best thing we can do as traders is to independently verify whether or not the January Barometer exists, whether it has a positive expectancy (an edge) on the SP500? And if it does, is it unique to only the SP500, or is it robust enough to be applied to global indices? Can we use the January Barometer to help time the index markets?

So there are a few questions we need to answer for ourselves. By going through this exercise I want to show you how I review and validate ideas with the hope to encourage you to do the same when considering a new trading approach.

Market Idea
The January Barometer believes a positive January will result in a positive year. A negative January implies a negative year. I want to determine whether this observation is valid or merely an old wife's tale?

Market Data
As this observation refers to the SP500 I'll be focusing purely on indices.

Data Source

Data:	I use futures data.
Period:	1992 – 2018, 26 years.
Source:	I use Premium Data from Norgate Investor Services; www.premiumdata.net
Format:	I use the back-adjusted continuous future contract data.
Sessions:	I use the combined all-sessions data.
Data rollover:	I used Premium Data's default rollover days that attempt to roll over when the daily volume shifts.

Software
I do all my own programming using VBA (Visual Basic Application) for Excel. To view the VBA editor in Excel simply open a workbook and hit "Alt F11".

The Dilemma of Pundit Commentary – Lack of Granularity

A dilemma faced by most traders hearing or reading market commentary is the lack of granularity, or specifics, within the commentary. Whether commentators do it intentionally or unintentionally, the result is the same. From their pulpit they will share a market insight without first scrutinising it. They will not offer any practical evidence to back up their opinion. Unfortunately the unwary trader or investor hears the insight, feels and enjoys the pundit's energy and enthusiasm and embraces whole heartedly the idea expressed. If they like the enthusiasm shown they'll like the idea. Its not until they look to implement the idea that they realise there is a lack of specifics and evidence to support the idea. This is the dilemma of punditry, a lack of detail.

Let me unpack this phenomena.

Hirsch reports his observation in 1972 that January's performance is a good predicator for the year. The observation is coined the January Barometer. It's a catchy phrase and catches on!

This is how it works. Towards the end of January someone remembers the January Barometer and uses it to develop a market prediction for the year. Since January is up, they predict an up year for the SP500. People read or hear it and enter the market long in February. They enter long with no idea of when to get out except at year end. Their risk is undefined. They may be lucky, the market may continue strongly throughout the year until they exit on December 31st. But on the following year they follow the same observation only to suffer while the market losses -10%, -15% before finishing on a strong up swing with a small annual gain of +1%. No harm no foul. Phew the trader/investor says. On the following year January is strong, they enter long just before the market reverses and keeps going down until the year ends with a -17% loss! Wow they say. Didn't expect that. The year was meant to be up?

This is the problem with many market generalisations that are regurgitated and re-amplified by non-traders, by the peripheral market participants who espouse market "knowledge" which is meant to sound "insightful" and help build their audience.

The key problem with many market generalisations like the January Barometer is that there is not enough granularity to make the advice actionable in a practical sense.

Look, certainly I understand the January Barometer could be considered "actionable". If January is up, buy February's open and exit market on close on December 31st. That is very actionable. But does it reflect "practical" reality. Should a trader/investor hold a losing position for 11 months? I'd suggest not.

So in my opinion the January Barometer, in its raw form is no more then puff punditry, an impractical and unactionable observation that unfortunately gets regularly trotted out and discussed by puffed up market pundits during the months of January.

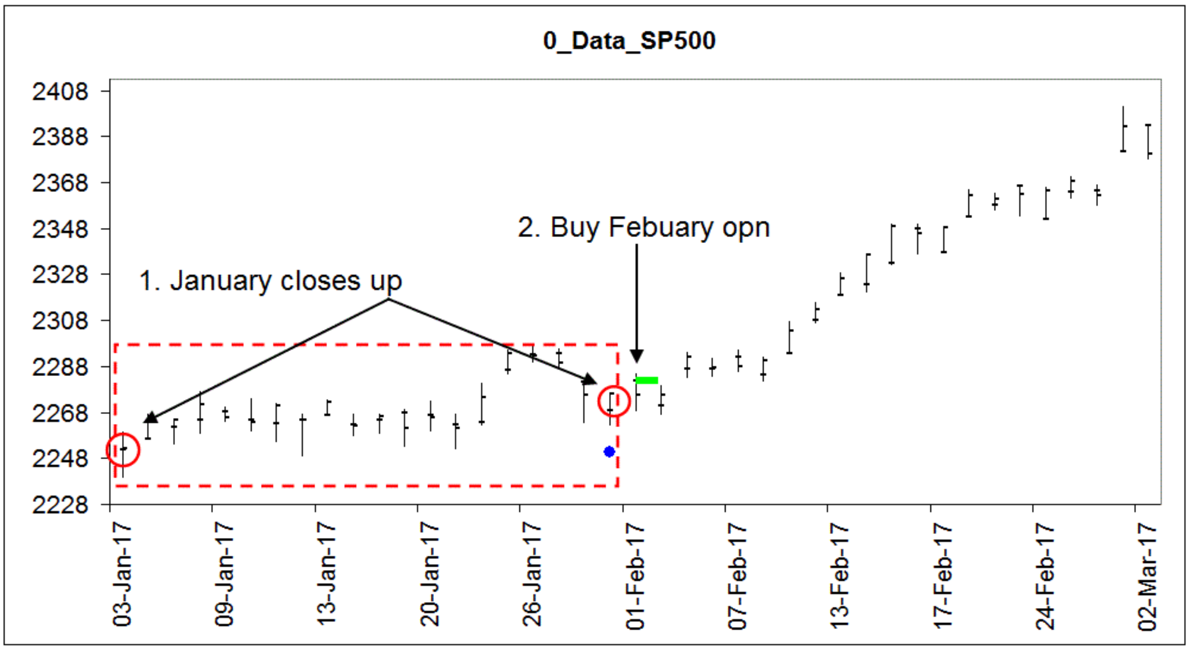
The trick for me is to try to convert it into an "actionable" observation and determine whether it has any legitimacy? A positive expectancy? At the moment it's no more then a trivial piece of punditry popcorn, lite and tasty but certainly not actionable and sustainable.

Let's take a look at the January Barometer.

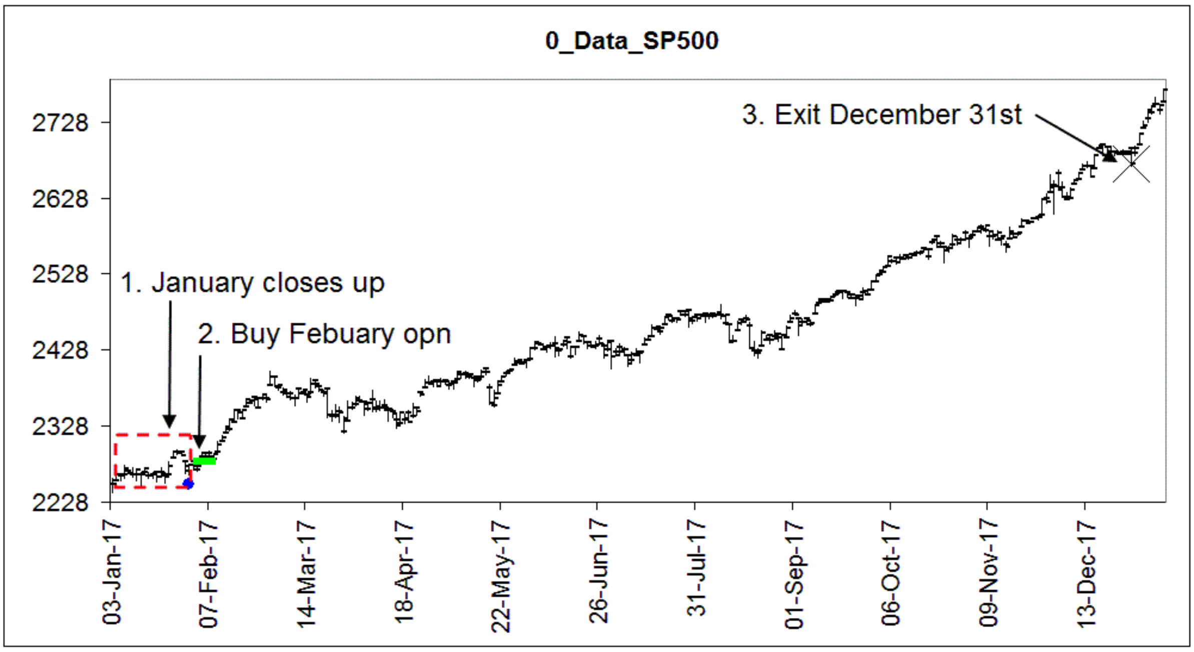
<u>January Barometer</u>
Regardless of my opinion let me measure the January Barometer in its raw form;

Longs:	Entry:	If January closes above its open, buy February's open.
	Exit:	Exit market on close on December 31st.
Shorts:	Entry:	If January closes below its open, sell February's open.
	Exit:	Exit market on close on December 31st.

To measure its value or expectancy I've programmed the January Barometer into my VBA Trading Model. Whenever I'm testing an idea I first review a chart to check my coding.



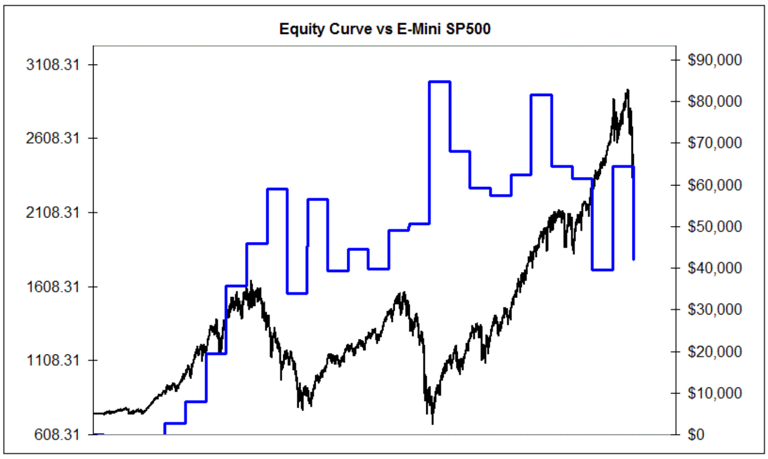
In this example January 2017 finished above its open so the January Barometer buys February's open.



According to the observation the January Barometer will then exit year end on December 31st.

Ok, once I'm happy with my coding I'll run the idea over the data, which in this case is the SP500.

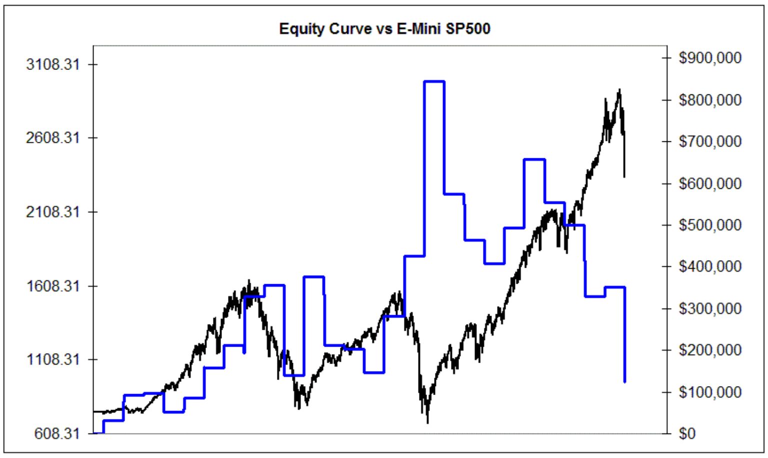
Market	SP500
Strategy	**January Barometer (No Stop)**
Results Start Date	3/02/1992
Results End Date	24/01/2019
Results Period	27 Yrs
Risk/Reward	
(1 Contract)	
Net Profit $$/AUD	$42,012
CAGR	2%
Max DD	-$45,324
Rsk/Rwd: $$/DD	1
Maximum consecutive losses	3
Total trades	27
Net avg profit	$1,556
Avg brok.& slip. per trade	-$68
Profit to loss ratio	1.3
Percentage profitable	52%
Average win to loss ratio	1.2
Expectancy E[R]	13.9%
Real Potential	
(wMMGT)	
MMGT Strategy: Fixed Percentage	0.02%
MMGT Starting Capital	$50,000
Net Profits $$/AUD	$38,208
CAGR	2%



Well, not so good. The positive news is that the idea is profitable with a positive expectancy. The bad news is it's accuracy is no better then a coin-toss and it has a terrible risk/reward ratio of only 1:1 where the small profit is less then the worst maximum drawdown. On the SP500 it really is only a marginal proposition. One that certainly doesn't deserve the attention it receives each January.

Let's see if the January Barometer is robust enough to be applied to an out-of-sample portfolio of global indices?

Markets	DA,AP,NI,HS,FT,SP,ND,TW,XX
Strategy	**January Barometer (No stop)**
Results Start Date	3/02/1992
Results End Date	24/01/2019
Results Period	27 Yrs
Risk/Reward	
(1 Contract)	
Net Profit $$/AUD	$123,068
CAGR	5%
Max DD	-$722,425
Rsk/Rwd: $$/DD	0
Maximum consecutive losses	18
Total trades	225
Net avg profit	$547
Avg brok.& slip. per trade	-$85
Profit to loss ratio	1.1
Percentage profitable	49%
Average win to loss ratio	1.1
Expectancy E[R]	2.9%
Real Potential	
(wMMGT)	
MMGT Strategy: Fixed Percentage	0.02%
MMGT Starting Capital	$50,000
Net Profits $$/AUD	-$324,582
CAGR	



Nup. Doesn't look good at all.

Not only does the January Barometer have a low expectancy on the SP500, it has an even lower expectancy on an out-of-sample portfolio of global indices, suggesting its core idea is not robust enough to be relied upon.

In addition, despite its profitability over a portfolio of indices traders/investors cannot ignore the fact that the small net profit is dwarfed by the worst maximum drawdown, offering a pitiful risk/reward payoff.

Based on this evidence the January Barometer should not be talked about and should not be relied upon for either initiating a new SP500/market position or for maintaining an open position.

No. There is no January Barometer.

However, let's see if I can salvage something from the January Barometer. Let me tighten it up a bit. Really, initiating a position without a stop is hair brain.

Trade Plan – January Trader

So let me review the January Barometer within a "trader's" context. I want to run the realty ruler over it and see if it remains in the puff popcorn corner or whether it has a tradable edge?

To do this I'm going to develop a trade plan I'll call January Trader.

Please see over for the rules.

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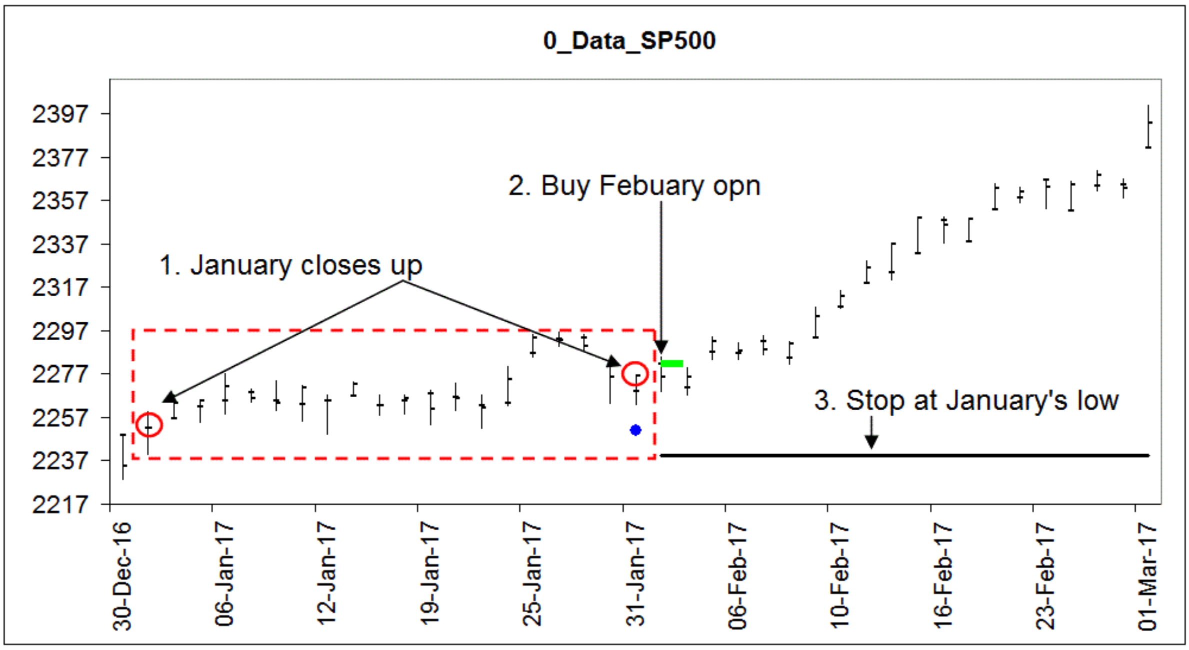
January Trader;

Longs:	Entry:	If January closes above its open, buy February's open.
	Initial Stop:	A break of January's monthly low.
	Trailing Stop:	A break of the previous quarter's low.
	Exit:	Exit market on close on December 31st.
Shorts:	Entry:	If January closes below its open, sell February's open.
	Initial Stop:	A break of January's monthly high.
	Trailing Stop:	A break of the previous quarter's high.
	Exit:	Exit market on close on December 31st.

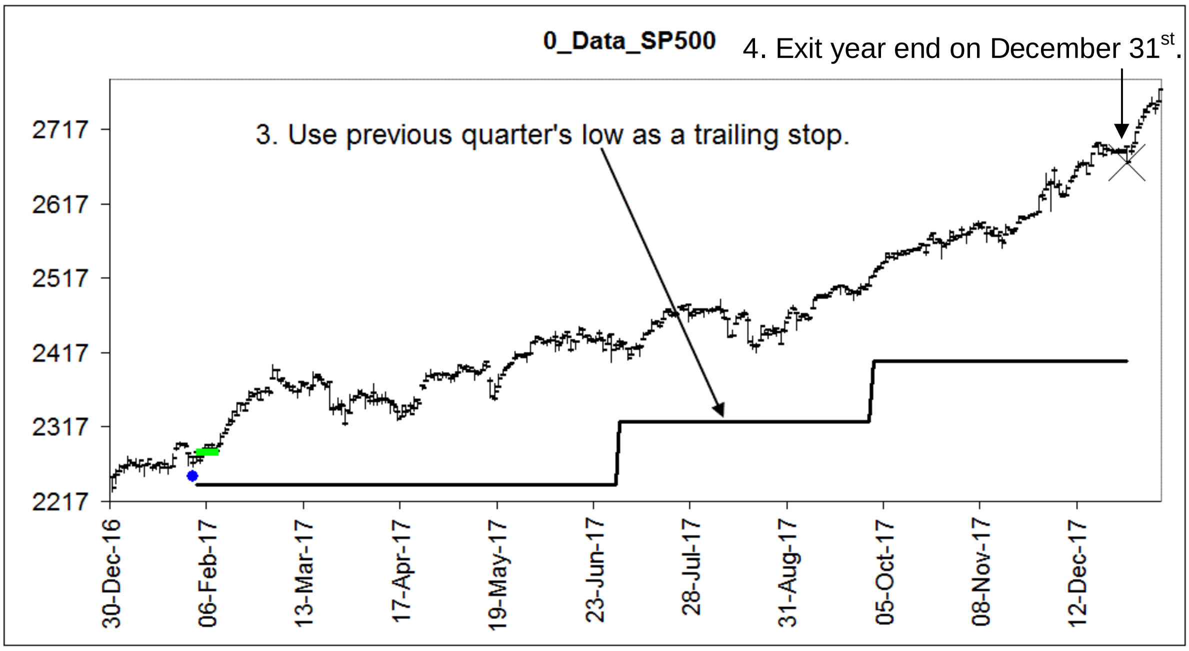
January Trader supplements the January Barometer with an initial and trailing stop to reflect the practical world of risk management.

These rules, taking advantage of the January Barometer, are granular, practical (with stops) and therefore actionable. Let me code it up and measure its expectancy. And who knows, if positive the punditry puff popcorn may just become a factual market observation!

I've programmed January Trader into my VBA Trading Model. Once again I'll take a look at a chart to ensure my coding is correct.

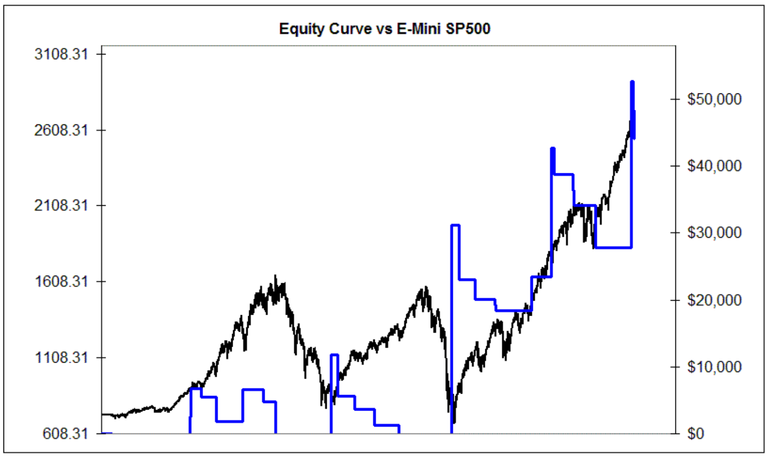


In this example January 2017 finishes above its open so January Trader buys February's open and places an initial stop at January's low.



January Trader will use the previous quarter's low as a trailing stop and will exit open positions at year end on December 31st. Once I'm happy with my coding I'll then run the model. Let's have a look.

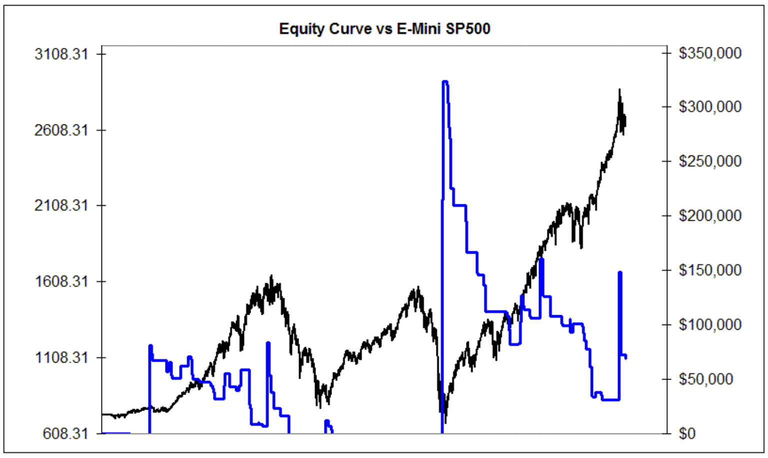
Market	SP500
Strategy	**January Trader (With Stop)**
Results Start Date	3/02/1992
Results End Date	25/01/2019
Results Period	27 Yrs
Risk/Reward	
(1 Contract)	
Net Profit $$/AUD	$44,092
CAGR	2%
Max DD	-$17,628
Rsk/Rwd: $$/DD	3
Maximum consecutive losses	5
Total trades	27
Net avg profit	$1,633
Avg brok.& slip. per trade	-$68
Profit to loss ratio	1.6
Percentage profitable	26%
Average win to loss ratio	4.5
Expectancy E[R]	43.4%
Real Potential	
(wMMGT)	
MMGT Strategy: Fixed Percentage	0.02%
MMGT Starting Capital	$50,000
Net Profits $$/AUD	$43,354
CAGR	2%



Emm. Better. But still there isn't anything here to get really excited about. The good news is that adding stops, not only does it give the trader comfort knowing there is an exit point if it all goes pear shape, but by being a good loser it has halved its worst drawdown and tripled both its risk/reward ratio and expectancy (13.9% to 43.4%). Now although the expectancy is much, much better, its improved risk/reward ratio is still too low for me. So although an improvement, it not a strategy I'll be rushing off to add to my portfolio.

Let's see what the January Trader can do on an out-of-sample portfolio of global indices.

Markets	AP,NI,SP,DA,HS,FT,ND,TW,XX
Strategy	**January Trader (With Stop)**
Results Start Date	3/02/1992
Results End Date	23/01/2019
Results Period	27 Yrs
Risk/Reward	
(1 Contract)	
Net Profit $$/AUD	$69,184
CAGR	3%
Max DD	-$292,791
Rsk/Rwd: $$/DD	0
Maximum consecutive losses	33
Total trades	225
Net avg profit	$307
Avg brok.& slip. per trade	-$85
Profit to loss ratio	1.1
Percentage profitable	22%
Average win to loss ratio	3.8
Expectancy E[R]	5.2%
Real Potential	
(wMMGT)	
MMGT Strategy: Fixed Percentage	0.02%
MMGT Starting Capital	$50,000
Net Profits $$/AUD	$39,965
CAGR	2%



Woops. Not so good.

Well January Trader is an improvement on the January Barometer. But it's only marginal. Yes it has drastically reduced its worst maximum drawdown from -$723,000 to -$293,000 but it has only lifted its expectancy from 2.9% to 5.2%.

Although January Trader on the SP500 alone is a good improvement, its failure to reflect a similar improvement over a portfolio of out-of-sample global indices underlines the fragility and lack of robustness of its core idea, the January Barometer.

Based on my work here, January Trader, incorporating the January Barometer, is not an idea worth pursuing.

So for me, despite the inclusion of practical trading considerations the use of January's performance as a trend indicator presents a dead-end.

Or does it?

Certainly looking at January's performance as a trend indicator is poor. However the idea of using a month's performance as a trend indicator may still be worthwhile pursuing?

Let's see if there is still some life left in the core idea behind the January Barometer.

Is January's Performance the Best Barometer?
We now know looking at January's performance is not a good trend indicator of future performance.

To examine whether a "month's" performance can be seen as a potential trend indicator I'll modify January Trader to use different months of the year to trigger signals.

Let's see if January is the "superior" trend month?

Given Yale Hirsch 1972 observation you'd think so, right?

So I went ahead and tried each month.

If February closed up, the model would buy March's open, if it closed down, the model would sell March's open. I'd run the model and collect the results.

I'd then run the model again using March's performance. If March closed higher then its open the model would purchase April's open and vice-versa sell April's open if March closed down. I'd run the model and collect the results.

The initial stop and trailing stop were the same in each run through.

The initial stop being the "performance" month's high or low, depending on the signal direction.

The trailing stop being the previous quarter's high or low etc.

I ran the model across all months except December.

So the question I wanted answered was whether or not January deserved being called the "barometer" month?

I ran the modified model across a portfolio of global indices.

Let's see what I came up with on the following page.

Global Indices: Dax, Ftse, SPI, Nikkei, Hang Seng, Taiwan, SP500, Nasdaq, Stoxx50

TREND MONTH	January	February	March	April	May	June	July	August	September	October	November
Year	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result
1992	-$2,243	-$9,475	$8,158	-$6,871	-$17,593	-$8,228	-$11,685	-$14,142	$3,540	-$5,255	-$4,213
1993	$83,195	$57,504	$66,107	$32,761	$93,196	$48,243	$27,675	$60,720	$57,127	$49,521	-$4,977
1994	-$15,506	-$3,254	-$26,861	-$19,004	-$17,135	-$20,268	-$26,883	-$22,663	$8,994	-$11,967	-$5,934
1995	$4,993	$20,781	$6,717	$2,514	-$2,694	-$23,592	$19,986	$6,852	-$3,278	-$11,023	$9,907
1996	-$23,356	-$9,189	-$12,340	-$15,466	-$11,378	-$15,892	$1,113	$42,564	$14,072	$24,892	-$10,441
1997	$7,743	$12,399	-$34,637	-$4,503	-$34,289	-$46,990	-$46,374	$44,727	-$57,008	-$25,501	-$1,641
1998	$3,940	-$24,790	-$30,583	-$20,497	-$42,108	-$56,265	-$28,269	-$73,986	-$30,642	$55,565	-$24,641
1999	$25,369	$896	$57,569	$48,042	-$43,090	$66,359	-$28,539	$72,039	-$60,974	$158,682	$113,055
2000	-$67,575	-$118,944	-$3,770	$158,118	$8,821	-$46,555	-$35,243	-$55,379	$112,498	$5,794	$12,402
2001	-$69,549	$162,083	$44,223	-$131,518	$148,993	$138,234	$95,018	$8,341	-$116,124	$86,429	$21,815
2002	$64,857	-$42,477	-$31,615	$205,360	$204,448	$160,603	$77,631	$3,124	-$36,937	-$30,742	-$62,008
2003	-$65,179	-$19,211	-$3,220	$127,796	$130,127	$43,806	$76,118	$22,182	-$35,911	$26,482	$15,603
2004	-$23,687	-$5,228	-$24,879	-$30,590	-$6,221	$2,885	-$11,087	$32,087	$29,392	$26,441	$21,022
2005	$13,913	-$25,702	-$28,161	-$24,162	$90,289	$43,367	$63,184	$9,648	-$19,591	-$30,254	$25,407
2006	$15,349	-$4,130	-$56,351	-$22,673	-$43,570	$104,317	$22,215	$98,047	$83,518	$40,548	$28,581
2007	-$26,798	-$23,141	$51,211	$11,669	-$57,748	-$50,245	-$63,846	$48,648	-$25,177	-$67,614	-$8,293
2008	$398,637	$28,981	-$39,954	-$83,868	$158,322	$334,605	$60,705	$190,394	$207,031	$32,933	-$26,976
2009	-$114,584	-$97,053	$275,321	$195,505	$15,283	-$50,239	$88,830	$51,408	$40,599	-$33,126	$16,341
2010	-$63,455	$15,982	-$57,810	-$18,630	-$46,821	-$37,807	$69,873	-$48,991	$52,226	$4,779	-$2,904
2011	-$34,176	-$28,827	-$26,903	$12,564	$64,428	$24,739	$101,368	$15,752	-$60,535	-$20,820	$3,939
2012	$14,921	-$44,830	-$36,547	-$26,834	-$72,626	$87,975	$60,132	$20,265	$26,412	$1,087	$15,892
2013	$34,016	$34,112	$31,627	$93,146	-$43,059	-$35,705	$88,483	-$27,146	$68,713	$17,958	$9,352
2014	-$53,007	-$33,561	-$40,466	-$47,008	-$34,189	-$24,954	-$54,382	-$47,535	-$43,496	-$21,413	-$27,487
2015	-$6,605	-$61,899	-$31,388	$4,698	$11,812	$27,611	-$31,649	-$66,539	-$76,445	-$34,631	-$67,309
2016	-$63,301	-$21,914	-$12,732	-$61,897	-$49,561	-$13,720	$63,220	-$22,424	-$34,956	-$26,884	$6,955
2017	$110,773	$104,827	$43,706	$79,270	$50,934	-$19,852	$19,765	$15,913	$13,454	$645	$6,757
2018	-$79,501	$65,648	-$34,468	-$40,692	-$18,148	$102,258	-$73,638	$72,104	$47,869	$90,923	$54,780
	$69,184	-$70,412	$51,954	$417,230	**$436,423**	**$734,690**	**$523,721**	**$436,010**	$164,371	$303,449	$114,984
Win	12	10	9	12	11	13	16	18	14	15	15
Losses	15	17	18	15	16	14	11	9	13	12	12
Accuracy	44%	37%	33%	44%	41%	48%	59%	67%	52%	56%	56%
Avg Win/Loss	3.8	2.9	3.5	3.2	3.5	3.5	2	3	1.6	1.8	1.1
Expectancy	5.2%	-6.2%	4.4%	31.2%	39.2%	60.9%	38.6%	40.0%	11.5%	29.9%	12.8%

Well how about that.

January, as a trend indicator is only better, over a portfolio of global indices, then February and March. Months from April onwards are far superior to January!

Based on market performance since 1992 January does not deserve the mantle of market “barometer”!

So there you go. The January Barometer scores three strikes against it.

One. The raw idea, apart from being unactionable, has only a marginal positive expectancy on the SP500 and a much lower expectancy on a portfolio of global indices.

Two. Supplementing the raw idea with actionable attributes (stops) failed to produce a high enough expectancy on a global portfolio for it to pass the robustness test.

Three. When reviewing alternative months for their ability to predict trends it showed January was by no means the superior month. It did not deserve the mantle of “barometer”.

Three strikes say, in my opinion, that the January Barometer is not a robust proposition. It should be ignored.

Summary: Is the Market Idea Fact or Fiction?
The short answer is that the January Barometer is a poor trend indicator for future performance. It should not be discussed, and if it is, it should be ignored by the knowledgeable trader.

In my opinion its fiction.

Anyone who offers it up as a possible crystal ball is only confirming their own ignorance. It’s a red herring. Please ignore it.

However there is a positive.

There does appear to be some currency in looking at a month’s performance as a trend indicator of future performance. Just not the month of January!

So the January Barometer can certainly take credit for initiating my interest and my review of examining alternative months.

Now back in 1972 the January Barometer may well have been a fair trend predictor, however over the last 26 years it doesn’t have enough robust expectancy to warrant its popularity.

So in my opinion the January Barometer is purely puff punditry that reveals the ignorance of those who sprout its value.

As I said it’s a red herring, thrown up from time to time by ignorant peripheral market participants, the Infotainers (newsletter writers) and the Repeaters and the Amplifiers (those talking heads) looking to boast their appeal while appearing knowledgeable to their target market.

But that is just my opinion.

As I’ve said many times it’s important to welcome all ideas, even the above January Barometer that looks marginal in my January Trader. You never know they may look more interesting in a different context that you design, similar to my use of alternative trend months. You cannot afford to prejudice any thoughts you hear about the markets, despite how crazy some may sound, or how indifferent they appear to be in studies such as this one I’ve shared with you.

However, to survive in the markets you need to become a cynic when it comes to trading.

Certainly welcome all suggestions however you need to reserve your opinion until you have independently validated the idea.

There are no short-cuts to trading success. As Larry Williams has said there are no easy solutions to trading.

Do the work. Test all ideas. Use a universal portfolio to eliminate data mining. Embrace simplicity to minimise your curve fitting. Calculate your expectancy and ROR. If your ROR=0% you may just be ready to trade for profits.

These are my results with my portfolio with my simple January Trader strategy.

You may achieve different results with a different portfolio, different timeframe and different alternative strategy.

It doesn't matter.

What matters is that you independently validate all ideas to see whether they have value in *your hands*, across your portfolio, within your timeframe and with your strategy.

If they do (with minor curve fitting and no data mining) then you're moving forward.

I hope this Working Paper has been of some assistance as you continue your journey toward long-term and sustainable trading.

And remember to be a cynic in this business of trading, particularly when it comes to the January Barometer.

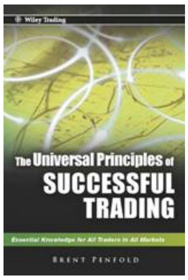
Good validating, good money management and good risk management.

Brent Penfold
Helping traders since 2001
Sydney, Australia
January 2019

Brent Penfold

Trader, Advisor, Author and Educator

Brent Penfold
Helping traders since 2001.



Brent Penfold is a 30-year veteran trader having begun his career in 1983 as an institutional trader with Bank America. In addition to being a professional trader Brent is an advisor, author and educator. Today Brent trades a diversified global portfolio of markets including indices, currencies, interest rates, energies, metals, grains, softs and meats.

He is the author of two books;

- ***Trading the SPI*** (Wiley 2005) and
- ***The Universal Principles of Successful Trading*** (Wiley 2010).

The *Universal Principles of Successful Trading* has become an international best seller that has now been translated into Polish, German, Korean, Japanese and simplified and orthodox Chinese.

Brent has a third book coming out in 2018;

- ***The Universal Tactics of Successful Trading*** (Wiley 2019).

Brent publishes daily newsletters for active index, currency and commodity traders and is a popular and sought after international speaker who has presented to traders throughout the Asia Pacific region including;

- Australia
- New Zealand
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- Singapore
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- Thailand
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Brent is an advisor and holds a Master of Commerce (Finance) degree. To learn more about Brent Penfold and his services you can visit his web site:

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