Twitter Thread by Robot James



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In my 20 years of trading I have noticed this cycle play out again and again with traders that "make it":

1. Overconfidently reach for returns
2. Get humbled by the market
3. Simplify + concentrate on clear, high probability edges.

1/n

Nearly everyone starts with a lack of respect for how hard it is to consistently make money trading.

That leads them to pass over high-probability sources of returns in favor of more marginal ideas.

Or they overcomplicate the trading of a good edge.

2/n

Here's an example...

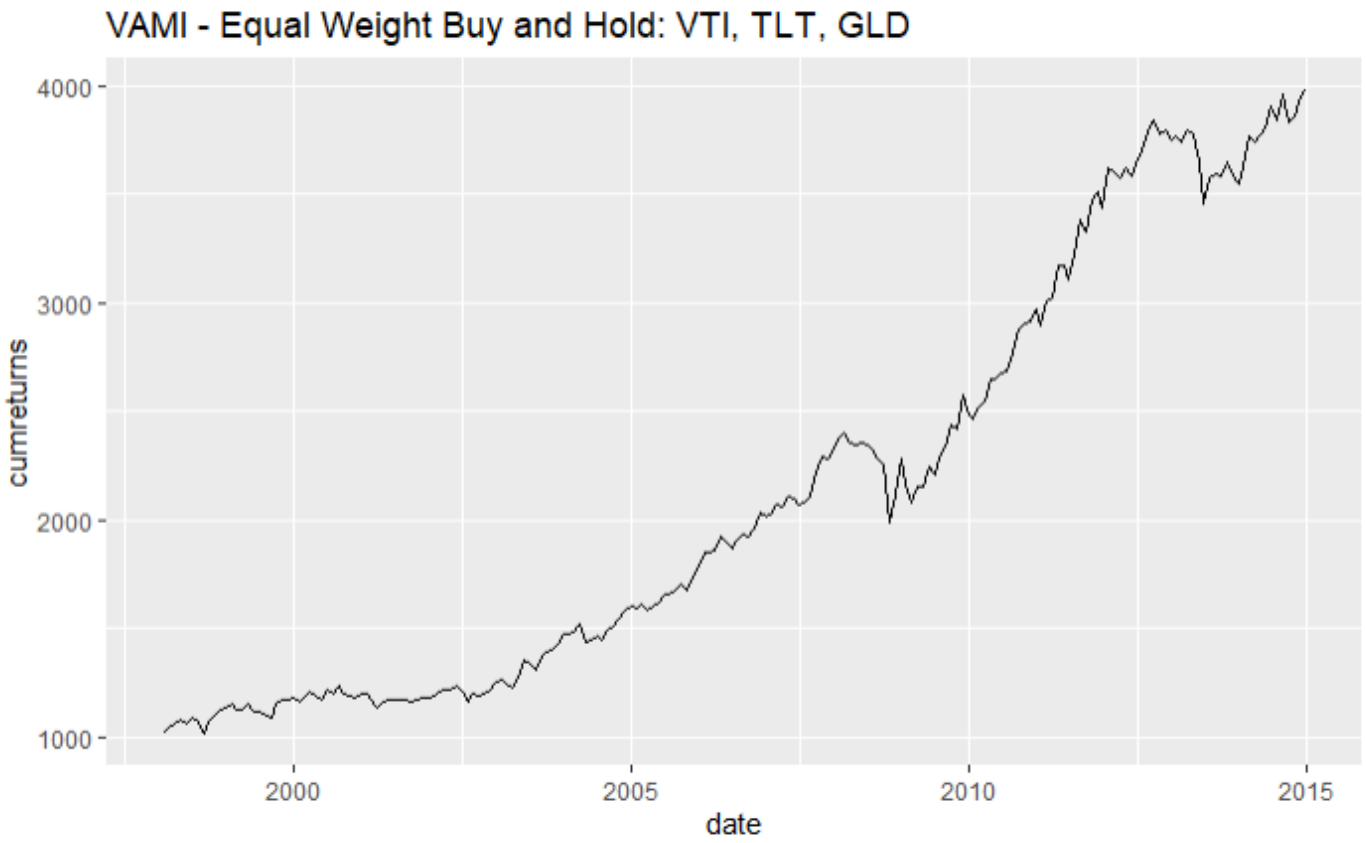
It is 2015. You look at a simple strategy.

You hold an equal dollar exposure to:
- Cap Weighted US Stocks (VTI)
- 20+ Yr US Treasury Bonds (TLT)
- Gold (GLD)

And rebalance each month.

(I've extended back a bit with mutual fund prices.)

3/n



It made money consistently with a few blips.

You'd have 4x your money from 1997 to 2015.

It makes sense. It's harnessing two big sources of risk premia (equity + duration).

It diversifies across 3 macro assets that tend to outperform in different econ environments

4/n

But, naturally, you turn your mind to how you could do better...

And here is where it gets dangerous!

There are good ways to try to "do better", and there are bad ways to try to "do better".

5/n

The "good ways" involve trying to maximize the probability this will be profitable *in the future*.

For example:

1. The asset universe is US-centric. Global diversification would reduce concentration risk that the US underperforms in the future.

6/n

2. Gold is doing a lot of heavy lifting there - more asset classes would be helpful.

3. The assets have different levels of volatility and their volatility changes over time - managing this so that each asset's contribution is more equal over time would be helpful.

7/n

These kinds of things are "good ways" to try to improve things. Things that increase the chances of you making money in an uncertain future

What are the bad ways?

The bad ways *decrease* the probability of you making money in an uncertain future. They add ways to screw up

8/n

For example, you might notice that, in the past, assets that tend to have out-performed over the previous 12 months tend to outperform in the short term too.

We call this x-sectional momentum.

So, you, say, "I'm gonna use this effect to improve returns"

9/n

Now at the start of each month, instead of holding each of the 3 assets in equal dollar amount, you're going to:
1. Rank each asset by its total return over the past 12 months
2. Hold only the top asset (with the highest returns).

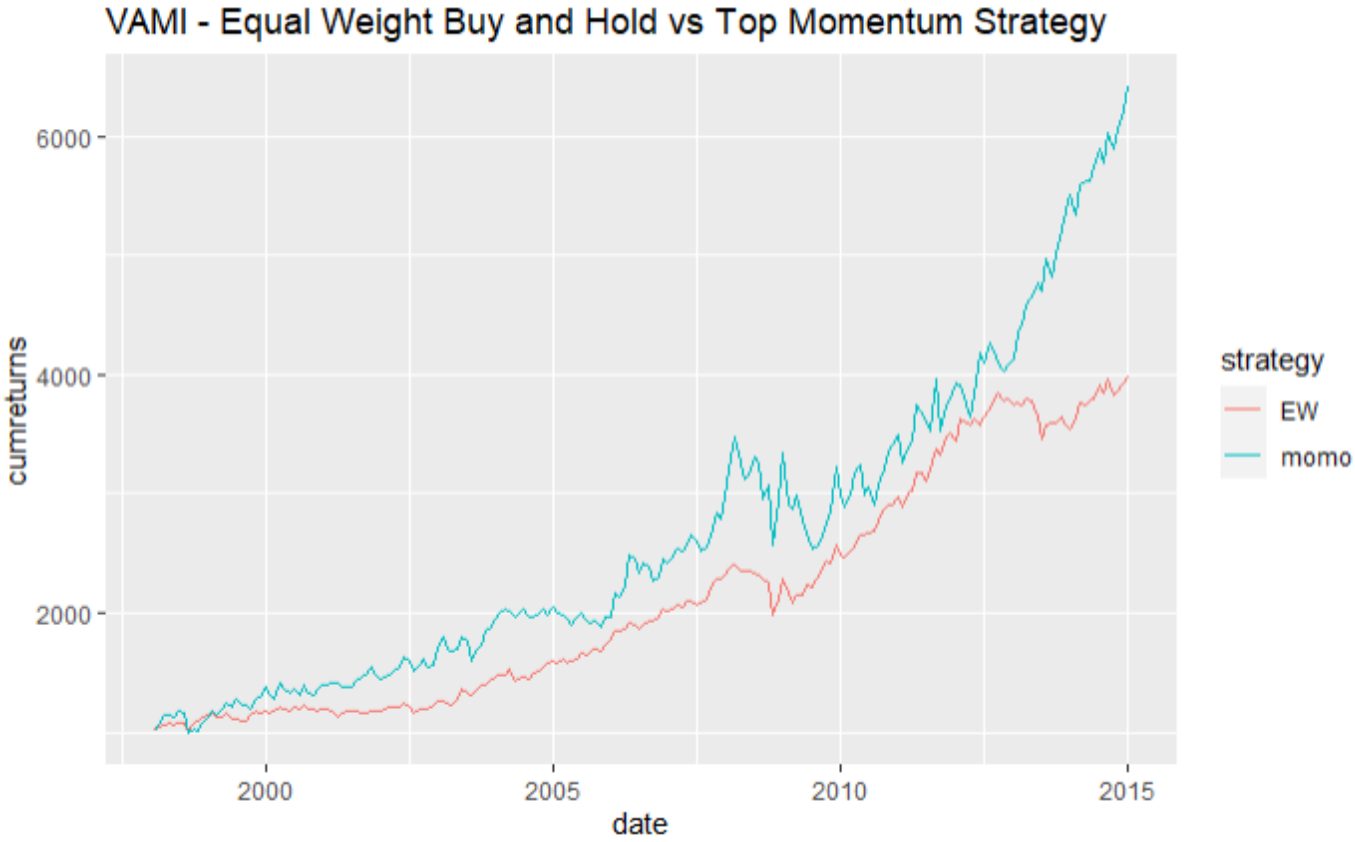
10/n

You can see the past performance of this approach in cyan vs the diversified equal weight strategy in red.

It was more volatile but would have out-performed in returns quite significantly...

So, emboldened by the glory of the backtest, you trade the momentum strategy.

11/n



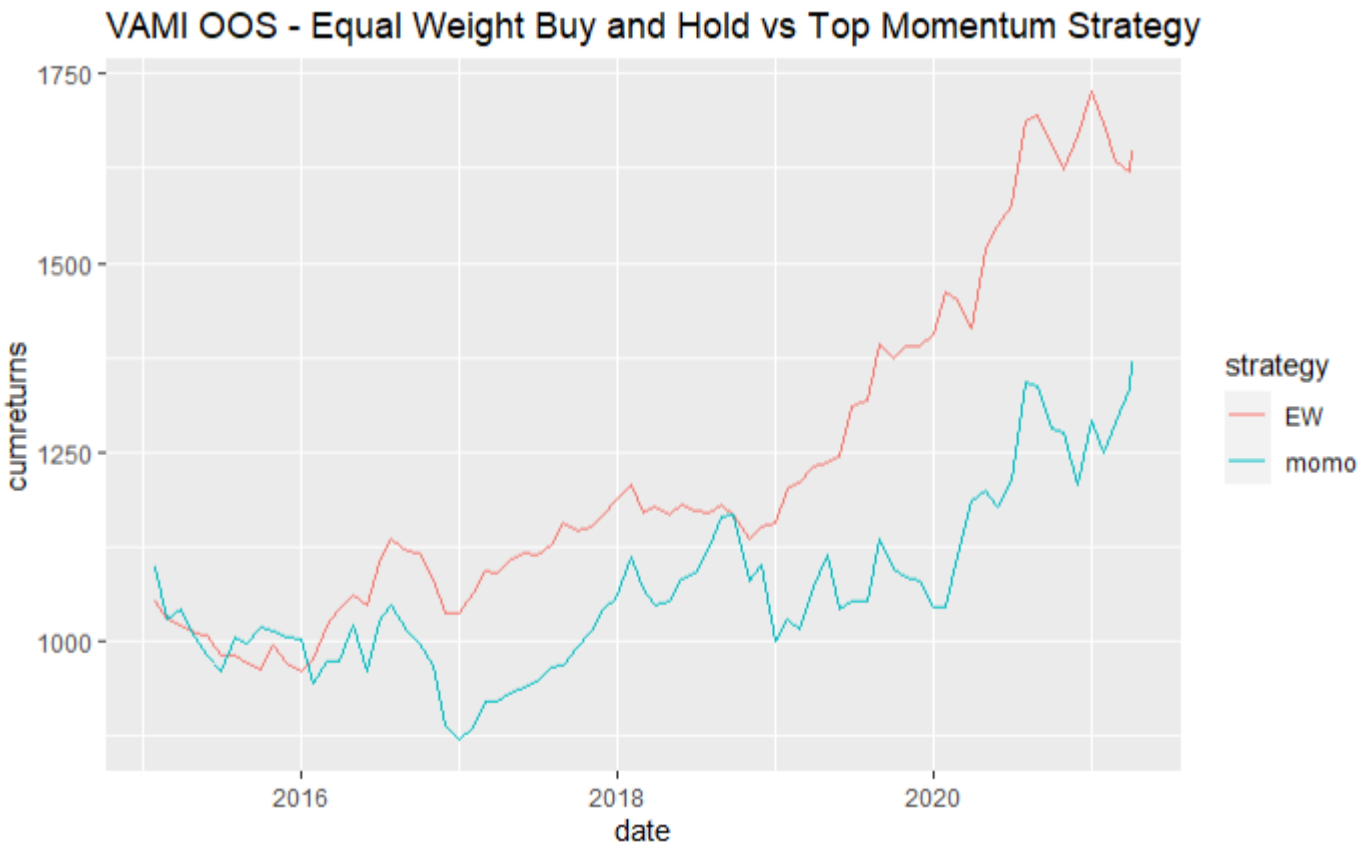
How did you do from 2015 - 2021?

Oops... not so hot.

You underperformed the diversified buy and hold strategy quite significantly.

What happened?!!

12/n



You started with a very good high-probability edge: Diversified Risk Premia.

Then, in overconfidently reaching for extra returns, you added a much lower probability active bet (x-sectional momentum) to it.

You added a new way to screw up!!

13/n

But did we just get unlucky?

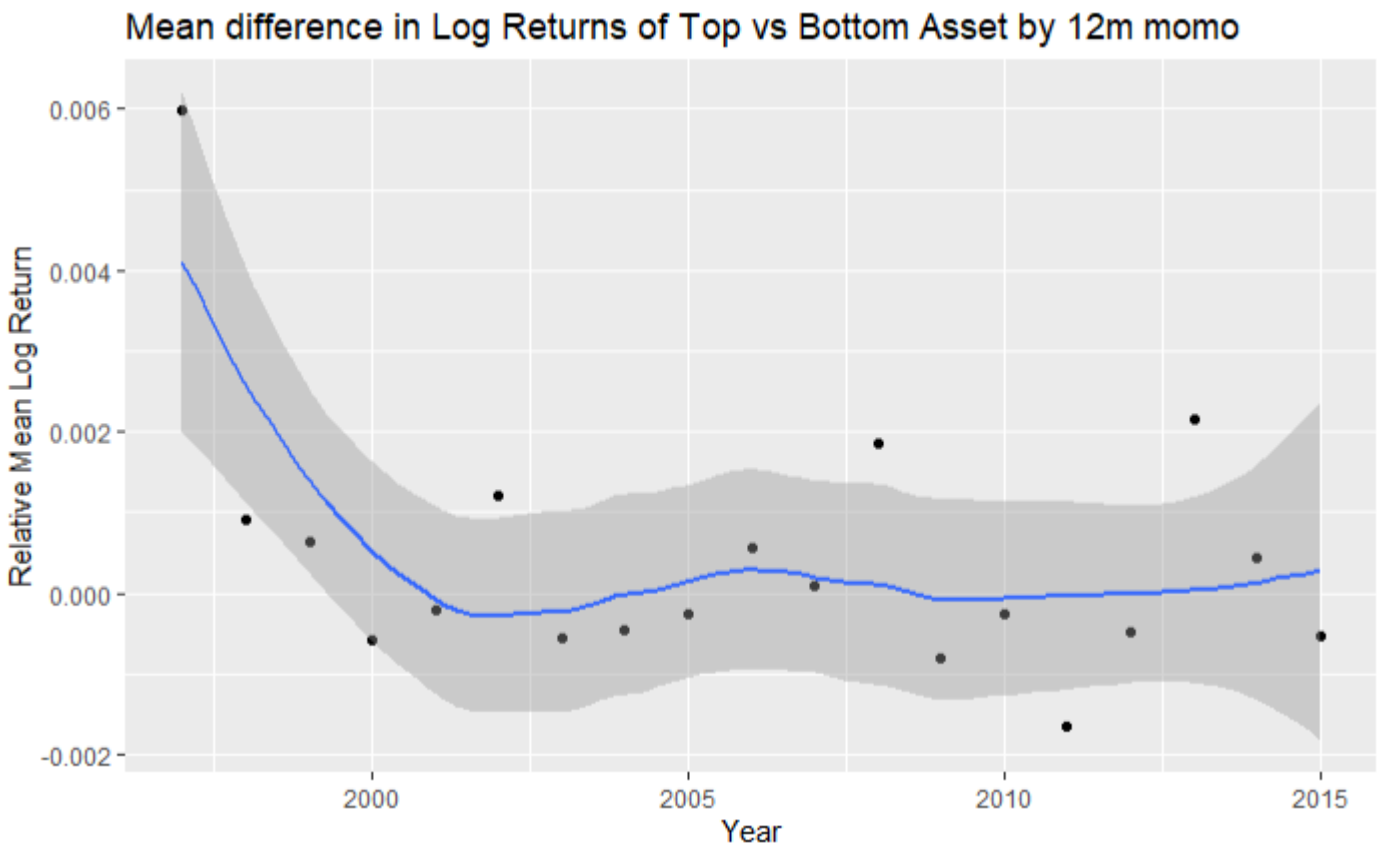
Was there ever enough evidence that we should have been overconfidently overlaying that momentum strategy?

Let's look....

14/n

Here we:
1. Take monthly observations for each asset
2. Rank each asset each month by their previous 12-month total returns
3. Calculate the difference between the next month log returns of the top and bottom-ranked asset
4. Plot the mean of this difference by year

15/n



There's a small hint that there may have been a strong x-sectional momentum effect pre-2000.

But much less since 2000...

But imo, there was really nowhere near enough evidence available to us in 2015 to be making such a drastic active bet on x-sectional momentum.

16/n

You have to understand what is driving performance in something like this.

Our edge comes from being exposed to risk premia.

And the smooth performance (vs just buying stocks) comes from the volatility-reducing diversification effects of holding uncorrelated assets.

17/n

Cutting ourselves off from those effects with an active timing rule is cutting ourselves off from the things that we *want* to be exposed to. The things that are driving our returns.

It's an overconfident bet on an uncertain effect.

18/n

The edge (diversified risk premia) is too good to add the chance of screwing it up.

If you wanted to trade the x-sectional momentum effect, you should have done it *in addition to* the simpler diversified strategy, not *instead of it*.

19/n

This way, you'd gently increase weights in the highest momo asset each month, and gently decrease weights in the lowest.

You'd have some exposure to the momentum effect - but you wouldn't be cutting yourself off from the high-probability diversified risk premia effects.

20/n

Summary:

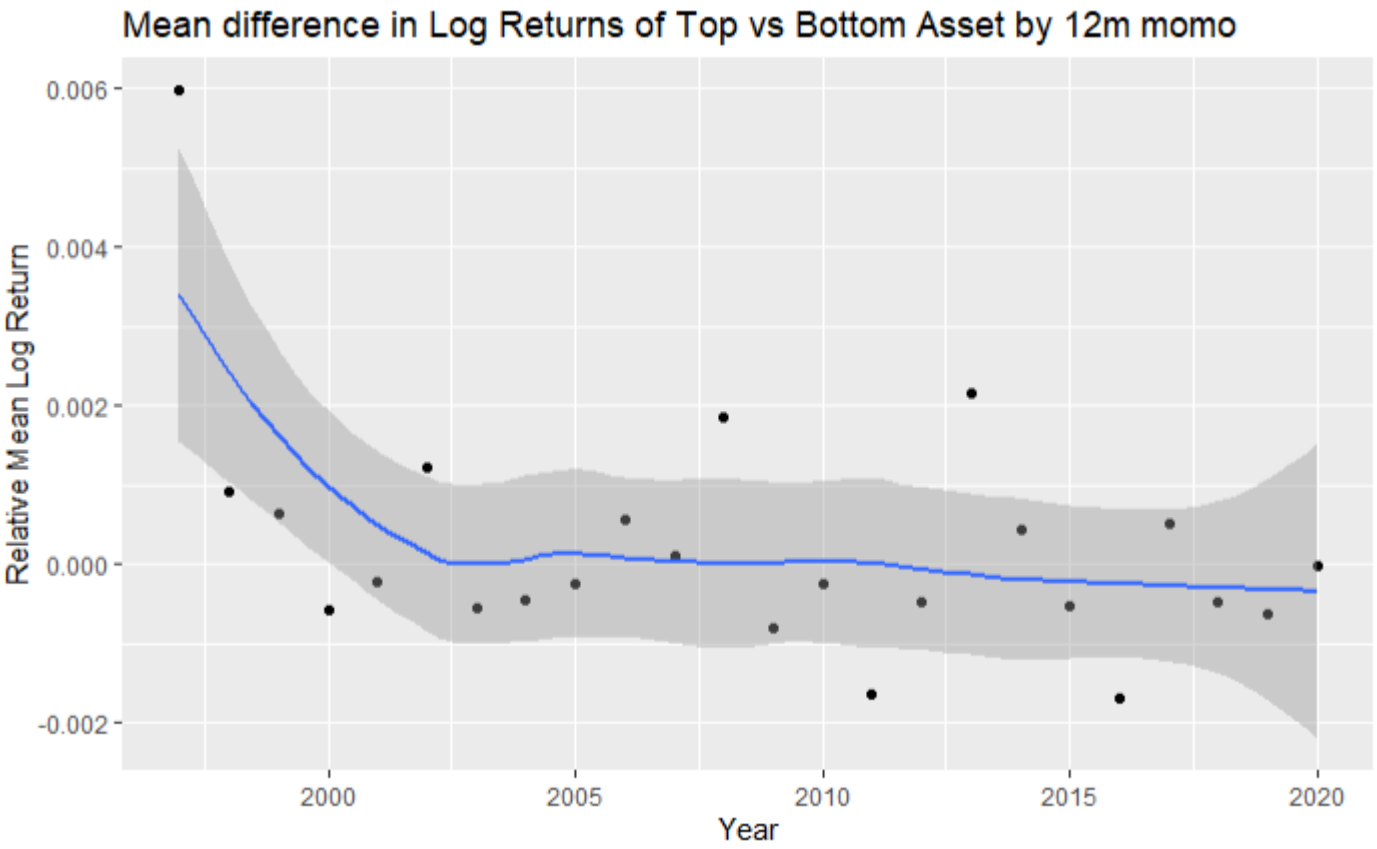
Don't add ways to screw up high-probability good things.

Look to maximize the chance of making money in an uncertain future - rather than reaching for lower probability excess returns.

Keep it simple. Don't try to be a hero.

21/21

BTW here's what that x-sectional momo time series plot looks like extended out to 2020...


Mean difference in Log Returns of Top vs Bottom Asset by 12m momo
Relative Mean Log Return
0.006
0.004
0.002
0.000
-0.002
2000
2005
2010
2015
2020
Year