Philosophy and Investing: Predictive and Platonic Jeremy Gwiazda

Abstract: The purpose of this paper is to think about the various methods of attempting to make money in the capital markets ("investing"). I suggest that though running a betting system on a Roulette wheel is silly, running a betting system on the capital markets may be a good idea.

"Nobody Knows Anything" James Grant quoting William Goldman¹

Great. The epistemology is done. Let's dive in. If philosophy is thinking about things and investing is trying to make money, we are going to think about trying to make money. We'll aim to be intentionally breezy, setting out some hypotheses and moving along. Hypothesis: it it impossible to make large, consistent returns in today's capital markets with predictive investing. But what is predictive investing? And what other forms of investing are there?

1. Predictive

We are human beings embedded in the world existing through time. What's the weather going to be tomorrow? When is the right time to plant the crops? If I ask Sally to the movies, what will she say? Will Billy punch me? We engage with the world at a moment in time. We think about what has happened, exist in the present, and try to figure to what will happen. These observations are so banal as to almost beg to go unmentioned. But the point here is that what most people think of as investing simply is predictive investing, e.g., "Let me try to find a stock that will go up and buy it." And the human condition, existing in a world through time, makes this make sense.

Picture a graph of price through time. Staying for a moment with predictive investing, one thing to do is pick a point, the "now," and try to figure out where price is heading in the future, up, down, or sideways. Doing this by actually looking at graphs might lead you to something like technical analysis. Interviewing management, studying trends in revenue, etc (anything where you try to figure out the future from a point in time) are other possibilities. All of these methods of investing are predictive investing. Predictive investing is focussed on figuring out the future path of price through time (up, down, or sideways) in order to make money.

2. Free-Money

Free money is nice and there are a whole set of investment strategies that relate to free money. You can try to get free money that you simply have. For example, buying and selling the same asset at the same time (for different prices) on different exchanges is classic arbitrage. You then simply have the "free" money.

You can also try to get free money for a limited time period, that you then use to get your actual free money. Let's look at an example (those uninterested in options can simply skip this paragraph). Consider a stock and the put and call options on the stock at the stock price, perhaps a year out. Go long and short the stock, the call, and the put, so 6 positions total. This is idiotic as they all cancel out. However, now let us divide the 6 positions into 2 accounts. In one account we are long the stock, long the put (covering the downside), and short the call (selling the upside). In the second account we are short the stock, long the call (covering the "downside" of being short the stock), and short the put (selling the "upside" of being short the stock). Now imagine that calls and puts are equally priced and focus on the second account. We have a position that will neither gain nor lose. That is, we can short the stock, cover losses by

buying a call, and give up gains by selling a put. *But shorting a stock gets us cash*, which we can go invest at the risk free rate (a one-year Treasury). That's free money for one year. But there shouldn't be free money. So if the risk-free rate is positive at a certain timeframe (in this example, one year), then calls at that timeframe need to be more expensive than puts (absent other overriding considerations). And indeed they are. Put again slightly differently, if puts and calls were the same price, then the person who created the second account would be engaging in getting the use of free money for a year, which they could then use to make money. (A year out they have to cover the short, as their options expire and so no longer give them a neutral position.) The person is not trying to predict anything. They are noticing features of the market, various identities and relationships and such, and using those features to make money.

3. Feedback

Feedback investing recognizes that there are feedback loops in the markets and that a large enough investor's actions, market related or otherwise, affect the markets. Bull and bear pools are an example of feedback investing. For example, bulls pool money, and go to expert traders to drive the stock price up. When the stock price is elevated, the pool attempts to sell and make money. Almost always there is some sort of accompanying PR campaign, even if subtle: "they are buying Union Pacific." The literature has fun examples of bull and bear pools, for example "Reminiscences of a Stock Operator" has many such examples. Another example would be to put out a scathing report about a company having previously shorted the company's stock.

There is also the idea of using one market to affect another. For example, is it possible to use the options market to affect the stock market in order to make money? Amazingly, there is a discussion in "Confusion de Confusiones," written in 1688, of a bear pool trying to use options, specifically buying calls, to try to *depress* stock prices. This sounds crazy to our modern, liquidity-soaked, "gamma-squeeze"-riddled ears. But there it is: "The fifth strategem [of the syndicate] consists in selling the largest possible quantity of call options in order [apparently by the absorption of available loan funds] to bring pressure on the payers of premiums to sell the stocks if they exercise their right to call." In Amsterdam in the 1600s we see the idea of using the options market to affect the stock market, an example of feedback investing.²

4. Fraud

If you can't actually make money in the markets, there's always fraud. Since we are assuming that gains are not coming from the market, then money must come from somewhere. Generally it is from new investors, leading to the concept of the Ponzi scheme, where money from new investor is used to pay off old investors. Bernie Madoff ran a recent and well-publicized Ponzi scheme.

5. Platonic (Betting System)

Imagine trying to make money betting roulette. You could try to predict the outcomes (predictive) or you could use a betting system, that is a path dependent sequence of bets through time (platonic).³ We suggest that the latter is an under-appreciated possibility for trading capital markets. There are books on both of these attempts to make money via roulette. "The Eudaemonic Pie" is a book about predicting outcomes in roulette. "13 Against the Bank" is a book about using a betting-system to try to make money via roulette.

Platonic investing shifts gears away from predictive investing. Forget the now. Forget prediction. Look at the graph. Is there money in those curves? This is the (what we call the)

Platonic outlook. What has been will be again. Does the overall path of price through time behave in a manner that lends itself to large, consistent profit? Interestingly enough, we began trying to trade the coin-flip environment.⁴ Ultimately, it may be that *the differences* between the coin-flip environment and the actual market paths are what allow for profit.

The siren call of attempting to predict what will occur in the markets may be a reason for the lack of advanced, public development of betting systems run in the markets. That is, most people understand that it is difficult to predict roulette, and so abandoning prediction and shifting to a betting system is an easy transition. In the markets, is more difficult to *completely*⁵ abandon the idea of prediction. But one who does so and runs a betting system is engaging in what I am calling Platonic investing, and that person may very well be on to something.

Let us take stock. We have set out 5 methods of investing. (They are not meant to be exhaustive and they are not meant to be mutually exclusive. In an area where you are limited in method only by the limits of imagination, it can be difficult to carve up the space.) Hypothesis: in the modern capital markets, the only way to make large, consistent returns is by methods 4 (fraud) or 5 (Platonic). If we see large, consistent returns, 4 or 5 are occurring.⁶

Gregory Zuckerman has written an enjoyable book "The Man Who Solved the Market." Here is a question: Upon finishing the book, does one have a better, worse, or same understanding of what is really going on? Zuckerman, taking his reporting at face value, likely would argue: better. Some would think, "well, at worst we gain no understanding." But no, dear reader, always remember rule #1: things can always get worse. But why would a reader of the book have a worse understanding? Here we might explicitly contrast two hypotheses:

Zuckerman's hypothesis: when the smartest people on the planet have an extreme incentive to have you not understand what they are doing, and you take them at face value, you come away with a better understanding as to what is really going on.

By contrast, we have Gwiazda's hypothesis (only differing by 1 word): when the smartest people on the planet have an extreme incentive to have you not understand what they are doing, and you take them at face value, you come away with a worse understanding as to what is really going on.

So an employee talks about getting a bigger bonus upon finding a better "predictive source." Reading this under Zuckerman's hypothesis one reasons: they try to predict things and get better bonuses if they do a good job. Reading this under Gwiazda's hypothesis one reasons: people don't talk like this; they aren't predicting anything (in the standard sense—later we may discuss whether the distinction between predictive and platonic can be made mathematically precise, or whether the distinction is mainly psychological; put differently, funneling money into the shapes of curves through time can be given a "predictive" gloss/reading?). The fact that they use the words "predict, prediction, predictive" a great deal is a tell signifying a bluff on the latter hypothesis.

If we give up on the predictive view (the view that the returns come from predictive investing), what is left? In reality the answer is: everything else. But for the people who think that investing is only predictive investing, there is nothing left. Thus some folks hypothesize that large, consistent returns come from fraud. The argument seems sound:

- 1) Predictive investing cannot yield such returns
- 2) Investing is (only) predictive investing
- C) Therefore the returns are not from investing and so must be ill-gotten.8

This paper is urging a rejection of the 2nd premise, "investing is predictive investing." But the fraud folks are at least correct in rejecting what we derogatorily call "the crystal ball view." That is, we agree on the first premise "predictive investing cannot yield such returns." Now, let's stick with this idea of fraud for a moment. This is an anti-Ponzi fraud (money is returned to old investors) and no one seems to know that they have been defrauded. One mystery (how are the returns achieved?) has been replaced with a far greater mystery: how in the world is this alleged fraud operating? If it is fraud, one must simple simply go with Will Ferrel's line in Anchorman, when his dog ate the whole wheel of cheese: "I'm not even mad, that's amazing." Put differently, fraud is not driving the returns.9

The price of an asset changes through time. (We are using "asset" broadly—the price of things changes through time, where the thing could be a stock, bond, derivative, futures contract, toothbrush, whatever really.) How can we attempt to make money? One method is to try to predict the direction of travel of the price. But what else is there? There are prices that change through time. It seems to us that an under-explored method of trying to make money is to look at the shape of price through time and try to "take money out of it." These methods are akin to betting systems in roulette, in the sense that for these strategies you are updating bet sizes through time based on path dependent past outcomes/prices. Can money be taken out of the market in such a manner? That is, with no effort to predict the future travel of price, rather armed only with some level of confidence that the future will resemble the past? I suggest that the answer is yes. Many small strategies, properly chosen, entwined, geared, updated, reset, and stacked upon each other, are the path to the money tree.¹⁰

The paper began with a quote: "nobody knows anything." We are more that happy to apply the quote to ourselves. Achieving large consistent returns in the market is an amazing feat, and a challenging mystery to try to unravel. We are stumbling in the dark. So be it. But let us also recall that the quote refers to media executives inability to predict how well a movie will perform at the box office. Prediction is very difficult. Prediction is not consistent with large consistent returns. At the least, there is a role for philosophy vis-a-vis investing insofar as the space of possible ways to make money could use some expansion and conceptual clarification. Then when it comes to large consistent returns, let's rule out the impossible and see what's left. Predicting your way to such returns is impossible. Of that we are quite confident. And perhaps we can be forgiven for taking a stab at exploring the space of what's left.

Afterward: Conceptual Differences

Let us go through a list of concepts and focus on how they are viewed differently from the predictive versus the platonic points of view.

1. Predictive

Time — embodied humans existing through time try to predict the future

Strategy — for example: interview and find good management and get long a strong stock or etf; note a low p/e ratio and predict 10 year returns, etc.

Undervalued — intrinsic value is greater than the price, ideally by a lot so that you, a fallible human creature, have a margin of safety¹¹

Randomness — doesn't really have a role

Going Short — views differ, but there are overriding bad themes: stupidity, death, danger, evil, plague, anti-patriotic, greed etc., e.g., "The second faction consists of the bears...The bears always begin operations with sales. Some of them even surpass Timon of Athens who loved Alcibiades only in order to share his mission, namely, to be the destroyer of his native country. These bears must be fled like the plague..."12

Trading different markets, e.g. futures vs stocks — both are tough to predict

5. Platonic

(Now let us consider the same concepts from the point of view of platonic investing.)

Time — What has been will be again. Forget the now. Do not try to predict where the market will go. Rather try to funnel money into the market in real time to take advantage of "inefficiencies" in the path of price through time. In a sense we are focussing on the structure of the price through time, thought of in toto, and we are not focussing on an instant and trying to decide what will happen from here

Strategy —

Undervalued — e.g., this purchase at this time (even if the stock is going up) is undervalued because it is part of an overall strategy that has a positive expected value (or is expected to make money, even if the expected value is ill-defined)

Randomness — can be a good way to decide, e.g., whether to go long or short in certain situations, or to select an asset, or to select a retirement/reset point, or to select an update time period, etc.

Going Short — has an amazing mathematical property (50% gain and 50% loss results in a 25% gain), means you can be (close to) market neutral, allows for dual strategies, gets you cash, among other amazing strengths¹³

Trading different markets, e.g. futures vs stocks — From the perspective of predictive investing, it is difficult to predict the future, and so, at least on the face of it, there does not seem to be a major difference. 14 From the perspective of platonic slosh investing, e.g., the futures market may behave differently than the stock market and so be easier (or harder) to trade

OUTTAKES

We have suggested that Platonic investing can make large consistent returns. The issue can be reversed, namely, what would have to be true of the markets for it to be impossible to make money from platonic slosh?

The normativity gets weird. Bad isn't bad if it is consistently bad, because you can generally get "on the other side" of any strategy. Actual bad is uncontrollable chaos. Consistent bad is great. Just get on the other side of it. When trading the coin flip environment it is tough trying to get a toehold into anything actually good or bad. In the actual stock world there is much of interest.

Is it possible to create a basket of assets that is more mean-reversiony than single assets? A schmear.

Is it possible to use platonic slosh to flow money around in a totally indifferent manner, such that any asymmetry/skew can be profited from? The possibilities for moving from one asset to many are seemingly limitless.

A lot of stuff "devolves" into the Kelly criterion when modeling or working in the coin-flip environment, when you move away from EV = 0. A nice feature of the actual markets is that the price curves through time are what they are. You don't have to worry about generating them and this potential devolution.

Of course, there is a problem of induction here: how do we know the future will be like the past? The short answer is that we don't. But just as we feel comfortable eating bread for nourishment (and don't worry that bread may now be poisonous), one can become comfortable that price through time will continue to have certain regularities from which one can profit.

What is a betting system? How does a betting system differ if there is price through time versus discrete bets with a win/loss outcome? (With price through time, there are more potential update points, which gets tricky.) Take an asset's price chart through time — is there money to be made there from the shape of that chart? If so, how? The first paper thought that the very movement of money could be harnessed to make money, even without an edge in expected value. Though we believe that there are interesting results in that space, we now believe that actual market moves are needed to arrive at large consistent returns. Put in reverse, there has to be some way that price can behave through time that does not allow for large returns for all, such behavior is likely largely random. This implies that widespread betting-system trading of the capital markets would make the markets' overall behavior more random.

Imagine Fosbury allowed to jump so that no one saw him. Of course, when interviewed, he would not say "I've got this amazing new technique." He'd say, "I eat lots of spinach and do squats," implying that he is doing what everyone else does. Or imagine that the guy who first used rubber on a ping pong paddle had invisible soundless rubber. Again, he'd say he practiced

a lot. When extraordinary leaps occur, something new and different is occurring. And if people can, they will suggest that nothing new, nothing different is occurring. They will imply that all is as it ever was. This is basic incentives 101. Well, great. But what is occurring? This paper is attempting to begin a discussion investigating that question.

Is implies can (as a great psychological aid, whether trying to run a 4 minute mile or solve a tough puzzle).

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NOTES

- ¹ In a conversation with Alex J. Pollock, author of "Finance and Philosophy," on 2/22/2024.
- ² Confusiones p. 31, bracketed material in original. George Soros's "The Alchemy of Finance" and the concept on reflexivity tie into this concept of feedback.
- ³ Basically you are deciding whether to bet more or less (or the same) after outcomes. This is the notion of "a betting system" that we will take to the capital markets.
- ⁴ As you are reading about the investing world, some themes become clear. There is value investing. There is trend following. With value investing, you are more inclined to sell as price rises and buy as price decreases. With trend following, the opposite is the case. It also occurs to you that people like to say, "If you make 50% and lose 50%, then you are down 25%." But this is only true if you are in an investment that *increases in size as you make money and decreases in size as you lose money*. Going short is the easiest way to think about the opposite case, where your position size increases as you lose money and decreases as you gain money. When short, if you make 50% and lose 50%, then you are up 25%, e.g. -100 to -150 to -75 (or -100 to -50 to -75). Can you just make money by using this mathematical property? The issue is drawdowns. These were major themes of the author's "To The Money Tree." While writing that paper the present author had recently finished "The Ginger Man." His thought process was, "add some emotion, try to be funny, change person and tense willy-nilly style, and you'll have a classic." A main lesson of that paper became: don't do that.

That paper posited that perhaps money could be made in a negative expected value environment. Yes it sounds absurd, or perhaps just counterintuitive. Running the same negative expected value bet repeatedly obviously loses money over time. But nothing says that you have to run the same bet. What is the general proof that money is lost? (And what does it mean to lose money given a P/L graph over time? This question is not as dumb as it sounds.) Second, to some pre-defined acceptable probability of total loss, obviously money can be made. A straight martingale (bet 1, then 2, etc until a win, then stop) can win 1. If you accept a 1/(2^10) probability of total loss, then you can make 1 with a bankroll of 1023. Can this be improved upon? One way to think of this question: given a bankroll of 1023, can you lower the probability of ruin and still make 1, or make more than 1 with the same probability of ruin. If not, what is that proof? Third, imagine betting 1, then if you lose bet 3, then if you lose bet 6, so that upon a win you make 1 for each time step. Your "profit" through time has a slope of 1, with massive drawdowns along the way. What is the relationship between slope and drawdowns? And how does the relationship vary through different, and possibly complex, strategies? These 3 examples/questions are potential starting points for thinking about the coin-flip environment. Some of these questions are easier to answer than others. Ultimately it seems likely that betting systems may work on the actual capital markets but not on randomly generated returns (randomly generated price through time series).

- ⁵ "But Jeremy, plenty of people pay a great deal of attention to position size." True. But the point of this paper is to pay 100% attention to position size and 0% attention to anything else. That is the idea of a betting system, or what I am calling the "Platonic" outlook.
- ⁶ The hypothesis in the first paragraph was that large consistent returns do not come from 1) predictive investing. This hypothesis is stronger, namely that large, consistent returns can only come from 4) fraud or 5) Platonic investing.

- ⁷ Put another way, with Platonic investing one can say "I predict that funneling money into and out of assets in the manner I am undertaking will make money over time." On this reading Platonic investing is prediction of another sort, where again, a key move is to ditch trying to predict direction of travel.
- ⁸ To be clear, we do not consider 4) fraud to be a legitimate investing method, rather it is a way to try to make money. 1, 2, 3, and 5 are the legitimate investing methods considered in this paper.
- ⁹ Though not how this stuff actually occurs, imagine the meeting to pin down the specifics of the fraud. A: "What sort of returns should we aim for?" B: "65% annually, that should keep us under the radar." A: "Great thinking, I like it."
- ¹⁰ The specifics of this are a nightmare. There are too many possibilities. The infinite whacks you over the head very quickly. Infinite 1, you 0.
- ¹¹ The idea of margin of safety has a whole path through the literature. The latest main development being "Margin of Safety."
- ¹² Confusiones p. 12.
- ¹³ The drawback that if you are just short, or overly short, you can get your "face ripped off" is real. It remains.
- ¹⁴ This claim glosses over a lot.