Thomas Peterffy's Speech at the Chicago Trading Conference 5/10/2018

SUCCESSFUL INVESTING

The only way to make money reliably on Wall Street is by front running. Front running means to buy or sell things ahead of others, knowing or expecting that other people will follow you later.

Short term front running is often called "illegal".
Long term front running is often called "investing".

I got the first hint of this in 1969 when I had the opportunity to see the silver ring on COMEX. Traders and brokers stood around the ring, a large circular counter in the middle of a large room, the perimeter of which was occupied by phone banks where clerks received orders. Many of the clerks were standing on boxes so that they had a clear line of sight to their brokers. The clerks communicated their orders to the brokers by hand signals that everybody could see. Whenever a large buy order was signaled, the ring suddenly erupted with everyone clamoring to buy ahead of the broker, just to sell to him, immediately after, at a tick higher. Some brokers were more careful and required the clerks to quietly write order tickets and run them into the pit. Taller locals stood behind these brokers, trying to get a glance at these tickets in an effort to front run these orders.

The ultimate drama in the silver pit came a decade later when the Hunt brothers cornered the market by buying up a huge number of contracts, representing much more silver than there was in all the warehouses. The brothers always used the same broker for their buying, Norton Waltuck. This became so evident to all the traders that whenever Waltuck was seen approaching the pit the price immediately spiked up. Soon clerks were seen sneaking upstairs where the brokers offices were located in 4 World Trade Center. When Norton Waltuck came out of his office on his way to the elevator to the pit, they tried to beat him there, taking the stairs three or four steps at a time - literally front running him.

While front running is a fairly safe bet, it isn't one hundred percent. This was clearly demonstrated by a trader who sent his clerk to watch Waltuck's door with the mission of sending a pager signal the moment the door opened. The trader in

fact almost had to declare bankruptcy when Waltuck, instead of going downstairs to the pit, only went to the bathroom.

In 1977, when I went down to the floor of the American Stock Exchange as a market maker in options, the situation with the clerks and brokers had not changed much, but since there were more moving parts in stock options trading than in silver, several other tricks were developed. Many of these were much more subtle; like when the broker would walk into the crowd and ask where he could buy 50 call options and two of us market makers would both yell out the price posted on the overhead screen. "At four and a half ", the specialist would say to the broker, "OK Sam, you bought 50 at 4 and a half", and then he would launch into a long conversation waiting for the underlying stock to move. "What did you do last weekend?, Did you go to the game?, How is your mom doing? and the kids?" Then as soon as the stock ticked down (thereby lowering the value of the call option), he would say, "OK Sam, I sell you 40 and the two gentlemen will sell you 5 contracts each." On the other hand, if the stock ticked up (thereby raising the value of the call option), he would say, "I'll sell you ten and these two clowns in the crowd will sell you 20 contracts each."

It paid well to be a specialist in those days.

For many similar reasons, in 2004 several NYSE specialists were fined $240 million for various forms of front running, so that for most practical purposes, front running became prohibited as far as exchange based trading is concerned. Up until recently, that is.

Now that bids and offers change in milliseconds, it is practically impossible to discern or prove front running on such a miniscule time scale. High Frequency Traders rule the trading day!

Over the counter trading in instruments that may be incredibly similar, but not completely identical to exchange traded derivatives, are governed by different rules.

Recall the relevant part of the Volker rule: insured depository institutions, i.e. banks, may not take positions that would exceed "reasonably expected NEAR TERM demands of clients, customers or counterparties." That is, if you are a bank, front running is OK but speculation is not.

Because taking a position to satisfy expected LONG TERM demand is speculating and as a bank you must make your trading profits apparently without risk. Just like the traders on the Comex floor, buying ahead of Waltuck arriving to the pit (presumably in order to be able to satisfy his near term demand).

It was interesting to learn that the top five US banks earned $9.5 billion in the first three month of 2018, trading equity derivatives. Fascinating!

Only the top five US banks! $150 million per trading day, and only by trading equity derivatives, i.e. options, futures and swaps.
Who do you think is on the other side of those trades? Hedge funds, mutual funds, pension funds, endowments, ETF issuers, the so-called sophisticated, institutional investors. They collectively took the $9.5 billion loss in the first three months.

Yes, these institutions pay about 100 billion a year to their prime brokers around the world, with whom they trade their equity portfolios. This does not include bonds or loans or unregistered securities where the markets are much wider. But this is the safe position to be in. Morgan Stanley's prime brokerage is very expensive but should something go wrong, they are PROBABLY too big to fail and the clients pay for that. That is the reason I am long Goldman and Morgan Stanley in my personal portfolio -- betting that people will continue to choose the path of least resistance and do nothing differently, as long as their personal interest is not directly on the line.

Nevertheless, after a while, paying all those billions does not go unnoticed. The money comes out of the managers' net performance, which, on the average seems to suffer year after year. The ultimate beneficiaries, or their advisors, do eventually notice.

Hence, comes the new invention: Passive Investing! Just buy baskets of stocks imitating the indexes or buy ETFs and sit on them. Hundreds of historical studies indicate that on balance, you will outperform the actively managed funds. Why? Because passively managed funds trade much less often, thus you will give up much less to operators front running your passive manager's orders.

Front running occurs on many different time scales. Starting with the high frequency trader who can see that your buy order was only partially filled on the NYSE and lifts the offer on NASDAQ, 7 milliseconds before your buy order gets there; simultaneously canceling his sell orders on all the dark pools; or going to the guys on the floor who receive On The Close orders a few minutes before the closing imbalances are published, then to people who can sneak a peek at research reports to be published the next morning, then to the traders who mostly correctly forecast the coming deletions and additions to the various indexes, and buy or sell the relevant stocks a couple of weeks ahead of the quarterly rebalancing, then to traders who sniff out coming mergers and acquisitions months in advance, all the way to the astute and hardworking analysts and investors who correctly forecast and funnel resources into industries and companies who will likely face increasing demand for their products and services and draw resources away from waning areas of the economy.

If you are a long term investor, you do not necessarily expect buyers or sellers to emerge until several months or possibly years after your move and you must wait to unload your position. But nevertheless you hope that they will come and that you will have front run them -- you have bought ahead of them, successfully.

Let us all pile into passively managed ETFs. But this will go just so far. While front-running on a short time scale is a questionable practice, especially if you are not the prime brokerage arm of an investment bank, doing so on a long time scale is the way a market economy runs itself.

I recently heard the CEO of an investment bank say that it was doing God's work. I would rather say, speaking from painful memories of having grown up in socialist Eastern Europe, that profitable, long term investors are doing God's work, for the results surely BEAT those of a centrally planned economy. And yes, brokers who enable these long term investors to invest profitably also do God's work. The less expensive they are, the less friction in the economy, and the more they deserve that characterization.

The operative word is PROFITABLY, for if your research draws the wrong conclusion and you invest in areas that do not pan out, you are moving the prices and the economy backward, instead of forward.

Now, let's assume that you are a serious investor doing loads of research trying to identify publicly traded companies that satisfy your criteria to invest in or potentially to short. You want to do God's work for a profit!

WHAT WOULD BE MY CRITERIA?

In my view success in business is all about management and deployment of the appropriate technology. The field in which the business operates does not matter so much if you make it broad enough.

But right now I would invest in businesses that could benefit from putting their operations on a technologically strong platform, such as health care, home building, agriculture, personal care or even money management, where with the use of big data many functions will be standardized and automated and with that much greater scale, savings and efficiencies will be achieved. As a result, your company becomes one of the few to survive and prosper in the space.

You want to identify entrepreneurial companies that have substantial insider ownership, where management has a long term perspective, interest and commitment. They don't just want to drive the stock price up before they cash out their options and leave. They also aren't likely to be looking for a bigger pay package at another company. They personally identify with and are invested in the goals, continuing growth and success of the firm. They should have longevity at the firm and expertise in the business AND in building the necessary technology.

You also recognize that for the last several thousand years it is the application of new technological innovations that have been driving our economic advancement and THAT isn't going to change. So you want to make sure that you invest in companies at the forefront of applying all the new technologies that can be utilized in the business.

Specifically in today's world, successful companies create automated platforms on which their customers can manage the relevant parts of their businesses or personal lives. These platforms keep track of all the customers and their individual needs and preferences and provide algorithms for optimally satisfying them within the given constraints. These platforms manage the supply chain, maintain

all the books and records and comply with applicable rules and regulations -- all in an automated manner.

Due to the high degree of automation, only few employees work in day-to-day operations. Most concentrate on adding new products and services and developing new platform functionality. Automation brings low operating costs, which is shared with customers, and generates high rates of growth and high profit margins relative to the industry. Management must relentlessly focus on creating value for the firm's customers and in this regard, staying well ahead of competitors.

You the investor must follow all the other players in the industry and keep track of how they do on all these measures. So if the company in which you invest appears to be losing its advantage, you can take action in time. If you also use short positions in your portfolio, this may give you the opportunity to identify the laggards in the space and trade the leaders and the laggards against each other.

Why do I think that you can succeed as an investor going up against so many other people who may have more experience, know-how, and resources? Because near term front running has prevented so many investors for such a long time from making a profit commensurate with the risk they are taking, and as a result, so many of them are turning to investing passively.

You know how passive investing works but you may not have reflected on the details. Most passive investment products are fashioned after indexes and most indexes consist of a basket of stocks, each of which is represented in the index in proportion to its market capitalization as of a certain date in the past. So if two stocks, A and B have the same price but A has twice as many shares outstanding as B, it's market capitalization is twice as large as B's and it will have twice as many shares in the basket than B. As ETF buyers come to the market, they buy from sellers who have to buy the basket of stocks and deliver it to the licensed issuer, who issues the ETF to the seller against the basket of stocks and a small fee.

Now as a serious investor doing loads of research, you have identified the publicly traded companies that satisfy your investment criteria, many of which may be the ones I previously mentioned - and possibly others, that would be short candidates. You have identified stock B as the stock to accumulate.

But you are not alone, and other investors also conclude that B will grow faster and will be more profitable than A and they will start buying. Ordinarily, due to that buying pressure the price of B would rise rapidly relative to A so you have to be among the first few buyers to benefit. That would be true were it not for the ever increasing amounts of monies pouring into passive managers, ETFs and robo-advisers who keep buying or selling both A and B in the same proportion, independently of their prices. This in turn will delay the prices reaching their ultimate levels and enable the active investors to front-run the passive ones.

Even more important, as successful, but smaller market capitalization companies grow, they get added to various indexes that are followed by passive investors. The more and larger indexes these stocks are added to the more passive monies will be invested in them, giving a huge opportunity to earlier buyers to take their profits. The reverse is true for the larger, companies that are unable to keep up with changing technology. They are dropped out of indexes and are subsequently sold by passive investors. As the passive investors sell the stock and push the price down the market capitalization diminishes, prompting other index managers to delete the stock. This feedback continues giving a slowly cascading effect to the prices.

Good stocks will remain undervalued and bad ones will remain overvalued for longer, giving active investors more opportunity to make money in the market. The more money flows into passive managers the greater the opportunity will become for active ones. Eventually, as stock B's price, and thereby its market cap keeps rising, although slowly, it gets added to more and more Indexes and ETFs, and more and more passive investment vehicles must buy it.

To recap; the only way to make money on Wall Street is by front running. Investors have lost so much money to front-running over the years that they are now putting more and more money into passive investment vehicles. This in turn opens up an opportunity for active investors to front run the passive ones.

But this is a TRADING CONFERENCE. Why am I talking to you about successful long term investing? Because a trader also tends to be more successful if he or she knows which foot to put down first. If you research your stocks and trade the good ones from the long side and the bad ones from the short side, you will do

better. This is not only because the stocks will tend to move in your favor -- that is indiscernible on the short run -- but knowing that you are standing on the correct foot will give you the confidence you need to succeed as a trader.