The Type 2 Investor

October 12, 2017

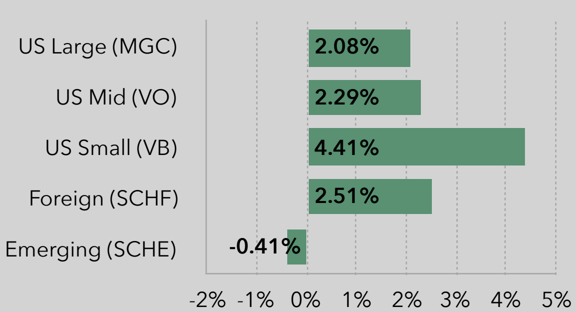
September 2017

Economic Data

- Hurricanes Harvey and Irma were no doubt factors as 33,000 jobs were lost in September, the first drop in seven years; the unemployment rate fell tow-tenths, however, to 4.2% and y/y wages matched a recovery high of 2.9%
- Existing home sales were also hit by Harvey, falling 1.7% in August
- Year-over-year inflation (CPI) rose two-tenths to 1.9% in August on higher energy costs
- Retail sales fell by 0.2% in August driven largely by weaker auto sales

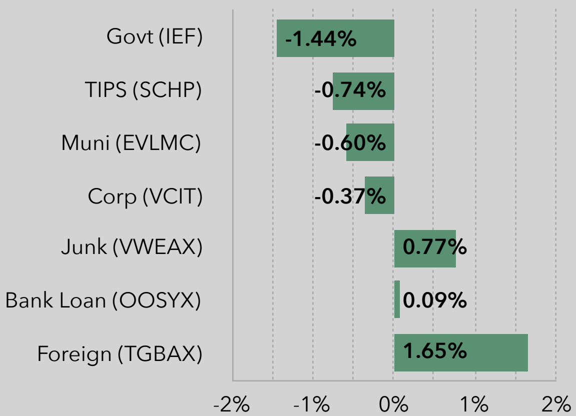
Stocks

September Returns



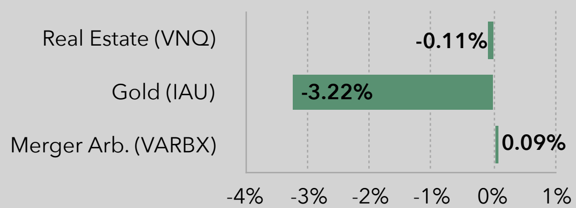
Bonds

September Returns



Alternatives

September Returns



Performance data provided by Morningstar.

The brain uses two systems to process information. The first type is intuitive but lazy, rapidly forming judgements with no conscious input. The second system is slow, reflective, and is not guided by emotions. It is that second system – type 2 – that we want in control of our investment portfolios.

Private Equity for the Little Guy

One of the biggest frustrations as an investor is when you identify a company that you think will be truly disruptive to an industry, only to find out it's not publicly traded. Remember how cool you thought Facebook was after you first set up your profile? It sure would've been nice to have been able to buy in 2006, rather than 2012. How about that first Uber ride? It was a trip to San Francisco in 2011 for me. Still can't invest in that one (although I don't think I'd want to at this point).

Essentially, the SEC believes that 'accredited investors' – those that have over $1 million in net worth or make at least $200,000 per year ($300,000 for joint income) – are sophisticated and don't need the protection provided by regulatory disclosure filings. This allows companies to raise cash through a Reg D private placement without the expense of a public filing, but does not allow the majority of the "unsophisticated" public to invest. This has changed somewhat recently, however, as two new avenues for investing have come to prominence: Initial Coin Offerings (ICOs) and equity crowdfunding.

Initial Coin Offerings

ICOs are all the rage right now. ICOs essentially allow anyone to raise money by offering made up cryptocurrency tokens to anyone with bitcoin or ether burning a hole in their flash drives, with nothing more than a website and a white paper that uses the word 'blockchain' a lot. There have been over $2 billion in token sales so far this year, most of them seemingly for services that already exist and are easily accessible, but, you know, aren't on a blockchain.

ICOs bypass the rigors and expense of raising money through regulated means, because they aren't actually selling equity. Unless they are, in which case they are breaking the law and the SEC is scrambling to crack down on them. China went so far as to outright ban ICOs last month. And there is really no obligation on the part of those launching the ICO to actually do what they say they are going to do. It's like trying to invest in Disney by buying Disney Dollars that can only be used at Disney World, and there is a very good chance Disney World is never actually going to be built.

The whole ICO market is rife with scams, but money is still being made hand over fist right now. If you really want to get in on the action, your best path to riches is not investing in an ICO, but rather launching one yourself. Seriously, get together with a few of your buddies, stock up on beer and psychedelics, and lock yourself in an apartment for the weekend. Write a white paper about, I don't know, a decentralized means of paying contract workers around the globe using the blockchain and smart contracts and stuff, while not explicitly saying it's about evading taxes. Come up with some cool name for your token, like 'ShinGig' -- the token for the gig economy! Better yet, call it the 'Goldman' token so that a bunch of morons will think Goldman Sachs is somehow involved. Then just watch the millions roll in while you nurse your hangover and try to forget how morally bankrupt you are.

This might be a big part of the future of investing, but not before a lot of people get swindled. Until then, I'm doing my best to avoid the cognitive biases that tempt us all to join in on these types of speculative frenzies, and I'm staying away from cryptocurrencies.

JOBS Act Equity Crowdfunding

Crowdfunding sites like Indigogo (founded in 2008) and Kickstarter (2009) allow the everyman to give money to support creative projects and product developments they are interested in. The reward for your investment can be tickets to the show you are supporting, a discount on the product you want to see made, or perhaps, I guess, just the good feeling of giving your money away. But the reward could not be equity until just recently.

The Jump-start Our Business Startups Act, or JOBS Act (clever), was passed in 2012, but the SEC didn't actually establish the corresponding 685-page set of rules until 2016. The JOBS act made equity crowdfunding and investments from non-accredited investors legal.

Title III of the act allows startups to raise up to $1 million every 12 months. However, this avenue is unappealing to serious startups for two reasons. First, there are significant upfront compliance costs associated with this type of fundraising that exceed the cost of a classic Reg D accredited investor raise, as well as steep brokerage fees for a successful campaign. Secondly, $1 million is chump change in the tech space. It makes you wonder if anyone doing a Title III raise is only doing so because they know sophisticated investors would not give them money.

Title IV, which pertains to Reg A+, has more promise. It allows companies to raise up to $20 million (Tier I) from accredited and non-accredited investors alike while pre-empting state registration, and up to $50 million (Tier II) with state registration.

There are now over a dozen portals like SeedInvest and StartEngine that offer equity crowdfunding opportunities, but I advise caution at this point. Companies I have been interested in investing at first glance, I have soured on once I have read the offering circulars, which aren't really prominently linked to on these sites. And that's a problem. The average joe isn't going to take the time to read the circular, and even if he did he probably wouldn't understand it.

Take Rayton Solar for example, which has so far raised more than $6 million from over 4,000 investors. You might have seen ads on Facebook with Bill Nye the "Science" Guy (the mechanical engineer, turned comedian, turned actor, turned *Dancing with the Stars* contestant, turned political figure, turned corporate shill) promoting the company. The idea behind the company is to use particle accelerators to cut silicon wafers as thin as three microns, thus eliminating the kerf waste in the current manufacturing process for solar panels. Sounds cool enough, but the company doesn't show any substantial data on the cost savings. Silicon is not all that rare of a material, and its not clear from the circular just how much silicon adds to the manufacturing cost of solar panels (according to MIT's photovoltaics lab, it's only 15%).

The particle accelerators they want to use to cut silicon wafers reportedly cost $2.3 million a pop. Here is the rub: "The particle accelerator in its present form is not, however, capable of producing silicon wafers in the volume necessary for commercial use." That seems like a lot of money to spend on an overly-complicated saw that doesn't do the job it needs to do.

Even if it is a good idea, the terms are very unfriendly to the investor. With 200 million shares authorized, at $1.52 per share, the offering values the company at $304 million. The founders' investment in the company was only $70,500 for 80.5 million shares, or $0.00088. Yes, less than one-tenth of one penny per share. Private placements netted them another $2,683,545 for 56,919,968 shares, or $0.04715 per share. Now, they are asking you to pay $1.52 per share. That's 3,124% above the private placement and 173,460% over the founders' buy-in

for a company that has only six employees and less revenue than your daughter's lemonade stand.

Worse, the three million dollars raised between the $7 million and $10 million marks will go directly to founder and CEO Andrew Yakub and two companies I could not find any information on: Marooned, Inc. (bought-in last year at less than $0.03 per share) and Phos, LLC. Another $150,000 will go to paying back a loan to ReGen America, a company 50% owned by Andrew Yakub. Last year Rayton paid Mr. Yakub $120,000 and awarded him stock-based compensation of 4,000,000 shares, which at $1.52 would be worth more than $6 million. He's already taken out far more money than he put in, and the company is still probably more than a year away from selling a product. If this is going to be such a great business, why is the founder so eager to cash out?

In the first six months of 2016 Rayton spent only $72,210 on research and development. Meanwhile, they spent an astounding $335,333 on sales and marketing when they have no product to sell or market. No product to market except the company's stock, of course.

Furthermore, the circular claims they are "unaware of any other company that has created a particle accelerator that can penetrate silicon at a 3-micron level," which is intentionally specific . A simple Google search reveals there are other companies and research institutions working on the kerf issue, and they are very well funded. I honestly hope Rayton is a commercial success, but I have serious doubts. The reality is that solar cells will continue to get cheaper without this technology.

I think it's best to avoid flashy tech companies like this on equity crowdfunding sites. If a company truly has revolutionary technology

Binge Box

American Vandal

When a friend texted me the link to the trailer for *American Vandal* a couple months ago, I initially thought it was just a two-minute dick joke parodying the long-form, true-crime genre made popular by works like *Serial* and *Making a Murderer.* It turns out, though, it's actually a real show! It stars Jimmy Tatro, who I recognized from his self-deprecating YouTube videos chronicling the "frat life" that were popular around the office I worked in about five years ago.

Happily, the mockumentary ends up being much more than an eight-episode, 4-hour-long dick joke. I found myself immersed in the story, and formulating my own theories as to who drew the dicks. It's definitely worth a binge on Netflix.

backed by data, they are going to be drowning in venture capital money. However, I do think this could eventually be a great avenue to invest in less-sexy small businesses with strong leadership, good financials, and a clear purpose for the funds other than lining their own pockets.

For now, I think I'll stick to boring old publicly traded stocks and bonds.

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Tactical Asset Allocation					
Asset Class	Heavy Under-weight	Under-weight	Neutral	Over-weight	Heavy Over-weight
Cash				●	
Fixed Income		●			
Core Domestic		●			
TIPS				●	
US High Yield	●				
Bank Loans				●	
Foreign Bonds			●		
Equities		●			
Large Cap		●			
Mid Cap		●			
Small Cap	●				
Developed Intl.		●			
Emerging			●		
Alternatives				●	
Real Estate		●			
Commodities					●
Hedging					●

About EmeraldSpark

EmeraldSpark Investments, LLC is a Registered Investment Adviser based in Chicago, IL. We were founded by Ryan P. Layton, CFA in 2015 to provide personalized financial planning and fiduciary investment management services to select individuals. Our investment process blends the foundations of Modern Portfolio Theory with the latest research in the field of behavioral finance. We specialize in asset allocation and investment due diligence to help provide our clients with investment strategies personalized to match their specific goals and risk comfort zone.

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