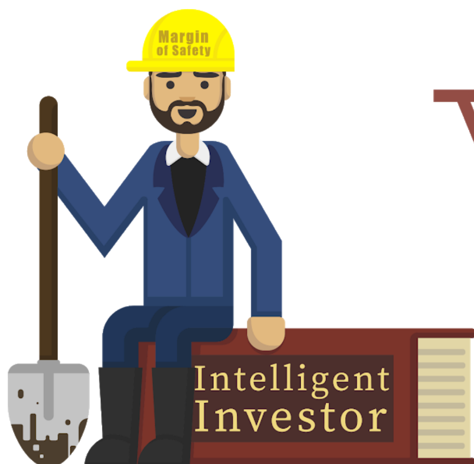
Value Ventures: December 2019
Long-term thinking in a world of short-term orientation.



A Private Equity Mindset in Public Markets & Surge Components, Inc. (SPRS)

by Brandon Beylo on 09 December 2019

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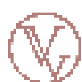
Last Month's Must-Reads

Each month I collect various articles, blog posts, research materials, etc. and deposit them here. This month's collection features Verdad Capital's piece on Growth Bankruptcies, Greenwood Investors' Q3 letter, a podcast with Joel Greenblatt and an article on happiness.

Growth Bankruptcies, *Verdad Capital*

What has a better chance of losing all your money: IPOs or an old, heavily leveraged business? Turns out it's IPOs.

Growth Bankruptcies reveal the catastrophic losses experienced by buy-and-hold IPO investors. We've seen 3.700 public market IPOs since the late 1980s. Of those 3,700, half have lost *at least* 41% over a five-year holding period.



The top three worst sectors to buy-and-hold IPOs? Communication Services, Information Technology and Healthcare.

GreenWood Investors Q3 Letter, *Chris Torino & Steven Wood*

Steven Wood & Chris Torino of GreenWood Investors released their Q3 letter. In it they discuss dead-money investing, Rory Sutherland's book *Alchemy* and Leonardo (LDO). My favorite section from the letter dealt with customer acquisition through the lens of Sutherland's *Pub vs. Tourist* approach.

In short, there's two main ways to acquire (and retain) customers. The pub and the tourist way. Torino explains the pub way as, "*The business [that] makes less money from people on each visit but likely generates significant trust and more profits in the long-term.*" These are the types of businesses we want to invest in. These 'pub' businesses will sacrifice short-term profits for long-term value creation.

They're what Steven likes to call, 'Builders'.

The tourist approach is stark in contrast. This approach, according to Torino, "*attempts to gouge the customer on a single visit or short-term contract, and is thus less trustworthy.*" These are businesses we want to *stay away* from, or even short. 'Tourist' businesses will go to great lengths to engineer profits, manufacture cash and dilute shareholders.

Value Investing with Legends Podcast: Joel Greenblatt

I'm a simple man. When I see an interview or podcast with Joel Greenblatt, I stop. I listen. And then I go about my day. Greenblatt is one of my favorite investors (I've mentioned him numerous times in these letters).

In this podcast, Greenblatt discusses off-the-beaten-path investing. He notes areas that are ripe for mispricings (spin-offs, rights offerings, weird securities, micro-caps). Greenblatt also dives into portfolio allocation and efficient market theory (hint: he's not a fan!).

The Happiness Ruse, *Cody Delistraty*

While not directly related to investing, *The Happiness Ruse* is a terrific read on the hijacking of happiness. The 3,000 word article discusses John B. Watson's controversial experiment on human conditioning and its applications in brand creation, advertising and product personality.

Watson used his findings to help advertising agencies capture human emotion; which was fear in most cases. He developed the 'scare tactic', frightening consumers into buying a product. The article gives the example of a Scott's toilet paper ad:

"He helped to create a print advertisement in which surgeons are looking at a patient, while the text below says 'and the trouble began with harsh toilet tissue' as a way of scaring and selling."

Yet my favorite quote from the piece fights back against the idea of purchased-happiness:

"But if we continue to allow ourselves to be manipulated into pining after peak experiences, then we leave ourselves open not only to market manipulation but also to loneliness, poor judgment and, ironically, an abiding sadness."

THIS MONTH'S
PHILOSOPHY CORNER

Think Differently: A Private Equity Mindset in Public Markets

Private equity outperforms public markets. Unfortunately, most PE opportunities are for accredited investors (or high-net worth individuals). This means a majority of retail investors are unable to take part in these outsized returns.

Yet what if there was a way to bring private equity investing to the masses?

What if retail investors, small funds, etc. could access private equity opportunities at scale? What if *you* could replicate the strategy that helps private equity outperform public markets?

You can, and here's the solution: **apply a private equity investment strategy to public markets.**

Thinking like a private equity investor is an edge in today's short-term, next quarter mindset. Applying private equity principles to public market investing combines the best of both worlds. This gives *every* investor a chance at recreating that powerful strategy once reserved for high net-worth investors.

The Three Pillars of Private Equity

While thinking about the idea of private equity in public markets, we found recurring themes. We'll call these our 'Three Pillars' of Private Equity in Public Markets. They are:

1. Smaller is better
2. Illiquidity Premium
3. Long-term Thinking

Over the course of this section we'll dive into these themes that a private equity mindset creates in public markets. Then, we'll discuss ways to implement this mindset into your investment strategy.

I will warn you. This method isn't for everyone. It requires a long-term outlook, a disregard for random stock price movements and a stomach for dramatic volatility.

Brief History of Private Equity

Let's review the two types of PE firms we want to emulate. There's Leveraged Buyouts (LBOs) and Venture Capital.

Leveraged Buyout Firm

As the name suggests, Leveraged Buyout Firms (or LBOs) use debt to purchase an existing business (either public or private). The leverage juices returns if things go well, but destroys capital in the event of a downturn.

LBOs sometimes use as much as 90% leverage to finance an acquisition. The goal for LBOs is an eventual sale (a.k.a., 'exit') three-to-five years down the road. These firms then try to improve the business through the income statement or balance sheet. Improving the business has two benefits:

1. Increases cash-flow to the PE firm while they own the business.
2. Presents the opportunity for a multiple re-rating when it comes time to sell.

Two high-profile examples of LBO Firms include Bain Capital and Apollo Global Management.

Venture Capital

Venture Capital Funds are another well-known PE vehicle. These funds invest in early-stage companies. These companies aren't usually profitable. Some companies haven't even generated revenue yet.

Venture funds invest (more-or-less) either the founder/CEO, or the vision of the company. Since there's no profits, venture funds must learn to judge the quality of the CEO and the viability of an idea. These funds invest in either Seed or Series A rounds. Both rounds are the earliest times a company can invest.

Three examples of high-profile venture funds are Sequoia Capital, Insight Venture Partners and Adventur.es.

Here's what we know: Private equity outperforms public markets.

We've already mentioned the three reasons why private equity generates higher returns:

- Smaller sized companies
- Illiquidity Premium
- Long-term Thinking

Let's dive further into the investment strategy behind many private equity companies.

How Private Equity Firms Think

Private equity investors focus on four main areas when looking at potential investments:

- Downside Protection
- Three-To-Five Year Time Horizons
- Changing Management
- Buy To Sell

These four areas of focus fit nicely with our larger three criteria for higher returns. Applying these frameworks to public markets can juice our returns. Let's break them down.

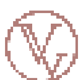
Downside is All That Matters

I know, this sounds confusing at first glance. Aren't private equity firms known for massive leverage to juice returns? Yes, but as Munger likes to say, "invert, always invert."

Private equity investors look for the ***strongest*** balance sheets. It is ***because*** they use leverage that they must look for the strongest balance sheets.

Leveraging an already levered company is like playing Russian Roulette. Sure you might hit it big with one or two names. But it only takes one name to topple the house of cards.

Three-to-Five Year Time Horizons



The standard PE model is to buy a company, instantiate change, and then exit for a multiple re-rating in three-five year's time. This time-frame, three to five years, is important. The average public market participant can barely hold onto a stock for a year.

In fact, check out the data for average holding period by decade. The erosion in time horizon is stunning:

- 1960, eight years, four months;
- 1970, five years, three months;
- 1980, two years, nine months;
- 1990, two years, two months; and
- 2000, one year, two months

The average investor now holds onto a stock for ***less than one year***. Here's how insane that time frame is. Less than 1% of the business' future value comes during that time. How then, is an investor supposed to realize the long-term benefits of a business' cash flows? They can't with that short of a time frame.

This is why time horizon matters. Three to five years is a *minimum* if an investor wants to reap the benefits of a cash-flowing business. Barring hard catalysts, these time frames should garner your entire investment decision.

Changes in Management or Operations

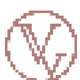
One of the greatest advantages private equity has over public markets is their ability to initiate change in management. This is a ***big*** reason why private equity returns generally outperform broader public markets.

Even if an investor has great ideas to turn a company around, he won't be able to build a big enough position to do anything. That is, if she's investing in larger companies. As we'll see later, the size of the company can make activism a possibility *even* for smaller investors.

They Buy To Sell

Harvard Business Review's article on private equity hints at the "secret" sauce behind PE's outsized returns. Are you ready? PE firms buy *with the intention* of selling at a higher price. I know, radical thinking, right? Here's a snippet from the article (emphasis mine):

> *"But the fundamental reason behind private equity's growth and high rates of return is something that has received little attention, perhaps because it's so obvious: the firms' standard practice of* ***buying businesses and then, after steering them through a transition of rapid performance improvement, selling them****. That strategy, which embodies a combination of business and investment-portfolio management, is at the core of private equity's success."*



Buying to sell flies in the face of conventional value investing principles. Value investors *should* invest in compounders, right? Well, not entirely. Remember, our goal is to not lose money. It's not to ***only*** invest in compounders. Three to five year time horizons should be our bread and butter. If we can hold onto a business after that, its icing on the cake.

The Solution: Private Equity Investing in Public Markets

So, how do we combine the best of both public and private markets? Before diving into the strategy, we'll investigate three men *already* practicing this very idea. Dan Rasmussen, Adrian Warner and David Barr.

Verdad Capital: Small-cap, leveraged Value Stocks

Dan Rasmussen runs Verdad Capital, an investment fund dedicated to private equity-style investing in public markets. Dan's strategy is simple. He invests in small-cap, leveraged firms. Diving deeper, Dan looks for the following characteristics:

- Companies trading <6x EBITDA
- 3-4x Debt/EBITDA leverage ratios
- Value tilt

According to Verdad's research, this type of strategy produced an annualized return of 25.1% from 1965 - 2013. That's not bad!

Verdad prefers public markets over private markets for a few reasons. First, they're able to invest in cheaper companies while using appropriate leverage. Second, public markets offer greater transparency and trust than private markets. This makes sense as public markets have GAAP accounting, short sellers (to keep you honest), SEC requirements, etc. Private markets have none of that.

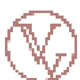
Finally, investing in public markets is cheaper than equivalent private market transactions. These savings are passed down to LPs (limited partners) in the way of lower fees (AUM or performance).

For more information on Dan's strategy, check out his podcast interview with Patrick O'Shaughnessy

Avenir Capital: Private Equity Investing in Austrailan Stock Market

Adrian Warner is another public equity investor implementing private equity strategies. Before starting Avenir Capital, Warner spent 20 years in Australian and US private equity.

Now, he's using that experience in public markets. Warner laid out his fund's strategy in an interview with MOI Global.



During the interview, Warner presented three areas he thinks are vital for private equity investing in public markets. All emphases are mine.

1. Focus on the downside

*"There's a great deal of emphasis on worrying about what can go wrong in any investment, which I consider quite a healthy starting point, and **fixating on avoiding permanent loss of capital**. That's probably the first element of private equity we work really hard on bringing over to the public markets."*

2. Strong emphasis on fundamentals and bottoms-up research

*"[You should] remove yourself from trying to second-guess stock prices and focus on what you see as the underlying or intrinsic value of an asset and **look to invest only in those situations where you can buy at a very material discount it**. This bottom-up approach, which is highly consistent in private equity, is essential to what we do."*

3. Absolute, long-term returns is what matters

"There are no benchmarks in the short term, no liquidity or daily pricing of assets. The focus is very much on what you can buy an asset for now and what you think you'll be able to sell it for three, four, or five years' time. You don't worry too much about what's going to happen to the price in the short term. This absolute long-term return focus is very powerful, but a lot of the public market industry is trapped in the relative benchmarking mindset, which can be very damaging to focusing on the long-term return, in my view."

I highly recommend listening to the interview or reading the transcript. Avenir's investment strategy can be summed up in one sentence: *Investing with a long-term time horizon, running a concentrated portfolio and evaluating investments as if we are buying the whole company.*

PenderFund Capital Management: Private Equity Approach in Canada

David Barr is President and Portfolio Manager of PenderFund Capital Management, Ltd. In 2018, Barr released a slide deck outlining the fund's public market strategy. Here's a few snapshots of my favorite slides:

The Pender Way

Key Differentiators

- We seek to obtain more value than we are paying for
- We take a private equity approach to public markets
- We are independent thinkers and patient opportunists
- We manage concentrated, idiosyncratic portfolios
- We are focused on owning businesses, not trading stocks
- We are occasionally contrarian
- We are aligned because we are investors in the fund too

"The Pender Way"

PenderFund focuses on three drivers for long-term value creation:

1. "Scuttlebutt" research and due diligence
2. Work with investee companies
3. Drive a liquidity event or exit

Barr does all these things *inside* public markets. But he's not engaging with mega, blue-chip companies. He's going to the smallest corners of the markets. The small and micro-caps.

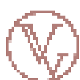
According to Barr's deck, he prefers small caps because of large target markets and long runways for growth:

Why Small Cap?

- Big Target Markets
- Early Innings

Long Runways

We know the strategy works, and we've seen examples of other investors *doing* it. Now let's flesh out the key pillars to the underlying strategy.



Fleshing Out The Advantages (The Three Pillars)

Now it's time to dive into the Three Pillars of our private equity strategy. We'll expand on each pillar so that you understand *why* it matters and how we apply it to public markets.

Size Matters: Smaller Value Companies Win

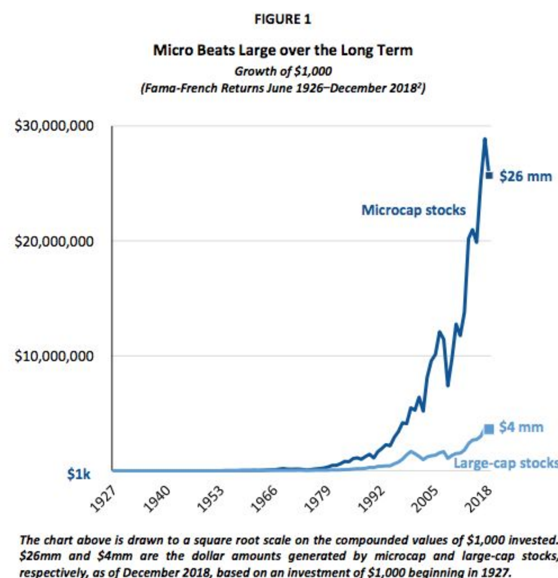
The data is clear. Smaller companies outperform larger companies in public markets. And no one analyzes the smaller-company edge better than Roger Ibottson.

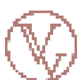
According to the famous slide deck, [Liquidity as an Investment Style](), micro-cap stocks outperformed *every other* size between 1972-2013:

As the data shows, this isn't the *most* optimal strategy. Using size as the lone factor increases the standard deviation of returns and reduces the return to risk ratio. We can do better (and we will).

Further research by DGHM & Co., backs up Ibottson's claim. Between 1928 - 2018, microcap stocks compounded $1,000 into $24M. Large caps during that same time frame? $4M.

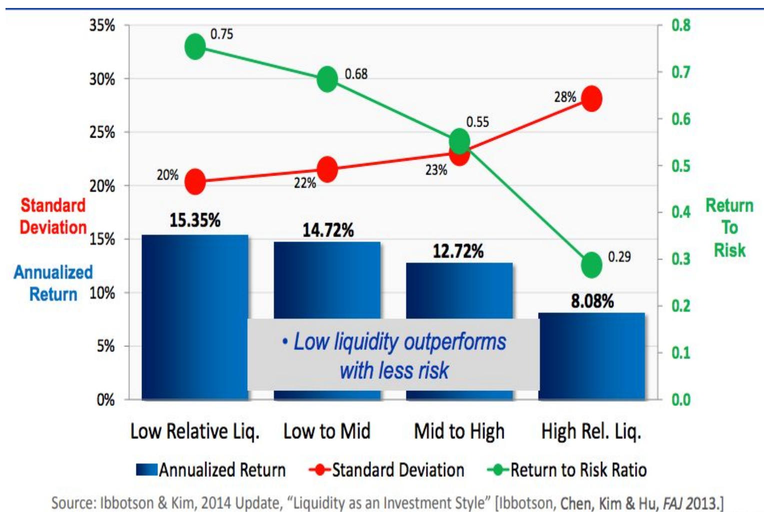
It's evident that the smaller we go, the greater the chance for outperformance. But we're not done. There's one more layer we can add to this criteria to *really* boost potential returns.





Illiquid Stocks Perform Better

We know smaller is better. But we can *do* better than that. According to Ibottson (and private equity theory), it's illiquidity that drives outperformance.



There are three things that stand out on this chart. First, low liquidity outperforms high liquidity by nearly 10% per year.

Second, the return to risk ratio is 0.75 for the least liquid investments and 0.29 for the most liquid.

Finally, the standard deviation for illiquid stocks is 20% compared to 28% for high liquidity stocks.

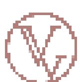
In other words, illiquid stocks generate higher returns with less risk. That doesn't sound too bad! But, when we combine the above features -- small size and illiquidity -- we get 1 + 1 = 3. *This* is our **optimal strategy** (see photo below):

			Liquidity			
			Low			High
			1	2	3	4
Size	Micro	1	16.3%	16.9%	11.1%	1.5%
	Small	2	15.9%	14.9%	12.6%	6.5%
	Mid	3	14.3%	14.3%	13.1%	8.7%
	Large	4	11.8%	12.3%	11.9%	9.2%

Illiquid micro-cap stocks generated 16.3% annualized returns from 1972-2013. This far surpasses any other investment category.

Long-Term Thinking as an Edge

As we discussed earlier, many PE firms have three-to-five year time horizons. This is important because value creation doesn't happen overnight. A large part of most PE strategies involves shaking up management. Sometimes changing the entire course of the business. To assume those long-term efforts will pay off in less than a year is foolish.



But there's another reason why PE investors need long-term time horizons. Illiquidity. Unlike public markets, if an investment goes south, PE investors can't quickly sell. They're stuck with their business, for better or worse.

Thus, illiquidity encourages a greater emphasis on the balance sheet and durability of a business. We can recreate all three of these advantages in public markets.

Creating an Investment Strategy Around our Three Pillars

We're now ready to create an investment strategy aimed at capturing private equity premiums in public markets. The strategy is simple in its construction, but brutally difficult in execution. Let's dive in.

Before you do anything, shrink your universe of stocks to microcaps and the most illiquid stocks you can find. I focus on stocks trading at market caps at or below $50M. Of those stocks I look for ones with the least amount of average trading volume.

After you've done that, focus on boring business. These are businesses that aren't susceptible to technological change. Businesses that are small cogs in a larger machine. Think of electrical component manufacturers, valve producers, cyclical companies, etc. The more boring the better. Remember these companies are small. If they're in a fiercely competitive technology sector, how much confidence is there that they can outspend on R&D?

Narrowing down our stocks to boring businesses we then focus on the balance sheet. Verify that the balance sheet is clean and bullet-proof. Favor current assets over long-term assets (unless its an asset play where management's liquidating PP&E).

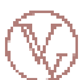
We want to buy companies with ***little-to-no debt***. Remember, we're thinking like PE investors. It's hard to leverage a company with an already leveraged balance sheet. This doesn't mean we're going to use leverage -- but we must think within that same framework.

Finally, from this subset of small companies with great balance sheets, focus only on the most illiquid names. I measure illiquidity by average annual share turnover. The calculation looks like this:

- 10 day average volume x 252 (number of trading days) / total shares outstanding

The smaller the percentage the better.

Once you get to this point, you'll have a small list of potential investments. You can do one of two things. You can invest in a basket of microcap and illiquid stocks. Or you can take a more concentrated approach. It all depends on your risk tolerance and portfolio goals.



If you're using this as a diversification tool within a larger, factor-based portfolio, a basket approach makes more sense. If you're looking to change course or develop a true, private equity-type strategy -- concentrated picks might be the move.

Let's chat about risk management for a minute. Stop-losses aren't as reliable in microcap investing given the wide bid/ask spreads. Keep this in mind as you're deciding on which iteration of this strategy is right for you: basket or concentrated.

Risks of a Private Equity Strategy

Yes, this strategy works. And yes, you can generate significant outperformance. But it doesn't come without its share of risks. Illiquid, micro-cap investing shares the same risks as the general market. Yet there's three risks that are unique to an illiquid, micro-cap strategy:

1. Liquidity Risk

A PE strategy applied to public markets brings about liquidity risk. In other words, you might not be able to get out of a stock when you want / need to. In illiquid, micro-caps, there's not always a complimentary buyer/seller on the other end of the trade. This also works the other way. It may take weeks *or even months* to establish a full position in an illiquid name.

Are you willing to sit in a position knowing *full well* you might not be able to get out of it in quick time?

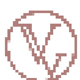
2. Capital Constraints

The second major risk, if you want to look at it like that, is capital constrainment. An illiquid, micro-cap strategy works for small account sizes. The larger you climb the AUM ladder, the fewer companies you'll be able to invest in. It breaks down to simple math. A $200M fund cannot invest in companies with $5M or less market caps.

3. Increased Volatility

I want to preface this by saying, no, volatility is not *investment risk*. Yet it is *personality* risk. Let me explain. An investment strategy is only as good as the person implementing it. So, if you can't stomach random gyrations in share price, this strategy may not be for you. But, if you understand that share price isn't indicative of intrinsic business value, you'll *welcome* the volatility.

Illiquid micro-caps experience bouts of extreme volatility for several reasons. First, one investor can move the market. It may not be for fundamental reasons. Maybe his daughter needs a new car. Or the investor needs to pay for her vacation. In this space, we're dealing (for the most part) with retail investors.



Concluding Thoughts

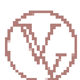
Thinking like a private equity investor in public markets is powerful. Through this lens, we can create a strategy that provides the best of both private and public markets. We leverage the alpha from illiquidity and smaller-sized companies, while retaining higher liquidity than conventional private equity offerings.

This strategy is backed by decades of research confirming its absolute outperformance over broader indices. Here's the beauty of the strategy. You don't *have* to implement it across your entire book. You can create a subsection of your portfolio dedicated to this illiquid, micro-cap space. In doing so, you increase portfolio diversification and expected long-term returns.

THIS MONTH'S
DEEP DIVE

Cliff-Notes: Surge Components, Inc. (SPRS)

- **What We Like:**
    - **Nano-cap stock that's off the beaten path ($14M market cap)**
    - **Zero debt and nearly $0.46/share in net cash ($2.65 share price)**
    - **$1.38/share in NCAV**
    - **Historically profitable, niche business**
    - **CEO owns 22% of the company and has been with the business since its start (1981)**
    - **Low share turnover (5% annual)**



- **Activist, deep-value investor investing alongside (Zeff Capital)**
- **Products are small pieces to larger products (i.e., low cost to OEM)**
- **3:1 upside to downside ratio at current prices**
- **12% Free Cash Flow Yield**

- **What We Don't Like:**
  - **Operates in a cyclical business (semiconductors)**
  - **No basing pattern on the charts**
  - **Highly competitive business with pressure to drive prices lower over time**
  - **Potential for Chinese Tariff Impact**

- **What We Think It's Worth:**
  - **Liquidation Scenario: ~$1.40/share (45% downside)**
  - **No-growth Scenario: ~$4.45/share (65% upside)**
  - **Historical Growth Scenario: ~$6.30/share (>140% upside)**

Deep Dive: Cheap and Growing Nano-Cap Company (SPRS)

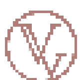
Surge Components, Inc. (SPRS) is a leading supplier of electronic products and components. SPRS' products are used from home appliances to utility meters, even car horns and lawn mowers. The company ranks in the top five in all major electronic component products.

SPRS checks off all our criteria for a micro-cap, deep value candidate. CEO Ira Levy has run the business since its founding in 1981. He owns 22% of the company. There's no debt on the balance sheet, and $2.3M in net cash. The company's grown revenues at an 11% 10-year CAGR and generates roughly 12% free cash flow yield.

Oh, and you can buy SPRS for less than 4x this years earnings (~3x ex-cash). And after speaking with CEO Ira Levy himself, I believe the company's run by a talented, properly incentivized allocator.

Understanding Switches: Product Review

According to SPRS website, the company's product portfolio includes aluminum electrolytic-capacitors, film capacitors, MLCC (MultiLayer Ceramic Chip), discrete



semiconductors, and switches. The company regularly adds new products to their portfolio. They're among the largest (in terms of capacity) for these products. Finally, their automotive products are AECQ (Automotive Electronic Council) compliant.

It's important that we dive into the details on SPRS' products before we check out their real-world application. Once we have an understanding of *how* their products work, we'll be more comfortable with deciding if their products are essential to daily life. All product information is from the SPRS website.

DIP Switches

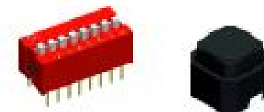
DIP Switches are manual electric switches that are packaged by group into a standard Dual In-Line Package (hence, DIP). This type of switch is designed to be used on a printed circuit board along with other components. DIP Switches enable customization of behavior within the product. This enables the end-user to tailor the switch for specific purposes.

They're often referred to as 'toggle' switches with two settings: on or off.

SPRS is #1 globally in annual DIP switch production, and private labels for many popular industry brands.

TACT Switches

TACT (or TACTile) switches are on/off electronic switches that are only on when you press the button or if there is a definitive change in pressure.



DIP Switch and TACT switches.

TACT switches also function as "make or break" switches. As soon as a TACT switch button releases, the circuit breaks.

OEM's use these switches in keyboards, keypads, instruments or control-panel applications.

SPRS is #3 globally in annual volume produced for TACT switches.

Illuminated Switches

Illuminated switches are switches that emit light (usually an LED) during operation. The duration of the light varies by application. The light can either be on, dependent on an input, or have different colors for different applications (red = close, green = open).

SPRS is #5 globally in annual volume produced for Illuminated Switches

Alright. Now that we know a little bit about the SRPS products, let's dive into their real-world applications.

Peter Lynch: Invest In What You Use

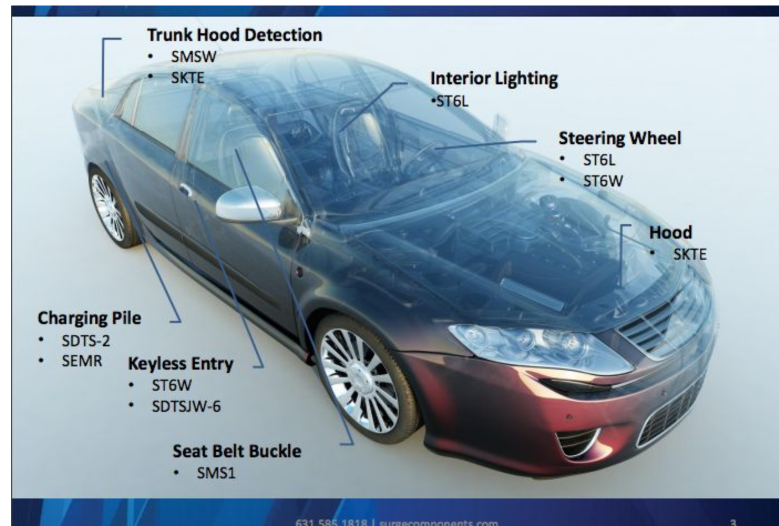
Dec. 09th, 2019

Odds are you use *at least* one SPRS product in an indirect way everyday. Don't believe me? Let's start with SPRS' automotive products.

The company produces six types of switches for automobiles (capacity per month):

1. DIP (16M)
2. Tact (113M)
3. Slide (9.5M)
4. Detector (8.5M)
5. Multi-Function (2.5M)
6. Illuminated (1M)

We don't need to get into the minute details about the specific products to understand how often we use them. Check out the picture below. Each part mentioned involves *at least* one SPRS product:



SPRS is involved in nearly every electrical process in the automobile. From rear trunk detection to keyless entry. SPRS products make all these things possible.

But that's outside the car. SPRS controls various components inside the vehicle as well.

The company's switches are responsible for Heads Up Display, Steering wheel controls, infotainments (radio, etc.) and electronic toll detector. Not to mention your tire pressure monitoring system, interior GPS and Dash CAM recorder.

Whether you're in your car or inside your home, odds are you're *still* interacting with SPRS components. Let's dive into the home to see where SPRS operates.

In-Home Applications

SPRS produces nine parts that interact with your fridge, dishwasher and microwave oven. These are the items you use *every day*. Let's break down the applications by appliance:

- Fridge
    - Negative Ion Generator
    - Motor Soft Starter
    - Ventilation Fan

Refrigerator

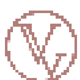
Surge Parts	Equivalent Parts
SX008/SX011	MCR100-6/MCR100-8
SST1389	BT138X
STO410	T405/T410
SST8DW	

Dishwasher

Surge Parts	Equivalent Parts
ACS110	ACS108
SST04/ST0410	T410/T435
SST08	T810/BTA208S/BTA08

Microwave Oven

Surge Parts	Equivalent Parts
SST06/SST12	BTA06/BTA12
SST16	BTA16



- Dishwasher
    - Timer
    - Door Lock
    - Water Inlet Valve
    - Water Heater
    - Detergent/Rinse Aid Dispenser
    - Extraction Pump

Coffee Maker

Surge Parts	Equivalent Parts
ACST110/SST131/ACST105	BT131/Z0107
SST08	BTA08
SST12	BTA12
SST16	BTA16
SST24	BTB24

Food Processor

Surge Parts	Equivalent Parts
SST134/SST136/SST104	BT137
SST06	BTB06-600BW
SST137/SST08	BTA08
SST12	

Rice Cooker

Surge Parts	Equivalent Parts
SST136/JST137	BT136/BT137/BTA12
SST12/SST16	BTA16

Juice Machine

Surge Parts	Equivalent Parts
SST06/SST12	BTB06-600BW
	BTB12-600BW

- Microwave Oven
    - Halogen Lamp Heating
    - Rotating Plate Control

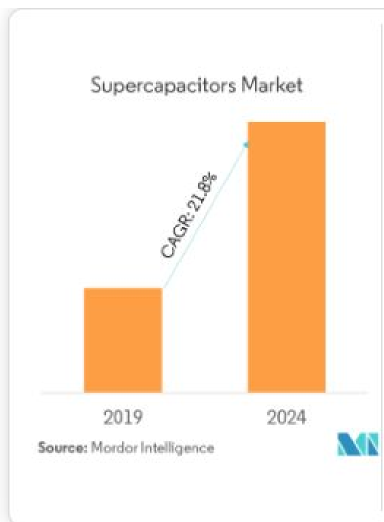
SPRS is also responsible for various parts in cooking appliances. Appliances like coffee makers, rice cookers, food processors and juice machines all use SPRS products. Most of which, for speed motor control.

Finally, SPRS covers your broader home appliances like washing machines, bidets, water purifiers, fans, vacuum cleaners and electric water heaters.

These are everyday appliances that we take for granted. Yet SPRS plays a vital role in their utility and performance.

Surge's Newest Product: Supercapacitors

SPRS' newest product is their Electric Double-Layer Capacitor (EDLC). EDLC are supercapacitors. They offer more energy storage, temperature stability. SPRS' tag-line is:

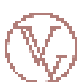


"When OEM's need the charge/discharge robustness of a capacitor with the energy storing capacity of a battery."

Typical applications for EDLC's include:

- Memory protection
- Internal Power Backup
- Electric Vehicles
- Alternative Energy

The market for supercapacitors is set to pop. Industry reports suggest a whopping 21.8% CAGR for supercapacitor market value from 2019 - 2024.



Future growth will come from an effort to help the environment. Meanwhile, supercapacitors are the *most* environmentally friendly storage devices. All materials used in producing EDLC's are made from biodegradable carbon.

SPRS positioned itself as the lowest-cost producer of supercapacitors. In their Product Spotlight Press Release, the company noted:

> ***"Competitive pricing and delivery are going to be key advantages in choosing Surge as your Supercap supplier."***

The company faces competition from Eaton, Elna and Kemet. Panasonic was another challenger, but discontinued their production of EDLCs.

Here's what the new supercapacitors look like:

Diving into The Financials

SPRS is growing revenues, generating cash-flows and sports a rock-solid balance sheet. Check out some key statistics from Quickfs.net:

Key Statistics

Valuation Ratios		10-Yr Median Returns		10-Yr Median Margins	
P/E	4.5	ROA	7.4%	Gross Profit	26.6%
P/B	1.7	ROE	11.5%	EBIT	4.2%
P/S	0.4	ROIC	20.2%	Pre-Tax Income	4.6%
EV/S	0.4	**10-Year CAGR**		FCF	3.1%
EV/EBITDA	7.8	Revenue	11.2%	**Capital Structure**	
EV/EBIT	4.7	Assets	8.2%	Assets / Equity	1.4
EV/Pretax	3.8	FCF	-	Debt / Equity	-
EV/FCF	10.6	EPS	-	Debt / Assets	-

The company's grown revenues at an 11% ten-year CAGR. Meanwhile, the stock trades less than 4x pre-tax income and ~11x free cash flow.

SPRS did $32M in revenue last year. On a 2019 TTM basis, the company's generated $34M in revenues, $3M in operating income and $0.61 EPS.

Skin In The Game & Rock-Solid Balance Sheet

The company's run by Ira Levy. Ira's led the company since its founding in 1981 and owns over 20% of the business. Interests are aligned with shareholders. Levy's joined by Steven Lubman. Lubman's worked for the company since its founding. He currently serves as the VP, Secretary and director. Like Levy, Lubman eats his own cooking -- owning 18.6% of shares outstanding.

Together, the two men own 40% of the company. It's no surprise, then, that the company's displayed a history of buybacks. The company bought back half of its shares since 2011 (10M to 5M).

SPRS sports a rock-solid balance sheet. They have zero debt, $0.46/share in cash, and over $1/share in NCAV (net current asset value). The company's balance sheet provides adequate downside protection.

Valuation: What's It Worth?

We're not trying to predict the future. We want to cast a range of potential outcomes, and hopefully, those outcomes are positively skewed. Our three scenarios are:

- Liquidation Value
- No-growth
- Cautious Growth

Liquidation Value

SPRS has zero debt, $0.46/share in cash and around $1.40/share in NCAV. I'm comfortable with this liquidation / sale value of the company.

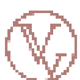
While I don't think it will go for this, it's a nice basement level barometer. Remember, its $1.40/share in NCAV *with* a growing, profitable operating segment.

No-Growth Scenario

The company averages 11% top-line growth. In this scenario, we're assuming *zero* revenue growth over the next five years. On top of that, we're assuming pricing pressure shrinks operating margins (from 4% to 2%).

In this scenario, we'd end up with $32M in 2023 revenues, $8.2M gross profits and around $810K in operating profit. The company would generate roughly $5.7M in free cash flow over the next five years, and have an equity per share value of ~$3/share (30% upside).

Cautious Growth



Ira's cautiously optimistic about the future -- and we like that. If anything, we prefer our owners to underpromise and overdeliver. Yet, taking Ira at his word, we'll assume conservative growth estimates.

We're assuming 5% top-line growth, historical operating margins, and an EV/EBITDA re-rating to 8x.

But management's had a history of buying back stock. So, we're incorporating a slow reduction in share count over the next five years to around 4M outstanding.

In this scenario, we end up with nearly $42M in revenues, $10.5M in gross profit and $1.65M in pre-tax cash flow. The cautiously optimistic scenario generates a cumulative $9.41M in free cash flow over the next five years (or 78% of its Enterprise Value).

This gives us an intrinsic value per share of nearly $7/share. If we assume the company doesn't buyback stock, we're still left with over $5.50/share in value. That's over 110% upside. Put another way, a 2.34:1 upside to downside capture.

Risks

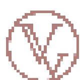
There's a few main risks with SPRS: Commodity product risk, Chinese Tariffs and currency risk.

The company hasn't experienced any downside from the tariffs yet, but that tune can change in an instant. As of writing this (Dec. 4th), President Trump *apparently* will sign a trade deal before the 2020 Election. Don't hold your breath. Trump could change his mind in the blink of a tweet.

An ongoing risk for the company is the commodity nature of their business. Companies compete on price, and it's a race to the bottom. The winners will be the ones that can produce their capacitors, switches, etc. at the lowest cost to their OEMs. There's also no margin expansion in a commodity-type industry, so we need SPRS to maintain their already competitive margins.

Here's a snippet from SPRS' latest 10-Q (emphasis mine):

> *"Management is concerned that the **rest of 2019 into 2020 will be a year of change and challenge**. These challenges could affect the Company in negative ways, possibly reducing sales and or profitability. In order for the Company to grow, we will depend on, among other things, the **continued strength and growth of the electronics and semiconductor industries**, our ability to **withstand intense price competition**, our ability to **obtain new customers**, our ability to retain and attract sales and other key personnel in order to expand our marketing capabilities, our ability to secure adequate sources of products, which are in demand on commercially reasonable terms, our success in executing and managing growth, including monitoring an expanded level*



of operations and systems, controlling costs, the availability of adequate financing, and our ability to deal successfully, with new and future disruptors."

The company's positioned themselves to capture the new wave of supercapacitor demand. If they can keep their OEM's, win on price and expand into new markets (EV and alternative energy), they could win big. And shareholders would be *well rewarded.*

Value Ventures Portfolio Review

Company	Ticker	Price at Issue	Current Price	% Change	Notes
S&W Seed, Co., Inc.	SANW	$2.79	$2.31	-17.20%	
Covetrus, Inc.	CVET	$12.61	$14.53	15.23%	
Carbo Ceramics	CRR	$1.75	$0.37	-78.86%	Exit price: $1.40
LiveChat, Inc.	LVC (Warsaw Stock Exchange)	34.15	40.7	19.18%	
Grupo BMV	BOLSA (MXN)	42.61	42.79	0.42%	
Bio Pappel	CADGF (USD)	$1.20	$1.10	-8.33%	
Surge Components, Inc.	SPRS	$2.85	$2.85	0.00%	

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