Value Ventures: March 2020
Long-term thinking in a world of short-term orientation.

The Case For Bayesian Analysis & A Micro-Cap Italian Stock

by Brandon Beylo on 11 March 2020

Table of Contents

The Case For Bayesian Analysis & A Micro-Cap Italian Stock **1**
Table of Contents 1
The Case For Bayesian Analysis & Kelly Criterion **3**
The Case For Bayesian Analysis **4**
Bayes' Big Hit 4
Bayes Law: A Breakdown 4

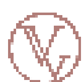
Understanding The Equation 5
Bayesian Analysis Applied to Stock Markets 6
Scientific Method In Action 7
Real World Example of Bayesian Analysis: S&W Seed Co, Inc. (SANW) 8
Common Mistakes with Bayesian Analysis 10
Mistake #1: No Clear Hypothesis 10
Mistake #2: Over-Optimistic Hypothesis About Future 11
Mistake #3: Overweighting Short-Term Earnings Reports 11

The Kelly Criterion: How Buffett & Keynes Sized Their Bets 12
What Is The Kelly Criterion? 12
Calculating The Kelly Bet Percentage 12
Playing With The Numbers 13
Implications From Kelly Bet Formula 13
Criticisms of Kelly Betting 14
Issue #1: Normal Kelly Bet Size is Too Large 14
Issue #2: Potential For Tremendous Volatility & Drawdowns 14
Issue #3: Imperfect Information For Equity Investing 14
Half-Kelly To The Rescue 15
Practical Applications for Kelly Betting 15
Cliff-Notes: EdiliziAcrobatica (EDAC.MIL) 16

Deep Dive: EdiliziAcrobatica (EDAC.BIT) 16
Industry Trends 17
EDAC's Addressable Market 17
Highly Fragmented Industry = Opportunity 18
Franchise Business Model & Higher Margins 18
Balance Sheet Analysis (as of H1 2019) 19
Above Average Returns 19
Insider Ownership & Management 19
Valuation: Pay Almost Nothing For Growth 20
Pessimistic View: No Revenue Growth & Stagnant Margins 20

Value Ventures Portfolio Review 20

THIS MONTH'S
PHILOSOPHY CORNER



The Case For Bayesian Analysis & Kelly Criterion

Buy and hold investing is dead. While novel, the "coffee can" investing approach isn't optimal for those wanting outsized returns.

True value investing involves a deep-rooted understanding of Bayesian analysis and probability theory. It's about remaining open to new information and then reweighting your assessed probabilities accordingly.

Value investing isn't about hit rates. It's the slugging percentage that counts.

Bayesian analysis sounds daunting. But it's not. It's a simple, powerful framework to augment how you think about investing, valuation and business.

Over the course of this first section, you'll learn the following:

- **The Man Behind The Theory: Thomas Bayes**
- **Bayes Rule: A Breakdown**
- **Bayesian Analysis Applied to Stock Markets**
- **How To Use Bayesian Analysis In Your Process & Common Errors**

The second part of the Philosophy section covers the Kelly Criteria for bet size. As you'll see, Kelly betting is a natural extrapolation on Bayesian Principles.

This second section on Kelly Criterion discusses the following:

- **What Is The Kelly Criterion?**
- **How To Calculate A Kelly Bet**
- **What Is The Optimal Bet Size?**

Let's dive in!

The Case For Bayesian Analysis

Thomas Bayes' biggest claim to fame is a series of notes on the problem of inverse probability.

This proof set the stage for what we know today as Bayesian Probability.

Bayes Law: A Breakdown

Here's the rule (from Wikipedia): *For the binomial distribution with probability of success p, Bayes set out to find the distribution of p given an observed number of successes. He found that if he assumed that p was uniformly distributed, then the distribution of p given the observed number of successes has a beta distribution.*

That's a bit academic so let's refine it.

Bayes' theorem describes the conditional probability of an event based on data as well as **prior information or beliefs** about the event or conditions related to the event (see photo for mathematical illustration).

$$\Pr(A \mid B) = \frac{\Pr(B \mid A)\Pr(A)}{\Pr(B)}$$

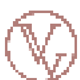
Before we dive deeper, there's two things you should note about Bayes Theorem:

1. **It stresses the importance of using *new information* to update *old* hypotheses/information.**
2. **It acknowledges that there is an element of uncertainty with predictions, and allows for adjustments.**

Let's take a real-Life example (from JMP.com):

> *Suppose that I tell you that my only sibling drives a sports car. I don't mention whether I have a brother or a sister, so you might be interested in the probability that I have a brother. We assume that 15% of males drive sports cars (completely made up), 10% of women drive sports cars (also completely made up), and that the population is approximately half male and half female (made up, but more believable).*

In this example, the probability that your sibling is male is 60%. Here's the math (from the website):



$$\Pr(\text{ male} \mid \text{sports car}) = \frac{\Pr(\text{sports car} \mid \text{male}) \Pr(\text{male})}{\Pr(\text{sports car})}$$
$$= \frac{(.15)(.5)}{(.15)(.5)+(.1)(.5)}$$
$$= .6$$

How is this important? Well, **we can use *new* information to update our *old* ideas. This allows us to assign newer (i.e., *better*) probabilities to those *updated* ranges of outcomes.**

You can see how this idea, Bayes Rule, applies directly to analyzing investment ideas.

Let's break things down a bit further before moving on to the investing application.

Understanding The Equation

The goal of Bayes' Rule is to find P(A | B). What does this mean? We're searching for the probability of Event "A" occurring *given that* Event "B" occurred.

There's two terms to guide our use of Bayes' Rule:

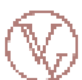
1. Prior
   a. Prior Probability is P(A). If we have a good enough data set, we can reasonably assign a probability to an Event A occurrence.
2. Posterior
   a. Posterior Probability wants to know the P(A) after adding another variable (piece of information).

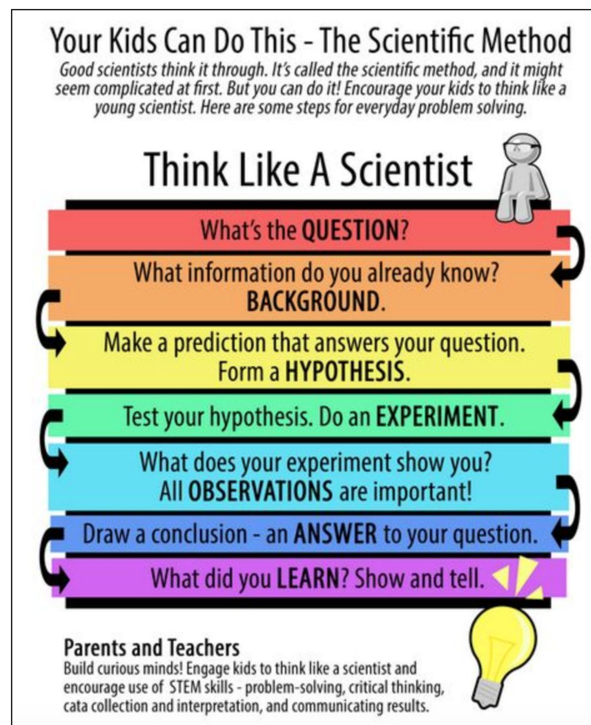
So, the entire goal of Bayes' Rule lies in understanding the **Posterior Probability.**

What does this look like when analyzing a stock?

Bayesian Analysis Applied to Stock Markets

Implementing Bayesian Analysis first requires a systematic process of investment evaluation. I prefer the Scientific Method of evaluation:





KahnAcademy offers another simple breakdown of the Scientific Method:

1. **Make an observation.**
2. **Ask a question.**
3. **Form a hypothesis or testable explanation.**
4. **Make a prediction based on the hypothesis.**
5. **Test the prediction.**
6. **Iterate: use the results to make new hypotheses or predictions.**

For the most part, value investors are good at following the above steps. Where is their most common error?

Iterate: use the results to make new hypotheses or predictions.

This is where Bayes' Rule comes into play. Let's use an example.

Scientific Method In Action

Suppose you find stock XYZ on one of your stock screeners. You dive into the fundamentals, look at the balance sheet, and notice insiders own a decent chunk of the business. So far so good. This is your initial **observation**.

Next, you **ask a question**: “What will the company look like five years from now?” Steps 1 and 2 complete.

Now it’s time to **form a hypothesis** on the operations of the business over the next five years.

After forming your hypothesis, you’re ready to **make a prediction** based on that hypothesis.

Your prediction takes the form of estimating the company’s revenues, cash flows and earnings over the next five years (aka, a simple DCF model).

The measurement of how well your hypothesis worked rests on how close you were to correctly estimating the company’s operational success. Note that nowhere do I mention that a company’s stock price confirms or denies your hypothesis. Stock price movements DO NOT equal correct/incorrect hypotheses. Intrinsic business value does not move in lock-step with short-term stock gyrations.

Observation made. Question asked. Hypothesis formed. Prediction spoken. You’re ready to **test your prediction**.

How do you test your prediction? Pull the trigger and buy (or short) the company based on your hypothesis and prediction.

After testing your prediction by buying (or selling) the company’s stock, you’re ready to **iterate**.

Here’s a few questions to kickstart your iteration process:

- *Is the company doing what I thought they would do?*
- *Are they growing the way I predicted?*
- *How are they allocating capital? Is it like I estimated?*

You’ll know the answers to these questions as you follow the company each year.

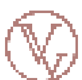
I know what you’re thinking.

“But Brandon, shouldn’t we iterate our prediction every quarter when the company reports earnings?”

We’ll cover that later.

At the end of each year, go through the company’s data and ask yourself this question:

> **Given what I now know about the company, does my long-term prediction still have a reasonably high probability of being right?**



From here we can think of our next steps via a decision-tree model.

- If yes:
  - continue to hold onto the company

    Or …

  - buy shares if the current stock price is lower than the previous prediction price.
- If no:
  - Re-underwrite your valuation and estimate the margin of safety and expected return.

    Or …

  - Sell out, admit you were wrong and look for another idea.

The above example reveals why the last step -- **iteration** -- is so important. Businesses change. Valuations change. Events happen that trigger cascading effects on long-term cash flows. Having a Bayesian Framework matters.

Real World Example of Bayesian Analysis: S&W Seed Co, Inc. (SANW)

SANW was the newsletter's first stock pick, making it a ripe candidate for our real-world example. We've held the position since July 2019 or around seven months.

The stock price has bounced all over the place during those seven months. Take a look at the seven-month high and low prices:

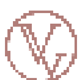
- **High: $3.00/share**
- **Low: $1.90/share**

That's a 36% drawdown between the high and low in seven months. Does a business's intrinsic value change *that much* in such a short period of time? Of course not.

Knowing that a company's intrinsic value moves *slower* than its market price, let's run SANW through our Scientific Method.

1. **Observation:** *A recent $70M licensing agreement with Corteva Agriscience turns* SANW *into a company with a rock-solid balance sheet, net cash for strategic acquisitions and instantly accretive book value over $2-per share.*

2. **Ask A Question:** *What will this business look like in five years?*



3. **Form a Hypothesis:** *The market, as it tends to do, is unimaginatively valuing* SANW *solely on the past; a singular-minded alfalfa seed company with high levels of debt and significant revenue decline.*
    a. *Looking forward, the company will be a multi-seed offering business with zero debt, growing top and bottom-line figures and a management team that buys companies cheap and sells them high and has a long history of successfully doing so.*

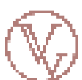
4. **Make a Prediction:** *Current market prices offer a chance to buy a business trading at a 20% discount to tangible book value with clear industry tailwinds and a rockstar* CEO, *all while getting non-core segment growth for free.*

5. **Test Your Prediction:** Write-up SANW and add it to the V*alue Ventures Portfolio* at $2.79/share.

6. **Iterate:** Update previous probabilities with new information.
    a. List of things CEO Mark Wong and his team accomplished during 2019:
        i. Pioneer licensing agreement in May 2019
        ii. Licensed an elite wheat germplasm portfolio from Corteva Agriscience (CTVA) in Australia
        iii. Expanded crop portfolio to four crops in Australia (sorghum, alfalfa, sunflower and wheat)
        iv. Expanded US Distribution capabilities by investing in the Chromatin farmer-dealer network
        v. Restructured sales team for cost and sales synergies

    b. Wong also commented in the Q4 2019 earnings report, saying:
        i. *“We remain focused on leveraging our revised sales structure, developing value-added trait technologies, pursuing accretive acquisitions and continuing integration of our profit improvement plans with a goal to drive value for shareholders in the years to come.”*

In this example, each new piece of information (evidence) reaffirms my original bullish thesis. This gives me a higher conviction in my hypothesis and allows me to hold on through the 36% gyrations.



Common Mistakes with Bayesian Analysis

I see a few common mistakes amongst investors when adding Bayesian Analysis into their process. Let's review the common errors and offer solutions to remedy such errors.

Mistake #1: No Clear Hypothesis

The first mistake investors make with Bayesian Analysis is not having a clear hypothesis. You can't analyze what you don't measure. Opaque assumptions like, "I think this stock will double over the next three years" won't do.

You need clear, concise and quantifiable data. If you're trying to lose weight, is it enough to say, "I want to lose weight over the next three months?" Of course not. You need a calculable goal … "I want to lose 20lbs by July."

The same principle applies to business hypotheses. Focus on the business, not the stock price. Set concrete assumptions on how you think the business will perform over your given time-frame.

Here's some hard numbers I like to use when evaluating my hypothesis:

- Revenues
- Operating Earnings
- EBIT Margins
- Leverage Ratios

The value of each metric depends on your investment thesis/hypothesis. One company's thesis could hinge on its ability to de-lever. Another depends on gross margin expansion. One size will not fit all.

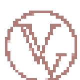
Mistake #2: Over-Optimistic Predictions

Think about hypothesis formation like goal-setting. Even if you're bullish on the future of the business, you want to be realistic about varying degrees of outcomes.

If a company's grown revenue 10%/year for the last ten years and doesn't show signs of changing that rate, don't forecast 15%. It sounds drab, but its shocking how many investors mold their DCF models to fit whatever rosy scenario they desire.

Be realistic and conservative. We want pleasant surprises. I'd much rather have a company grow 5% when I modeled 2% than a company growing 15% when I modeled 25%.

Under-cut, under-cut, under-cut. If a company's cheap on overly-careful conservative estimates, imagine the value creation if it grows.



Mistake #3: Overweighting Short-Term Earnings Reports

This is the **biggest** mistake investors make when adding Bayesian analysis into their process. Armed with their new mental model, they're quick to overweight short-term earnings reports and its effects on long-term cash flows.

It doesn't matter what the company reports over the next quarter, or even year. What matters is how much cash the company generates in three to five years. What will *those* cash flows look like?

Now, that doesn't mean you don't read or listen to earnings calls each quarter. You just have to shift your mindset when digesting short-term reports.

The best filter for assessing short-term earnings reports is one question:

> **Does (insert whatever happened during the quarter) affect the future cash flows of this business?**

One quarterly earnings miss shouldn't damage the long-term cash flow power of the business.

But sometimes management offers clues about cracks in the foundation. What do those look like?

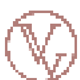
Let's take SANW for example. One of the pillars of the thesis was CEO Mark Wong's ability to buy companies at great prices and then sell them for more than he paid.

If we hear that Wong's overpaid for an acquisition, or that he's selling acquired businesses at a loss, that would affect the long-term thesis.

Remember, when in doubt, ask yourself: **Does this negatively affect the long-term cash flows of the business?**

The Kelly Criterion: How Buffett & Keynes Sized Their Bets

With a firm grasp of Bayesian Analysis, we shift to optimal betting on public equities. How do we achieve optimal betting ranges? Enter the Kelly Criterion.



What Is The Kelly Criterion?

According to Wikipedia, the optimal Kelly bet size is maximizing the expected value of the logarithm of wealth by betting a predetermined fraction of assets. This is equal to maximizing the expected geometric growth rate.

That sounds like a bunch of academic mumbo-jumbo.

In English, a Kelly Bet is a bet with a fractional percent of your capital. This fractional percentage is determined by two factors:

1. Probability of Bet Winning
2. Win/Loss Ratio

Calculating The Kelly Bet Percentage

Investopedia offers a simple look at the formula:

$$K\% = W - \frac{(1 - W)}{R}$$

You can find W by looking over a dataset of previous trades. W is the number of winning trades divided by the total number of trades. For example, if you placed 20 trades in 2019 and 10 of them produced a profit, you have a W of .50 (50%).

Next is the R multiple. To calculate R, take the average gain from your winning trades and divide it by the average loss of your losing trades.

Let's continue with our example from above. On average we generate a 50% win rate on our trades. Over the course of 20 trades, we'll have 10 winners and 10 losers. Let's assume that on average, our 10 winners produce an average return of 2.50%. We'll then assume the 10 losing trades generate an average of 0.85% loss. This gives us an R multiple of 2.94.

We have all we need to compute the optimal Kelly Bet Size. Now plug in our figures:

- **Kelly %** = 0.50 - (1 - 0.50)/2.94 = 0.3299 = **33%**

33% is our optimal bet size given our winning probability and average R multiple.

Playing With The Numbers

How would the bet size change if we changed the variables? What would the bet look like if our win rate decreased? What if we didn't cut our losses quick enough, thus decreasing our R multiple?

To give you an idea, I ran a few variations based on different portfolio metrics:

- Portfolio 1: 35% Win Rate and 2R
    a. Optimal Kelly Bet: 2.50%

- Portfolio 2: 65% Win Rate and 1.5R
    a. Optimal Kelly Bet: 41.6%

- Portfolio 3: 30% Win Rate and 4.3R
    a. Optimal Kelly Bet: 13.7%

Implications From Kelly Bet Formula

There's endless ways to win in financial markets, and our three portfolio examples prove that. Yet common themes reverberate through each method. Think of these themes as "if-then" statements -- conditional coding language of sorts:

- "If-Then" #1: *If* you have a low win rate, *then* you need a high R multiple.
- "If-Then" #2: *If* you have a high win rate, *then* your R multiple will likely be lower.
- "If-Then" #3: *If* you have a low win rate and a low R multiple, *then* you need a new strategy.

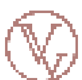
You don't need a certain R or W ratio. You only need to ensure that your strategy works. It doesn't matter if your win rate is 30% if your winners make up for your losers. But if they don't? Change it up. Find what works and what fits your personality.

Criticisms of Kelly Betting

Kelly Betting doesn't come without its share of critics. Even the legendary trader — and Kelly position sizer — Edward Thorp acknowledged these issues. Thorp co-wrote the paper *Good and bad properties of the Kelly Criterion* to discuss such topics.

Let's break down the main issues according to Thorp.

Issue #1: Normal Kelly Bet Size is Too Large



Think about the above examples using rudimentary win rates and R multiples. Kelly criteria gave us 30%+ bet size recommendations. When looking through the lens of money management, is 30%+ actually an optimal betting size?

The math says yes, but the psychology? Not so much.

Such large positions bring us to the second major issue.

Issue #2: Potential For Tremendous Volatility & Drawdowns

Kelly Betting comes with volatility. It *has* to or else it wouldn't work. Given the formula, the Kelly Criterion won't take you to *extreme ruin* (i.e., 100% loss of capital). But it could get you close.

Here's how the paper describes the risk:

"But, because a long sequence of bad scenario outcomes is possible, any strategy can lose substantially even if there are many independent investment opportunities and the chance of losing at each investment decision point is small."

"The main disadvantage of the Kelly criterion is that its suggested wagers may be very large. Hence, the Kelly criterion can be very risky in the short term."

If an investor takes a long-term approach, the Kelly Betting strategy works well. *Really* well. But can they endure a potential period of massive drawdowns?

Issue #3: Imperfect Information For Equity Investing

Public markets are imperfect information vehicles. Past results aren't indicative of future performance. This affects Kelly Betting. As Thorp suggests (emphasis mine):

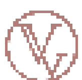
> *"However, in investment applications, this is usually not the case.* ***Realized future equity returns may be very different from what one would expect using estimates based on historical returns.*** *Consequently, practitioners who wish to protect capital above all, sharply reduce risk as their drawdown increases."*

Half-Kelly To The Rescue

Many investors use the "half-Kelly" rule. The Half-Kelly is simple. Take whatever the Kelly Formula says to bet, and cut it in half. This will reduce the upside potential on your investment, but will dramatically reduce your maximum drawdown potential.

The blog post *How Kelly bet size and Number of bets affect Max drawdown* illustrates this idea well (emphasis mine).

> *"For any number of plays, the maximum drawdown for the half Kelly size is smaller on average than for the Kelly size. However, the vertical distance between the medians in*



> *each red box and each related pink box follows the same pattern as the interquartile range follows: increases first and then decreases.* ***So the advantage of half Kelly size is more visible if one plays a mid-run*** *(in the plot below mid-run falls between 100 and 1000 of plays) rather than a long-run or a short-run."*

In other words, it pays to bet half-Kelly between 100 and 1000 plays (or trades).

But here's where things get interesting. The more you bet, the less risk a half-Kelly provides. Going back to the blog post (emphasis mine):

> *"For example, if one bets 30 times, the median of full Kelly is around 0.38 and median of half Kelly is around 0.2. The difference between the two is 0.18. However, if one bets 1000 times, the median of full Kelly is around 0.9 and median of half Kelly is around 0.6. The difference between the two is 0.3.* ***Lastly, if one bets 100,000 times, the median of full Kelly is around 1 and median of half Kelly is around 0.9****. The difference between the two is 0.1. By this example, we see that the difference between the medians initially increases and then decreases as one increases the number of bets."*

Investors with longer-term horizons (like us) need not worry about 100,000 bets. Let's put that into perspective. 100,000 trades over the next 30 years would equate to 3,333 trades per year. That's 277 trades per month, 69 trades per week and 14 trades per day.

Practical Applications for Kelly Betting

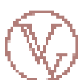
The Kelly Criterion is an excellent tool for understanding the *optimal* bet size on any position given two points:

1. Average win rate per trade
2. Average win/loss ratio

If you have enough historical data on your investment strategy, Kelly Betting might be a great addition to your order execution.

Whether it's full Kelly, half Kelly, or no Kelly. Knowing what the optimal bet size is on each position gives you a clearer picture of how you should think about that trade.

If the odds are in your favor, the charts look right and the fundamentals line up, swing like Kelly!



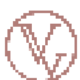
THIS MONTH'S
DEEP DIVE

Cliff-Notes: EdiliziAcrobatica (EDAC.MIL)

- **What We Like:**
  - Largest player in highly fragmented (and boring) industry
  - High insider ownership
  - Growing top-line revenue >30%
  - Double-digit ROA, ROE and ROIC
  - Double-digit EBIT margins
  - Positive Working Capital (strong balance sheet)
  - Illiquid micro-cap on foreign exchange (zero analysts)
  - Long runway for growth via acquisitions & organic

- **What We Don't Like:**
  - Entering a period of heavy cap-ex investment
  - Short-term results will not accurately portray business success
  - The chart pattern isn't great

- **What We Think They're Worth:**
  - Negative Growth Scenario: -7% Downside
  - No-growth Scenario: 20% Upside
  - Historical Growth Scenario: ~295% Upside



Deep Dive: EdiliziAcrobatica (EDAC.BIT)

EdiliziAcrobatica S.p.A. engages in the maintenance and renovation of buildings and other architectural structures. It provides a range of services, such as renovation, maintenance, installation and removal, safety, cleaning, and restoration. The company was founded in 1994 and is headquartered in Genova, Italy. It's the only company in Italy that specializes in double-rope safety restoration. The company was founded by Riccardo Lovo. He remains CEO today and owns 80% of the company.

Here's the thesis: EDAC is the largest player in the highly-fragmented double-safety rope building restoration market. They're averaging 30%+ revenue growth over the last three years, expanding margins and extending their geographical footprint. Double-safety rope building restoration is a boring business. And we love boring businesses.

We think EDAC is well-positioned to consolidate the highly fragmented industry, grow top-line revenue by 20%+ over the next few years and expand their franchise model into other European countries. Short-term investments in infrastructure and cap-ex to facilitate growth will muddy the company's income statement. Giving us an opportunity to act.

If management executes according to plan (and they have every reason to as CEO owns 80% of the company), shareholders should be greatly rewarded buying shares at the current price. There's a path towards 180% upside over the next five years (36% IRR).

Industry Trends

The main trends of the last few years certainly include the following:

- Professionalization of the sector, with a growing presence of well-organized operators who are active in building management (facility and property management companies);
- Renewed attention, whether in Italy or in the whole of Europe, in historical buildings, which has led to investments in building conservation in the form of ordinary and extraordinary recovery and maintenance;
- The growing tendency to plan ordinary and extraordinary maintenance of buildings.

EDAC is well-positioned to capture the bulk of these trends.

EDAC's Addressable Market & Operating Results

In order to identify EDAC's target market, i.e. buildings suitable for the type of work carried out by the Group (double safety rope systems), only buildings at least three stories high have been considered, and these total 4,257,815 residential units in Italy, approximately 35% of buildings identified as being for residential use.

Operating Results for 2018

EDAC did $26.2M in 2018 revenues, $3.65M in EBIT (14% margin) and $2.24M in net income (8.5% margin). The company's growing *fast*, averaging >30% revenue CAGR over the last five years.

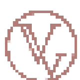
We don't have a long history of financial data on the company since it IPO'd in December 2018. Yet we do have data going back to 2015. Each year the company reported an operating profit and positive net income.

Highly Fragmented Industry = Opportunity

EDAC competes in a highly fragmented industry. Numerous small players congregate in the space. When we say small, we're referring to sub-$5M in revenues. Tiny companies.

EDAC is the largest out of its peers by a long shot. Here's the list of the company's competitors:

1. Recotech ($4M revenue)
2. Gico System ($3.3M revenue)
3. Mazzaferri ($1.64M revenue)
4. Fratelli Gianni ($1.24M revenue)
5. Fly Original ($1.19M revenue)
6. Archlngegno ($1.07M revenue)



EDAC competes with 19 different competitors within their industry. Yet only these six have revenues over $1M. If anyone's built to roll-up this market, its EDAC.

This initial competitive survey led the company to France, an area ripe for acquisitions. In 2019, EDAC bought the assets of Enterprise de Travaux Aeriens et d'Interventions Rapides Mediterranee (ETAIR) in a court-ordered liquidation. At the time of purchase, ETAIR was a leading double safety rope construction company.

A second survey for future acquisitions yielded 316 potential candidates. These candidates were all around the globe: UK, Holland, Ireland, Germany, Switzerland, and Austria.

Although EDAC does most of its business in Italy, the company *should* expand into most of its European neighbors. How will they grow so easily throughout Europe: Franchise business model and decentralized ownership.

Franchise Business Model & Higher Margins

EDAC wants to expand its market share through a franchise model. The company added 9 franchises in 2018 for a total of 31 by year-end. A franchise model is attractive for many reasons:

- Higher margins and lower upfront investment for the parent company
- Decentralized leadership throughout the company
- Easier to expand locations and reach
- Develops entrepreneurial spirit within the company

Along with its expanded franchise model, the company offered a few reasons for their increased YoY performance:

- Rise of sales revenue from both Senior and Junior departments.
- Review of production process featuring greater accuracy in site planning.
- Ad-hoc training for the heads of department based on the commission margins expected from the business.
- Cost-saving in existing credit lines with the main national banking institutions.

Let's move onto the balance sheet.

Balance Sheet Analysis (as of H1 2019)

So far, I love the company. It's a boring business that's leading in a highly fragmented industry. On top of that, they're growing revenues, increasing margins and taking market share. Let's see what the balance sheet looks like.

EDAC has $29.3M in current assets. $5.4M comes from cash and equivalents, $2.5M from inventories and $12.5M from receivables. The company also has around $4.7M in fixed assets in the form of PP&E related items.

This gives the company around $34M in total assets. Now to the liabilities.

EDAC sports around $22M in total liabilities. Of that $22M in total liabilities, $11.6M is debt paid to various banks ($6.5M), bondholders ($5M) and lenders ($153K).

EDAC has a strong balance sheet. They have around $7M in net working capital, nearly double their 2017 figure of $3M. They've also flipped from -$255K capital reserve to $12M.

Above Average Returns

EDAC dominates its market, and nowhere is this more apparent than their returns on equity, investment and sales (see right).

DESCRIPTION	31.12.2018	31.12.2017
ROE (Return On Equity)	22.09%	49.78%
ROE gross, before taxation	33.54%	88.98%
ROI (Return On Investment)	12.27%	16.68%
ROS (Return On Sales)	17.22%	16.18%

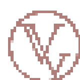
Since going public, the company's made large efforts to diversify their supplier relationships. As of last year, the company isn't reliant on any one supplier for their business needs.

These returns will decline over time as the company expands, but there's no competitor with EDAC's size to give them a *real shot* at reducing their competitive advantage. I don't see why they can't maintain 20%+ ROE for the next five-to-ten years.

Insider Ownership & Management

Insiders own close to 80% of the business in the form of Arim Holding Srl. 80% of Arim Holding Srl is owned by Riccardo Lovo, CEO and chairman of EDAC. 20% of shares float on the open market. Lovo founded the company over two decades ago and became the first man to introduce double safety-rope building restoration to the country.

Riccardo is a true entrepreneur. He discussed his passion for entrepreneurship during an *Open Source Management* presentation:



- “My previous idea was "How do I make money to rip people off?" turns into "What can I create something that can give VALUE to people?"”
- “Think of Bill Gates when he created Windows: I had to create something USEFUL for people, even for my group. I was no longer an entrepreneur who wants for himself, but to change the positive life of many people.”
- “As an entrepreneur, we start from a concept "I want to create something great, I want to change the way of building in the world". Here, when you reach it, it is there that you decide that it is the right time to [list on the exchange].”

Lovo took a boring, blue-collar job and turned it into an attraction. An article from *Ilpiacenza* demonstrates this transformation (emphasis mine):

“*They [EDAC] are now seen around all Italian cities, on Facebook there are over 126 thousand fans and they have* ***transformed one of the heaviest and least 'coveted' jobs in the world, into a kind of custom phenomenon.***”

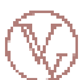
How did Lovo create such love and passion for a dirty-job-type profession? By focusing on the people and company culture. Lovo’s business partner and head of human development, Anna Marras credits EDAC’s success to its people. In fact, if I didn’t mention her name before, you’d assume the following quote was uttered by Ray Dalio (emphasis mine):

“*Our business model is completely structured on people because we are convinced that the success of a company is directly related to the success of the individual people who are part of it. This is why we support them with* **personal-sized growth plans**, *targeted training courses and* **economic incentive plans linked to the results**. **Meritocracy is one of our core values** *and we ensure that this translates into economic benefits, and not only, for the members of the Group who really* **make a difference with their extraordinary work**."

We love the leadership team at EDAC. Their focus on people, economic incentives and creating an environment of ownership will bleed into increased profits. Interests are aligned from the top-down.

Valuation: Pay Nothing For Growth (Figures in Euros)

******Note: I did most of my research before the COVID-19 wave hit Italy. Because of this, EDAC is now >30% cheaper than when I first started writing. This is a great deal for***



longer-term investors as we now have the chance to buy this businesses even cheaper once prices recover*

I don't like paying for growth. In fact, it's one of the most critical aspects of my valuation process. I'm usually out if I have to pay for any growth over the next five years. I know, it sounds almost too strict. And at EDAC's current stock price, you get any future growth for free.

The company released its preliminary FY 2019 figures on Feb, 20th. So far we know EDAC did $39M in revenues. That's a whopping 55% top-line growth versus 2018! Not bad. Do I think >50% revenue is sustainable over the next five years? Probably not.

It'd be foolish to model out even >40% revenue growth over the next five years. Remember, we want a ridiculous value based on conservative estimates. That way, any growth or unexpected positive news we get for free.

Let's go through are three scenarios:

1. No Growth & Lower Margins
2. Low Growth & Lower Margins
3. Historical Growth and Improved Margins

Scenario 1: No Revenue Growth & Lower Margins

In this scenario, we're assuming zero revenue growth and stagnant margins. One quick point on margins before we continue. I expect them to compress over the next year as the company invests in growth for new locations/acquisitions/franchises. So in the first year we're modeling lower EBITDA margins, which will stay consistent throughout each valuation scenario. Back to the valuation.

Scenario 1 ends 2023 with $39M in revenues, $6M in EBITDA and $3M in free cash flow.

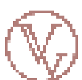
This gives us around $11M in private value cash flows, $34M in terminal cash flows and $45M in Enterprise Value. That's around 7% upside from current prices.

Do I think the company won't grow revenue? No, I'm almost certain they'll expand 10%+ each year for the next five years. But that's what margin of safety is for!

Scenario 2: Low Growth & Lower Margins

Our next scenario assumes low growth and continued lower margins. In this future, EDAC expands into neighboring countries, increases franchises but achieves lower-than-expected growth and can't increase margins.

If EDAC grows 3% on average over the next four years, we end 2023 with $44M in revenues, $6M in EBITDA with nearly $4M in FCF. We have $8M in private value and $29M in terminal value. That gives us $37M enterprise value.



Add back cash and subtract debt and you're left with **$31M in shareholder equity, or $4.73/share (20% upside).**

EDAC can grow revenues *well in excess* of 3% a year. They're fresh off the heels of 56% revenue growth in 2019. Our third and final scenario gets closer to what I think will actually happen over the next five years.

Scenario 3: Conservative Growth & Improved Margins

Our final scenario includes top-line revenue growth starting at 35% in 2020, then dwindling to 15% by 2023. Along with the top-line growth, I'm assuming EDAC's able to recognize improved margins from its expansion into franchise models across Europe. Increased franchises should raise EBITDA margins above historical levels (15%). So in the model we're increasing margins 100bps each year for the next four years.

At the end of 2023, we get $99M in revenue, $17M in EBITDA and $7M in free cash flow (27% cash yield). Calculating our private value cash flows gives us $13M. Our $9M in terminal cash flow produces $95M of PV terminal value for an Enterprise Value of $108M.

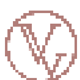
Add back cash and subtract debt and you're left with **$101M in shareholder value (295% upside).**

Risks: Besides The Obvious

There's three main risks associated with EDAC. Some are obvious, others not so much.

Risk #1: Falling Knife Chart

EDAC's chart is brutal. If you buy now, you're trying to catch a falling knife. I love the current price, but want to see consolidation and base-building before getting in with any size.



Risk #2: Execution Risk on Growth Strategy

Management's goal is clear: to grow throughout Europe via bolt-on acquisitions and expanding their franchise model. Any time you have growth strategies you bring in execution risk. If management can't execute on their growth plan, what multiple does the company deserve? Not very high.

Granted, we're not *paying* for future growth, but that doesn't mean Mr. Market won't slam the share price if it notices a significant slowdown.

Risk #3: (Very) High Insider Ownership

Riccardo Lovo is a passionate founder and owner-operator. He also owns over 80% of the company. This means common shareholders (like ourselves) don't have much say in what happens with the business.

If management acts out, uses the company as a personal piggy bank, or dilutes common shareholders, that's a red flag. Lovo hasn't given me any reason not to trust him with my capital, as he's grown his business for over 25 years before listing on the exchange.

Risk #4: Reduced Demand For Refurbished Buildings

EDAC makes their money because people want old buildings refurbished. Like we mentioned earlier, these are high-rises (at least three stories), and usually older in condition. If people stop caring about the condition of such buildings, or if they prefer another method of refurbishment, EDAC's market vanishes.

That being said, we are talking about Europe (Italy specifically). The amount of historical buildings in the country (and the greater European nations) provide plenty of opportunity for expansion and revenue growth.

Value Ventures Portfolio Review

Company	Ticker	Price at Issue	Current Price	% Change	Notes
S&W Seed, Co., Inc.	SANW	$2.79	$2.64	-5.38%	
Covetrus, Inc.	CVET	$12.61	$10.39	-17.61%	
Carbo Ceramics	CRR	$1.75	$1.40	-20.00%	Exit price: $1.40, delisted
LiveChat, Inc.	LVC (Warsaw Stock	34.15	38	11.27%	

	Exchange)				
Grupo BMV	BOLSA (MXN)	42.61	41.39	-2.86%	
Bio Pappel	CADGF (USD)	$1.20	$0.82	-31.67%	
Surge Components, Inc.	SPRS	$2.85	$1.70	-40.35%	
Paragon Technologies	PGNT	$2.40	$2.10	-12.50%	
Odlewnie Polskie	ODL	$4.90	$3.90	-20.41%	
Maxcom	MXC	$14.90	$11.80	-20.81%	
EdiliziAcrobatica	EDAC	$4.32	$4.32	0.00%	

Macro Ops
700 Lavaca St. Ste 1401, Austin, TX 78701