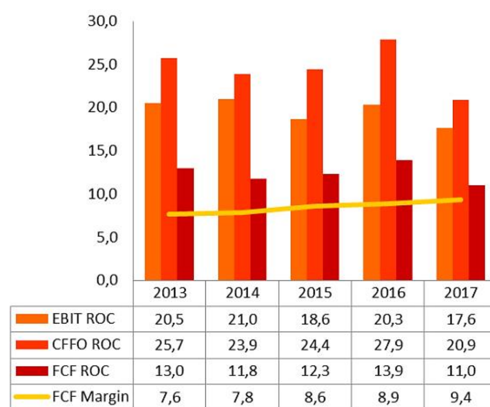
Thoughts on Heineken

Heineken has, I believe, the characteristics of a classic Buffett stock. The high quality businesses I look for have a strong balance sheet, a history of consistently high return on invested capital (ROC) and strong cash flows, where large amounts of “free” cash flow are generated.

The net debt relative to EBITDA over the last 5 years fluctuated between 2.5 and 2.9 and here is an outline of the ROC and the free cash flow margin of Heineken.



	2013	2014	2015	2016	2017
EBIT ROC	20,5	21,0	18,6	20,3	17,6
CFFO ROC	25,7	23,9	24,4	27,9	20,9
FCF ROC	13,0	11,8	12,3	13,9	11,0
FCF Margin	7,6	7,8	8,6	8,9	9,4

A family owned business

Heineken is a family-owned business. In the latest annual report of EXOR, John Elkann wrote about the importance of family control:

There are a number of characteristics of family-owned businesses which give them enduring strength:

- They tend to be prudent in how they are run, particularly in relation to financial matters, which means they remain robust when they face downturns, crises and unexpected events;
- They have the patience not to act when action is unnecessary and resist the pressure to do so.
- They are aware of changes in the world and are able to adapt when those changes require it;
- They have strong cultures, clearly defined purposes and a sense of responsibility. Their cultures, rather than pay, help them to retain talent and to grow leaders internally.

In his 2017 Investor Letter, Thomas Russo, the Managing Member Gardner Russo & Gardner LLC and General Partner Semper Vic Partners, describes 3 occasions of how the protection of the Heineken family voting control of the public company, Heineken N.V., has enabled the Heineken Leadership team to make right long term decisions. It is a wonderful Investor Letter by Thomas Russo and I encourage you to read it.

The first precedent happened when Heineken leadership passed on the buy of Brazil's second biggest brewer, Schincariol, as they felt the value Kirin paid, over $4 billion, tremendously exaggerated the business. Heineken got specific “Wall Street Heat” for their “failing”. After four years, and for a simple $1.1 billion, Heineken bought the then cash losing business from Kirin.

Second, Heineken competitor SABMiller ended up in the awkward position of being a takeover target of AB InBev. SABMiller decided to launch a hostile takeover of its own targetting Heineken. The Heineken family “just said no.”

Third, Heineken invested heavily to increase market awareness in Vietnam. As they repositioned their Heineken and Tiger brands to create a new price tier at the high end of Vietnam’s beer market, Heineken risked short term declines in market profitability and once again “Wall Street Heat”. In the end, Tiger’s repositioning has resulted in accelerated growth of both repositioned brands and increased profitability.

In the Fall 2018 Investment Newsletter of Graham & Doddsville, you will find an interesting interview with the New York Investment Firm Tweedy Browne. One of the questions asked was related to Heineken. The question was: “You are long Unilever and Nestle, right?”

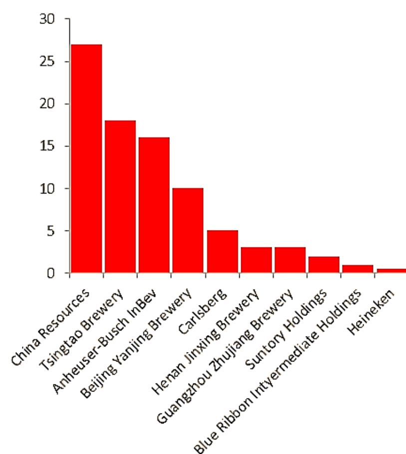
And here is the answer. Yes, as well as Heineken. They’ve almost become semi-permanent holdings. We have owned them for 15-20 years. They have durable competitive advantages that have allowed them to compound our estimate of their underlying intrinsic values at an attractive and predictable rate. It’s a very tax efficient way to invest. We’ll sometimes trade around their estimated intrinsic value, meaning we’ll trim the position if the stock price moves ahead of intrinsic value and add to the position if the stock price drops below. These companies also give us exposure to faster growing parts of the world. When growing middle

classes around the globe get more discretionary income, they want a better beverage and a better food product. These companies are serving that demand, which is growing all the time.

China

Until recently, Heineken, the world's No. 2 brewer, had struggled to compete with the dominant players in China's premium lager market such as Anheuser-Busch InBev and Carlsberg. The Dutch group had a 0.5 percent share of the China market by volume in 2017 (data from research firm Euromonitor International), while AB Inbev had 16.1 percent. The Budweiser maker is by far the leading foreign brewer in the world's biggest beer market and CR Beer had more than a quarter share.

Interestingly enough, China Resources bought the 49 per cent stake in Snow Breweries from SABMiller, its previous foreign partner. SABMiller sold its Snow stake to get regulatory clearance to merge with AB InBev in 2016, creating the world's largest beer company.



On 3 August 2018, Heineken N.V. announced that it has signed non-binding agreements with China Resources Enterprise, Limited ('CRE') and China Resources Beer (Holdings) Co. Ltd. ('CR Beer') to create a long-term strategic partnership for Mainland China, Hong Kong and Macau (together 'China'). In the context of this partnership, Heineken will become CRE's 40% minority partner in holding company CRH (Beer) Limited ('CBL'), which controls CR Beer. The companies are conducting due diligence and will need anti-trust approval from China. The transaction is expected to complete by year-end.

"We very much look forward to joining forces with CRE and CR Beer, the undisputed market leader in China. CR Beer is everywhere in the country, but they lack an international premium beer, making the Chinese group's distribution network and Heineken's brands a good match. They have what we don't have and we have what they don't have, so it's a win-win situation. Consumers switch to alternatives such as wine, meaning growth can only come from selling higher-end brews as tastes shift towards the premium end of the market. We believe that our strong Heineken® brand and marketing capabilities, combined with CR Beer's deep understanding of the local market, its scale and best-in-class distribution network will create a winning combination in the growing premium beer segment in China." – Quote Heineken CEO Jean-François van Boxmeer.

As part of the strategic partnership, Heineken China's current operations will be combined with CR Beer's operations and Heineken will license the Heineken® brand in China to CR Beer on a long-term basis.

Together, Heineken, CRE and CR Beer are perfectly positioned to win in the rapidly growing premium beer segment in China.

China's beer market, the world's largest beer market by volume, is now the second largest premium beer market globally and is forecast to be the biggest contributor to premium volume growth in the next five years, driven by its rapidly growing middle class. Profitability of the Chinese beer market is expected to improve significantly, driven by premiumisation, demand for international beer brands and cost optimisation. In increasing middle class means disposable incomes in China are growing faster than in most developed markets and, coupled with urbanization, creates new opportunities for socialising and consuming higher-end beers. Younger consumers in particular, are interested in trying new beer styles. Wheat beer and stout have recorded very strong growth over the past five years. While growth has now become more restrained it remains in double digits."

"We are very excited about this partnership and see immense potential in the combined strengths of CR Beer and Heineken. With Heineken's long heritage and world-class iconic brand portfolio, along with our leading presence and deep understanding of China, we believe we can win together in this new era of the Chinese beer market, in which the premium segment will become increasingly important. In Heineken we have found the

perfect partner to achieve our ambitions in China and - as an international partner - to support us in growing our business outside China." – Quote Chen Lang, Chairman of CRE.

The combination of Heineken and CR Beer in China is expected to be highly complementary. CR Beer has a best-in-class route to market network, a wide brewery footprint and a deep understanding of the Chinese market. Heineken has proven premium brand building capabilities and a world-class international brand portfolio, led by the iconic Heineken® brand for which it has built strong equity over the years in China. Heineken, CRE and CR Beer are convinced that their strategic partnership will drive growth for their businesses. The partnership will enable CRE to advance its premiumisation strategy and it will help Heineken to significantly expand availability of the Heineken® brand in China to fully leverage the brand's potential.

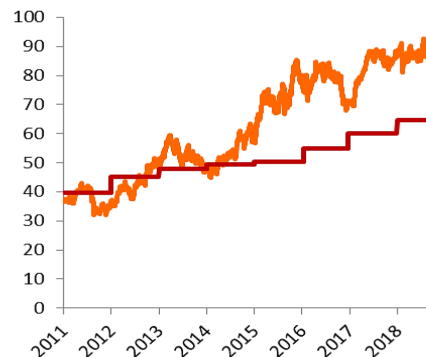
Under the strategic partnership agreement, Heineken will be CRE's exclusive partner for international premium lager beers in China. Heineken and CR Beer will investigate which other premium brands from Heineken's portfolio can be licensed to CR Beer in China. Heineken and CRE will also investigate if the Dutch brewer's global presence and marketing capabilities can be leveraged to support and accelerate the international growth of the locally popular CR Beer's Snow® brand and its other Chinese brands to become the Chinese beers of choice. "This (deal) will help accelerate CR Beer's Snow beer high-end strategy and achieve its goal to take a leading position in the premium market within 5-10 years." – Quote CR Beer's Chief Executive Hou Xiaohai. Snow accounts for about 90 percent of CR Beer's total beer sales volumes but is almost exclusively sold in China.

How to value Heineken?

The only thing I try to do when valuing high quality stocks like Heineken is applying a very conservative multiple of the company's cash flow in light of prevailing interest rates.

It seems as if the Federal Reserve officials, despite the vocal critics of the central bank's actions by President Donald Trump, remain convinced that continuing to gradually increase interest rates is the best formula to preserve a steady economy. There might even be a period where the Fed will need to go beyond normalization of rates and into a more restrictive stance.

Nevertheless, given this interest rate environment I do believe that a multiple of 10 times 3 year average operational cash flow per share is reasonable, which happens to be the equivalent of a P/E ratio of 19.



As of today the stock trades well above this multiple (red line). As you can see, there was a great window of opportunity in 2011-2012 to buy into this wonderful company.

For a value investor a P/E multiple of 19 might seem too high. The current interest rate environment is, I believe, very favorable for stock market valuations. Warren Buffett recently (once again) explained that when interest rates rise to high levels such as in the early 1980s, it makes higher equity valuation multiples much less attractive to investors: "When we had 15 percent short-term rates in 1982, it was silly to pay 20 times earnings for stocks."

The buying price, I believe, is a very personal matter. Perhaps you want to buy as cheap as possible, but then there is a risk that Mr. Market doesn't offer you this low buying price and you will not be able to buy into this wonderful company. Or perhaps you believe the current price is right, but if the markets crash after you bought the stock, you probably would regret you bought the stock @ such a high price.

The Value Firm®

In his 2017 Investor Letter, Thomas Russo points out that if you want to buy, the Heineken Holding N.V. stock (HEIO.AS) might turn out to be the better alternative.

"Ironically, for over 30 years, Heineken Holding N.V. shares have often traded at a discount to the operating company shares which they control. The discount has exceeded 15 percent, in some instances, even though every share of Heineken Holding N.V. economically represents a share of the more expensive public company holding." – Quote Thomas Russo.

And finally, Alexander. The 34-year-old Alexander de Carvalho, the eldest son of Charlene and Michel de Carvalho and the favorite grandchild of Freddy Heineken, studied at Harvard. There he was not only praised as one of the 'brightest stars', he was also known as 'excessively flamboyant'. He kicked it among other things to join the very exclusive Porcellian Club, whose ballotage is so strict that once even Franklin D. Roosevelt, who would later become president of the United States, was refused. Will Alexander once become the new CEO? Time will tell…

Cordially,

Peter

Peter Coenen
Founder & CEO of The Value Firm®
21 October 2018

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The Heineken Leadership Team

18 October 2018

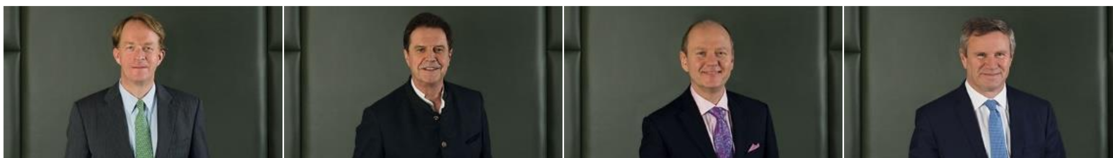
Jean-François van Boxmeer, Chairman Executive Board / CEO

Jean-François van Boxmeer was born on 12 September 1961 in Elsene, Belgium. He received a master's degree in Economics from the Facultés universitaires Notre-Dame de la Paix in Namur, Belgium in 1984. In 2001, appointed member of the Executive Board and from 1 October 2005 Chairman of the Executive Board/CEO. Joined HEINEKEN in 1984 and held various management positions in Rwanda (Sales & Marketing Manager), Democratic Republic of Congo (General Manager), Poland (Managing Director), and Italy (Managing Director). Executive Board responsibility for HEINEKEN Regions and Global functions: Human Resources, Corporate Relations, Supply Chain, Commerce, Legal Affairs, Strategy, Internal Audit and Company Secretary.

Jean-François van Boxmeer
Chairman Executive Board / CEO

Laurence Debroux
Member Executive Board / CFO

From left to right: Marc Busain - President Americas, Dolf van den Brink -President Asia Pacific, Marc Gross - Chief Supply Chain Officer, Blanca Juti - Global Corporate Affairs Officer.



Drom left to right: Jan Derck van Karnebeek - Chief Commercial Officer, Roland Pirmez - President Africa Middle East and Eastern Europe, Stefan Orlowski - President Europe, Chris Van Steenbergen - Chief Human Resources Officer.

Thoughts on Verisign

This is actually an investment thesis I wrote in 2017. Much of the work for this investment thesis was already done by John Huber, Phil Ordway, H.A. Capital Management, Eric Nickolaison, Stephen Pomeroy, Trefis.Com, D. Smith and probably many more. So I tried to understand their insights and wrote my own version of it. What really helped to grasp this thesis from a business perspective was, I believe, many years of experience in the telecommunication & ICT business.

An investment in Verisign is actually a bet on the future of the internet and the growth of cybersecurity business. The importance of the Internet is still underestimated. The next ten years will be more spectacular than the previous 10 years. The Internet is simply the most important technological development in the history of humankind.

Summary

Verisign is the Mercedes of the domain name business and essentially has a legal monopoly on the business. The beauty of having exclusivity to *.com* is that Verisign has a branding and security moat in the minds of consumers. It is as close as you can get to having a legal monopoly with pricing power.

Considering the potential for internet growth in emerging economies and the e-commerce boom, it seems highly plausible that domain name registrations are going to increase at an unprecedented rate in the years to come. The real catalyst that I see for this stock is Non-Latin Script and Foreign Language Domains. Verisign Internationalized Domain Names (IDNs) enable businesses to say *.com* and *.net* in local language characters. It's a friendlier, more meaningful way to connect with customers. There is long-term growth in emerging markets like China and India. In 2014 approximately 6.5% of Verisign's revenue came from China. This number grew to 11.1% in 2016.

Verisign makes money mainly by collecting $7.85 per year for each *.com* domain name that is registered, and there are around 127 million *.com* domain names. The company also gets paid a similar fee for each of its roughly 16 million *.net* domain names. Verisign is the exclusive registry for domain names ending in *.com* and *.net* (among a few others), an extremely attractive and enviable competitive position that could be likened to a monopoly within the *.com* and *.net* TLD's. The margin on this recurring revenue is extraordinarily high, and there is very minimal need for cash in this business. The high margin recurring revenue and the low capital requirements lead to stable and predictable free cash flow, which the company uses almost exclusively to buy back stock.

- Verisign trades @ a 9.4B USD market cap (30 June 2017) and has an operating margin of 60% (2016). It has 101.5M shares outstanding (trading @ 92.9 USD per share), it has 1.8B USD cash position and 1.2B USD long-term debt on the balance sheet and has a strong and predictable free cash flow, 641M USD over 2016. Verisign has 984 Full-Time Employees (March 31 2017).
- The average trading range (price to 3-year average free cash flow) of the Verisign stock over the past 8 years is between 17,2 and 25,1. Based upon a conservative estimate of long-term growth, the trading range of the Verisign stock in 2024 is estimated between 230 and 335 dollar per share. The corresponding stock price CAGR is between 12,2 and 17,6%, approximately 15%.
- According to Morningstar.com 13.04% of the shares are owned by T. Rowe Price, 12.58% by Capital World Investors, 12.72% by Berkshire Hathaway and 8.34% by Vanguard Group.

Company history

Verisign was founded in 1995 as a spin-off of the RSA Security certification services business. The new company received licenses to key cryptographic patents held by RSA and a time limited non-compete agreement. The new company served as a certificate authority (CA) and its initial mission was "providing trust for the Internet and Electronic Commerce through our Digital Authentication services and products". Prior to selling its certificate business to Symantec in 2010, Verisign had more than 3 million certificates in operation for

everything from military to financial services and retail applications, making it the largest CA in the world.

In 2000, Verisign acquired Network Solutions, which operated the .com, .net and .org TLDs under agreements with the Internet Corporation for Assigned Names and Numbers and the United States Department of Commerce. Those core registry functions formed the basis for Verisign's naming division, which is now the company's largest and most significant business unit. In 2002, Verisign was charged with violation of the Securities Exchange Act. Verisign divested the Network Solutions retail (domain name registrar) business in 2003, retaining the domain name registry (wholesale) function as its core Internet addressing business.

Verisign operates two businesses, Naming Services, which encompasses the operation of top-level domains and critical Internet infrastructure, and Network Intelligence and Availability (NIA) Services, which encompasses DDoS mitigation, managed DNS and threat intelligence. Verisign's share price tumbled in early 2014, hastened by the U.S. government's announcement that it would "relinquish oversight of the Internet's domain-naming system to a non-government entity". Ultimately the Internet Corporation for Assigned Names and Numbers chose to continue VeriSign's role as the root zone maintainer and the two entered into a new contract in 2016.

The unique position of Verisign

For more than 19 years, Verisign has maintained 100 percent operational accuracy and stability for *.com* and *.net*—managing and protecting the DNS infrastructure for over 142.2 million domain names and processing more than 143 billion transactions daily—keeping the world connected online, seamlessly and securely.

At the core of the internet are 13 root servers. Verisign operates two of the internet's root servers. That's approximately 15% of the core of the web. The other root servers are held by University of Southern California, Cogent Communications, University of Maryland, NASA, Internet Systems Consortium, US Department of Defense, US Army, Netnod, RIPE NCC, ICANN and WIDE Project. At the top of the root server hierarchy is the "A" root server owned by Verisign, which every 12 hours generates a critical file that tells the other 12 servers what Internet domains exist and where they can be found.

The defense community views VeriSign as important to national security. Verisign provides a hugely important critical function, namely providing stability and ensuring proper functioning of the internet. The department of the Homeland Security has designated the root servers as critical homeland security infrastructure. The U.S. Government (or ICANN) will not mess with a function that is so crucial, when the company performing that function is doing so (and has always done so) perfectly. And they probably even won't allow new competition to enter. Should a new operator screw things up—means the internet, and thus society and crucial competitive advantages of the United States of America, stops functioning properly.

Much of the root zone infrastructure itself is inextricably intertwined with Verisign's TLD operations for *.com* (as states in the Public Comment on Proposed Amendment to *.COM* Registry Agreement). It is my understanding that the servers that provide root services are hosted at every *.com* resolution site (over 100 locations). These servers share bandwidth, routing and monitoring with the *.com* operations, and the servers use the same code base as the *.com* TLD name servers and are operated and maintained by the same operation and engineering group. On the provisioning side, the root zone's provisioning system is derived from the *.com* Shared Registration System (SRS), using the structure, schema, and software used for *.com* provisioning operations. Verisign builds and signs the root zone today using the same cryptographic facilities used for *.com* as well as signing software derived from that used for signing *.com*.

Importantly, Verisign's root zone operations are also within the *.com*'s Denial of Service attack detection and mitigation framework including independent internal and external monitoring and packet filtering at all layers. A key component of ensuring security of the root operations was making sure that those operations continued to benefit from its historic association with the *.com* operations.

Knowing this I think it's fair to say that Verisign has a unique and very crucial position to maintain stable, secure, and reliable operations of the root zone not only for direct root zone management service customers (Registry Operators, Registrars and Root Server Operators), but also to maintain the security and stability of the Internet's domain name system and thus the internet as a whole. And I think it's fair to say that it will be very, very hard, if not impossible for competitors to even come close to this unique service offering by Verisign.

The relation with ICANN

Verisign existed before ICANN, and thus with the establishment of the Internet's oversight body, Verisign was in a place of sustained recognition as the registry of many of the Internet's most important TLDs. While it has given up some of its original TLD oversight, it continues to manage the Internet's most well-known extension, *.com*, and others.

Verisign is consistently one of the largest sponsors of ICANN's meetings; they sponsored at the Platinum level or above for all 2011 meetings. Some commentators attributed the ability of ICANN to secure former U.S. President, Bill Clinton, to speak at ICANN 40 with the especially high level at which Verisign sponsored that meeting. Clinton described international non-governmental organizations like the internet governing body ICANN as the highest pinnacle of civilization and established his bona fides by pointing out that when he was inaugurated as president in 1993, there were only 50 websites, while there were 36 million by the time he left office in 2001. That, he said, gave him "the great honor of being the president at the dawn of the internet age."

It's interesting that despite the opposition of senator Ted Cruz on competition issues and pricing Verisign will remain the sole registry operator and is allowed to raise prices and thus maintains its unique monopoly-like position. So how come? In reality ICANN has about as much control over the internet as Ted Cruz has a grasp on how DNS actually works—which is to say, very little. But the perpetuation of the fiction that ICANN controls the internet is representative of the completely understandable human impulse to try and assign control of the internet to someone or something. Saying any one group controls the internet is as absurd as saying who "controls" capitalism or globalization itself.

I do not believe that ICANN will dare to assign this crucial function to another company. Verisign will be the sole operator of *.com* and *.net* domain names far beyond 2024. Actually, as of today Verisign is the only company feasibly capable of performing the registry operations (more than 143 billion transactions daily) and has been operating for fifteen years. Why mess with a function that is so crucial, when the company performing that function is doing so (and has always done so) perfectly?

I think the relation between ICANN and Verisign goes deeper than a favored position. There can really only be one registry at the end of the day. They provide the matching for domains and IP addresses on all the "*.com*" addresses. It would be counterproductive to have multiple entities doing this - and not even sure if logistically it would be possible without having those multiple entities coordinating changes and new domains between them. This is ultimately the role VeriSign plays as you can get a *.com* domain from a number of approved registrars (eg GoDaddy) but they consolidate and combine at the VeriSign level - and you need somebody playing that role.

With the introduction of new top level domains ".whatever", other entities can act as the VeriSign equivalent but for each of those there can really only be one top registry. I think what you're really betting on here is the growth in *.com* and *.net* websites (and others that VeriSign now runs) as well as the stickiness and difficulty in changing from VeriSign to someone new by ICANN. From that perspective I'm of the belief that VeriSign will own this forever (as long as they don't do stupid things). The risk to the entire internet of changing over to a new provider will massively exceed the value of somebody bidding a couple of pennies below on price. I can't imagine anyone investing to build the infrastructure (the security costs alone would be massive) if they were subject to being displaced themselves in a couple of years.

Danny McPherson, SVP and Chief Security Officer of Verisign, serves on the Internet Corporation for Assigned Names and Numbers (ICANN) Security and Stability Advisory Committee (SSAC), and also on the U.S. Department of Homeland Security's Cybersecurity Subcommittee, and the Federal Communications Commission's (FCC) Communications Security, Reliability and Interoperability Council (CSRIC), as well as the Online Trust Alliance (OTA) Board of Directors.

Pricing

Verisign can petition for removal of the price cap if it can prove to the U.S. Department of Commerce that market conditions no longer warrant price restrictions. It will have to demonstrate "that competition from other top level domains, use of alternative Internet navigation techniques (including search engines, browsers and URL shorteners, among others), reduced demand for domain names, or other factors are sufficient to constrain Verisign's pricing of Registry Services at the current Maximum Price."

And Verisign can show that a new Consensus Policy or extraordinary expense "from an attack or threat of attack on the Security or Stability of the DNS" raised its costs. On recent investor calls, Verisign CEO James Bidzos has hinted that he thinks the domain name market is moving closer to the point at which Verisign might be able to trigger price increases. A small price increase means big money to Verisign. There are nearly 128 million *.com* domains registered. If the price is increased 7% from $7.85 to $8.40, that's another $70 million of pure profit per year for Verisign. Still, I could see ICANN agreeing to a small increase to make Verisign happy and then see what the Department of Justice thinks. It could do this under the guise of new policies increasing the cost to run *.com*.

Back in 2005, Verisign used its financial and legal advantage over ICANN to push it into an agreement where Verisign retained the dot-com contract on very favorable terms: it retained control, plus a presumptive renewal of the contract, and was given the ability to increase prices by seven percent in four of the six years of the contract term. In return, it gave ICANN what it wanted: recognition that ICANN had authority over the domain name system. When the contract was renewed again in 2012, ICANN was planning to give Verisign the exact same deal including the same price-rising rights, but the US government intervened and said the contract should not include any price increases.

Emerging Markets

Considering the potential for growth in internet penetration in emerging economies and the e-commerce boom, it seems highly plausible that domain name registrations are going to increase at an unprecedented rate in the years to come. Domain name registrations and the number of internet users are directly proportional. The four key countries in which VeriSign sees potential for increased business are China, India, Vietnam and Indonesia. To gain a better perspective, it would be worthwhile to analyze the internet penetration levels in two of the largest economies in question here - India and China.

China leads the pack with the largest internet user base in the world. The country has almost 668 million citizens with access to the internet. Like India, most of the users in the country access the internet via their smartphones - almost 89% of the internet using population. Internet penetration in the country now stands at close to 49%. Given the current economic conditions, it does seem plausible that the rate of growth is going to come down marginally, but this could prove to be only a temporary setback.

The number of internet users in India has grown (and continues to grow) at unprecedented levels in the recent past. The country witnessed an addition of more than 200 million users to its internet user base over the last 5 years. In the latest reports available from October, India's internet user base was recorded at 375 million users (significantly higher than the population of the U.S.). This figure is expected to reach 400+ million users by the end of this month (a whopping 49% jump over last year). Only about 30% of the country's population has access to the internet. This definitely leaves a great scope for growth in the coming years.

Businesses in India are beginning to realize the power of the Internet. With only a small percentage of businesses having a Web presence, there is an opportunity to educate the mass market on the value of getting online, of having a branded email address and a professional website. This market education and awareness, along with strong growth in Internet penetration, will result in a large Web services economy in India for the years to come. Given the reasons highlighted above, it seems highly plausible that there is scope for heavy registrations in the *.com* and *.net* space over the next five years.

The next Internet revolution will not be in English

Imagine if, every time you wanted to visit a website, you were expected to type in letters from a foreign language, or worse, an entirely foreign script, such as Arabic, Cyrillic, or Chinese. For more than a billion people, this is how they experience the Internet today. The Internet was designed to be global, but it was not designed to be multilingual. For decades, this limitation was most evident in website and email addresses, which permitted only a small set of Latin characters. Fortunately, over the past decade much work has been done to allow website addresses to support non-Latin characters, referred to as internationalized domain names (IDNs). More than 30 countries, ranging from Saudi Arabia to South Korea, now support country code domains in their native scripts.

For more than a billion web users, *.com* has always been a foreign address. Local-language domain names do have value. And they will improve the usability of the Internet. VeriSign, the registry that manages *.com*, is now pursuing a Russian transliteration: .ком, as well as variations in Chinese and Hindi. The fact is, IDNs are here, and many more are coming. And the regions these IDNs span constitute more than 2.5 billion people, most of whom do not speak English as a native language. The regions also represent where most of the growth in Internet usage will occur over the next decade. We're inching closer to a linguistically local Internet, in which people no longer have to leave their native languages to get where they want to go. This is a positive development for making the Internet truly accessible to the world.

The threat and opportunity of Cybersecurity

Verisign has unmatched experience in protecting critical internet infrastructure, and is entrusted by leading organizations to help secure and protect their businesses. And there is a need for guidance in the cybersecurity evolution.

The ever-evolving technology sector has truly transformed our lives but not without some hiccups. That's because cybercrime, which includes destruction of data, identity theft, spying and other illegal activities, poses a threat. Enterprises and government agencies are frequently targeted by hackers, and therefore have to adopt strict cyber security measures. Over the past few years, high-profile business houses and government agencies have reported a significant rise in data breaches which, in turn, prompt them to impose tighter security measures. The latest was a massive ransomware attack on May 12, 2017, which halted daily work at several companies, government offices and even hospitals across the globe.

According to a report from cybersecurity firm FireEye Inc. FEYE, the attack, which persisted throughout the whole weekend, affected over 200,000 computers in at least 150 countries across the Americas, Europe, Russia and Asia over the following weekend. Known as WannaCrypt or WannaCry, the malicious software reportedly seizes the control of computers and encrypted files with a password which only hackers have access to. After that, victims were asked to pay ransoms in order to regain control of their systems. The hackers demanded ransom in bitcoin. The latest cyberattack proved that, whether government or private enterprise, most organizations around the world lack proper security measures.

Per the predictions of CSO, a provider of news, analysis and research on a broad range of security and risk management topics, cybercrime damages may cost the world a whopping $6 trillion annually by 2021, double from $3 trillion in 2015. According to a joint report of Identity Theft Resource Center (ITRC) and CyberScout, 1,093 data breaches had been recorded in 2016, which was 40% higher than 780 reported in 2015. The long list of data breaches puts the Internet security market in focus, as companies are beginning to realize the necessity of beefing up cyber safety measures. Moreover, with rapid technological advancement, more organizations are adopting the "bring your own device" (BYOD) policy to enhance employee productivity with anytime, anywhere access. This trend, on the other hand, has made it necessary for companies to enforce stricter data security measures.

From being a niche industry a decade ago, cyber security has grown into a very important segment in the IT space. Various independent research firms forecast strong demand ahead. According to a Markets and Markets report, worldwide cybersecurity spending will reach $90 billion in 2017, $101 billion in 2018 and $170 billion by 2020. Gartner had earlier mentioned that IT security spending peaked to above $83 billion in 2016. This indicates that business houses and government agencies would rather compromise on other IT expenses than security measures, which, I believe, will enhance long-term prospects for cyber security providers like Verisign.

Risks

For a comprehensive risk assessment, please look at section 1A of the Form 10-K. The top 3 risks:

Risk. Undetected or unknown defects in their service, security breaches, and DDoS attacks could expose Verisign to liability and harm their business and reputation. **Assessment.** Cybercrime, which includes destruction of data, identity theft, spying and other illegal activities, poses a huge threat to reputational damage. Verisign has unmatched experience in protecting critical internet infrastructure, and is

entrusted by leading organizations to help secure and protect their businesses.

Risk. Governmental regulation and the application of new and existing laws in the U.S. and overseas may slow business growth, increase their costs of doing business, create potential liability and have an adverse effect on their business. **Assessment.** VeriSign operates in a highly regulated industry. Regulation is great because it decreases competition and makes it difficult for new incumbents, but it's also an issue because it reduces margins unnaturally. The department of the Homeland Security has designated the root servers as critical homeland security infrastructure. The U.S. Government (or ICANN) will not mess with a function that is so crucial, when the company performing that function is doing so (and has always done so) perfectly.

Risk. Verisign operates two root zone servers and are contracted to perform the Root Zone Maintainer function. Under ICANN's New gTLD Program, Verisign face increased risk from these operations. **Assessment.** In a recent survey that was conducted by ICANN, .com was still the most popular and most recognized gTLD. Legacy TLDs like .com, .net, and .org were also chosen by about 90% of the participants as being the domain extensions they trust. The .com extension has been around for almost 30 years and is firmly set in people's mind. Lastly, it would be worthwhile to mention that VeriSign is also participating in the new gTLD program, albeit only partially. The company has applied for IDN versions (Internationalized Domain Names) of .com and .net domains. In the latest quarter earnings, the company has announced a planned rollout of about 11 IDNs by the end of the year. Therefore, if new gTLDs do catch up in the future, VeriSign is ready to capitalize on the changing trend.

Cordially,

Peter

Peter Coenen
Founder & CEO of The Value Firm®
30 June 2017

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The Verisign Leadership Team

9 October 2018

D. James Bidzos. Verisign President, Chief Executive Officer and Chairman of the Board

James Bidzos is president and chief executive officer of Verisign. He also serves as chairman of the board of directors and has been executive chairman since August 2009. As the founder of Verisign, Bidzos is an Internet and security industry pioneer whose accomplishments include building RSA Security into the early standard-bearer for authentication and encryption, and launching Verisign as a company in 1995 to develop the digital certificate infrastructure for Internet commerce.

Before returning to the president and chief executive role in August 2011, Bidzos served as Verisign's first president and CEO and also served as Verisign's chairman of the board of directors from April 1995 until December 2001, as vice chairman from December 2001 to July 2007, and as interim CEO from July 2008 to August 2009. Bidzos served as president and CEO of RSA Security from 1986 to February 1999, and then served as RSA's vice chairman from 1999 to May 2002.

Bidzos was named one of Time Magazine's "Digital 50," and is in CRN's Computer Industry Hall of Fame.

D. James Bidzos

President, Chief Executive Officer and Chairman of the Board

Thomas Indelicarto

Executive Vice President, General Counsel and Secretary

Dr. Burt Kaliski, Jr.

Senior Vice President and Chief Technology Officer

Pat Kane

Senior Vice President, Naming and Directory Services

Ebrahim Keshavarz

Senior Vice President, Product Management

George Kilguss III

Executive Vice President and Chief Financial Officer

Danny McPherson

Executive Vice President and Chief Security Officer

Dave Pool

Senior Vice President, Technology Services

Scott Schnell

Senior Vice President of Global Marketing and Channel Management

Todd Strubbe

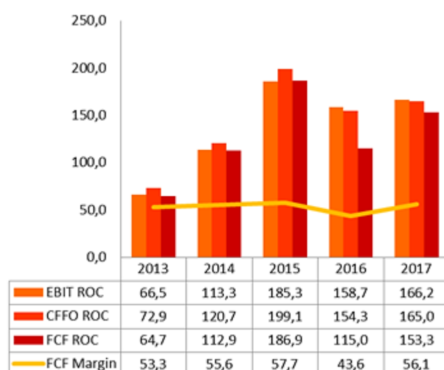
Executive Vice President and Chief Operating Officer

Update on Verisign

7 November 2018. The U.S. Government has extended its Cooperative Agreement with Verisign for managing the .com domain name. The deal will allow Verisign to negotiate with ICANN to raise the price of .com by 7% in each of the last four years of each six-year .com contract.

In the amendment, the U.S. Department of Commerce stated that ccTLDs, new gTLDs and social media "have created a more dynamic DNS marketplace", and as such, it's appropriate for Verisign to have pricing flexibility.

To get an idea of the profitability of this company, just have a look at this graph:



	2013	2014	2015	2016	2017
EBIT ROC	66,5	113,3	185,3	158,7	166,2
CFFO ROC	72,9	120,7	199,1	154,3	165,0
FCF ROC	64,7	112,9	186,9	115,0	153,3
FCF Margin	53,3	55,6	57,7	43,6	56,1

Verisign will still have to get ICANN's approval for any price hikes. ICANN is likely to grant price hikes in return for a higher cut of the action. The Department of Commerce billed the changes as reducing regulatory burdens in line with Trump's policies:

NTIA and Verisign have agreed to extend and modify the Cooperative Agreement. These modifications are in line with policy priorities of the Trump Administration. The changes create a new commitment to content neutrality in the Domain Name System (DNS), provide market-based pricing flexibility, and reduce the regulatory burden on Verisign.

Amendment 35 confirms that Verisign will operate the .com registry in a content neutral manner with a commitment to participate in ICANN processes. To that end, NTIA looks forward to working with Verisign and other ICANN stakeholders in the coming year on trusted notifier programs to provide transparency and accountability in the .com top level domain.

Some observations:

- .com domains have massive market power. According to Verisign's own industry brief, there are currently 135.6 million .com domains names registered. The second largest extension only has 22.7 million registrations. More than 480 of the Fortune 500 companies use a .com for their company URL. Simply put, .com domains continue to have overall market power and has significant global demand in the marketplace.
- Over the past 6 years (2012 through 2017) Verisign has only put $275 million into capital expenses to invest in additional networking, bandwidth and server upgrades. At the same time, it spent $4.17 billion dollars to repurchase its own stock. Instead of investing cash into its business and upgrading its infrastructure, Verisign is investing purely in its own stock.
- Verisign's cost to operate the Registry has remained flat since 2009. Even though VeriSign added 54 million new domains to its base since 2009, the cost to operate the entire business have have not changed at all. It cost $455 million to run VeriSign in 2009, and it cost $455 million to run VeriSign in 2017. The base of domains has grown 55.0% from 2009 to 2018, yet the cost to operate the business has remained flat. This level of earnings-to-operational expenses is unheard of in the tech industry.
- Verisign currently employees fewer employees than ever before – Even though the number of domains has increased by more than 50% since 2009, Verisign continues to reduce staffing. In 2009, Verisign had 1,100 full-time employees. At the end of 2017, Verisign ended the year with only 952 full-time employees. On the Q2 2018 Earnings Conference Call, Verisign reported only 941 employees. While revenues have grown 89.2% since 2009, the number of full time employee has decreased by 13.5%.

- Verisign's operating margins have climbed from 26.0% in 2009 to 60.7% for the full year end 2017. In the most recent Q3 2018 quarterly earnings call, Verisign announced its margins reached the highest levels yet of 63.8%.
- As far as their .net domain names are concerned, on 27 July 2017, Verisign announced that it is increasing the price of .net domain names by 10%, as per 1 February 2018. Verisign increases these prices 10% every year and has the contractual right to do so until 2023 under its recently-renewed contract. This means the wholesale price of a .net registration could be $14.52 in 2023.

With thanks to https://domainnamewire.com.

Thoughts on Monro

Headquartered in Rochester, NY, Monro, Inc. is a leading independently-owned and operated auto service and tire provider in the United States. The Company went public in 1991 and trades on the NASDAQ under the symbol MNRO.

The Company operates more than 1150 stores, has 98 franchised locations, 9 wholesale locations and 3 retread facilities in 28 states, serving the Mid-Atlantic and New England regions and portions of the Great Lakes, Midwest and Southeast.

While Monro, Inc. has enjoyed a steady history of success, the company has experienced significant growth in recent years through acquisitions and, to a lesser extent, the opening of newly constructed stores.

The Monro, Inc. brand portfolio features 10 quality brands, the majority offering complete auto care and service at significant savings compared to dealers and local repair shops. Core product and service offerings include:

- Oil changes
- Brake systems
- Exhaust systems
- Suspension systems
- Wheel alignments
- Belts and hoses
- Tires
- Heating and cooling systems
- Transmission flush and fills
- Tune-ups
- Batteries, alternators and starters
- Belt and hose installations
- State inspections
- Scheduled maintenance

The company wants to be America's leading auto and tire service centers, trusted by consumers as the best place in their neighborhoods for quality automotive service and tires by exceeding guest expectations, providing consistent value and by building a committed, knowledgeable organization of friendly and professional teammates

The Balance Sheet

With a 2018 current ratio of 1.07, quick ratio of 0.28, a long-term debt of 2.8 times EBIT and a long-term debt relative to equity of 60%, the balance sheet looks "balanced". Other balance sheet characteristics: 47% of the total assets consist of "intangibles", a total shareholders' equity relative to total assets of 50.2%, and the retained earnings per share growing consistently from 11.9 in 2014 to 16.3 in 2018 (values in 000's).

Industry overview

Demand for automotive repair services, including undercar repair and tire sales and services is correlated to the overall number of vehicles in operation and the increasing average age of vehicles, and to a lesser extent,with increased average miles driven. The number of vehicles in operation is expected to continue to grow over the next several years, with vehicles 6 years or older representing the vast majority of this growth.

This is in contrast to the past several years in which the number of vehicles 6 to 12 years old declined significantly in response to the lower volume of new vehicles sold during 2008 to 2012. Additionally, vehicles continue to increase in complexity, making it more difficult for a vehicle owner to perform do-it-yourself repairs. At the same time as demand for automotive repair services has grown, the number of general repair outlets has decreased. Monro believes that these factors present opportunities for increased sales by the Company.

Monro competes in the automotive service and tire industry. This industry is generally highly competitive and fragmented, and the number, size and strength of competitors vary widely from region to region.

Monro believes that competition in this industry is based on customer service and reputation, store location, name awareness and price. Monro's primary competitors include national and regional undercar, tire specialty and general automotive service chains, both franchised and company-operated; car dealerships, mass merchandisers' operating service centers; and, to a lesser extent, gas stations, independent garages and

Internet tire sellers. Monro considers TBC Corporation (operating under the NTB, Merchant's Tire, Midas and Tire Kingdombrands), Firestone Complete Auto Care service stores, The Pep Boys — Manny, Moe and Jack service stores, Meineke Discount Mufflers Inc., and Mavis Discount Tire to be direct competitors.

In most of the new markets that they have entered, at least one competitor was already present. In identifying new markets, they analyze, among other factors, the intensity of competition.

Monro.Forward

Monro has experienced significant growth in recent years through acquisitions and, to a lesser extent, the opening of newly constructed stores. Management believes that the continued growth in sales and profits of the Company is dependent, in large part, upon our continued ability to open/acquire and operate new stores on a profitable basis.

Monro believes that there are significant expansion opportunities in new as well as existing market areas, which may result from a combination of constructing stores on vacant land and acquiring existing store locations as well as purchasing existing businesses.

They believe that, as the industry consolidates due to the increasingly complex nature of automotive repair, the expanded capital requirements for state-of-the-art equipment and aging of existing shop owners, there will be increasing opportunities for acquisitions of existing businesses or store structures.

Monro seeks to set competitive prices for quality services and products. They support their pricing strategy with special offers and coupons distributed through a variety of channels including: direct mail, e-mail, digital advertising, newspaper, promotional store signage and in-store displays. In addition, to increase consumer awareness of the services they offer, Monro advertises through radio, cable television and yellow page advertising.

Their digital marketing efforts include paid and organic search on all major search engines, search remarketing and banner and mobile advertising. They also manage social media profiles on a variety of platforms.

Their websites include Monro.com, MrTire.com, TQTire.com, AutoTire.com, TireWarehouse.net, KenTowery.com, TireBarn.com, TheTireChoice.com and Tiresnowonline.com. These websites help their customers search for store locations, print coupons, make service appointments, shop for tires and access information on their services and products, as well as car care tips.

Monro currently maintains mobile apps on the iPhone and Android platforms that enable customers to access information, coupons and specials and make appointments on their smart phones, as they do on our websites.

Monro.Forward centers around four key pillars, which will be supported by a number of investments in technology and data-driven analytics across the business:

Improving Customer Experience

The primary focus is to drive operational excellence and deliver a consistent 5-star experience to their customers with a focus on increasing customer lifetime value. It starts with the improvement in their online reputation and increased efforts to solicit customer feedback. Leveraging the insights from this feedback, they are making improvements to their store operations, which, in turn, are leading to a material improvement in Monro's overall star rating across online review sites.

The increased number of online reviews is also leading to higher conversion, and most importantly, driving higher traffic to their stores. Additionally, they are setting clear brand standards for how they operate and how they look across their store base. This includes developing standard operating procedures for the teammates using an education-centered approach to position them as expert advisers, who can clearly and professionally provide their customers with options and

choices for the work their vehicles need. They are also implementing a store refresh initiative to ensure their stores are inviting and modernized, while remaining appropriate for what their customers expect from the Monro brand.

Enhancing Customer-Centric Engagement

The second objective is to engage with their customers more effectively and invest in marketing channels with the highest return to drive increased customer retention and new customer acquisition, and to develop an omnichannel presence. They will leverage their customer relationship marketing platform to reach their customers with the right message for the right service at the right time, increasing brand loyalty and building long-term one-to-one relationships. Their data-analytics will also assist in identifying high-value potential new customers, as well as optimizing the digital marketing efforts to reach them. Additionally, Monro recognizes the importance of developing a robust omni-channel presence, which they will roll out in two phases: modernizing the online presence through their mobile platform and website, and creating a seamless buying experience for their customers.

Optimizing Product & Service Offering

Creating a clearly defined product and service offering is another strategic priority which will allow them to improve the customer experience and maximize their ticket through higher conversion. They will accomplish this through a redefined selling approach and optimized tire assortment. By implementing a stronger merchandizing strategy across good, better and best pricing options, they will allow their technicians to properly educate their customers on their vehicle needs and provide them with clear options to choose the right products and services for their vehicle. Given that tires represent half of their sales, they have been particularly focused on optimizing their assortment. Monro has taken considerable steps to ensure they are offering the right tires at the right prices, leveraging the breadth of their tire brand portfolio.

Accelerating Productivity & Team Engagement

Given that the teammates are at the heart of the organization, Monro will implement a number of initiatives to increase productivity and engagement across their base. They will focus on optimizing their store staffing model and using data-driven scheduling to ensure they have the appropriate amount of talent allocated to each store. Additionally, they are committed to attracting, developing and retaining their talent. Monro wants their technicians to have a clearly defined career path at Monro and will provide them with the necessary onboarding materials and proper training to optimize their performance, particularly as vehicles become increasingly complex. Monro will also ensure their compensation model is based on a balanced scorecard designed to increase incentives as the teammate’s performance improves, with maximum payouts for outstanding performance.

Monro has had a successful rollout of their foundational technology and tools, including business intelligence and key performance indicator dashboards and a tabletbased, standardized store review process.

Amazon.Com

Monro expanded its collaboration with Amazon.com to provide tire installation services at over 330 additional Monro retail tire and automotive service locations in 10 states across the Eastern United States and are now expanding this option for tire installation to Amazon.com customers at a total of nearly 400 locations.

The preferred tire agreements with online retailers are a key initiative of their omni-channel strategy, and this expanded collaboration underscores the strong progress they have made as they continue to develop their online presence. Monro plans to make these services available to Amazon.com customers at more than 1,170 retail locations across 28 states.

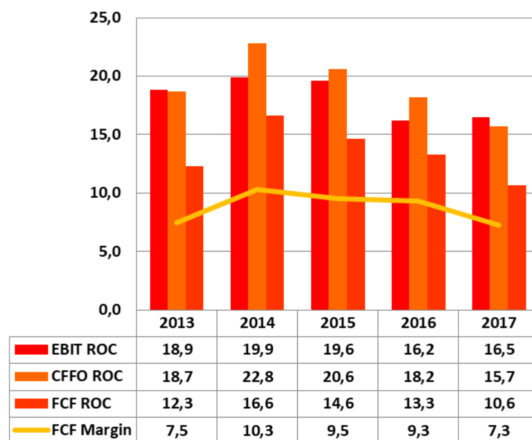
The partnership with Amazon is still in its early innings. About half of the traffic Amazon brings in are first-time customers for Monro, and the majority are car enthusiasts, according to the company.

Monro believes that there are significant expansion opportunities in new as well as existing market areas. Monro has a strong presence in the Northeastern U.S.,and continues to expand in Southern and Western adjacent markets.

It’s pretty difficult to even comprehend how ridiculously large the US economy is, and the map below helps put America’s Gross Domestic Product (GDP) of $20.5 trillion in 2018 into perspective by comparing the economic size (GDP) of individual US states to the entire national output of other countries. The chart was put together by The American Enterprise Institute (AEI).

Profitability

The first graph visualizes respectively operating income (EBIT), operating cash flow (CFFO) and free cash flow (FCF) relative to the net PP&E plus net working capital.

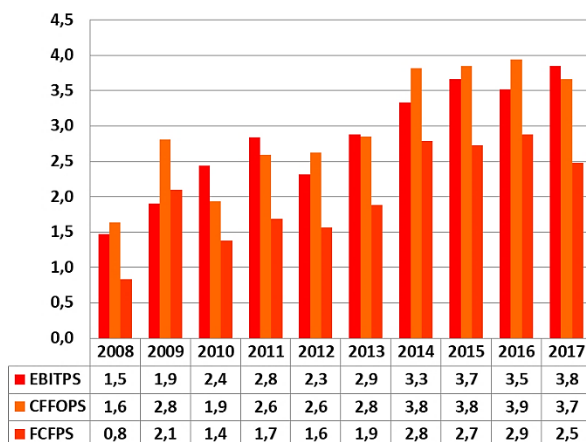


	2013	2014	2015	2016	2017
EBIT ROC	18,9	19,9	19,6	16,2	16,5
CFFO ROC	18,7	22,8	20,6	18,2	15,7
FCF ROC	12,3	16,6	14,6	13,3	10,6
FCF Margin	7,5	10,3	9,5	9,3	7,3

Looks very healthy. The yellow line is the free cash flow relative to the revenue (free cash flow margin).

Growth

The 10 year compounding annual growth rate (CAGR) of the operating income per share, earnings per share, the operational cash flow per share, the free cash flow per share and the book value per share are respectively 9.7%, 9.1%, 8.7%, 12.1% and 11.8%.



	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017
EBITPS	1,5	1,9	2,4	2,8	2,3	2,9	3,3	3,7	3,5	3,8
CFFOPS	1,6	2,8	1,9	2,6	2,6	2,8	3,8	3,8	3,9	3,7
FCFPS	0,8	2,1	1,4	1,7	1,6	1,9	2,8	2,7	2,9	2,5

Value Creation Engine

At times, I use the Value Creation Engine (VCE) for stock selection. If you have two companies with identical ROC and company A grows e.g. with 3% free cash flow per share and company B with 6%, I tend to believe that there is value in adding additional weight to company B.

The question is how to do that. During the Zürich Project 2017 I introduced the Value Creation Engine. The more aggressive definition of this Value Creation Engine is ROC times GROWTH. A more conservative approach is to add just a few extra points to the ROC for company B. In the latter case you could argue that the Value Creation Engine is a sort of adjusted ROC.

Let's have a look @ the Monro 3 year average CFFO ROC, where the capital base is defined by the net PP&E plus net working capital; approximately 27.6. Dependent on the FCF per share CAGR, I will add some basic points to it. This results in a Value Creation Engine (VCE) of approximately 30.

Valuation

Monro was added to the Intelligent Cloning Portfolio in the second half of 2017, when the stock was trading @ 47 USD (1.55B Market Cap), or 13 times 3 year average operational cash flow, and 19 times 3 year average free cash flow.

If the stock trades @ 25 times free cash flow, 15 years from now, and the compounded annual growth rate (CAGR) of the free cash flow equals 6%, 8%, 10% or 12%, then the company trades @ a market cap of respectively 5.4B, 7.1B, 9.4B or 12.3B USD, 15 years from now.

A market cap of 10B USD, 15 years from now, would correspond to an annual stock price growth rate of 13.2%.

Risks

Competition.

The automotive repair industry in which Monro operates is generally highly competitive and fragmented, and the number, size and strength of their competitors varies widely from region to region. Their primary competitors

include national and regional undercar, tire specialty and general automotive service chains, both franchised and company-operated, car dealerships, mass merchandisers operating service centers and, to a lesser extent, gas stations, independent garages and Internet tire sellers.

Technology.

The demand for their products and services could be adversely affected by continuing developments in automotive technology. Automotive manufacturers are producing cars that last longer and require service and maintenance at less frequent intervals in certain cases. Quality improvement of manufacturers' original equipment parts has in the past reduced, and may in the future reduce, demand for their products and services, adversely affecting their sales.

Integration.

Monro may not be successful in integrating new and acquired stores. Management believes that the continued growth in sales and profit is dependent, in large part, upon the ability to open/acquire and operate new stores on a profitable basis. In order to do so, Monro must find reasonably priced new store locations and acquisition candidates that meet their criteria and they must integrate any new stores (opened or acquired) into their system. Their growth and profitability could be adversely affected if they are unable to open or acquire new stores or if new or existing stores do not operate at a sufficient level of profitability. If new stores do not achieve expected levels of profitability, this may adversely impact their ability to remain in compliance with their debt covenants or to make required payments under their credit facility.

Cordially,

Peter

Peter Coenen
Founder & CEO of The Value Firm®
12 March 2019

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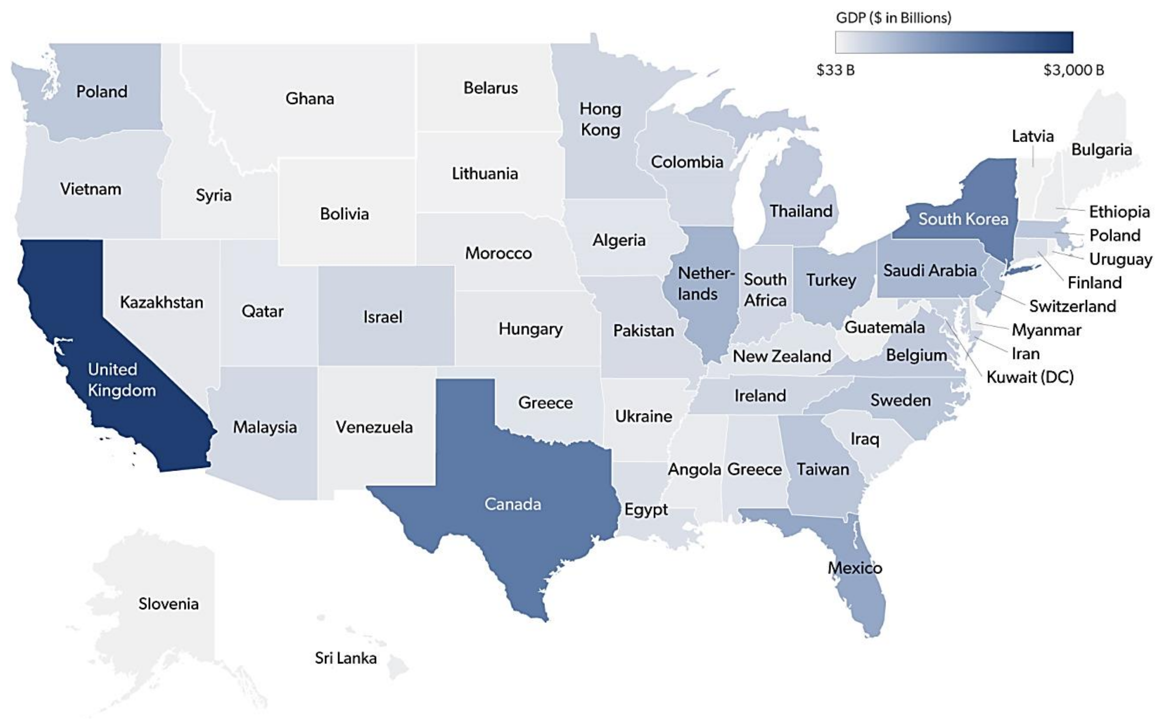
The Value Firm®



The Monro Leadership Team

13 March 2019

Brett T. Ponton- President and Chief Executive Officer (CEO)	Brian J. D'Ambrosia Executive VP and CFO	Evan Naylor Chief Operating Officer	Deborah R. Brundage Senior VP – Chief Marketing Officer	Avi Dasgupta Senior VP and Chief Information Officer	Gerald G. Alessia Senior VP - Tire Merchandising	Maureen E. Mulholland Senior VP – General Counsel and Secretary

Samuel Senuk Divisional VP – Store Operations	Russell W. Welsh, Jr. Divisional VP – Store Operations	Paul Baratta VP – Real Estate	Jeffrey L. Campbell VP - Parts Merchandising, Distribution and Indirect Procurement	Jack Heisman VP – Business Development and Real Estate	Shane L. Nickerson VP – Human Resources

Brett T. Ponton, President and Chief Executive Officer

Brett T. Ponton was named Chief Executive Officer of Monro, Inc. in October 2017. He was appointed to serve as President in August 2017, bringing over 25 years of auto industry and operational turnaround experience to the Company. Mr. Ponton spent over 15 years in executive leadership roles at The Goodyear Tire & Rubber Company and 10 years leading organizations in private equity backed companies.

Most recently Mr. Ponton served as CEO of private equity backed American Driveline Systems, the parent company of AAMCO, where he led a strategic turnaround at the company, leading to a successful sale of the company to private equity sponsor. Prior to A.D.S, Mr. Ponton was CEO of Heartland Automotive, the largest franchise operator of Jiffy Lube locations in North America. He was successful in growing Heartland Jiffy Lube from 390 locations to nearly 600 locations while leading Operational Excellence initiatives, during his tenure, resulting in a successful sale to a private equity buyer.

Previously, Mr. Ponton served as Managing Director, Asia-Pacific of Veyance Technologies, a private equity backed industrial and automotive products manufacturing company, located in Shanghai, China and Melbourne, Australia. While at Goodyear, Mr. Ponton served as Vice President, of Marketing for Goodyear Tires in North America and was also the Vice President & General Manager for Goodyear's Company-owned Retail Division.

Thoughts on StoneCo

The IPO prospectus of StoneCo is great. The only thing I had to do to write this thesis is to put it into context, summarize it (lots of copy and paste, but not copying in this case means probably a lower quality of the thesis) and add some thoughts on valuation. Here is the result.

What is FinTech?

Financial technology (FinTech) brings about a new paradigm in which Silicon Valley's innovative technologies are poised to continue to disrupt and permeate throughout Wall Street's core financial businesses. J.P. Morgan CEO Jamie Dimon warned in his annual letter to shareholders that these Silicon Valley startups are coming to eat Wall Street's lunch. And indeed, FinTech's like Lu.Com, Stripe and One97 have achieved huge success and are actually multi-billion market cap companies.

FinTech is not merely one type of solution. Rather, it is an ecosystem of digital tools designed to serve a multitude of needs. The areas experiencing the greatest activity today are payments, funding, lending, investing, business services and digital currencies. E.g. digital payments have become a mainstay in the life of nearly all consumers.

Recently, Berkshire Hathaway announced $600 million in investments into 2 FinTech companies; StoneCo and PayTM. Obviously, Todd Combs and the Berkshire management see tremendous promise in the future of mobile payments and the FinTech industry as a whole. Ant Financial, Alibaba's finance affiliate controlled by billionaire Jack Ma, agreed to buy a stake in the Brazilian payments firm StoneCo as well.

Aside from Buffett and Jack Ma, another billionaire family is also seeking to increase its stake. Madrone Capital Partners, backed by heirs to the Walmart Inc. fortune, has also indicated it wants to buy more shares. Among other shareholders of StoneCo are 3G Capital Inc -- of billionaire Jorge Paulo Lemann -- and former Brazil central bank chief Arminio Fraga.

Major banks, credit card companies and financial giants have long controlled payments but their dominance looks increasingly shaky. Since 2014, investors have poured $130 billion into ground breaking technologies like Blockchain and mobile payments. Thanks to next generation payment methods that bypass banks and credit cards, the unbanked and underbanked have been increasing their economic activity.

Previously, many financial services firms had no desire to extend their services to the emerging markets' middle class. FinTech firms, however, are uniquely positioned to serve them. Given their highly scalable platforms, adding a middle class banking customer with a few thousand dollars in savings or who requests a loan for a few hundred dollars may still be profitable. In China and India, the number of middle class consumers is growing at 6% per year, compared to just 0.5% growth in developed markets. Globally, the middle class is adding approximately 160 million people each year. There is a huge potential revenue from extending financial services to the unbanked.

Digital payments

The global payments industry is a $100 trillion plus market consisting of large and small companies fiercely competing for retail, cross border transactions, peer to peer services, and e-commerce. Big financial companies like Citi, JP Morgan Chase and Bank of America collect consumer deposits, provide low-cost funds to support loan origination, and facilitate retail and cross border payments. Startups developing Blockchain and smart contracts will redefine the relationship between customers, suppliers, and vendors. MasterCard and Visa are heavily spending to preserve their dominant market share in credit cards. With so much at stake, the category is attracting considerable investment.

The payments industry is experiencing significant transformation because of changing consumer behavior. The industry has moved from traditional checking/savings accounts to seamless "one-click" messenger applications like Alipay, WeChat and PayTM. Payment firms such as Stripe, Adyen and PayTM are disrupting banks, credit card companies and payment processors. Stuck with out of date infrastructure, these incumbents are trying to remain relevant by expanding into adjacent markets, including point of sale and peer-to-peer services. Tech giants like Apple, Google and Samsung all provide cash-less and card-less payment

solutions for consumers at the point-of-sale. Major retail chains are already using their platforms. Big tech's sophistication and considerable financial resources pose a unique competitive threat to legacy financial services providers.

These days even the corner coffee shop needs to offer in-store as well as desktop and mobile ordering options to customers, while accepting physical payment in cash, credit, debit, gift cards, as well as digital payments from mobile wallets on phones and wearables, money transfers from apps, and sometimes even in a variety of cryptocurrencies. Take, for example, the payment methods accepted at Starbucks, according to their website: Gift cards, Starbucks Mobile App, Chase Pay, Apple Pay, PayPal, Visa Checkout, Credit Cards and Cash. All of these forms of payment need to occur instantaneously, while ensuring security, reliability, and integration across the business's other accounting, inventory, and order fulfillment systems. For many firms, offering such a complex web of payments options requires working with third-party FinTech firms that offer point-of sale hardware, cloud-based software solutions, and payments infrastructure to facilitate these transactions. The end result is that payments firms are entrenched as an essential component of retail business operations around the world.

Brazil

Brazil is a geographically vast country, of continental proportions, composed of more than 5,500 cities and 200 million people to date. According to Neoway, there are currently approximately 9 million small and medium businesses in Brazil, battling the difficulties associated with the high cost banking environment and the infrastructure challenges that such a vast geography imposes, while trying to grow their businesses despite these challenges.

Brazil is a large and fast-growing market for financial technology solutions. According to the World Bank, Brazil GDP and Private Consumption Expenditures in 2017 were R$6.6 trillion and R$4.2 trillion, respectively, up from R$6.3 trillion and R$4.0 trillion, respectively, in 2016. According to Statista, retail e-commerce sales in Brazil excluding digitally distributed services and digital media downloads were approximately R$61.8 billion in 2017 and are expected to grow to approximately R$104.8 billion by 2022. According to the World Payments Report 2017, Brazil is the fourth largest market in the world for non-cash transaction volumes. The payments market has continued to grow and demonstrate resiliency to macroeconomic fluctuations in Brazil.

Despite Brazil's large size, its payments market remains less penetrated and has greater growth upside than more mature economies, such as the United States and the United Kingdom.

- Electronic payments volume represented 28.4% of total household consumption in Brazil in 2016. This penetration percentage is lower than comparable measures of 46.0% and 68.6%, respectively, in the United States and the United Kingdom.
- 27.0% of the Brazilian population aged 15 and above had a credit card in 2017, compared to 65.6% in the United States and 65.4% in the United Kingdom.
- In 2017, 17.6% of the Brazilian population aged 15 and above used the internet to pay bills or made online purchases over the previous year, compared to 77.2% in the United States and 80.7% in the United Kingdom.

In the early years, the merchant acquiring market in Brazil was still a duopoly dominated by two payment processing companies owned by the country's largest banks that had exclusive arrangements with the global networks. In 2010, the Central Bank of Brazil and Brazilian antitrust authorities implemented a series of initiatives to create a regulatory framework aimed at fostering a more open and competitive environment.

StoneCo's founders envisioned to help the small and medium businesses in Brazil be more productive and efficient, by leveraging technology, a differentiated approach to service and support, and local proximity. They believed that owning direct distribution is the only way to create a true understanding of merchants' needs, and to be able to respond effectively to those needs by establishing a relationship of trust and transparency.

There is a range of business needs that can be addressed through better technology to make those merchants more productive and profitable. With the roll-out of their Stone Hub strategy, their experience in thousands of cities has enabled them to understand how they can provide better commerce solutions to merchants and act as a partner, introducing the best technologies and solutions that can help them grow and become more competitive.

There are various important trends that are impacting the growth and market opportunity for their services in Brazil:

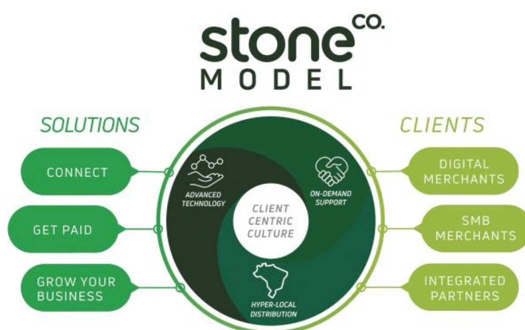
- Increasing Use of Electronic Commerce — Commerce in Brazil is increasingly being transacted through electronic accounts, such as credit, debit, and prepaid cards, eWallets, and mobile devices instead of cash and checks.
- Increasing Shift to Digital Channels — Consumers and merchants are increasingly conducting commerce through digital channels online and through mobile devices.
- Growing Use of Omni-Channel Commerce —As a result of the growing use of electronic commerce and the increasing shift to digital channels, consumers and merchants are increasingly conducting commerce across more than one channel. Businesses are responding to increased consumer spending online and through mobile devices by increasing their e-commerce and mobile commerce capabilities.
- Expanding Use of Technology at the POS —As the costs of technology have decreased in Brazil, access to the internet has increased, and software has become easier to use, merchants are using more solutions, such as smart POS devices, integrated POS terminals, mobile devices, and specialized software applications to run their front-of-house operations and back-office functions.
- Deployment of Technology Services is Changing —As a result of the growing use of omni-channel commerce and the expanding use of technology at the POS in Brazil, service providers are increasingly deploying technology in new ways, including through: (1) cloud-based solutions; (2) integrated software solutions; (3) mobile devices; and (4) third-party applications.
- Deployment of Financial Services is Changing —As a result of these trends, the deployment of financial services is also changing. More financial services are being provided outside of traditional bank branches, such as at the point-of-sale or online, and more financial services are being provided by non-bank firms that are using technology to deliver these services more efficiently and conveniently.
- More Open Regulatory Environment —The regulatory environment for the payments industry in Brazil has undergone significant changes in the past few years due to a concerted effort by the Central Bank and the Brazilian government to foster innovation and promote more open and fair competition. In 2010, the Central Bank and antitrust authorities initiated a series of measures that eliminated the exclusivity of certain vendors and opened up the market to new entrants. Since then, a new regulatory framework has been developed and government authorities have been fostering competition.
- Growing Market in Small and Medium-Sized Cities —The incremental growth of electronic payments in Brazil will be significantly driven by commerce in small and medium cities. According to a 2015 McKinsey report, small and medium cities with populations between 20,000 and 500,000 inhabitants will account for more than 50% of total consumer spending growth in Brazil between 2015 and 2025. This spending growth will be compounded by the continued shift to electronic payments to generate above-market growth rates for electronic payment volumes in Brazil.

The company

StoneCo is a leading provider of financial technology solutions that empower merchants and integrated partners to conduct electronic commerce seamlessly across in-store, online, and mobile channels in Brazil. They have developed a strong client-centric culture that seeks to delight their clients rather than simply providing them with a solution or service. In their initial years, they were inspired by Zappos' approach to customer relationships. One of the first decisions they made relating to the business was to build the customer relationship team in-house, to serve clients of all sizes and channels. Brazil suffers from a general lack of a service mentality and, being entrepreneurs, they understood the sense of urgency that exists and wanted to assure they would not frustrate their clients by having them wait in line or make multiple phone calls to solve a simple issue. This Zappo's type of customer centricity, in their case merchants centricity, which only can be the result of a deeply embedded "customer first" culture, is

very hard to replicate and might turn out to be a very unique competitive advantage.

StoneCo created a proprietary, go-to-market approach called the Stone Business Model , which enables them to control the client experience and ensure that interactions are provided by their people or technology. The Stone Business Model combines their advanced, end-to-end, cloud-based technology platform; differentiated hyper-local and integrated distribution approach; and white-glove, on-demand customer service.



The Stone Business Model is disruptive and has enabled them to gain significant traction in only four years since the launch of their service. In 2017, they were the largest independent merchant acquirer in Brazil and the fourth largest based on total volume in Brazil. In 2017, they became the first non-bank entity to obtain authorization from the Central Bank of Brazil to operate as a Merchant Acquirer Payments Institution. In the same year, they grew their total revenue and income to R$766.6 million, an increase of 74.3% from 2016. They have managed this rapid growth while maintaining high-quality service and obtaining high NPS (Net Promotor Score), a measure of the willingness of customers to recommend a company's products and services. As of August 2018, they had an NPS of 65, the highest NPS among their peers in their key markets in Brazil.

The combination of the various proprietary and vertically-integrated elements of the Stone Business Model are difficult to replicate in full. This provides them with strong protective barriers to entry which may make it difficult for competitors to replicate the value proposition.

They served over 200,000 active clients in Brazil as of June 30, 2018, including digital and brick-and-mortar merchants of varying sizes and types, although their focus is primarily on targeting the approximately 8.8 million small-and-medium-sized businesses, or SMBs. They also served over 95 integrated partners as of June 2018, which use or embed StoneCo's solutions into their own offerings to enable their customers to conduct commerce more conveniently in Brazil. These integrated partners include global payment service providers, or PSPs, digital marketplaces, and integrated software vendors, or ISVs.

The balance sheet

StoneCo has $1.6 billion in total liabilities compared to $1.84 billion in total assets. StoneCo clearly uses a significant amount debt to boost returns, as it has a debt to asset ratio of 0.9. StoneCo reported negative cash flow over the past several quarters.

The Stone Technology Platform

StoneCo developed and operate the Stone Technology Platform which brings together an integrated suite of advanced technologies designed to provide differentiated capabilities and seamless omni-channel commerce client experiences in a more secure, all-in-one environment. The platform was developed to operate in a completely digital environment and enables them to develop, host, and deploy their solutions, conduct a broad range of transactions seamlessly across in-store, online and mobile channels, manage the distribution hubs, and optimize the client support functions—all in a fully-digital, fully-integrated, and holistic manner. Given its digital DNA and cloud-based architecture, the platform is agile, reliable, and scalable with fast processing speeds and a broad range of capabilities that can be maintained and expanded relatively easily and cost-effectively. The advanced nature and flexibility of the platform enables them to provide a number of technologies and benefits, which provides operating advantages, including the ability to:

- Connect and integrate easily with their clients—StoneCo develops and provides a range of powerful connection and integration technologies, user-friendly client portals, and convenient reporting tools that are simple and easy to use. These were designed to eliminate the technical complexity and difficulty that many clients and partners typically encounter when trying to conduct electronic commerce, and they are designed to require minimum effort to implement by their clients or

personnel. StoneCo has publicly published their proprietary APIs, which provide a set of programming instructions and standards to access and connect to their systems. StoneCo has also developed a set of SDKs, which provide software development tools, code, and documentation to help third-party developers create applications on their platform. Together, these help their clients connect to their systems easily and make StoneCo a partner of choice for many ISVs, PSPs and marketplaces seeking to do business in Brazil.

- Provide seamless omni-channel experiences — StoneCo designed the platform to enable merchants to conduct commerce and reconcile data seamlessly across various sales channels in a single, brick-and-motar store or multi-location environment, online through an e-commerce or mobile commerce enabled website, or inside of a mobile application. This provides a competitive advantage that appeals to merchants and integrated partners who are increasingly operating across more than one channel and are looking to provide their consumers with a streamlined shopping experience.
- Implement and deploy new capabilities — StoneCo utilizes their digital, cloud-based architecture and integration capabilities to implement and deploy new features and technologies to their clients and integrated partners. The technology platform provides the flexibility to do this easily without the need for expensive upgrades, complex conversions, or lengthy service disruptions. This enables them to provide their clients with the latest functionality in a quick and frictionless process. In addition, the architecture and infrastructure are designed for rapid scalability, which enables them to expand the capacity and manage utilization efficiently and cost-effectively.
- Utilize AI and Machine Learning Technology — The digital DNA and cloud-based architecture of the platform enables them to generate, capture and aggregate a vast array of data across the various business activities. For example, they have developed and deployed machine-learning technologies throughout the enterprise to leverage this data to improve the speed, functionality, and quality of many of their services and operations. For example, they use AI to: (1) predict merchant behavior and enable proactive action by their sales teams; and (2) increase the accuracy of their fraud management. In addition, they use AI in many of the internal processes to create better efficiencies and performance. For example, they use AI to: (1) improve the management and interpretation of the operational KPIs; and (2) better predict cultural fit, job satisfaction, and long-term performance of job candidates during the talent recruitment and retention processes.
- Operate at Low Marginal Costs —The architecture and various operating advantages of the Stone Technology Platform enables them to run the business increasingly efficiently and with lower incremental transaction costs.

Payments Volume and Processing Fees

StoneCo derives a substantial part of their revenue from fees earned as a percentage of the TPV (total payment volumes) of their clients. Their TPV is primarily driven by:

- Growth of volume within their active client base. As active clients grow their transaction volume, the TPV will also grow. Their active clients are positioned in attractive growth market segments. The focus is primarily on targeting the approximately 8.8 million SMBs in Brazil, which have historically been underserved. In addition, despite the large size of Brazil's economy, its Payments market, particularly among SMBs in small and medium cities, remains less penetrated and has greater growth upside than more mature economies, such as the U.S. and the U.K. StoneCo also targets the e-commerce market, which is expected to grow faster than the overall Payments markets in Brazil.
- Growth of their active client base. Growth of their active clients is driven by (i) growth in the number of merchants resulting from openings and ramp-up of Stone Hubs; (ii) growth in the number of integrated partners in specific verticals and niche market segments; (iii) growth in their e-commerce merchant base.

The quarterly TPV grew 192% in a two-year period, from R$6.3 billion for the quarter ended June 30, 2016 to R$18.5 billion for the quarter ended June 30, 2018, and the number of active clients expanded 216% over the same period, from approximately 63,500 active clients as of June 30, 2016 to approximately 200,600 active clients as of June 30, 2018.

A significant part of the net revenues is generated through fees they charge for providing end-to-end processing services using the Stone Technology Platform, which include the authorization, capture, transmission, processing and settlement of transactions. In the case of e-commerce merchants, they may additionally charge a fixed fee per transaction to provide gateway services.

Deep expertise and track record

StoneCo's founders and several members of their management team have deep expertise in developing and delivering disruptive financial solutions. The team has a proven track record of founding, investing, and scaling several successful financial technology businesses in Brazil, including:

- Pagafacil —an e-commerce escrow service, which was sold to private investors in 2004;
- NetCredit —a provider of consumer credit solutions, which was sold to BNG Bank in 2009;
- Braspag —an e-commerce payments solution provider, which was sold to Grupo Silvio Santos in 2009;
- PGTX —a payments technology company, which was sold to Pontual in 2014;
- Sieve Group —an e-commerce price comparison service, which was sold to B2W in 2015 and
- Moip —an e-commerce payments facilitator, which was sold to Wirecard in 2016.

Their board of directors is comprised of highly successful senior executives that combine strong global operating, financial, and regulatory experience with deep expertise in the financial services, payments, and technology industries. In addition, StoneCo has attracted a strong base of world-class investors, many of whom have been key strategic advisors to the company and have consistently increased their investment in the group over prior capital rounds. The mix of the entrepreneurial, executive, board, and shareholder experience and expertise provide a key competitive strength for the company.

André Street is the Chairman of the board of directors. He has held the position of member of the board since 2014. In 2000, he founded Pagafacil.com, a company specialized in internet payments in Brazil that partnered with websites such as I-Bazar, Mercadolivre, Lokau.com and Arremate. In 2005, he founded Braspag Tecnologia Em Pagamentos, a service provider of payment solutions in Latin America, where he served as CEO until 2009, when the company was sold. In 2007, he also founded Netcredit Promoção de Crédito S.A., a consumer credit company that geared towards facilitating business growth by offering extended payment terms and emphasizing digital credit approval processes. Mr. Street is a founding partner of ACP Investments Ltd – Arpex Capital (formed in 2011), a company focused on investing in e-commerce technology companies in Latin America and in the United States. While at Arpex, he founded StoneCo Ltd., the issuer company, controller of Stone Pagamentos S.A. and Mundipagg Tecnologia em Pagamentos S.A., two of their subsidiaries. Between 2012 and 2015 he had indirectly controlled Sieve Group Brasil Tecnologia S.A., a holding company that was owner of several technology companies, sold in 2015. He also served on the board of directors of B2W Companhia Digital S.A. from 2015 to June 2018 and currently serves on the board of directors of Lojas Americanas S.A. In 2010, Mr. Street completed the Owner President Manager Program at Harvard Business School.

Thiago Dos Santos Piau is the Chief Executive Officer, a position he has held since 2017. Prior to 2017, he was their Chief Operations Officer and prior to 2016, he was the Chief Financial Officer. He is a partner at ACP Investment Ltd. – Arpex Capital, where he was responsible for the definition of the business strategy, investment structuring, merger and acquisition transactions and oversees the management of portfolio companies. In 2011, he founded Paggtaxi, a company that facilitated the payment of taxi rides through a mobile app and credit card machines, where he served as a partner until 2013. Mr. Piau conducted studies in mechanical engineering at Universidade Federal do Rio de Janeiro from 2007 to 2011 and participated in the Key Executive Program at Harvard Business School in 2013. He also participated in the Owner President Manager Program at Harvard Business School in 2018.

Growth

StoneCo's distribution is a key competitive strength that will enable them to expand their footprint and market penetration and continue to extend the reach of their business. They intend to continue to:

- Grow the base of Stone Hubs —As of June 30, 2018, they had nearly 180 operational Stone Hubs across Brazil and expect to continue to launch new hubs to increase their coverage and penetration of the market. The strategy of targeting underserved, small-and-medium sized cities, combined with their speed and agility, provides StoneCo with a significant growth opportunity. Following the development of the Stone Hub, they have established highly-scalable, plug-and-play processes that enable them to deploy new hubs faster and more effectively, with more efficient hiring, training, and selling.
- Grow the base of Integrated Partners —As of June 2018, they had over 95 integrated partners, such as PSPs, marketplaces, and ISVs. These integrated partners represent an important growth channel for StoneCo to capture more e-commerce and software-integrated payment volumes. StoneCo expects to continue to leverage their powerful connectivity and integration capabilities, including the Mundipagg gateway and Pagar.me PSP platform, to grow their base of integrated partners and help their existing clients grow their businesses.
- Sell additional solutions to their clients —As in-store merchant locations continue to become digitalized, the broad suite of solutions and their omni-channel commerce capabilities provide StoneCo with significant opportunity to sell additional existing solutions into their client base. StoneCo intends to leverage the strong relationships and distribution capabilities provided by their Stone Hubs to sell additional solutions to their merchant base with a view to minimizing incremental acquisition costs.

StoneCo intends to develop new solutions and capabilities for their current client segments to better serve their clients and further empower them to grow their businesses, such as:

- Digital Banking Solutions —StoneCo is developing a suite of digital banking solutions designed to enable their clients to conduct financial transactions, receive and remit funds, issue boletos, pay bills, and integrate their enterprise financial data in a more efficient, streamlined, and cost-effective manner than traditional bank accounts.
- ERP Software —StoneCo is deploying ERP software to help merchants in the food and beverage industry manage and integrate their point-of-sale transactions with their front-of-house functions and back-office operations more effectively. They also aim to identify opportunities to develop and deploy ERP software into other industry verticals.

And StoneCo intends to develop new solutions and capabilities for their new client segments, to address new business opportunities that leverage their technology, solutions and distribution, such as Micro-Merchant Commerce —they are deploying an independently branded easy-to-use, out-of-the-box, and cost-effective solution, which combines point-of-sale technology with their payment acceptance services and a fully integrated digital wallet account and bank card to help the approximately 5.5 million micro-merchants in Brazil, according to Neoway data as of June 2018, who may not need all of the advanced functionality of the standard offerings, to run their businesses more effectively.

StoneCo intends to enter new markets. The Stone Business Model is well suited to serve clients in other markets where their technology, solutions, and support model can continue to disrupt traditional vendors and legacy business models. Opportunity exists in:

- New Sectors —They are exploring new complementary business opportunities in adjacent sectors, such as digital banking and vertical-specific software solutions. In the future, they may selectively expand into other sectors where they see an opportunity to leverage their capabilities to provide a differentiated value proposition for clients, such as CRM solutions and loyalty programs.
- New Geographies —They are also expanding their geographic footprint by growing the base of Stone Hubs across Brazil. In the future, they may also seek to grow their business by selectively expanding into new international

markets where they can leverage the Stone Business Model .

Competition

The Brazilian payments industry is highly competitive and fast-changing. StoneCo faces competition to acquire merchants from a variety of providers of payments and payment-related services. Primary competitors include traditional merchant acquirers such as affiliates of financial institutions and well-established payment processing companies, including Cielo S.A., a company controlled by Banco Bradesco S.A. and Banco do Brasil S.A., Redecard S.A., a subsidiary of Itaú Unibanco Holding SA, Getnet Adquirência e Serviços para Meios de Pagamento S.A. (Santander Getnet), a subsidiary of Banco Santander (Brasil) S.A. Other competitors include other payment processing companies, such as PagSeguro Digital Ltd., First Data Corporation, Global Payments—Serviços de Pagamentos S.A., a subsidiary of Global Payments Inc., Banrisul Cartões S.A.(known as Vero), a subsidiary of Banrisul S.A., Adyen B.V. and SafraPay, a unit of Banco Safra S.A. StoneCo also faces competition from non-traditional payment processors that have significant financial resources and develop different kinds of services, including gateways, PSPs, other reconciliation providers and ERPs. Other means of payment, both digital and traditional, including cash, checks, money orders and electronic bank deposits or transfers, compete indirectly with their products and services.

The most significant competitive factors in this segment are price, brand, breadth of features and functionality, scalability and service capability. While competitive factors and their relative importance vary based on the size, industry and focus of each merchant, StoneCo seeks to differentiate from their competitors through their disruptive business model. And interestingly enough, Brazil's own internal regulations mean that outside FinTech companies like PayPal will not be able to easily muscle in and compete.

Risks

For a comprehensive risk assessement, please look at section "risk factors" (page 22) of the IPO prospectus.

- The first risk is fierce competition (previous paragraph).
- The second risk relates to the rapid developments and change in the industry. This market is characterized by rapid technological change, new product and service introductions, evolving industry standards, changing client needs and the entrance of nontraditional competitors. In order to remain competitive and continue to acquire new merchants rapidly, StoneCo is continually involved in a number of projects to develop new services or compete with these new market entrants, including the development of mobile phone payment applications, e-commerce services, digital banking, ERP, digital wallet account and bank card, prepaid card offerings, and other new offerings emerging in the electronic payments industry.
- And the third risk relates to regulation. Their business is subject to Brazilian laws and regulations relating to electronic payments in Brazil. Pagar.me has applied to the Central Bank to be licensed as a payment institution, and is awaiting such Central Bank approval. While Pagar.me is permitted to continue operations as a payment institution pending the outcome of the approval process, the failure to eventually obtain such approval would have material adverse effects on the business. In addition, Pagar.me currently operates as a payment scheme settlor pursuant to Central Bank license exemption, and depending on its growth in volumes processed, will be subject to the applicable regulations to operate as a payment scheme settlor.

Valuation

StoneCo is by no means a classic low risk value stock with a huge margin of safety. Actually, it's the prototype of a high risk growth stock. It probably will be a bumpy road for the StoneCo stock, especially the first few years, with lots of risks that can materialize. StoneCo is currently trading @ a market cap of 6.5B USD. So is this company going to double, triple, quadruple or even more? Well, I just don't know.

Many times, analysts project companies like these to grow @ double rate digits and often they are wrong. Only 10 percent of the high growth companies maintain 20 percent real growth 10 years on. But there are indeed

exceptional growth stocks, e.g. Amazon, Verisign, Nvidia and Constellation Software. And it is not exceptional that these companies trade @ 20 to 25 times EBITDA.

Valuing companies like StoneCo, early in the life cycle, is difficult, partly because of the absence of operating history. Like Buffett, Munger and Klarman, I also believe that valuations based upon EBITDA multiples in general don't make sense at all. You should avoid that, as much as possible. The traditional value investor critique from Buffett, Munger and Klarman is simple and correct: it isn't actually cash flow because it excludes necessary expenses and capital reinvestment.

But there are exceptions. John Malone, faced with the capital intensive and competitive needs of the early cable industry, was likely the first to introduce EBITDA to Wall Street. If companies create value, e.g. gaining market share, without profits, the best attempt to measure this "yet unprofitable value creation" might be EBITDA. The same counts for companies early in their lifecycle and companies that come into existence from a special situation, like spinoffs. For these companies, net income, or other measures, do not reflect the value that might be accumulated or earned. EBITDA might give a better performance picture when traditional metrics are negative.

Let's suppose that StoneCo will be one of these exceptional companies with a consistent growth rate of 20% or even more over 10 years and let's assume that the EBITDA of StoneCo equals 250M USD soon and take that as the starting point. Then the EBITDA 10 years from now approximately will be 1.5B USD. If by then the stock trades @ 20 to 25 times EBITDA, the company will actually trade @ a market cap of approximately 34B USD. The stock currently trades @ 6.5B USD. You could argue that the stock has the potential to become a 5 to 6 bagger.

The question is if StoneCo will be one of those elite long term growth stocks. Time will tell. And once again, obviously Todd Combs and the Berkshire management see tremendous promise in the future of mobile payments. There is research out there suggesting that the annual global growth rate of mobile payments 2016 – 2021 is 52% and Brazil is just scratching the surface of this trend.

Cordially,

Peter

Peter Coenen
Founder & CEO of The Value Firm®
1 December 2018

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Veritiv Corp

Recommendation: Long

Veritiv is a small cap (631M USD) with big cap revenues (8B USD). Multibagger potential.

EXPECTED RETURN	TIMEFRAME	POSTED
142.7%	2 Years To 5 Years	6/30/2018

Author: Peter Coenen

Posted While At: The Value Firm BV

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About Peter Coenen

The Value Firm® is a classic value investing company inspired by the thinking and teachings of investing legends like Warren Buffett and Seth Klarman. The company is based in the greater Amsterdam area. The company offers investment partnerships (fund management, separately managed accounts) based upon the original Buffett Partnership principles.

Veritiv Corp

Asset Class: **Equity** Symbol: **VRTV:US** Submitted: **6/30/2018** Updated: **7/2/2018**

BY:
Peter Coenen

CURRENTLY AT
The Value Firm BV

COMMUNITY RATING:
6 VOTES PERCENTILE: **60%**

Veritiv is a small cap (631M USD) with big cap revenues (8B USD). Multibagger potential.

Return Performance

RETURN TO DATE:	-2.1%
EXPECTED RETURN:	142.7%
IRR:	N/A
RETURN VS. BENCHMARK: *(S&P 500)*	-0.8%

Pricing Details — LONG

RECENT PRICE:	39.15 USD *7/03/18 at 11:59PM*
TARGET PRICE:	95.00 USD
INITIAL PRICE:	40.00 USD *7/02/18 at 12:00AM*
CLOSING PRICE:	N/A

ASSET CLASS: Equity

SITUATION: Deep Value

TARGET ALLOCATION: 5% - 10%

CATALYSTS:

TIMEFRAME: 2-5 Years

Fundamentals

CURRENCY	United States Dollar
52 WK. RANGE	22.55 - 43.85 USD
MARKET CAP	630M USD
EV	1.72 Billion
TOTAL CASH	71 Million
TOTAL DEBT	1.16 Billion
BOOK VALUE PER SHARE	34.03
THREE MO. AVG. DAILY VOLUME (USD)	2,576,010
SELLSIDE CONSENSUS	2.33

Mutiples/Ratios

LTM P/E	-22.76
FORWARD P/E	9.46
EV/EBITDA	13.85
EV FCF	68.72
EV SALES	0.20
PRICE BOOK	1.15
FCF YIELD	0.04
DEBT BOOK	2.13
DIV YIELD	N/A

Additional Data

SECTOR	Industrials
INDUSTRY	Capital Goods
COUNTRY	United States
REGION	North America

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Thesis

Summary

- Given their competitive business model, their unmatched national supply chain, their exceptional customer base, their sales force and their world class relationships with both their suppliers and customers, you could argue that the barriers to entry into this business are very high. Veritiv is the market leader in all of their segments and there is no one in the industry offering the full suite of products that Veritiv does.
- The Veritiv business will change materially over the course of time. In the long run approximately 95% of the adjusted EBITDA will be comprised of the packaging & services business (80%) and facility solutions (15%). The packaging & services market is poised to experience steady growth, much of it closely tight to the ongoing boom in the fast growing e-commerce strategy across major North American markets.
- Currently, 30 June 2018, the stock trades @ 1.17 times book, 3.5 times adjusted EBITDA and @ a price-to-sales ratio of 0.1. Veritiv is a small cap (631M USD) with big cap revenues (8B USD). Even if things get worse and revenues decline 50%, it is still a 4B USD revenue company. With a moderate P/S ratio of 1 you could argue that this company has the potential to become a 4B USD market cap company. Baupost (Seth Klarman) owns 24% of the company.

The balance sheet

As of December 31, 2017, Veritiv had approximately $934.8 million in total indebtedness, reflecting borrowings of $897.7 million under the asset-based lending facility (the "ABL Facility"). The 2017 debt-to-equity ratio is 2. The current ratio is 2.33, the quick ratio is 1.45.

The business model

I would like to spend some time with you on the Veritiv business model (slide 8 of Veritiv strategy & optimization presentation) and what that means in terms of

barriers to entry. It is a simple business model. Veritiv sits between the manufacturer and the customer. The value Veritiv brings to the manufacturer is reach to the customer base. They have over 1900 sales professionals, who have those connections and understand the markets.

Veritiv also has an unmatched and very effective national supply chain and that enables them to reduce their costs, to serve approximately 170 distribution centers (and there is still room for optimization), 20 million square feet of warehouse space, their own 1000+ trucking fleet and 13 packaging design centers that actively support their packaging business today. Veritiv buys over 7B USD worth of products and services to support, not only to their manufacturing supply chain, but to their customer supply chain as well.

From a customer standpoint the value Veritiv brings is a full product line, which consequently reduces their costs of supply chain and reduces their complexity. Veritiv can support large, national customers, because they are one of the few with a broad national network. Veritiv provides more than just products to their customers. They also provide total solutions and services in areas where customers chose not to invest or don't have the capabilities themselves in general.

Veritiv has an exceptional customer base. They do business with more than half of the Fortune 500. No one customer accounts for more than 3% of their sales, which leads to a high quality working capital and therefor strong asset backed lending facility, with very low interest rates. Veritiv has world class relationships

with their suppliers and their customers. Through design solutions, sourcing, and delivery, Veritiv provides significant value to both suppliers and customers.

Obviously, given their business model, their unmatched national supply chain, their exceptional customer base, their sales force and their world class relationships with their suppliers and customers, you could argue that the barriers to entry into this business are very high. Veritiv is the market leader in all of their segments and there is no one in the industry offering the full suite of products that Veritiv does.

The strategy

Veritiv's strategy is to invest in the higher growth, higher margin segments packaging & services, to protect the leading market positions in print & publishing and facility solutions, and optimize (post integration activities 2018 – 2020) the supply chain, support (back office) services and working capital. Important to know is that the Veritiv business materially will change over the course of time. Slide 25 of the strategy & optimization presentation clearly shows that in the long run approximately 95% of the adjusted EBITDA will be comprised of the packaging & services (80%) and facility solutions segments (15%). If you want to understand the future of this company, you have to understand the key drivers for the packaging & services segment, the competitive dynamics of this market and the specific competitive advantages Veritiv has, to become an even more dominant player in this market.

The global packaging industry is a growth business. And it is a very stable business. The packaging business will be around and doing well 25 years from

now. CEO Mary Laschinger expects that Veritiv will be able to grow at least at GDP type levels, perhaps even better. I believe that's a very conservative statement. There is increasing demand for packaging due to a shift in consumption behavior across the globe as a result of a growing middle class as well as a growing elderly population. Today's consumers are looking for three main qualities in their packaged products, especially when it comes to food product packaging: convenience, ease of use, and ease of transport. Retailers are seeking similar qualities, in addition to packaging that provides longer shelf-life. With greater demand comes greater market opportunity. The global packaging market is poised to experience steady growth, much of it closely tight to the ongoing boom in the fast growing e-commerce strategy across major North American markets. It's estimated to reach 1 trillion USD by 2020.

Veritiv is already the market leader of the growing packaging market in North America and will become more and more dominant as a result of their unmatched competitive advantages and their power to lead this market with customer tailored innovations & smart acquisitions. On September 2, 2017 Veritiv completed the acquisition of All American Containers, a family-owned and operated leading distributor of rigid packaging, including plastic, glass and metal containers, caps, closures and plastic pouches. All American Containers had trailing twelve month revenues of approximately 225M USD as of June 30, 2017. The company has approximately 260 employees and more than 1 million square feet of warehousing. Their vast global reach and technical expertise allow them to provide a worldwide, high quality manufacturing network. Over the past two decades, All American Containers has experienced significant year-over-year growth.

Through this acquisition, Veritiv is gaining important expertise in rigid plastic, glass and metal packaging that complements their industry-leading portfolio of packaging products and services. The markets they serve are Cosmetics & Personal Care, Food & Beverage, Household & Industrial Chemical, Pet & Vet, Sports Nutrition, Pharmaceutical, Nutraceutical, & Supplements, Wine, Beer & Spirits and Custom Packaging. I wouldn't be surprised at all if Veritiv continues to roll up its smaller peers in the industry and to acquire more high growth, high margin businesses.
Nowadays, leading brands are leveraging packaging and supply-chain efficiencies as a competitive advantage. By making packaging part of the product development process and implementing strategic improvements throughout the supply chain, businesses around the world are boosting their top and bottom lines through strategic packaging. And Veritiv aims to be at the forefront to help these businesses thrive. Once Veritiv is deeply ingrained in the supply chains of these S&P 500 companies, it will be very difficult for these companies to switch to competitors of Veritiv, especially knowing that there are hardly any competitors offering these total services solutions that Veritiv does. And that, just might offer Veritiv the pricing power needed to grow their profitability even beyond the long term estimate of 5 to 6 % a year over the upcoming 20 years.

Margin of Safety

Investing in spin-off companies is not easy. Veritiv seems to offer some benefits that usually characterize spin-offs. In addition, due to merger transaction that was implemented immediately after the spin-off, the misunderstanding and under-appreciation of company's potential by the market is even higher. Attractive valuation, significant opportunities for growth, synergies, and cost

savings due to a large size of the combined business, and presence of a famous value investor with a significant stake in the company make Veritiv an attractive investment target for a long-term, value investor.

Currently, 30 June 2018, the stock trades just above book, 3.5 times adjusted EBITDA and @ a price-to-sales ratio of 0.1. Veritiv is a small cap (631M USD) with big cap revenues (8B USD). It's by no means a value trap, since the future core business of the company, packaging & distribution, will grow at US GDP level at a minimum for a very long time. You will not lose money on this investment. Even if things get worse and revenues decline 50%, it is still a 4B USD (packaging & delivery) company. With a moderate P/S ratio of 1 you could argue that this company has the potential to become a 4B USD market cap company.

I believe that the long-term business potential of Veritiv is mispriced. My best estimate is that the long-term growth rate of this company will be consistent and low. But very consistent. I think it's fair to say that in a conservative scenario Veritiv will grow the upcoming 20 years in a range of 4 to 5 % and in an optimistic scenario 6 to 7%. If you do the math, based upon the current adjusted EBITDA of approximately 180M USD, you will find out that Veritiv will end up with an adjusted EBITDA 20 years from now that will justify a market cap by then of 6 to 7B USD. Obviously, it is highly uncertain at what adjusted EBITDA multiple Veritiv will trade by then, but for this calculation let's assume that there will be a time that Veritiv trades at 12.5 times adjusted EBITDA. And that corresponds to a stock price CAGR of 14 to 15% over the next 20 years.

The global packaging market

The global packaging market is expected to show a steady growth and reach a global revenue of around 1 trillion USD by 2020. Packaging has become an integral part of a products lifecycle and has outgrown its traditional usage limited to protection. Sustainability, environmental concerns and the demand to keep the product quality high has brought a major shift in the packaging industry making it smart and active. Internet of Things (IoT), nano technology, biotechnology, bio-based plastics and many such technological and product innovations have propelled the growth of global packaging market. The growing e-commerce and online retailing fueling the growth of paper board packaging market. Flexible packaging is anticipated to grow in the food and beverage industry by improving the barrier layers and more non-reactive packaging.

The global packaging market is also expected to show an upward trend with companies opting for green packaging solutions. Recently, McDonald's announced to source 100-percent of its fibre-based packaging requirement from recycled or certified sources by the end of 2020. Coca-Cola is one major name looking to also address the negative connotations of packaging in plastic with the development of its 100% bioplastic Plant Bottle 2.0. The soft drinks multinational plans to have completed a global switchover to these by 2020.

Food and beverages packaging industry is estimated to be the largest market in terms of application. The market expected to grow owing to the rising demand for packed foods, frozen foods, packed beverages etc. High awareness and concerns over the state of packaged food and beverages has boosted the growth of foods and beverages packaging market. Innovations in digital printing, technological advancement in smart and active packaging has brought major

shift in the product range available in the market. Pharmaceuticals market will also witness an augmented growth with growing lifestyle diseases and strict government rules for packaging of medicines.

The Asia Pacific region is expected to be the fastest growing market as all developing countries fall into this region such as India, China, Japan and Korea. Developing countries lead this market owing to its economic development, open market, improvement in standard of living, industrialization etc. North America is estimated to be the largest market with growing demand for packed and frozen foods. The demand for packaging is based on different trends adopted in different regions. In emerging economies investment in housing and construction, growing retail outlets and demand in cosmetics sectors are factors that have fueled the growth of this market. In developed countries the trends of smaller households, smaller and convenient packaging and growing men population attracted towards beauty and health products are factors that have powered the growth of this market.

The rise of online retail has been one consumer shift that is responsible for much of the recent growth in the board packaging market, an application where it is the dominant format. Emerging markets such as China and India shop online as frequently as more developed countries, and consumers increasingly prefer digital shopping over physical retail experiences. This provides several key aspects of board packaging that are changing. For example 30–40% of online purchases are returned, meaning that their packaging must be easily opened and resealed. In the future, e-commerce will likely see even further focus on tailoring board packaging to maximize the end-user experience.

The Veritiv packaging business

Veritiv works directly with customers to identify and implement packaging solutions that deliver in both form and function. Their packaging specialists are experts at discovering untapped efficiencies in designing, sourcing, and delivering standard and custom packaging processes for customers across a range of industries – including consumer packaged goods, fulfillment, food processing, retail, and manufacturing (slide 19 of the strategy & optimization presentation).

Veritiv packaging solutions are not restricted to one particular substrate – they evaluate every project with a material-neutral approach. They have long-standing relationships with box plants, sheet plants, and other international material sources, providing them with access to a wide range of material inputs. Their packaging solutions span across food-grade packaging, industrial packaging, point-of-sale displays, and shipping supplies. Their exclusive TUFflexTM line of packaging essentials delivers enduring performance, maximum efficiency, and unmatched value. They also sell and distribute single function and fully automated packaging equipment. In addition, they offer assembly and fulfillment services, such as kitting – which help customers manage seasonal spikes, new market testing, and promotions.

Packaging optimization extends through their Veritiv Packaging Design Network, where an experienced team of designers, engineers, and marketers provide in-house expertise for custom improvements in cost and waste reduction, logistics, structural and graphical integrity, and testing processes.

Key question, of course, is: are they able to execute on their commitments and to deliver? And the answer to that question, I believe, is a convincing “yes”. On October 18, 2017, Veritiv has been named a 2016 Nestlé North America Procurement "Supplier of the Year." This prestigious award is designed to recognize and formally acknowledge suppliers who exemplify outstanding performance and execution in the key areas of innovation, customer service, operations, quality, cost, and value creation.

In order to achieve this award, suppliers must exceed Nestlé's high standards in performance as assessed via a rigorous business review process. Veritiv not only achieved the highest scoring in the business review process but also successfully executed several innovative ideas leading to value creation for both Nestlé and Veritiv. The Veritiv team was specifically recognized for their dedication and support in the design and management of Nestlé's corporate marketing paper program. Veritiv's support in driving chain of custody, minimizing risk management and delivering cost savings has shown a strong business impact for Nestlé and will continue to grow in other areas of the organization. What this basically means is that Veritiv not only outperforms their competitors. They crush them. No competition in sight!

Risks

For a comprehensive risk assessment, please look at section 1A of the Form 10-K. The top 3 risks:

1. The industry-wide decline in demand for paper and related products could have a material adverse effect on their financial condition and results of operations. Assessment. The industry-wide decrease in demand for paper and related products in key markets Veritiv serves is a fact. This

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trend is expected to continue. I am convinced that the growth in the packaging segment will offset future losses in the print business.

2. The loss of any of their significant customers could adversely affect their financial condition. Assessment. Their ten largest customers generated approximately 9% of their consolidated net sales for the year ended December 31, 2016, and their largest customer accounted for approximately 3% of our consolidated net sales in that same period. The loss of significant customers could affect their financial condition, but with minor impact. And new customers in the packaging segment will offset these losses, I believe.

3. Risks relating to the Spin-off and Merger. They may not realize the anticipated synergies, cost savings and growth opportunities from the Merger. Assessment. The risk over here is that, even if they are able to integrate the xpedx and Unisource businesses successfully, this integration may not result in the realization of the full benefits of the growth opportunities and cost savings and other synergies that they currently expect from this integration within the anticipated time frame. Up until now, Veritiv has consistently exceeded synergy guidance and I believe they will continue to do so. There might be a delay in fully realizing anticipated synergies, but eventually they will.

Comments

Glenn Tongue
PORTFOLIO MANAGER AT DEERHEAVEN CAPITAL MANAGEMENT
JUL 01, 2018

Thanks for the write up. Is there amazon risk here?

Peter Coenen
DIRECTOR AT THE VALUE FIRM BV
JUL 02, 2018

Your question is astute. In general you could argue that if Jeff Bezos sets eye on any industry, all companies in that industry are "under pressure". The question is if Amazon will set eye on the Veritiv packaging business. In my thesis I outlined the very high barriers to entry and my best guess is that Amazon will hunt for industries and companies that better fit its current "web services & customer empowerment" strategy and with easier barriers to entry. The future of Veritiv lies in the "packaging design and supply chain optimization business" and that is, I believe, a completely different ball game.

And it is a game that will be very hard to replicate. Most people underestimate how hard it is to become the Nestlé North America Procurement "Supplier of the Year". As described in the thesis Veritiv achieved this award in 2016. In the latest annual report of Amazon, there is this nice story about how hard it is to learn to do a perfect free-standing handstand. And the same holds for the Veritiv business. It's not easy to replicate. Here is the little story:

"A close friend recently decided to learn to do a perfect free-standing handstand. No leaning against a wall. Not for just a few seconds. Instagram good. She decided to start her journey by taking a handstand workshop at her yoga studio. She then practiced for a while but wasn't getting the results she wanted. So, she hired a handstand coach. Yes, I know what you're thinking, but evidently this is an actual thing that exists. In the very first lesson, the coach gave her some wonderful advice. "Most people," he said, "think that if they work hard, they should be able to master a handstand in about two weeks. The reality is that it takes about six months of daily practice. If you think you should be able to do it in two weeks, you're just going to end up quitting."

But if Amazon decides anyhow to enter this business, the best way to make a huge leap is to buy Veritiv. And that would make Veritiv a very compelling acquisition target.

Let me take this opportunity to give you an idea where Veritiv is going and I will do that by describing the developments in their new Missisauga facility, one of their largest design centers in North America.
In the past, packaging was often considered a last-minute process before products went to market. It was part of shipping, plain and simple. Nowadays, leading brands are leveraging packaging and supply-chain efficiencies as a competitive advantage. By making packaging part of the product development process and implementing strategic improvements throughout the supply chain, businesses around the world are boosting their top and bottom lines through strategic packaging. And Veritiv aims to be at the forefront to help these businesses thrive.

Their new Mississauga facility—part of Veritiv's network of 14 DCs across Canada and one of their largest in North America—is making it easier than ever for customers to solve their most pressing packaging and business challenges. The new DC—housing approximately 410,000 square feet of warehouse space and another 42,000 square feet of office space—gives Veritiv customers access to packaging and facility supply products and services, along with paper and print offerings, from one of the largest inventories in the country, all sourced from best-in-class suppliers. While this facility's massive inventory is impressive, its real differentiating value lies in the packaging experts, sales representatives and customer support specialists who collaborate with customers to develop and implement innovative packaging solutions.

The new Mississauga facility is the birthplace of new ideas and innovations, where Veritiv works with client businesses to understand their goals and objectives then align the right experts to develop an effective solution.
• Veritiv's corrugated specialists evaluate a customer's current packaging to provide guidance for more effective design and sourcing strategies.
• Packaging equipment specialists perform on-site surveys and help deploy automated packaging equipment that can help speed up the process and reduce labor requirements.
• Creative and structural designers improve packaging design to protect products, promote the brand, entice buyers and create a positive unboxing experience.
• Unit Load Containment Specialists identify ways to help reduce breakage, damage and loss so more products get into the hands of consumers.

All of these professionals, and many more like them, frequent the hallways at Veritiv's Mississauga facility, providing customers with a central source for hands-on guidance and personal service. Each customer's products, goals and resources are different, so Veritiv believes each packaging solution should be too. Rather than selecting from a limited assortment of materials, Veritiv packaging designers take a material-neutral approach. This involves researching a wide array of conventional and emerging substrates—from essential corrugated and progressive PaperFoam to recycled PET (polyethylene terephthalate) and everything in-between— to find the right solution for each package.

Moreover, Veritiv's team of design engineers, equipment technicians and supply chain experts work with customers to identify and resolve operational inefficiencies by analyzing every detail of their packaging operations— from sourcing and manufacturing to delivery and unboxing. Veritiv then collaborates with the customer to develop packaging, processes and ideas that boost efficiency and cut costs, while protecting their products and elevating their brand. This strategic approach is helping deliver new benefits to customers as they work to capture market share in a growing economy. Veritiv's holistic approach to packaging design and supply chain optimization helps businesses across Canada unlock efficiencies, significantly improve profitability and evolve as they grow.

Notably, if not entirely surprisingly, it is the robust rate of growth in the packaging part of the business that has Jason Alderman, Veritiv's regional vice-president, excited about the future prospect for Veritiv's new Canadian headquarters. "Our packaging business has been growing since we have opened the new Mississauga facility," Alderman relates, "and we are expecting this growth to continue in the future." As Alderman points out, Veritiv's new Mississauga DC has everything in place to benefit from this expected growth in the packaging business—much of it closely tied to the ongoing boom in the fast-growing e-commerce industry across major North American markets.

"It's great that we were able to combine all of Veritiv's business segments in the GTA region under one roof," Alderman points out, "alongside our customer service and sales team." Along with traditional end-of-line equipment offerings such as stretch wrappers, shrink tunnels, case rectors and taping machines, Veritiv's Mississauga DC also supplies commodity-type packaging products such as packaging tapes, corrugated boxes, folding cartons and bottles—offering many of its customers one-stop-shop convenience backed up by impeccable service support capabilities. Employing close to 1,000 people at 14 strategically- located DCs across Canada, Veritiv serves a vast and growing customer base of manufacturing and industrial clients with clockwork JIT (just-in-time) reliability, according to Alderman.

"We also provide a growing number of custom packaging solutions," Alderman adds. "For example, we supply one of our baking industry clients with some specialty widgets that are used solely for applying icing onto a cake, which we source strictly for that customer. That's the kind of custom packaging solution that Veritiv is keen to tap into on a greater basis. We are working hard to increase our offerings of unique solutions that are not your basic off-the-shelf product offerings." According to Alderman, the booming e-commerce business will provide many additional new growth opportunities for Veritiv to move into that direction in the future, as well as increase the sheer volume of corrugated packaging, tapes, pallet wrap and many other key packaging supplies widely used by online distributors to protect their shipments.
"We have the space and we have an inventory management system that is second to none," Alderman asserts. "So even though we have already established good relationship with many leading e-commerce players over the last five to six years, there are plenty of additional opportunities ahead for further growth," he adds.

With online food sales growing at a brisk pace, Alderman sees the food-and-beverage sector as an example of one important source of further packaging innovation and advancement for Veritiv. "Food manufactures are continuing to look for bold new ways to distinguish themselves from competition on the shelves," he says, "which results in new technologies coming online all the time to support that trend. As we strive to keep up with the latest from a contact packaging perspective, what makes that food look good, what promotes better shelf-life, and all the other things that go into getting a product off the processing line onto a store-shelf in the most appealing packaging solution," he states.

Contrary to popular belief, Alderman contends that major retailers have not eased up in pressing their vendors and suppliers to continue to reduce the amount and the weight of packaging sent to their retail outlets in recent years. "Helping manufacturers improve their supply chain to protect their product with less packaging is one of Veritiv's core strengths that we are very proud to have," states Alderman, while acknowledging that a significant increase in the amount of products purchased online in the future, especially food, will drive overall demand growth for more packaging.

"There is no getting away from the fact that as consumers continue to buy more products online, there will be a greater need for packaging to make sure their purchases arrive to their homes safe and sound," Alderman reasons. According to Alderman, Veritiv is currently going through a comprehensive company-wide IT systems upgrade that will significantly enhance its supply chain efficiencies and data acquisition capabilities. "We are still going through a process of internal integration of our assets and brand recognition, and while we are still finding out who we are as Veritiv, we know that we have a fantastic customer base. "It is our job to cultivate that base beyond just the procurement side of the business to provide solutions and services that will enhance their marketing and product development activities and efforts. "It certainly is an evolution for Veritiv." Alderman sums up, "but evolving as a company is the only way to be able to attract new customers in the future to support our growing business and market ambitions. "And our new Mississauga facility is a good example of how we are planning for the future."

Portfolio Manager
$10M - $50M HEDGE FUND
JUL 02, 2018

Given it's position in the value-chain I do believe Veritiv has every right to exist, but am unsure how its vendors will allow it to become substantially more profitable.

Peter Coenen
DIRECTOR AT THE VALUE FIRM BV
JUL 02, 2018

It’s fascinating. Obviously, and that’s the way capitalism works, if the vendors are able to compete with the Veritiv solutions, they will. But as I pointed out in the answer to the previous question, it’s not easy to compete with the holistic approach of the Veritiv solutions in the packaging business. Most of the vendors try to sell a product based upon price, and I would argue that there is more to it than just that.

And sure. Don’t take my word for it. Feel free to disagree. Have a look at the Veritiv customer and partner testimonials @ https://www.veritivcorp.com/testimonials#.

Veritiv has total solutions for their customers in packaging, from concept to deliver. Today they do extensive work developing concepts and designing packaging for their customers. They have in house capabilities around structural and graphic design to meet branding, marketing and product needs. It’s a total solution for a customer with multiple materials in any given box. In addition to their specialty packaging, they also have a broad array of standard packaging and they source both the standard and the specialty often times from the same suppliers.

They have extensive relationships with the markets largest suppliers across most categories. They are of the size and scale that they have their own private label offering as part of their standard packaging line-up. So when a customer comes to them, they can provide the full array, both from a standard packaging as well as from specialty packaging. They also have the ability to deliver, on multiple service fronts, with their packaging customers. They have broad reach and they have the ability to provide value added services, that many of their customers ask for today.

I am excited about their competitive position. They are an industry leader today. They are one of the few that have the capabilities to provide an end-to-end packaging solution nationally to their customers.

Vice President
$500M - $1B HEDGE FUND
JUL 04, 2018

Thanks for sharing the interesting and unique idea!

Portfolio Manager
$100M - $500M HEDGE FUND
JUL 06, 2018

Thanks for the idea Peter. How do you get 3.5x EV/adjusted EBITDA?

Peter Coenen
DIRECTOR AT THE VALUE FIRM BV
JUL 06, 2018

Thanks for asking. Veritiv is not trading @ 3.5 times EV/adjusted EBITDA. Veritiv is trading @ 3.5 times adjusted EBITDA. Sorry for the misunderstanding.

During their fourth quarter and fiscal year 2017 financial results update, Veritiv announced that the 2018 adjusted EBITDA is expected to be 180-190M USD and the 2018 free cash flow is expected to be at least 30M USD. Market cap of 631M USD

divided by adjusted EBITDA of 180M USD equals 3.5. And it helps, I believe, to have a look at their Appendix of this presentation for an explanation of their Non-GAAP Financial Measures, like adjusted EBITDA.

This is a company getting ready for optimization and long-term growth. I just love free cash flow, and I am more than happy to read that Veritiv is ready to generate free cash flow of at least $30m in 2018. The leadership team has shown before that they have the ability and courage to execute, and I do believe they will be able meet their 2018 free cash flow target.

Joe Cook
PARTNER AT APOLLO FUND, LP
JUL 10, 2018

The margins are terrible. I think you make the business position sound too impressive. 10-K says, "The packaging, facility solutions, paper and publishing distribution industry is highly competitive, with numerous regional and local competitors, and is a mature industry characterized by slowing growth or, in the case of paper, declining net sales." I find it odd that management wants to focus on improving "adjusted" EBITDA. The implication is that the charges & adjustments will not be ending soon and valuation is worse than you suggest. The stock has moved sideways for 4 years since Klarman bought it. What am I missing?

Peter Coenen
DIRECTOR AT THE VALUE FIRM BV
JUL 11, 2018

Great question. You're absolutely right when you state that the margins are terrible. This is by no means a classic Buffett stock, with high margins and high return on capital. I have a hard time finding classic Buffett stocks trading at attractive prices.

There seems to be a disconnect between the description of the competitive landscape in the 10-K and the assessment of their competitive positioning in their strategy & optimization presentation. By the way, I hardly know of any industry in the U.S. that is not highly competitive. One of the few exceptions that I know of, might be a company called Verisign, with their almost legal monopoly on the domain name registration business.

Let's have a closer look at the Veritiv competitive landscape in each of the reportable segments (strategy & optimization presentation)
• Packaging. Veritiv is an industry leader. Limited competition providing total packaging solution. Small regional competitors provide standard packaging.
• Services. Veritiv has great access to customers. Generally fragmented markets - some with one or two large competitors. Limited competition across multiple offerings (i.e. few if any E2E solutions)
• Facility Solutions. Veritiv is an industry leader. Many small local competitors.
• Print. Veritiv is an industry leader. Regional and local competitors lack scale and supply chain capabilities.
• Publishing/Print Management. Veritiv is an industry leader. Three regional competitors. National printers backward integrating.

Veritiv is the market leader in all of their segments and there is no one in the industry offering the full suite of products that Veritiv does. Veritiv believes that their competitive advantages include over 1,800 sales and marketing professionals and the breadth of their selection of quality products, including high-quality private brands. The breadth of products distributed and services offered, the diversity of the types of customers served, and their broad geographic footprint in the U.S., Canada and Mexico buffer the impact of regional economic declines while also providing a network to readily serve national accounts.

Veritiv's strategy is to invest in the higher growth, higher margin segments packaging & services, to protect the leading market positions in print & publishing and facility solutions, and optimize (post integration activities 2018 – 2020) the supply chain, support (back office) services and working capital. And I believe that Veritiv has the leadership team in place to execute on their plans and improve margins. Since the merger, Veritiv reported many operational and financial successes, but where they are today is by no means a resting spot.

You state that you find it odd that management wants to focus on improving "adjusted" EBITDA: the implication is that the charges & adjustments will not be ending soon and valuation is worse than suggested. I do not like EBITDA and the "horrors" of adjusted EBITDA at all. But fact of life is that it has become a popular indicator of financial performance. My focus is on the free cash flow. It will be interesting to see if they will be able to generate their 30m USD free cash flow in 2018.

The future of Veritiv, I believe, is in the packaging & services business. Let's just listen what CEO Mary Laschinger had to say during the strategy & optimization update. "We are really excited about our competitive position. We are an industry leader today. We are one of the few that have the capabilities to provide an end-to-end packaging solution nationally to our customers. There is limited competition. We are excited about what we can do with our packaging business and we will expect that we will be able to grow at least at GDP type levels, perhaps even better."

I do not believe that I make the business position sound too impressive. I mentioned before that Veritiv has been named a 2016 Nestlé North America Procurement "Supplier of the Year." And as of recently Veritiv has earned recognition in the John Deere Achieving Excellence Program as a Partner-level supplier for 2017 and was inducted into the 15-year Supplier Hall of Fame. Veritiv was selected for the honor in recognition of its dedication to providing products and service of outstanding quality as well as its commitment to continuous improvement.

Peter Coenen
DIRECTOR AT THE VALUE FIRM BV
SEP 25, 2018

Glenn Tongue
In addition to the first question by Glenn on the Amazon risk, the following.

On 19 September 2018, Veritiv announced that the company has officially joined the Amazon Packaging Support and Supplier Network (APASS). Amazon designed the APASS program to help sellers, merchants, and manufacturers obtain certification of their products as Frustration Free Packaging (FFP), Ships-in-Own-Container (SIOC), and Prep-Free Packaging (PFP).

APASS certification enables Veritiv to provide package-testing services in compliance with Amazon's certified test methods directly to sellers, merchants, and manufacturers. Veritiv will bring additional value by helping sellers design innovative yet functional packaging that is intended to not only meet Amazon's strict standards but also create efficiencies through lower damage and improved material sourcing.

"Amazon sets a high standard for its APASS program, but Veritiv meets the criteria," said Matt Reddington, Director of Sourcing and Product Management for Veritiv. "We are pleased to be part of a program where we can leverage our expertise and networks to provide Amazon vendors with quality, sustainable packaging that not only supports the arrival of their products intact and undamaged, but gives their customers a good unpacking experience."

Through its Global Design, Testing, Sourcing, and Logistics Services, Veritiv offers a globally integrated team of artists, engineers, and project managers capable of delivering services such as: in-house package design and prototyping, ISTA certified testing, material analysis, and international sourcing of packaging materials. The company's creative design network offers full service structural design, graphic design, and performance validation testing to deliver innovative, material neutral solutions to domestic and global customers.

The Veritiv Leadership Team

9 October 2018

Mary A. Laschinger. Chairman and Chief Executive.

Mary Laschinger is Chairman of the Board and Chief Executive Officer of Veritiv Corporation (NYSE: VRTV), a leading North American distribution solutions company. Previously, Ms. Laschinger served as Senior Vice President of International Paper Company from 2007 to June 2014, and as President of the xpedx distribution business from January 2010 to June 2014. Ms. Laschinger also served as President of the Europe, Middle East, Africa, and Russia business at International Paper; Vice President and General Manager of International Paper's Wood Products and Pulp businesses, as well as in other senior management roles in sales, marketing, manufacturing, and supply chain at International Paper. Prior to joining International Paper in 1992, Ms. Laschinger held various positions in sales, marketing, and supply chain at James River Corporation and Kimberly-Clark Corporation.

Ms. Laschinger is a member of the Board of Directors of the Federal Reserve Bank of Atlanta, where she serves on the Audit Committee. Ms. Laschinger is also a member of the Board of Directors for Kellogg Company, where she chairs the Compensation & Talent Management Committee and serves on the Executive and Nominating & Governance Committees.

She also serves on the Executive Committee of the Metro Atlanta Chamber of Commerce and is a former lead Director of Ilim Group, Russia's largest pulp and paper company. Ms. Laschinger holds a bachelor's degree in business from the University of Wisconsin and an MBA from the University of Connecticut. Ms. Laschinger has also completed postgraduate studies in executive management at the Kellogg School of Management at Northwestern University.

MARY A. LASCHINGER
Chairman of the Board and Chief Executive Officer

STEPHEN J. SMITH
Senior Vice President and Chief Financial Officer

THOMAS S. LAZZARO
Senior Vice President, Field Sales and Operations

JOHN G. BISCANTI
Group Vice President, Publishing and Print Management

CHARLES B. HENRY
Senior Vice President, Corporate Services

MARK W. HIANIK
Senior Vice President, General Counsel and Corporate Secretary

BARRY R. NELSON
Senior Vice President, Facility Solutions

ELIZABETH A. PATRICK
Senior Vice President and Chief Human Resources Officer

TRACY L. PEARSON
Senior Vice President, Packaging

DANIEL J. WATKOSKE
Senior Vice President, Print and Veritiv Services

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Update on Veritiv

Most important takeaways from the Q3 2018 results (Nov 6, 2018):

- Improved revenues driven by top line growth in their Packaging segment.
- Consolidated adjusted EBITDA up nearly 20% year-over-year, driven by both revenue growth as well as lower operating expenses. For the full year 2018, Veritiv expects adjusted EBITDA to be within the range of 180 to 190 million USD, to improve in 2019.
- Veritiv updates their guidance for 2018 free cash flow from previous stated level of 30 million USD to be near zero, largely driven by higher than anticipated accounts receivables, as a result of both their growth in the Packaging segment and process related challenges for their integration activities.

The growth on both revenues and adjusted EBITDA is satisfying and the lowering of the 2018 expected free cash flow to near zero is disappointing. The stock declined more than 20%, which is by the way great news for the Veritiv believers, as they can now buy stock at better prices.

Predicting and managing free cash flow during the transition phase where Veritiv is in right now is very, very hard and perhaps they were better off not giving guidance on the 2018 free cash flow.

2018, as previously stated, has been a complex year due to the combination of system's conversions, warehouse consolidation, and warehouse management system installation. These three programs are putting short term pressures on processes and cost and as a result of that, on free cash flow.

The good news is that operating system conversion will be substantially completed by yearend. If management succeeds with their integration activities and lowering operating costs and if the Packaging segment continues to grow I expect Veritiv to become at least a 10 times adjusted EBITDA company in terms of market capitalization, which is the equivalent of approximately 2B USD market cap. In the long run, the market cap potential is, I believe, substantially higher.

This presentation and the information contained herein are for educational and informational purposes only and do not constitute, and should not be construed as, an offer to sell, or a solicitation of an offer to buy, any securities or related financial instruments. Responses to any inquiry that may involve the rendering of personalized investment advice or effecting or attempting to effect transactions in securities will not be made absent compliance with applicable laws or regulations (including broker dealer, investment adviser or applicable agent or representative registration requirements), or applicable exemptions or exclusions therefrom. The Value Firm® makes no representation, and it should not be assumed, that past investment performance is an indication of future results. Moreover, wherever there is the potential for profit there is also the possibility of loss.

Peter Coenen –8 November 2018

Debenhams

British department store group Debenhams went into administration, 10 April 2020, for the second time in 12 months, seeking to protect itself from legal action by creditors during the coronavirus crisis that could have pushed it into liquidation.

With Britain in lockdown during the pandemic, Debenhams’ 142 UK stores are closed, while the majority of its 22,000 workers are being paid under the government’s furlough scheme. It continues to trade online.

Last year the debt-laden company was taken over by its lenders, and this time the management said the business needed the protection that the administration procedure provides, as some creditors were threatening legal action that could push the business into liquidation. The creditors are likely to be suppliers who have not been paid for stock they have provided.

Debenhams said administrators from FRP Advisory would work with the existing management team to get the UK business into a position to re-open and trade from as many stores as possible when restrictions are lifted by the government.

The retailer has been battling the effects of £600m of debt, tough competition and the downturn on the high street.

Stefaan Vansteenkiste, the chief executive, said he was working with landlords and pension trustees and “striving to protect jobs and reopen as many Debenhams stores as we can, as soon as this is possible.”

Was it foreseeable that Debenhams was close to financial distress, just by looking at their financial statements? The answer to that question is, I believe, yes.

The newly developed Risk Rating Algorithm, as described in the Winter 2020 Edition on Intelligent Cloning, assigned a 10 rating to Debenhams, meaning that there were too many identifiable signs of possible financial distress.

A year earlier, in 2019, the Algorithm assigned a 10 rating to Debenhams, and in 2018 a 3 rating. Moody's downgraded Debenhams ratings to Ca, which is the equivalent of a 10 rating, already in April 2019.

Score	Meaning	
10	Very high risk +	Too many identifiable signs of possible financial distress.
9	Very high risk	Many identifiable signs of possible financial distress.
8	High risk	Companies with elevated vulnerability to financial distress.
7	Medium risk +	Companies, already more susceptibale to the unexpected.
6	Medium risk	Good company with a moderate risk of financial distress.
5	Low risk ++	Good company, with still a low, but slghtly more risk.
4	Low risk +	High quality company, with still a low, but slightly more risk.
3	Low risk	High quality company, with a low risk of financial distress.
2	Very low risk +	High quality company with a very low risk of financial distress.
1	Very low risk	High quality company with almost zero risk of financial distress.

As stated earlier, I try to calibrate the algorithm by using credit ratings. Let’s have a look at some new Fitch Credit Ratings:

	The Value Firm®	Fitch	
Verizon	1	A-	3
BASF	2	A	3
BP Plc	3	A-	3
AmerisourceBergen	6	A-	3
Xilinx	1	A-	3
Acea	4	BBB+	4
Exelon	5	BBB	4
Williams Companies	5	BBB-	5
CIFI Holdings	3	BB	6
Meinian	2	BB-	7

The Value Firm® Risk Rating for Meinian is substantially lower than the Fitch Credit Rating, and, I believe, for a good reason.

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Meinian is a China-based preventive health examination services provider. And although its business operation was interrupted significantly by the coronavirus outbreak and the majority of its centres were closed in 1Q20, leading to a decline in revenue of more than 50%, most of the medical centers resumed normal operations from April 2020.

Secondly, Alibaba became a investor in Meinian in November 2019 and plays a strategic role. Cooperation with Alibaba in e-commerce can help Meinian expand its individual-customer base. For example, Meinian can use Alibaba's online platforms to divert traffic to its medical centres and promote its check-up packages. Alibaba will also cooperate with Meinian on IT system upgrades to streamline the check-up process and provide comprehensive pre and post check-up services.

As far as the lower ratings are concerned, ratings 1 to 3, you could argue that these ratings represent “moat ratings”. The lower the rating, the better “the moat”. As far as I know, there is only one company that provides “moat ratings”, and that is Morningstar. The Value Firm® Moat Rating is comparable. It represents a company's sustainable competitive advantage. A company with an economic moat can fend off competition and earn high returns on capital.

If you are interested in these risk ratings, let me know. Right now, I am looking for a “launching customer”, who will benefit tremendously from being the launching customer. E-mail: peter@thevaluefirm.com.

Prospective customers include other rating agencies (Moody’s, Standard & Poor’s, Fitch, Graydon), endowments, pension funds, accountancy firms, institutional investors, hedge funds, family offices, banks and insurance companies.

Software release management

Current release: Risk Rating Algorithm 28042020.

Date	Software changes	New bankruptcy data footprints
29042020	-	Foresight Energy
07052020	-	-
14052020	-	Debenhams

Thanks for reading!
14 May 2020.

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Destination Maternity

Destination Maternity- which operates Motherhood Maternity, A Pea in the Pod, and its namesake brand – filed for bankruptcy on October 21 2019, with plans to shutter 183 US stores. While Destination Maternity has attributed sales declines to factors like lowered foot traffic and increased competition from e-commerce, it has also routinely mentioned “demographics and other macroeconomic factors” that include “fluctuations in pregnancy rates and birth rates” in forward-looking statements on earnings calls.

US birthrates hit a record 32-year low in 2018 after dropping 2% from 2017, according to the Centers for Disease Control and Prevention. Over the past two years, the dip has negatively impacted a variety of companies, from Toys R Us and Babies R Us to consumer-packaged-goods companies like Kimberly-Clark and Procter & Gamble that sell diapers and other products for babies.

“While competition from online retailers and other widely discussed factors may have had some role to play, Destination Maternity’s declining net sales in recent years have tracked fairly closely with the sharp decline in births in the United States,” Lyman Stone, an advisor at Demographic Intelligence advisor, said in a statement.

“Infant and maternity products are the canary in the coal mine,” Stone said. “In a few years, we can expect to see weakness in the earnings reports for products aimed at older children, and, eventually, universities will face serious enrollment declines. From there, a smaller prime-age population will present challenges to many sectors of the economy, ranging from retail, to housing, to historically robust sectors like healthcare.”

Destination Maternity has had five CEOs in the past 5 years.

Was it foreseeable that Destination Materinty was close to financial distress, just by looking at their financial statements? The answer to that question is, I believe, yes.

The newly developed Risk Rating Algorithm, as described in the Winter 2020 Edition on Intelligent Cloning, assigned a 10 rating to Destination Maternity, meaning that there were too many identifiable signs of possible financial distress.

Stockholders Equity shrunk in 5 years from 126M USD to 27M USD in 2018. The company did not generate any substantial free cash flow at all over a 5 year period.

Score	Meaning	
10	Very high risk +	Too many identifiable signs of possible financial distress.
9	Very high risk	Many identifiable signs of possible financial distress.
8	High risk	Companies with elevated vulnerability to financial distress.
7	Medium risk +	Companies, already more susceptibale to the unexpected.
6	Medium risk	Good company with a moderate risk of financial distress.
5	Low risk ++	Good company, with still a low, but slightly more risk.
4	Low risk +	High quality company, with still a low, but slightly more risk.
3	Low risk	High quality company, with a low risk of financial distress.
2	Very low risk +	High quality company with a very low risk of financial distress.
1	Very low risk	High quality company with almost zero risk of financial distress.

After Thomas Cook, McClatchy, Pier 1, McDermott andFlybe, Destination Maternity is the sixth example of a company rated 10 by the Risk rating Algorithm before it filed for Chapter 11.

Another method of assessing the results of the risk rating algorithm is to compare the ratings with the results of the credit rating agencies, like Standard & Poor's, Moody’s and Fitch.

In the attachment you will find the interpretation of their ratings in relation to The Value Firm® Risk Ratings. And keep in mind that these Credit Rating Companies evaluate the associated risks through a completely different lens.

Here are some new results. On the left you will find the Fitch Credit Rating and on the right The Value Firm® Risk Rating.

Company	Fitch	The Value Firm®	
	2020	2019	2020
Adani Transmission	5	3	4
Meritor	7	6	5
PT Bumi Serpong Dam	7	6	5
WPX Energy	5	7	8
Lennar	5	6	5
Martin Marietta Mater	4	5	5
ThyssenKrupp AG	7	7	10
TalkTalk Telecom Grou	7	3	4
Qurate Retail	6	5	5
eBay	4	3	4
Eneva SA	2	6	5
Gran Tierra	8	6	4
PT Tower Bersuma	2	6	4
Thermo Fisher	4	6	5
Waste Connections	4	4	4
Teva Pharmaceutical	7	6	7
Harsco Corp	6	3	2
Texas Instruments	3	1	1
Michael Kors / Capri H	7	3	2
Emeco Holdings	6	7	5
Mondelez	4	6	5
Renault	7	7	5
Boeing	3	4	10

Boeing. If Boeing were a normal company, it could be facing questions about bankruptcy after losing billions of dollars over the grounding of the 737 Max. But is it too big to fail?

The company has been losing money since its biggest selling plane, the 737 MAX, was grounded. And it's had to borrow billions of dollars from major banks.

Boeing recently called for a $60 billion bailout in access to public and private liquidity, including loan guarantees, for the struggling U.S. aerospace manufacturing industry, which now faces huge losses from the coronavirus pandemic.

ThyssenKrupp. Thyssenkrupp's CEO scrapped the German industrial group's dividend, warned of deeper losses and asked investors for yet more patience over its turnaround. After four profit warnings and two failed attempts to restructure since July 2018, Thyssenkrupp is also aiming to slash 6000 jobs and looking for new owners of businesses where it is clear it cannot catch up with rivals.

Recently, Kone withdrew from talks to buy Thyssenkrupp elevator business. The primary reason for withdrawing from the tendering process is the poor financial situation of Thyssenkrupp. Kone, for example, could have lost its 2.5 billion euro downpayment in the worst-case scenario of bankruptcy.

Remember that Risk Ratings are statements of opinion and not a statement of facts. I will continue evaluating bankruptcies and credit ratings to find out if The Value Firm® Risk Rating Algorithm makes sense.

20 March 2020.

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Everybody makes mistakes now and then. If you find any, let me know: peter@thevaluefirm.com. Always do your own research!

Diamond Offshore Drilling

The word "bankrupt" derives from ***banco rotto****, the practice in midieval Italy of smashing the benches that merchants sold their goods from if they did not pay their debts, to force them to stop trading.*

Diamond Offshore Drilling Inc., the rig contractor controlled by Loews Corp., filed for bankruptcy on 27 April 2020, amid an unprecedented crash in crude prices that's wrecking demand for oil exploration at sea.

Conditions worsened "precipitously in recent months," the company said, citing a price war between OPEC and Russia and the Covid-19 pandemic.

In a statement posted on Diamond Offshore's website, Edwards outlined that, through the Chapter 11, the business intends to restructure its balance sheet to achieve a more "sustainable debt level" to reposition it for "long-term success".

Was it foreseeable that Diamond Offshore Drilling was close to financial distress, just by looking at their financial statements? And the answer to that question is, I believe, yes.

The newly developed Risk Rating Algorithm, as described in the Winter 2020 Edition on Intelligent Cloning, assigned a 10 rating to Diamond Offshore Drilling, meaning that there were too many identifiable signs of possible financial distress. This 10 rating was previously reported, several weeks before Diamond Offshore filed for bankruptcy, in my write up on General Electric.

Score	Meaning	
10	Very high risk +	Too many identifiable signs of possible financial distress.
9	Very high risk	Many identifiable signs of possible financial distress.
8	High risk	Companies with elevated vulnerability to financial distress.
7	Medium risk +	Companies, already more susceptibale to the unexpected.
6	Medium risk	Good company with a moderate risk of financial distress.
5	Low risk ++	Good company, with still a low, but slghtly more risk.
4	Low risk +	High quality company, with still a low, but slightly more risk.
3	Low risk	High quality company, with a low risk of financial distress.
2	Very low risk +	High quality company with a very low risk of financial distress.
1	Very low risk	High quality company with almost zero risk of financial distress.

The Value Firm® Risk Rating Algorithm is solely based upon historical financials. And that's very different from what the Credit Rating Agencies (Fitch, Moody's and Standard & Poor's) actually do. These credit ratings are often based upon forward looking business developments, and at first sight you might think that the latter is the best approach.

Well. You know the old saying: "predicting is difficult, especially when it comes to the future." Even these well skilled credit rating professionals often underestimate the limitations of their foresight. The better approach, I believe, is to use both credit ratings and risk ratings.

One of the unique features of this algorithm is that for the higher risk ratings, the Risk Rating Algorithm tries to identify unusual risk profiles ("potential bankruptcy data footprints") and then, in combination with other parameters, assign a risk rating to that company. A few months ago, I wrote that as time passes by and more bankruptcies become available, there is opportunity to make the algorithm smarter, case by case.

So here we are. Is the algorithm indeed already "smarter"? As a result of the Covid 19 pandemic, there already were many, many bankruptcies in 2020. Most of them were identified by the algorithm without adding an additional "bankruptcy data footprint", and that is, I believe, how you can measure if the algorithm is indeed becoming smarter, or more intelligent, if you will.

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70% of the 20 companies in the list below, companies that recently went bankrupt or are currently seriously considering going into bankruptcy were rated " very high risk+ " , that is, a 10 rating. The other 30% needed an additional "bankruptcy data footprint" to be identified as a 10 rating and to ensure that in the future similar "bankruptcy data footprints" will be identified as very high risk.

Software release management

Current release: Risk Rating Algorithm 28042020.

Bankruptcy case	Software changes	New bankruptcy data footprints
Laura Ashley	-	-
LSC Communications	-	-
Foresight Energy	-	x
Diamand Offshore Dr.	-	-
Debenhams	-	x
Yuma Energy	-	-
Frontier Communications	-	x
BroadVision Inc.	-	-
Carbo Ceramics	-	-
J.C. Penny	-	-
Hertz	-	x
Melinta Therapeutics	-	-
Speedcast	-	x
Insys Therapeutics	-	-
Stage Stores	-	-
Chesapeake	-	-
Intelsat	-	-
Ultra Petroleum	-	-
Virgin Australia	-	-
Avianca	-	x

Don't expect an algorithm that is able to rate 100% of the bankruptcy cases correct. Hopefully, by the end of the year, we will reach the target of 85%.

These "company specific bankruptcy data footprints" only affect the 9 and 10 ratings. As far as the 1 to 8 ratings are concerned, I am more than happy as they are right now and don't expect any further improvements will be necessary. Thus far, I am more than happy with the overall results of the Risk Rating Algorithm.

If you are interested in these risk ratings, let me know. Right now, I am looking for a "launching customer", who will benefit tremendously from being the launching customer. E-mail: peter@thevaluefirm.com.

Prospective customers include other rating agencies (Moody's, Standard & Poor's, Fitch, Graydon), endowments, pension funds, accountancy firms, institutional investors, hedge funds, family offices, banks and insurance companies.

Thanks for reading!
21 May 2020.

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Flybe

Thursday, March 5th, 2020. The largest domestic airline in the United Kingdom, Flybe, has ceased all operations, entering into the British equivalent of bankruptcy effective immediately, with all its flights being grounded and passengers being warned not to even try going to the airport unless they have flights lined up with another airline. The airline's more than 2000 staff now face an uncertain future with all flights cancelled, and the entire fleet of more than 60 aircraft grounded.

Flybe had a tumultuous decade after its 2010 IPO. It was bought and bailed out a year ago by a consortium called Connect Airways, comprising Virgin Atlantic, Stobart Aviation and Cyrus Capital Partners. The airline reportedly failed in a last minute attempt to secure emergency funding, seeking a £100 million loan from the U.K. Government which was ultimately rejected. Flybe has been on the brink too many times, but it was the coronavirus outbreak that ultimately killed it.

Was it foreseeable that Flybe was close to financial distress, just by looking at their financial statements? The answer to that question is, I believe, yes.

The newly developed Risk Rating Algorithm, as described in the Winter 2020 Edition on Intelligent Cloning, assigned a 10 rating to Flybe, meaning that there were too many identifiable signs of possible financial distress.

Although revenues grew, according to their 2018 financial statements, operating income and net income were negative. And the company wasn't able to generate any free cash flow at all over the last 5 years.

Score	Meaning	
10	Very high risk +	Too many identifiable signs of possible financial distress.
9	Very high risk	Many identifiable signs of possible financial distress.
8	High risk	Companies with elevated vulnerability to financial distress.
7	Medium risk +	Companies, already more susceptibale to the unexpected.
6	Medium risk	Good company with a moderate risk of financial distress.
5	Low risk ++	Good company, with still a low, but slightly more risk.
4	Low risk +	High quality company, with still a low, but slightly more risk.
3	Low risk	High quality company, with a low risk of financial distress.
2	Very low risk +	High quality company with a very low risk of financial distress.
1	Very low risk	High quality company with almost zero risk of financial distress.

After Thomas Cook, McClatchy, Pier 1 and McDermott, Flybe is the fifth example of a company rated 10 by the Risk Rating Algorithm before it filed for Chapter 11.

Let's have some more "rating fun". Another method of assessing the results of the risk rating algorithm is to compare the ratings with the results of the credit rating agencies, like **Standard & Poor's**, **Moody's** and **Fitch**.

In the attachment you will find the interpretation of their ratings in relation to **The Value Firm® Risk Ratings**. And keep in mind that these Credit Rating Companies evaluate the associated risks through a completely different lens.

Here are the results. On the left you will find the Fitch Credit Rating and on the right The Value Firm® Risk Rating.

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Company	Fitch	The Value Firm®
Adani Transmission	5	3
Meritor	7	6
PT Bumi Serpong Damai	7	6
WPX Energy	5	7
Lennar	5	6
Martin Marietta Materia	4	5
ThyssenKrupp AG	7	7
TalkTalk Telecom Group	7	3
Qurate Retail	6	5
eBay	4	3
Eneva SA	2	6
Gran Tierra	8	6
PT Tower Bersuma	2	6
Thermo Fisher	4	6
Waste Connections	4	4
Teva Pharmaceutical	7	6
Harsco Corp	6	3
Texas Instruments	3	1
Michael Kors	7	3
Emeco Holdings	6	7
Mondelez	4	6
Ohio Valley	5	6
Renault	7	7

The outcome of the **Fitch Ratings** and **The Value Firm® Risk Ratings** shows e.g. Adani Transmission as a high quality company with a low risk of financial distress and medium grade obligations with slightly more than moderate credit risk.

Another example is Gran Tierra. The rating results show that Gran Tierra is a good company with moderate risk of financial distress, but their obligations are speculative and subject to high credit risk.

The question arises why Fitch believes that their obligations are subject to high credit risk. You can find their assessment over here.

Their Key Rating Drivers are:

- Modest Production Growth
- Improved Reserve Base
- Higher Leverage Profile
- Effective Cost Producer
- Stable Cash Flow Profile

The only driver that potentially indicates a high credit risk is the higher leverage profile. And it's true that their long-term debt increased from $197 million in 2016 to $697 million in 2019. But given their current cash position of $103 million and a stockholder's equity of $1032 million, I would argue that that's not a reason to doubt their credit risk.

And there is a free cash flow potential over the next five years of approximately $1.1 billion for 1P reserves and $1.8 billion for 2P reserves.

But then again, any rating must be construed solely as a statement of opinion and not a statement of fact. Recently, oil prices suffered an historic collapse after Saudi Arabia shocked the market by launching a price war against onetime ally Russia. US oil prices crashed as much as 34%. That's the only reason I can think of, but you won't find that in the Fitch assessment. Anyhow. I'm not an expert on the business of oil.

I will continue evaluating bankruptcies and credit ratings the upcoming months. For now, I am not too unhappy with the results. Hopefully, it turns out to be a very powerful risk rating algorithm.

11 March 2020.

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Attachment

Rating			S&P	Moody's	Fitch	Credit Risk
10	Very high risk +	Too many identifiable signs of possible financial distress.	CC	Ca	CC, C	Near Default. Obligations are highly speculative.
9	Very high risk	Many identifiable signs of possible financial distress.	CCC+, CCC, CCC-	Caa1, Caa2, Caa3	CCC+, CCC, CCC-	Obligations are of poor standing and subject to very high credit risk.
8	High risk	Companies with elevated vulnerability to financial distress.	B+, B, B-	B1, B2, B3	B+, B, B-	Obligations are speculative and are subject to high credit risk.
7	Medium risk +	Companies, already more susceptibale to the unexpected.	BB-	Ba3	BB-	Obligations are speculative and subject to substantial credit risk.
6	Medium risk	Good company with a moderate risk of financial distress.	BB+, BB	Ba1, Ba2	BB+, BB	Obligations are speculative and subject to substantial credit risk. Likely to fulfill obligations.
5	Low risk ++	Good company, with still a low, but slightly more risk.	BBB-	Baa3	BBB-	Obligations of medium-grade and subject to slightly more than moderate credit risk and as such possess certain speculative characteristics.
4	Low risk +	High quality company, with still a low, but slightly more risk.	BBB+, BBB	Baa1, Baa2	BBB+, BBB	Obligations of medium-grade and subject to moderate credit risk and as such may possess certain speculative characteristics.
3	Low risk	High quality company, with a low risk of financial distress.	A+, A, A-	A1, A2, A3	A+, A, A-	Obligations of upper-medium grade and are subject to low credit risk.
2	Very low risk +	High quality company with a very low risk of financial distress.	AA+, AA, AA-	Aa1, Aa2, Aa3	AA+, AA, AA-	Obligations of high quality and are subject to very low credit risk.
1	Very low risk	High quality company with almost zero risk of financial distress.	AAA	Aaa	AAA	Obligations of the highest quality, subject to the lowest level of credit risk.

Foresight Energy

On 10 March 2020, coal mining company Foresight Energy LP, already reeling as power plants shift to cheaper and cleaner sources of energy, filed for bankruptcy protection, saying the global economic slowdown caused by the coronavirus epidemic helped push it over the edge.

Foresight operates Mach Mine in northeast Williamson County near Corinth. It also operates the Sugar Camp mining complex in Franklin County near Macedonia. These two mines are among the most productive underground mines in the United States.

Their restructuring plan, which allows the company to stay in business, would cut debt by about $1 billion by swapping $1.33 billion of debt for equity. The plan would leave Foresight with just $225 million in new secured debt.

Was it foreseeable that Foresight Energy was close to financial distress, just by looking at their financial statements? The answer to that question is, I believe, yes.

The newly developed Risk Rating Algorithm, as described in the Winter 2020 Edition on Intelligent Cloning, ultimately assigned a 10 rating to Foresight Energy, meaning that there were too many identifiable signs of possible financial distress.

Score	Meaning	
10	Very high risk +	Too many identifiable signs of possible financial distress.
9	Very high risk	Many identifiable signs of possible financial distress.
8	High risk	Companies with elevated vulnerability to financial distress.
7	Medium risk +	Companies, already more susceptibale to the unexpected.
6	Medium risk	Good company with a moderate risk of financial distress.
5	Low risk ++	Good company, with still a low, but slghtly more risk.
4	Low risk +	High quality company, with still a low, but slightly more risk.
3	Low risk	High quality company, with a low risk of financial distress.
2	Very low risk +	High quality company with a very low risk of financial distress.
1	Very low risk	High quality company with almost zero risk of financial distress.

From an investment perspective, you better stay away from the red ratings, be cautious with the yellow ones, and you're best of focusing on the green ratings. The lower, the better. For "short sellers", paradise might be found in the higher ratings.

The success of the algorithm, and especially the success of the red ratings, depends on the ability of the algorithm to learn from bankruptcy cases. If a bankruptcy situation is at first sight not identified as a red rating by the algorithm, a "bankruptcy data footprint" will be identified and then added to the algorithm, so ultimately the company will be rated as "high risk". Foresight Energy is such an example, and the next time a similar company showing such a specific risk profile will be identified as "high risk".

An interesting question at this point would be: do you have examples of companies identified by the algorithm as a high risk company, solely based upon the "bankruptcy data footprint" of another company. And the answer to that question is "yes". Whiting Petroleum, reported as a 10 rating a few weeks ago, actually was identified as a high risk company, by the "bankruptcy data footprint" of Kona Grill, a company that owns and operates restaurants in several states in the United States.

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Talking about bankruptcies… Mark Cohen, former Sears Canada CEO, expects thousands of retail businesses to likely file for bankruptcy. Former Macy's CEO Terry Lundgren says that retail stores with strong balance sheets probably will survive the coronavirus pandemic. It will be interesting to watch in terms of risk ratings.

Previously I showed you a comparison between the Moody's Credit Ratings and The Value Firm® Risk Ratings. These results were used to further calibrate the algorithm. I made quite some improvements in the yellow and green ratings. This time we'll have a look at 30 Fitch Credit Ratings.

	The Value Firm®	Fitch	
Texas Instruments	1	A+	3
Electricite de France	6	A-	3
Rockwell Automation	2	A	3
Stanley Black & Decker's	3	A-	3
Toyota Motor Corp	4	A+	3
MPLX	4	BBB-	4
Marathon Petroleum	2	BBB-	4
Pioneer National Resources	2	BBB	4
Kawasan Industries	10	BBB	4
Continental AG	2	BBB	4
Campbell Soup	6	BBB	4
Xiaomi	2	BBB	4
Xylem	2	BBB	4
PerkinElmer	3	BBB	4
American Tower	2	BBB+	4
Ecopetrol	2	BBB-	5
KION Group	4	BBB-	5
Expedia Group	2	BBB-	5
Infrastrutture Wireless Italia	2	BBB-	5
Flex Ltd	5	BBB-	5
EP Energy	6	BBB-	5
Grupo KUO	4	BB	6
Grupo Elektra	4	BB+	6
GVC Holding	3	BB	6
Sunoco	6	BB	6
Light S.A.	5	BB-	7
Hilong Holding	6	B	8
Tutor Perini	10	B+	8
Tata Motors	4	B	8
Virgin Australia	9	CCC-/D	9

The algorithm assigned a 10 rating to Kawasan Industries, meaning that there are too many identifiable signs of possible financial distress, not identified as such by Fitch. But you have to be careful over here. Kawasan Industries is an industrial estate developer in Indonesia, and the algorithm is not exactly fit for financials, insurance companies and real estate related businesses.

Fitch identified Tata Motors as a high credit risk company, where the algorithm assigned a more conservative risk "4" rating. It's not about being right or wrong. These ratings are "just" opinions, looking at these companies from a different angle.

The algorithm assigned a 10 rating to Tutor Perini (TUT), meaning that there are too many identifiable signs of possible financial distress. It's interesting to read why Fitch affirms Tutor Perini at 'B+', but revised its outlook to negative. You can find it over here. The negative outlook reflects the vulnerability of TUT's profitability due to the cyclical nature of the engineering and construction (E&C) industry, as well as the company's limited margins and uneven project cash flows.

Most of TUT's key contracts are considered essential though, and it's expected that the company will be able to continue executing on backlog throughout 2020. The 10 rating in this case may be well overdone.

The algorithm can easily rate 1000 companies a day, and that means that it has the potential to rate the entire stock market universe, financials excluded, once every quarter.

More info: peter@thevaluefirm.com

Software configuration release management

Current release: Risk Rating Algorithm 28042020.

Weekly Update 29042020:

- Software Changes: -
- New data patterns: Foresight Energy bankruptcy data footprint

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Everybody makes mistakes now and then. If you find any, let me know: peter@thevaluefirm.com. Always do your own research!

General Electric

Accounting “detective” Harry Markopolos believes General Electric is engaged in accounting fraud so big that it will soon be forced into bankruptcy. He argues that General Electric utilizes many of the same accounting tricks as Enron did, so much so that they’ve taken to calling this the “GEnron” case. Former Enron CFO Andy Fastow talks about General Electric as "a slow motion train wreck".

The Value Firm® Risk Rating Algorithm assigned a 10 rating to General Electric, meaning that the company has too many signs of possible financial distress.

You can find the 175 pages Markopolos report over here (and if not, send me an e-mail, and I will send it to you).

Interestingly enough, recently, Moody's Investors Service ("Moody's") assigned a Baa1 credit rating. The planned sale of a portion of General Electric shares in Baker Hughes did not affect this rating.

On a scale from 1 to 10, you can compare a Baa1 rating to a “4” rating, meaning that its obligations are of medium grade and subject to moderate credit risk (see attachment). So here we have a huge disconnect between the result of The Value Firm® Risk Rating Algorithm, a “10”, and Moody’s Credit Rating, a “4”.

To get a better understanding of how many “huge disconnects” there actually are, I decided to test 138 company ratings. Here are the results. On the left you will find the company name, then The Value Firm® Risk Rating, and finally Moody’s Credit Rating (source: markets.businessinsider.com) and the corresponding number, according to the overview in the attachment.

	The Value Firm®	Moody's	
Microsoft Corporation	2	Aaa	1
Johnson & Johnson	2	Aaa	1
Exxon Mobil Corporation	4	Aaa	1
Apple Inc.	1	Aa1	2
Automatic Data Processing	1	Aa3	2
Visa Inc	2	Aa3	2
Procter & Gamble Co	2	Aa3	2
Chevron Corporation	3	Aa2	2
Walmart Inc	3	Aa2	2
Nestle SA	3	Aa3	2
Costco Wholesale Corporation	4	Aa3	2
3M Co	1	A1	3
British American Tobacco	1	A3	3
NVIDIA Corporation	1	A3	3
Coca-Cola Co	2	A1	3
Intel Corporation	2	A1	3
Cisco Systems, Inc.	2	A1	3
LVMH Moet Hennessy Louis Vuitton	2	A1	3
Amazon.com, Inc.	2	A2	3
Snap-on Incorporated	2	A2	3
Swisscom AG	2	A2	3
Applied Materials, Inc.	2	A3	3
Xilinx, Inc.	2	A3	3
Caterpillar Inc.	2	A3	3
ASML Holding NV	2	A3	3
Baidu Inc	2	A3	3
Gilead Sciences, Inc.	2	A3	3
BASF SE	3	A2	3
QUALCOMM, Inc.	3	A2	3
Abbott Laboratories	3	A3	3
Air Liquide SA	3	A3	3
OMV AG	3	A3	3
Comcast Corporation	3	A3	3
Schneider Electric SE	3	A3	3
UnitedHealth Group Inc	3	A3	3
Siemens AG	4	A1	3
American Express Company	4	A3	3
Bouygues SA	4	A3	3
VERBUND AG	4	A3	3
Deutsche Wohnen SE	4	A3	3
Bayerische Motoren Werke AG	5	A1	3
Volvo AB	5	A3	3
Daimler AG	5	A3	3
Deutsche Post AG	5	A3	3
Nissan Motor Co Ltd	5	A3	3
Vinci SA	5	A3	3
Engie SA	6	A3	3
Volkswagen AG	6	A3	3
Amgen, Inc.	1	Baa1	4

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Company			
KLA Corp	1	Baa1	4
Starbucks Corporation	1	Baa1	4
Verizon Communications Inc.	1	Baa1	4
Biogen Inc	2	Baa1	4
Electronic Arts Inc.	2	Baa1	4
Maxim Integrated Products Inc.	2	Baa1	4
Continental AG	2	Baa1	4
eBay Inc	2	Baa1	4
Givaudan S.A.	2	Baa1	4
Wolters Kluwer	2	Baa1	4
Elisa Oyj	2	Baa2	4
HP Inc	2	Baa2	4
Tate & Lyle PLC	2	Baa2	4
Anglo American plc	2	Baa2	4
Verisk Analytics, Inc.	2	Baa2	4
Adecco Group AG	3	Baa1	4
Danone SA	3	Baa1	4
Enagas SA	3	Baa1	4
Eni SpA (ADR)	3	Baa1	4
Heineken N.V.	3	Baa1	4
Merck KGaA	3	Baa1	4
UPM-Kymmene Corporation	3	Baa1	4
Pernod Ricard SA	3	Baa1	4
Telekom Austria AG	3	Baa1	4
Telia Company AB	3	Baa1	4
Castellum AB	3	Baa2	4
BAE Systems plc	3	Baa2	4
Kerry Group PLC	3	Baa2	4
Solvay SA	3	Baa2	4
Centrica PLC	4	Baa1	4
Orange SA (ADR)	4	Baa1	4
United Utilities Group PLC	4	Baa1	4
Bayer AG	4	Baa1	4
A2A SpA	4	Baa2	4
Fiserv Inc	4	Baa2	4
Publicis Groupe SA	4	Baa2	4
Severn Trent Plc	4	Baa2	4
Snam SpA	4	Baa2	4
Endesa SA	4	Baa2	4
Fortum Oyj	4	Baa2	4
Kingfisher plc	4	Baa2	4
WM Morrison Supermarkets PLC	4	Baa2	4
Deutsche Telekom AG	5	Baa1	4
Repsol SA	5	Baa1	4
E.ON SE	5	Baa2	4
Enel S.p.A.	5	Baa2	4
Lafargeholcim Ltd	5	Baa2	4
Iberdrola SA	6	Baa1	4
Veolia Environnement SA	6	Baa1	4
Autodesk, Inc.	6	Baa2	4
Lanxess AG	6	Baa2	4
Naturgy Energy Group SA	6	Baa2	4
Rolls-Royce Holding PLC	6	Baa2	4

Company			
General Electric Company	10	Baa1	4
Micron Technology, Inc.	1	Baa3	5
STMicroelectronics NV	2	Baa3	5
Steel Dynamics, Inc.	2	Baa3	5
FLIR Systems, Inc.	3	Baa3	5
Marks and Spencer Group Plc	3	Baa3	5
Stora Enso OYJ	3	Baa3	5
Western Digital Corp	3	Baa3	5
Imperial Brands PLC	3	Baa3	5
Methanex Corporation	3	Baa3	5
Fresenius SE & Co KGaA	4	Baa3	5
HeidelbergCement AG	4	Baa3	5
Ceconomy AG	5	Baa3	5
Deutsche Lufthansa AG	5	Baa3	5
MTU Aero Engines AG	5	Baa3	5
Suedzucker AG	5	Baa3	5
RWE AG	6	Baa3	5
Tesco PLC	6	Baa3	5
Citrix Systems, Inc.	1	Ba1	6
Open Text Corp	2	Ba2	6
Wienerberger AG	3	Ba1	6
Atlantia SpA	5	Ba2	6
Leonardo SpA	6	Ba1	6
TUI AG	5	Ba3	7
Central Garden & Pet Co	3	B1	8
Mobile Mini Inc	4	B2	8
Outokumpu Oyj	5	B1	8
PGS ASA	8	B3	8
SGL Carbon SE	10	B2	8
Diamond Offshore Drilling Inc	10	B3	8
Mattel Inc	10	B3	8
Heidelberger Druckmaschinen AG	10	Caa1	9
Obrascon Huarte Lain SA	10	Caa1	9
Scientific Games Corp	10	Caa1	9
Transocean LTD	10	Caa2	9

To be of “investment grade”, a company must be rated 6 or lower. A risk rating between 8 and 10 is highly speculative. And what about a 7 rating? It depends.

If you look at the “investment grade” companies, risk rating between 1 and 6, you will find 4 cases, up for discussion: General Electric, Central Garden & Pet, Mobile Mini and Outokumpu Oyj. For the other 134 ratings, it’s obviously clear whether or not we are dealing with an “investment grade” company.

You could argue that, from the perspective of making an investment decision, The Value Firm® Risk Ratings and Moody’s Credit Ratings lead to the same insight in almost 98% of the cases. Please be advised never to make an investment decision solely based upon a rating. A rating is “just” an additional check, if you will.

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Moreover, if you decide that you won't invest at all in a "red rated company", whether it was assigned by The Value Firm® Risk Rating or Moody's Credit Rating, there are no cases for discussion at all. I find that mind boggling!

The Value Firm® Risk Rating Algorithm is just "software on a laptop" with access to the web. That's it. Are we witnessing the world's first Fintech Risk Rating Agency over here?

Finally, let's go back to General Electric. The company admits it is having a tough time. Since its peak at almost $33 in July 2016, the stock is down approximately 80%. But will they go bankrupt? Nobody knows for sure.

How impressive the 175 page Markopolos report may seem, there is always reason to practice caution. It reminds me in a way of the Bill Ackman 342 slide presentation on Herbalife, he gave at the Sohn Conference in 2012, stating that it was a predatory pyramid scheme destined to fail. Well, in the end Herbalife did just fine.

28 March 2020.
peter@thevaluefirm.com

Post scriptum. This piece was written prior to the outbreak of the corona virus. These are exceptionally uncertain and uncomfortable times. Nobody knows what's going to happen. Anyhow, it is assumed the world will go back to business as usual soon (months).

My thoughts and prayers are with all out there suffering from the virus and with all these wonderful health care workers. Take care.

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Attachment

Rating			S&P	Moody's	Fitch	Credit Risk
10	Very high risk +	Too many identifiable signs of possible financial distress.	CC	Ca	CC, C	Near Default. Obligations are highly speculative.
9	Very high risk	Many identifiable signs of possible financial distress.	CCC+, CCC, CCC-	Caa1, Caa2, Caa3	CCC+, CCC, CCC-	Obligations are of poor standing. Subject to very high credit risk.
8	High risk	Companies with elevated vulnerability to financial distress.	B+, B, B-	B1, B2, B3	B+, B, B-	Obligations are speculative. Subject to high credit risk.
7	Medium risk +	Companies, already more susceptibale to the unexpected.	BB-	Ba3	BB-	Obligations are speculative. Subject to more than substantial credit risk.
6	Medium risk	Good company with a moderate risk of financial distress.	BB+, BB	Ba1, Ba2	BB+, BB	Obligations are speculative. Subject to substantial credit risk.
5	Low risk ++	Good company, with still a low, but slightly more risk.	BBB-	Baa3	BBB-	Obligations of medium-grade. Subject to more than moderate credit risk.
4	Low risk +	High quality company, with still a low, but slightly more risk.	BBB+, BBB	Baa1, Baa2	BBB+, BBB	Obligations of medium-grade. Subject to moderate credit risk.
3	Low risk	High quality company, with a low risk of financial distress.	A+, A, A-	A1, A2, A3	A+, A, A-	Obligations of upper-medium grade. Subject to low credit risk.
2	Very low risk +	High quality company with a very low risk of financial distress.	AA+, AA, AA-	Aa1, Aa2, Aa3	AA+, AA, AA-	Obligations of high quality. Subject to very low credit risk.
1	Very low risk	High quality company with almost zero risk of financial distress.	AAA	Aaa	AAA	Obligations of the highest quality. Subject to the lowest level of credit risk.

Intelsat

The word "bankrupt" derives from ***banco rotto****, the practice in midieval Italy of smashing the benches that merchants sold their goods from if they did not pay their debts, to force them to stop trading.*

On May 13, 2020, satellite operator Intelsat, which launched the world's first commercial communications satellite Intelsat 1 in 1965, filed for Chapter 11 bankruptcy in order to ease a multibillion-dollar debt and join an FCC spectrum clearing program.

Intelsat notes that its current plan involves no changes to the day-to-day operation of the company, or any reduction in headcount. The company also said that it has secured $1 billion in committed new financing, which will come in the form of debtor-in-position funds, subject to court approval.

The company also says it'll be continuing to launch new satellites, building out its ground network and adding new services as it goes through the process, and that its goal is to get through the restructuring "as quickly as possible."

Was it foreseeable that Intelsat was close to financial distress, just by looking at their financial statements? And the answer to that question is, I believe, yes.

The newly developed Risk Rating Algorithm, as described in the Winter 2020 Edition on Intelligent Cloning, assigned a 10 rating to Intelsat, meaning that there were too many identifiable signs of possible financial distress.

Score	Meaning	
10	Very high risk +	Too many identifiable signs of possible financial distress.
9	Very high risk	Many identifiable signs of possible financial distress.
8	High risk	Companies with elevated vulnerability to financial distress.
7	Medium risk +	Companies, already more susceptibale to the unexpected.
6	Medium risk	Good company with a moderate risk of financial distress.
5	Low risk ++	Good company, with still a low, but slghtly more risk.
4	Low risk +	High quality company, with still a low, but slightly more risk.
3	Low risk	High quality company, with a low risk of financial distress.
2	Very low risk +	High quality company with a very low risk of financial distress.
1	Very low risk	High quality company with almost zero risk of financial distress.

One of the unique features of this algorithm is that for the higher risk ratings, the Risk Rating Algorithm tries to identify unusual risk profiles ("potential bankruptcy data footprints") and then, in combination with other parameters, assign a risk rating to that company.

Last week I showed you that 70% of the latest 20 companies in the bankruptcy list by then, companies that recently went bankrupt or were seriously considering going into bankruptcy were rated " very high risk+ " , that is, a 10 rating. The other 30% needed an additional "bankruptcy data footprint" to be identified as a 10 rating and to ensure that in the future similar "bankruptcy data footprints" will be identified as very high risk.

This week, 7 new companies were added and all of them were identified as a 10 rating, without adding a new "bankruptcy data footprint". This means that out of the latest 20 companies, only 3 needed an additional footprint. In other words, 85% of the "bankruptcies" were rated correctly by the algorithm. I do have my doubts if these levels are sustainable in the long run, but for now, I am more than happy with it.

Please be careful with the interpretation of this 85%. Read it carefully once again, if you will. This does NOT mean that "a 10 rated company" has a 85% chance of going bankrupt!

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Software release management

Current release: Risk Rating Algorithm 28042020.

Bankruptcy case	Software changes	New bankruptcy data footprints
Laura Ashley	-	-
LSC Communications	-	-
Foresight Energy	-	X
Diamand Offshore Dr.	-	-
Debenhams	-	X
Yuma Energy	-	-
Frontier Communications	-	X
BroadVision Inc.	-	-
Carbo Ceramics	-	-
J.C. Penny	-	-
Hertz	-	X
Melinta Therapeutics	-	-
Speedcast	-	X
Insys Therapeutics	-	-
Stage Stores	-	-
Chesapeake	-	-
Intelsat	-	-
Ultra Petroleum	-	-
Virgin Australia	-	-
Avianca	-	X
Mallinckrodt	-	-
Centric Brands	-	-
Internap	-	-
Quorum Health	-	-
Akorn	-	-
Hornbeck Offshore	-	-
Tuesday Morning	-	-

If you are interested in these risk ratings, let me know. Right now, I am looking for a "launching customer", who will benefit tremendously from being the launching customer. E-mail: peter@thevaluefirm.com.

Prospective customers include other rating agencies (Moody's, Standard & Poor's, Fitch, Graydon), endowments, pension funds, accountancy firms, institutional investors, hedge funds, family offices, banks and insurance companies.

Thanks for reading!
28 May 2020.

Post scriptum. I will continue updating you on these bankruptcies and risk ratings in August once again. My annual Investor Letter will be published 1 July 2020.

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Laura Ashley

22 April 2020. British fashion and housewares brand Laura Ashley announced plans to file for administration, the United Kingdom's equivalent of bankruptcy, as efforts to obtain an emergency loan to keep the company afloat were halted by the coronavirus outbreak.

The announcement could affect more than 150 British stores and 2,700 employees.

Laura Ashley branded products are available in the United States at stores including Marshall's, JCPenney, HomeGoods, Neimans Last Call and Macy's Backstage.

The Guardian reported that "Discussions with stakeholders have been ongoing and the directors are in advanced discussions for the provision of third-party debt funding. However, based on the company's revised cash flow forecasts and the increased uncertainty facing the group, the company expects that it will not be in a position to draw down additional funds from third-party lenders in a timely manner sufficient to support working capital requirements.

MUI Asia Limited, the investment company that controls Laura Ashley, has confirmed that it is unable to provide financial support in the required timeframe."

Was it foreseeable that Laura Ashley was close to financial distress, just by looking at their financial statements? The answer to that question is, I believe, yes.

The newly developed Risk Rating Algorithm, as described in the Winter 2020 Edition on Intelligent Cloning, assigned a 10 rating to Laura Ashley, meaning that there were too many identifiable signs of possible financial distress.

Score	Meaning	
10	Very high risk +	Too many identifiable signs of possible financial distress.
9	Very high risk	Many identifiable signs of possible financial distress.
8	High risk	Companies with elevated vulnerability to financial distress.
7	Medium risk +	Companies, already more susceptibale to the unexpected.
6	Medium risk	Good company with a moderate risk of financial distress.
5	Low risk ++	Good company, with still a low, but slghtly more risk.
4	Low risk +	High quality company, with still a low, but slightly more risk.
3	Low risk	High quality company, with a low risk of financial distress.
2	Very low risk +	High quality company with a very low risk of financial distress.
1	Very low risk	High quality company with almost zero risk of financial distress.

There is no such thing as investing without risk. We all know that. But there is definitely a distinction between a low risk investment and a high risk investment. And to pinpoint that distinction, the algorithm assigns risk ratings to companies, based upon their historical financials.

One of the unique characteristics of this algorithm is that it is calibrated by using the actual credit ratings of credit rating agencies (Moody's, Standard & Poor's and Fitch) and by studying actual bankruptcy cases.

The high risk ratings are partly based upon "pattern recognition". It's my experience that in almost every bankruptcy case, and I studied many, you can identify "suspicious data patterns", or perhaps the better phrase for that is "bankruptcy data footprints".

The idea is that the more "bankruptcy data footprints" are added to the algorithm, the better the high risk ratings will become. In the example of Laura Ashley, the algorithm assigned a 10 rating, without adding a new "bankruptcy data footprint" to the algorithm. And that tells me that there is already a lot of value in this algorithm.

In their announcement to file for administration, Laura Ashley refers to the coronavirus outbreak. Well… In 2019, based upon the historical financials up until 2018, the algorithm assigned a 10 rating, meaning that the company was already in deep trouble by then. In 2018, the algorithm did not find any signs of potential financial distress. Here are the historical Laura Ashley risk ratings:

2016	2017	2018	2019	2020
2	2	4	10	10

That's it for now.

Are you worried about this corona crash and what might happen next? Or perhaps even afraid? Howard Marks is: LINK.

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LSC Communications

On April 13, 2020, magazine and book printing powerhouse LSC Communications filed for Chapter 11 Bankruptcy Protection. The company accumulated approximately $900 million in debt; no positive operating income, net income or operational cash flow at all.

LSC is continuing constructive discussions with its lenders regarding strategic alternatives and the terms of a potential financial restructuring plan. LSC has received commitments for $100 million in debtor-in-possession financing from certain of its revolving lenders, subject to the satisfaction of certain closing conditions. Following court approval, this financing, combined with cash on hand and generated through its ongoing operations, is expected to be sufficient to support the Company's operational and restructuring needs.

The company now has "sufficient liquidity to continue operating its business," which should have several publishers across the U.S. breathing a sigh of relief. LSC is the largest book printer in the country, and also boasts a sizable clientele of magazines.

Was it foreseeable that LSC Communications was close to financial distress, just by looking at their financial statements? The answer to that question is, I believe, yes.

The newly developed Risk Rating Algorithm, as described in the Winter 2020 Edition on Intelligent Cloning, assigned a 10 rating to LSC Communications, meaning that there were too many identifiable signs of possible financial distress.

A year earlier, in 2019, the Risk Rating Algorithm assigned a 6 rating to LSC Communications, meaning only a moderate risk of financial distress.

Score	Meaning	
10	Very high risk +	Too many identifiable signs of possible financial distress.
9	Very high risk	Many identifiable signs of possible financial distress.
8	High risk	Companies with elevated vulnerability to financial distress.
7	Medium risk +	Companies, already more susceptibale to the unexpected.
6	Medium risk	Good company with a moderate risk of financial distress.
5	Low risk ++	Good company, with still a low, but slghtly more risk.
4	Low risk +	High quality company, with still a low, but slightly more risk.
3	Low risk	High quality company, with a low risk of financial distress.
2	Very low risk +	High quality company with a very low risk of financial distress.
1	Very low risk	High quality company with almost zero risk of financial distress.

The algorithms helps identifying risks in a timely manner, hopefully way before these risks manifest themselves. Here are the main ingredients of this Risk Rating Algorithm:

- Fundamental Warren Buffett type of criteria are used to identify the high quality, low risk companies.
- Insights of Schilit, Sloan, Altman, Beneish and others are used to identify risk, especially the higher risk ratings.
- Credit ratings of Moody's, Fitch and Standard & Poor's are used for calibrating the risk ratings even further.
- Identifying, if possible, "suspicious data patterns" in actual bankruptcy cases and use these "company specific bankruptcy data footprints" as reference for assigning the highest risk ratings and by that identifying the group of companies with a high degree of bankruptcy exposure.

The idea is that the more "bankruptcy data footprints" are added to the algorithm, the better the high risk ratings will become. In the example of LSC Communications, the "bankruptcy data footprint" of FTD Companies served as a reference for the high risk rating of LSC Communications. I don't know of any algorithm out there, that is able to do just that, as of yet.

The Value Firm®

The ultimate goal is to build up a certain "mass of bankruptcy intelligence", that you hope for will act as a reference for identifying future high risk ratings. Up until now 76 bankruptcy cases were evaluated and approximately 50% led to new "bankruptcy data footprints". 24 more to go to reach the target of 100 bankruptcies.

Now let's have a look at 30 new Fitch ratings, compare them with The Value Firm® Risk Ratings, and see if there are adjustments to be made to the algorithm:

	The Value Firm®	Fitch	
Companhio Energetica	3	AAA	1
Progressive Corp	2	AA	2
Intel	2	A+	3
TE Connectivity	2	A-	3
CK Hutchison	4	A-	3
Enel	4	A-	3
Beijing Gas	6	A	3
NVR Inc	1	BBB+	4
Agilent	2	BBB+	4
D.R. Horton	2	BBB	4
Agrico Eagle Mines	2	BBB	4
Seagate Technology	1	BBB-	5
Continental Resources	2	BBB-	5
NXP Semiconductor	2	BBB-	5
Marvell Technology	3	BBB-	5
Sunrise Communications	4	BBB-	5
Williams Companies	5	BBB-	5
Avnet	6	BBB-	5
Western Digital	2	BB+	6
MTN Group	2	BB	6
Klabin S.A.	4	BB+	6
Centurylink Inc	4	BB	6
Alcoa	4	BB+	6
Embraer	4	BB+	6
Transalta Corporations	5	BB+	6
Arconic	6	BB+	6
Minor International	5	B	8
Kaisa Group Holdings	6	B	8
Tenneco	7	B+	8
SM Energy	10	C	10

I am very happy to see that both the Fitch Credit Rating and The Value Firm® Risk Rating identified SM Energy as a very high risk company, with too many signs of possible financial distress. You can find the Fitch comments over here.

I don't see any reason at all to make adjustments to the algorithm and I just accept that there are differences of opinion on some of the ratings. Actually, these differences are, I believe, reason to reassess, in depth, the specific company risk.

Although the algorithm was initially designed for publically traded companies, I am quite sure that it can be put to good use for private companies as well.

If you are interested in these risk ratings, let me know. Right now, I am looking for a "launching customer", who will benefit tremendously from being the launching customer. E-mail: peter@thevaluefirm.com.

Prospective customers include other rating agencies (Moody's, Standard & Poor's, Fitch, Graydon), endowments, pension funds, accountancy firms, institutional investors, hedge funds, banks and insurance companies.

Software release management

Current release: Risk Rating Algorithm 28042020.

Date	Software changes	New bankruptcy data footprints
29042020	-	Foresight Energy
07052020	-	-

Thanks for reading!
7 May 2020.

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Attachment

Rating			S&P	Moody's	Fitch	Credit Risk
10	Very high risk +	Too many identifiable signs of possible financial distress.	CC	Ca	CC, C	Near Default. Obligations are highly speculative.
9	Very high risk	Many identifiable signs of possible financial distress.	CCC+, CCC, CCC-	Caa1, Caa2, Caa3	CCC+, CCC, CCC-	Obligations are of poor standing. Subject to very high credit risk.
8	High risk	Companies with elevated vulnerability to financial distress.	B+, B, B-	B1, B2, B3	B+, B, B-	Obligations are speculative. Subject to high credit risk.
7	Medium risk +	Companies, already more susceptibale to the unexpected.	BB-	Ba3	BB-	Obligations are speculative. Subject to more than substantial credit risk.
6	Medium risk	Good company with a moderate risk of financial distress.	BB+, BB	Ba1, Ba2	BB+, BB	Obligations are speculative. Subject to substantial credit risk.
5	Low risk ++	Good company, with still a low, but slightly more risk.	BBB-	Baa3	BBB-	Obligations of medium-grade. Subject to more than moderate credit risk.
4	Low risk +	High quality company, with still a low, but slightly more risk.	BBB+, BBB	Baa1, Baa2	BBB+, BBB	Obligations of medium-grade. Subject to moderate credit risk.
3	Low risk	High quality company, with a low risk of financial distress.	A+, A, A-	A1, A2, A3	A+, A, A-	Obligations of upper-medium grade. Subject to low credit risk.
2	Very low risk +	High quality company with a very low risk of financial distress.	AA+, AA, AA-	Aa1, Aa2, Aa3	AA+, AA, AA-	Obligations of high quality. Subject to very low credit risk.
1	Very low risk	High quality company with almost zero risk of financial distress.	AAA	Aaa	AAA	Obligations of the highest quality. Subject to the lowest level of credit risk.

McClatchy

McClatchy Co., the second-largest U.S. newspaper group by circulation, filed for bankruptcy protection, a move that comes as the nation's newspaper industry is struggling to cope with a sharp decline in print advertising and the challenges of building a robust digital business.

The bankruptcy will end 163 years of family control of America's second largest local news company and hand it to creditors who have expressed support for independent journalism.

The Chapter 11 filing will allow McClatchy to restructure its debts and, it hopes, shed much of its pension obligations. Under a plan outlined in its filing to a federal bankruptcy court, about 55 percent of its debt would be eliminated as the news organization tries to reposition for a digital future.

The likely new owners, if the court accepts the plan, would be led by hedge fund Chatham Asset Management LLC. They would operate McClatchy as a privately held company. More than 7 million shares of both publicly available and protected family-owned stock would be canceled.

Was it foreseeable that McClatchy was close to financial distress, just by looking at their financial statements? The answer to that question is, I believe, yes.

The newly developed Risk Rating Algorithm, as described in the Winter 2020 Edition on Intelligent Cloning, assigned a 10 rating to McClatchy, meaning that there were too many identifiable signs of possible financial distress.

Over the last 4 years the company experienced declining revenues and negative net income. Over the last 2 years stockholders equity turned negative. Much of the larger loss was due to a write-down in the assets of the company, as well as restructuring expenses and severance charges. But even without those charges and other special items, the company would have reported a net loss of $34.2 million in the first nine months of the year.

Score	Meaning	
10	Very high risk +	Too many identifiable signs of possible financial distress.
9	Very high risk	Many identifiable signs of possible financial distress.
8	High risk	Companies with elevated vulnerability to financial distress.
7	Medium risk +	Companies, already more susceptibale to the unexpected.
6	Medium risk	Good company with a moderate risk of financial distress.
5	Low risk ++	Good company, with still a low, but slghtly more risk.
4	Low risk +	High quality company, with still a low, but slightly more risk.
3	Low risk	High quality company, with a low risk of financial distress.
2	Very low risk +	High quality company with a very low risk of financial distress.
1	Very low risk	High quality company with almost zero risk of financial distress.

14 February 2020.

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McDermott

U.S. oilfield services provider McDermott International filed for prepackaged bankruptcy protection under Chapter 11 on 21 January 2020. The company struggled with the debt taken on from its takeover of Chicago Bridge & Iron in 2018 in an all-stock deal valued at around $6 billion including nearly $4 billion in debt.

McDermott specializes in building and installing large, expensive items like oil platforms and natural gas plants, a business that's under pressure as low energy prices discourage new construction. McDermott's total debt stood at $9.86 billion as of Nov. 4, 2019.

McDermott has informed that it has the support of more than two-thirds of all its funded debt creditors for a restructuring transaction that will equitize nearly all the company's funded debt, eliminating over $4.6 billion of debt.

As part of the restructuring transaction, subsidiaries of McDermott have entered into a share and asset purchase agreement with a joint partnership between The Chatterjee Group and Rhône Group pursuant to which the joint partnership will serve as the "stalking-horse bidder" in a court-supervised sale process for Lummus Technology.

Was it foreseeable that McDermott was close to financial distress, just by looking at their financial statements? The answer to that question is, I believe, yes.

The newly developed Risk Rating Algorithm, as described in the Winter 2020 Edition on Intelligent Cloning, assigned a 10 rating to McDermott, meaning that there were too many identifiable signs of possible financial distress.

The debt overloaded company wasn't able to generate positive pretax income, net income, operational cash flow or free cash flow, according to their 2018 financial statements.

Score	Meaning	
10	Very high risk +	Too many identifiable signs of possible financial distress.
9	Very high risk	Many identifiable signs of possible financial distress.
8	High risk	Companies with elevated vulnerability to financial distress.
7	Medium risk +	Companies, already more susceptibale to the unexpected.
6	Medium risk	Good company with a moderate risk of financial distress.
5	Low risk ++	Good company, with still a low, but slghtly more risk.
4	Low risk +	High quality company, with still a low, but slightly more risk.
3	Low risk	High quality company, with a low risk of financial distress.
2	Very low risk +	High quality company with a very low risk of financial distress.
1	Very low risk	High quality company with almost zero risk of financial distress.

After Thomas Cook, McClatchy and Pier 1, McDermott is the fourth example of a company rated 10 by the Risk rating Algorithm before it filed for Chapter 11.

I will continue evaluating bankruptcies the upcoming months and let's see if the algorithm indeed has predictive bankruptcy detection value.

4 March 2020.

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Pier 1

Home furnishings chain Pier 1 filed for bankruptcy and plans to sell the company, just over a month after announcing hundreds of store closures and warning about its ability to stay in business amid increased competition.

Once wildly popular for its inexpensive, imported pillows and rattan chairs, the home furnishings chain struggled to compete against Home Goods, Etsy and giants like Amazon and Walmart.

Pier 1 announced in a statement that it was starting voluntary Chapter 11 bankruptcy proceedings to "facilitate an orderly sale process" as it continues discussions with multiple potential buyers.

"Today's actions are intended to provide Pier 1 with additional time and financial flexibility as we now work to unlock additional value for our stakeholders through a sale of the Company," said CEO Robert Riesbeck. "We are moving ahead in this process with the support of our lenders and are pleased with the initial interest as we engage in discussions with potential buyers."

Was it foreseeable that Pier 1 was close to financial distress, just by looking at their financial statements? The answer to that question is, I believe, yes.

The newly developed Risk Rating Algorithm, as described in the Winter 2020 Edition on Intelligent Cloning, assigned a 10 rating to Pier 1, meaning that there were too many identifiable signs of possible financial distress.

Declining revenues and operating income, net income and operational cash flow all turning negative in 2019.

Score	Meaning	
10	Very high risk +	Too many identifiable signs of possible financial distress.
9	Very high risk	Many identifiable signs of possible financial distress.
8	High risk	Companies with elevated vulnerability to financial distress.
7	Medium risk +	Companies, already more susceptibale to the unexpected.
6	Medium risk	Good company with a moderate risk of financial distress.
5	Low risk ++	Good company, with still a low, but slghtly more risk.
4	Low risk +	High quality company, with still a low, but slightly more risk.
3	Low risk	High quality company, with a low risk of financial distress.
2	Very low risk +	High quality company with a very low risk of financial distress.
1	Very low risk	High quality company with almost zero risk of financial distress.

26 february 2020..

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Thomas Cook

Today, the world's oldest travel firm Thomas Cook (TCG.L) collapsed, stranding hundreds of thousands of holidaymakers around the globe and sparking the largest peacetime repatriation effort in British history.

Was it foreseeable that Thomas Cook was close to financial distress, just by looking at their financial statements? The answer to that question is, I believe, yes.

If you study "forensic accounting", you will learn that fraud and bankruptcy models may serve as important tools in analyzing the financial information presented by companies. Along with the earnings management ratios, quality of earnings and quality of revenue (Schilit 2003), more elaborate models and metrics (Altman 1968 and 2005, Dechow, Sloan and Sweeney 1996, Sloan 1996, Beneish 1999, and Dechow, Ge, Larson, and Sloan 2007, and Robinson 2007) may serve as a veritable arsenal of techniques for detecting financial problems within companies.

This is by no means "easy stuff", and I am certainly not a certified forensic accountant. But that doesn't mean that you can't apply these models and insights. I tend to believe that I do know how to value good businesses (which most people unfortunately don't), and I can apply that knowledge to identify bad businesses.

What happens if you combine these value investing insights with the group of shenanigans & bankruptcy models? Well, you get some interesting results.

The newly developed risk rating model assigned a score of 10, meaning very high risk, to Thomas Cook, based upon the historic 5 year financials of the company. Fully auditable.

There is still a lot of work to do, but the simple fact that ***The Value Firm® Risk Rating Agency*** assigned the score of 10 to a company that, unfortunately, went bankrupt, is hopeful and promising.

The purpose of these risk ratings is to provide investors with a simple system of graduation by which "the probability of financial distress of a company within 2 years" may be gauged.

Risk Rating	Meaning	
10	Very high risk +	Too many signs of possible financial distress
9	Very high risk	Many signs of possible financial distress
8	High risk +	Elevated vulnerability to financial distress
7	High risk	Real possibility of financial distress.
6	Medium risk ++	Medium possibility of financial distress
5	Medium risk +	Elevated vulnerability, more susceptibale to "the unexpected"
4	Medium risk	Low expection of financial distress
3	Low risk ++	High quality companies, but more vulnerable
2	Low risk +	High quality companies, but slightly more vulnerable
1	Low risk	Companies of exceptional high quality

I believe it is a mistake to think that you can predict a bankruptcy. It is "just" a risk rating, indicating a probability that financial distress might happen within 2 years from now.

If some kind of stunning acrobat act is rated as "very high risk", that doesn't mean the acrobat will fail for sure. The same holds for companies and businesses.

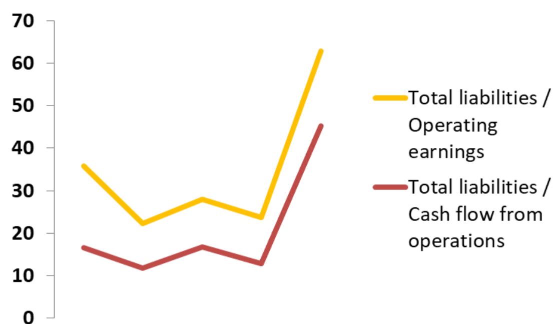
The models and insights I use are well documented and actually, you can find all of them on the web. The "new thing" is that I came up with this balancing act of identifying the models and ratios that really matter. In fact, there are so many ratios, that if you try to apply them all, you will most certainly fail.

I do use Altman, Beneish and Schilit, and I don't use Dechow and Sloan (for now). When you try to implement these models, there are still some choices to be made. E.g. do you use the 5 ratio or 8 ratio Beneish model. And what about your benchmark for "financial distress: -1.78 or -2.22?

Same for Altman and Schilit. You can "exactly" copy the classic definitions, or you might want to make some adjustments. And as said earlier, I added value investing insights as well.

Every new bankruptcy situation will add some new insights and hopefully the model will improve over the years, just by studying those. And there won't be a shortage of case studies.

Here you find the results of two Thomas Cook debt ratios that, I believe, reveal something:



The upcoming weekend the Autumn 2019 Edition on Intelligent Cloning will be released. Until then, the best!

Peter

23 September 2019.

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Whiting Petroleum

Whiting Petroleum becomes the first major shale bankruptcy and becomes the first publicly traded casualty of crashing crude oil prices.

Reuters.Com reports that numerous shale oil and gas producers, faced with burdensome debt loads, have cut spending aggressively as oil prices have plunged by about two-thirds this year with the coronavirus pandemic slamming fuel demand and Russia and Saudi Arabia flooding markets with extra crude.

Whiting said it had more than $585 million of cash on its balance sheet and will continue to operate its business in line with commercial commitments. The company also said it would honor financial obligations during the restructuring without any "need for additional financing."

Was it foreseeable that Whiting Petroleum was close to financial distress, just by looking at their financial statements? The answer to that question is, I believe, yes.

The newly developed Risk Rating Algorithm, as described in the Winter 2020 Edition on Intelligent Cloning, assigned a 10 rating to Whiting Petroleum, meaning that there were too many identifiable signs of possible financial distress.

Score	Meaning	
10	Very high risk +	Too many identifiable signs of possible financial distress.
9	Very high risk	Many identifiable signs of possible financial distress.
8	High risk	Companies with elevated vulnerability to financial distress.
7	Medium risk +	Companies, already more susceptibale to the unexpected.
6	Medium risk	Good company with a moderate risk of financial distress.
5	Low risk ++	Good company, with still a low, but slghtly more risk.
4	Low risk +	High quality company, with still a low, but slightly more risk.
3	Low risk	High quality company, with a low risk of financial distress.
2	Very low risk +	High quality company with a very low risk of financial distress.
1	Very low risk	High quality company with almost zero risk of financial distress.

The Risk Rating Algorithm looks from the perspective of historical financial statements for “accounting irregularities”, or “suspicious data patterns” if you will, e.g. by looking at the earnings management ratios, quality of earnings and quality of revenues (Schilit), but also more elaborate models and metrics (Altman, Sloan, Sweeney and Beneish).

The testing, fine tuning and calibrating of the algorithm, e.g. by studying bankruptcies is, I believe, far advanced. I will continue the testing and fine tuning, but for now let’s have a look at the results, as we put the algorithm to work in France (at least 500M Euro sales).

Company	Score
Christian Dior SA	1
Hermes International SCA	1
Bureau Veritas SA	1
Ubisoft Entertainment SA	1
Kaufman & Broad SA	1
Metropole Television SA	1
LVMH Moet Hennessy Louis Vuitton SE	2
Safran SA	2
Atos SE	2
Kering SA	2
Elior Group SA	2
Ipsen SA	2
Trigano SA	2
Somfy SA	2
Sartorius Stedim Biotech SA	2
Devoteam SA	2
L'Oreal SA	3
Sodexo SA	3
SEB SA	3
Dassault Systemes SE	3

Company	Score
Derichebourg SA	3
Television Francaise 1 SA	3
Synergie SE	3
Alten SA	3
Elis SA	3
Worldline SA	3
Akwel SA	3
Societe B I C SA	3
Compagnie de Saint Gobain SA	4
Bouygues SA	4
Danone SA	4
Schneider Electric SE	4
Air Liquide SA	4
Eiffage SA	4
Capgemini SE	4
Publicis Groupe SA	4
EssilorLuxottica SA	4
Pernod Ricard SA	4
Arkema SA	4
Ald SA	4
Lagardere SCA	4
Legrand SA	4
Xpo Logistics Europe SA	4
Teleperformance SE	4
Sopra Steria Group	4
Nexity SA	4
Rubis SCA	4
Eurofins Scientific SE	4
Tarkett SA	4
Accor SA	4
Amundi SA	4
BioMerieux SA	4
LISI SA	4
Manitou BF SA	4
Eutelsat Communications SA	4
Quadient SA	4
Electricite de Strasbourg SA	4
Virbac SA	4
Mersen SA	4
Guerbet SA	4
Manutan International SA	4
SMCP SA	4
Plastiques du Val de Loire SA	4
Hexaom SA	4
Groupe Guillin SA	4
Seche Environnement SA	4
Aeroports de Paris SA	4
Compagnie des Alpes SA	4
Remy Cointreau	4
Total SA	4
Carrefour SA	5
Vinci SA	5
Air France KLM SA	5
Veolia Environnement SA	5
Valeo SA	5
Faurecia SE	5
Suez SA	5
Vivendi SA	5
Colas SA	5
Compagnie Plastic Omnium SA	5
Nexans SA	5
Spie SA	5
Burelle SA	5
Fnac Darty SA	5
Savencia SA	5
Imerys SA	5
Unibel SA	5
Vicat SA	5
Altran Technologies SA	5
Bonduelle SA	5
Ramsay Generale De Sante SA	5
Ipsos SA	5
Jacquet Metal Service SA	5
Vilmorin & Cie SA	5
Samse SA	5
Id Logistics Sas	5
GL Events SA	5
EXEL Industries SA	5
Solocal Group SA	5
Fleury Michon SA	5
Damartex SA	5
SRP Groupe SA	5
Haulotte Group SA	5
JCDecaux SA	5
Klepierre SA	5
Compagnie Plastic Omnium SA	5
Sanofi SA	5
Engie SA	6
Airbus SE	6
Renault SA	6
SCOR SE	6
Rexel SA	6
Bollore SE	6
Dassault Aviation SA	6
Eramet SA	6
April SA	6
Coface SA	6
Electricite de France SA	7
Casino Guichard Perrachon SA	7
Fonciere Euris SA	7
Rallye SA	7
Korian SA	7

The Value Firm®

Company	Rating
Antalis SA	7
Getlink SE	7
Latecoere SA	7
Exacompta Clairefontaine SA	7
Herige SA	8
Technicolor SA	9
Pierre et Vacances SA	9
Vallourec SA	10
Orchestra Premaman SA	10

A final remark on the two 10 ratings, Vallourec and Orchestra Premaman:

- Vallourec's debt is rated by credit rating agency Standard & Poor's. The Long-term credit rating is CCC+, which is the equivalent of very high credit risk.
- Orchestra-Prémaman faces insolvency. The French childrenswear retailer, one of the largest in Europe, has asked for safeguard procedure to restructure its business and avoid an eventual Chapter 11.

6 April 2020.
peter@thevaluefirm.com

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Rating			S&P	Moody's	Fitch	Credit Risk
10	Very high risk +	Too many identifiable signs of possible financial distress.	CC	Ca	CC, C	Near Default. Obligations are highly speculative.
9	Very high risk	Many identifiable signs of possible financial distress.	CCC+, CCC, CCC-	Caa1, Caa2, Caa3	CCC+, CCC, CCC-	Obligations are of poor standing. Subject to very high credit risk.
8	High risk	Companies with elevated vulnerability to financial distress.	B+, B, B-	B1, B2, B3	B+, B, B-	Obligations are speculative. Subject to high credit risk.
7	Medium risk +	Companies, already more susceptibale to the unexpected.	BB-	Ba3	BB-	Obligations are speculative. Subject to more than substantial credit risk.
6	Medium risk	Good company with a moderate risk of financial distress.	BB+, BB	Ba1, Ba2	BB+, BB	Obligations are speculative. Subject to substantial credit risk.
5	Low risk ++	Good company, with still a low, but slightly more risk.	BBB-	Baa3	BBB-	Obligations of medium-grade. Subject to more than moderate credit risk.
4	Low risk +	High quality company, with still a low, but slightly more risk.	BBB+, BBB	Baa1, Baa2	BBB+, BBB	Obligations of medium-grade. Subject to moderate credit risk.
3	Low risk	High quality company, with a low risk of financial distress.	A+, A, A-	A1, A2, A3	A+, A, A-	Obligations of upper-medium grade. Subject to low credit risk.
2	Very low risk +	High quality company with a very low risk of financial distress.	AA+, AA, AA-	Aa1, Aa2, Aa3	AA+, AA, AA-	Obligations of high quality. Subject to very low credit risk.
1	Very low risk	High quality company with almost zero risk of financial distress.	AAA	Aaa	AAA	Obligations of the highest quality. Subject to the lowest level of credit risk.