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ABOUT THE TOP STOCKS CHALLENGE

The ideas featured within this report were selected as the 15 Winners and Finalists of the 3rd Top Stocks Challenge, an annual investment research competition hosted by SumZero, a global platform of nearly 17K buyside investment professionals.

SumZero members are investment professionals working at hedge funds, private equity funds, mutual funds, and family offices or are investment professionals with substantial prior fund experience. The complete research history of individuals featured in this report, as well as bios, and work history can be found on the SumZero database.

The 95 submissions entered into this year’s Challenge were independently assessed and voted on by a panel of 25 senior fund professionals and asset allocators. The following, multi-factor criteria was utilized to determine the Winners:

- VALIDITY OF THE THESIS
- STRENGTH OF THE SUPPORTING ARGUMENT
- FEASIBILITY OF THE TRADE
- ORIGINALITY
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Special situation opportunities with a tangible trigger event.
Potential catalysts include bankruptcy, spin-offs, litigation, regulatory changes, etc.
Echostar Corp

Asset: Equity
Symbol: SATS:US
Idea Posted: 12/20/18
Idea Updated: 12/25/18

RETURN TO DATE: 12.94%
EXPECTED RETURN: 366.01%

Best IP in the satellite space at 3.5x EBITDA on core business with additional free options worth more than the current EV

About Nitin Sacheti

Prior to founding Papyrus Capital, Nitin was a Senior Analyst with Equity Contribution at Charter Bridge Capital where he managed the firm’s investments in the technology, media, and telecom sectors. Nitin was also responsible for select consumer investments. Prior to Charter Bridge, Nitin was a Senior Analyst at Cobalt Capital where he focused on technology, media and telecom investments. Nitin has 12 years of buy-side experience, having begun his investment career in 2006 at Ampere Capital Management, a consumer, media, telecom and technology focused investment firm, initially as a Junior Analyst, rising to Assistant Portfolio Manager. Nitin graduated from the University of Chicago with a BA in Economics and was a visiting undergraduate student in Economics at Harvard University.

About Papyrus Capital

Papyrus Capital is an investment adviser focused on compounding partner capital by investing in mispriced public securities, mostly equities, with an emphasis on intrinsic value generation over time.
Echostar Corp a

Asset Class: Equity   Symbol: SATS:US   Updated: 12/24/2018   Submitted: 12/21/2018

BY: Nitin Sacheti

FORMERLY AT: Papyrus Capital

Best IP in the satellite space at 3.5x EBITDA on core business with additional free options worth more than the current EV

INVESTMENT THESIS

ECHOSTAR (SATS) – EXTREMELY CHEAP WITH ADDITIONAL FREE OPTIONS

THESIS

Echostar (SATS) offers the opportunity to invest in:

1. A predictable core business at a very attractive multiple (3.5x EBITDA on the core business)
2. With significant upside due to multiple hidden assets,
3. Run by a talented owner/manager, Charlie Ergen.

We believe the core operating business is worth $88 (146% upside). Should certain strategic options play out the company would be worth $197/share, offering 446% upside.

WHY IS SATS MISVALUED?

There are a ton of stocks down 40% YTD, just like SATS but many of those are cyclical/levered/impaired in a trade war. SATS is none of these things. Its core business is stable/predictable and almost a utility (broadband with no competition), its current cash flows are almost entirely domestic and it has very little net debt. It’s down mainly because of high hedge fund ownership. One $1bln fund closed down abruptly and liquidated its SATS position, taking it from $58 to 50. Another from the high $40s~mid $40s and a mutual fund took it from the mid $40s to the high $30s. This is all forced selling based on redemptions/liquidations which presents us with an incredible opportunity.
PREDICTABLE CORE BUSINESS AT AN ATTRACTIVE MULTIPLE: ECHOSTAR OPERATES THREE MAJOR CORE BUSINESSES

1. KA-BAND JUPITER SATELLITES - THE CROWN JEWEL OF SATS (FIRST MAJOR CORE BUSINESS)

Over the past several years, a technology shift has occurred within the satellite industry; newly launched Ka-band satellites like SATS’ offer 10x capacity for the same construction costs as legacy Ku-band satellites – i.e. 1/10th the cost per bit. The number of satellites that can offer this sort of service is also limited by the number of orbital slots available and the IP is very hard to recreate, so it will remain a duopoly. SATS has three major revenue opportunities in this segment.

• CONSUMER BROADBAND - SATS sells broadband service to consumers in very rural areas. The increased capacity allows for greater data throughput which increases the addressable markets for the satellites – more consumers are willing to subscribe to satellite broadband due to higher speeds (25mbps) vs. dial-up/DSL (1-5mbps). These satellites offer the ability to run service to a home for $400 vs. $6k per rural home for wireless or cable broadband – there is very little risk of terrestrial competition. Currently SATS offers service in North America with limited service in Brazil and Colombia. Echostar and competitor Viasat’s combined 4 satellites can serve 4m customers (though some capacity will be used in Mexico/Canada and for other services including in-flight broadband) while the FCC estimates that the market size is about 20m unserved/underserved households in the US, alone. SATS also recently added capacity over South America where the TAM is very large (given lower quality cable pipes, they are competing in cities for customers, too)

They have only scratched the surface as it relates to worldwide consumer broadband demand since SATS and VSAT are the only companies offering this service.

• 5G WIRELESS – MASSIVELY CHANGING LANDSCAPE: What is 5G – in a nutshell, an ultra-fast wireless standard that requires a densified network – i.e. more wireless towers along with small cell wireless towers attached to lampposts and in buildings. 5G is also all about backhaul – when we densify wireless networks with so many more radios, we need to ‘trunk’ that data back through to the datacenters. Trunking is accomplished through fiber/cable in large cities and satellite in rural areas. Given their cost per bit advantage in Ka-band, we could envision an entire fleet of Echostar satellites across the world trunking capacity in rural areas. 2 Jupiter Ka-band satellites handling consumer broadband in the US, but we could see 10-20 built across the world over time.

• INFLIGHT – Fastest Inflight Broadband Speeds. In-flight broadband speeds using Ka are much faster than substitute products that use ATG and Ku (Gogo/Panasonic). This is a large and growing market as new satellites are built across regions with aircraft traffic.

• COMPETITION – The only competitor for consumer broadband in rural areas, DSL/dial up, is not improving while we are seeing Moore’s Law related cost per bit declines in Ka-band satellites. Meanwhile, Ku and LEO can’t compete with Ka for inflight/5G backhaul.

The difficult to re-create IP, rational duopoly and limited competition/substitutes ensures Echostar will continue to generate significant free cash flow/growth from Ka-band. Unlevered IRRs conservatively above 20% with significant reinvestment opportunities – faster than they can build, themselves – therefore, partnerships worldwide

The chart [on the following page] shows IRRs for a Jupiter satellite, assuming only consumer broadband and not additional capacity/cash flows from 5G Backhaul and In-flight.
2. FIXED SATELLITE SERVICES (FSS) (Second Major Core Business) – owns satellites which distribute television service to Dish Networks, Dish Mexico and Bell Canada, mainly. With long term contracts, annual price escalators and the transition to higher bandwidth utilizing HD/4K television, cash flows in the FSS business are extremely secure even with subscriber declines at their customer, Dish. This business is also a beneficiary of the NPRM to transition C-band from satellite into terrestrial spectrum, since the current C-band satellite business in the US will transition to EchoStar’s Ku-band FSS satellites (though this is a 2021+ opportunity).

3. HUGHES ENTERPRISE MANAGED SERVICES (Third Major Core Business)- offers connectivity to businesses in remote areas (i.e. all Getty stations outside cable/DSL footprint for transaction connectivity) utilizing EchoStar’s aforementioned satellite constellations. Similar to the above businesses, with customers in rural areas, this business has little competition and 99% customer renewals.

4. DISH MEXICO: Satellite television service provider 49% owned by SATS. This business is also growing quickly, given a solid partner and a robust new channel offering. While financials are undisclosed, Dish Mexico has grown its subscriber base at 40%+/year and is estimated to have about 5m subs, currently. While DBS providers in the US and in other developed nations trade at about $400-600/subscriber, ARPUs are about 50% lower in Mexico, thus we value the company at $12/share.

MULTIPLE HIDDEN OPTIONS OFFERING SIGNIFICANT UPSIDE

1. SOLARIS EUROPEAN SPECTRUM: EchoStar acquired Solaris, a satellite company with 30mhz of S-band spectrum in Europe and a satellite orbital slot, extremely cheaply. Solaris offers SATS significant optionality to lease the spectrum to wireless carriers and sell satellite service (machine to machine for logistics management, satellite radio service…etc). With the advent of smartphones, users are consuming more bandwidth on their phones each year, straining the medium by which the bandwidth is transmitted, spectrum. As wireless operators scramble to offer higher speeds to consumers, the value of spectrum, a finite resource has continued and will continue to increase. Similar to Dish in the US, EchoStar is in discussions with regulators across the EU to repurpose this spectrum for terrestrial use.

- **SCENARIO 1** - Wholesale LTE Network: Should EchoStar receive approval from all EU regulators, they can deploy a wholesale LTE network worth $29/share

- **SCENARIO 2** - Satellite Radio Network: Should EchoStar not receive full approval, worst case, they can launch some combination of a satellite radio network with a wireless network.

Any way you look at it, Solaris offers significant hidden upside for SATS!
2. ACQUISITIONS: SATS may use its $30+ in gross cash per share on the balance sheet to make an acquisition to scale its incredible IP, do JVs in foreign countries like they recently did in Africa with Yahsat and build additional satellites.

3. SOUTH AMERICA/BRAZIL: South America - Orbital slot and satellite for HD video worth $200m+ along with Ka-band hosted payload with consumer broadband services.

As per the chart above, the core business is worth $88/share at a 10% free cash flow yield on the consolidated business plus $11/share in value for Dish Mexico and $108/share, in total, from the free options.

<table>
<thead>
<tr>
<th>Core Business</th>
<th>EBITDA–Capex</th>
<th>Multiple</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>FSS Business</td>
<td>129</td>
<td>12.0x</td>
<td>1,544</td>
</tr>
<tr>
<td>Hughes</td>
<td>529</td>
<td>14.0x</td>
<td>7,401</td>
</tr>
<tr>
<td>Enterprise Value</td>
<td></td>
<td></td>
<td>8,945</td>
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<tr>
<td>Net Debt</td>
<td></td>
<td></td>
<td>361</td>
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<tr>
<td>Market Capitalization</td>
<td></td>
<td></td>
<td>8,584</td>
</tr>
<tr>
<td>Core Business Value Per Share</td>
<td></td>
<td></td>
<td>$88</td>
</tr>
<tr>
<td>Upside</td>
<td></td>
<td></td>
<td>146%</td>
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<table>
<thead>
<tr>
<th>Free Options</th>
<th>Value per Share</th>
<th>Prob</th>
<th>Adj Value per Share</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ka-Band Future Value</td>
<td>$59</td>
<td>90%</td>
<td>$53</td>
</tr>
<tr>
<td>Brazil</td>
<td>$10</td>
<td>75%</td>
<td>$8</td>
</tr>
<tr>
<td>Solaris</td>
<td>$49</td>
<td>75%</td>
<td>$37</td>
</tr>
<tr>
<td>Dish Mexico</td>
<td>$11</td>
<td>100%</td>
<td>$11</td>
</tr>
<tr>
<td>Total Free Option Value</td>
<td></td>
<td></td>
<td>$108</td>
</tr>
<tr>
<td>Total Company Value</td>
<td></td>
<td></td>
<td>$197</td>
</tr>
<tr>
<td>Upside</td>
<td></td>
<td></td>
<td>446%</td>
</tr>
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$500k in savings. The business (including Echostar) has a market capitalization of $20 billion and Charlie has a net worth of ~$10 billion. At Dish Networks, he acquired bankrupt satellite spectrum for $2.9bln in 2012, petitioned the government for the right to use it wirelessly and it’s currently worth $30bln today and likely $50bln in 3-5 years. Charlie acquired Sirius debt in 2008/2009 with the intention of forcing the company into bankruptcy to control the equity. He owned about $500-600m in debt that would have given him control of the company post reorganization. John Malone swooped in to White Knight Sirius but had Ergen been successful, he would have owned a large percentage of Sirius’s current $21bln+ equity value.

There are many other examples of Charlie’s investment prowess, but the key is that he knows the satellite business better than anyone, identifies trends many years ahead of others, buys great assets extremely cheaply and builds a business when the time is right. He further surrounds himself with a very talented operational team to run the businesses to generate the most value.

RISKS

UNFORESEEN TECHNOLOGY CHANGE

Should multiple technology changes occur that (a) offer rural consumers an alternative to Dish Networks and/or (b) allow the cost effective building of wireless or cable broadband to rural areas, Echostar would see additional competition from a superior product. We believe these technology changes are extremely unlikely for at least the next 10 years.

VALUE DESTROYING ACQUISITION

Should Echostar acquire a low quality business that destroys value, our fair value would decline. However, we believe this risk is mitigated by a very capable team.

REGULATORY CHANGE

Regulatory risk always exists in any high barrier duopoly business. However, Echostar and its competitor are not

GREAT OWNER/MANAGER – CHARLIE ERGEN

In order to understand the upside in SATS, one must understand the brilliance of the company’s owner/manager, Charlie Ergen. Charlie founded Dish Networks in 1980 with

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CONCLUSION

We believe SATS is the perfect platform business. We have a very predictable operating business run by an extraordinary team generating significant free cash flow. We have an incredible owner/manager, Charlie Ergen investing that cash (plus additional cash raised through the tracking stock transaction) in asymmetric options, such as Solaris and as he builds scale to continue to invest in an extremely well-protected duopoly with high ROIs in Jupiter Ka-band satellites.
Company transforming from asset heavy leasing company to asset light business services company with downside protection from legacy net asset value.

### About Adrian Warner

Adrian Warner has over 20 years experience in Australian and overseas financial markets. Before establishing Avenir Capital, Adrian was Managing Director and part-owner of Catalyst Investment Managers, a mid-market private equity firm with over $900 million in FUM. Prior to that, Adrian was Managing Director at CVC Asia Pacific one of the leading private equity groups in Asia with US$4 billion under management and part of the CVC Capital partners Group. Prior to CVC, Adrian worked at Pacific Equity Partners, the largest Australian based private equity firm, and at AEA Investors Inc., one of the longest standing private equity firms in the United States. Previously, Adrian was a management consultant at Bain & Company in Australia, the U.S. and Asia. Adrian has a MBA from Harvard Business School and a Bachelor of Commerce (1st Class Hons) from UNSW.

### About Avenir Capital

Avenir Capital specializes in fundamental, value oriented investments in global equity markets. Our private equity background emphasizes bottom up research, long-term absolute returns and minimizing downside risk. We invest in special situations and quality companies undergoing change that we can buy at a 50% discount to a growing intrinsic value.
ECN Capital Corp

Asset Class: **Equity**  Symbol: **ECN:CN**  Updated: **12/24/2018**  Submitted: **12/21/2018**

**BY:** Adrian Warner
**CURRENTLY AT:**  Avenir Capital

**COMMUNITY RATING:** ★★★★★
**PERCENTILE:** 77%

Company transforming from asset heavy leasing company to asset light business services company with downside protection from legacy net asset value.

**INVESTMENT THESIS**

**OVERVIEW**

ECN Capital (ECN) was spun off from Element Financial in October 2016 and has subsequently gone through a corporate restructuring and refocusing of the business. The company has sold most of its original rail and aircraft leasing portfolios (in five completed transactions that were sold at a 2% premium to book value overall) and acquired three high-growth and high-return asset-light business service providers (specialty finance providers).

Steve Hudson, the CEO is a serial entrepreneur and founded Element Capital. At the time of the spin-off of ECN, Hudson became the CEO of ECN (moving across from CEO of Element) and sold the vast majority of his stock in Element to acquire shares in ECN in the open market.

ECN is trading at C$3.39 per share and has approx. C$1.56 per share of net asset value in the remaining legacy leasing book of business. This means the implied EV of the recently acquired business services companies is C$2.46 per share (including the value of preferred shares). The 3 business services providers (net of corporate costs) are likely to generate roughly C$0.28 and C$0.35 per share in net income in 2018 and 2019 respectively meaning they trade on a P/E of 8.7x and 6.9x respectively.

At end Q18, employees and board members own approximately 11% of the company including shares, options and PSUs. Management and insiders have been buyers of shares. Corporate Senior management compensation is tied to performance metrics.
Since the spin-off, ECN has acquired three asset-light businesses service providers:

- **7th September 2017**: Service Finance for US$304 million (C$410m with estimated earn out of C$40mn)
- **29th December 2017**: Triad Financial Services or US$100 million (C$125mn)
- **31st May 2017**: Kessler Group for US$222.1 million (for 70%)

Note that all acquisitions have 5-year earn-outs in place that may require additional payments based on the achievement of certain ROE milestones. It is not clear what these payments are and how substantial they are.

Assuming the business services operations were valued at 15x EPS, ECN would be worth closer to $6.24 on FY19 forecast earnings or 84% above the current price.

**CAPITAL RETURNS**

Since the spin-off, ECN has bought back C$216 million of stock via a substantial issuer bid and a subsequent normal course issuer bid. The company used some of the proceeds from the sale of parts of the rail and aviation lease assets with most of the remainder being used to acquire the businesses services businesses. The company recently (30th November 2018) announced a second material (C$265m) substantial issuer bid.

**SUBSTANTIAL ISSUER BID (“SIB”)**

On 30th November, 2018, ECN announced another substantial issuer bid to buyback for cancellation up to C$265 million of ECN stock at a price between C$3.35-3.75 per share by way of a modified “Dutch auction”. This represents about 24% of the current outstanding share capital and indicates management’s view of the current mispricing of ECN shares. The modified Dutch auction will take place between early December 2018 and early January 2019. The buyback will be funded “principally with cash on its balance sheet and secondarily from an amended committed senior credit facility”.

**BUSINESS SERVICE COMPANIES**

**SERVICE FINANCE (SFC)**

ECN announced the acquisition of Service Financial on 8 June 2017 (closed September 2017) for C$410m (US$304m) in cash. Agreement provided for a 5-year performance based deferred purchase plan. Purchase price represented:

- 10.7x 2017 and 5.9x 2018 estimated EBITDA;
- 12.4x 2017 and 7.5x 2018 estimated adjusted net income after tax

Founded in 2004, Service Finance Company, LLC utilizes a technology driven platform to originate prime & super-prime retail instalment contracts (“RICs”) to finance home improvement projects. 75% of originations are sourced through exclusive national vendor programs with manufacturers and dealers including Lennox Industries, Service Experts, Owens Corning, EGIA, Rinnai. SFC doesn’t fund originations on its balance sheet but
instead sells production through to FDIC insured institutions (13 institutions currently participating) without recourse and acts as the servicer for a management fee. Financings are originated at a discount to par and sold for a gain. SFC receives an ongoing fee for servicing and portfolio management. The amount of the ongoing fee is not disclosed but brokers estimate that Greensky (GSKT: NASDAQ), which IPO’d in May 2018 and is a similar business, gets about 1% on an ongoing basis from banks and 6% upfront from dealers/manufacturers.

Unlike some fintech companies that acts as competition to the large well-funded banks, ECN is a partner to the banks and acts as a distribution channel for diverse small loans rather than a competitive provider of credit to consumers.

The US home improvement market is now $350 billion (2017 est.), with approximately half home improvement projects being financed and 7% growth in credit purchases. There are ~87 million owner occupied homes in the US and they make up 82% of all home improvement spend. The instalment contract is the fastest growing segment of the financing market with 12-14% market share, which is expected to grow to over 20% in the next 5 years.

As an example, given the cost of a new furnace may be $10,000, even most customers with great credit would likely not want to put that on their credit card – especially in a rising rate environment. This is what makes SFC’s offering more attractive to the end consumer – charging low rates in an instalment-based plan.

SFC has approximately 7,000 approved contractors (as at June 2017) and the number of approved contractors has grown at 25% per annum over the past several years.

The customers are prime and super-prime with an average FICO score of ~760. And a short duration of ~29 months. Credit losses have been ~0.8% annually to the FDIC insured institutions.

The average loan size is C$12,535 and the revenue on average portfolio is 5-6% with operating expenses at 1.5-2.0%.

Origination volume has been growing massively (+118% in 2015, +52% in 2016, +47% in 2017). Management is projecting 40% core origination growth in 2018 as the company continues to add 170 new dealers per month, coupled with continued success from their exclusive national vendors. To note: YTD 2018, core origination is growing closer to 70%.

The Company has added Abbey Carpet as a new national vendor for 2018 – Abbey Carpet has $4bn in sales in 800 showrooms across the country – which represents a move into the retail channel, which is a significant opportunity for Service Finance.

Management is guiding to US$51mn in adjusted operating income before tax in 2018 and to grow that to roughly US$70mn in 2019. 2018 was originally guided to US$55m but the Sear’s bankruptcy (reduced originations from its Sears Home Improvement Services subsidiary) and tornado damage to a supplier’s manufacturing facility has lowered the original forecast. The shortfall is expected to be made up by better than
expected performance from Kessler in 2018 so we leave the $55m in our analysis.

Founded in 1959, Triad is a prime and super prime originator and servicer of consumer manufactured home loans and is the oldest manufactured home lender in the U.S. Triad is based in Jacksonville, FL and operates in 42 states. Average FICO score of 740.

Manufactured housing is pre-fabricated homes that are constructed at a factory and assembled at the building site. Currently, there are 8.6 million manufactured homes in the US (10% of the housing stock). At the moment, there are backlogs as there isn’t enough manufacturing capacity to meet demand for these homes. Manufactured home are considerably cheaper vis a vis traditional site-built homes – 55% cheaper per square foot. The time to construct is considerably less – 8-12 weeks from order to finished product and the home conform to federal building standards.

The number of manufactured home shipments declined from the late 1990s through 2009 as the housing bubble boomed, but Triad managed to stay profitable in that time-period while their competitors struggled. Since then, shipments have been recovered steadily and are starting to accelerate (15%+ growth in last 2 years).

The basic thesis for continued growth is that housing affordability continues to decline, interest rates don’t have room to drop and so the relative attractiveness of manufactured housing continues to grow.

Triad is focused on originating and servicing prime and super-prime manufactured housing loans with high FICOs, an average of approximately 740, and low annualized net

### TRIAD FINANCIAL SERVICES

ECN announced the acquisition of Service Financial on 25 October 2017 (closed December 2017) for C$125m (US$100m) in cash. Agreement provided for a 5-year performance based deferred purchase plan. Purchase price represented:

- 12x 2017 and 7x 2018 estimated adjusted net income after tax
charge-offs, approximately 0.6% for the last 5 years with a peak NCO’s of 1.16% in 2011. Triad has zero expected loss to lenders although does establish a first loss reserve pool at the time of funding. Triad recourse is limited to the reserve account and excess reserves are returned to Triad over time.

The funding model is outlined below:

Triad currently has 2,900 approved dealers.

Approximately 75% of originations come from traditional loans to high-quality and high-credit customers. A typical loan: $69,000 loan at 7% with a 226-month term and 18% down payment. The average realised duration is ~98 months.

In addition to this, Triad also assists third parties in underwriting, originating and servicing manufactured home loan transactions. These transactions are funded 100% by the third party, for example, a community REIT, with no recourse to Triad. Triad completes the underwriting and origination for a flat origination fee and services the loans for an ongoing service fee.

On average, Triad earns a fee of approximately 1.5% of the cumulative yield over the life of a loan, not present valued, with a 5.5% yield going to the purchasing bank. 100% of Triad’s fee is collected upfront, with 35% of that fee recognized immediately and 65% of that fee deposited into a reserve account in Triad’s name in the purchasing bank (recourse for the bank that gets released to Triad if all things go well).

Triad currently services floor plan credit lines for manufacturers on a state-of-the-art floor plan finance software platform. Services that they provide include marketing credit, documentation, billing, auditing, collections and legal support for portfolios.

In addition to the servicing business, Triad sees a substantial opportunity to directly offer floor plan financing. This option provides for great returns, on average over 7% interest rate, in addition to further strengthening manufacturer and dealer relationships and driving additional core origination growth. This, however, may be on-balance sheet usage, so create a different risk dynamic.

Management is guiding to US$20mn in adjusted operating income before tax for the business in 2018 and approximately US$23m in 2019.
KESSLER

ECN announced a strategic investment in Kessler Group (KG) on 10 May 2018 whereby ECN would invest US$221.2 million in KG. The investment valuation represents:

- 6.1x 2018 and 5.0x 2019 estimated EBITDA
- 7.8x 2018 and 6.8x 2019 estimated adjusted net income after-tax

The Kessler acquisition marked the end of ECN’s two-year strategic transformation. Kessler currently advises/manages US$1 bn of prime consumer unsecured loans and is the leading manager, advisor and structuring partner to credit card issuers, banks, credit unions and payment networks. Its business services platform is based on deep relationships with partners that drive long-term annuity contracts based upon value-added servicing of consumer credit card portfolios.

Kessler works with half of the top 12 banks by assets in the U.S., 48% of the top 25 regional banks by assets, and 67% of the top 15 U.S. credit card issuers by balances. There is not a direct competitor doing the same things as Kessler, with substitutes being local banks, consulting firms or investment banks. Multi-year contractual revenue streams represent -75% of annual revenue. The top 20 KG executives average -25 years in the industry and -20 years with Kessler.

The company develops solutions in the following areas: strategic advice, where they are paid to manage, advise and structure partner portfolios; portfolio advisory, where they are paid for transactional advisory services, partner selection, due diligence, valuation, negotiation, etc; risk based marketing, where Kessler provides financing to fund marketing initiatives to their banking partners; and multi-channel marketing, where they help with the development and execution of marketing campaigns, leveraging their three-decade deep marketing expertise.

ECN acquired 80% of KG in the above transaction and have set aside 10% of that to be allocated to management (meaning ECN will retain 70%). Management is guiding to US$31mn in adjusted operating income before tax 2018 and to grow that to US$36 million in 2019 (for the 70% of KG owned by ECN). In the 3Q18 results management stated that Kessler will exceed the FY2018 guidance.
The three acquired businesses services companies achieve solid ROE of ~15% and have attractive growth profiles as shown below.

**CORPORATE OVERHEAD**

Given the sale of the rail and aviation leasing assets, the company is also committed to reducing the level of corporate overhead to better suit the new company operations. Management have taken reductions on compensation as shown [on following page].

Management are guiding for corporate overhead to be reduced to a run-rate of roughly US$20-21mn (C$26-28mn) by IQ19 as shown below (with associated one-time costs of US$6mn). [Please see table on following page]

**VALUATION**

ECN appears to be cheap particularly given the value contained in the legacy rail and aviation assets. As shown in the table below, assuming the legacy assets can be realised for current book value (and management have stated they believe this to be the case) then ECN is worth roughly C$5.15 per share assuming a 15x FY2018 P/E for the asset light businesses. Assuming the same multiple on 2019 estimated earnings and the company could be worth C$6.24 per share or 84% above the current price. This valuation excludes the impact of the recently announced substantial issuer bid. [Please see table on following page]

Another way to think about this is, if the legacy assets can be realised for book value, the asset light businesses (after deducting US$22m of corporate costs and treating the C$200m of preferred shares as debt) are trading for roughly C$2.46 per share or 6.9x 2019F P/E.

**EFFECT OF RECENTLY ANNOUNCED SUBSTANTIAL ISSUER BID**

Assuming the company buys back 70.7 million shares for C$265m under the recently announced substantial issuer bid (implied buyback price of C$3.75 per share which is the maximum under the offer) then the value per share increases to C$6.95 for FY19 (+105%).

**GREENSKY (NASDAQ:GSKY)**

Greensky (GSKY) is a very close peer to the Service Finance business and IPO’ed in May 2018 providing a useful valuation comp. In the IPO, Greensky raised $1 billion, at $23 per share, which went to existing shareholders rather than to the company. The IPO price of $23 was close to 28x forward P/E compared to ECN’s ex legacy assets implied 2019F P/E multiple of 6.9x.

Since the IPO, the GSKY share price has fallen to $9 per share which represents a roughly 13x forward P/E multiple. Following the GSKY 3Q18 results, sell side analysts dramatically lowered their price targets for GSKY, from ~$26 per share to $12 per share which is where the current target prices sit. This decline was based on a lowering of FY19 and FY20 EPS forecasts by roughly 20% (still representing strong growth over revised FY18 EPS of -25% and -50% respectively) and a lowering of the target multiple from 30x FY19 to closer to 17x. This compares to ECN’s implied multiple of 6.9x ex legacy assets.

Importantly, following the GSKY 3Q18 results, analysts have changed their perspective on Greensky and now view it more as a consumer finance company rather than a payments fintech stock (which was always a misplaced view in our opinion).

While ECN is also more appropriately viewed as a consumer finance company, it is not directly exposed to credit risk as it is a distribution system rather than a provider of credit (except for limited circumstances in which the company tests or validates a product such as solar loans before offering it to its bank/life insurance customers).

Assuming 15x P/E for (ex legacy asset) ECN, we arrive at a value of $6.24 per share, or 84% upside from the current price of $3.39 (excluding effect of current substantial issuer bid).
Kessler achieves ECN’s financial performance goals

<table>
<thead>
<tr>
<th>Goals</th>
<th>Profitability</th>
<th>Growth</th>
<th>Efficiency</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>After Tax ROE</td>
<td>Earnings Growth</td>
<td>EBITDA Margin</td>
</tr>
<tr>
<td>Kessler Group</td>
<td>14%</td>
<td>15%</td>
<td>13%</td>
</tr>
<tr>
<td>Service Finance Company LLC</td>
<td>13%</td>
<td>16%</td>
<td>67%</td>
</tr>
<tr>
<td>Triad Financial Services</td>
<td>15%</td>
<td>16%</td>
<td>73%</td>
</tr>
</tbody>
</table>

Leadership on Cost Reduction

**EXECUTIVE COMPENSATION TO BE REDUCED IN 2018**

| 2017 COMPENSATION | 2018 TARGET COMPENSATION
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>CEO</td>
<td>$5.3 million</td>
</tr>
<tr>
<td>President</td>
<td>$4.5 million</td>
</tr>
<tr>
<td>CFO</td>
<td>$2.6 million</td>
</tr>
</tbody>
</table>

1 Assumes Board approved performance metrics are achieved in 2018. Amounts converted to US Dollars at an assumed exchange rate of 1.29 USD/CAD.

Summary of Corporate Operating Expenses

<table>
<thead>
<tr>
<th>Quarter</th>
<th>USM Quarterly</th>
<th>USM Annualized</th>
</tr>
</thead>
<tbody>
<tr>
<td>Q1 2018</td>
<td>~$7.5</td>
<td>~$30</td>
</tr>
<tr>
<td>Actions</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Executive compensation reductions; led by 20% reduction by CEO</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Eliminate M&amp;A related costs</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Other SG&amp;A reductions</td>
<td></td>
</tr>
<tr>
<td>Q3 2018</td>
<td>~$6.25</td>
<td>~$25</td>
</tr>
<tr>
<td>Actions</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Further executive compensation reductions</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Right-sizing corporate overhead</td>
<td></td>
</tr>
<tr>
<td>Q1 2019</td>
<td>~$6-6.25</td>
<td>~$20-21</td>
</tr>
<tr>
<td></td>
<td>Reductions will result in one-time severance and other costs of $6 million</td>
<td></td>
</tr>
</tbody>
</table>

Cost reductions represent a ~30% improvement from Q1 2018 to Q1 2019.
CATALYSTS

• Clearer picture of earnings power coming through over next few quarters
• Evidence of corporate costs moving closer to the reduced management guided level
• ECN Capital Investor Day on 29th January, 2019
• Material share buyback of up to 24% of shares outstanding in substantial issuer bid (currently underway and due to be completed by 10th January 2019)

RISKS

The main risks to ECN include the following:

• The fact that ECN has only recently acquired its three main operating businesses and has provided no detail in relation to the historical financial performance of those companies;
• There is some cyclical risk as the business is involved in distributing economically sensitive and discretionary purchases – large-ticket items for home improvement for example. A weaker economy or higher interest rates may lead to reduced growth or declines in underlying business volumes. Approximately 53% of ECN’s revenue is derived from transaction fees related to originations which could be economically sensitive;
• Given the nature of the loans to consumers, there may be regulatory and/or reputational risk if the industry or company engages in unfair or dishonest lending practices;
• There is likely some customer concentration risk. In the case of Greensky, the top 10 clients drive 30% of revenues and it is likely somewhat similar for the Service Financial business of ECN. ECN has a somewhat more diversified revenue stream however with the Kessler business and Triad being driven by different customer bases.
Exelixis Inc

Asset: Equity  Symbol: EXEL:US
Idea Posted: 12/21/18  Idea Updated: 12/25/18
Community Rating: ⭐⭐⭐⭐⭐

The next high potential, commercial stage oncology takeout target: Buy Exelixis

About Eric Gregg

Eric is the founder and Principal of Four Tree Island Advisory LLC. He was formerly CEO of Oto Technologies LLC and a Director in the Investment Banking group at Credit Suisse. His professional experience ranges from money management to technology entrepreneurship to institutional investment banking. In the financial services industry for over 15 years, Eric worked at Goldman Sachs, Deutsche Bank, DLJ and Credit Suisse. His investment approach is grounded on “value” and “growth at a reasonable price” (GARP) metrics.

About Four Tree Island Advisory LLC

Four Tree Island Advisory (FTIA) is a registered investment advisor that stewards separately managed accounts. FTIA manages three distinct strategies: Capital Appreciation, Total Return, and an out-of-the-money put selling strategy called Cash Yield. FTIA is a fundamentals driven, value based money manager that is market cap and sector agnostic.
The next high potential, commercial stage oncology takeout target: Buy Exelixis

INVESTMENT THESIS

This write-up is going to be short and to the point.

• Exelixis is a one cancer drug pharma company with a great runway ahead of it. Cabozantinib (aka Cabometyx®) is a TKI (Tyronise Kinase Inhibitor) which is approved for the treatment of Renal Cell Carcinoma (aka “RCC” or kidney cancer) in the US & Europe, Hepatocellular Carcinoma (aka HCC or liver cancer) in Europe and certain types of thyroid cancer. Kidney cancer is the 6thmost observed cancer in men and 10thmost observed in women. Liver cancer is the 5thmost prevalent form of cancer worldwide and causes approximately 9% of all cancer deaths.

• In addition to its current approvals, Exelixis and its partners are in various stage trials to expand Cabometyx’s indications in RCC, HCC and Thyroid cancer but also start addressing non-small cell lung cancer (NSCLC), metastatic urothelial cancer, breast cancer, colorectal cancer, high grade uterine sarcomas, metastatic gastrointestinal stromal tumor, pancreatic, soft tissue sarcomas and others. Some of these other development programs are with Cabometyx as a monotherapy and others are for Cabometyx in combination with other therapies.

• The RCC drug market is currently estimated to be ~$4bn[1] in size with the market growing at an 8% CAGR through 2025 (making it a >$6.4bn market in 2025). The main competitor drugs in this market are Novartis’s Votrient and Bayer/Amgen’s Sutent with BMY’s Opdivo + Yervoy combo which was just approved six months ago. Exelixis’s and BMY’s offerings are gaining share at the expense of Novartis’s and Bayer/Amgen’s offerings.

• The HCC market is currently estimated to be a modestly sized market, but it is expected to grow to $1.5bn2 (with a 22%+ CAGR) by 2022. HCC is experiencing an annual,

[1] ResearchandMarkets.com
gradual increase in incidence driven by the obesity epidemic in the developed world. According to William Blair research that alludes to outstanding medical literature, the incidence of HCC is likely to increase as a bi-product of NASH (nonalcoholic fatty liver disease). NASH is an area of high interest and activity in the pharma community with no approved drugs currently addressing the disease which has a poor prognosis in its advanced stages. Broadly speaking, the same drugs noted previously that compete in RCC are also either currently or expected to be competing in HCC.

• Unlike some other notable, young in their lifecycle, commercial stage oncology companies, Exelixis is not one to throw out grandiose forecasts for out year revenues (unlike Tesaro for instance). Exelixis seems to follow the “under-promise and overdeliver” mantra and lets its product growth to date speak for itself. Cabometyx has grown from $32mm in revenues back in Q2 2016 (the quarter it received FDA approval for RCC treatment) to over $162mm in revenues last quarter (or a 66%+ CAGR over that period). Sell-side forecasts range from $1.5bn-$2bn of peak revenues for Cabometyx. With the drug already run-rating at close to $700mm of revenues, those forecasts could easily prove conservative should Cabometyx continue its success in expanding its label for additional indications.

• The only quarterly guidance that Exelixis provides is on expenses. Impressively, for a one drug pharma company in a strong ramp mode with multiple development programs in progress, Exelixis’s expense forecasts are meaningfully less than expected 2018 revenues.

• Common takeout multiple for fast growing biotech and oncology assets can be 10x+ two-year forward revenues (see shareholder letter sent to Medivation shareholders at the time they were contesting Sanofi’s offer https://www.sec.gov/Archives/edgar/data/1011835/000119312516630503/d208883dex991.htm). At a 8.5x multiple for company revenues in 2021 using the mid-point of the high and low sell-side revenue forecasts, Exelixis is arguably worth -$12.7bn or $40 per share.

• Exelixis trades at $4.9bn enterprise value or 40% of that warranted estimated takeout valuation.

• As Cabometyx has been gaining traction and consistently expanding its label and market access, Exelixis has increasingly been speculated as a takeout candidate (and at times had its stock price thrust higher on that speculation). Unlike some other early commercial stage biotechs, Exelixis doesn’t have an impetus to sell due to a) high cash burn and limited resources (Exelixis generates meaningful FCF and has $750mm of cash on the balance sheet) b) anxious pre-ipo investors (they are long gone as the company IPOd in 2000) or c) because they have an older management team that wants to spend more time on their hobbies (EXEL’s CEO is only 57). That said, the Company presents as a very attractive takeout candidate for any potential buyer that is trying to bulk up in oncology with a drug with a great runway at a price that isn’t a “bet the Company” type transaction for big biopharma. Also, insiders have been consistent sellers with the stock in the $20s so with a reasonably justified takeout price at $40+, I would be surprised if Exelixis wouldn’t take a deal. While the company may elect to voluntarily undergo an auction process, I think it more likely that an unsolicited approach will compel the Company to run a process.

• For this type of asset, it’s probably easier to determine which large cap biopharma wouldn’t be interested vs. which ones would be most interested. Novartis and Bayer/Amgen have direct competitor drugs so are probably off the list. Virtually every other major biopharma with oncology interests could be interested. Exelixis also has partnerships and collaborations with: Ipsen, Takeda, Daiichi Sankyo, BMS, Roche and others. Certain of those companies may be especially suitable acquirers.

**BACKGROUND ON EXELIXIS, CEO DR. MICHAEL MORRISEY AND CABOMETYX**

Exelixis was founded in 1994 and executed an IPO in 2000. Its business is to discover, develop and commercialize new
Drugs to improve the care of people diagnosed with cancer. CEO Michael Morrisey (57) joined the company in 2000 pre-IPO and has been CEO since 2010. Prior to joining Exelixis, Dr Morrisey was VP of Discovery Research at Berlex Biosciences (a Company that was eventually purchased by Bayer) and prior to that worked at Ciba-Geigy (part of the merger that formed Novartis). Dr. Morrisey owns 3.8mm shares of company stock.

Cabometyx was originally approved by the FDA in 2012 in capsule form for the treatment of medullary thyroid cancer. This initial indication had limited commercial reach and only resulted in $37mm of annual revenues as of 2015.

Where things started torqueing up was when Cabometyx obtained FDA approval in tablet form for second line treatment of RCC in April of 2016. Since then Cabo has made steady gains in not only that indication but other indication and in foreign markets.

As highlighted in the NRx volume & share chart, Cabometyx continues to make strong inroads in RCC. One of the reasons they have been so successful is Cabometyx is the only TKI that is approved in both 1stline (for those with a less favorable outlook) and 2ndline therapy. The Company also highlighted as recently as Q3 earnings that it is the preferred TKI in its indications of use amongst 90% of the Key Opinion Leaders (KOLs) it has surveyed (of which there are over 50).

It is Exelixis’s intent to broaden Cabometyx’s label to address all aspects (1stline and follow up therapy) of the RCC and HCC markets (either as a monotherapy or in combination with other therapies) and in a number of additional indications. The following table provides an overview of the breadth of areas that are trying to be addressed with Cabometyx.

Of note, Exelixis has commercial partners for Cabometyx outside of the US. Ipsen SA ($11 bn market cap) has the rights to Cabometyx in Canada and the ROW ex-Japan. Takeda ($25 bn market cap) has rights in Japan. Royalty rates are different between the two companies but escalate to as high as 22-26% of revenues. In the case of Exelixis’s relationship with Ipsen, there are multiple milestone and incentive payments involved and Ipsen is compelled to pick up as much as 35% of development costs for Cabometyx.
## Development Program for Cabometyx as a Single Agent

<table>
<thead>
<tr>
<th>Indication</th>
<th>Status Update</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Thyroid Cancer</strong></td>
<td></td>
</tr>
<tr>
<td>Progressive, metastatic medullary thyroid cancer</td>
<td>Approved in US and EU</td>
</tr>
<tr>
<td>Differentiated thyroid cancer</td>
<td>Phase 3 initiated October 2018</td>
</tr>
<tr>
<td><strong>Renal Cell Carcinoma (RCC)</strong></td>
<td></td>
</tr>
<tr>
<td>Second and later-line advanced RCC</td>
<td>Approved in US, EU and Canada</td>
</tr>
<tr>
<td>Advanced RCC (including previously untreated RCC)</td>
<td>Approved in US and EU</td>
</tr>
<tr>
<td>First or second line papillary RCC</td>
<td>Phase 2</td>
</tr>
<tr>
<td><strong>Hepatocellular Carcinoma (HCC)</strong></td>
<td></td>
</tr>
<tr>
<td>2nd line and later-line advanced HCC</td>
<td>European Commission Approval 11/15/18 - Filed in US with PDUFA date of January 14, 2019</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>As of Last 10-k</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Metastatic urothelial cancer</td>
<td>Phase 2</td>
</tr>
<tr>
<td>Breast cancer with brain metastases</td>
<td>Phase 2</td>
</tr>
<tr>
<td>Colorectal cancer</td>
<td>Phase 1</td>
</tr>
<tr>
<td>High grade uterine sarcomas</td>
<td>Phase 2</td>
</tr>
<tr>
<td>Metastatic gastrointestinal stromal tumor</td>
<td>Phase 2</td>
</tr>
<tr>
<td>Pancreatic neuroendocrine tumors and carcinoid tumors</td>
<td>Phase 2</td>
</tr>
<tr>
<td>Plexiform neurofibromas (pediatric and adult cohorts)</td>
<td>Phase 2</td>
</tr>
<tr>
<td>Relapsed osteosarcoma or Ewing sarcoma</td>
<td>Phase 2</td>
</tr>
<tr>
<td>Soft-tissue sarcomas</td>
<td>Phase 2</td>
</tr>
</tbody>
</table>

## Development Program for Cabometyx with Immune Checkpoint Inhibitors as of last 10-K

<table>
<thead>
<tr>
<th>Indication</th>
<th>Combo Regimen</th>
<th>Status Update</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>RCC</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>First line advanced RCC</td>
<td>Opdivo</td>
<td>Phase 3</td>
</tr>
<tr>
<td><strong>HCC</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Second and later line HCC</td>
<td>Opdivo+Yervoy</td>
<td>Phase 1/2</td>
</tr>
<tr>
<td><strong>NSCLC</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Advanced solid tumors</td>
<td>Tecentriq</td>
<td>Phase 1b started in 2017, eight planned expansions cohorts including NSCLC</td>
</tr>
</tbody>
</table>

### Additional Clinical Trials

<table>
<thead>
<tr>
<th>Indication</th>
<th>Combo Regimen</th>
<th>Status Update</th>
</tr>
</thead>
<tbody>
<tr>
<td>Endometrial Cancer</td>
<td>Opdivo</td>
<td>Phase 2</td>
</tr>
<tr>
<td>Metastatic Triple Negative Breast Cancer</td>
<td>Opdivo</td>
<td>Phase 2</td>
</tr>
</tbody>
</table>
RATIONALE FOR AN APPROACH

The never-ending challenge for big biopharma is building and re-filling the product portfolio of patent protected drugs. There are salesforces to feed, significant fixed costs to cover and typically plenty of drugs that are near the end of their patent life that need to be replaced with other high value drugs with long runways. It is part of virtually every major biopharma's modus operandi to supplement internal R&D with acquisitions where a product can easily be slotted into the portfolio and significant redundant costs at the acquired company be removed.

Of the nine multi-billion biopharma M&A transactions committed to over the past two years, five of them were for companies focused on oncology. Of note, Exelixis is likely to deliver revenues in 2018 that are roughly comparable to all the product revenues of the 2017 & 2018 acquired oncology companies combined (which were acquired for a combined $33 billion).

POTENTIAL POSITIVE CATALYSTS

1. January 14, 2019 PDUFA date for Cabometyx in HCC – this approval is expected and should be positive for Exelixis. There are certain potential acquirers, like Gilead, that should become particularly interested in Exelixis post this anticipated approval. Between liver disease expertise (Hep C, Hep B, NASH (arguably the most promising area in Gilead's development efforts)) and oncology broadly, Exelixis would be a particularly good fit for Gilead. The two companies also happen to be based in the same city (South San Francisco, CA). Just because January 14 is the PDUFA date doesn’t mean that approval couldn’t come sooner. I wouldn’t be surprised if approval for Cabometyx in HCC came the 1st week of January.

2. In 2020 (RCC) and 2021 (HCC) trials related to Cabometyx for the Japanese market come to conclusion. These are not immediate catalysts, but progress on breaking into the Japanese market should be well received.
3. As indicated earlier, there are multiple other trials ongoing for Cabometyx as both a monotherapy and in combination with other therapies like Opdivo. Positive data flow from various trials should be positive for the stock.

4. If an approach is made to Exelixis or the company decides to put itself up for sale, that would be the most impactful positive catalyst for the stock. The five most obvious potential acquirers are arguably:

- Roche (strong presence in oncology, already collaborating with Exelixis in trials and Genentech (Roche subsidiary) is based in SF).
- BMS (strong presence in oncology and multiple trials ongoing with Exelixis on combination therapies).
- Gilead (in addition to prior points, incoming Gilead CEO comes from Roche suggesting an increasing oncology focus at Gilead).
- Glaxo (with the intent to combine its consumer health business with Pfizer’s and then spin it off, Glaxo will be looking for additional assets to bolster its portfolio (a la Tesaro)).
- Pfizer (not only is Pfizer a serial acquirer, similar to Glaxo with it jettisoning its consumer health business Pfizer will be looking for additional therapies to add to its portfolio (a la Medivation)).

**RISKS**

- A material slowdown for Cabometyx. While Cabometyx has been gaining share at the expense of Votrient and Sutent, Opdivo+Yervoy was approved in April and is making significant inroads. Exelixis management represent that given the challenging prognosis for patients with RCC and HCC, that it is likely to be a question of when, not if, Cabometyx will be used during a patient’s treatment lifecycle.
- Channel inventory adjustments. Q4 2017 sequential quarter sales growth slowed due to distributors managing inventory. The market didn’t respond well.
- Negative outcomes in either new indication approvals or drug trials for Cabometyx.
- Any drug price reform that lands firmly on Cabometyx.
- Exelixis is a volatile stock. An investor needs to appreciate this.

**SUMMARY**

In a market that has been punishing pro-cyclical stocks with significant overseas (especially Chinese) exposure, Exelixis represents a somewhat idiosyncratic opportunity. It is primarily leveraged to growth in US sales of its only approved drug. Cabometyx has a bevy of additional indications it could gain approval for that could materially increase its potential peak sales. The Company is not only generating real earnings and free cash flow, it has $750mm of net cash ($2.50 per share or 13% of its market cap) on the balance sheet. Exelixis is amongst a very small group of biopharma companies. It represents a “digestible” acquisition (not bet the Company acquisition) for a number of major biopharma companies that are in need of expanding their oncology portfolios with assets that can immediately move the needle on the top line. The stock trades at a 45% discount to its 52 week high and 44% of a reasonably arrived at takeout value for the Company. While buying a stock in anticipation of a takeout is often foolhardy in many industries, in biopharma for “young”

**POTENTIAL TAKEOUT VALUATION SENSITIVITY**

As highlighted earlier, a rough baseline for high growth biopharma/especially oncology assets is ~10x 2-3 year forward revenue. Surveying sell-side research I’ve seen a range for 2021 revenues of $1.2-$1.64 billion. Anchoring on a $1.4bn revenue number and using a more conservative takeout multiple of 8-9x, one could easily justify a $40 takeout price for Exelixis’s shares (125% above the current stock price). See the following sensitivity tables.
commercial stage companies with only one meaningful approved drug a takeout is often the ultimate outcome. Exelixis appears to be a highly attractive takeout candidate for 2019 particularly if it receives FDA approval for Cabometyx use in HCC; which we should be hearing about in just a few weeks.

EXELIXIS – TAKE THE PILL.

Postscript: While I am recommending Exelixis as an outright long, I also recommend selling long-dated out-of-the-money puts as an additional way to gain exposure and monetize the high implied volatility in EXEL options. EXEL $15 strike Jan 2021 puts should be able to be sold for approximately $3.70+ per contract at the time of my writing this report. Implied volatility is 59%. While the upside will not be as significant in the kind of takeout scenario I’ve outlined, the risk in such a short position is also appreciably less (risk is only if the stock goes below $11.30 vs. $17.72 where the stock is currently trading). Something to consider.
Ideas on companies whose respective market capitalizations were less than ~US$300M at the time of submission.
A conspiracy special situation that insiders do not want you to know about.

About Hyung Choi

Hyung is an Analyst at memento SA, a Switzerland-based single family office. He looks for opportunities in the under-followed special situations space and attained his MBA from the Wharton School.
Roadrunner Transportation Systems (RRTS) is recapitalizing its business through rights offering. This situation embodies many attributes that I look for in a special situation: completely off the radar, a likely forced selling activity, finalizing corporate action during holiday season when fewer eyes are watching, insiders don’t want you to know about it, and a highly motivated activist and insiders with skin in the game.

Highest return in a chapter 11 restructuring comes from new equity that is distributed to eligible parties before it gets offered to the public and such opportunity is playing out in public where an investor can purchase shares at a price equal to the distribution of new equity. I believe this under-followed special situation offers investors with highly attractive risk / return profile. Investors can either long the shares now and subscribe for the rights or wait for the rights offering and build the position through rights or shares or both.

RRTS is a hybrid of asset-heavy and asset-light logistics provider in the US. The company operates three divisions: Truckload Logistics (54% revenue), Less-than-truckload (20% revenue) and Ascent Global Logistics (26% revenue). Truckload Logistics division arranges the pickup and delivery of truckload, intermodal and ground and air expedited freight through its own services centers, brokers and independent brokerage agents. LTL division provides a point-to-point delivery of smaller / partial truckloads. Ascent Global is a domestic and international logistics solutions provider.

RRTS is going through a tough period which was mostly self-inflicted. In January 2017, RRTS identified accounting errors that involved unrecorded expenses and indication of goodwill impairments. These errors turned out to be an accounting fraud – two former executives were charged for their alleged
participation in the accounting and securities fraud scheme that resulted in a loss of more than $245m in shareholder value. Beginning in 2014 the two conspirators found $7m in overstated accounts on balance sheet of one Roadrunner’s operating companies. Instead of writing off the full amount, they developed a plan to adjust the balance sheet by small sums each month between 2014 and 2017 to conceal the extent of the misstated accounts.

Following the outbreak of the scandal, a series of event led the company to where it is today

- RRTS appointed a new independent Chairman of the Board and replaced the former management team
- On March 2017, Elliott unveiled its 7.5% ownership in RRTS which was increased to 8.6% a month later
- RRTS entered into a $540m preferred share investment agreement with Elliott. The preferred shares were in five series requiring a hefty dividend of -16% -18%
- Along with the above financing, Elliott appointed two directors into the board and received small amount of warrants
- RRTS completed restating its historical financial statements in January 2018

RRTS also struggled to turn its business around. Between 2010 and 2014, RRTS grew its topline by more than 25% yearly through aggressive acquisitions while in the recent two years the growth dropped to a low single digit. On the back of deteriorating balance sheet and high preferred dividends, RRTS was unable take advantage of the favorable market conditions in 2018.

On 8th October, RRTS received notice regarding continued listing standard from NYSE. RRTS’ market cap had fallen below the NYSE’s continued listing standards relating to minimum average of $50m for over a consecutive 30 trading-day period. RRTS said it intends to submit a plan to NYSE to regain listing compliance within the required 18-month timeframe. The company has 45 days to submit the plan to the NYSE.

On 18th October, RRTS received a similar notice, but this time for a different standard – failing to keep its stock price above $1.00 per share over a 30 trading-day period. The company can regain compliance with the standard if the last trading day of any calendar month during the six-month period following the receipt of the notice or on 12th April 2019, six-month following the notice date.

On 23rd October, RRTS filed a preliminary proxy that details the rights offering. Management laid out forward-looking statements with adjusted EBITDA and proforma capitalization with and without rights offering. RRTS also proposed to amend the Certificate of Incorporation to accommodate for a reverse stock split.

On 7th November, RRTS released 3Q earnings. Operation showed moderate improvement, limiting operating loss and showing top-line growth despite the sale of one of the operations in 2017. Management also reiterated the business improvement plan.

On 9th November, RRTS announced the signing of Standby Purchase Agreement with Elliott. This agreement confirmed the backstop commitment by Elliott and over-subscription rights to shareholders other than Elliott. The company also agreed on amending the credit agreement of ABL facility to accommodate for the rights offering.

**INVESTMENT RATIONALE 1. RIGHTS OFFERING WITH A BACKSTOP AGREEMENT**

Primary purpose of the rights offering is to retire the onerous preferred shares (see opposite table) that Elliott owns. Any unsubscribed rights will be backstopped by Elliott. Elliott will participate in the basic subscription but not in the oversubscription. By providing the backstop Elliott is effectively converting its debt (preferred shares) into equity, hence why I think this is essentially a loan-to-own transaction. Current shareholders will get heavily diluted, unless they choose to participate in the rights offering.
A reverse stock split will follow the rights offering to comply the NYSE listing requirement of maintaining share price above $1.

On 13th November, RRTS filed a definitive proxy for the rights offering, reverse stock split and other various amendments to the Certificate of Incorporation. Some key figures to the finalized offering,

- 900,000,000 shares of common stock upon exercise of rights to purchase shares at $0.5 (raising $450m) – current number of outstanding shares is 38.5m
- Each right therefore, provides the right to buy 23.14 shares at $0.5 per share
- Unsubscribed rights will be backstopped by Elliott at the same price as the basic subscriptions price of $0.5
• Rights will be tradeable starting from 9th January to 31st January
• After the rights offering, the company will conduct a reverse stock split, which will be in the range of 1-for-35 to 1-for-100

As most of the proceeds from the rights offering will be used to retire the preferred, an incremental dollar that Elliott puts in to backstop the offering has a different value depending on the result of Elliott’s shareholding after the recapitalization. Using the management’s 2020 projected EBITDA and forward capitalization as a base, one can back calculate the implied EBITDA multiple that Elliott is incrementally paying for the resulting ownership.

Assuming none of the shareholders participate to the rights offering, Elliott is incrementally paying $45m ($450m - $361m preferred) to purchase an extra 83% of ownership. This implies around 6.0x on management’s 2020 projected EBITDA of $106m. However, if 50% of the shareholders participate to the offering, that same $45m incremental dollars represent only an extra 35% ownership of RRTS, implying around 10.3x 2020 projected EBITDA (please see table below).

For this motive, I believe that Elliott may want fewer investors to subscribe to the rights and hence, is downplaying the situation. This also leads us to believe that the management’s adjusted 2020 EBITDA forecast with a 4.5% margin (when industry peers EBIT margin is around 8.5%) is perhaps overly and intentionally conservative (more on this later).

<table>
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<th>Implied Valuation for Elliott</th>
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<tr>
<td><strong>$000s</strong></td>
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<tr>
<td>Assumed % of shareholders (non-Elliott) participate</td>
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<tr>
<td>Shares bought through rights (non-Elliott shareholders)</td>
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<td>Total shares after rights (000)</td>
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<td>Dollar value - raised from non-Elliott shareholders ($000)</td>
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<td>Dollar value - raised from Elliott ($000)</td>
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<td>Total fund raised ($000) (a)</td>
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<td>Elliott current shares</td>
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<td>Elliott current shareholding</td>
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<tr>
<td>Elliott backstopped shares</td>
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<tr>
<td>Elliott shareholding after backstop</td>
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What Elliott effectively pays

| Elliott subscription | 450,000 | 292,500 | 225,000 |
| less: preferred stock, net of fund raised from other shareholders (405,000) | (247,500) | (180,000) |
| What Elliott is effectively paying for extra shares (b) | 45,000 | 45,000 | 45,000 |
| Extra shares purchased (c) | 82.9% | 49.4% | 35.0% |
| Elliott stake before rights offering (d) | 13.5% | 13.5% | 13.5% |
| Elliott stake after rights offering (d) | 96.4% | 62.9% | 48.5% |
| Implied equity value on Elliott’s total investment (a) / (d) | 466,729 | 715,812 | 928,082 |
| Net debt | 167,000 | 167,000 | 167,000 |
| Implied enterprise value on Elliott’s total cash injection | 633,729 | 882,812 | 1,095,082 |
| 2020 EBITDA | 106,000 | 106,000 | 106,000 |
| Implied EBITDA x Elliott is paying (incl. preferred) in total | 6.0x | 8.3x | 10.3x |
There are more clues that point to Elliott's intentions. The proxy says:

_We will use any remaining net proceeds for general corporate purposes, which amount will vary based upon the amount of rights exercised by stockholders other than Elliott because our transaction fees are structured such that we pay an additional fee for rights exercised and shares of common stock purchased by stockholders other than Elliott. Assuming 0%, 25%, 50%, 75%, and 100% of our stockholders other than Elliott exercise rights and purchase shares of our common stock in the rights offering, we estimate net proceeds remaining for general corporate purposes will be $33.7 million, $31.3 million, $28.4 million, $23.8 million and $17.9 million, respectively, if the rights offering closes by January 31, 2019._

The difference rises from the fact that expenses for RRTS to service ex-Elliott shareholders rights is higher than servicing Elliott's rights. At the same time, RRTS' ABL requires RRTS to retain $30m in net cash proceed from the offering, so any shortfall below this, Elliott has agreed to waive the accrued and unpaid dividends so that the proceeds from the offering does not fall below $30m. From the above projections, when half of the stockholders other than Elliott, the net proceeds falls below $30m. This gives additional incentive for Elliott and the management to want fewer ex-Elliott shareholders to participate. As a context, the difference between the 0% and the 100% scenario is $16m ($33.7m - $17.9m), while RRTS had paid $14m on ABL interest in 2017 – the difference is material to RRTS.

With this skepticism in mind, I tried to figure out what Elliott's intentions could be in varying circumstances. First here is a quick back of the envelop calculation of Elliott's commitment after the rights offering would be $453m in total

- Preferred share $360m
- Common share before rights offering $33m (Elliott’s cost base for the commons)
- Basic rights subscription $60m (5.2m shares now X 23 shares as per rights on each share @ $0.5)

Regardless of how many old or new shareholders subscribe, Elliott is committing $450m (rounded down), but the only difference is the resulting ownership after the offering. I have organized the outcome of the rights offering and Elliott’s objective in a 2x2 matrix – Resulting Elliott holding % after the offering (large, small) x Elliott’s intentions (make money, breakeven), and explored each scenario with back-of-the-envelope figures.

Given Elliott’s accrued dividends and an entry price of -$6, it is prudent to consider the case where Elliott would just want to breakeven. On Elliott’s intention to make money cases, I assumed that Elliott will want to roughly make a 17% annualized return (given its dividend rates on the preferred) on its $450m investment in three years and held the company's EBITDA multiple at 6x. On the table below, I am changing the figures in orange boxes to achieve figures in green boxes. Then I compare the resulting implied share price to today’s ex-rights price.

[See figure on following page]

1. ELLIOTT ENDS UP WITH LARGE SHAREHOLDING AND WANTS TO BREAK EVEN:

This is by far the easiest case to achieve for Elliott. Assuming Elliott ends up with around 95% of the company (i.e. majority of current shareholders decide not to participate), the management would need to achieve around $106m EBITDA for Elliott to break even on their $450m investment. This is in line with management’s 2020 EBITDA forecast of $106. In this case, the implied share price is roughly equal to the current theoretical ex-rights price.

2. ELLIOTT ENDS UP WITH SMALL SHAREHOLDINGS AND WANTS TO BREAK EVEN:

Due to large participation of the existing shareholders, Elliott ends up backstopping for fewer shares and ends up with roughly 28% of the new capitalized RRTS. If Elliott wants to break even the company needs to achieve around $300m EBITDA. Shares get a huge upside of 244% but the run-rate assumption is aggressive without some sort of acquisition. (more on this later)
3. ELLIOTT ENDS UP WITH LARGE SHAREHOLDINGS AND WANTS TO MAKE MONEY:

To achieve Elliott’s target return of roughly $720m, the company needs to achieve an EBITDA of $165m. Share price results in c.60% upside from the current ex-rights price.

4. ELLIOTT ENDS UP WITH SMALL SHAREHOLDINGS AND WANTS TO MAKE MONEY:

Elliott’s resulting ownership is the same as Case 2, and the required return for Elliott is the same as Case 3. By working backwards from target return, EBITDA should be around $470m – even more aggressive than Case 2. The implied upside here comes to 450%. In this case, the resulting RRTS is a $2.5bn market cap company, when RRTS’ market cap hovered around $1.0bn before its troubles. Once again not a sensible expectation with only organic growth.

The cases reflect the extreme ends and the actual result will be in the spectrum of the above. The most important outcome of the analysis is that the current stock price (with rights) has meaningful downside protection based on any combination of the outcome of the shareholding and Elliott’s intentions.

My expectation now, is for the outcome to fall somewhere between Case 3 and Case 4. Definitive proxy reveals certain changes that gives Elliott more control over the business and I believe it shows Elliott’s confidence to restructure and turn around the business. For example, no. 11 of the proxy vote is to “approve an amendment to... to permit stockholders holding a majority of our outstanding common stock to remove directors with or without cause” – clearly giving more power to Elliott.

Also post the offering, Elliott will represent the board in accordance to the resulting shareholding. Elliott currently represents 2 out of 10 members.

Unlike other situations Elliott is involved in Europe (notably the messy board fight within Telecom Italia), RRTS is an American company sharing American way of doing business. RRTS looks to be much more susceptible to the restructuring process dictated by Elliott. RRTS is also an incomparably simpler business.
INVESTMENT RATIONALE 2.
KEEPING A LOW PROFILE

I wouldn’t go far as to call this a sand-bagging but given the insider’s intentions outlined, I think the management’s forward-looking statements could be somewhat artificially suppressed. RRTS employs a hybrid model of asset-heavy and asset-light business. Asset-heavy peers such as Saia and Marten, record around 13-20% EBITDA margin while asset-light peers such as CH Robinson record around 6%. Current asset-lite business of RRTS records around 6% EBITDA margin, largely from growth in retail consolidation and domestic freight management. Retail consolidation resulted in growth from existing and new customers and domestic freight management benefited from higher truckload and LTL brokerage.

RRTS CEO states that RRTS ought to achieve EBITDA margins of single high digits and the 2020 expectation of 4.5% shows the progress toward achieving that point. If there are any expectation of a tuck-in acquisition, this profile could also change. The company will conduct a full business portfolio review post the rights offering and intends to focus on asset-lite side of the industry (providing in-out bound logistics solutions and freight forwarding).

During my conversation with the CEO, pointed out that the company intends to become a platform company that can perform tuck-in acquisitions to increase its capacity and reach. Elliott will play a large role in execution at the board level. Therefore, the growth and margin profile of the company will significantly change depending on what, when and how many acquisitions RRTS conducts until judgement day. This leads to my next rationale on insider incentives.

INVESTMENT RATIONALE 3.
INSIDER ACTIVITY AND RETENTION BONUS

The conspiracy plot thickens – reviewing the management’s activity and incentive structure, I have developed a reasonable expectation for a hard catalyst during 2019.

First, I would like to highlight the increased insider buying activity after the announcement of the Standby Purchase Agreement with Elliott. From the 13th to 16th of November,

- CEO Curtis Stoelting increased shareholding to 1.14% of outstanding stock (56% increase)
- CFO and Executive VP Terence Rogers increased shareholding to 0.21% of outstanding stock (10% increase)
- COO Michael Gettle increased shareholding to 0.69% of outstanding stock (13% increase)
- CCO (Chief Compliance Office) Robert Milane increased shareholding to 0.04% of outstanding stock (80% increase)
- Board member Christopher Doerr increased shareholding to 0.21% of outstanding stock (163% increase)
- President of Roadrunner Freight Frank Hurst increased shareholding to 0.06% of outstanding stock (160% increase)
- Scott Dobak, an Elliott appointed board member, increased holdings to 0.04% (179% increase)
- Elliott increased its shareholding from 9.6% to 13.6% (40% increase)
Management has in place, significant retention bonus that triggers when RRTS is either sold or merged to parties other than Elliott. I think it is logical to conclude that management’s incentive to make a transaction (benefits coming from retention bonuses) at a fair to high valuation (benefits coming from owned shares) before 30th June 2019 is high.

The timing of the retention agreement is also interesting. May 2018 was when the rights offering with Elliott backstopping the issue was first discussed between RRTS and Elliott. Non-binding term sheet for the rights offering was shared in June, and in July issued a press release that RRTS had appointed the special committee to review and evaluate financing alternatives. So, this retention agreement (July) was signed under a solid information that Elliott was in to backstop the rights offering. Therefore, the timing of this retention bonus agreement gives reasonable comfort that the motives of RRTS management and Elliott are aligned.

This set up is highly attractive, and I can reasonably expect the company to resume acquisition in the coming years with Elliott on the driver’s seat. As shown in the previous section through Elliott’s intentions, a few acquisitions that changes the operating trajectory is imperative for Elliott to make a return.

INVESTMENT RATIONALE 4. FORCED SELLING EVENT

There are also numerous reasons for a forced selling when the rights get traded. Around 17% of the top twenty shareholders (collectively owning 63%) is passive, mutual fund investors. I expect these mutual funds to be sellers of the rights once the rights start to trade. Additionally for the same reason, exit strategy could be challenging for these mutual funds as rights offering may, 1) give Elliott a majority holding and 2) become a “controlled company” within the meaning of the NYSE listing standards in which case could be against the mandates of these mutual funds.
Another visible forced selling activity is the #1 shareholder, HCI Equity Partners (HCI). HCI is a Chicago based private equity that brought RRTS public. HCI, through a now terminated consulting agreement, was instrumental in RRTS’ acquisition strategy and execution. HCI as of August 2018, held 20%. The chairman during the accounting scandal was Scott Rued who is a managing partner of HCI. At this point HCI’s intention on the rights offering is unclear but I believe the rights offering is a liquidity event for HCI to exit its position. In this case both stocks and rights will show added selling pressure.

**VALUATION**

Investors get two prices to choose from once the rights start trading. Annual meeting will be held on 19th December, and the rights are expected to be traded between 9th and 31st January. If shares trade below the rights offering price of $0.5, accumulate with shares and if rights (to buy c.23 shares at $0.5) trade lower, accumulate with rights.

With restructuring and recapitalization out the way, Elliott’s members on board and some low hanging fruits in the operating side (re-shuffling product portfolio, redirecting money losing routes and some industry tailwind during 2019), and given some skepticism behind the management’s forecast, I expect the company could record -6-7% EBITDA margin by 2020. Industry on a TTM basis trades in the range between 7x-10x and a de-levered, fundamentally improved RRTS should trade at least around the lower end of the multiple and slowly expand as management delivers results. This results in roughly a 76% upside.

The company could certainly have series of disappointing quarters depending on the speed of restructuring. And by catching the nuance of the CEO the turnaround is still a long way ahead (past 2020). But the setup of outsized return in the long-term is very attractive given Elliott’s presence to quickly turn around and build a platform out of RRTS while the downside meaningfully protected as seen in Elliott’s intentions.

**RISKS**

**ELLIOTT / MANAGEMENT FAILS TO EXECUTE:**

This is the surest way to lose money. But as mentioned, the complexity of the restructuring and the turnaround of RRTS is far lower than other situations Elliott is involved in. The business was tampered with fraudulent management and now that is in the past. The account has been cleaned up, preferred equity is going away, and the business is showing hints of improvement already.

**ELLIOTT’S INTENTION IS TO ONLY RECOVER PART OF ITS INVESTMENT:**

Elliott started accumulating commons in May 2017 and went into an investment agreement for preferred shares shortly after that. Therefore, this development could have been Elliott’s master plan all along, and if that were the case, Elliott would certainly want to at least break even. However, if Elliott is looking to only partially recover by selling the company, participants of the rights lose. The magnitude of the loss is dampened as more investors participate into the rights offering, as explained in the investment rationale.

**LIQUIDITY / EXIT RISK:**

Once the rights get exercised, Elliott could end up with (theoretically) 96% of the company if none of the shareholders subscribe. Holding above 50% makes RRTS a “controlled company” under the NYSE standard and shareholder’s protection is lessened. Given some investors distaste on the situation (as seen in the latest earnings call) this is not a long shot.

**TIMING OF ELLIOTT’S EXIT:**

As with numerous examples of large private equity / hedge fund ownership, exit points of these majority owners are difficult to predict and has a large impact on the share price. I would expect Elliott to be gunning for multiples of return on this opportunity, but it is no
guarantee that in the future Elliott suddenly offers to unload shares at a discount to the then trading price due to various internal reasons.

CONCLUSION

I believe the setup of this special situation offers a very interesting opportunity. Elliott is a savvy investor who will exert more influence on the company to transform and insiders are aligned with their skin in the game. I also see some short-term catalysts around the NYSE listing issue which will be solved easily via the offering and reverse stock splits and a potential liquidity event during 2019. Looking at different angles to Elliott’s intentions also gives us reasonable margin of safety at the current price.
Recent earnings hiccup provides opportunity for inexpensive price on growing, profitable, high-retention online wine subscription club.

**About Brad Hathaway**

Brad Hathaway is the founder and Managing Partner of Far View Capital Management. Prior to launching Far View in July 2011, he worked for almost 7 years at investment firms J. Goldman & Company and Tocqueville Asset Management where he invested globally and in multiple asset classes. He graduated from Yale University in 2004 with a BA in Political Science. Far View invests a global portfolio with a focus on special situations and long-term value investing. The firm runs a long-biased, concentrated portfolio, generally with 10-25 positions.

**About Far View Capital Management**

Far View Partners is a concentrated, global investment fund that aims to generate attractive long-term returns while seeking to minimize permanent capital impairment. Far View’s portfolio will usually consist of 10-20 positions, mainly, but not limited to, long investments in both domestic and international equities and will be highly concentrated in its top few positions. The Partnership’s strategy utilizes a multi-year time horizon to focus on special situations and value investments.
Recent earnings hiccup provides opportunity for inexpensive price on growing, profitable, high-retention online wine subscription club.

INVESTMENT THESIS

WINE operates Naked Wines, an online, crowd-funded wine subscription club. The company also runs Majestic Wines, a UK wine retailer, Majestic Commercial, a commercial liquor sales and distribution business and, Lay & Wheeler, a small fine wine retailer. The stock is down due to lower FY 4/19 earnings due to the company’s subscriber acquisition investment at Naked, lower growth than expected at the Majestic due to the weaker UK consumer, Brexit concerns and confusion around recent disclosure with regards to Naked’s LTV payback ratio.

I believe Naked Wines is a valuable business with a strong competitive position, solid customer retention metrics and proven profitability. At current prices, I believe investors are paying a cheap price for Naked with the potential for further upside from continued improvements in Majestic Wines where the company’s increased move to a franchise-lite model is poised to generate attractive results. I view upside as GBP 500-600 per share with solid downside protection at GBP 210-220 which I think is an attractive risk-reward at GBP 265.

NAKED WINES

Naked is an online, crowd-funded wine subscription club. The company takes monthly deposits from “angels” and uses them to fund independent winemakers. Naked provides the winemaker money to buy grapes, bottling facilities and packaging, and a marketing and distribution network.

What this model does is remove several of the factors that prevent winemakers from maximizing the quality of their wine at a reasonable cost. As Naked notes, only $20 of a $100 bottle of wine is spent on making the wine, with the remaining
$80 spent by the winemaker on financing the winery, vineyard and grape purchases (well in advance of actually selling the wine), marketing the wines, and gaining distribution and generating profit for various middlemen (especially in US 3-tier market).

Naked significantly improves the winemaker's marketing and distribution efficiency by showcasing the wine to its members about whom the company has collected significant data about taste and cost preferences to make tailored recommendations. Because of Naked's size relative to independent winemakers, the company also enjoys significant economies of scale in packaging/labeling and can provide much broader distribution for a small winemaker than what they would enjoy with the existing network. Naked also provides capital upfront which lowers the financing costs for the winemaker and provides them certainty of volume which gives them greater flexibility to make the best wine possible. Finally, because Naked is classified as a winery in the US, the company can ship direct to customers (over 90% of the US within 48hrs) which significantly lowers costs by removing profits at all levels of the 3-tier distribution system.
Here are some quotes from some of Naked’s winemakers describing the value that Naked brings to winemakers:

The biggest challenge for winemakers these days is twofold, according to Napa-based winemaker Matt Parish.

“First, how do I pay for the winemaking process, which takes many years and lots of capital?” he says. “Then, how do I sell it all?”

Another Naked Wines partner, Scott Peterson tells Inverse that direct-to-consumer online sales help winemakers profit and customers save money by “cutting the fat in the middle.”

“The margins are already so slim for the winemakers due to the three-tier system, so partnering with a platform like Naked Wines helps wineries like mine distribute inventory and stay out of debt.”[i]

“I make more money selling my wine through Naked at $15 a bottle than through the 3-tier system at $50 per bottle.” -Daryl Groom

The lower costs of the Naked are also passed along to the customer so that they can enjoy a higher quality bottle of wine at a reasonable price point. This higher quality is supported by customer data with customers rating that they would buy 91% of Naked’s wines again.

Because of these advantages, Naked has worked with impressive winemakers like Jean-Phillippe Moulin from Barons de Rothschild, Randall Grahm of California’s Bonny Doon, Daryl Groom of Penfolds, Virgile Joly of Languedoc, Jonathan Maltus of Chateau Teyssier, and Ken Deis from Flora Springs. Frequently, Naked provides an outlet for talent at high-end wineries that lack the capital to branch out on their own.

Naked gains customers through partnerships with companies including Amazon, Crate & Barrel, Saks 5th Ave, and American Express among others. You may recognize the $100 vouchers that arrive in packages you have ordered. The company has also significantly expanded its digital marketing arm with targeted ads on Facebook and Twitter mainly.

Newly acquired customers lose significant amounts of money in the initial order (GBP 17mln EBIT loss on 24mln of TTM revenue) due to the cost of customer acquisition and the loss on the highly subsidized first order. However, the goal of this initial order is to attract repeat customers who are very profitable (~26% contribution margin). The overall customer base has a long life with overall sales retention currently -80%. Customer cohorts have an initial period of higher churn followed by a much more consistent and profitable longer tail of revenues. The company expects retention to trend up to the mid-high 80s as the faster churning new customers become a smaller portion of the mix.

Plugging the numbers from this slide into excel shows how there is a clear improvement in retention as the customer base gets more seasoned and shows the long-tail of the Naked customer base that is very valuable.

[i] https://www.inverse.com/article/42697-wine-startups-clubs
Naked has also proved that it can be profitable. In the still growing UK market, Naked generated ~8% EBIT margins in FY 18. Margins were lower in the faster growing US and Australian markets due to the upfront nature of customer acquisition costs. Over the long-term, the US is expected to be a higher margin business than the UK due to the greater margin umbrella generated by the 3-tier distribution system.

Naked acquires new customers with the goal of a minimum LTV Payback Ratio (LTV/CAC) of 4x over a 10 year period and a 5x return over a 20 year period so continued growth should generate strong long-term returns for shareholders.

Due to these strong returns, at its 2018 Capital Markets Day WINE announced a plan to double its growth investments because they believed that the potential investment opportunity was much larger than they had previously estimated and returns were better than expected.

**This will more than double the value added through new customer acquisition:**

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<th>Invest</th>
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<tr>
<td>Potential</td>
<td>£24m</td>
<td>&gt;4x</td>
<td>£100m+</td>
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While this upfront investment in customer acquisition has hampered FY 4/19 results, it should generate significant long-term value for Naked and for WINE shareholders.

**MAJESTIC RETAIL**

Majestic operates ~200 wine retail stores in the UK. The company presents itself as a midmarket wine retailer with an average bottle price of ~GBP 9 vs. the supermarkets and discounters below GBP 5. The sales pitch is based on the expertise of Majestic’s knowledgeable employees as well as the data they have on their customer base that helps them tailor offerings to specific tastes.

Majestic’s profitability has also been depressed due to strategic choices made by the management team as they focused on improving customer acquisition and retention. Since the Naked acquisition Majestic has invested GBP >10mln in operating expenses as part of a 3 year turnaround plan in the traditional Majestic business. Majestic has made investments in store refits, customer acquisition (media spend and vouchers), customer retention (more staff, better store experience), increasing the flexibility of the supply chain and a significant IT upgrade (buy online, pick up in store etc).

The company has also invested in a growing Concierge program which is a subscription program where the company hand-selects cases for its customers and ships them a case of wine every 3 months. In the 1 year since launch, the company has signed up 30k customers who have higher average spend and profitability. The company has invested over GBP 1mln in recruiting customers in plan’s 1st year but believes they are generating an 85% return on the cost of recruitment.

Majestic is also embarking on its Partnership program, which is a franchise-lite approach that rewards high performing store managers with greater autonomy and responsibility and compensates them based on the profits generated by the store. This Partnership program has been rolled out to 25% of the store base and the results of those stores have significantly outpaced the non-franchised stores (GP growth +430bps vs. non-Partner stores). Furthermore, the company also benefits from providing a more attractive future for its best store managers which lowers employee turnover. Eventually, this could evolve in
to a full franchise model which would allow the company to release significant capital from their Majestic estate. While this plan would be quite significant if implemented, no concrete plans have been announced yet.

The company also believe some of the tactics it uses in Naked with regards to partnerships and digital marketing are showing signs of working at Majestic and so they believe they have an opportunity to increase the customer base and improve customer retention by employing these tactics.

Overall, while Majestic Retail has faced a tough environment with the weak UK consumer, the company has put in place several strategies with the potential to improve results and generate returns for shareholders. Furthermore, as the company begins to lap some of its cost investments, a greater proportion of revenue should drop to the bottom line.

**Retail: The KPIs plus the meritocracy deliver performance**

<table>
<thead>
<tr>
<th>Initiative</th>
<th>Description</th>
<th>KPIs</th>
<th>How does this link to the plan?</th>
<th>What we’re learning</th>
</tr>
</thead>
</table>
| Store Refits | Refurb of stores | • 5* service  
• 2nd shop rate  
• Lfl sales | • Simplify the task  
• Right Range, Right Store | Positive early signs – need to trade through peak for reliable data |
| People | • Additional 0.5 heads per store  
• Incentives and remuneration increases | • 5* service  
• Team Retention  
• Lfl sales | • Keeping great people  
• Own the customer relationship | Positive early signs – need to trade through peak for reliable data |
| National Fulfilment Centre | Fulfilment centre for 40% of all online orders and urgent store replenishment to support peak trading | • 5* service  
• Lfl sales  
• Availability | • Right stock, right time, right amount  
• Next Day Delivery | Launching as we speak – needs to trade through peak to see full impact |

**MANAGEMENT**

A key factor in the positive outlook for WINE is its strong management team. WINE is led by Rowan Gormley who previously worked for Richard Branson setting up Virgin Money and Virgin Wines. After meeting Gormley during a PE deal that didn’t close, Branson was impressed enough to hire him straight away despite not having an idea of what he wanted him to do. Eventually, Branson sold Virgin Wines and Gormley started Naked Wines in 2008. In 2015, Majestic acquired Naked and installed Gormley as CEO of the combined enterprise.

Gormley has a refreshing long-term, return-oriented focus (I highly recommend reading his reports) and has been frequently willing to sacrifice short-term profits for long-term returns. In his first full period as CEO, Gormley undertook a strategic plan of investment aimed at sustained growth by focusing on customer loyalty. This strategic plan significantly burdened operating results in FY 4/16 but as Gormley noted, his goal job is to create value for shareholders “in a sustainable way”. Thus, making a significant investment that lowered near-term results with the expectation of a longer-term gain.

At the April 2018 capital markets day, Gormley made another choice that focused on the long-term when he announced a significant growth investment in Naked

[ii] www.businessinsider.com/what-richard-branson-taught-this-wine-ceo-2016-7
and Majestic which reduced EBIT results in FY 4/19 but was expected to show significant benefits in FY 4/21 and beyond. Once again, he was willing to take short term pain for the potential long-term gain.

Management also stated very clearly that if they cannot allocate capital above their 4x target return, they will return that capital to shareholders. In fact, CFO James Crawford’s job has been described as “Release under-performing capital and redeploy it into proven high ROI opportunities while being agnostic about Country, Company, Opex/Capex, Customer acquisition/retention etc.”[iii]

During the Naked acquisition, Gormley declined a bonus and instead asked for it to be distributed to his staff instead. In FY 17, he voluntarily waived his bonus entitlement for the year due to the unsatisfactory shareholder returns during FY 17.

Gormley other members of management owns ~6% of WINE and he, the CFO and the CTO all purchased shares at ~310-320p right after the collapse of the shares post earnings.

WHAT WENT WRONG

WINE shares had previously declined over 10% YTD due to concerns about Brexit and the UK consumer as well as investor uncertainty about the lower FY 4/19 results due to the Capital Markets Day investment plan. Then, in November, the company announced disappointing H1 19 results which led to an additional 30%+ decline.

One factor that concerned investors was a downgrade in the company’s expectation for Majestic Retail’s profit. This lowered expectation fed the fears of UK investors who have been very concerned about the weakness of the UK consumer.

More importantly, the company presented an LTV Payback Ratio projection for its H1 19 cohort of Naked angels of 4.0x compared to 4.7x for the H2 18 cohort. WINE also lowered the LTVs for prior cohorts. These lower numbers generated investor concern that the returns Naked was achieving on its significant growth investment were worse than expected.

To better understand what happened, I think it’s important to dive into these metrics a little bit further. The LTV payback ratio is the lifetime value of the customer (LTV) divided by the cost of customer acquisition (CAC). LTV is calculated by reviewing the sales and contribution generated by the current cohort and comparing it to the historical behavior of prior cohorts to make a projection. The cost of customer acquisition includes all marketing costs for new customers as well as the loss on the first, subsidized case divided by the number of customers added in the quarter.

Two things have happened recently which negatively impacted the ratio. Firstly, the company increased its marketing spend over 60% y/y during H1 19. However, there is often a significant delay between the timing of the marketing spend (voucher sent, digital ad placed) to when the new customer signs up (ex. people keep the voucher on the fridge for a couple of weeks before signing up). Thus, while the marketing expense was much higher in H1 19, some of that expense was targeted at people who will become customers after 10/1/18.

Thus, the CAC was artificially elevated due to the is timing mismatch in marketing spend (H1 19) vs. customer additions (some not activating till H2 19) which left the number of customers recorded in the period trailing the marketing spend paid up front to acquire those customers. As CFO Crawford noted, “The media we deployed, the vouchers we sent out in the last few weeks of the year, nobody would have even really seen them and reacted to the yet.”[iv]
With a higher CAC in the denominator, the LTV payback ratio was lowered despite strong LTVs of the current cohort. This impact as was especially significant during H1 19 due to the large increase in marketing spend which meant that these lagging customers were significantly higher than prior periods.

With regards to the lowering of prior years, the LTV payback ratio suffered from a quirk of the calendar. WINE’s FY 18 ended on April 2nd, 2018 and Easter was April 1st, 2018. Thus Easter 2018 fell in H2 18 while Easter 2017 fell on April 16th which was H1 2018. Thus for H1 19, there was a difficult compare as H1 18 contained an Easter while H1 19 did not and Easter is a significant period for wine sales.

Due to this Easter timing, the H1 19 sales of the cohorts were lower than expected by the model when it compared H1 19 to prior H1s which included an Easter. Thus, this tough compare led the model to downgrading its LTV projections for all cohorts because their H1 19 sales were lower than normal. In H1 20, the company should benefit again from an easy compare (Easter in H1 20 vs. no Easter in H1 19) which should help the LTV calculation. As CFO Crawford explains, “We actually don’t have an Easter in April of 2019, but we had one in April of 2018. The model says, well, hold up, it looks like people are spending as much as you expected them to. So it just drops the forecast lifetime value a little bit. When all of these de-phasing is net out, I expect that to move back up again.”[v]

CEO Rowan Gormley noted that the company is on plan for Naked in H1 19 and that they are seeing “payback in line with our expectations” and that “customer lifetime values are trending up”. During the earnings call CFO Crawford also noted that they “have reason to believe that we will see a similar increase (in LTV payback ratio) in the F2019 H1 cohort, but it will only be when we actually see them performing better than the average over that last five years that used to create that prediction that we will start to see that come through in the numbers.”[v]

Overall, I believe these misunderstandings about the lower than expected LTV Payback Ratio was the largest factor in driving the >30% decline since the Nov 2018 results.

[v] H1 19 Earnings Call

**CAP STRUCTURE**

WINE has 72mln shares for a market cap of GBP 191mln at GBp 265. The company has 20mln of net debt for a total EV of 211mln. FY 4/1/19 sales are expected to be 509mln (0.4x), EBITDA is expected to be 20mln (10.6x) and EPS is expected to be 13.6p (19.5x).

**UPSIDE**

Naked sales should continue to increase and its profitability should expand significantly due to the growth in earnings from repeat customers offsetting the 1x increase in marketing costs and losses tied to new customers. In the FY 18 presentation, WINE management laid out a blueprint for forecasting Naked contributions based on various metrics (see Appendix at end). Projecting forward based on this guidance, I expect Naked EBIT to increase from -7mln in FY 4/1/19 to -20mln in FY 4/1/22 as the base of repeat earnings continues to build and significantly outpaces the investment in new customer acquisition and the growth of fixed costs.

<table>
<thead>
<tr>
<th>Income Stmt</th>
<th>Apr-19</th>
<th>Apr-20</th>
<th>Apr-21</th>
<th>Apr-22</th>
</tr>
</thead>
<tbody>
<tr>
<td>Naked Wines New Sales</td>
<td>148.9</td>
<td>171.5</td>
<td>199.7</td>
<td>234.4</td>
</tr>
<tr>
<td>Naked Wines Repeat Sales</td>
<td>177.0</td>
<td>205.2</td>
<td>240.1</td>
<td>282.9</td>
</tr>
<tr>
<td>Naked Wines EBIT</td>
<td>(19.7)</td>
<td>(21.9)</td>
<td>(25.3)</td>
<td>(29.1)</td>
</tr>
<tr>
<td>Naked Wines Repeat EBIT</td>
<td>38.7</td>
<td>45.4</td>
<td>53.9</td>
<td>63.3</td>
</tr>
<tr>
<td>Naked Fixed Costs</td>
<td>(12.2)</td>
<td>(12.8)</td>
<td>(13.5)</td>
<td>(14.1)</td>
</tr>
<tr>
<td>Naked EBIT</td>
<td>6.8</td>
<td>10.7</td>
<td>15.2</td>
<td>20.0</td>
</tr>
</tbody>
</table>

Combined with a recovery in Majestic EBIT from 16 to 21mln due to the continued success of the franchise program, growth in the concierge and a small turnaround on the commercial side where they just added new management, I see EBIT increasing from 12.5mln to 31mln in FY 4/22.
30mln of EBIT generates ~GBP 33.5 of EPS which would be worth ~GBP 500-600 at 15-18x EPS which I believe would be justified due to its >20% EPS CAGR as well as the fact that 2/3 of its EBIT was being generated by the attractive Naked business.

Another way to think about upside is on the SOTP basis. Naked should generate ~GBP 177mln in FY 19 sales. Given its profitability, growth trajectory and subscription model, I believe at least 2x revenues is warranted. Combine that with ~8x non-Naked (Retail + Commercial + Lay & Wheeler- corporate) EBIT and you have a share price of ~GBP 530 in an upside scenario.

### CONCLUSION

With GBP ~240-340 of upside and 40-55p of downside, WINE’s risk-reward appears very attractive at current prices.

### RISKS

1. Naked is unable to grow at attractive economics
2. Change to US distribution regulations impacts Naked US
3. UK retail environment worsens
4. Brexit disrupts supply chain of wine into UK

### APPENDIX-MODELING NAiled

At the FY 18 results, the company put out a good slide to explain how to model the Naked business.
In this chart, you start at #1 where you take the repeat sales from the prior year and multiply them by the retention rate for the retained sales.

In 2, the company has provided guidance for the growth in new business investment spending as well as the new business margin which provides new customer contribution. New contribution/margin will generate new customer sales. The company also provided guidance for the in-year sales conversion of new customers (basically any orders in year 1 post their initial subsidized order). When you add the in-year conversion sales to the retained sales, you will have the repeat sales. The company provides guidance for repeat margin which will provide repeat contribution. New + repeat sales=total sales and new + repeat margin-fixed costs (guidance) will provide EBIT. Thus, if you play with these inputs going forward, you have a method to forecast the Naked Wines results.

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**Xlmedia Plc**

**Asset:** Equity  
**Symbol:** XLM:LN  
**Idea Posted:** 12/18/18  
**Idea Updated:** 01/07/19

**RETURN TO DATE:**  
-2.76%

**EXPECTED RETURN:**  
107.04%

**RETURN TO DATE:**

**TIMEFRAME:** 6 Mo. - 1 Year  
**SITUATION:** Value  
**MARKET CAP:** 202.0M USD

Founder-led affiliate marketing company with high ROIC and great growth opportunities, ample net cash and free cashflow, 7% dividend, trading at 6x cash-adjusted earnings.

**About Andreas Hennes**

I’m a passioned value investor with a style-agnostic investment mentality with a focus on European and North American equities. My approach has been influenced significantly by Benjamin Graham, Warren Buffett, Phil Fisher and Howard Marks. Being style-agnostic helps me to find opportunities independent of market conditions. My best ideas have always been those where you don’t need a calculator for, although I don’t shy away from digging deep. I came across value investing in 2002 at the age of 13 when searching for books about scientology on the web. Luckily, Jeff Bezos had founded Amazon by that time already and that the search results included the book “Buffetology”, which led me to Warren Buffett and the father of value investing, Benjamin Graham. Since then, I read all kind of books about value investing and decided to study Finance and Accounting (B.Sc. 2009-2012 and M.Sc. 2012-2015) at the Goethe University in Frankfurt. At the same time, I worked as intern at Shareholder Value Management AG (a German investment boutique) since 2013 and became a full time financial analyst after graduation in 2015.

**About Shareholder Value Management AG**

Concentrated or diversified intrinsic value strategy (depending on the mandate) seeking to safely compound capital over the long-term. The portfolio is constructed using a fundamental bottom-up process that combines various investment styles with a top-down asset allocation overlay based on behavioral elements. We focus on owner-operator companies with economic moats that provide a sufficient margin of safety and that fulfill our sustainability criteria.
**XLMedia Plc Ord**

BY: Andreas Hennes

CURRENTLY AT: Shareholder Value Management AG

Founder-led affiliate marketing company with high ROIC and great growth opportunities, ample net cash and free cashflow, 7% dividend, trading at 6x cash-adjusted earnings.

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**INVESTMENT THESIS**

**EXECUTIVE SUMMARY**

**BUSINESS DESCRIPTION**

XLMedia Plc is one of the leading online performance marketing companies in the verticals gambling, mobile applications and personal finance. The company attracts paying users across various mobile and online channels and directs them to their customers’ online services in return for a share in lifetime revenue, a fixed fee, or a combination of these. XLMedia Plc generates revenues primarily in Europe and North America. The company was founded in 2008, is registered in Jersey (UK) and is led by its founder and CEO Ory Weihs. The main operating subsidiary is Webpals in Israel.

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**INVESTMENT THESIS**

XLMedia Plc is a founder-led online performance marketing company with high returns on invested capital, great growth opportunities, operates as leader in a fragmented market, has a healthy balance sheet with ample net cash and free cashflow, yields a 7% dividend, trades at 6x cash-adjusted earnings which represents a discount of >50% vs. historic median and almost >70% vs. peers and comes with various catalysts to allow the stock price to catch up with the company’s intrinsic value. Although the thesis does not require any topline growth to generate double-digit returns, this investment case could morph from a 6-12 months short-term revaluation case into a multi-year growth story with multi-bagger potential due a range of structural tailwinds (which is not part of the thesis presented here, but I highly...
recommend to have a look at the growth, competition and valuation section to understand the reasoning).

The short-term thesis is that the management will make smart use of their significant net cash balance for acquisitions and/or share buybacks to drive EPS growth and that a return to organic earnings growth in 2019, once the various (and partially temporary) headwinds are lapped, will help to restore investor sentiment and raise valuation. Unless there are significant permanent net negative changes in regulation across multiple countries and verticals, which I regard as very unlikely, I don’t see a significant downside in this investment case and regard the probability of a permanent loss of capital as low.

Key assumption is that the management utilizes the significant net cash on the balance sheet either for share buybacks at depressed share prices, for the acquisition of publishing assets at reasonable prices or both. I regard both options as highly likely, given that the management has several times stated that they seriously consider buybacks if they cannot use the net cash for attractive acquisitions. In addition, the founder and CEO Ory Wehs owns roughly 2% of the company, representing a significant share of his private wealth according to my estimates. He uses the opportunity to average down with his own money (not only via options) whenever possible and according to my estimates, his cost base (neglecting purchases from options) should be around 136p. Also, the last round of options to the executive team (3 million) was granted in January 2018 close to the peak with an exercise price of 202p.[1] Until recently, the company was in a closed period and could not do buybacks, but given the purchase of Ory Wehs on 19th November, the closed period is over and the buyback window open. In one of the meetings he mentioned Warren Buffett and how buybacks below intrinsic value can be of great benefit for shareholders. Given the CEO’s strong economic interest in the company, the fact that the management increased capital when it was least dilutive and most beneficial for shareholders at roughly 20x earnings, given that the CEO and CFO are also on the board of XLMedia and given that they know about the value of buying back shares when trading significantly below intrinsic value, I am highly confident, that they will act to enhance shareholder value.

THE CASES

To give a better understanding of the range of potential outcomes, I constructed a bear and bull case around my base case, which I regard as the most likely scenario. As you will notice in course of the report, I use rather conservative assumptions (no or low organic growth, no synergies from acquisitions, higher than usual effective tax rate, significant discount to peers, etc.) and leave many potential and structural (long-term) tailwinds aside (e.g. potential growth drivers from increased penetration of online and mobile in multiple regions, opening and regulation of the US sports betting market, etc.).

Please find the input data and general assumptions below (table 1). When combined with the assumptions for each case, you should be able to easily recalculate my results.

---


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Table 1: Input Data and General Assumptions.

Source: CapitalIQ, Company Reports and Own Calculations.

<table>
<thead>
<tr>
<th>Input Data as of 13-Dec-2018</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>USD/GBP</td>
<td>0,7897</td>
</tr>
<tr>
<td>Share Price (GBP)</td>
<td>0,73</td>
</tr>
<tr>
<td>Shares Outstanding (mn)</td>
<td>220,4</td>
</tr>
<tr>
<td>Net Cash (GBP)</td>
<td>32,5</td>
</tr>
<tr>
<td>2018e EBITDA (mUSD)</td>
<td>42</td>
</tr>
<tr>
<td>2018e EBITDA (mGBP)</td>
<td>33</td>
</tr>
<tr>
<td>2018e Net Income (mUSD)</td>
<td>28</td>
</tr>
<tr>
<td>2018e Net Income (mGBP)</td>
<td>22,1</td>
</tr>
<tr>
<td>EPS (GBP)</td>
<td>0,10</td>
</tr>
<tr>
<td>Div (GBP)</td>
<td>0,05</td>
</tr>
<tr>
<td>Current Div Yield</td>
<td>6,9%</td>
</tr>
<tr>
<td>Current P/E</td>
<td>7,3</td>
</tr>
</tbody>
</table>

Assumptions

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Acquisition multiple (EV/EBITDA)</td>
<td>6,0</td>
</tr>
<tr>
<td>Tax rate</td>
<td>20%</td>
</tr>
<tr>
<td>No synergies from acquisitions</td>
<td></td>
</tr>
<tr>
<td>No net regulation tailwind/headwind</td>
<td></td>
</tr>
</tbody>
</table>
Table 2: The Bear Case: Assumptions, Expected Return and Expected Share Price.
Source: CapitalIQ, Company Reports and Own Calculations. All data in GBP.

<table>
<thead>
<tr>
<th>The Bear Case</th>
<th>EPS Contribution</th>
<th>Return</th>
</tr>
</thead>
<tbody>
<tr>
<td>No Organic Growth</td>
<td>0</td>
<td>0%</td>
</tr>
<tr>
<td>No Acquisitions</td>
<td>0</td>
<td>0%</td>
</tr>
<tr>
<td>No Buybacks</td>
<td>0</td>
<td>0%</td>
</tr>
<tr>
<td>No Multiple Expansion</td>
<td>0</td>
<td>0%</td>
</tr>
<tr>
<td>Dividend Yield</td>
<td></td>
<td>7%</td>
</tr>
<tr>
<td><strong>Total Expected Return</strong></td>
<td></td>
<td>7%</td>
</tr>
<tr>
<td><strong>Expected Share Price</strong></td>
<td></td>
<td>0.73</td>
</tr>
</tbody>
</table>

Table 3: The Base Case: Assumptions, Expected Return and Expected Share Price.
Source: CapitalIQ, Company Reports and Own Calculations. All data in GBP.

<table>
<thead>
<tr>
<th>The Base Case</th>
<th>EPS Contribution</th>
<th>Return</th>
</tr>
</thead>
<tbody>
<tr>
<td>No organic growth in 2019</td>
<td>0,000</td>
<td>0%</td>
</tr>
<tr>
<td>Use remaining 11.5m GBP net cash after buybacks for acquisitions at 6x EBITDA</td>
<td>0,007</td>
<td>7%</td>
</tr>
<tr>
<td>10% buyback at 30% premium for 21m GBP</td>
<td>0,011</td>
<td>11%</td>
</tr>
<tr>
<td>Multiple expansion from 7.3x to 12.9x P/E (historic median)</td>
<td></td>
<td>77%</td>
</tr>
<tr>
<td>Dividend yield</td>
<td></td>
<td>7%</td>
</tr>
<tr>
<td><strong>Total expected return</strong></td>
<td></td>
<td>118%</td>
</tr>
<tr>
<td><strong>Expected Share Price</strong></td>
<td></td>
<td>1.53</td>
</tr>
</tbody>
</table>

Table 4: The Bull Case: Assumptions, Expected Return and Expected Share Price.
Source: CapitalIQ, Company Reports and Own Calculations. All data in GBP.

<table>
<thead>
<tr>
<th>The Bull Case</th>
<th>EPS Contribution</th>
<th>Return</th>
</tr>
</thead>
<tbody>
<tr>
<td>Return to double-digit organic EPS growth in 2019</td>
<td>0,01</td>
<td>10%</td>
</tr>
<tr>
<td>Use remaining 11.5m GBP net cash after buybacks and 1x EBITDA leverage for acquisitions at 6x EBITDA</td>
<td>0,027</td>
<td>27%</td>
</tr>
<tr>
<td>5% interest rate on 1x EBITDA debt after taxes</td>
<td>-0,008</td>
<td>-8%</td>
</tr>
<tr>
<td>10% buyback at 30% premium for 21m GBP</td>
<td>0,011</td>
<td>11%</td>
</tr>
<tr>
<td>Multiple expansion from 7.3x to 15x P/E</td>
<td></td>
<td>106%</td>
</tr>
<tr>
<td>Dividend yield</td>
<td></td>
<td>7%</td>
</tr>
<tr>
<td><strong>Total expected return</strong></td>
<td></td>
<td>203%</td>
</tr>
</tbody>
</table>

THE BEAR CASE (7% EXPECTED RETURN // 0.73 GBP EXPECTED SHARE PRICE)

The management does neither buybacks nor acquisitions. The net cash will just remain on the balance sheet and cannot be unlocked. XLMedia does not grow and continues to distribute 50% of earnings via dividends and will keep the remainder in cash. Value of cash cannot be realized, and negative sentiment remains. Negative and positive effects from regulation offset each other. The company will continue to trade at 7x (non-cash-adjusted) earnings. Expected return thus 7% dividend yield. Expected share price of 0.73 GBP.

THE BASE CASE (117% EXPECTED RETURN // 1.53 GBP EXPECTED SHARE PRICE)

The management repurchases 10% of outstanding shares at 95p for 21m GBP, representing a 30% premium to current share price of 73p, resulting in an EPS increase of 11%. The management uses the remaining 11.5m GBP for acquisitions at 6x EBITDA, adding ca. 1.9m GBP in EBITDA, resulting in an EPS increase of 0.7p or 7%. As a market response to utilization of the net cash position, valuation increases to 12.9x earnings, which is the historic median. Negative and positive effects from regulation offset each other. The expected return is thus 118% of which are 18% from EPS.
growth (11% from share buybacks, 7% from acquisitions), 77% from multiple expansion and 7% dividend yield \( \times (1 + 0.11) \times (1 + 0.07) - 1 + 0.07 = 117\).  

**THE BULL CASE (202% EXPECTED RETURN // 1.82 GBP EXPECTED SHARE PRICE)**

The management repurchases 10% of outstanding shares at 95p for 21m GBP, representing a 30% premium to current share price of 73p, resulting in an EPS increase of 11%. The management uses the remaining 11.5m GBP and raises 1x EBITDA debt (32.2m GBP) for acquisitions at 6x EBITDA at 5% interest after taxes, adding ca. 7.3m GBP in EBITDA, resulting in an EPS growth of 2p or 19% (after interest). The company returns to double digit organic EPS growth (=10%) and valuation increases to 15x earnings, representing a 15% premium to historic median, but 21% discount to peers. Negative and positive effects from regulation offset each other. The expected return is thus 203% of which are 43% from EPS growth (19% from acquisitions after net interest costs, 10% organic, 11% from share buybacks), 106% from multiple expansion and 7% dividend yield \( \times (1 + 1.09 + 0.1) \times (1 + 0.11) \times (1 + 1.06) - 1 + 0.07 = 202\).  

**REASONS FOR DEPRESSED VALUATION**

* A capital increase of 8% in January 2018 to fund acquisitions despite being net cash, causing a small EPS and DPS dilution due to the lag in EPS contribution.

* A profit warning in June 2018 due to scraping attacks, decline in revenue due to stop of low-margin media campaigns as well as adverse regulatory developments in some countries.

* Loss of trust into company and management as a product of failing to deliver on overly optimistic investor expectations. A lack of transparency.

**ASSESSMENT OF REASONS FOR DEPRESSED VALUATION**

* Capital increase was smart given the rich valuation and attractive acquisition pipeline, speaking in favor of a prudent capital allocation by management.

* The profit warning was significantly driven by temporary one-offs of which some could become a tailwind in 2019. Loss of trust into company and management unwarranted and should be re-established once the company laps the headwinds and returns to growth.

* Transparency likely to improve going forward as company seems to be open minded for proposals such as reporting KPI’s and installing an IR department.

**CATALYSTS TO REALIZATION OF UPSIDE POTENTIAL**

* Use of net cash and debt up to 1x EBITDA to acquire publishing assets. Highly likely as this has always been part of the strategy and management and board have a great track record of doing attractive and rational acquisitions and have expressed their willingness to use some leverage for attractive opportunities.

* Use of net cash for share buybacks for up to 10% of outstanding shares at depressed levels. Very likely as management and board proved smart capital allocation skills already and given the 10% share buyback authorization.

* Return to double digit earnings growth. Very likely once the negative headwinds that lead to the profit warning are lapped.

* Meeting or exceeding the guidance for 2018 and guiding for earnings growth in 2019. Very likely that the expectations for 2018 will at least be met which could itself already lead to a revaluation given the depressed valuation. The management might want to remain conservative regarding the guidance for 2019 given this year’s profit warning and thus not guide for earnings growth, although I expect them to return to organic earnings growth in 2019 but which is not required for my base case.

* Tailwind effects from reversal of this year’s temporary headwinds. Reasonably likely, but not part of the case and timing not foreseeable.

* Activist investors begin to build positions and push for aggressive buybacks and potential delisting and relisting at Nasdaq or Stockholm stock exchange to close valuation
gap to peers. Realistic option if the management does not act regarding buybacks at the current or even lower valuation levels.

• Relisting from AIM to Stockholm or Nasdaq. Likely only if there is more investor activism or if there is a takeover by a PE player. Would possibly require a delisting first. Especially likely in the longer-term if the drastic undervaluation compared to peers remains.

• Improving transparency from better disclosure of KPI's as well as better investor relations work by installing an investor relations department. Possible but might take some time.

• XLMedia being acquired by competitor like Catena Media or private equity. Possible, but low probability as Catena is highly indebted and has a relatively new CEO who might not feel comfortable to make such a big transformative acquisition. Private Equity more likely given the low valuation, high net cash position, huge upside and no controlling shareholder.

• Merger with competitor like Catena Media or Better Collective. Possible and more realistic than (9) given that Catena is highly indebted, and that Better Collective is probably too small to acquire XLMedia.
SMALL CAPS

Ideas on companies whose respective market capitalizations were between US$300M and US$2B at the time of submission.
In our view, the cannabis company Aphria is a zero. We believe that regulatory and legal risk along with reputational damage due to insider dealing and scheming will bring the company down.

About Gabriel Grego

Gabriele Grego has over 20 years of experience in finance and investment banking. In 2008 Gabriele founded Zanshin Capital, a wealth management company based in Tel Aviv, Israel and focusing on value investing through individually managed accounts. Prior to Zanshin, he served as Vice President at SFK, an Israeli financial conglomerate and advisory firm, overseeing numerous consulting projects in infrastructure, LBOs and real estate. Prior to that, he held a junior management position at Shell Oil as part of the Global Retail Strategy team. In 2001/2002 Gabriele served in an elite unit of the Paratroopers Division in the Israel Defense Forces. He holds a BA in Economics from Tufts University and the London School of Economics, an MBA from SDA Bocconi and an executive degree on Value Investing from Columbia. He is currently enrolled at the Open University for a degree in Physics and Mathematics.

About Quintessential Capital

Quintessential Capital is a long/short equity fund aiming to provide investors with exceptional returns through value and activist investing. The fund invests through a concentrated portfolio of high quality businesses acquired at a discount to intrinsic value and alpha shorts based on insights from in-depth, investigative due diligence. We select our investments through a disciplined process involving deep fundamental analysis, on-field information gathering and the application of rigorous analytical models. We target market-beating long-term average returns.
In our view, the cannabis company Aphria is a zero. We believe that regulatory and legal risk along with reputational damage due to insider dealing and scheming will bring the company down.

**INVESTMENT THESIS**

**SUMMARY**

- We are of the strong opinion that Aphria is part of a scheme orchestrated by a network of insiders to divert funds away from shareholders into their own pockets.
- Aphria’s recent C$280m Latin American acquisitions raise major red flags. Our extensive on-the-ground research shows that the transactions appear to be largely worthless.
- Example: The official registered office of Aphria’s C$145m Jamaican acquisition is an abandoned building that was sold off by the bank earlier this year.
- Example: Aphria’s C$50m Argentine acquisition publicly boasted sales of US$11m in 2017. A worker at the company, however, affirmed that 2017 revenue was only US$430k.
- Documents show that Aphria insiders were likely undisclosed beneficiaries of these deals. We noticed what appear to us as systematic attempts to hide the true nature of these transactions, for example changing the names of the shell companies involved in a way that makes it harder to link them to Aphria’s insiders.
- These M&A transactions are entirely financed by copious and dilutive share issues. We estimate that Aphria has diverted upwards of C$700m via such transactions, or about 50% of Aphria’s total net assets.
- Aphria consistently generates negative cash, and its cannabis seems to be of low quality. Interviews with sources describe facilities infested with bugs, stricken with mold, and having failed audit inspections.
Because Aphria generates a minimum amount of sales relative to its market cap, we believe that the uncovering of this alleged scheme, coupled with a massive asset write-off, would have catastrophic consequences for its share price.

BACKGROUND

Any time an exciting new industry draws widespread attention it also draws retail capital, which in turn can draw unscrupulous actors. This is not a story about the cannabis industry and its commercial potential, nor is it a story about valuations and competitive marketplace dynamics. This is simply about one of the larger companies in the industry that appears to have diverted a tremendous amount of money toward the private interests of its insiders at the direct expense of its public shareholders.

BACKGROUND ON CO-AUTHOR QUINTESSENTIAL CAPITAL MANAGEMENT (QCM)

We are proud to bring you this report in conjunction with QCM. QCM has an unparalleled track record in identifying and exposing corporate malfeasance through deep investigative due diligence.

QCM's last report was published in May of this year, and focused on Greek retailer Folli Follie. The report alleged widescale inflation of revenue. Following publication, FF’s stock dropped 60% in two days and was suspended two weeks later. In July 2018, the company filed for protection from creditors through the Greek bankruptcy code. Management is now facing criminal charges and shares have not resumed trading. Preceding Folli Follie, QCM published a report on Globo PLC, a provider of enterprise mobility management software and services. Globo’s stock was suspended in less than 12 hours, and management confessed to accounting fraud within 48 hours of publication. Globo never re-opened for trading and was declared worthless by the liquidator.

BACKGROUND: APHRIA’S NUUVERA SCANDAL

Earlier this year, Aphria came under scrutiny after we exposed undisclosed insider self-dealing relating to the company’s $425 million acquisition of Nuuvera.

We had written that Nuuvera appeared to be a worthless artifice designed to enrich insiders at the expense of Aphria's investors. The company later admitted that its executives and directors had undisclosed stakes in Nuuvera.
prior to Aphria’s acquisition, along with a key deal partner named Andy DeFrancesco.

The company traded lower by about 30% in the weeks following the exposé and the subsequent admission. Following the episode, the company responded by reassuring investors that the newly acquired international assets were of great value. They further attempted to assuage investor concerns by adding compliance personnel and announcing governance reforms relating to its investment policies. The stock has largely recovered since that point and had even reached new highs in September.

**INTRODUCTION: THEY’RE AT IT AGAIN—THE LatAm TRANSACTIONS**

Despite the announced governance reforms, our research shows that Aphria’s insiders have doubled down on their questionable investments:

**Aphria recently spent over C$280 million on nearly worthless Latin American acquisitions that appear to have clear signs of insider self-dealing.**

We performed extensive on-the-ground due diligence in Jamaica, Colombia, and Argentina and will present evidence that the newly acquired asset values appear to be vastly inflated or outright fabrications. We will also present documents showing that the same Aphria advisor who had described himself as the “architect” of the Nuuvera deal, Andy DeFrancesco, was an undisclosed backer of this latest slew of deals. DeFrancesco effected the transactions in conjunction with Aphria Chairman/CEO Vic Neufeld, who also served as Chairman of Scythian Biosciences (recently renamed Sol Global Investments), another company integral to the execution of these ‘LatAm’ deals. All told, the effect has been massive. We estimate that at least 50% of Aphria’s C$1.46 billion in net assets have been diverted to ‘investments’ that are, at best, grossly inflated. Our breakdown of these balance sheet assets is as follows:

- **C$524 million in goodwill which we believe is entirely worthless;**
- **C$246 million in intangibles, which includes licenses, permits, and “brands” acquired from these dealings, that we estimate are inflated by 80%+; and**
- **C$86 million in equity investees and long-term investments which we believe are the product of related-party deals and are significantly impaired.**

Following a review of the LatAm deals, we will then explore the background of DeFrancesco, including his run-in with Canadian regulators and his close business ties to individuals that the SEC has alleged to have engaged in multiple pump and dump schemes, including Bobby Genovese, Barry Honig, John O’Rourke, and John Stetson.
Finally, we will review Aphria’s cannabis business. While the company declares itself to be “setting the standard” for low-cost production, in reality it appears to be setting the standard for low-quality production. We share the content of an interview with a former worker who detailed failed audits with Health Canada, a circus-like environment, and a facility that has had repeated issues with mold and is “infested with bugs”. We also share the content of our interviews with industry experts, all of whom corroborated the low-quality nature of the product. With glaring red flags relating to its investment activities, strongly negative historical cash flow, and a low-quality cannabis product, we think Aphria’s stock is going to get smoked.

**PART I: THE UNUSUAL STRUCTURE OF APHRIA’S ‘ACQUISITIONS’**

We believe Aphria has diverted shareholder assets to insiders through a systematic process:

1. Aphria insider Andy DeFrancesco sets up or acquires an international company, providing a token justification for an acquisition (e.g., conditional cannabis licenses, a leased facility, purchasing a small existing local business.)

2. The international company is then purchased by a Canadian shell company under the control of DeFrancesco through his closely held private equity firm, the Delavaco Group.

3. The shell company agrees to be acquired by Aphria’s ‘sister’ company, Scythian Biosciences, where Vic Neufeld, Aphria’s Chairman/CEO, and DeFrancesco hold key insider roles.

4. Scythian then sells its stake in the entity to Aphria at a large markup.

5. As a result, DeFrancesco and unnamed associates get cash and/or Scythian shares, Scythian gets cash and/or Aphria shares, and Aphria’s shareholders get international assets that are essentially worthless.

(Sources: Scythian/Aphria filings & press releases, Canadian corporate records, and on-the-ground research)
UNDISCLOSED INSIDER SELF-DEALING?

The architect of these deals, as we will show, appears to be Aphria/Scythian insider Andy DeFrancesco. DeFrancesco was integral to the formation of both Aphria and Scythian, serving as a founding investor and orchestrating the reverse-mergers that took both companies public. He has served as advisor to all of Aphria’s bought deal financings, and currently serves as the Chairman and Chief Investment Officer of Scythian. In fact, earlier this year Scythian even operated out of the same office and suite number of DeFrancesco’s personal private equity firm, the Delavaco Group. Our first major indication that something is amiss came through the following revelation: Canadian corporate records show that the entities acquired in the LatAm deal were all previously named after DeFrancesco’s personal private equity firm, the Delavaco Group.

It appears that efforts were made to conceal the relationship to Delavaco. The names to all of these entities were changed prior to the acquisition announcements, ensuring that the “Delavaco” name didn’t show up in any of the deal-related press releases. For example, Canadian corporate records show that the name of the entity holding purported Jamaican assets was changed two days prior to Scythian’s letter of intent to acquire it.

In short, money has been flowing from retail investors to Aphria, which has then used the capital to buy “assets” from entities associated with insiders. So, let’s take a look at some of the assets.

APHRIA’S C$145 MILLION JAMAICAN ACQUISITION: MARIGOLD PROJECTS

In March 2018, Scythian signed a letter of intent to acquire Marigold Acquisitions Inc., which was described as “a privately-held British Columbia corporation.” (pg. 24) At the time, Marigold Acquisitions was in the process of purchasing a 49% stake in Jamaican company Marigold Projects. In other words, the entity didn’t even own the Jamaican asset yet. Four months later (in July), Scythian then announced the sale of the Marigold letter of intent along with their other LatAm “assets” to Aphria. Scythian completed its purchase in mid-September and subsequently closed the sale to Aphria 2 weeks later. Ultimately, Aphria paid an estimated C$145 million for the Marigold stake, netting Scythian a C$127 million gain for an asset it only actually owned for about 2 weeks (p. 96).

Meanwhile, unnamed Marigold investors in the “privately-held” shell entity were paid C$18 million. We will present evidence that those investors include Aphria/Scythian insider DeFrancesco along with unnamed associates.

ON THE GROUND IN JAMAICA: MARIGOLD’S OFFICIAL REGISTERED OFFICE IS AN ABANDONED BUILDING

So, what exactly did Aphria buy? We visited Jamaica to find out. According to Marigold’s latest filings, the company’s official registered office is 28 Lancaster Road in Kingston St. Andrew.

Much like Aphria’s acquisitions, from the outside it almost looked passable:

But from the inside it became obvious that the building had been abandoned for years:
Busted doors and ceilings. Holes in the wall. Yellowed newspaper on the floor. Dirt everywhere. Not exactly the cutting-edge operation we’d expect. Marigold’s much-touted managing director, Lloyd Tomlinson, lists the same abandoned property as his personal address.

Following our visit, we checked Jamaican real estate records and learned that neither Tomlinson nor Marigold even own the abandoned property anymore. Tomlinson used to be the owner but it was sold off by the mortgage lender in January.

Despite this, Marigold and Tomlinson’s recent filings still listed the abandoned property as their current address.

**ON THE GROUND IN JAMAICA:**

**MARIGOLD CLAIMS TO HAVE 3 OTHER LEASES**

Aside from the abandoned building, Marigold claims to have 3 leases in Jamaica. We visited Marigold’s other properties as well, or at least the ones we could confirm actually exist.

On the Ground in Jamaica: Marigold Claims to Lease “Unit 51” of a Building Complex That Only Goes up to Unit 50

Marigold claims to lease an 800 sq/m herb house in collaboration with the Peter Tosh Museum located at “Unit #51, Pulse Center, 38a Trafalgar Road, Kingston” (pg. 17). The company claims to have leased the facility as of April. (pg. 57) We visited the location in October.

**ON THE GROUND IN JAMAICA:**

**“JAMAICA’S LEADING MEDICAL CANNABIS COMPANY”...HAS A PAPER SIGN ON THE DOOR OF ITS EMPTY OFFICE?**

Marigold also reportedly leased space in “Suite #6” in an office building in Kingston Jamaica (pg. 17). The lease for the office was signed in April (pg. 57). Our investigator visited the site in October during business hours on multiple occasions and found that while the lights were on, nobody was home. He spoke with the neighboring business which said they had rarely seen anyone enter or leave the office.

Why does this “world class asset” have a paper sign on its office door 6 months into its lease? (Someone may also want to stop by from time to time to water that dehydrated office plant):

The company’s other purported lease is for cultivation facilities on a plot of land in Saint Catherine parish. According to the company, this land is intended to eventually support greenhouses and a state-of-the-art research facility. After much searching, our researcher was unable to find the site. We were therefore unable to confirm its existence.

We spoke with the landlord during our site visit. He informed us that the units only go up to 50. In other words, Marigold’s “Unit 51” didn’t exist. We then called the museum later in the month. They couldn’t provide us with contact information for Marigold, saying “they haven’t actually opened as yet.”
ON THE GROUND IN JAMAICA:
MARIGOLD’S TEAM OF “CUTTING-EDGE” SCIENTISTS

When Scythian signed the letter of intent to acquire a stake in Marigold in March 2018, one of the justifications for the transaction was Marigold’s strong scientific team: “Marigold’s leadership in the cutting-edge science of cannabis cultivation and precision dosing brings added depth and prestige to an already strong team.”

MARIGOLD’S MEDICAL DOCTOR DIRECTOR DENIES EVER SERVING ON ANY BOARD, LET ALONE MARIGOLD’S

We reviewed Jamaican corporate records to see who was on Marigold’s team of top scientists. One of the original founding directors of Marigold’s team was Dr. Janice Simmonds-Fisher, one of two scientists associated with the company.

Dr. Fisher is a doctor based in Jamaica (and is a very nice lady). We visited her office and spoke with her. She denied ever having held any directorship positions at any company, let alone Marigold. In fact, she later signed a document attesting to this.

MARIGOLD’S GENETIC ENGINEER. A TOTAL UNKNOWN

Marigold’s other director-scientist was an individual named Ray Anthony Chin, who was listed as Marigold’s “Genetic Engineer”. We visited Mr. Chin’s address at 7 Norbrook Crescent.

The tenant said no one by that name lives there and they had never heard of anyone by that name. We searched extensively for signs of a top (or any) genetic engineer by the name of Ray Anthony Chin through scientific journals, ResearchGate, web sources, social media, etc. We came up completely empty handed. How has Mr. Chin managed to become a top scientist without leaving a trace of his accomplishments?

ON THE GROUND IN JAMAICA:
THE MUCH-TOUTED REASON FOR THE DEAL—A LOCAL CANNABIS R&D LICENSE—COSTS ONLY $500 TO ACQUIRE

At the time of the deal announcement, much was also made of the fact that Marigold had been issued one of three original permits in Jamaica for the R&D of cannabis products. We met with the Jamaican Cannabis Licensing Authority (CLA) and learned that by the time the Marigold deal had closed in September, the CLA had approved at least 22 full licenses and over 80 conditional licenses.

We asked about the process for attaining a license. It requires about $500, some paperwork, and a wait time of less than 6 months. That was basically it.

ON THE GROUND IN JAMAICA:
BUT WAIT...MARIGOLD ISN’T EVEN FULLY LICENSED!

Shortly after our visit, Jamaican media reported on Marigold’s deal with Aphria. Per the article, Marigold Managing Director Lloyd Tomlinson said that Marigold plans to set up 5 herb houses across Jamaica, “the first of which will open at the Pulse Centre.” In other words, none are open.
Furthermore, Tomlinson said that he would reserve full comment about the retail ganja venture:

“until all his licenses are issued by the Cannabis Licensing Authority.”

The article continued:

“...Marigold already has conditional approval for several licenses.”

“...The operation will be fed by a 20-acre farm at Bernard Lodge but could potentially source raw material from a farm operated as a separate business by the Tomlinson family within the Blue Mountains. That farm awaits approval to grow marijuana.”

So, rather than being licensed to operate, Marigold is waiting for its conditional licenses to be approved.

JAMAICA/MARIGOLD:
TO RECAP SO FAR...

• The official office is an abandoned property that was sold off by the lender almost a year ago.

• The company claimed to lease a “Unit 51” that didn’t exist.

• One of the company’s founding directors denies ever being a company director.

• The other mystery scientist has no clear web presence.

• The company’s plot of raw land is not approved to grow cannabis.

• The company has conditional licenses and is awaiting full approval.

All this...for C$145 million? So, what is going on?

JAMAICA:
MARIGOLD STAKES WERE ORIGINALLY BOUGHT FOR US $118 IN TOTAL. WHO WERE THESE LUCKY SHAREHOLDERS?

The undisclosed Aphria/Scythian deal partners who purchased their stakes in Marigold didn’t seem to think the asset was worth C$145 million. Jamaican Corporate records show that two Canadians associated with multiple DeFrancesco-backed deals had purchased their shares of the Jamaican entity for about US $118 (not millions) for shares that were flipped to Scythian mere months later for C$18 million (and ultimately flipped to Aphria for C$145 million.) The two individuals named in Jamaican corporate records were Marvin Igelman and Clifford Starke. Marvin Igelman’s relationship with Aphria/Scythian insider DeFrancesco spans more than a decade, having worked together at brokerage firm Standard Securities Capital Corporation (SSCC) where DeFrancesco had served as the Managing Partner:

Since then, Igelman has played an active role in DeFrancesco-backed deals including serving as:

• Vice Chairman of Delavaco-backed Breaking Data Corp/Sprylogics,

• Director of Delavaco-backed Jamba Juice, and

• Director of Delavaco-backed American Apparel.

Clifford Starke has been described as “an early stage investor and financier of Nuuvera Corp” prior to its takeover by Aphria. As noted in our earlier piece, we think Nuuvera was just as worthless as Aphria’s other acquisitions. The deal had undisclosed conflicts of interest, including ownership by DeFrancesco along with Aphria Chairman/CEO Vic Neufeld, Aphria’s CFO, and multiple Aphria directors.
JAMAICA:
THE CHEAP SHARES WERE OWNED BY AN ENTITY FORMERLY NAMED AFTER APHRIA/SCYTHIAN INSIDER ANDY DEFRANCESCO’S FIRM

The shares were later transferred to an opaque, newly-formed Bermudan entity. That entity, in turn, was owned by the Canadian shell entity that was formerly named “Delavaco Caribbean Ventures”.

Recall that Delavaco is the name of the personal private equity firm of Aphria/Scythian insider Andy DeFrancesco. Following the name change, Scythian announced its letter of intent to acquire the entity. The name change took place only 2 days before Scythian signed its letter of intent to acquire the entity on March 21st. Canadian corporate records captured the originals, however.

Keep in mind that in addition to DeFrancesco's role, Aphria Chairman/CEO Vic Neufeld was also the Chairman of Scythian at the time of the announced Marigold deal. This is the same Vic Neufeld who oversaw Aphria’s acquisition just months later, ultimately paying C$145 million of Aphria shareholder money for the Jamaican entity. The shareholders of the private shell entity in turn were paid $18 million, which looks to have been almost pure profit.

APHRIA’S C$50 MILLION ARGENTINE ACQUISITION: A.B.P. SA

On March 11, 2018, Scythian signed a letter of intent to acquire MMJ International, which was later described as “a privately-held British Columbia company” (pg. 24). MMJ International had an agreement to purchase an Argentine company called ABP, a “pharmaceutical import and distribution company". Four months after Scythian’s letter of intent to acquire the Argentine assets, Scythian then announced the sale to Aphria of the ABP letter of intent along with other LatAm “assets”. Scythian closed its purchase in late September and subsequently closed the sale to Aphria 6 days later.

Ultimately, Aphria paid roughly C$50 million for the ABP stake, netting Scythian a quick C$23 million gain for an asset it only actually owned for 6 days. (pg. 3). Meanwhile, investors in the private shell entity were paid C$27 million for their stake in MMJ. We will show evidence that those investors include Aphria/Scythian insider DeFrancesco, along with unnamed associates.

ON THE GROUND IN ARGENTINA:
ABP’S “STRONG” RETAIL PLATFORM CONSISTS OF EXACTLY ONE SMALL PHARMACY

The company has touted that “ABP has had a strong platform from its distribution and retail business to build on.” Per Aphria’s transaction documents we see that ABP had 2 facilities in total (pg. 74): “ABP operates two facilities located in the City of Buenos Aires - a pharmacy that operates under the trade name Farmacia & Perfumeria and a wholesale drugs distribution centre, which also serves as a secondary warehouse for Farmacia & Perfumeria.” Thus the “strong” retail platform consisted of exactly one pharmacy. Here is a picture of the outside of the pharmacy, courtesy of Google Maps:

We visited the site. It is located in a rundown section of Buenos Aires and is smaller than a conventional CVS or Rite-Aid. Here are pictures from the inside and a receipt confirming ABP’s name on our purchase.
ON THE GROUND IN ARGENTINA:
A “LEADING IMPORTER AND DISTRIBUTOR OF PHARMACEUTICALS”...WITH AN EMPTY, DILAPIDATED OFFICE

At the time of the deal announcement, Vic Neufeld was Chairman/CEO of Aphria and the Chairman of Scythian. He called ABP “one of the nation’s leading importers and distributors of pharmaceuticals.”

We visited ABP’s “wholesale drugs distribution centre”. The area was largely dilapidated and residential. Here is a picture of the entrance from Google Maps alongside a picture from our visit:

On the inside, we saw almost no signs of existing operations, aside from one lone desk and some stacked boxes in what looked like an unfinished, empty warehouse.

ABP:
VIRTUALY NO DIGITAL PRESENCE AND A HANDFUL OF EMPLOYEES

As part of our research on ABP, we called the company, visited its offices, and scoured the web for any signs of a business presence. We saw virtually no digital signs of life and found very few employees.

Oddly, ABP’s Facebook page shows that its first post was in August, five months after the deal with Scythian was announced. The page had 7 likes as of this writing. All told, we were only able to locate 3 actual employees of ABP, excluding retail staff. Two of them were college students:

1. The manager, Gonzalo Arnao, looks to have actual laboratory experience, according to his LinkedIn profile.
2. The second identified employee reports on his LinkedIn that his main occupation is a university student.
3. The third identified employee is a 20 year old who lists his occupation as soccer player/coach on his Facebook page.

COMPANY PRESS RELEASE:

ABP GENERATED “REVENUES IN EXCESS OF USD $11 MILLION IN 2017” VS. EMPLOYEE INTERVIEW: REVENUES WERE ACTUALLY USD $430 THOUSAND

In the initial press release by Aphria’s ‘sister’ company Scythian announcing the letter of intent to acquire ABP, the header of the press release boasted:

“ABP REVENUES IN EXCESS OF USD$11 MILLION IN 2017 AND PROFITABLE”
The headline number struck us as odd given that the company’s operations seemed to consist of one small retail pharmacy and an empty, unfinished warehouse. We checked Dun & Bradstreet which reported that annual sales at the entity were only roughly USD $212,000 which seemed more in-line.

We then spoke with employee #2 (from the section above) and recorded the call. When asked about ABP’s annual revenues, he replied that they were about 15 million Argentine Pesos, which converts to about USD $430,000.

ON THE GROUND IN ARGENTINA:
ABP’S TOUTED “PURCHASE ORDER” WITH A LOCAL HOSPITAL WAS ACTUALLY A DONATION

Prior to the closing of the purchase of ABP by Aphria/Scythian, Scythian announced that a major milestone had taken place at the would-be subsidiary: “Scythian Announces ABP S.A.’s First Purchase Order with Aphria Inc.—Order to Supply World Renowned Pediatric Hospital for Research and Education”

The purchase order was for Aphria’s CBD oil which would support clinical research at Argentina’s renowned Garrahan Pediatric Hospital. “I am very proud of ABP working with the Scythian team for reaching this new milestone of a first purchase order...” gushed Scythian’s CEO in the press release.

It was purported to be a major achievement—an order for a large multi-year study involving over 100 patients. The newly-formed Argentine partnership seemed to be generating new sales, lending the proposed Aphria acquisition added credibility.

One problem: We spoke with representatives of the hospital and they informed us that they didn’t make any purchase. It was actually a donation from the company. The picture on the right is of our meeting with Lucas Schiaffini, a department head at the hospital.

At risk of belaboring the point, Merriam-Webster defines ‘purchase’ as ‘to obtain by paying money or its equivalent’. While Scythian gave the impression that it had secured a major multi-year purchase contract, in reality it was Scythian making the purchase...from Aphria. The product in turn was given away for free to the ultimate consumer.

The hospital later confirmed this publicly. Per a press release put out by the hospital (translated from Spanish): “The medicinal cannabis used in these trials was provided by the Aphria laboratory in Canada, which will donate the drug throughout the study and for all patients in which it is proven to work.”

The hospital employee said they were grateful for the donation, but he complained to us that the company’s representative in Argentina kept hounding them to issue more press releases about the partnership.

ARGENTINA:
UNDISCLOSED INSIDER SELF-DEALING?

So, who were the lucky investors in the “privately-held” shell entity that were paid C$27 million for the Argentine assets? Canadian corporate records show that the shell entity used to be named Delavaco MMJ International but was changed prior to the public announcement of the deal.

As a reminder, Delavaco is the name of Aphria insider & current Scythian Chairman Andy DeFrancesco’s personal private equity firm. If there is still any lingering doubt about what is going on here, we can turn to Andy DeFrancesco’s private Instagram account. This is an Instagram post dated one week prior to Scythian’s announcement to acquire the “privately-held” Argentine assets:

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The picture on the right is of our meeting with Lucas Schiaffini, a department head at the hospital.
Yes, that is Aphria insider, Scythian insider, and current Scythian Chairman & Chief Investment Officer Andy DeFrancesco bragging about purchasing ABP’s pharmacy into his own personal private equity firm one week before flipping it to Scythian for C$27 million. He even hash-tagged #GreedIsGood. We can confirm that it is the exact same pharmacy. Here is the picture from our visit of the same section of the store taken at a different angle:

**APHRIA’S C$84 MILLION COLOMBIAN ACQUISITION: COLCANNA SAS**

In April 2018, Scythian signed a letter of intent to acquire a Canadian entity named MMJ Colombia Partners, which was described in filings as “a privately-held Ontario company” (pg. 24). At the time of the announcement, MMJ Colombia was in the process of purchasing a 90% stake in Colombia-based Colcanna SAS. In other words, Scythian entered into a letter of intent to acquire a “privately-held” entity that didn’t own anything yet.

Scythian later sold the letter of intent along with their other LatAm “assets” to Aphria. Ultimately, Aphria paid C$84 million for the stake, netting Scythian a quick C$45 million gain. Meanwhile, the unnamed investors in “privately-held” MMJ Colombia Partners banked almost C$39 million. We will show evidence that those investors include Aphria/Scythian insider Andy DeFrancesco, along with unnamed associates.

**COLOMBIAN CORPORATE DOCUMENTS: ZERO OPERATING ACTIVITY AND TOTAL ASSETS OF $16,000**

Colombian corporate records show that Colcanna was established on December 27, 2017, and was thus only months old when Scythian signed its letter of intent to buy it. The newly formed entity reported exactly zero operating activity and total assets worth about US$16,000.

On the ground in Colombia: an actual office! But not much else

Colcanna has an office and some property in Colombia. Here are pictures from our investigator’s visit in mid-November. He said there were approximately 5 people working there.

As far as development of the property goes, it does not appear that much is going on, however. The Colcanna website features a pilot greenhouse. The other pictures from the website are rather underwhelming.

Colombia: but wait...Colcanna isn’t even fully licensed!

When our on-the-ground investigator asked for information about buying Colcanna’s products, the company rep said they were still in the licensing process and that they are not near production. An industry expert gave us the following insight on the key license Colcanna appears to be missing:

“I don’t think Colcanna is one of the four companies approved to do characterization. This is a necessary requirement for cultivation.” “…If the company doesn’t have a characterization license then it’s a huge red flag. I think the current government is in no rush to stimulate the industry. People are just twiddling their thumbs in the government departments at the moment.”
Colcanna has received some of its required cannabis licenses per Ministry of Justice and Ministry of Health records, but until they receive all their required licenses they appear to be in the thumb-twiddling business along with the local government.

**COLOMBIAN COMPARABLE TRANSACTIONS:**
**APHRIA OVERPAID RELATIVE TO PEERS FOR LAND/LICENSES**

When comparing the purchase price of Aphria’s acquisition relative to other Colombian cannabis producers we see that they stand out:

![Graph showing cost of cannabis licenses](image)

_Sources: Company filings, company press releases, and local experts_

The cannabis space is replete with debates about valuation, but putting that aside, the fact that Aphria’s purchase stands head and shoulders above the rest of the industry speaks for itself.

**COLOMBIA:**
**UNDISCLOSED INSIDER SELF-DEALING?**

Who were the shareholders in the privately-held shell entity that banked C$39 million for selling a newly-formed, stalled Colombian operation? Canadian corporate records show that two months prior to the Scythian announcement MMJ Colombia had a different name: Delavaco Colombia Partners. Recall that Delavaco is the name of Andrew DeFrancesco’s personal private equity firm. Also recall that DeFrancesco is the current Chairman of Scythian and a key insider of both Scythian and Aphria. The entity was registered in the name of DeFrancesco’s spouse.

The timing of the name change looks prescient. Delavaco Colombia’s name was changed on February 16, 2018—the very day that Colcanna received its first license for cannabis R&D from the Colombian government, suggesting that the acquisition plan may have been set in motion upon receipt of the license.

**APHRIA’S “OPTION” TO PAY $24 MILLION+ FOR A NEWLY-FORMED BRAZILIAN ENTITY WHICH APPEARS TO OWN NOTHING BUT A PENDING LICENSE**

On July 23, 2018, Scythian announced a letter of intent to acquire a stake in “Brazilian Investments Inc”, a private British Columbia-based entity. Canadian corporate records show that “Brazil Investments” had also undergone a name change. It was originally named “MMJ Brazil Investments” and was incorporated only on March 14, 2018. The name was changed to the nebulous “Brazil Investments Inc” on June 15, 2018, about a month before the announced deal: “The acquisition of LATAM provides the Company with an option to purchase 50.1% of a Brazilian entity for $24 million (USD), once it secures a medical cannabis licence from the Brazilian government and a right of first offer and refusal on another 20-39% of the Brazilian entity.” (Pg. 23).

Brazilian corporate records show that the ultimate target, “Green Farma Brasil”, had informally operated as of early 2017 but had only taken the step of legally constituting months after the announced deal, on August 23, 2018.

The company was formed with capital worth only about US$27,000. Thus, it seems that Aphria purchased an option to buy a recently formed entity with no known operations except a pending Brazilian cannabis license. For the sake of their investors, we sincerely hope they don’t choose to exercise this option and shovel $24 million (or more) into this new
shell. From the prior name “MMJ Brazil Investments”, it appears to us that the company under option by Scythian is also related to Delavaco based on the naming convention used in the Colombian acquisition, which was named “MMJ Colombia Partners Inc” immediately prior to its acquisition.

PART II: WHO IS ANDY DEFRANCESCO?

Andrew DeFrancesco is the Founder of the Delavaco Group, a private equity and advisory firm based in Toronto and Florida. His biography was recently removed from the Delavaco site and his spouse is currently listed as the Chairman and CEO of the firm.

ANDY DEFRANCESCO’S DEEP RELATIONSHIP WITH APHRIA

As described briefly above, Andy DeFrancesco has been a key figure with Aphria from the beginning.

DeFrancesco’s biography on the Delavaco website stated that he was “founding investor to Aphria, leading all rounds of financing and strategic advisor to the company since inception.” Despite the recent removal of his biography, we can still see the original through Web Archives, which also shows that he was formerly listed as “Founder, Chairman & CEO” of the firm.

Additional links to Aphria include:

- DeFrancesco’s Delavaco Group is named as a “special advisor” to Aphria in the company’s press releases relating to all of their bought-deal financings (1,2,3,4,5,6,7).
- DeFrancesco’s private equity firm, the Delavaco Group, was the advisor in Aphria’s reverse-merger into a shell entity named Black Sparrow Capital Corp. That transaction took Aphria public.
- The COO of Delavaco Capital was the CEO and CFO of the Black Sparrow shell.
- DeFrancesco was the self-described “architect” of the Aphria/Nuuvera deal which we previously identified as being laden with undisclosed related party conflicts.

ANDY DEFRANCESCO’S DEEP RELATIONSHIP WITH SCYTHIAN BIOSCIENCES (NOW RENAMED SOL GLOBAL INVESTMENTS)

DeFrancesco also has a close relationship with Aphria’s ‘sister’ company, Scythian BioSciences/Sol Global Investments:

- Going back to the beginning, the “finder” of Scythian’s reverse-merger deal to take the company public was the COO of the Delavaco Group. The Delavaco Group is DeFrancesco’s personal private equity firm.
- Until recently, Scythian’s head office was listed as 366 Bay Street, Suite 200, Toronto, the very same address and suite number of DeFrancesco’s Delavaco Group Toronto office (pg. v).
- Scythian’s former CFO, Jonathan Held, served in the role until late September. Held operates his consulting firm ALOE Finance out of the exact same address and suite number as the Delavaco Group’s Toronto office.
- In September, DeFrancesco was named Scythian’s Chairman of the Board and Chief Investment Officer. He is now in charge of allocating Scythian’s fresh batch of money received from Aphria through the LatAm deals.

In short, DeFrancesco has played an integral role with Aphria, Scythian, and the LatAm transactions as outlined above. We view him as the architect of these questionable transactions. Now, we will explore his background and associations.
CANADIAN REGULATORS: 
DEFRENCESCO HAS “LITTLE REGARD FOR THE TRUTH”

A 2009 IIROC complaint mentioned Andy DeFrancesco’s prominent role in a scheme that led to the subsequent industry ban of a broker. For context, IIROC is the national self-regulatory association for Canadian investment dealers, similar to FINRA in the U.S. IIROC’s complaint made several conclusions about Andy DeFrancesco and the broker, who both worked at Standard Securities Capital Corporation (SSCC): “Both the respondent’s and Andy DeFrancesco’s conduct in this matter showed they have little regard for the truth.”

“Andy DeFrancesco was deceptive in his conduct with respect to his wife.”

“He was deceitful to his employer, SSCC, in managing (a client’s) account by placing his own assets in her account.”

“Both the respondent and Andy DeFrancesco were involved with the SSCC new account application form of (the client) which contained the false signature of (the client).”

Per earlier SEC filings, DeFrancesco had served as the Managing Partner at SSCC, a firm that was the recipient of multiple regulatory sanctions (1,2,3,4). SSCC was eventually absorbed by another brokerage firm.

DEFRENCESCO’S BUSINESS TIES TO BARRY HONIG, WHO SEC PROSECUTORS ALLEGED TO HAVE ENGAGED IN MULTIPLE PUMP AND DUMP STOCK SCHEMES

DeFrancesco has several close business interests with Barry Honig, a controversial financier who was recently alleged by SEC prosecutors to have orchestrated multiple pump and dump schemes. SEC and Canadian records show that Honig and Andrew DeFrancesco (along with family accounts) have cooperated on a slew of deals, including:

- **RIOT BLOCKCHAIN** (formerly named Venaxis Inc.): DeFrancesco’s spouse reported a key ownership stake in Venaxis Inc. and even joined Barry Honig in an activist campaign to oust the prior board of directors. DeFrancesco advocated for Honig’s new director slate, which included John Stetson and John O’Rourke, two individuals who were later alleged by the SEC to have participated in multiple pump and dump schemes along with Honig.

Venaxis later “pivoted” business models several times, ultimately becoming Riot Blockchain. Documents show that DeFrancesco had a key role in Riot as well...

As we alleged in an earlier report, Riot at one point made an irregular acquisition that is reminiscent of Aphria’s LatAm transactions: the company bought equipment by purchasing it through a newly-formed privately-held shell entity rather than just buying it on the open market. The equipment cost ~$2 million, but Riot paid ~$12 million for the entity, netting holders of the shell a roughly $10 million gain in about 2 weeks. So, who owned the shell? None other than DeFrancesco’s spouse together with Barry Honig.

- **REAL ESTATE:** According to Florida corporate records and real estate records, the pair also invested together in the very building where Delavaco Holdings Florida office is headquartered.

DEFRENCESCO / DELAVACO’S TIES TO A STEALTH STOCK PROMOTION RING

Delavaco was recently named in an exposé by investigative reporter Chris Carey relating to an “army of writers, both real and imaginary” that have produced hundreds of bullish articles on clients of investor relations firm IRTH and about companies backed by Barry Honig. The article is entitled “Pretenders And Ghosts: Stealth Promotion Network Exploits Financial Sites To Tout Stocks.” Per the article: “The stealth promotion ring began posting stories last year
about companies with financial ties to The Delavaco Group...
The touting ring has spotlighted at least four companies in The Delavaco Group's investment portfolio: MassRoots, Aphria Inc. (OTCQB:APHQF), Liberty Health Sciences Inc. (OTCQX:LHSIF) and Breaking Data Corp. (OTCQX:BKDCF).

DEFRANCESCO’S BUSINESS TIES TO BOBBY GENOVESE, WHO SEC PROSECUTORS ALLEGE TO HAVE ENGAGED IN A MANIPULATIVE PENNY STOCK SCHEME

An SEC complaint filed August 2017 accused an individual named Bobby Genovese of “a penny stock promotion, manipulation and unlawful distribution scheme”. The complaint was related to an Ontario-headquartered and TSX-listed company called Liberty Silver Corporation. The IIROC complaint mentioned earlier provided insight into DeFrancesco’s business relationship with Bobby Genovese. Per the complaint, DeFrancesco had apparently illicitly deposited shares into a fake client account as payment for “services rendered from past transactions” that he had done with Bobby Genovese. According to a 2010 deposition of Andy DeFrancesco in an unrelated matter, he similarly referenced his business relationship to both Bobby Genovese (and the banned broker, Phil Vitug) (Pg. 27). In sum, when reviewing DeFrancesco’s past associations and regulatory run-ins, we view his role in Aphria’s irregular acquisitions as totally unsurprising.

PART III—APHRIA’S SIDE BUSINESS: LOW-COST LOW-QUALITY CANNABIS

As shown in our introduction, Aphria has dedicated much of its cash to international ‘investments’.

Aside from its questionable acquisitions, however, the firm has also made investments into its greenhouse operations in Canada which produce a variety of cannabis products. The firm believes it has an edge in the competitive production space. They have repeatedly touted their ability to produce cannabis at lower cash costs than competitors, which enables them to deliver “one of the highest adjusted gross margin levels in the industry”.

We spoke with a former worker at Aphria’s facility which described the Aphria approach in rather different terms: “The motto should be quality over quantity, but it’s probably the other way around. It’s more quantity over quality.”

As far as management: “A lot of the people who are running the show are young, possibly not very experienced in what they are doing”

This has led to issues such as audit failures, mold, and bug infestations: “We were constantly running into errors and not passing audits with Health Canada and having issues with bugs...it kind of became a bit of a circus.”

“We had a lot of issues with mold and right now the facility is infested with bugs.”

“Every single room that has product in it in that (Leamington) facility right now has bug problems.”

Another source with experience in Canadian and Colombian cannabis companies said the following: ‘Aphria is a big company but is yet to deliver product. There is huge customer turnover. They get a lot of newbies to get prescriptions and get signed up, but first orders receive 3 times market value for low grade.’ It seems that Aphria could be sacrificing quality and its long-term brand in order to generate temporary high margins. Regardless, the strategy appears to be failing as Aphria is not generating positive cash flow from operations. A money-losing, poor-quality, low-cost operation does not strike us as a winning formula.

Additionally, competition is only intensifying as more producers come on-line. Aphria had an early-mover advantage with its licensing and facilities, but that
advantage dissipates with every new entrant. With their best times behind them we don't think Aphria will ever generate meaningful positive cash flow from its Canadian growing operation.

THE ‘BLUNT’ TRUTH: APHRIA IS UNINVESTABLE

All told, Aphria's international deal spree has resulted in over C$700 million being deployed to its questionable “investments”. Including the Brazilian purchase option this total could reach over C$736 million.

We hope this information has been informative and has given readers a sense of what is going on at Aphria. We believe the conduct of Aphria’s executives and deal partners has been deeply unethical and possibly criminal. With a slew of highly questionable transactions, negative operating cash flow, and a low-quality product, we ultimately see no credible path forward for this company.

We’ll leave it at that (for now).
A high-quality, low-cost pet insurance provider, building a durable moat with long-term compound growth potential

About Joseph Frankenfield

Mr. Frankenfield is Partner and Portfolio Manager at Saga Partners. Prior to founding Saga Partners, he worked for KeyBanc Capital Markets in Equity Research. He also worked in Corporate Banking and Asset & Liability Management at PNC Bank. Mr. Frankenfield earned his B.S. in Finance from Miami University and is a member of the CFA Society of Cleveland.

About Saga Partners LLC

We are fundamental, long-term, value investors. The actively managed Saga Portfolio is expected to provide net returns materially above the general market over the long-term by taking concentrated positions in our highest conviction ideas (10-20 positions). We look for undiscovered or misunderstood "compounder" companies with a durable competitive advantage and strong earnings growth potential from reinvestment opportunities.
A high-quality, low-cost pet insurance provider, building a durable moat with long-term compound growth potential

INVESTMENT THESIS

• U.S. pet insurance industry is under-penetrated with a large addressable market.

• Trupanion is building a durable advantage as the low-cost pet insurance provider, growing economies of scale, and strengthening its network of veterinary hospitals through its nation sales force of Territory Partners.

• It is found-led with a strong CEO that is aligned with shareholders.

• Valuation looks very attractive based on high IRR reinvestment opportunities, market growth, and strong cash flow generation at scale.

TRUPANION BACKGROUND

Headquartered in Seattle, Trupanion is a monthly subscription service provider of medical insurance for cats and dogs in the U.S. and Canada. The current CEO started the company in Canada in 2000 and entered the U.S. in 2008. Since then it has grown to be the second largest pet insurer in North America.

Before Trupanion entered the U.S., pet insurance was typically a bad product. Pet insurers set premiums at a low price point but excluded many of the conditions causing a bad customer experience. Trupanion was the first pet insurer to offer comprehensive insurance that covered hereditary and congenital conditions, the health issues pets are most likely to have. Trupanion pays 90% of the veterinary costs with the
pet owner paying 10%. There are no payout limits or lifetime maximums with the only costs not covered related to pre-existing conditions prior to the pet's enrollment and routine or preventative care such as examination fees. The goal of the policy is to be a simple and easy to understand medical plan that provides pets with the best medical care while helping pet owners manage the costs.

While Trupanion is an insurance company in that it pools and redistributes risk, the business looks more like a monthly subscription service. Because pet insurance claims are very predictable, uncorrelated, and typically low dollar amounts, Trupanion can very accurately predict its monthly costs. In other words, it's an insurance company with very short tail risks, therefore it can operate more on a cash flow basis with nominal float.

The company uses a “cost-plus” pay as you go monthly subscription model. After accumulating nearly two decades of data, they are able to accurately predict the “average cost” of a pet based on breed, zip code, age, and sometimes even the specific veterinary hospital. Once they know the average cost of a specific pet category, they add a 30% margin in order to target a 70% claims payout ratio, while most pet insurance competitors payout ratio is closer to 50-60%. Part of Trupanion’s “pricing promise” is to always price the premium with a target 70% veterinary claims ratio so customers know they are getting the same value regardless of their location or pet.

**U.S. PET INSURANCE INDUSTRY**

Pet insurance in the U.S. is significantly underpenetrated if you compare it to other developed countries. In the U.S., only about 1.5-2.0% of pets have insurance while it's 5% in France and Denmark, 14% in Norway, 25% in the UK, and 40% in Sweden. Even Australia, South Africa, and Japan have 5-15% penetration rates.

The important question is why is there such a large discrepancy relative to other developed countries when the U.S. has typically been a leader in financial services?

One view for lower penetration rates is the average person would be financially better off simply saving their monthly premium and paying out veterinary costs as they occur with their specific pet. That view is more a statement on the general purpose of insurance than specifically pet insurance. People buy insurance of any kind to help them pay for large, unexpected or unplanned expenses for which they would have trouble paying for out-of-pocket. The reason for not buying pet insurance would be the same for not buying life, rental, home, dental, eye, or general health insurance since it will no longer be required by law.

While the average pet owner would be better off saving the monthly premium and paying out vet expenses as they occur, the average pet own usually only owns 1-3 pets at a time. They do not have the benefit of diversifying the risk among thousands of pets. If one of their specific pets becomes sick, the owner can be faced with a hefty vet bill. As more expensive and sophisticated veterinary care becomes more prevalent, including radiation therapy, CT scans, and transplants, customers are increasingly valuing the benefit that pet insurers provide by taking on the risk of potentially expensive procedures in exchange for consistent premiums.

**Pet Insurance Penetration Rates**

Source: Trupanion Investor Presentation

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Source: Saga Partners
People buy insurance for catastrophe protection. The question any pet owner must ask when deciding to get pet insurance is how much money they are willing to spend on their pet if it has a serious illness or condition. Is it $1K, $5K, $10K? If a pet owner is only willing to spend a total of $1K on vet bills before putting their pet down, spending $600-$700/year in premiums may not make sense financially. If they are likely to spend much more on their pet, to the point it puts a burden on the average person’s budget, insurance likely makes sense.

The lower U.S. pet insurance penetration rates are not because disposable income is lower, or U.S. pet owners love their pets less. According to the American Pet Products Association (APPA), U.S. consumers are estimated to spend over $72 billion on their pets in 2018, which is a nearly 70% increase over the last 10 years. A survey by Harris Interactive estimated 91% of U.S. pet owners consider their pets to be family members, 81% consider them equal members of the family, and 58% think of their pets as children. A growing number of pet owners are spending more on their pets whether it's premium organic food, doggy day care, or general vet care and medicines.

The answer to lower penetration rates is because pet insurance in the U.S. was historically a bad product. In the U.S., pet insurers historically set premiums at a low price point but excluded many of the conditions pets were most likely to have. The insurance products typically had complex policy language, coverage exclusions, and payout caps over the life of the policy and per condition. The result was a bad product with unhappy pet owners and vets reluctant to recommend insurance.

Comprehensive pet insurance started in the UK in the 1970’s but did not come to the U.S. until 2008. While Nationwide (VPI) is currently the largest U.S. pet insurer and its product has been around since the early 1980s, Trupanion was the first company in the U.S. to offer comprehensive coverage. If you use other developed countries as a proxy for future pet insurance penetration rates in the U.S., it’s reasonable to expect demand for pet insurance to have a long runway of growth going forward if the product provides good customer value.

The winners in insurance businesses are going to be the companies that have some franchise based on providing a specialized product, managerial talent, or better distribution. We think Trupanion checks all three boxes. There will be competitors that attempt to copy Trupanion’s product offering, but we think the company has a strong head start that gives it a growing competitive advantage.

### Competitors

According to IBISWorld, the U.S. pet insurance industry is highly concentrated with the top four companies accounting for over 90% market share in 2018, a large increase from nearly 70% in 2013. There are an estimated 14 companies operating in the industry with the largest player being Nationwide (VPI).

The industry’s increasing concentration is largely attributable to Trupanion’s high growth in recent years. Trupanion’s market share has grown from -15.5% to 29.3%
over the last five years. Petplan has also experienced strong growth, increasing market share to ~7%. IBISWorld predicts the dominant companies to continue to use their established positions and scale within the industry to drive revenue growth for both themselves and the industry as a whole.

While industry premium volume has grown at a 13% CAGR since 2011, Trupanion has grown at a 35% CAGR as market share reached nearly 30% in 2018. Gains in market share has primarily come by growing the total market of pet owners enrolling in pet insurance versus stealing it from competitors. Increasingly pet owners are learning about the value of having comprehensive pet insurance.

### U.S. Pet Insurance Market Share

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<td>Petplan</td>
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<tr>
<td>ASPCA</td>
<td>12%</td>
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<tr>
<td>Nationwide (VPI)</td>
<td>45%</td>
</tr>
<tr>
<td>Trupanion</td>
<td>30%</td>
</tr>
<tr>
<td>Other</td>
<td>7%</td>
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Source: IBISWorld 2018

### Trupanion Market Share

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<th>Year</th>
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<th>Trupanion Sales</th>
<th>Trupanion Market Share</th>
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<tr>
<td>2018</td>
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Source: IBISWorld 2018

### 1. LOW-COST PROVIDER AND ECONOMIES OF SCALE

Trupanion’s core strategy is to be the low-cost provider. They are committed to having the lowest cost to administer and the lowest cost to acquire new customers which is very difficult for any new or existing company to copy. Being the low-cost provider does not necessarily mean their product is the cheapest in the market. It means that Trupanion can consistently use a higher percentage of customers’ monthly premiums toward paying veterinary invoices.

Trupanion pays ~70% of premiums collected to veterinary claims vs. the industry average of ~50-60%, meaning their value proposition is about 10-20% better than competitors. Trupanion’s insurance may cost more than some products with certain exclusions but it delivers an overall better value proposition to pet owners. Competitors may underprice policies at times to boost short term growth, although that is unlikely to be a sustainable strategy.

How can Trupanion price their product below competitors but still be profitable? Trupanion is able to price insurance at a lower mark up because they are vertically integrated which reduces frictional costs. Unlike most competitors that outsource insurance underwriting to a third party, Trupanion owns its insurance subsidiary. They do not have to share the profit from underwriting which cuts ~10-12% in costs.

Trupanion also has their own national sales force of Territory Partners, actuarial team, contact center and owns their brand. In total, vertical integration eliminates between 10-20% in frictional costs that most other competitors experience.

### COMPETITIVE ADVANTAGE

Trupanion’s competitive advantage comes from a combination of being the low-cost operator, proprietary data, and their distribution model.

![Trupanion Investor Relations](image)

Source: Trupanion Investor Relations
2. DATA AND PRICING PROMISE
(BUILDING A BRAND)

Current scale and data collected over the past 15 years helps Trupanion price policies more accurately. It has a proprietary database that breaks down 1.2 million different price categories, giving them the ability to price policies down to specific zip codes and sometimes even to vet hospitals while Nationwide and other competitors still price policies by state. Even though companies like Nationwide have been in the market longer, it does not have pricing data going farther back because they only more recently started to offer more comprehensive coverage. An owner of a Dachshund in Eureka, California should not be subsidizing an English Bulldog in San Francisco. The better the data, the more accurate Trupanion is able to price specific policies so pet owners know they are receiving the promised value proposition.

Trupanion currently has ~500,000 dogs and cats insured. They are expected to reach their target adj. operating margins at scale which is somewhere between 650,000-750,000 pets and should happen by 2020/2021 (discussed below in financial section). Once a business becomes the low-cost provider at scale, it has a choice between either keeping prices higher and making more money or sharing some of the cost advantage with its customer.

On the 3Q18 earnings call the CEO stated, “today we target and spend ~70% of subscription revenue paying veterinary invoices. Once we achieve our goal of a 15% adjusted operating margin at operational scale, we intend to return any additional cost savings back to the pet owner by the way of an even better value proposition.”

Trupanion has committed to their pricing promise of maintaining its value proposition, by always targeting a 70% payout of premiums collected. Passing on the cost advantage to customers strengthens its brand. Pet owners will know they are getting the most value when they sign up with Trupanion. It creates the powerful self-reinforcing virtuous cycle that we love to find. A company shares its economies of scale with customers, leading to higher demand, and therefore greater economies of scale. Distribution (Territory Partners and Trupanion Express)

3. DISTRIBUTION (TERRITORY PARTNERS AND TRUPANION EXPRESS)

Distribution and customer acquisition costs are key parts of an insurer’s business model. Historically, U.S. pet insurers unsuccessfully used a more direct to consumer marketing strategy. Trupanion has a different model that uses a contracted sales forces called territory partners who build relationships directly with veterinarians. This was the primary strategy used in the U.K. and has so far been very successful for Trupanion with nearly 50% of new customers coming from vet referrals. Trupanion is the only U.S. pet insurer with a national sales force that directly markets to veterinarians.

Trupanion has been growing its Territory Partners sales force since 2003 in an effort to build veterinary relationships. Veterinary hospitals are very fragmented and typically owner operated. An average territory has ~2 million people, 1 million dogs and cats, and 250 hospitals. It usually takes 2-3 years of repeated visits to develop relationships with vets before they become comfortable referring pet owners. It would be very difficult and time consuming for a competitor to try and replicate Trupanion’s network of Territory Partners and their relationships with veterinary hospitals.

It’s important for Trupanion to continually strengthen its relationship with vets and customers. One way they did this was by improving the legacy insurance reimbursement
model which was slow, inefficient, and created a bad customer experience. The legacy reimbursement model required customers to pay 100% of vet costs out of pocket, then submit a claim and wait for it to get approved and reimbursed which could take 30-45 days. Some veterinary costs can be very expensive and require customers to pay a lot of money upfront.

Trupanion created a software called **Trupanion Express**. It is a no-cost software that integrates with a vets practice management software to enable direct payment by Trupanion to vets. One of the key benefits of the software is that it provides a framework for claims automation. With claims automation, Trupanion can reduce the checkout time to seconds. Overall it removes friction and eliminates pain points for both vets and pet owners.

Trupanion Express helps widen Trupanion’s moat by benefiting all parties. Vets benefit because they can move forward with providing care for a sick pet, reduces non-paid accounts receivable, and saves on credit card transaction fees which can improve a vet’s cash flow by -15%. Pet owners benefit because it reduces their upfront out of pocket costs and removes having to submit a claim and waiting for the insurance company to respond. Trupanion benefits because it collects more data to further improve their pricing models, lowers variable expenses, and strengthens relationships with vets and therefore improves referral and conversion rates of new customers.

**MANAGEMENT**

Darryl Rawlings is the CEO and started Trupanion in 2000 by insuring his dog. He has a clear vision and goal of becoming the largest and best pet insurer in the world. Usually company annual shareholder letters are more marketing brochures, but Darryl writes out detailed letters that explain how he thinks about the business, its goals, opportunities, problems, etc.

Darryl owns -7% of outstanding shares which makes up the majority of his net worth. Other insiders own -3%. Management has taken the owner mentality a step further by providing an equity incentive program that grants shares to all employees based on growth in intrinsic value each year. While rarely fans of companies issuing shares, we like companies that aligned incentives with shareholders and pay for performance. If the employees can grow Trupanion’s intrinsic value at 30% a year, we will happily pay them 2.5% of the growth.

**FINANCIALS**

Trupanion is in the high growth stage of its life cycle, growing sales greater than 20% a year for every quarter since going public. According to their 2016 shareholder letter, they have not had a single month in the last five years in which revenue has been less than the previous month’s revenue. Sales growth is attributable to enrolling more pets and increases in monthly revenue to pet.

Total pets enrolled has grown over 20% YOY for nearly every quarter since going public.
Average revenue per pet has grown at a 4-5% CAGR since the company has been public. Trupanion does not try to control the cost of veterinary care or increase pricing to boost profitability. They simply target spending 70% of premiums on veterinary claims for a specific pet category.

Unlike most competitors that will automatically increase pricing as a pet ages each year, Trupanion prices a pet by the age at enrollment. The expected costs of care for a pet are averaged over the life of the pet by using the age at enrollment. For example, if a puppy enrolls, the price of the policy is based on an average cost for the puppy enrolled for ages 0-13 years, while enrolling a 5-year-old dog will be based on the average cost for ages 5-13 years.

Growth in the average revenue per pet only reflects the higher average cost of veterinary care from both general inflation as well as advances in care, diagnostic tests, and more advanced treatments now available to pets. Over the last 15 years, veterinary costs have grown at an annual rate of 5-10%. Trupanion continually adjusts their subscription pricing up or down to target the 70% payout ratio. Existing members’ monthly premiums are locked-in for a minimum of 12 months from their last rate change.

Management evaluates their business and capital allocation based on adjusted operating income. They define adjusted operating income as their discretionary margin or the operating income before any costs to acquire new pets. After Trupanion pays all the veterinary invoice expenses, other cost of revenue (direct and indirect member service expenses), technology & development, and G&A, they assess what is available to be spent on sales and marketing (pet acquisition costs).

Trupanion’s cost structure is based on reaching scale, which is expected to happen when 650,000-750,000 pets are enrolled. Scale is very important for several reasons. As the number of pets enrolled grows each year, the fixed costs (technology and G&A) and certain variable costs (specifically “other cost of revenue”) decline as a percent of sales. Reaching scale is what will provide Trupanion the

<table>
<thead>
<tr>
<th>($) in millions</th>
<th>2012</th>
<th>2013</th>
<th>2014</th>
<th>2015</th>
<th>2016</th>
<th>2017</th>
<th>YTD 3Q18</th>
</tr>
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<tr>
<td>Total Sales</td>
<td>55.5</td>
<td>83.8</td>
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<td>188.2</td>
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<td>133.5</td>
<td>170.1</td>
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<td>6.4</td>
<td>11.5</td>
<td>16.1</td>
<td>18.4</td>
<td>21.4</td>
<td>29.5</td>
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<td>15.8</td>
<td>19.9</td>
<td>25.2</td>
<td>33.3</td>
<td>43.1</td>
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<td>Technology and development</td>
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<td>4.9</td>
<td>9.9</td>
<td>11.2</td>
<td>9.5</td>
<td>9.8</td>
<td>6.8</td>
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<td>General and administrative</td>
<td>6.2</td>
<td>8.7</td>
<td>14.3</td>
<td>15.6</td>
<td>15.2</td>
<td>16.8</td>
<td>13.2</td>
</tr>
<tr>
<td>Adj. Operating Income</td>
<td>1.7</td>
<td>2.3</td>
<td>(4.3)</td>
<td>(1.5)</td>
<td>8.5</td>
<td>16.5</td>
<td>17.2</td>
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<tr>
<td>Sales and marketing</td>
<td>7.1</td>
<td>9.1</td>
<td>11.6</td>
<td>15.2</td>
<td>15.2</td>
<td>19.1</td>
<td>18.0</td>
</tr>
<tr>
<td>EBIT</td>
<td>(5.5)</td>
<td>(6.8)</td>
<td>(15.9)</td>
<td>(16.8)</td>
<td>(6.7)</td>
<td>(2.6)</td>
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</table>

<table>
<thead>
<tr>
<th>Margins</th>
<th>2012</th>
<th>2013</th>
<th>2014</th>
<th>2015</th>
<th>2016</th>
<th>2017</th>
<th>YTD 2018</th>
<th>Target Margins at Scale</th>
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<td>100.0%</td>
<td>100.0%</td>
<td>100.0%</td>
<td>100.0%</td>
<td>100.0%</td>
<td>100.0%</td>
<td>100.0%</td>
</tr>
<tr>
<td>Veterinary invoice expense</td>
<td>68.1%</td>
<td>67.4%</td>
<td>68.9%</td>
<td>70.3%</td>
<td>70.9%</td>
<td>70.1%</td>
<td>70.6%</td>
<td>70.0%</td>
</tr>
<tr>
<td>Other cost of revenue</td>
<td>11.5%</td>
<td>13.7%</td>
<td>13.9%</td>
<td>12.5%</td>
<td>11.4%</td>
<td>12.2%</td>
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<td>10.0%</td>
</tr>
<tr>
<td>Gross Profit</td>
<td>20.4%</td>
<td>18.9%</td>
<td>17.1%</td>
<td>17.2%</td>
<td>17.7%</td>
<td>17.7%</td>
<td>16.8%</td>
<td>20.0%</td>
</tr>
<tr>
<td>Technology and development</td>
<td>6.1%</td>
<td>5.8%</td>
<td>8.5%</td>
<td>7.5%</td>
<td>5.1%</td>
<td>4.0%</td>
<td>3.1%</td>
<td>5.0%</td>
</tr>
<tr>
<td>General and administrative</td>
<td>11.2%</td>
<td>10.3%</td>
<td>12.3%</td>
<td>10.6%</td>
<td>8.1%</td>
<td>6.9%</td>
<td>6.0%</td>
<td>5.0%</td>
</tr>
<tr>
<td>Adj. Operating Income</td>
<td>3.1%</td>
<td>2.7%</td>
<td>-3.7%</td>
<td>-1.1%</td>
<td>4.5%</td>
<td>6.8%</td>
<td>7.8%</td>
<td>15.0%</td>
</tr>
<tr>
<td>Sales and marketing</td>
<td>12.9%</td>
<td>10.8%</td>
<td>10.0%</td>
<td>10.4%</td>
<td>8.1%</td>
<td>7.9%</td>
<td>8.1%</td>
<td></td>
</tr>
<tr>
<td>EBIT</td>
<td>-9.8%</td>
<td>-8.2%</td>
<td>-13.8%</td>
<td>-11.4%</td>
<td>-3.6%</td>
<td>-3.1%</td>
<td>-0.4%</td>
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</tr>
<tr>
<td>Total pets enrolled</td>
<td>117,217</td>
<td>182,497</td>
<td>232,450</td>
<td>291,818</td>
<td>343,649</td>
<td>423,194</td>
<td>497,942</td>
<td>650,000-750,000</td>
</tr>
</tbody>
</table>

Source: Company filings
ability to maintain its pricing promise (paying out 70% of premiums in vet costs) as the lowest cost operator. Another significant benefit of reaching greater scale and therefore increased density in more mature markets, is the cost of acquiring new pets is significantly lower than in newer markets with less pets enrolled.

At scale, the operating margin before customer acquisition costs is expected to be -15%.

Veterinary costs are consistently around 70% of total sales each quarter.

As Trupanion gets closer to scale, variable costs (veterinary invoice expense + other cost of sales) will approach 20% and fixed costs (G&A and technology & development) will approach 5% of sales.

As the number of pets increase, Trupanion continues to get closer to its target adjusted operating margin of 15%.

Adjusted operating income should be viewed as a proxy for operating cash flow while pet acquisition costs are similar to capital expenditures. Each pet is an asset for Trupanion, therefore from an investment perspective, money spent acquiring the value of that asset should be amortized over the life of the asset. Trupanion’s strategy is to invest as much capital as possible, as long as they can achieve a good return on their investment. They are able to accurately predict the return on their invested capital (pet acquisition costs) because they are able to predict the lifetime value of a pet (LVP), retention rate, and contribution margin of the average pet.

As long as Trupanion is able to invest all adjusted operating income in pet acquisition costs, they will not report any earnings on a GAAP basis because all pet acquisition costs are expensed when they occur. This is a big benefit from a tax standpoint and paradoxically means that the more Trupanion can invest capital at high returns, the lower their net earnings will be, but the faster intrinsic value will grow. It’s similar to any high growth company not reporting any free cash flow in their early years as they reinvest the operating cash flow.

As Warren Buffett famously said, “truly great businesses, earn huge returns on tangible assets and can reinvest a large portion of their earnings internally at high rates of return.”

Below calculates the return Trupanion expects to make on an average pet based on 2017 numbers. It is based on the adjusted operating income they expect to earn on the average pet acquired, the expected time the average pet will be enrolled, capital charges, and the acquisition costs per pet.

In 2017, the average life of a pet was 73 months and Trupanion spent $152 to acquire each new pet. Based on an adjusted operating margin of 9.6%, the IRR was 36% on the $152 spent to acquire each new pet. In other words, Trupanion should be reinvesting every dollar they can in pet acquisition costs as long as they are able to maintain a high return on their investment.

The ratio of lifetime value of a pet to pet acquisition costs (LVP/PAC) enables management to determine if they will achieve their cash flow and IRR targets. It provides a proxy to assess the return on pet acquisition costs. The lifetime value of a pet is based on the contribution margin of a pet multiplied by the number of expected months the pet will be enrolled. The higher the LVP/PAC ratio, the more value Trupanion receives for each dollar spent in acquiring a pet. Over the last five years the ratio has ranged between 4-6x, providing very attractive returns on acquisition costs.

As Trupanion scales and spreads fixed costs across more pets, the adjusted operating margin will expand and more
capital can be spent on pet acquisition costs relative to the life time value of the pets while still earning a high IRR on their investment.

Below is a sensitivity table showing how Trupanion’s operating margin impacts the amount that can be spent on pet acquisition costs. As the operating margin increases, Trupanion is able to spend more on pet acquisition costs relative to the lifetime value of the pet and still earn a high IRR. In other words, the more profitable each incremental pet is, the more Trupanion can spend to acquire that pet relative to the lifetime value of the pet, meaning the LVP/PAC ratio can decline and the IRR will still be attractive.

The adjusted operating margin has recently ranged between 7-10% and the LVP/PAC has been between 4-6x, providing an IRR of 30-40%. With a 15% operating margin, Trupanion can have an LVP/PAC ratio of 3.0x and still have an IRR of -40%.

**FUTURE GROWTH**

Trupanion is in the high growth stage of its life cycle and an important question is how much more they will be able to grow. We referenced the fact that the U.S. pet insurance market is less penetrated relative to many Western European nations. Using a 20-30% penetration rate found in more mature markets, a reasonable potential addressable market range in the U.S. and Canada is between $26 - $39 billion.

<table>
<thead>
<tr>
<th>($ in billions)</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Pets in the U.S. and Canada</td>
<td>200M</td>
</tr>
<tr>
<td>Avg. Monthly Revenue Per Pet</td>
<td>$54.55</td>
</tr>
<tr>
<td>Penetration Rate</td>
<td>20%-30%</td>
</tr>
<tr>
<td><strong>Total Addressable Market</strong></td>
<td>$26.2-$39.3</td>
</tr>
</tbody>
</table>

The $26-$39 billion total addressable market is a very imprecise range for the potential in North America. There are many different variables that could impact the potential market, but it gives some idea of the potential TAM. In the U.K. it took ~20 years to reach a 5% penetration rate and then another 20 years to reach 25% penetration. Therefore it took a fairly long time to reach the initial 5% penetration, but subsequent adoption grew at a much faster pace.

Management believes the U.S. is at least one pet generation away (~10 years) from reaching 5% penetration rates.

**GROWTH DRIVERS**

1. **NUMBER OF STORES**

Stores are veterinary hospitals actively recommending Trupanion. This has been the key growth driver for Trupanion historically. It typically takes 2-3 years of repeated visits from Territory Partners before a hospital becomes confident in Trupanion to suggest pet owners look into pet insurance.

Trupanion had over 9,000 active hospitals as of June 2018. There are ~28,000 hospitals in the U.S. and Canada providing over 30% penetration. In more mature markets where Trupanion has been for at least 5+ years, ~50% of hospitals are typically active. ~80% of all veterinary hospitals are located within Territory Partners current geography. Trupanion’s goal is to be visiting 25,000 hospitals in the U.S. and Canada and have ~70% active, providing a potential 17,500 hospitals in the U.S. and Canada.

![Active Hospitals](image)

**Source:** Trupanion Investor Relations. Note 2017 as of June 2018

2. **SAME STORE SALES**

Growth in number of pets enrolled as a hospital. Management indicated that they have not figured out a way to accelerate SSS growth beyond what happens naturally over time. They have tested a few tools that may prove accretive but they are still early in their development.
3. DIRECT TO CONSUMER MARKETING:

Utilizing media such as TV and radio advertisements. This is what competitors have typically used ineffectively to grow enrolled pets. Management believes that in more mature markets where the majority of vets are actively recommending Trupanion, there will be a cost-effective was to market directly to consumers. So far this has not been a big growth driver for Trupanion.

4. PET OWNER REFERRALS (REACHING “NIRVANA”):

Currently enrolled pet owners that either add another pet or tell their friends about Trupanion. This growth channel costs Trupanion $0 in customer acquisition costs. Management has a goal they call “nirvana” which is having referrals offset Trupanion’s churn rate. If nirvana is reached Trupanion could in theory spend $0 on pet acquisition costs and maintain their current number of enrolled pets.

Nearly 80% of referral sources (veterinary leads and existing member referrals) are not directly compensated. Most recently, pet owner referrals contributed 0.7% to monthly growth, so Trupanion is halfway for pet referrals offsetting the 1.5% churn rate.

Pet owner dissatisfaction is the largest contributor to churn which often occurs within the first 90 days of enrolling. After the first 90 days, retention rates increase substantially and the average life of the pet enrolled increases ~10 years versus the ~6 years when all enrolled pets are counted. Dissatisfaction mostly occurs because a pet may have a preexisting condition that is not covered. If an older pet signs up with Trupanion, all prior vet records need to get documented which can take time to get processed if a vet needs to send them to Trupanion. Trupanion Express is attempting to improve the speed and transparency of informing pet owners if a specific preexisting condition is not be covered. Trupanion is also focused on educating pet owners to sign up puppies and kittens which have no preexisting conditions so pet owners know everything will be covered during the entire life of their pet.

5. OTHER REVENUE:

Business-to-business partnerships through corporate employee benefits and veterinary employee benefits. Trupanion’s insurance subsidiary, American Pet Insurance Company, also issues policies for other brands of medical insurance for pets.

6. NEW PRODUCTS/BUSINESSES:

This could include other lines of pet insurance (i.e. fish insurance) or entering new businesses. Trupanion still has plenty of ability to grow within its existing product lines therefore this growth category will be not be relevant until the U.S. and Canada dog and cat insurance market becomes more saturated.
VALUATION

Management has been very transparent about near-term and long-term goals for the company. In each of the annual shareholder letters, they outline what the company did well and needs to work on. You can go back and read what management says in past years and see what actually occurs subsequently. For example, in the 2014 letter, management said they plan on being cash flow positive by the second or third quarter of 2016, which they achieved in the second quarter of 2016.

Most of Trupanion skeptics state the company is a money losing P&C insurance business and should be valued relative to book value. We agree that on the surface valuation looks expensive since there are no reported GAAP earnings and a price to book ratio of ~6x. However these often-used, somewhat cursory valuation proxies do not provide much insight into Trupanion’s true potential intrinsic value.

At the basic level, insurance is simply pooling together premiums from customers to redistribute risk and then paying out claims. The most important job of an insurance company is estimating what the future claims will be and pricing premiums at a level to cover the claims and operating expenses to leave a fair profit for shareholders.

Trupanion’s insurance operation is not as comparable to certain other P&C insurers. Some insurance operations such as with life insurance have very long-term policies. There can be a long lag between when insurers collect premiums and eventually pay out claims. This means some insurance companies do not know their true cost of goods sold or operating margin in a given period for several years after they report because estimates of the claims accrued for a given year do not materialize for many years into the future.

The larger the claims, lower the frequency, and more unpredictable the costs, means insurers must hold more assets on their balance sheet to prepare for potential long-tail risks. Insurers will hold premiums longer creating a lot of float, which is simply money held at the insurer but is expected to be paid out in claims. As insurers hold more assets on their balance sheet relative to their potential claims liability, they become more capital intensive and dependent on interest and investments for income.

At the end of the day the value of any company is the cash they generate and shares will follow the earning power of the company over time. What truly matters with any asset is understanding the cash flows. Trupanion operates on a money-in, money-out in the same month (on average). Their goal is to pay claims within the first five minutes of the invoice being created. As a result Trupanion carries very little float.

Trupanion’s entire cost structure is based on what they will look like when they reach scale at 650,000-750,000 pets, at which point they should have operating margins before customer acquisition costs of ~15%. Based on historic trends and expected enrolled pets of 510K at 2018-year end, we think it’s reasonable to expect Trupanion to reach between 650K-700K pets by 2020.

Below is a model of what Trupanion’s income statement may look like in the year 2020. We assume pets enrolled grow at 12-17% CAGR, veterinary care inflation is 5-6%, and Trupanion reaches scale adjusted operating margins of 14-15%.

We assume that in 2020 Trupanion will still be able to reinvest all adjusted operating income in high IRR pet acquisition costs. Since pet acquisition costs should be viewed as capital expenditures spent on acquiring long-term assets, we amortize the adjusted operating income over the expected life of pet, or -6.5 years.

Assuming 2.0-2.5% in share dilution, 2020 EBIT could range between $53 – $62 million. If an investor requires a 15% return on their investment (not the WACC just a general return on investment target), the present value EBIT would be between $42 - $50 million, providing an market cap/EBIT of 16-19x. We use market cap instead of enterprise value because we assume the net cash held on Trupanion’s balance sheet is required for operating purposes. As of 3Q18, Trupanion has $74 million in cash equivalents and $8.6 million in debt. Cash equivalents held on the balance
sheet is to cover expected claims (reserve for veterinary invoices was $14.2M at 3Q18).

A 16-19x EBIT multiple looks very attractive considering Trupanion has a long pathway ahead for growth, with the ability to reinvest cash flow at 30-40% IRR and continue to grow sales between 20-30%.

The market can underappreciate the value of a truly high-quality company that has the ability to reinvest earnings at a high rate of return for many years into the future. Amazon is a good example of this kind of business. If you go back just 15 years, Amazon was trading for a market cap of $21 billion and had sales and earnings of $2.3 billion and $4 million. If you bought shares in 2003 for $50 and held them today, you would have earned a 25% compounded return. Let’s say in 2003 you required a long-term IRR of 15% on all your investments (far above the 7-8% S&P 500 CAGR provided over the same time). Amazon’s fair value to an investor would have been about $200 per share or 4x the price. $200/share would have valued Amazon at $84 billion or 37x its 2003 sales.

Other great 20%+ compounders like Google, Facebook, or Berkshire Hathaway, were historically undervalued much of the time because the market underweighted their compounding power. Of course hindsight is always 20/20 and we are not claiming Trupanion is the next $1 trillion market cap company, but it does show how the market can undervalue companies that have the ability to reinvest capital at high returns for many years into the future.

There are few long-term compounding companies, so if you get conviction you have found one, we suggest buying shares and holding on to them for the long-haul. Wall Street analysts typically don’t look much farther than two years out when valuing a company. Trupanion skeptics are very focused on how the financial statements look today, ignore their growing competitive advantage, long-term trends in the historic results, and disregard what the company will likely look like in 10+ years.

<table>
<thead>
<tr>
<th>Trupanion Current Valuation</th>
<th>2018E</th>
<th>2020E</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pets Enrolled 2018E</td>
<td>510,000</td>
<td>675,000</td>
</tr>
<tr>
<td>2 Yr. Pets Enrolled CAGR</td>
<td>13%</td>
<td>15%</td>
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<tr>
<td>Pets Enrolled 2020E (scale)</td>
<td>650,000</td>
<td>675,000</td>
</tr>
<tr>
<td>Avg. Revenue Per Pet 3Q18</td>
<td>$54.55</td>
<td></td>
</tr>
<tr>
<td>Avg. Veterinary Care Inflation</td>
<td>5.0%</td>
<td>5.5%</td>
</tr>
<tr>
<td>Avg. Revenue Per Pet 2020E</td>
<td>$60.14</td>
<td>$60.72</td>
</tr>
<tr>
<td>Annual Revenue ($m)</td>
<td>469.1</td>
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<tr>
<td>Revenue CAGR</td>
<td>24%</td>
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<tr>
<td>Adjusted Operating Margin</td>
<td>14.0%</td>
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<tr>
<td>Sales &amp; Marketing Amortized Over 6.5 yrs</td>
<td>2.2%</td>
<td>2.2%</td>
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<tr>
<td>EBIT margin</td>
<td>11.8%</td>
<td>12.3%</td>
</tr>
<tr>
<td>EBIT</td>
<td>$55.6</td>
<td>$60.3</td>
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<tr>
<td>Share Dilution Per Year</td>
<td>2.0%</td>
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<tr>
<td>2020 Diluted EBIT</td>
<td>$53.4</td>
<td>$57.7</td>
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<tr>
<td>Discount Rate</td>
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<tr>
<td>Present Value of Diluted EBIT</td>
<td>$42.0</td>
<td>$45.6</td>
</tr>
<tr>
<td>Current Market Cap ($m)</td>
<td>$790</td>
<td></td>
</tr>
<tr>
<td>Market Cap / EBIT</td>
<td>19x</td>
<td>17x</td>
</tr>
</tbody>
</table>

Source: Company filings, Saga Partners
(Right) are sensitivity tables showing what Trupanion may look like 20 years out in 2038. There is huge margin for error when looking out 20 years, but if you believe Trupanion is building a durable moat in a large underpenetrated market, we think these scenarios are within a reasonable range of expectations. If you do not think Trupanion has a defensible moat and provides an undifferentiated, low margin product, it's probably best to look no further.

We assume the 200 million dog and cat population in the U.S. will grow inline with historic rates of 1.5% annually, providing 270 million dogs and cats in 2038. Regarding U.S. & Canada pet insurance penetration, management believes the U.S. is at least one pet generation away (~10 years) from reaching 5% penetration rates. If the U.S. follows a similar trend as the U.K., once it hits 5%, growth in penetration may accelerate in the subsequent decade. We think a 5-25% penetration rate in the year 2038 is a reasonable range. Trupanion's current market share is ~30% and its market share of newly insured pets is closer to ~40%, therefore we assume future market share between 20-45%. Based on the assumptions below, Trupanion will enroll between 2.7-30.4 million pets in 2038.

Assuming a 5% CAGR in average revenue per pet over the next 20 years, (at the low end of the 5-10% historical average veterinary care inflation over the last 15 years), the average monthly revenue per pet will grow from the current $54.55 to $144.74 in 2038, providing a revenue range of $4.7-$52.7 billion based on the sensitivity scenarios.

Assuming a margin of 15%, Trupanion's adj. operating income would be between $703 million - $7.9 billion.

Note that adj. operating income is before sales & marketing costs to acquire new pets. There is a chance that Trupanion reaches "nirvana" where they could spend $0 in customer acquisition costs and maintain the current number of enrolled pets, meaning all adj. operating income could drop to the bottom line after paying interest and taxes if no attractive investment were available. It is reasonable to expect that Trupanion will not be able to invest at such a high IRR on pet acquisition costs since the market will be more saturated.

For valuation purposes, let's assume that Trupanion can not find any attractive investment opportunities in 20 years and adj. operating income is available to shareholders after paying interest expense and taxes. Putting a reasonable 12x market cap/EBIT multiple on 2038 adj. operating income provides an enterprise value range between $8.4-$95
billion. This is a very wide range which makes sense given the uncertainty looking 20 years out. This growth also does not consider Trupanion expanding into related business lines (i.e. fish insurance) or expanding outside the U.S. and Canada. Often when investing in high quality companies there can be positive surprises over time (such as Amazon unexpectedly moving into AWS), while lower quality businesses often have negative surprises.

Based on the current market capitalization ~$790 million, the expected returns for the given scenarios range between a 13-27% CAGR over a 20-year period. An investor should probably lower the expected CAGR by ~1-2% annually to account for share dilution, providing an 11-25% CAGR.

Earning an 11% CAGR over the next 20 years vs. earning 25% CAGR will provide significantly different results however we think it shows the substantial return potential for a strong long-term compounding company.

RISKS

EXECUTION

Trupanion is in the very early stages of their development and disrupting an industry that is largely untapped. While Trupanion’s trends look strong, they have to continue building their competitive advantage. Competition was not historically very strong and it is reasonable to expect other companies to try and emulate Trupanion’s business model going forward. While we think the cards are heavily weighted in Trupanion’s favor, they still have to execute but sticking to their pricing promise and providing the best valued product to both customers while supporting veterinarians.

REGULATORY RISKS

There has been a lot of attention recently on Trupanion’s regulatory matters. The concerns surround the fact Territory Partners are not licensed to sell insurance. Trupanion has licensed agents that sell their products direct to pet owners through their 24/7 call center or online. Trupanion claims that Territory Partners do not sell directly to customers, unless they chose to be licensed themselves. Their role is to build and support relationships with veterinarians. The grey area is how Territory Partners are compensated.

According to regulators, “an insurance agency may pay a fee to a non-licensee, non-employee for making a referral provided that the non-licensee does not discuss the specific terms and conditions of the policy, and the fee paid is not dependent upon whether the referral results in the sale of insurance.”

Territory Partners are compensated by a combination of referral fees for new pet enrollment and residuals tied to pet retention within their territory. Their fee compensation is the same flat amount without regard to how the customer enrolled.

Trupanion claims they have ongoing discussions with regulators relating to their business practices and no state regulatory agency has ever reached any conclusion that has or is expected to have a material impact on their business.

We are not experts in regulatory law or policy, however let’s say regulators determine that Territory Partners must become licensed. It costs a few hundred dollars and typically a few weeks at most to study and pass the insurance licensing exam. It would hardly be a big blow to Trupanion’s business model if regulators determined that the 100+ Territory Partners needed to get licensed.

A worse scenario would be if regulators found that Trupanion knowingly had bad business practices and would get fined a material amount of money. From what appears to be ongoing and constructive conversations with regulators, it is unlikely Trupanion would face significant penalties.

CAPITAL ALLOCATION

In July 2018, Trupanion issued 1.8 million shares at $33 to acquire the $65 million building it was leasing. There was some concern among investors that issuing equity at a below market price at the time (shares were selling for -$40/share), may not have been the best source of capital. Management had stated in their 2016 letter, “paying up
front for assets that would sit on...balance sheet and help lower ongoing frictional costs.”

Our main question was why Trupanion did not issue debt to purchase the building. Trupanion’s investor relations provided us with more color stating the equity raise was because regulators approved 10% of the equity in the building ($7.5 million) would be considered in Trupanion’s risk based capital requirements, therefore freeing up $7.5 million that could be used for higher returning investments (PAC). Over the next 12-15 years it will free up ~$60 million of capital. Additionally purchasing the building in itself lowers fixed expenses by $3M-$5M per year in lease savings and rental income.

From a capital standpoint, Trupanion is subject to risk-based capital regulations that require it to maintain certain levels of surplus capital to support the overall business operations in consideration to their size and risk profile. To be fully compliant with a “no action level” status, insurer’s total adjusted capital must be equal to or greater than 200% of insurer’s estimated capital adequacy. Trupanion has

CONCLUSION

Trupanion is a high-quality company building a durable competitive advantage with long-term compound growth potential. It has a strong lead relative to competitors as the low-cost operator. As the company reaches operating scale over the next 2-3 years, adjusted operating income will accelerate while still having numerous opportunities to reinvest capital at high returns into the foreseeable future.

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Neglected small cap retailer in defensible niche, price trashed on trivial reset in guidance. Selling at 6.5X demonstrated earning power with a 16% free cash flow yield.
Neglected small cap retailer in defensible niche, price trashed on trivial reset in guidance. Selling at 6.5X demonstrated earning power with a 16% free cash flow yield.

INVESTMENT THESIS

QUICK PITCH

Stock beat up on recent minor guide down. Can easily bounce back to $18-20 based on improvement in current dismal sentiment, confirmation of a new CEO, or release of reasonable earnings guidance in early March. Valuation has priced in a lot of negative news at 6.5X preliminary guess of fiscal 2020 Eps of $2.00+.

BRIEF RECENT HISTORY

At the end of 2013, Men’s Wearhouse had a clean balance sheet with no debt, minimal intangible assets, stock price in the mid-30’s, selling for under 14X earnings. In mid-2014, MW acquired Jos A. Bank, loading the balance sheet with Goodwill and debt. The transaction seemed way too expensive at the time; still, in 2015 bulls on the stock pushed it up to around $64 where it was valued at well over 30X that year’s earnings. From there, the deal collapsed, and a huge amount of the Goodwill & intangibles were written off, leaving only the mountain of debt. The stock has visited the $9 to 10 range three times since then, in January & July 2016, and in June 2017. If you want more detail on this history, see the next few paragraphs. If not, just skip the next section.

LONGER HISTORY

In mid-2013, Men’s Wearhouse (hereafter referred to as MW) had been flat lining for a couple of years, and in summer/early fall was in a range $35 to high 30’s. In early October, Jos A
Bank (hereafter referred to as JB) made an offer of $48.00 cash for all MW shares. This valued the company at 0.93X revenue, and about 8.55X EV/EBITDA. Also, it was 28.2X what MW ended up reporting in EPS for that FY, and 18.8X EPS of the prior year. When viewed in the context of today’s valuation for brick & mortar retailers – typically 5 to 7X EV/EBITDA, with some as low as 3X, and earnings multiples of 10 – 11X, that price was a gift. Of course, hindsight makes that judgement “perfect”, but still a common sense view would say a high teens multiple of earnings for a business which was not really growing was more than fair for any business, retailer or not. MW’s board did not even try to negotiate, instead they went into full turtle mode, rejecting the offer, putting up takeover defenses and in general giving lip service to “shareholder value added” while setting the table for what became one of the stupidest misallocations of capital in this analyst’s experience.

On November 26, 2013 MW unveiled its ultimate weapon of self-destruction, an all-cash offer for JB of $55/share which valued JB at around 9.1X EV/EBITDA. At this point, it became clear which player at the poker table was the sucker. JB was able to stay in the hand for several more rounds of betting, eliciting subsequent offers of $57.50, $63.50, and finally $65, all the while with no other player raising the pot. The final offer accepted came in at $1.8 billion which valued JB at 10X EV/EBITDA. Not only did JB play its hand very well, there was no stock in the deal despite the fact that MW shares had risen to a range of $48 – 55 during this period. All cash. Financed with debt. MW management glibly spun the deal to shareholders with the carrot of $100 to $150mm in “synergies by the end of FY 2016, and “accretive to earnings” in year one. They conveniently ignored that fact that interest expense on the massive debt borrowed to pay for the transaction moved annual interest expense from a trivial $3mm to $100mm, a delta of $2.00 per share before taxes. The final price was a 56% premium to JB’s share price preceding this farcical comedy of investment banking “wisdom”.

A glance at the next table [below] provides a sense of how this worked out.

A couple of points: Not only did JB not add to earnings, it produced a massive loss just 21 months after the deal closed. The ensuing write off of Goodwill totally wiped out TLRD’s shareholder equity and in fact there is still a negative hole in the equity account. Also, TLRD management does not really like to talk about GAAP earnings, and essentially adjusts out every possible item

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<td>38%</td>
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which detracts from their version of “reality”. Even using their version of earnings, the most telling conclusion of TLRD results is there has been no growth in Eps for five years, a period of reasonable expansion in the U. S. economy. To be sure, many other retailers continue to struggle, excess capacity is still abundant, and retailers lacking an effective online channel are especially at risk. Despite that, the question remains: How did the TLRD Board fail to hold the CEO responsible for the JB fiasco for so long? Let’s review a few significant dates.

2011: DOUG EWERT BECOMES CEO

6/18/14 Jos Bank acquisition closes. Ewert says they are “thrilled” at the opportunity, says deal will be accretive year one, says there will be $100 to 150mm of synergies.

3/11/2015 Full year Jan ’15 earnings announced. Ewert says upcoming year will be the “year of strategic transition for Jos A Bank.” [ I guess he meant, this will be the year the business totally blows up. ] Ewert also added: “We expect profits to accelerate in 2016 with rebounding sales after three consecutive years of negative comps at Jos A Bank.....”

3/9/16 Full year ’16 earnings announced. Massive write off, driven by the evaporation of the asset premium created in the Jos A Bank acquisition.

12/13/16 TLRD CFO fired. Current CFO Jack Calandra hired. Seasoned financial guy, most recently 10 years at Gap Stores.

June, 2015 Tux rental venture with Macy’s formed

Q2 2017 Macy’s tux rental biz shut down, with a significant impairment charge.

March, 2016 Current acting CEO Dinesh Lathi joins Board.

June, 2017 Current lead director Theo Killion joins Board.

9/30/18 CEO Doug Ewert, who presided over the disastrous results discussed above, retires.

AN OUTSIDER’S INTERPRETATION OF THIS HISTORY

My color on this history has no special insight into the politics and personal dynamics of the management and Board; it is just based on a review of the financial documents. By inference, I draw these possible conclusions:

1. In 2013-14, the then Board of Directors acted solely out of self-preservation, used poor judgement in paying up for JB, apparently exerted little or no restraint on management, and was extremely naïve in how the JB deal was to be financed.

2. TLRD had enough unissued shares to structure part of the JB purchase with equity, but instead used all cash. Is it possible the sellers did not want any MW equity at the then price in the $50’s? That would be my assumption. So MW/TLRD management & Board totally lacked any concept of how to value either business, paying too much for JB, and not asking the question why JB owners only wanted cash.

3. Amazingly, the Board did not hold the CEO accountable for poor results, multiple mistakes, and colossal destruction of shareholder value. Allowing him to continue in office for another 2 ½ years seems like an egregious example of Board laxity to the point of negligence.

MOVING BEYOND HISTORY

The preceding narrative is sufficient to justifiably ask why TLRD is discussed as a viable investment, or even a speculation. In response, I merely remind the reader this is all in the past even though the consequences of destruction remain. Most importantly, I remind the reader of value dean Howard Marks’ comment that price is one of, if not the most, important elements in any investment decision. While TLRD remains challenged, there are numerous positive elements as well, as discussed below. On the subject of price, Jos A Bank was a terrible investment at $65, or even at the initial offer of $55, just as Men’s Wearhouse was unattractive at the
same time in the $50’s. To state the obvious, the question is how interesting is TLRD today at $13, ignoring the dismal recent history? A related question might be, on what basis did the stock trade at $35 on May 21, 2018 on essentially no news when that was well before the CEO retirement? That price was 14.4X existing guidance for current year earnings, illustrating there are occasions when Mr. Market views a double-digit multiple as justified (!)

A LOOK AT CREDIT

There are 3 pieces of TLRD debt. 1/ Senior notes due 2022, coupon 7.0%, balance outstanding $228.6mm. TLRD has been actively buying these notes in from time to time. These notes are callable and trade near par. In June 2018, the company redeemed $175mm of the notes. 2/ Term loan, balance $900mm, matures April 2025. Eighty percent of the term loan rate has been fixed with swaps, the blended rate as of most recent 10-Q is 5.69%. In October, TLRD negotiated a 25 bps reduction in pricing on the term loan, to Libor + 325. Even allowing for the bankers being in la-la land in terms of the credit cycle, at least they don’t seem to think TLRD is getting worse in terms of risk. 3/ An asset backed facility which matures in Oct. 2022. From a peak of $1.687 billion in Feb. 2015, TLRD has paid down $510mm in long term debt. While the company is still rated low junk, the debt burden is now more manageable, with maturities stretched out. The 7% notes should be paid off in advance of maturity given excess cash flow. I estimate that with reasonable earnings/cash flow, leverage might be down to 3.1X by the end of FY 2020. In short, there is no indication of undue stress on the top part of TLRD’s capital structure, implying the risk of insolvency is pretty low at this time.

A LOOK AT THE POSITIVES

Here is a rundown on my perception of what is better or what can go right in the TLRD story.

- **Non-core businesses** are being systematically divested. The corporate apparel business appears to be next on the block. While it is unlikely to garner a significant price, at least as a distraction it will be gone.

- **The value-destroying CEO is finally gone.** The current CFO seems focused and serious. The current acting CEO speaks knowledgeably about the business and is emphasizing strategies which appear sound. Next event point is new CEO hire. Obviously, talented leadership in retailing is scarce, so the choice of a new CEO will be important to watch.

- **The balance sheet is substantially cleaner.** with a ton of intangibles written off and debt reduced by 30%.

- **The rental service segment is a fabulous business,** with gross margins over 80% and revenue ~$450mm. It can’t be severed from the retail stores, but think about how it would be valued as a stand- alone business. A multiple of 20X earnings or better seems easily defendable.

- **The custom suit business is good** and growing fast. While still a small percentage of total retail, it is becoming more significant and is a great differentiator for a brick & mortar retailer fighting to create an image of “relevance”. TLRD is upgrading sales associates through training in order to provide customers with a professional fitting to provide a satisfactory experience & build brand loyalty/repeat business. Additionally, wait times for custom suits are being reduced to further enhance customer satisfaction.

- **Earnings guidance** has been more conservative of late, removing some element of distrust. The recent tweak down based on some softness at the MW stores was really pretty minor (10 cents at midpoint of guidance) even though the stock reacted violently to the downside. Essentially, that guidance cut was capitalized at a gigantic multiple of incremental Eps, illustrating the zero credibility management has with investors given past mistakes.

- Speaking of that, it is fair to say **the stock is loathed and despised.** There is virtually no Street sponsorship. There is no visible ownership by savvy value investors.
There is no activist involvement. Thus, from a very low level, sentiment could easily improve with time, sponsorship could improve if management executes better, value investors could take a look given the recent retreat in share price.

- The business dress style is said by cynics to be extinct, yet TLRD is selling $46 million worth of stuff per week. So, business dress is not in fact extinct, it is still very viable and in fact TLRD has OK margins even though there is room for more improvement.

- Speaking personally, men hate shopping at malls and especially department stores. The idea of visiting a department store and experiencing zero service (although Nordstrom is a major exception!) is truly an experience to avoid at any cost. So being able to visit a TLRD store, focused on men’s apparel, get knowledgeable assistance, and execute a “lightning strike” with no distractions is very appealing. Get in fast, make decisions fast, get out fast. That is the goal of most men.

**SOME RISK FACTORS:**

- As mentioned, maybe the new CEO will not be the right person.

- Ditching the corporate apparel business may take longer or be impossible.

- Total retail comps at TLRD for the last 9 quarters, including an estimate for the current quarter, average only +0.5%. So it would not take much to flip into negative comps, and for sure the company has economic sensitivity regardless of how well they execute. TLRD also has exposure to the Canadian economy, which at last look was not doing well at all.

- The company has significantly reduced its exposure to sourcing from China, but still has some modest exposure there, roughly 15% for the next FY.

- Even though the stock is already hated, ignored, under followed, small cap, leveraged, and in an unpopular sector, sentiment toward the shares could continue to languish instead of improving.

**EARNINGS, VALUATION, PRICE TARGET**

First, my rule of thumb for any company which is not growing: fair value is 10X earnings. While not infallible, that rule of thumb has worked well in the past as long as inflation is dormant. High inflation negates the rule of thumb because of the effect on replacement cost of inventory and CAPX even though in theory it is eventually offset by the monetary gain on liabilities. If we stipulate that the bulk of past write offs and restructuring items will be much less or hopefully zero going forward, then TLRD has demonstrated earning power of $1.75 – 2.00 per share, which puts the stock in the high teens at 10X.

That range is actually in line with a more elaborate guess using EV/EBIT. See Excel spreadsheet published with this report. Over the last 16 months, EV/EBIT mean was 11.0X, as was the median. Two standard deviations below that mean is 9.4. For earnings, I conservatively penciled in negative 2% comp sales for the retail business next year, and removed (sold) the corporate apparel division. On EBIT of $210mm, and some additional reduction in debt, a price target of $20 is derived. As a sanity check, the current valuation on 2019e EBIT is 7.1X, which is about in the middle of a range of comps for retailers currently viewed as having low comp sales (for example, Gap, Macy’s, Chico’s, Dillard’s and others). So we can say, the entire sector is under a cloud, but very low valuations, thus reasonably discounted. A lift in sentiment can change those values – for example, the 3-year median EV/EBIT for GPS, DDS and M is 7.5, 8.2 and 9.1X respectively. By definition there is variability around the median values, so allowing room for natural fluctuation in share prices, my target multiple seems well within reach.

Thirdly, we can look at a simple shorthand free cash flow, which for TLRD ought to be around $2.00 per share. That is a 16% FCF yield at current levels, or a $20 stock price if a still generous 10X FCF is applied.
Lastly, the current dividend seems secure as long as management is content to not pay off debt any faster, so compensation of 5.6% is provided on a flat share price, with optionality for favorable catalysts or a lessening in investor aversion.
Ideas on companies whose respective market capitalizations were between US$2B and US$10B at the time of submission.
Burford Capital Ltd

Asset: Equity  
Symbol: BUR:LN  
Idea Posted: 12/22/18  
Idea Updated: 12/27/18  
Community Rating: ★★★★★

RETURN TO DATE:  
7.72%

EXPECTED RETURN:  
129.14%

#1 legal claims investor and compounding machine with 30%+ portfolio IRRs. Two founders are aligned with shareholders. Long growth runway and 30% ROE. Trades at -15x P/E. Up to 300% upside.

About Artem Fokin

Artem Fokin is the founder and portfolio manager of Caro-Kann Capital LLC, a hedge fund based in San Francisco. Prior to founding Caro-Kann, he was a principal at Outrider Management LLC. Before entering the investing industry, Artem was an attorney with Greenberg Traurig LLP in New York City. Artem earned an MBA from the Stanford GSB (Arjay Miller Scholar). Artem earned a Master of Laws degree from NYU School of Law (Newman Scholar) and a bachelor of law from the Higher School of Economics (Presidential Scholar) in Russia. Artem is admitted to the practice of law in the State of New York and is a dual citizen of the United States and Russia. Caro-Kann Capital’s core investment principles include: (1) concentration when properly compensated, (2) risk is not equivalent to volatility, (3) non-economic selling can lead to attractive opportunities; (4) capital allocation is often underappreciated by the market, and (5) incentives and insider ownership are paramount.

About Caro-Kann Capital

Caro-Kann Capital LLC is a hedge fund manager investing in special situations and compounders. Caro-Kann Capital’s core investment principles include: (1) concentration when properly compensated, (2) risk is not equivalent to volatility, (3) non-economic selling can lead to attractive opportunities; (4) capital allocation is often underappreciated by the market, and (5) incentives and insider ownership are paramount.
Burford Capital Ltd Ord

Asset Class: Equity  Symbol: BUR:LN  Updated: 12/27/2018  Submitted: 12/21/2018

BY: Artem Fokin
CURRENTLY AT: Caro-Kann Capital
COMMUNITY RATING: ★★★★★  PERCENTILE: 93%

#1 legal claims investor and compounding machine with 30%+ portfolio IRRs. Two founders are aligned with shareholders. Long growth runway and 30% ROE. Trades at ~15x P/E. Up to 300% upside.

INVESTMENT THESIS

ELEVATOR PITCH

Burford Capital is a compounding machine, and the investment opportunity can be best described as “growth at unreasonably cheap price”.

Burford Capital is the leading and largest litigation finance provider in the world. It invests in legal claims from its own balance sheet. Burford’s own capital is ~$1.6B. In addition, Burford manages hedge funds with external capital and charges a management fee (0% to 2%) and performance fees (20% to 42%). The 42% incentive fee is not a typo as Burford just announced that it would manage ~$667M for a sovereign wealth fund and charge 0% management fee and 42% incentive fee. These are Renaissance Technologies’ style incentive fees. Burford’s AUM attributable to third parties is $2.33B.

Burford is at the cutting edge of the transformation of the legal industry where law firms are increasingly facing clients’ resistance to high legal fees. Burford funds litigation and international arbitration claims by paying legal fees (average check size is ~$20M) in exchange for a share of a litigation award.

Burford’s customer value proposition is compelling as it allows corporate clients to better monetize their litigation assets, avoid unfavorable accounting treatment prescribed by GAAP and IFRS, and turn in-house legal departments from cost centers to profit centers. Importantly, law firms that operate as classic equity partnership are not well positioned to take such large cases on a contingency basis.
Burford’s investment track record is one of a kind. Burford has generated 31% IRR on its capital over ten years. These superb investment returns and earnings reinvestment have allowed Burford to grow its earnings at a pace of 50%+. Burford’s ROE has been ~30%.

Burford’s superior returns are well-protected by high barriers to entry as all top 10 players entered the industry before 2013. Lack of new sizable entrants is the best evidence of how difficult it is to break into the litigation finance. Compared to other existing players, Burford benefits from its scale, reputation, experience, and proprietary data that it has been collecting for ten years and that improves Burford’s assessment of potential investments and its decision making.

Importantly, Burford is at the beginning of its incredible journey. The legal industry is extremely large, and the penetration of litigation finance is not higher than 1% to 2%. Low penetration, compelling customer value proposition, and Burford’s undisputed industry leadership create a long growth runway that could last decades.

However, one does not need to wait decades to make money by investing in Burford shares. Shares are currently priced at ~15.2x P/E. However, earnings will be going substantially higher because Burford’s incentive fees would go from a couple of millions of dollars to tens of millions of dollars if not higher. On top of that, Burford would be reinvesting earnings at its very high IRRs.

Top management is well aligned with public shareholders. Two co-founders own 5%+ each. Thus, each of them owns ~$225M+ worth of shares. The next ~20 executives collectively own ~$80M worth of shares. Every single employee is a shareholder as well. This point speaks volumes about the company culture. Very few companies in the world make every employee a shareholder, and those who do it generally create tremendous shareholder value.

Due to the aligned incentives, management has a long-term vision, does not stress about quarterly earnings, and refuses to give guidance. Their communication style is candid and straight to the point. Annual reports are very comprehensive, and when I was reading the annual reports for the past ten years, it was clear that management is writing those reports because they want me to understand the business as opposed to fulfilling some regulatory requirements.

I would also note that Burford’s business is not cyclical and does not depend on the economy or GDP growth. Companies litigate in good economies and in bad economies. I would even suspect that the demand for litigation finance would increase in a recessionary environment because the number of disputes would likely go up while companies would be even less willing to pay high legal fees.

I expect Burford to be a multi-year portfolio holding and – who knows – maybe a 20-year position. However, I see 150% to 300% upside in the next 3 to 4 years as well.

**HISTORICAL PRICE CHART**

[See chart on following page]

Burford stock has performed incredibly well over the past five years: up ~1,300%. The stock performance was driven by strong earnings growth. However, shares are down ~26% from its peak in early October 2018.

**CAPITAL STRUCTURE AT A GLANCE AND KEY LTM VALUATION METRICS**

**PRICE AS OF MARKET CLOSE ON 12/19/2018:**

GBP 1,514.69 OR $19.24[4]

<table>
<thead>
<tr>
<th>Description</th>
<th>Value</th>
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</thead>
<tbody>
<tr>
<td>F/D S/O</td>
<td>218.65M</td>
</tr>
<tr>
<td>Market Cap:</td>
<td>$4.2B</td>
</tr>
<tr>
<td>Cash and Cash Equivalents</td>
<td>$529M</td>
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<tr>
<td>Debt (publicly traded bonds)</td>
<td>$643M</td>
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<td>Enterprise value:</td>
<td>$4.31B</td>
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<tr>
<td>LTM P/E:</td>
<td>15.2x</td>
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WHY DOES THIS OPPORTUNITY EXIST?

There are a few reasons why this investment opportunity exists:

- AIM listing
- Low investor awareness
- Misconceptions about litigation finance

1. BURFORD IS LISTED ON THE AIM

Burford became public in early 2009 on the AIM and has remained listed there for a decade. Today, Burford is one of the largest companies listed on the AIM (generally in top 3 subject to market fluctuations). Despite its large size, many investors still have negative bias against AIM-listed companies.

2. LOW INVESTOR AWARENESS

The AIM listing also contributes to a low investor awareness. A good indicator of such low buyside awareness is the number of write ups devoted to Burford on major investment research websites and communities. I am aware of only one such investment pitch.

3. MISCONCEPTION ABOUT LITIGATION FINANCE

Even more importantly, lots of misconceptions exist about the litigation finance industry. After telling several buyside peers about Burford and hearing their thoughts, I have developed a list of most popular misconceptions. I discuss two of these misconceptions below and explain why they are not accurate.

MISCONCEPTION #1: YOU NEED TO HAVE A VIEW ON LITIGATION OUTCOMES

The most popular misconception about the litigation finance industry in general and Burford in particular is that an investor would need to have a view on the underlying legal claims and their outcomes. Probably no buyside investor or sellside analyst can develop these views. Thus, Burford becomes uninvestable.
This is not true, and here is why. A public investor is extremely unlikely to have an accurate view on the litigation outcome of a particular case. Even Burford does not get it right all the time. Both public markets investing and investing in legal claims are inherently probabilistic. By investing in Burford, you let its management and investment team have a view on the litigation outcomes. While they will inevitably make mistakes, their track record is truly outstanding. Thus, you are betting that Burford’s investment process is repeatable and their prior returns have not been driven by pure luck. Since Burford has been doing this for 10 years, I believe that its investment process is repeatable.

MISCONCEPTION #2: DOING PERSONAL INJURY AND CLASS ACTIONS IS A RISKY BUSINESS FROM A REGULATORY PERSPECTIVE

Burford has nothing to do with personal injury lawsuits and class actions. Burford works only with corporate clients and not individuals.

LEGAL CLAIMS IS A NEW AND RAPIDLY GROWING ASSET CLASS

1. WHAT IS LITIGATION FINANCE?

Litigation finance involves two parties: the litigation funder and a claimant whose rights have been violated. A claimant either lacks money or does not want to expend its own financial resources and thus asks a litigation funder to provide financing in exchange for sharing in the litigation recoveries.

The most conceptually accurate approach is to consider a litigation finance provider as an investor in an asset class of legal claims.

2. WHY IS IT SO DIFFICULT TO THINK OF LEGAL CLAIMS AS AN ASSET CLASS?

Looking at legal claims as an asset class may sound somewhat counter-intuitive for at least three reasons.

• Unlike more traditional investments, legal claims never show up on a balance sheet of a party whose rights have been violated.

• The value of legal claims is extremely difficult to ascertain.

• If a case is lost in court, then the value of legal claims ends up being zero.

3. WHY CAN LEGAL CLAIMS BE AN ASSET CLASS?

However, legal claims have a lot more in common with other asset classes than one may think.

First, legal claims have payoffs that can range from zero (if a case is lost) to 100% of the amount of damages requested by a plaintiff / claimant.

Second, one can attach probabilities to various outcomes of a litigation: lost at trial, settled before trial, partial victory in court, full victory in court.

Third, combining the two points above, one can calculate the expected value of a legal claim.

All other asset classes have expected values as well. Think about stock investing: when we invest in stocks, we construct various scenarios and payoffs, and estimate the probabilities of these scenarios occurring. Then we calculate an expected value.

Fourth, buying an asset substantially below its expected value is what any investing is about. Investing in legal claims is no different.

Given that the spirit of investing in legal claims is identical to the spirit of investing in any other asset class, I have a strong belief that legal claims constitute a new and rapidly growing asset class.
Burford management did a terrific job at describing legal claims as an asset class in 2014 Annual Report.

“A litigation claim is an asset. It sounds slightly strange to say that, as litigation claim does not comport with our traditional concept of assets, but an asset it is nonetheless. Litigation claims can be bought, sold, hypothecated, securitized and otherwise treated like any other intangible asset. This is a crucial point, as Burford’s business is not the funding of legal fees to bring a claim, as though we were a class or group action lawyer operating on a contingent or conditional fee arrangement. Rather, it is the financing of an asset.

Sometimes, that financing takes the form of providing capital in support of the legal fees needed to develop the asset. That’s what we now call basic litigation funding. However, even that type of transaction is still asset financing; Burford’s capital is provided pursuant to a financing arrangement, often accompanied by a perfected security interest in the litigation claim asset. We are not equity partners with our clients, but much more like mezzanine capital providers. We provide fixed dollar investment arrangements, not open ended commitments.” (All emphasis is mine.)


LITIGATION FINANCE: MASSIVE TOTAL ADDRESSABLE MARKET AND LONG GROWTH RUNWAY DUE TO LOW PENETRATION

1. LITIGATION FINANCE HAS A MASSIVE TOTAL ADDRESSABLE MARKET

It is very difficult to calculate the precise size of total addressable market of litigation finance. This is because of a variety of factors:

• Law firms are generally private.
• Many matters are confidential.

• While court decisions are public, their quanta are generally not aggregated.
• Many matters presented in front of arbitration panels are confidential.

These factors and more do not make the TAM analysis easy and straightforward. However, I am willing to be approximately right instead of precisely wrong. Thus, it is useful to look at two proxies for the potential TAM of the litigation finance:

• legal fees and
• quantum of litigation and arbitration awards

2. LEGAL FEES

The amount of legal fees globally is unknown, but several tidbits of useful information exist.

Various legal industry publications estimate the amount of annual legal fees globally between $600B and $800B. Legal fees in the U.S. alone are -$400B+. There are more than 40K law firms in the U.S. with -15 of them generating annual revenues in excess of $1B. Top 200 U.S. law firms generate $100B in legal fees a year. It is clear that law firms have become very large enterprises.

Of course, not all of the $600B to $800B of legal fees are related to litigation. When I browse websites of several large U.S. law firms, -20% of attorneys are litigators. This number is inherently imprecise, and it is just a best guesstimate. If we assume that lawyers across practice group and departments bill the same number of hours, then the litigation legal fees would account for $120B to $160B which is still a very large number.

3. QUANTUM OF LITIGATION AND ARBITRATION AWARDS

While the amount of litigation and arbitration awards is enormous, it is difficult to calculate. Suffice to say that
people attempt to measure them as a **per cent of GDP**. This fact alone speaks to its massive size.

The ICC in Paris is one of a number of arbitration institutions. The ICC has a pending case load of ~$200B+. Again, this is just one arbitration institution. This number does not include any other arbitration institutions. More importantly, it also completely ignores courts around the globe: U.S., England, Europe, etc.

### 4. Litigation Finance is Likely to Expand TAM

My interviews with litigation and arbitration attorneys on their views about the litigation finance industry brought a realization that the litigation finance industry would likely expand the TAM and looking at the existing TAM can be wrong. Here is why.

There are many cases that parties do not bring to court because it is too expensive regardless of how strong merits are. Burford is creating more of a level playing field for corporate America and the rest of world. Thanks to Burford even a small company can take upon a Fortune 500 company if the latter violated its rights. In other words, Burford helps David to fight Goliath.

### 5. Litigation Finance Has a Very Low Penetration

While the TAM is massive, the penetration is very low. The top 10 players of the litigation finance industry in the world (and there are not that many players beyond them) have been investing ~$2B per year over the last few years.

Thus, if we use this number against the litigation legal fees, the penetration rate is less than 2%. If we use this number of annual investment activity against the quantum of litigation and arbitration awards, then the penetration rate is less than 1%.

### 6. Penetration is Low Due to the Novelty of the Industry

The litigation finance industry in its current shape and form is very new. All the top players in the industry are 10 years old or "younger", and there were no credible players before ten years ago.

### 7. The Law Firm Industry Is Ripe for Change

The law firm industry is a multi-billion dollar industry with fairly simple capital structures and no access to capital markets (partially due to laws and regulations and partially due to a law firm business model and lack of tangible assets). However, clients are increasingly resistant to high legal fees, which puts disruptive pressures on the legal industry and legal profession. *The industry is ripe for change, and the litigation finance industry is bringing solutions.*

### 8. All Three Components for a Long Growth Runway Are Present

All three components for a long growth runway are present:

- Massive TAM.
- Very low penetration.
- Compelling customer value proposition.

We have already discussed the first two components. Now it is time to address why the customer value proposition of litigation finance is compelling.

### Customer Value Proposition: Which Pain Points Does Burford Solve for Its Clients?
1. WHY WOULD CLIENTS EVEN NEED BURFORD’S SERVICES?

Normally, when people hear the words “litigation finance”, they think of personal injury cases or car collisions where an economically disadvantaged party may not be able to pursue a legal claim to protect and defend its rights because of financial constraints.

However, Burford invests in legal claims arising out of disputes between “big boys”: one multi-billion corporation suing another multi-billion corporation or an investor filing an arbitration claim under an international investor treaty because a sovereign state violated investor rights. *Shouldn’t these parties have the cash to pay for legal expenses? Why would they need Burford?*

These are legitimate questions, and they bring us to the notion of customer value proposition and which pain points Burford resolves for its clients.

2. GAAP AND IFRS ACCOUNTING RULES CREATE UNFAVORABLE AND ASYMMETRIC TREATMENT OF LEGAL CLAIMS AND LEGAL EXPENSES

Both GAAP and IFRS provide accounting treatment of legal claims and legal expenses that is unfavorable and – even worse – asymmetric.

First, any legal expenses that a company incurs must be expensed which creates a negative impact for the P&L.

Second, the company does not record any value (either at cost or expected value) on its balance sheet.

Third, even if the company wins litigation and receives an award, investors will treat it as a one-off, extraordinary income and rightly so. But what is really interesting is that investors generally view legal expenses as normal and ongoing while they view litigation awards as extraordinary. Hence, asymmetry.

Thus, a public company paying substantial litigation expenses out of pocket may hurt its share price. Using litigation finance solves this problem.

3. COMPANIES HAVE AN OPPORTUNITY COST OF PURSUING LITIGATION

Even when a company has financial resources to pursue a litigation or an arbitration, it faces an opportunity cost as these funds may be put to a better use in its core business. The story of Rurelec is a great example.

Rurelec PLC is a publicly-traded owner, operator and developer of power generation capacity that does business internationally. Generally, Burford cannot discuss its clients and their cases due to confidentiality obligations. However, Rurelec disclosed a significant amount of information about this litigation which made it possible for Burford to share the Rurelec story with the investment community.

“Rurelec was pursuing an arbitration claim against Bolivia for the expropriation of one of Rurelec’s power plants. Rurelec did not need capital to pay its lawyers – what is generally called “litigation funding”. Rather, it needed capital to continue to grow its business – but lenders wanted very high interest rates because of the loss of its Bolivian assets. Unlike a traditional lender, Burford was able to evaluate the value of Rurelec’s pending arbitration claim, and thus was able to provide the following facility:

• A fully recourse, secured $15 million senior loan at a 12% ... interest rate

• A contingent value right to receive a portion of the ultimate arbitration award, expressed on a sliding scale based on time and amount

Rurelec then won its claim, extracted payment from Bolivia, and paid off Burford.

The Rurelec transaction was profitable for Burford, which earned an $11 million net profit on a $15 million investment, generating a 73% return and a 34% IRR. However, what is
truly noteworthy about this transaction is its innovative structure and its demonstration of the expanding market potential for litigation finance.”


This story is a great illustration of why a company would choose litigation finance as opposed to financing litigation out of pocket.

4. HOW TO FINANCE LITIGATION IS A DECISION THAT IS NO DIFFERENT FROM ANY OTHER CAPITAL ALLOCATION DECISION

How to finance the pursuit of a litigation claim is a decision that is no different from any other capital allocation decision. For example, if a company needs to buy PP&E, it would routinely consider all available options such as (1) pay with cash, (2) pay with debt, (3) lease, (4) other options. Litigation should be no different, and the corporate world (both General Counsels and CFOs) is embracing that.

5. SIGNALING EFFECT

As a general rule, the presence of a litigation funder is not required to be disclosed in the litigation or arbitration proceedings. However, sometimes a judge or an arbitration panel may require such disclosure. If that happens, there is a powerful signaling effect associated with the fact that Burford is backing the litigation. This is how Burford described it a few years ago:

“we believe that the disclosed presence of Burford in a case should make a defendant think twice about its position, as it would then know that a dispassionate, highly skilled, profit-motivated entity had evaluated the plaintiff’s case and concluded that it had real merit.”


6. STRUCTURALLY CONSTRAINED CLAIMANTS

There are also structurally constrained claimants – parties that would like to bring a matter to litigation but because of their mandate may have difficult time financing such litigation. Such structurally constrained claimants are ideal customers for Burford.

For example, investment fund managers may want to bring claims against fraudulent companies or their management teams but may not want to hit their LPs with litigation expenses. Another example would be bankruptcy or liquidation trustees.

7. LAW FIRM ECONOMICS ALSO ENCOURAGE THE USE OF LITIGATION FINANCE

a. Law Firms Are Structured as Classic Equity Partnerships and As a Result Are Unwilling to Take Clients’ Litigation Risks

Even though there are ~15 law firms with revenues in excess of $1B per year, law firms have simple capital structures and balance sheets. Law firm structure and economics are very relevant to the litigation finance industry.

Law firms are usually classic equity partnerships where partners earn annual compensation based on the firm’s performance. Partners generally do not retain their equity stakes once they retire. Law firms almost never raise equity or structural debt (though law firms may have a revolving credit facility with a bank). As a result, law firm balance sheets are very simple, and law firm partners are generally resistant to reducing their cash compensation in exchange for longer-term potential rewards because partners who retire may not derive these benefits in the long-term.

As a result, law firms generally avoid taking clients’ risks and prefer a billable hour business model.
B. EVEN A LAW FIRM WILLING TO TAKE A MATTER ON CONTINGENCY WILL FACE CHALLENGES

Even if a more entrepreneurial law firm is willing to take a litigation case on the contingency basis, it would face challenges.

First, taking a matter on contingency creates a working capital deficit.

Second, the U.S. tax treatment of litigation provides that law firms that advance client expenses are not permitted to deduct those expenses and therefore must fund them with after-tax dollars. However, a law firm is allowed to deduct interest expenses. Thus, taking a loan appears to be an attractive option. However, most traditional lending institutions are not comfortable with the underlying collateral – legal claims and, thus, are unwilling to lend.

C. CLIENTS ARE INCREASINGLY RESISTANT TO HIGH LEGAL FEES AND THE BILL-BY-THE-HOUR-MODEL

On the other hand, clients are demonstrating ever increasing resistance towards high legal fees and billing by the hour.

D. LITIGATION FINANCE IS A SOLUTION

Litigation funding provides a compelling solution for both clients and law firms.

Burford uses a wide range of deal structures in its investment activities.

A fairly common transaction structure can be described as “capital back + preferred return + share of the award”. This is what it means.

Let’s say that Burford has provided $10M to a client that used those funds to pay for legal services. Burford and the client agreed that if the client wins the case, Burford receives its $10M back plus a 12% preferred return per year for the duration of legal proceedings. Let’s assume that the case took two years to get resolved, and the client won $30M in court.

Thus, Burford would receive $10M back + $2.4M ($10M * 2 * 12% = $2.4M). This is the “capital back + preferred return component”.

Let’s assume further that Burford and its client agreed that Burford would be entitled to receive 25% of the remaining award (i.e., award after principal back and preferred return are paid to Burford). The remaining award is $17.6M ($30M - $10M - $2.4M = $17.6M). Burford is entitled to receive 25% of it or $4.4M.

Thus, Burford would receive $16.8M on its “cost basis” of $10M.

2. THE ISSUE OF CONTROL

It is important to emphasize that even though Burford is financing the litigation, it does not control the litigation. In other words, Burford does not decide which procedural or substantive action to take. Burford cannot force its client to make such decisions either. Such actions include filing a motion, offering a settlement, agreeing to an offered settlement, selecting a litigation forum, etc. All these decisions are up to the client and its lawyers. This is an important issue from both legal ethics perspective and business perspective.
UNIT ECONOMICS

1. TWO KEY METRICS TO MEASURE UNIT ECONOMICS: ROIC AND IRR.

Let’s walk through the unit economics of legal investing. Not surprisingly and similarly to investing in any other asset class, there are two key metrics that define the success of legal investing: ROIC and IRR.

This hypothetical example serves as an illustration. Imagine that Burford puts $10M into financing the pursuit of a legal claim. Two years later Burford receives its investment back plus $7.5M of profit for a total of $17.5M. Thus, Burford’s ROIC = 75%, and its 2-year IRR = -32%.

2. BURFORD HAS GENERATED 60%+ ROIC AND HIGH 20%+s IRR OVER SEVERAL YEARS

Below I show Burford’s ROIC and IRR for 2013 – 2017. Burford Has Built an Extraordinary Track Record with IRRs of 25% to 30%+

These ROIC and IRR are calculated after losses. In other words, if the portfolio has generated a 75% ROIC after losses, it means that winning cases have generated 90% - 100% ROIC to make up for the losers that have brought the portfolio average down to 75%.

3. HOW ARE ROIC AND IRR CALCULATED?

A few things about these calculations are worth highlighting.

First, this data covers only concluded investments (both successful and unsuccessful) and excludes any pending investments even if they are progressing well.

Second, this is a cumulative dataset and not the vintage analysis. In other words, 2013 ROIC of 52% and IRR of 26% are based on all investment activity from inception in 2009 to 2013. 2017 ROIC of 75% and IRR of 31% include all investment activity from 2009 through 2017.

Third, the IRR is calculated by treating the entire investment portfolio as one undifferentiated pool of

Burford Has Built an Extraordinary Track Record with IRRs of 25% to 30%+

Portfolio returns

Source: Burford Capital filings, Caro-Kann Capital research and analysis
capital and measuring inflows and outflows from that pool. IRRs are computed only as to concluded investments and do not include unrealized gains or losses.

Burford noted that if it calculated IRRs on individual investment outcomes and then expressed the results on a weighted average basis, the IRRs would be considerably higher than reported above because of certain outlier cases that generated IRRs of 1,000% and above.

4. TENSION BETWEEN ROIC VS. IRR IS DUE TO SETTLED VS. ADJUDICATED CASES

There is an inherent tension between ROIC and IRR: higher IRRs generally translate into lower ROIC. Why is it the case? This tension is driven by differences in unit economics between settled cases and cases that proceed all the way to trial (i.e., adjudicated cases).

Settled matters generally take less time as they avoid lengthy trials. Thus, settled matters generate more attractive IRRs but lower ROICs because, by definition, a settlement requires a claimant to accept less than it is claiming and typically less than it believes it could recover through a trial or arbitration. A claimant is willing to accept such discount in exchange for certainty and avoidance of risk of losing the case entirely.

A couple of years ago Burford disclosed that it has never lost money on a settled case.

If a case is not settled and proceeds to trial, then it would take substantially more time: 2 to 5 years is typical. However, when a case is adjudicated, the claimant and Burford receive more money than they do with settlements. This of course assumes that a case was resolved in favor of Burford’s client.

During November 2018 Investor Day Burford disclosed useful data on how ROIC and IRR differ between settled and adjudicated cases. These data points include 1H 2018 and, therefore, are different than the historical data I provided above.
Thus, settled cases generate IRR of 52% which is very close to their ROIC of 53%. It implies that it takes about one year to reach a settlement. Adjudicated cases generate IRR of 27% and ROIC of 201%. This implies that an adjudicated case takes slightly less than 5 years to get resolved.

5. WHICH METRIC IS BETTER?

Each investor can decide for themselves which metric is more important. Burford management favors ROIC over IRR which is consistent with the corporate finance theory that favors NPV over IRR.

6. ASSET DURATION IS LESS THAN TWO YEARS

Another important metric is asset duration. Litigation claims are not equity that exists in perpetuity. Legal claims always get resolved either favorably or unfavorably. Thus, understanding the duration of this asset class is critical.

Below I provide the historical evolution of the duration of Burford’s concluded investments. Please note that this is not a cohort analysis but a cumulative data set.

As Burford has scaled its portfolio, its duration has decreased from ~2 years to 1.5 years.

Please note that this data is disclosed annually and, therefore, data for 2018 is not yet available.

7. AVERAGE COMMITMENT SIZE

Another important metric is the average investment size. The company reports its average commitment size which is different from the average investment size because it happens fairly often that not the entire commitment is drawn to pay for litigation.

As Burford Scaled Its Portfolio, the Average Duration Dropped from ~2 Years to ~1.5 in 2017

Source: Burford Capital filings, Caro-Kann Capital research and analysis
PORTFOLIO CONSTRUCTION

1. THE IMPORTANCE OF PORTFOLIO CONSTRUCTION AND DIVERSIFICATION

Every investor appreciates the importance of portfolio construction and a proper level of diversification. This is even more important for Burford as any single case’s investment can end as a complete loss.

Burford management understood it from the very beginning. This is what Burford management wrote in the 2011 Annual Report:

“We have always maintained that the right way to invest in litigation risk is through a broadly diversified portfolio, and we have practiced that view assiduously. The Buford portfolio is diversified across a number of metrics, each of which is monitored by the Board for compliance with internal portfolio policies. Those metrics include caps for investment by law firm, claimant, state, judge and area of law”.


It also appears that the Burford management has an ingrained understanding that investing in legal claims is a probabilistic exercise. Management also recognizes – very much in the spirit of what Annie Duke does in her excellent book, Thinking in Bets – that both luck and skill impact the litigation outcomes. This is what Burford management wrote eight years before Thinking in Bets was published:

“The very best trial lawyers will acknowledge that luck and circumstance play a role here, and that every lawyer wins cases that should have been lost, and vice versa. If we shy away from risk for fear of loss, as some litigation investors do, we will not maximize the potential performance of the portfolio.”


2. BURFORD PORTFOLIO IS PROPERLY DIVERSIFIED ACROSS MULTIPLE FACTORS

At the end of 2017 (the detailed data is disclosed once a year) Burford had a widely diversified portfolio with 82 separate investments and 877 underlying claims.[5] In 2016 these numbers were 64 and 811 respectively.

Here are some metrics showing diversification:

- No defendant represents even 5% of total commitments.
- No single case’s capital loss would amount to more than 2% of total commitments.
- Works with 70% of AmLaw 100 (the largest U.S. law firms by revenue).
- The largest law firm relationship accounts for 14% of investments across more than 30 different partners.
- Litigation matters are spread across more than 30 U.S. states.

It is worth explaining why Burford’s 14% exposure to a single law firm is not concerning. Law firms have multiple partners who have different areas of expertise (patent litigation, construction litigation, general commercial litigation, etc.), different client base, and different “litigation style”. Thus, having 14% of Burford’s investments spread across different partners reduced the concentration risk substantially.

BURFORD’S INVESTMENT PROCESS

1. BURFORD IS EXTREMELY SELECTIVE

Burford achieves this portfolio diversification due to its thoughtful, rigorous and repeatable investment process. Burford is very selective about which claims it will fund. For example, in 2017 Burford received requests for funding for 1,561 cases and funded only 59 of them; this is a 4% funding rate.
Only 4% of Requests Received Burford’s Funding in 2017

STAGE #1: INBOUND INQUIRIES ARE RECEIVED.
ECONOMIC ASSESSMENT: DO ECONOMICS OF THE CASE WORK?

Inquiries received go through a review to determine whether the economics are attractive for Burford assuming that the case is won in court.

STAGE #2: ANALYSIS OF LEGAL MERITS OF THE CASE.

Most heavy lifting and substantive due diligence happen at this stage: legal merits, damages theory, court history with similar cases, chances of a reversal on appeal, etc.

STAGE #3: INVESTMENT COMMITTEE REVIEW

Nine person investment committee makes a final decision. Only ~39% of cases presented to the investment committee became Burford’s investments in 2017. This equates to 4% of 1,561 cases that entered Burford’s pipeline.

STAGE #4: CLOSED INVESTMENTS

RISKS AND MITIGANTS

I can see several risks to my investment thesis. However, I see strong mitigants as well.

1. COMPETITION

Competition is the biggest risk as it can bring Burford’s returns down. I have discussed at length why I think competition will not reduce Burford’s ROIC and IRR at least in the next 5 – 10 years. If my assessment of the competitive dynamics, client behavior and lawyers’ behavior is inaccurate, I could be wrong in my judgments. After all, I spoke only with several attorneys and litigation finance clients, and my sample may not be representative.

2. REGULATIONS

If regulations that unfavorable to the litigation finance industry in general and Burford in particular are adopted by various countries, this may hurt Burford’s growth. However, I am not concerned about this for several reasons.

First, Burford is already subject to lots of regulations. More importantly, the chief regulator for what Burford does is a particular judge or an arbitration panel that presides over the case. They have authority to request any information from litigants pertinent to the case, including whether any third party is providing financing. This has happened to Burford in a number of cases and the judge was satisfied with arrangements. The key here is to ensure that any funding

Sources:


[2] Please note that this exercise is inherently imprecise, and I am ignoring any dilution that has most likely occurred during this 23-year period. While imprecise, the exercise still illustrates the key point well.

[3] The term “litigation finance” is the term that people tend to use. However, I think it does disservice and does not accurately describe what Burford truly does. I think the term “legal investing” or “investing in legal claims” would be more descriptive. I am using the terms “litigation finance”, “legal investing”, and “investing in legal claims” interchangeably.

[4] Even though Burford shares are listed on AIM and quoted in GBP, Burford reports its financials in USD. I am using 1.27 FX rate to convert the share price to USD.

[5] Some investments cover more than one litigation or arbitration case. They are so-called portfolio investments. For example, Burford has entered into arrangements with several corporations as well as law firms where it would finance the entire portfolio with dozens of underlying litigation claims.
arrangement does not violate legal ethics and procedural rules. Burford is a highly experienced litigation funder that plays by the rules.

Second, the global regulatory trends are actually favorable to litigation finance industry. For example, Hong Kong just expanded the range of cases where litigation funding is permissible. Singapore also introduced new regime that allows litigation finance.

Interestingly, Burford has worked closely with governments and regulatory bodies of both Hong Kong and Singapore on those regulations and not surprisingly it is already building its presence in both cities as they likely become the arbitration capitals of Asia in the same way as London, Paris, and Stockholm have become the arbitration capitals of Europe.

**CATALYSTS**

Burford Capital is a compounding machine, so catalysts are not needed as earnings growth will take care of itself.

However, I see one soft catalyst. As I explained, Burford’s current earnings include very little incentive fees. However, starting 2H 2018 Burford will start recording substantially higher earnings fees which will accelerate earnings growth even further. This may serve as a soft catalyst.
High-growth Metro seeks to disrupt UK banking following Commerce Bank’s (US) unique customer-service led model delivering 25-30% ROE’s at store-level with potential to 10x over 10 years

About Benjamin Pinkas
I invest long-only in a concentrated portfolio of public equities. The approach is “private equity in public markets,” applying long-term capital to great businesses at attractive prices. I focus on free cash flow generation, durable competitive advantages, and transparent management teams with proven capital allocation skills. I am a generalist investor with experience across nearly every major sector and equity investment style. Through my fund Powder Gate Capital I predominantly focus on long-biased, SMID-cap investments across the telecom, logistics, financials, and energy sectors.

About Powder Gate Capital
Powder Gate Capital (“PGC”) is a concentrated equity fund that invests long-only in public securities. The Partnership espouses a “private equity in public markets” approach, applying long-term capital to great businesses at attractive prices. The firm was founded in summer 2016, began investing summer 2017, and is located in New York City.
High-growth Metro seeks to disrupt UK banking following Commerce Bank’s (US) unique customer-service led model delivering 25-30% ROE’s at store-level with potential to 10x over 10 years

**INVESTMENT THESIS**

**BUSINESS DESCRIPTION**

Metro Bank is a UK-based retail and commercial bank founded in 2010 by Vernon Hill, the founder of US-based Commerce Bank (2007 acq. by TD Bank). As of 1H18 the bank had 56 stores with £13.7 billion in deposits and a loan portfolio that was 68% retail (largely resi mortgages) and 32% commercial. The high-growth bank seeks to disrupt the incumbent “Big 5” UK banks that control ~80% of deposits (HSBC, Barclays, Lloyds, RBS, and Santander UK) through a unique customer-service led model.

“Metro Bank is the revolution in British Banking” per their investor materials. It is the UK’s first new High Street bank in over 150 years, and unlike the Big 5 incumbents, Metro focuses on customers willing to trade lower deposit rates for premium customer service, reliability, and near-24/7 availability. The company views itself as a “growth retailer” not a banker, and since founding in 2010 Metro has built a unique culture by hiring for attitude and overtraining for skills. The bank boasts 7-Day in-store banking, instant account opening in-store & online, free pens, instant card printing in-store, free coin counting, and ability to block/unblock card on mobile app.

**SITUATION OVERVIEW**

Why now? The Big 5’s dominance and high customer concentration – controlling ~80% of UK’s deposits vs. Metro’s ~0.5% market share – has led to years of customer neglect with predominantly negative net promoter scores (vs. Metro’s 88%). Clearly there is room for positive change and increased competition. This is reinforced by the Alternative Remedies
Package (“ARP”) which mandates Big 5 contribution to foster competition as a condition for receiving government aid during the financial crisis. Uncertainty related to Brexit however has weighed on the country and sector, with single-market access hanging in balance and incumbents preparing for UK ring-fencing, which takes effect January 1, 2019

**INVESTMENT THESIS**

1. Since 2010 Metro has built 56 stores and accumulated ~1.4mm accounts representing £13.7bn in deposits. While the long-term investment thesis is predicated on continued growth (MTRO’s deposit market share is only ~0.5%), the current installed base alone provides downside protection as earnings potential reaches maturity

   - Assuming deposit growth continues apace until ~£25bn in deposits (amount supported by existing capital while maintaining target CET1 ratio), MTRO’s steady-state EPS of ~£1.45/share by 2020 means investors are buying at reasonable 13x fwd P/E with attractive reinvestment and takeout optionality

2. Proven Chairman and co-founder Vernon Hill compounded capital at ~23% for 34 years as CEO of Commerce Bank, a Philadelphia and NYC based retail bank. Alongside CEO Craig Donaldson, a British national and ex-RBS, Hill hopes to replicate Commerce success in a more concentrated UK banking market

   - Hill brings his customer-centric approach from Commerce, where he grew the banks deposits by ~30% CAGR from 1990-2007 and increased its share price -20x by leveraging a “retail experience” mindset taken from companies like Starbucks and Home Depot – the branches are called “stores”

   - Unit economics on individual stores demonstrate the model’s earnings power: by Year 5 post-opening, stores deliver ~17% ROE’s, increasing upwards of 30% by Year 10. Taking into account fixed costs, incremental ROIC on additional deposits are also ~30%

   - While challenging dominant incumbents banks is never easy, Hill’s installed base + continued growth converting “fan” customers makes MTRO a prime takeout candidate (generally at ~20% of deposits)

3. MTRO is down over 50% since March on the confluence of: (1) Brexit uncertainty and idiosyncratic UK recession risk; (2) recent unexpected equity raise impairing management’s creditworthiness; and (3) questions around concentrated risk for its predominantly residential mortgage loan portfolio

   - We view fears as baked into the stock down 50%, and view hard Brexit as unlikely given negative ramifications. Management has simply re-set expectations given the challenging environment

**LONG-TERM RETURNS**

For growth-oriented investors, we view this as a prime LT candidate with outstanding leadership and the potential to 5x over 5 years and 10x over 10 years. Probability’s in our 10 year scenario have been adjusted and skewed towards management’s long-term guidance of 250-300 stores, with the implicit assumption that if Metro lasts 10 years, management will have more likely been correct. Even in our long-term Mgmt Case, £140bn of deposits would represent -4% of 2028e UK deposit market share.
Vernon Hill’s Commerce Bank was acquired by TD Bank in 2007 for $35/share – a 20x return over 20 years from its $1.80 share price in 1987.

**MARGIN OF SAFETY & UNIT ECONOMICS**

Our Downside analysis assumes no further store growth beyond existing count and customer deposits continuing to grow at the established -£6mn per store per month until -£25bn of new deposits are taken in (amount supported by existing capital while maintaining target CET1 ratio). The net result, assuming conservative 2.75% NIM + fees, would put Metro’s steady-state EPS at -£1.45/share by 2020, implying that investors today would be buying at a reasonable 13x forward P/E. Further, while brick & mortar business models cause investor concern, Metro’s safe deposit box fee income covers 80% of store-level base rent.

As for the company’s unit economics, their published information on indicative Ealing Store reflect 20% ROE’s by Years 5-6, with potential to reach upwards of 30% steady-state. How? After attracting customers with best-in-class service, Metro’s simple bank business model with 1) sticky deposits given low rates; 2) low-risk, highly collateralized loan portfolio; and 3) significant operating leverage drive highly attractive and profitable unit economics which enables a virtuous cycle of further growth. Furthering our Margin of Safety analysis, ROIC’s on every incremental £1 GBp deposit for an existing store are also upwards of 30% given large fixed cost base.

**INDUSTRY TRENDS**

**MORTGAGE COMPETITION REMAINS FIERCE**

- **GENERAL:** UK banks saw improvement in mortgage pricing 2H18, with RBS stating that the pricing differential between its front and back book was just 80 bps. HSBC’s new digital intermediary mortgage origination platform underpinned its 1H18 mortgage book growth and continues to drive increased competition.

- **METRO:** Competition, especially in residential mortgages which account for nearly 68% of Metro’s lending portfolio (essentially it’s entire retail loan book), will continue to pressure asset yields with mortgage rates falling as base rates increase.

**BUT NO DETERIORATION (YET) IN UK CREDIT ASSET QUALITY**
**GENERAL:** YTD impairment trends have held up well as banks continue to benefit from write-backs and the economic landscape holds steady. That being said, key risks from here include Brexit-related uncertainty and its potential impact on economic growth which will likely drive credit quality deterioration.

**METRO:** Metro’s cost of risk through 1H18 remained low at 0.08% given a low-risk loan portfolio that’s highly collateralized with an average LTV ratio of ~60%. Metro’s non-performing loans as of June were reduced from 0.27% to 0.17%.

**DEPOSIT PRICING CREEPING UP WITH COMPETITION AND BOE RATE HIKES**

**GENERAL:** Combination of 1) two BOE rate hikes since Nov-2017 from 0.25% to 0.75%; and 2) increased competition from banks, particularly smaller challenger banks, has put upward pressure on UK deposit rates.

**METRO:** Banks focused more heavily on mortgages that rely on time deposit funding are most negatively exposed to these developments (LLOY, VM), but while Metro theoretically falls within this camp, they’re low-deposit-rate business mode provides insulation.

**LOAN GROWTH AND BREXIT**

**GENERAL:** HSBC and Standard Chartered posted strong loan growth through 1H18 but several domestic banks have seen early signs of caution from larger UK corporates as they grapple with the economic uncertainty of Brexit.

**METRO:** Metro grew its loans 9% qoq through 3Q18 on 8% qoq deposit growth (loan to deposit ratio of 89%) with limited look-through to-date of pullback.

**RISKS & MITIGANTS**

**BREXIT / MACROECONOMIC RISK**

While the prospect of a hard Brexit is limited in our view, the outcome is uncertain. We believe UK-based stocks are appropriately discounting the potential headwinds with the FTSE 100 trading at 10x 2018 P/E – levels not seen since 2009 and the 2011-12 European debt crisis – but regardless we view this as the largest potential risk.

**AIBR WAIVER**

Under the standardized approach, banks apply a conservative 35% risk-weighting to residential mortgages when calculating their CET1 ratio. Under the internal ratings-based approach however, banks can apply their own internal model-driven weighting (so long as they meet certain criteria) driving the average risk-weighting for resi mortgages closer to 9%. Metro has been using the 35% given their start-up nature with more limited default data.

Metro has applied for a waiver to receive substantial relief in the risk-weighting for its resi mortgages (almost 68% of its entire loan portfolio), which would free up significant equity capital and improve ROE’s. While they expect the Prudential Regulation Authority (“PRA”) to grant relief by 2H19, if Metro is unable to negotiate a less burdensome risk-weighting their near-term ROE’s would be pressured and the likelihood of another unexpected equity capital raise would increase.

**MANAGEMENT CREDIBILITY**

These are difficult times to be operating a sub-scale challenger bank in the UK. Regardless, management lost credibility with their unexpected 1Q18 equity capital raise and lowering of 2020 ROE targets. Based on our conversations with IR we view this as a conservative correction to avoid any future loss of credibility.
• CREDIT RISK

High growth bank implies high growth lending with the associated risks. Metro's conservative loan portfolio of largely 60% LTV residential mortgages is one of the most conservative of any bank we’ve seen (no complex derivatives or intercompany messes) and with an 85-90% loan-to-deposit ratio providing further buffer we feel comfortable with the in-place risk and believe in the event of a recession Metro’s BS would outperform the incumbents.

• ONLINE BANKING / TECHNOLOGICAL DISRUPTION

This is a bet on in-store retail experience and Metro’s ability to leverage that unique model into 2-4% market share gains (from 0.5% currently). We like this bet, and further believe that Metro’s sufficient online and mobile banking offering meet consumer expectations for convenience and reliability.
Sallie Mae is one of the fastest-growing banks and a top consumer finance franchise selling at ~8x 2018 EPS despite strong reinvestment opportunities and significant de-risking of earnings

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**About Rogelio Rea**

My competence is on investing in event-driven opportunities across different industries and sectors in developed markets. I am currently an Analyst at Evidika.

**About Evidika**

Evidika focuses on only one portfolio, we invest in highly mispriced small and mid-cap companies globally. We have a very effective process, built on a sound strategy.
Sallie Mae is one of the fastest-growing banks and a top consumer finance franchise selling at ~8x 2018 EPS despite strong reinvestment opportunities and significant de-risking of earnings.

INVESTMENT THESIS

• Sallie Mae is the absolute leader in the niche $10B high-return and oligopolistic U.S. private education loan industry with over 50% of market share.

• SLM is selling at -8x 2018E[1] EPS of $1.02 even with consistent ROCE of ~15% over the past years, continued earnings growth (including >40%[2] for 2018), double-digit portfolio and top-line growth, margin expansion, consistent credit quality and reinvestment opportunities.

  ° Sallie Mae has historically traded at 13.5x earnings and today the company has never looked better.

• Market concerns about competitive, legislative, credit and refinancing risks are being misappreciated and unlikely to meaningfully impact growth for the next several years.

  ° Sallie Mae is a stable and strong franchise absolutely and relatively undervalued. Conservative valuation, using only organic growth from the core private student loan business, offers 65-80% upside.

  ° SLM is one of the most beaten financial stocks and trades at discount to sector even outperforming in several metrics, including asset growth, earnings growth, returns on capital, and credit performance.

• Get de-risking of earnings and high-return reinvestment opportunities to the graduate market, personal loans and credit cards as an extra upside.

• Investing along ValueAct, a well-known activist fund with a long-term history of value creation and the largest shareholder of the company (position built in early 2018 with an average cost per share of $11.5).

[1] Price as of December 18, 2018 of $8.3 a share or $3.6B

[2] Actual expected growth for 2018E is >60% including the benefit from Tax Reform.
BUSINESS OVERVIEW

SLM Corporation, more commonly known as Sallie Mae, is the leading consumer finance company specializing in education with a 55%[3] market share in the highly attractive private student loan industry. The company was formed in 1972 as a GSE to service federal guaranteed student loans and was later privatized to also originate and service private education loans.

Given the nationalization of the FFELP program, in 2014 the board decided to separate SLM into two publicly-traded companies; the federal education loan management, servicing and asset recovery business (Navient) and the current consumer banking business franchise (Sallie Mae).

Sallie Mae has currently over $22B in total assets, from which $20B (90%) is its portfolio of high-quality private education loans (~745 average FICO and 90% co-signer rate), and the rest is a FFELP portfolio run-off mode and the newest personal loans portfolio. The company has a conservative funding approach with $18B in deposits split almost evenly between brokered and retail deposits (80% of funding), and the rest in long-term secured debt (20% of funding).

Sallie Mae participates in the high-return and oligopolistic $10B private education financing industry, which along with Wells Fargo, Discover, Citizens control over 90% of the origination volume and Sallie Mae itself dominates with -55% of market share, more than the rest of the players combined and almost 3x its closest competitors (Discover and Wells).[4]

FIGURE 1. Private student loan industry market share by 2018E originations. Source: companies’ fillings and Evidika estimates.

The ability of Sallie Mae to maintain and expand its competitive position can be attributed to its strong competitive advantages, including: longest operating history and the only player fully-focused in education; the specialized nature of the asset class in terms of underwriting expertise and infrastructure capabilities; having the largest salesforce in the industry, covering over 2,400 strong relationships with educational institutions; and an unrivalled brand awareness in college financing consumers.

Originations are the source of growth of their portfolio and are primarily driven by federal funding availability and by sociodemographic and economic trends like college enrollments and tuition rates. Federal funding is critical here because families tend to rely on private loans only when they have exhausted other funding sources such as federal loans and own resources. Therefore, when the government expands their borrowing limits, the need for private loans is reduced.

Since the separation, Sallie Mae has had an outstanding performance in every metric. They have consistently grown their private student loan originations and market share, going from $4.1B in 2014, to 2018E of $5.2B. This is primarily the result of favorable industry growth (averaging 3-4% over the last years) due to growing tuition rates, consistent enrollments and federal borrowing availability remaining stable, as well as some market share gains.

Net interest income has grown strongly over the past years going from $0.6B in 2014 to $1.4B for 2018E, or at a CAGR of ~19%. Moreover, the company has been able to meaningfully grow its portfolio and expand it net interest margin, the latter because of stable pricing and low deposit beta.

On the top of that, Sallie Mae has performed really well over the last years in operating efficiency, which has naturally enhanced EPS and returns, even with capital ratios well-above regulatory requirements.
Most recently, the company has commenced its product expansion strategy that intends to capitalize on its current attractive customer base (young high and middle class educated Americans about to start to consume financial products) and new-to-firm customers, offering them new products tailored to college graduates needs. The company has begun piloting personal loans with $400m in originations for 2018 and will roll-out its credit card product in 2019.

According to SLM research, when they first meet their customers at the age of 18, 21% of them have a credit card and 1% of them have a personal loan. This numbers surge to 95% and 30%, respectively, at the age of 29. During this whole period, Sallie Mae has a positive and intimate relationship with their customers, which makes this opportunity highly attractive, especially with low acquisition costs, close to zero operating incremental costs, and with plenty of experience and understanding of their customers credit-quality. In fact, some of the other players are only in this market to capture these attractive customers and then try to cross-sell other banking products.

The soundness of this strategy is evidenced by the strong response that Sallie Mae is getting in their first year of originations and previous pilots.

**FIGURE 5.** SLM borrowers by product penetration and age. Source: SLM Barclays Global Financial Services 2018 Conference presentation.

### OPPORTUNITY

Sallie Mae is priced cheaply relatively (with the market and comps) and absolutely speaking at ~8x 2018 earnings largely due to concerns with its concentration in the private student loan industry and the inherent risks of operating in that space; the political and legislative exposure, increased refinancing activity, and general sector-wide concerns about consumer credit.

We think the market is overestimating the probability of occurrence of these risks and its potential impact, while underestimating the strength of Sallie Mae’s franchise. The legislative environment is covered for the next couple of years and funding expansion faces challenges going forward; refinancing activity has already peaked and will begin to dissipate in the next quarters; competition has been really stable over the past decade and SLM is protected by its franchise; and credit performance has never been better.

Current price implies a meaningful drop in earnings, thus, making Sallie Mae a compelling investment even if it’s just able to sustain their current portfolio. We think they can continue to grow meaningfully over the next few years and the lift in their growth cap on 2016 by their regulator serves as evidence on their ability to grow top-line >20%.

### LEGISLATIVE AND POLITICAL RISKS

As we have described before, over 90% of its portfolio of loans are private education loans. This portfolio has been growing stably over the past several years (even in pre-spin-off years) given the growing demand environment. The risk here is that this demand deviates substantially to make the company unable to grow its portfolio.

The most significant factor that could hit demand for private student loans are legislative initiatives that increase FDLP funding availability. In the past, when this happened in 2007 and 2009, the market size later shrank by as much as 60% from its $21B peak in 2007, although it’s difficult to distinguish between the impact caused by tightening credit
standards by lenders (as a result of the 2008 financial crisis) and the actual impact from federal funding expansion.

With “debt-free college and tuition-free college” being a main part of Democrats’ campaign during the 2016 elections, the stock jumped -40% in November with the voting results of Republicans controlling the Congress and the victory of President Donald Trump. This makes obvious that the legislative atmosphere is a significant driver of Sallie Mae’s business and stock price.

There are currently two reauthorization initiatives in place, the PROSPER Act (reported by the Committee and placed in the Union Calendar) and the Aim Higher Act (introduced in late July 2018 and referred to the House Committee on Education and the Workforce).

The PROSPER Act was introduced by chairwoman of the Committee for the 115th and 116th Congress R. Virginia Foxx [R-NC-5]. While it does increase the federal program, it eliminates and curtails some of the PLUS program, which is an additional $10B market of graduate education financing or a double on their addressable market. Parent PLUS loans are expected to be limited compared to previously being unlimited, and the Grad PLUS program would be eliminated. According to management, the net effect of this initiative would expand their addressable market between 30%-40% and they have prepared SLM, investing in operating infrastructure and processing capacity to handle this potential new volume.

Concerning the Aim Higher Act, this is a House Democrats’ initiative much more oriented towards simplifying the program, eliminating origination fees and expanding some grants, with no meaningful impact in student loans limits.

However, both initiatives have been virtually frozen with the lack of by-partisan support within the Committee; both the Committee and the Congress are much more focused on Trump’s legislative agenda and now with mid-term elections results, legislative priorities clearly haven’t included the reauthorization of the Higher Education Act.

Moreover, there are increasing concerns about the deficit building on the $1.5T balance of federal student debt, and the growing cost this program is causing for American taxpayers, makes it unlikely that legislators approve any program expansion without looking for other ways to save money. On 2016, the Government Accountability Office estimated taxpayer losses of $108Bn of the DSL program, which was originally expected to generate savings after its nationalization. Savings were intended to pay for the Affordable Care Act.[5]

Considering that any legislative initiative would need by-partisan support, with the Committee and Senate controlled by Republicans, we don’t think is likely that they can pass any expansion without curtailing something else. If the Congress structure changes in 2020 we will have another discussion, but even with a Congress controlled by Democrats deciding for increasing federal funding, the growing cost for taxpayers, the deficit of the program and the lower priority that graduate education represents relative to college education should act as counterweight to any decision on irresponsible expansion.

Furthermore, if the PROSPER Act progresses in its current form, there is probably upside for Sallie Mae. Currently graduate financing is largely dominated by the government even though their rates are off-market. Even without positive legislation, Sallie Mae has been able to develop six products tailored to professions (Med School, Dental School, MBA, etc.) with competitive rates on the PLUS program. Diversification of earnings to this market even without the push of PROSPER, as well as to personal loans and credit cards, makes us believe that the potential impact is limited in relation to past experiences and probability of materialization is still questionable.

Lastly, it’s worth saying that even with a 40% market size reduction, which would make this a $6B industry, maintaining >50% market share, Sallie Mae continues to slightly grow its portfolio and current valuation makes SLM

a compelling investment even if they manage to just sustain their current level of earnings.

REFINANCING ACTIVITY

Coming from a historically low interest rate environment, Sallie Mae has experienced accelerated repayment activity since 2014 until recently. The main refinancers are SoFi, Citizens and CommonBonds, which have been stealing a small part of Sallie Mae’s portfolio.

The risk here is as more loans are refinanced from their portfolio, growth is constrained, and defensive efforts may result in a decrease in loan yields. This concern has grown lately due to the rapid acceleration in the last years. However, when we look at refi activity it from a repayment perspective (as a % of loans in active repayment status), the impact to date has been negligible. Even more, consistent with Sallie Mae history, most refi activity arise in the first couple of years of repayment status, which indicates that portfolio exposure is limited to only those cohorts coming into repayment status for the next years.

FIGURE 6. SLM Consolidations to Third Parties. Source: Sallie Mae Q4 2018 Investor Presentation.

The refinancing business has been part of the student loan industry for many years and this industry is clearly sensitive to the interest rate environment. As interest rates rise, the addressable market consolidators can take is lower, because their long-term fixed rate loans become less appealing relative to current borrower terms. This causes problems for refinancers because as the largest players aren’t banks, their high costs of funds relative to the APR they can charge leaves a minuscule margin (if positive) for credit quality, acquisition and servicing costs, and profits.

With interest rates rising already, and certainly with higher and volatile costs of funding for these companies, it’s a matter of time for this business to commence to fade. We believe it has begun to dissipate at current interest rates levels, evidenced by the stabilization of refinancing activity on SLM’s portfolio over the past three quarters. Moreover, SoFi, the largest refiner of SLM’s loans and the largest player, is reporting a decline of 30% in refinancing volume and losses compared with profits a year ago.[6] We have seen this before, this industry boomed in the 2004-2006 period and disappeared some years later.

Even if this activity persists, to cause a meaningful impact on portfolio growth it would need to reach an extraordinary level (more than duplicate from current levels) so their >$5B of annual originations are offset by these consolidations. This business is unsustainable at current levels and there are signs that it has already peaked. Additionally, Sallie Mae’s has commenced defensive efforts to address refinancing. They have augmented their technological capabilities to identify potential refi activity in the portfolio, selectively extend repayment terms, in some cases slightly reduce APR, and their personal loan product is expected to act as a debt consolidation product.

COMPETITIVE RISKS

The industry of private student loans is characterized as being small, highly specialized and concentrated, and politically exposed. This has kept away potential competitors from entering the market in a meaningful way and left attractive returns for the dominant players like Sallie Mae.

There are some concerns that competition can emerge and take share from Sallie Mae. Particularly, the concern has gone from FinTechs to Navient’s acquisition of Earnst, which is expected to enter the market in 2019. The fact is that FinTechs to date haven’t had any detectable market share gains (and certainly haven’t show any impact in SLM growth over recent years) and Navient faces numerous challenges that impede it to meaningfully compete in the in-school channel.

Navient is the federal loan servicing sister company of Sallie Mae before their separation in 2014. They point that “their understanding of the market, servicing and operating capabilities, and 40-year of data expertise” provides them a distinct advantage that can make them compete successfully within the in-school channel after their non-compete expires in 2019.

We disagree that these factors exclusively can make them successful and that their servicing capabilities are superior than any of the current dominant players in the industry. Moreover, we should add that their brand is virtually unknown and a potential disadvantage due to their ongoing lawsuits with regulators and bad reputation with states and legislators. For them to compete meaningfully, they would need to invest a lot of money for marketing and building a better reputation, but with Canyon pushing for returns, they probably won’t let them waste shareholders’ money. We believe Navient understands this and this is the reason why they haven’t confirmed publicly that they will enter decidedly the market.

Regarding existing competition, Discover is a medium-sized bank with reasonable capabilities that entered the space acquiring a part of Citi’s SLC portfolio in 2011. Since then, Discover has grown to $1.8B in originations for 2018, leveraging their customer base and marketing capabilities.

The fact that during all these years they are just one third the size of Sallie Mae and with no apparent deterioration in SLM’s market share, makes evident how difficult it is to compete within the space. A great part of their market share growth can be attributed to Wells Fargo recent weakness due to its internal problems and both Sallie Mae and Discover have been equal beneficiaries of this. Moreover, Discover is a bank with arguably greater marketing dollars, lower funding costs, and a larger brand equity and even with that hasn’t been able to impact SLM’s share. This is also valid for Citizens, which as of 2018 is expected to originate no more than $0.6B.

The industry is characterized by stable pricing, since the last crisis nobody has moved prices. Playing with pricing would mean diminish the high-returns of the industry and committing credit risk, which we think are good incentives to maintain stable as it has been. Having three serious publicly-traded companies dominating the space reduces this potential unnecessary aggressive pricing behavior, leaving most competitive activity on marketing.

In terms of brand awareness, which has validated to be a key competitive factor, Sallie Mae is unrivalled. They have the most highly recognized brand in higher educational lending and therefore they don’t need to spend as much as their competitors in marketing. According to a study made by the company, 30% of their traffic comes unaided, meaning they are directly typing “Sallie Mae” in search engines and 6 out of 10 consumers of education financing recognize their brand. Furthermore, as of their last product launch, this brand power has proved helpful lifting as much as 100% response rates relative to populations who haven’t had any relationship with Sallie Mae before.

We believe that Sallie Mae’s competitive prowess protects them and make it unlikely to experience meaningful impact from these competitive threats. Instead, we think this dominant position will be traduced in stable market share and consistent growth in their core business.

**CREDIT RISK**

Finally, credit performance is largely driven by underwriting standards and economic conditions. In terms of underwriting standards, the private student loans are more “family loans” which traditionally hold a high percentage of co-signers, which tend to be parents that put their FICO score to get their kids better terms on the loan.

The asset class itself is tough to underwrite. Sallie Mae attributes its moat to the required specialization needed to
write these long-term unsecured debt products to students with no income and that will begin to pay five years from now. Nonetheless, SLM have been very consistent over the last years with their underwriting standards. They have been able to grow aggressively yet maintaining their credit quality consistent of average FICO -745 and >90% co-signer rate. This has translated in very stable credit performance over these years and it has improved recently. For example, charge-offs as % of repayments have averaged a little less than 1% over 2014-2018 and as of Q3 2018, they sit at 0.88%.

Another sign of confidence on this asset class is DFAST results published by Sallie Mae in 2016 and 2017. Even under severely adverse economic conditions (unemployment doubling, GDP falling for five quarters, and federal loan limits increased), the company still manages to be profitable and remain well-capitalized.

The bottom line is that credit performance at this point is probably the strongest in the last years, and no signs of deterioration. Coupled with the strong credit attributes of the asset class over the cycle, we think it is improbable to see meaningful deterioration in credit from historical levels. While this risk could intensify with the expanding product suite into personal loans and credit cards, Sallie Mae is developing this business under their disciplined conservative philosophy; limiting originations to pre-approved customers and maintaining >15% returns as a priority. Additionally, with ValueAct as an involved constructive shareholder, we don’t see them risking much of investors’ earnings in wasteful efforts. We think we are in good company with ValueAct onboard and with the price already 25% cheaper, they have good incentives to get Sallie Mae on track.

**VALUATION**

Sallie Mae is priced to expect no growth. When we think about the strength of its business franchise, the consistency of their earnings, and their reinvestment opportunities, an -8x multiple is simply senseless. The average S&P company trades at a forward P/E of 15-16[7], yet the average company isn’t growing as fast as Sallie Mae, probably not earning the attractive returns on capital they earn and have this high-quality and stable franchise behind earnings. Since the spin-off, SLM has traded at an average P/E of 13.5[8]. Using that historical multiple to 2018 $1.02 EPS results in a 65% upside potential.

When we look at comps, the most obvious thing is that Sallie Mae is being sold at a slight discount to the sector yet outperforming in several metrics, including asset and book value growth, return on assets, return on equity, and earnings growth. It’s also worth noting the relative difference between asset bases, which gives us a proxy on how much this company can grow. And with a good management, we think that growth will be economically sensible. And while there is a general concern about consumer credit, we obviously don’t see that reflected on Sallie Mae’s performance, which should put them ahead relative to the sector.

With that in mind, we don’t think SLM has ever been better positioned to diversify their earnings at attractive returns and continue to grow in its core market. Thus, we think assigning a modest 15x multiple to 2018 earnings is judicious, reflecting the strength of its franchise, the observed stability and predictability of earnings, and growth prospects going forward. This results in a >80% upside. And it’s worth reminding investors that this isn’t giving any merit to positive regulatory developments that expand SLM’s addressable market, such as the PROSPER Act. If we continue to assume growth from this tailwind and with the expanding product suite, we believe the appreciation potential is well over 100%.

We believe we are factoring reasonable assumptions into our pricing, and this probably underestimates the long-term potential that Sallie Mae has to become a comprehensive consumer banking company in a +5-year horizon.


[8] Using a longer historic period wouldn’t be appropriate since prior to 2014 price reflected the larger combined (and Navient’s unattractive) business. Source: FactSet.
CONCLUSION

At <9x current earnings, SLM is priced as if it will never grow and luckily sustain current earnings. This price is underestimating its ability to grow and maintain its assets at attractive returns from its core market. We think the company will continue to perform as consistently as before and its franchise expansion to other markets provides an extra upside to our investment.

As the company continues to demonstrate its stability of earnings, we believe there is a high probability that valuation will adjust to reflect this. Ultimately, we stick to the conclusion that Sallie Mae's business is robust and in the long-term its intrinsic value is determined to continue to grow.

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### Facebook Inc

**Asset:** Equity  
**Symbol:** FB:US  
**Idea Posted:** 12/06/18  
**Idea Updated:** 12/10/18  
**Community Rating:** ★★★★★

The durability of Facebook’s platform is stronger than many believe, and the underlying economics are still intact. The negative sentiment is extreme, and has created a rare opportunity.

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<th>ATTACHMENTS</th>
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### About John Huber

I am the founder and portfolio manager at Saber Capital Management, LLC, an investment firm that manages a private partnership as well as separate accounts. Saber’s approach is to patiently build lists of high-quality businesses and then wait for only the most obvious opportunities to capitalize on a gap between price and value. This approach leads to a very highly-concentrated, unconventional looking portfolio, but one that I believe has the best chance to outperform over time. I also write about investing at the blog Base Hit Investing. I can be reached at john@sabercapitalmgmt.com.

### About Saber Capital Management, LLC

Saber Capital Management, LLC manages separate accounts as well as a private partnership. The partnership is modeled after the original Buffett partnerships of the 1950’s, with a 25% performance fee over a 6% compounding hurdle. John Huber is the founder and portfolio manager, and has virtually all of his net worth invested alongside his partners. The fund’s objective is to patiently build carefully researched lists of durable businesses that are generating high returns on capital, and then wait for only the most obvious opportunities to capitalize on a gap between price and value. This approach leads to a very highly-concentrated, unconventional looking portfolio, but one that the firm believes has the best chance to outperform over time with the lowest risk.
Facebook Inc Cl a

Asset Class: Equity  Symbol: FB:US  Updated: 12/10/2018  Submitted: 12/7/2018

BY: John Huber
CURRENTLY AT: Saber Capital Management, LLC

COMMUNITY RATING: ★★★★★ PERCENTILE: 82%

The durability of Facebook’s platform is stronger than many believe, and the underlying economics are still intact. The negative sentiment is extreme, and has created a rare opportunity.

INVESTMENT THESIS

“A simple rule dictates my buying: be greedy when others are fearful.” - Warren Buffett

Buffett wrote those words in an op-ed during the fall of 2008, which was certainly a time of fearfulness. The simple philosophy has been a foundational part of his investment approach for his entire career, and regardless of how often it gets repeated, it remains as useful and as valuable today as it was when Buffett first coined the phrase decades ago. Human nature doesn’t change, and the stock market continues to provide opportunities to be greedy when others are fearful.

As I’ve outlined before, there is no informational edge in most large-cap stocks, but there absolutely is a time-horizon edge for those who are willing to thoughtfully analyze what most people want to avoid out of fear of what the next year might look like.

Currently, fear is creating an opportunity with Facebook. The stock, at $140 per share, is currently trading around 18 times earnings (16 P/E excluding net cash). This is a company that grew its revenue by 49% last year, and while growth will obviously slow from that level, Facebook is one of the most profitable businesses in existence and still has a very long runway ahead. If you have the ability to look out two or three years, this is the time to be capitalizing on that fear.

“BEST BUSINESS MODEL EVER CREATED”

Facebook has one of the best businesses in the world. In some ways it operates like a traditional media company that provides content to readers and collects advertising revenue from businesses who want to reach those readers. But the key
difference is that Facebook has the largest readership base in the world (2.3 billion people), and the readers themselves provide the content for free. This is why John Malone once said Facebook has the “best business model that’s ever been created”.

The result of billions of readers providing free content for each other is a massive network effect and a business that can serve each incremental ad at a very low marginal cost. The company’s 85% gross margin leaves a lot of meat on the bone that the company can spend on hiring new engineers and developing new technology that is needed to maintain and grow the business. But even after paying the engineers, growing the headcount, spending over $9 billion on R&D, and paying the tax bill, shareholders are still left with around 40 cents of profit for each dollar of revenue.

Facebook reinvests these earnings into data centers, technology, and the occasional acquisition, but even so, the cash in the till has been piling up, and now exceeds $40 billion and counting ($14 per share). Facebook has spent $10 billion on buybacks in the last year, and this will likely accelerate in the coming years.

A DURABLE MOAT

All of Facebook’s properties have huge network effects, and the great thing about networks is that as they grow, their moat widens. The sheer size of the network acts like a magnet to get people and businesses to join, and it acts like gravity to get those participants to stay. It’s hard to leave a place that all of your friends and acquaintances are a part of. And for the same reason, it’s hard for a business to leave a place where all of its customers are. The strength of the network compounds exponentially as it grows.

Facebook’s network of 2.3 billion people is much stronger than Twitter’s 300 million or Snap’s 200 million. And for those who compare Facebook to MySpace: keep in mind the latter had 75 million users at its peak in 2008, roughly 3.3% of Facebook’s current user base. So far in 2018 alone, Facebook has added 142 million users, a sum that is nearly twice the number of users that MySpace ever had in total.

Facebook’s enormous user base doesn’t mean the network is invincible, but it is much more durable than many people believe.

GROWTH POTENTIAL

Facebook’s business is still growing fast (33% revenue growth last quarter), and despite the company’s large size, the runway is still long. Benedict Evans, a partner at the VC firm Andreessen Horowitz, recently pointed out that roughly $1 trillion is spent each year by businesses who are trying to reach customers who are asking the question: “What should I buy?”:

(Source: Benedict Evans, a16z)

Facebook has roughly 5% of this market, which I think is a share that will inevitably rise over the coming years as advertising dollars continue to shift from traditional media to the much higher ROI advertising platforms like Google, Facebook, and Amazon.

It’s worth pointing out that only 11% of Facebook’s 2.27 billion monthly active users are in the US and Canada, which mean that the platform has over 2 billion users outside of the US.

Despite having most of the platform’s users, Asia and the rest of the world account for a small piece of Facebook’s revenue. As consumers in those emerging economies gain
spending power, businesses in those regions will grow and spend more money advertising to those consumers:

<table>
<thead>
<tr>
<th>Revenue Per User - Last 12 Months</th>
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<tr>
<td>US &amp; Canada</td>
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<tr>
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<td>Overall ARPU</td>
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A dollar buys more goods and services in poor countries than it does in rich ones, but even if we adjust for purchase power parity, Facebook has a lot of untapped potential outside of the US.

**Instagram & WhatsApp**

The company also has an enormous potential for growth on Instagram (which is still in the early innings of growth) and WhatsApp (which has over 1 billion users but has yet to be monetized). Over 100 billion messages are sent every day across the company's services, and in many countries, they are the main tool for communicating. A fast-growing number of these messages are sent between merchants and customers, a service that hasn’t been monetized yet but is obviously very valuable for businesses.

These platforms will make more money from advertising in the near future, but there are also other potential sources of revenue from mobile payments, video content, subscriptions, or even commissions or usage fees from businesses that originate sales on these platforms. These business lines may or may not develop, but they are all possible, and they are all valued as free call options at the current stock price.

**Is the Network Still Intact?**

The intense negative sentiment surrounding the health and risks of Facebook’s namesake platform has caused the stock price to decline. As an investor, determining whether people are still likely to continue using Facebook’s properties is the most important variable to consider.

The numbers have yet to show any erosion. The user base keeps growing each and every quarter:

Despite its already massive size, Facebook added roughly 200 million users in the last year alone (by comparison, Snapchat and Twitter added a combined 4 million users during that period).

Even in the US, where virtually everyone is already on Facebook, the numbers have remained steady:

Facebook’s user base will slow and eventually plateau, but as long as it remains intact and engaged, revenue growth will continue as ad spending keeps shifting toward digital media. And again, the numbers above only refer to Facebook itself, and doesn’t include Instagram, WhatsApp, or Messenger.

The network appears to be strong. But this doesn’t mean that it is invincible, which brings me to another key variable
to consider, which is management: what are they doing to protect the network, and will they be successful?

**FACEBOOK’S STADIUM**

My friend and fellow investor Matt Brice has used an analogy of Facebook as a giant stadium where the entire world comes to watch events and interact with each other. The stadium itself is a great asset. It has the largest capacity (in this case over 2 billion) and it holds the concerts and sporting events that everyone wants to watch. The stadium is a very durable asset that doesn’t take much to maintain in the short-run. But Facebook’s job is to ensure that people continue to come back to future events. This requires spending money on maintaining the building, upgrading the facilities, fixing the occasional leaks in the roof, and installing security guards to root out those who misbehave. I would note that the behavior of a few bad apples doesn’t mean that the stadium can no longer hold effective events in the future.

The most important task right now is to focus on upgrading the stadium’s security so that those bad actors can no longer slip past the guards, and this is exactly what Facebook is doing—operating expenses grew by over 50% last quarter as the company hired more people and spent more money on security.

Facebook is a cash flow machine. The incremental revenue is very high margin, which leaves lots of cash left over to reinvest back into the business, and still maintain healthy free cash flow margins. The company will spend over $10 billion on R&D and close to $20 billion in capital expenditures in the next year, with most of those resources going toward the general goal of protecting and growing the platform.

It’s evident to me that protecting the stadium is the top priority at Facebook.

**MISSION-DRIVEN FOCUS**

I think the company’s efforts to fix the problems will be successful, because based on my conversations with employees at the company, their motivation for cleansing the platform is genuine, and genuine effort put forth by talented and hardworking engineers who love solving problems is a recipe for progress.

Mission-driven companies often have intangible qualities outside of money that motivate individuals. Facebook’s mission of connecting the world has gotten overshadowed by the current issues and the negative news momentum, but I don’t think the mission is any less meaningful. Zuckerberg has certainly taken a beating this year, but I’ve always been impressed with his foresight and his focus on the company’s long-term future. He’s faced adversity before (transitioning the company from desktop to mobile was a monumental feat), and his focus on doing what he thinks is best for the long-term health of the platform is what all shareholders should want.

I also think it’s comical to watch pundits debate whether Zuckerberg should step down. He and Sheryl Sandberg have created more equity value in the last decade than just about every other management team alive, and just like when reporters started questioning Tom Brady’s future in 2014 after an early season blowout loss in Kansas City, sometimes the market’s short-termism leads to a large gap between perception and reality. The Patriots went on to win 8 straight games after that question was posed, and Tom Brady ended the year as the Super Bowl MVP.

As I’ve said before, football fans, media members, and stock market participants all tend to overemphasize the relevance of recent events and get overly influenced by negative sentiment, and this causes inaccurate assumptions and extrapolations, both in football and in stocks. In the market, this is how stocks get mispriced.

**VALUATION**

At the current stock price of $140, we are paying 16 times earnings (excluding net cash) for a company with 40% profit margins, huge returns on incremental capital, 30% top line growth and a long runway as advertisers continue to shift their spending to higher ROI digital platforms.
I think the company has a lot of growth left that we aren't paying much for at the current price.

However, the key to analyzing Facebook is not to get precise with forward estimates, but to determine whether the company's network will remain strong. If so, the stock is very cheap.

A strong network leads to Facebook grabbing a much greater share of the $1 trillion (and growing) global ad/marketing industry. Revenue from ads alone could easily be twice the current size, which means that Facebook is a $100 billion business before counting any of the possible upside from payments, messaging, or any of the other potential business lines that the company could develop on the back of its large network effect.

Facebook's operating margins went from 25% in 2012 to over 50% last year. This operating leverage is an inherent part of their business model, and it has not disappeared. Costs could rise faster than revenue in the next year or two, but they will eventually be spread over what I believe is an inevitably rising revenue base as advertisers continue to shift money to digital platforms that offer more effective ways to reach customers.

Facebook generates far more cash than it can use, and it's likely that Facebook spends more of its growing cash hoard ($42 billion, or $15 per share) on buybacks.

I estimate that the large market opportunity, operating leverage, free cash flow generation and the potential for buybacks will result in Facebook's earnings growing to $15 per share in the next five years, with plenty of growth still remaining.

## RISKS

The two biggest risks to the investment thesis can be summarized in the following questions:

- Will the network effect remain intact?
- Is the company’s ability to monetize user data still intact?

Both of these are significant factors to consider.

The first question needs to be answered first. The company’s business is only as strong as its network. As I’ve laid out above, I think the network remains very strong, as even with all of its negative PR, the namesake platform has still added 200 million users this year alone, and in the US, where virtually everyone is already a part of the platform, users have remained stable. I think a network with 2.3 billion people is much more durable than the market currently believes. Leaving a network like MySpace with 75 million people means leaving behind far less interaction than leaving a network where virtually everyone you know is a part of.

Also, the surveys that report people leaving Facebook are filled with the same flaws that any survey has when it is associated with some sort of social stigma. How many people admit to watching 4 hours of TV per day? How many people were honest to pollsters about who they intended to vote for in the US Presidential Election? When there is a stigma attached (real or perceived), it often leads to a gap between people's words and actions.

All this said, looking at user metrics is backward looking, and so we have to have a sense that the network will remain intact going forward, and it is in my opinion the biggest variable to consider, and it is what would make me change my mind if I determine I am wrong in my assessment of the network's durability.

The other risk is whether or not Facebook will continue to be able to monetize their data in the same way they do now. This is regulatory risk, and my view is that there is certain to be some sort of regulatory headwinds going forward. During the Senate hearings earlier this year, Lindsay Graham asked Mark Zuckerberg what regulation he would recommend and if Zuckerberg would be willing to help Congress draft a regulatory framework. I think it’s likely that regulations will be a headwind, but won’t be existential. (After all, Facebook is one of the main tools that politicians use for campaign funds! Beto O'Rourke raised more money than any other politician in a single fund raising period ($38 million); 29-year old incoming Representative Alexandria Ocasio-Cortez was almost exclusively funded by individuals, with many of them donating through social media platforms. Both of these candidates demonstrated the incredible effectiveness of Facebook advertising).
I also think there is a gap between what people in media or the investment community think about Facebook’s business model and what everyday users think. In my talks with everyday people outside of finance/media, I’ve found that the overwhelming majority doesn’t really care all that much about the data that companies like Google and Facebook possess. People have real world concerns that are far more important than the Facebook data that shows what they like, watch, or click on. This isn’t to say that it’s not important, but I think the furor in the media does not extend to mainstreet, and without it, the political will to enact major regulation is probably lacking.

But again, I do think it’s highly likely that some form of regulation does occur. I just think it won’t hurt Facebook and Google permanently. It could become a headwind, and it could add a layer of costs or taxes, but I think the general economics of the business won’t be altered much.

There is also a chance that regulation such as Europe’s GDPR actually entrenches the incumbents like Google and Facebook, making it harder for smaller companies to compete. This happened with banking regulation post-financial crisis: big banks are making more money than they ever have before, and small community banks are struggling to spread those regulatory costs over a much smaller scale.

To sum up the risks: I think the two things to watch are whether the network’s strength is intact and whether regulatory pressures could alter the business to the point where its ability to sell targeted ads is impaired. I think those risks are unlikely, but they are the two most important variables that would make me change my mind if I’m wrong.

**SUMMARY**

The negative sentiment surrounding Facebook is extreme. Fears about the health of the platform has created an extreme negative sentiment in the stock.

If you can look out 2-3 years and ignore the day-to-day news, you’re likely to see two things: sentiment that has normalized and a business that continues to grow its earning power.

If you compare the current price to the powerful network effects, the economics of the business and attractive industry prospects, the risk reward is outstanding at the current price of $140 per share.

Facebook will not be completely free from problems, but management and the employee base will make significant progress in their fight to preserve the safety and soundness of their platform, and the inherent profitability and quality of the business model will get valued more appropriately as a result.
Hynix current valuation multiples imply the company is at risk of incurring large and sustained losses. I think this is unlikely. The stock is likely to rerate nicely from 2Q19. PT 140KW

About Vasu Kasibhotla
Hynix current valuation multiples imply the company is at risk of incurring large and sustained losses. I think this is unlikely. The stock is likely to rerate nicely from 2Q19. PT 140KW

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**INVESTMENT THESIS**

**SUMMARY**

I think Hynix is a great long at current price of 65K Won. It is trading at 2.8x 2018 consensus EPS and 3.5x 2019 EPS (3.3x 2020 EPS). Even if one argues that forward EPS estimates today are extremely optimistic, it is at 1.03x trailing book value and 0.77x 2019 book forecast. Equally important, Hynix is trading at 16 times the trough annual EPS achieved in the last 5 years i.e. since the industry consolidated down to 3 players. Buyside obviously does not think that the company has no residual value beyond the next 3 to 4 years; so, the implication from the consensus low P/E is that forward earnings are likely to decline precipitously from current levels. I do not believe that will be the case, based on a rational analysis of supply/demand. I believe memory stocks are in a new chapter of their life with consolidation, slowdown of Moore's law and introduction of new demand drivers such as AI/auto/IOT. Earnings are in fact likely to be less cyclical and more robust going forward as compared to their history, which warrants a market inline multiple. My price target is based on a cycle average EPS of 12,800 Won, and a multiple of 11x leading to a price target of 140,000 Won (alternately 2x current book leading to roughly similar price target) which implies more than a doubling of the stock from today's level.

**DETAILS**

Memory stocks are paying a price for past sins -- particularly for the horrible 2014-16 downcycle. Several new investors came into memory stocks during that timeframe on the premise that memory space has changed for the better with the consolidation into 3 players on DRAM (NAND still has 6 players, but NAND is less critical for the fortunes of Hynix and even MU). Essentially, they thought this time was different. Then it turned out “this time was neither different nor better” (for those who bought the stock near the peak in late 20014). In the 2014-16 downturn Hynix got cut in half, MU was down...
more than 70%. The disappointment thus caused is weighing heavily on this cycle.

Throughout the upcycle which began in June 2016 till the summer of 2018, we could see this stress on the stocks’ multiples. In the prior cycle (2012-14), trailing P/B peaked at 2.6x for Hynix but failed to break 2.1x in current cycle. This happened even as ROE peaked at 36% in 4Q14 and stayed above 25% for just 3 quarters (3Q14 to 1Q15); in contrast, ROE has stayed above 25% since 4Q16 till now, and peaked at 43% in 3Q18.

As importantly, trailing P/B multiple peaked in July 2014, 2 quarters prior to EPS peak (in 4Q14). In the 2016-18 cycle, P/B peaked way too early in October 2017, a full year before EPS peaked in 3Q18. As a result, while the best 4 quarter EPS for Hynix in the 2016-18 cycle is nearly 4x as much as what it achieved in prior cycle, the stock price peaked at 80% above the prior cycle peak. The same is more or less true for MU. All of this happened with the background of SOX reaching its best multiples in the last 12 months, and both DM and EM stock market indices reaching peak multiples in late 2017/early 2018. In a relative sense, the derating of memory stocks vs semi sector and broader indices is pretty striking. And as we show below, this happened even as the intrinsic fundamentals of memory are in far better shape now than they have been in 20 years.

Even bull analysts have been very timid. Throughout 2017 and in the first half of 2018, almost no one dared to use a P/E multiple of more than 8x or 9x, or a P/B multiple of even 2x to set their price target.

And the speculation has been rife from late 2017 that DRAM contract price declines were imminent, which was extrapolated by bears to claim that margins would crater and hence stock prices SHOULD decline. Of course, contract prices could not go up for ever, neither can margins appreciate too much from already extreme levels of 60% on the operating side (the 3Q18 DRAM industry margins are among the very highest in all of tech land, including on prem software). So, we had the spectacle of stock multiple declining precipitously (P/B from 2.2x in October 2017 to 1.15x by October 2018, even as the LTM operating margin expanded from 41% in 3Q17 to 53% in 3Q18. And now that the companies have confirmed inventory correction will last a couple of quarters and contract prices have been coming down, stock prices and multiples are crashing really hard.

Almost no one questions what the value is here – valuation has lost all its meaning in memory space. Directionality is all important. That contract prices and margins are seeing correction is enough to justify any multiple and price for the stock, regardless of how low it is. One hypothetical example: say, a bear analyst forecasts a 30% decline for DRAM contract price and 15 pt operating margin contraction in the next 12 months, and argues for a price target which is 20% less than current price using a P/E of 4x; and say the stock price indeed corrects 20% in the next 2 weeks -- this bear analyst does not say it has now reached his price target; he instead will argue that the stock deserves another 25% price cut because it now deserves only a 3x P/E multiple even if the fundamentals have not changed materially in those 2 weeks. In other words, a falling stock price is used to justify further declines in the stock price. Surely, this qualifies as “irrational exuberance”.

The fundamental bear argument on Hynix is related to the price compression seen in DRAM spot and contract prices (NAND is also important, but DRAM (90% of profits) is the most critical segment for Hynix stock price). The chart below shows the DRAM contract price trend (Spot price began its downtrend much earlier this year, but memory makers have been arguing that spot is a very small fraction of the total market and hence irrelevant and investors have tended to agree with that).

Consensus is forecasting -20% bit growth and -20% blended price decline in DRAM for Hynix in 2019, leading to roughly 3% DRAM rev decline. Likewise, consensus is forecasting -40% bit growth and 32% blended price decline in NAND flash, which also leads to -4% rev decline in NAND for Hynix. However, these numbers lead to a consensus EPS of 18,200 Won for 2019, which leads to a P/E of 3.6x. Since it is very unlikely that the stock is truly at such low multiple, buyside is most likely expecting much steeper price declines (than 20% for DRAM and 30% for NAND flash).
Some sell side analysts have already modeled 30% price declines in both DRAM and NAND flash next year but that still leads to an EPS of 14,000 Won for 2019 which is higher than the cycle average 12,800 Won EPS I used in setting my price target. The lowest EPS estimates are at 9,300 Won and 8,500 Won levels in 2018/19. Those are based on truly pessimistic price declines (almost matching the order of declines seen from 2014 peak to 2016 trough). We will discuss this later. But note that (a) even if those extreme scenarios are realized, the EPS of 8,500 Won is still 40% higher than the PEAK EPS (6,000) achieved in 2014/15 cycle (b) the current price is just 7.6x the trough EPS of 2020.

Why would DRAM prices continue to compress? The only way is that excess supply over demand persists not for a short time, but for a sustainable period.

Let’s examine the supply side:

- It is true that DRAM capex in 2018 has expanded nearly 30%. We don’t have the final 2018 numbers yet, but all 3 players are proactively managing capex as we speak. It looks like DRAM capex in 2018 could be in the range of $19B, up from $14.5B in 2018. Indications are that 2019 DRAM capex could be down 10% yoy or more (especially equipment spend if we ex out the spend on building shell).

- While we don’t have the final bit growth data for 2018, it is apparent that it will be slightly more than 20%. The market has been in imbalance for a few months and contract prices have been coming down. Recent pressure on prices has occurred more due to demand being under some stress and not because of supply spiking too much. Inventory has been built up and companies are saying it will take 6 to 8 months to clear up.

- The trailing 5-year (2014-18) DRAM industry capex totals roughly $68B. I use the trailing 5-year amount to match depreciation schedule and the equipment lifetime is in that range. If we look at the trailing 5-year capex in 2015, it was in the $35B range. So, the invested capital has roughly doubled and the industry is now adding 20%-bit growth but 3 years ago it was adding 25% to 30% bit growth. This is inline with what

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**4GB DDR4 CONTRACT PRICE TREND**

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all the participants have said: that the necessary capex dollars to add 1% industry-wide bit growth have doubled due to the slowing of Moore’s law and the larger number of processing steps and lesser amount of throughput from successive node shrinks.

• This is the first time in the industry’s history that all the 3 main players are reacting this early to an impending down cycle. In 2015, capex expanded ~30% yoy although DRAM prices peaked in mid- to late- 2014, and OP margins peaked in 1Q15. In the current cycle, 3Q18 probably marks the peak of DRAM cycle in terms of industry margins. But the commentary from both Samsung and Hynix on their 3Q18 calls was already looking ahead to cycle downturn and they are indicating corrective actions on capex.

• Think of bit growth as coming from 2 things: node shrink and wafer capacity. Node shrink is less helpful to bit growth now as industry moves from 1x to 1y (as compared to moving from 25nm to 20nm as happened in 2015/16). Secondly, the bit growth in 2017 and 2018 was supported by wafer growth to a large extent, otherwise bit growth would not have reached 20% in the last 2 years. In particular, both Samsung and Hynix had grown their wafer capacity in mid-teens from 4Q17 to 4Q18 for example (MU has grown its wafer capacity by a much smaller degree and obtained its own bit growth largely through node shrink). But while wafer capacity in the last 2 years has grown materially, based on current DRAM-exchange forecasts and what the companies are saying qualitatively and based on their capex indications, Hynix and Samsung are able to grow their wafer capacity in mid/high single digits at best in 2019 and MU is likely to have flattish wafer capacity. As such, node shrink has to shoulder more of the burden in 2019 to sustain the 20% bit growth but the 1y node shrink is happening slower than expected and simply may not be enough. I think the chances of supply exceeding 20% are quite small.

• The China factor is for now, non-existent. Even in the more pessimistic estimates, the cumulative supply from China is unlikely to exceed 1% of global supply in the next 2 years. The ban on sale of equipment to Fujian Jinhua shows that Chinese production is very vulnerable to current trade dispute issues.

Now let’s look at the demand:

• The biggest fears around demand are to do with slowdown of smartphone unit growth, a reversal of the recent stabilization of global PC units, and a deceleration of hyperscale datacenter spend on DRAM.

  ° Smartphone units are indeed unlikely to growth at a robust pace. The best we can hope for is a low single growth.

  ° PC units are likewise, unlikely to show any meaningful growth. A slow decline to flattish units is the best we can hope from PCs

  ° Hyperscale capex can be lumpy. However, this capex was driven by their own underlying business trends and economics. It is tough to envision how hyperscale capex slows materially on a secular basis but the trends that drove hyperscale capex in the first scale do not slow. As workloads flow more towards AI, it is clear that DRAM and NAND content have meaningful growth: AI training workload requires 6 times as much DRAM and twice as much SSD as compared to a normal cloud server; and the percent of all installed servers that are AI capable is less than 3% today but is expected to grow to 40-50% in the next 7 to 8 years according to IDC and Gartner.

• The true trend that forms the foundation of all this is monotonically increased consumption of computing by global consumers and businesses and governments.

  The shift from mainframe to PC to client server to smartphone to cloud, and in the next several years 5G, IOT, and AR/VR just indicate increased consumption of computing resources in various devices and form factors. Furthermore, the consumption of computing resource in USA is still increasing but that amount in even W EU is a fraction of what’s consumed in US on a per capita basis; and in emerging markets where ¾ of global population resides, the per capita consumption of computing remains a small fraction of what is consumed in the US. We see this in terms of content growth per box for PC, smartphone etc, but also in new usage drivers such as automotive, IOT, and others.
One example: the rumored spec on the new Samsung GS10 of the 5G flavor will have up to 12GB DRAM and 1TB flash in addition to 3 rear cameras and other upgraded hardware. That compares to 4GB on GS9 and iPhone XS.

Hence, while we can understand the short-term swings in demand for DRAM, I do not see bit growth demand slowing materially in the next several years. There is NO computing paradigm in which the amount of DRAM per unit of computing is declining; quite the contrary.

And these growth drivers are playing out even as it has become quite expensive and difficult for the industry to grow supply at the 20% rate.

WHAT ABOUT BEYOND 2019?

While the argument for very sharp price correction of DRAM pricing in 2019 itself is not compelling, that is not enough to justify this current low multiple for Hynix.

A multiple of 3x EPS and 1x book is suggesting that the company is facing the prospect of prolonged recession that lasts into 2020 and even 2021.

In fact, even if the eventual 2019 EPS is half as much as current Factset consensus, Hynix book value should appreciate to 70K Won in a year. At 65K, it is already trading at roughly 0.9x book. This multiple was reached only at the trough of prior cycle in 2016 and at which time ROE was 11% and the market was afraid ROE would dip to low single digits and potentially even turn negative. To me, this suggests that today’s multiples strongly imply that equity investors think DRAM industry’s recession will not end in 6 months as Hynix and Samsung have stated, or even one year but will persist for multiple years.

But how can this happen? For such an outcome to occur, the 3 DRAM players SHOULD continuously overspend on capex and create a supply glut exceeding demand for a long time. This in my opinion, is very unlikely.

The most likely player to create an industry downturn is and always has been Samsung. Samsung has the balance sheet, technology and cost structure edge, and revenue diversification to sustain itself during a downturn and grab some additional market share and force industry consolidation.

Even in 2014/15, Samsung was guiding to 20% to 25% bit growth but ended with creating 40-50% bit growth and led to the downturn. At that time, investors hoped Samsung had achieved its objective (industry was consolidated to 3 players) and hence Samsung would no longer be destructive – when this proved to be false, it created the current disgust about the industry in investors minds, and they are no longer willing to believe this space can act rational.

But there are a couple of differences between 2014/15 to now:

1. Samsung still had a big enough scale, margin, technology, and cost structure edge at that time. It was at least a node to node and half ahead compared to Hynix and especially MU. The latter had just acquired Elpida and was still working on fully integrating it. MU mix was more tilted towards PC which was going through a very rough time. MU’s balance sheet was still ridden with debt. And MU still did not have full ownership of Inotera. Samsung also had an advantage in DDR4 and wanted to move ahead fast.

2. Samsung continued to make 30%+ margins in DRAM. Even Hynix was making high teens or better in DRAM. MU’s DRAM margins were in mid-single digits at the trough of the cycle in 2016. This enabled Samsung to push DRAM prices down and gain some market share and yet make very healthy profits.

3. This now has changed. Samsung is still ahead on technology and mix but not by much. PC is a small percent of rev even for MU, which has now fully integrated Inotera and also repaired its balance sheet. All the industry players are on a mix of 1x and 1y nodes. Samsung is ahead but by half node and not one and half nodes as was the case in prior cycle. The margin differential between Samsung to the other two has more or less vanished – Samsung is at par with Hynix, perhaps slightly
better and the differential to MU on DRAM margins is also not more than 5 pts. So, if Samsung tries to push prices down in a destructive manner, it too will get hurt as much as the other two and there may not be much market share gain in any case.

4. In 2014/15 when Samsung catalyzed the downturn Samsung was obtaining ~40% of its group OP from Semis (so, ~35% from memory). In fact, in 2014 Telco contributed 14.6 trillion Won OP while Semis contributed 8.8 trillion Won. That situation has totally reversed. Semis contributed 13.7 trillion Won OP in 3Q18, while Telco made 2.2 trillion Won in OP. So, Samsung can't base its strategy on its product diversification and making its profits elsewhere to invest in memory share gains. For all practical investment purposes, Samsung today is a semiconductor company and more accurately a memory company.

In fact, it has been striking how subdued Samsung has been. Samsung's forecasts about DRAM industry growth (which in the past have tended to be beacons for the others re: capex) have been less aggressive than what Hynix and MU have said in the last 12 to 18 months. Samsung has not pushed ahead with 1y transition very aggressively even when it had a window; now, Hynix and MU are also embarking on 1y. DRAMExchange forecasts on wafer growth show that Samsung's wafer capacity in 4Q19 is likely to grow only mid-single digits from 4Q18. This is better than MU's wafer capacity (flattish from 4Q18 to 4Q19, as MU does not have clean room for DRAM wafer growth) but less than what Hynix is growing (high single digit up to 10% from 4Q18 to 4Q19). Samsung and Hynix have actually suggested the industry could face shortages in 2H19 just based on current plans for wafer growth but stock prices and multiples are telling us that almost no one believes there will be shortages for a very long time. But what if that turns out to be the case? In 2017 and 2018, wafer capacity growth contributed 40% to 50% of eventual bit growth, as node shrink is no longer sufficient to support 20%-bit growth. In 2019, industry wafer growth is not higher than mid-single digits, and 1y shrink is not enough and in fact may be getting delayed. Conditions are ripe from a supply perspective for a strong industry rebound and if demand does not crater, we could have a material and significant rebound in prices. Remember, stock prices are embedding some truly end of the world scenarios – far worse than is being embedded for other sections of tech and other industries.

**WHY DO I LIKE HYNIX AND WHY NOT MU?**

- MU and Hynix are both very inexpensive and offer great value for the next 2 years. But I believe Hynix is already near its trough book value and has less downside, and historically has been a better executor with a more favorable business mix, and less political problems. While I would be happy owning MU, Hynix is a better value today.

- Hynix is a bit less expensive between the two. As seen below, both MU and Hynix have ~$37B EV. Hynix’ market cap is slightly bigger but that is explained by more net cash on the balance sheet. Hynix has 20% higher revenue and 24% more EBITDA relative to MU, making it cheaper on EV/EBITDA. Hynix’ book value is ~63K Won, which means at current price of 66K, Hynix is very near its book value. MU’s book value is $28, which means at current price of $35 MU is trading at 1.25x book. Hynix has a better trailing ROE vs MU and yet trades at a lower book multiple

- Hynix has better business mix. Its DRAM exposure is nearly 80% of rev and even higher percent of OP. MU has 70% of its revs from DRAM. In the next 12 to 18 months, while both DRAM and NAND flash are under a cloud, it is clear that DRAM is a better space to be – fewer players (3 in DRAM vs 6 in NAND flash), China being more advanced in NAND flash than in DRAM and hence a greater threat to destabilize the space, and greater uncertainty about supply-demand balance in the near to intermediate term. DRAM currently has much better operating margins, and while DRAM prices are under some pressure DRAM is still expected to be highly profitable under even dire forecasts for the foreseeable future.

- Hynix has been a better executor in the past. MU was lossy for a couple of quarters at the bottom of 2016 cycle (Feb, May, Aug quarters of 2016) – not large losses, but nevertheless was lossy. Hynix stayed profitable every single
quarter in 2016. Hynix’ blended OP margin troughed for a single quarter at 11% and ROE troughed at 5%. While Hynix traded below trailing book in 2016 for a few months, its trough book multiple was more resilient than MU’s, and Hynix in fact traded below book in sympathy with MU which did lose money and had suffered negative ROE briefly. This was mainly due to DRAM v NAND mix (DRAM was profitable for MU as well at that time but their losses in NAND offset the profits from DRAM) – that said, some of it also had to with Hynix being a better execution company at that time (Since then, MU has acquired new management who are quite good).

• In a trade war between US and China, Hynix is likely a safer bet. In the end, the supply demand dynamic matters more for memory. But MU is at a higher risk of punitive fines and other regulatory sanctions from the Chinese government in this crossfire.

• In the next 12 months, MU will lose some market share. MU has no plans or ability to increase its DRAM wafer starts per month. It also does not have any spare clean room capacity to expand wafers starts readily. Hynix in 2019 has the most amount of growth in wafer starts per month and is equipped to increase bit growth at 20%. MU will likely struggle to keep bit growth in tandem with Hynix and Samsung. This is good for the overall supply-demand balance of DRAM industry globally, but MU will likely grow less vs its Korean rivals.

• As a result of above, MU will have a higher capex need relative to Hynix. MU is already building a shell in Singapore for NAND/3D X Point, but still has no announced plan to expand capacity for DRAM. Node shrink is unlikely to prove sufficient to grow bits at 20%, which means wafer growth is necessary but MU at the moment does not have enough clean room. In addition, MU’s capex is diluted by its investments in 3D X Point, and hence MU’s scale in DRAM vs Hynix will continue to get smaller. 3D X Point may or may not have superior return characteristics in the long term, but it is unproven in the near term. Hence, MU’s CFROI is likely to lag that of Hynix in the next 12 to 24 months.

**VALUATION AND PRICE TARGET:**

As I discussed above, very few sell side analysts have any rational discussion on valuation for Hynix and memory stocks in general. Those who are bearish on the stock use a low enough multiple to set a price target that has 20% or more downside; the multiple used is continuously adjusted downward. There is almost no discussion on why a specific multiple is used. Similarly, even the bull analysts have no solid framework to value these stocks and instead use a timid and low multiple to set a price target that does have a good amount of upside – but they too continuously shift the multiple down, as the stock prices have come down. No one wants to show an upside of 100% and imply that the markets got this so completely wrong.

But have they? MU closed Elpida in July 2013, making DRAM a 3-player market. It has been more than 5 years now. That is a long enough time frame. In this 5+ year period, Hynix has averaged an EPS of 9,500 Won and OP margin of 37%! Numerous tech companies are cyclical. Cyclical alone can’t be viewed as a bogeyman to justify extraordinarily low multiples.

Investors will not value memory stocks using P/E as opposed to P/B overnight. The downcycle has to play out. Hynix has already showed that cycle trough lows are consistently getting higher, and of course cycle peak crests are also materially higher as we move from cycle to cycle. While cycles will still persist, if all three players stay highly profitable during the downturn (in 2016, MU reported a small negative EPS for 2,3 quarters which impacted the multiples for Hynix and Samsung as well) it will lead to a gradual rerating of these stocks.

In the immediate/near term, I think 0.9x book is a trough. That was where it troughed in 2016 for Hynix. If even a truly pessimistic book value forecast can lead to 70,000 Won bps in 2019, then 63,000 Won (0.9x 70,000) is the downside PT for Hynix; i.e. less than 5% from current price. The book value trend shows Hynix increased BPS consistently through the downcycle, and there is no sensible case that argue a decline in BPS in the next 12 to 24 months. And the 0.9x is an extreme trough multiple for a company whose current ROE is 43% and even in the prior downturn made double digit ROEs.
What about upside? I think 2x book is a very reasonable, if timid, multiple in the next 12 to 18 months. As the downturn stabilizes in 2019 and contract prices begin some uptrend, Hynix can quickly move up to 2x book. That indicates a near double for the stock which today is at 1x book.

In the longer term, the stock and the space should be rated using earnings multiples, as many semis are already. When the importance of DRAM is apparent, and it is no longer considered a commodity (that makes 60% OP margins at the peak and >20% OP margins even in 2016), at least an inline market P/E multiple is warranted. With cross cycle average EPS in the 15,000 to 20,000 Won and a low teens multiple, Hynix could merit a price target near 200,000 Won which is more than triple of today’s price.

CATALYSTS

OK, the above sounds great – when can these happen and what can catalyze such rerating?

- I think the book value as a bulwark against further sell down is the first catalyst. If current trade tensions and rate hike fears persist, and equity markets tumble down, Hynix is likely to outperform on a relative basis as it is already at an atrociously low multiple. This obviously does not make sense to most PMs who would think a high beta stock like Hynix should underperform in a market correction. But Hynix shares have already corrected during the last 9 months, way more than the market.

- Any stability in the DRAM contract prices will be the most obvious catalyst. When can that happen? I think the most reasonable guesstimate in 2H’19. In the meanwhile, we will of course obtain other data such as 1y node shrink schedules, capex reductions, orders data from equipment guys like LRCX, and changes in spot.

- Related to the above, investors will be watching for inventory on the books of DRAM makers and channel inventories. Signs that inventory is stabilizing and no longer correcting will be a big relief.

- Demand catalysts such as smartphone content, hyperscale capex will also be watched closely and can be catalysts. A strong uptake of high-end smartphones or 5G phones which include a large amount of memory can be positive. Likewise, data related to new Intel CPU launches, datacenter workload acceleration to AI, announcements of data center construction, increased optimism about ADAS and IOT and other drivers, can all be positive catalysts.

- Buybacks – All three DRAM makers have committed to returning 30% or more of FCF to shareholders. Any capital return to shareholders was unimaginable in prior downturns. If these companies stay with their capital return plans in the current downturn, it will be a huge morale booster.
Liberty Global Plc

Asset: Equity
Symbol: LBTYA:US
Idea Posted: 12/22/18
Idea Updated: 01/18/19
Community Rating: ★★★★★

RETURN TO DATE: ▲5.83%
EXPECTED RETURN: 116.61%

LONG

A rare large-cap stock that is undervalued despite strong operational trends, the presence of excellent capital allocators, and a high-likelihood upcoming catalyst.

About Tolulope Bukola
Long/short equity analyst with 6 years of experience across the technology, industrial, and consumer sectors. I am a medium/long term fundamental investor with a focus on value and special situations. Prior experiences include managing a TMT and consumer sub-portfolio at Millennium Management and covering cyclical equities at Maverick Capital. Currently pursuing new opportunities.

About Clayrock Capital Advisors
Clayrock Capital Advisors, LLC conducts proprietary investment research and provides investment management advice to hedge fund sponsors and investor clients with a focus on global long/short TMT equities.
A rare large-cap stock that is undervalued despite strong operational trends, the presence of excellent capital allocators, and a high-likelihood upcoming catalyst.

INVESTMENT THESIS

With acknowledgement to prior posts, particularly by Robert King and Patrick Brennan.

LIBERTY GLOBAL PLC (LBTYA US, $25, ADV $40M, 0.5% SI) – LONG

Liberty Global (‘Liberty’ or ‘LGI’) is the leading European cable company assembled by chairman John Malone and CEO John Fries. In 2017 Liberty began a series of divestitures that will simplify the company, providing an investor with more exposure to the attractive core Western European markets:

• In December 2017 LGI spun out most of its Latin American operations into LiLAC Group.

• In December 2017 LGI announced the sale of its Austrian cable subsidiary, UPC Austria, to T-Mobile Austria for €9B ($2.2B), 11x operating cash flow. The deal was closed in July with proceeds of €900M ($1.03B), and Liberty announced a $500M increase to its buyback program.

• In May 2018 Liberty agreed to sell its operations in Germany, Hungary, Romania, and the Czech Republic to Vodafone for €19 billion ($22.7B).

The completion of the Vodafone transaction will leave Liberty with substantial resources with which to pursue its historically successful capital allocation strategy through aggressive buybacks, debt reduction, and focused M&A.

THESIS

1. Liberty Global is a best-in-class European cable operation run by managers with a long history of outsize value creation for public shareholders. A simplified footprint
should support continued execution on the historically successful model.

2. The Vodafone transaction is highly accretive and under-appreciated by the market. It will leave Liberty with immense cash reserves with which to pursue value-generating capital-allocation (i.e. massive buybacks).

LIBERTY AND THE EUROPEAN CABLE LANDSCAPE

Liberty Global provides video, broadband internet, fixed-line telephony, and mobile communication services to 22M customers, representing 46M revenue generating units (RGU) in 12 European countries. In addition, LGI owns 50% of VodafoneZiggo, a Netherlands joint venture with 4M subscribers, 10 million fixed-line RGU, and 5 million mobile services RGU. LGI’s investments include ITV, All3Media, ITI Neovision, Cas Systems, Lionsgate, the Formula E Series, and several regional sports networks.

Cable is an attractive monopoly-like business with predictable cash flows and high barriers to entry. It is low churn and recession resistant (in 2008/2009 the major U.S. and European cable cos experienced mid-single digit growth and flattish EBITDA margins). The cost of new cable installs, which can be anywhere from $3000 – 5000[1] per customer (compared to a current enterprise value of -$1200/subscriber for LGI), disincentivizes competitors from ‘overbuilding’ an area with an incumbent operator. At the midpoint, $4,000 per customer relationship (roughly in line with where U.S. cable peers have historically traded), LGI’s replacement cost is -$180B (vs. current enterprise value of $53B). Replacement costs tend to increase over time due to labor-cost inflation and the difficulty of building in ever more crowded cities (which are also the most attractive markets due to population density).

Though cable pipes were originally built for video, broadband internet is now the key value driver. Once cable is built to an area, it is typically the fastest and cheapest way to deliver data to a home. In the U.K. Liberty (via Virgin Media) offers broadband average speeds of 140Mbps through its HFC (hybrid fiber coaxial cable) setup, while even the fastest fiber connections offered by competitors are capped at -75Mbps[2]. Wireline data is an order of magnitude cheaper than wireless, with wireless cost/Gb/month across the EU ranging from ~€10 - 30 (~$25 - 60 in the U.S.). By contrast, most cable broadband subscriptions

[1] Verizon’s FIOS build out cost -$4,000/acquired customer per Craig Moffett of MoffettNathanson.
LGI’s own ‘project lightning’ build in the U.K. will be -$4,500/home passed

[2] https://www.cable.co.uk/providers/cable-broadband-providers/
allow unlimited data consumption (Comcast charges usage-based pricing after 1TB/month). Based on monthly usage figures of 100 – 150Gb released by cable operators, wireless data is anywhere from 25 – 100x as expensive as cable.

Demand for more data and faster speeds will remain a tailwind for subscriber growth in Europe, where -65+% of households still use some form of DSL (max speed: 30Mbps). In the U.K., LGI’s biggest market post the coming divestitures, overall cable penetration is <30%[3], as Virgin Media is the only provider. In 2016 Liberty set an ambitious target to pass 10M new homes by 2020, including 4M in the U.K. through its £3B ‘project lightning’ initiative (currently at 1.6M homes passed after significant delays and cost overruns). In its overall footprint Liberty has less than 50% penetration of homes passed, leaving plenty of room for subscriber growth.

Relative to U.S. peers, Liberty has a longer runway for subscriber growth. It also has more room to take price and a stronger moat due to three key differences:

• LOWER ARPU AND HIGHER EBITDA MARGINS DUE TO LOWER CONTENT COSTS

European content producers have limited scale, and thus limited bargaining power, due to fragmentation by country and language. This has allowed Liberty to maintain higher margins despite charging much less for its bundled packages. Liberty has -1/2 the ARPU of U.S. peers, while most of its post-divestiture user base (U.K.) has -70% of the U.S. income per capita.

• LOWER COSTS INSULATE EUROPEAN CABLE FROM THE THREAT OF CORD CUTTING

In much of Europe, a €10 Netflix subscription is expensive relative to a €30 – 60 double or triple-play broadband/video/telephony package, unlike in the U.S. where $11 for Netflix pales next to the $60 cost of video in the bundle. Liberty’s bundle also includes its in-house DVR and OTT offerings, making it both cheaper and higher value than comparable U.S. offerings.

• EUROPE HAS ALREADY EXPERIENCED MOBILE-WIRELINE CONVERGENCE

Liberty has 6M mobile customers which it services as a Mobile Virtual Network Operator (MVNO) through agreements with wireless operators in the U.K., Switzerland, Austria, Ireland, Hungary, Germany, and Poland. This allows it to offer triple and even quad-play bundles that include wireless. The VodafoneZiggo joint venture in the Netherlands is seeing substantial uptake of the bundle (30% of broadband subs taking mobile, 2/3rds of mobile subs taking broadband).

Partialy offsetting these advantages is one big negative: more competition, sometimes with less profit-oriented national champions.

<table>
<thead>
<tr>
<th>Liberty vs. U.S. peers</th>
<th>Charter</th>
<th>Comcast</th>
<th>LGI</th>
</tr>
</thead>
<tbody>
<tr>
<td>EBITDA Margin</td>
<td>36%</td>
<td>40%</td>
<td>50%</td>
</tr>
<tr>
<td>OCF Margin</td>
<td>28%</td>
<td>20%</td>
<td>34%</td>
</tr>
<tr>
<td>Capex/revenue</td>
<td>25%</td>
<td>11%</td>
<td>30%</td>
</tr>
<tr>
<td>FCF Margin</td>
<td>9%</td>
<td>10%</td>
<td>8%</td>
</tr>
<tr>
<td>ARPU (residential + commercial)</td>
<td>$130.0</td>
<td>$155.0</td>
<td>$58.73</td>
</tr>
<tr>
<td>Programming costs/video subscriber</td>
<td>$53</td>
<td>$49.8</td>
<td>$9.4</td>
</tr>
<tr>
<td>Programming costs/total cable revenue</td>
<td>25%</td>
<td>24%</td>
<td>9%</td>
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THE LIBERTY OPERATING MODEL

Most of the LGI’s European operations, including Germany and the United Kingdom, were built out through acquisitions since 2009:

The acquisitions have generally been well integrated, delivering far above target synergies ($280M vs. $180M target for Virgin Media, €250M vs. €160M target for Ziggo – later offset by growth challenges).

Complementing the acquisitions is a straightforward organic growth algorithm:

• Low single digit subscriber additions + low single digit price increases + operating leverage -> mid to single digit EBITDA and operating cash flow growth.

• Buybacks shrink the float, offsetting dilution from stock-based acquisitions and driving accelerated growth in cash flow/ share.

• Net leverage is maintained at 4-6x operating cash flow. Existing debt has an average tenor of ~5.5 years and 4.0% cost with 90% due after 2022 (70% after 2024).

• Massive depreciation and interest costs result in GAAP operating losses which offset gains on asset sales.

This strategy was largely successful through 2015, when Liberty started to face several headwinds. Profitability in the Netherlands was pressured as Ziggo faced aggressive (uneconomic) price competition from incumbent KPN, while ‘project lightning’ in the U.K. started to come in delayed and overbudget (not unusual for major cable buildouts). At the same time, Brexit-related currency fears made U.S. investors more cautious. The operating challenges led to multiple downward revisions, with 2016 – 2018 operating cash flow (OCF) growth/ annum going from a projected 7 – 9% to -5%.

Operating cash flow is the preferred metric for evaluating Liberty’s performance over time (and comparing to peers) due to the lumpiness of capital spending, which makes free cash flow unusually volatile.

KEY MANAGEMENT

• **Chairman John Malone**, the ‘cable cowboy’, has one of the all-time great investment track-records, rivaling Warren Buffett. Over his 50-year career he is perhaps the most influential figure in the history of the U.S. cable and PayTV industries. He manages his various holdings through large voting stakes in the Liberty group of companies, including Liberty Media (major stakes in SiriusXM), Liberty Broadband (major stakes in Charter), Liberty Expedia, Liberty Global, GCI Liberty (Charter, Liberty Broadband).

• **Mike Fries, CEO since 2005**, is a strong operator and capital allocator with 30 years of experience in the cable industry. He has worked with Malone since 1992, when he managed the overseas subsidiaries of Malone’s first cable venture, TCI. He became CEO of Liberty Global when it was spun off in 2005.

• Its worth noting that day-to-day management of individual regions is undertaken by regional CEOs while Fries focuses on strategic issues, so the quality of regional leadership is an important performance driver worth some diligence.

THE VODAFONE TRANSACTION

In May 2018 Liberty agreed to sell its operations in Germany, Hungary, Romania, and the Czech Republic to Vodafone for €19 billion ($22.7B). These businesses represent -28% of 2017 operating cash flow. **The sales price represents 11.5x segment OCF, 24x FCF, and ~10x EBITDA.** As a group, Liberty currently trades at 7.0x OCF, 11x FCF, and 7.5x 2018 EBITDA.

The sale is validation for Liberty’s long-term strategy and capital allocation acumen. CEO Fries noted that since the 2010/2011 purchase, the German assets have grown revenue 60% and OCF 82%. With the sale LGi locks in a 6x cash-on-cash return in 7 years.

<table>
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<th>$ Millions</th>
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<tr>
<td>Price</td>
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<tr>
<td>Fully Diluted Shares</td>
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<tr>
<td>Market Cap</td>
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<tr>
<td>Vodafone JV</td>
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<tr>
<td>57% Telenet Stock</td>
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<tr>
<td>Investments (ITV, Lionsgate, CFR, Other)</td>
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<tr>
<td><strong>Adjusted Market Cap</strong></td>
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<tr>
<td>E0Y 2017 Total Debt</td>
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<tr>
<td>(Vodafone Sale Debt Retirement)</td>
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<tr>
<td>(Austria/DT Sale Debt Retirement)</td>
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<tr>
<td>(100% Telenet net Debt)</td>
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<tr>
<td>50% Ziggo JV Net Debt</td>
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<tr>
<td>PF Gross Debt</td>
</tr>
<tr>
<td>(Cash)</td>
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<tr>
<td>(Austria/DT Sale Cash Proceeds)</td>
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<tr>
<td>(Vodafone Sale Cash Proceeds)</td>
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<tr>
<td><strong>Pro-forma cash</strong></td>
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<tr>
<td>PF Net Debt</td>
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<tr>
<td>PF Enterprise Value</td>
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<tr>
<td>PF 2019 OCF</td>
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<tr>
<td>PF EV/OCF</td>
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<tr>
<td>PF Gross Leverage (OCF multiple)</td>
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<tr>
<td>PF Net Leverage (OCF multiple)</td>
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The deal is expected to deliver €10.6 billion ($12.7B) in cash proceeds, half of Liberty's current market capitalization. In addition, Liberty will retain all cash generated by the businesses till mid-2019 close. When factoring in these proceeds Liberty is historically cheap.

At current prices, Remainco would be well under 6x operating cash flow, well below its own history and that of U.S. peers:

These multiples seem especially tame given Vodafone’s recent willingness to buy portions of these assets at 11-12x OCF.

**CAPITAL ALLOCATION**

Post deal LGI will have -$10-12B (including $1.6B of interim FCF generation) for a combination of buybacks and acquisitions. CEO Mike Fries has made no secret of his opinion that the stock is too cheap (an opinion backed up by his purchase of 100K shares for ~$2.9M in May):

"There's no big transactions pending. There's nothing -- we even have our eye on, to be honest with you, that would require capital. And I think, as you know, and I've already indicated, buybacks are a big part of what we do. We've already bought back half this company in the last 10 years. And at today's price, where it is right now, if this is where the stock was in a year, we'd probably use every penny of it to buy the stock back, that's what I'll tell you."
- Mike Fries, Liberty Global CEO

He reiterated this stance at Goldman's Communacopia conference, where he also validated the basic math above:

"... As we look forward, as we sit here today, let me say, we have no deals that we're looking at. I'll just come right out and tell you. There's no transactions. There's no big M&A things in the pipeline, can breathe easy at this point. We don't have the capital, number one; and we don't have the need, number two, 2 important reasons. As we look forward, as we get closer to closing, then we'll have to make some decisions. We'll look at our stock price. We'll look at the marketplace. We'll look at the opportunities that we have. We'll look at our own performance. And we'll make a judgment call. And we'll say, "Wow, geez, where can we put money to work and capital to work?" We think we've been pretty good capital allocators over the years. If I look at the M&A side, this is where I get a bit frustrated, if I look at a place like Germany, where we got over 6x our money on that investment. If I look at Telenet, pretty popular stock these days, $50 -- EUR 50 stock. Our basis in that is negative 2. We put about 20 in. We're taking 22 out in dividends. So Switzerland and the U.K. have been great investments for us. My point being I think we're pretty good allocators of capital. Now having said that, if we're trading where we're trading today -- and the way I look at the math, we traded about 5.5x, because you've got $14, $15 of cash, you got these other assets in Telenet in Holland, let's say, that might add up to say, $8, something like that, which means Virgin and all the other EBITDA trades at about 6 and that's about, in our book, about 5.5x. We're probably going to lean into our stock at that point because I don't know that we're going to find a better deal than the one sitting in front of us, especially as we start to improve free cash flow and operating free cash flow combined and we look at returns on that basis.” – Mike Fries, Liberty Global CEO

Once the deal is complete, Liberty will be the largest incremental buyer of its own shares. With available firepower at over 70% of adjusted market cap, the valuation disconnect is unlikely to persist.

**REMAIN CO. AND GO-FORWARD OPERATING MODEL**

After the Vodafone transaction, the UK, Ireland, Belgium, Switzerland, Poland, and Slovakia will remain:

- United Kingdom/Ireland (15M RGU = 55% of Remainco): attractive market where LGI (as Virgin Media) continues to add subscribers at a steady pace, driven by its speed advantage vs. competitors (BT, Sky, Talktalk)
° 85% broadband penetration, ~30% cable penetration, 65% Pay TV penetration. Liberty has ~25% (and rising) share, with nearly 50% share in its footprint.

° Share gains will be driven by Virgin Media’s speed advantage over incumbent technology. Nearly 40% of the market still consists of slow copper-based DSL lines (30 Mbps). Liberty’s standard offering (~140 Mbps) is twice as fast as the competition, with its fastest services (~350 Mbps) nearly ~5x faster.

° FCF has lagged because of investment in Project Lightning, a ~$4bn plan to increase homes passed in the U.K. by 4 million. Despite delays, this project is on track to generate 25 – 30% IRRs if it can achieve its target 40% penetration of homes passed, which seems likely given data from the 2015/2016 cohorts (34% penetration despite technical issues)

• Telenet Belgium (5M RGUs = 20% Remainco) – MSD growth market with 80% broadband penetration where Liberty has taken share in the last few years but faced stiffer competition recently. LGI is transferring the growing mobile business from an MVNO to its own network. TNet’s results are consolidated but it is also publicly traded

• Switzerland (2.3M RGU = 10% Remainco): Mature market with 70% broadband penetration, struggling with RGU losses (video subs) due to intense competition. Strategic action (most likely a sale) on this asset seems likely

• Poland/Slovakia (4M RGU = 15% Remainco) – Lower penetration, MSD’s RGU growth market

• Ziggo/Netherlands (15M RGU) – unconsolidated 50% subsidiary. Difficult market given incumbent KPN (30% overbuild of Liberty footprint) is an aggressive competitor.

From the above OCF I subtract Telenet OCF (since its accounted for as an investment in the calculations) and add half of Ziggo’s OCF to yield ~$5.4B in 2019 OCF. With annual PPE additions of ~$4.2B (35% capex intensity, compared to 32%, or $4.8B, currently), FCF will be ~$1.2B. It should ramp to ~$1.7B as ~$500M in Project Lightning growth capex rolls off in the next 3 years. This does not give any credit for management’s expectation that capital intensity can decline into the mid – 20s from the current 32% of revenue level as the company harvests the benefits of prior – year capex spend. Such a reduction in capital intensity would yield FCF well over $2B.

Post-transaction Liberty will be very dependent on the U.K., with 55% of subscribers and 60% of operating cash flow in the country. Performance of this region will be significantly dependent on the outlook for the Project Lightning build, which has so far added 1.3M premises to Liberty’s footprint and is on track to continue adding 400 – 500K premises a year (~3%). At the targeted 40% penetration rate, the buildout alone is a 1%+ unit growth tailwind to the U.K. business, supporting record levels of subscriber adds. In recent quarters nearly ~70% of new subscribers have been in the Lightning footprint.

The ex-U.K. businesses are all experiencing healthy growth and profitability, except the challenged Switzerland business which is undergoing a turnaround and is a candidate for sale or deconsolidation:

LBTYA - Transcript: Liberty Global PLC at Goldman Sachs Communacopia Conference, Th 09.13.18

“Look, we’re committed to a turnaround plan there, as we should be. But if you step back and look at the market, Salt has lost 25% of its revenue in the last 3 years. Sunrise has had 3 years of negative revenue, negative EBITDA, and this year, marginally positive. Swisscom is negative revenue, negative EBITDA this year. That’s not sustainable, all right, in my 30 years of experience. That’s not sustainable. So the market will rationalize. And regulators, from our point of view, are supportive of rationalization. How and when and why? I’m not going to give you an indication of that, except to say that it does make sense. Meanwhile, these companies trade at 8 to 10x. Sunrise is trading at 10x. They pay a dividend. I guess that matters. So maybe we should just take Switzerland public.” – Mike Fries, Liberty Global CEO

One under-appreciated point is the potential for FCF to ramp even faster than operating cash as the level of capex normalizes:
“...And that is, going forward, we anticipate meaningful improvement in operating free cash and levered free cash flow going forward. I think our CapEx ratio this year is 31% to 32% of revenue depending on which business, the continued operations or the full company. I think you’ll see that mid-20s next year, and that’s with new build. So we’re taking a look at the future and saying we’ve invested a ton of money in product, in capacity, in networks, in new build. And we’re at a point now, we think, we can realize some great free cash flow growth out of those investments, and I think that is sort of directionally where we think the business is going.” – Mike Fries, Liberty Global CEO

DEAL CLOSURE AND ANTI-TRUST RISK

This is the area where incremental research (e.g. conversations with regulatory experts) would be most value-added. My high-level assessment suggests that the deal is very likely (>65%) to be approved.

Opposition to the deal comes largely from German telcos, with the most vocal opponent being Deutsche Telecom (DT), Germany’s incumbent operator. This is understandable, given the deal would make Vodafone Germany’s leading broadband provider and position it as a much stronger challenger to DT. The German opponents of the deal are focusing on the potential impact on the PayTV market, where they claim Vodafone will have too much share and too much negotiating power with content providers.

On December 11 the European Commission (EC) opened an in-depth investigation into the proposed merger (http://europa.eu/rapid/press-release_IP-18-6772_en.htm). On balance, this is a positive for the merger’s chances, as it precludes investigation by German authorities, who would be more susceptible to political influence from DT. European regulators have been broadly favorable towards cross-national telco consolidation as part of the push towards a single European telecommunications market. The EC outlined some easily resolved concerns about the Czech market. Its key concerns are in Germany:

- The reduction of competition for investment in next-generation networks.
- The bargaining power of the merged entity vis-à-vis TV broadcasters.
- The impact on competition in the retail fixed telecommunications market and retail TV markets.

The first is a non-issue, as Vodafone will argue that the merger leaves it better positioned financially for network investment (the merger should be cash flow positive and significantly improve dividend coverage for Vodafone). Authorities will likely use the opportunity to secure commitments on network investment. The second concern is likewise easily remedied. The third point will be the most contentious, as the Commission may demand some asset sales, and will certainly demand third-party access rights that will compromise Vodafone’s competitive advantage. Indeed, such concessions on access rights are likely what Vodafone’s German competitors are really hoping for, as in when Telefonica Deutschland (German #3) called for “full and appropriate remedies”.

Since the deal broadly supports European Commission goals, I believe regulators will also be angling for concessions rather than looking for an excuse to block the deal. Given the financial and strategic benefits of the deal to Vodafone, I expect a deal to be reached. The EC review should be completed in May 2019.

VALUATION AND RISK/REWARD

Base case operating assumptions for Remainco produce significant upside at historical multiples
Of course, the upside would be even more dramatic if Liberty were to buy back a significant number of shares at or below $30:

In the bear case, the deal is blocked and continued capex over-runs cause the market to focus on a stagnant $1.5B in free cash flow. Liberty trades at 10% yield, or ~$19 when adjusted for its minority stakes, for 15% down side from the current $22 price. This extreme downside price represents only slightly more than 6x current operating cash flow.

**VARIANT PERCEPTION/ WHY THIS OPPORTUNITY EXISTS**

- **Investor fatigue** – Liberty was a top 10 TMT hedge fund holding till 2015/2016 when it was hit by Brexit and uncharacteristically poor execution. Many investors moved on to more fertile waters (FANG) and have missed the transformation.

- **Concerns about cord-cutting** have depressed cable multiples globally:
  - LBTYA is less susceptible than U.S. peers to cord-cutting since its video ARPU is already comparable to OTT prices. Mild sub losses (~1% in 2017) have been offset by mix shift from basic cable to higher ARPU digital video offerings.
  - Losses in low-margin video subs are offset by the increased ARPU of internet outside of the bundled package.

- **Concern about the 5G/fixed wireless threat** – investors are concerned that wireless connections will become fast and high-capacity enough to compete with wired broadband as 5G capabilities are rolled out:
  - The **rollout process for 5G is likely to be a decade long**. In Europe penetration of 4G is still only ~50%, and wireless companies are largely too capital constrained for an accelerated roll-out.
  - Industry observers and wireless operators acknowledge that **fixed wireless will be un-economical** in most cases. Fixed wireless is highly dependent on small-cells, wide-spread deployments of which start to rival cable costs (w/ the same poor overbuild economics). At the same time, cable technology is consistently improving, with DOCSIS 3.1 offering the potential of 10 – 20x speed improvements that would obsolesce the 5G threat at a fraction of the cost.
  - For what it’s worth, all indications are that Verizon’s limited-release of its 5G wireless rollout isn’t going particularly well for a variety of technical (https://spectrum.ieee.org/tech-talk/telecom/wireless/verizons-5g-rollout-experiences-a-mixed-bag-so-far?mc_cid=530cc3d461&mc_eid=ac30b8596a) and commercial reasons.

**RISKS**

- As outline above, the Vodafone deal still must pass regulatory scrutiny from the European Commission.

- Management may choose to use a significant share of Vodafone cash for M&A. However, Mike Fries has noted that there are no M&A targets currently on the radar and that he firmly believes Liberty’s own shares are the best investment at current prices.

- Project lightning may continue to drive elevated capex, pressuring FCF trends in the near term. Management expects capital intensity to decrease even before project lightning begins winding down in the next few years.

- **Macro risk** given ongoing Eurozone political/ economic upheaval. In particular, there remains a broad range of outcomes for the U.K.’s ongoing separation from the European union, “Brexit”:
  - In the past same-currency operating metrics have proved largely immune to macroeconomic upheaval,
though a severe recession scenario might affect the ability to take pricing in the near term.

- **Transactional and operating risks of currency movement are largely contained** as the company matches revenue generation and expenses.

- **The translational impact of currency is easily hedged**, as Liberty’s operating currencies (the British pound and the Euro) are both highly liquid and have extremely low transaction costs against the dollar.

### CATALYSTS

- European commission approval in mid-2019, followed by deal completion and the initiation of buybacks.

- After a mid-year restructuring Project Lightning appears to be on track. Further confirmation of strong UK subscriber trends and reasonable project capex in the next few quarters should be a major driver given RemainCo is now largely U.K.-based.

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CROSS BORDER INQUIRIES TO FUNDS | 100+ |
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*SIDDHARTH CHORARIA*
HEAD OF ANALYSIS, AMIRAL GESTION

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*JOHN ROLFE*
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*VICTOR BONILLA*
PORTFOLIO MANAGER, ALLIANCEBERNSTEIN
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