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• CAPITAL PARTNERS •

Moderna
moderna
RBD: Receptor binding domain
RBD
ACE2
E484K
N501Y
K417N
B.1.1.7
B.1.351
P.1
UK Variant
South African Variant
Brazilian Variant
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Fundamentals up, stocks down: update on the growth sell-off

May 2021 Investment Update

If you were forwarded this you can subscribe to our updates here, and past letters here.

Dear investors and well-wishers,

The fund advanced +1.2% in April taking us to +5.7% net for the calendar year-to-date and a net IRR since inception of 29% per annum, and +75% net for the financial year-to-date.

Net return to 30 April 2021	%
Rolling 1 year March 21	134%
Financial YTD 2021	76%
Calendar YTD 2021	6%

Net IRR since inception	29%

I recorded a podcast with Dr Robert Stretch. Rob graduated from Yale Medical School and conducted research at UCLA and BIDMC, one of Harvard's teaching hospitals.

In May there was a further sell-off in growth stocks that seems to have stabilised. Multiples are down ~50% from the start of the year, using estimates for 2021. Ofcourse, given the growth of these companies the year-to-date change is much less, as is the move in the portfolio:

	EV/Sales 2020	EV/Sales 2021	Change in multiple	Growth rate	YTD price change	Distance from 52wh
Tesla	21	11	-48%	74%	-16%	-35%
Afterpay	46	26	-44%	104%	-27%	-46%
Shopify	44	28	-36%	110%	-4%	-28%
Crowdstrike	54	30	-44%	74%	-10%	-24%
MercadoLibre	21	10	-49%	158%	-21%	-34%
Sea	22	12	-45%	102%	9%	-24%
Twilio	30	17	-42%	62%	-12%	-35%
Trade desk	45	20	-55%	48%	-35%	-47%
Carvana	8	4	-46%	104%	-1%	-27%
Teladoc	28	11	-62%	79%	-30%	-55%
Grow Generation	11	5	-58%	173%	-1%	-41%
Farfetch	13	6	-57%	46%	-34%	-43%
Ultragenyx	30	18	-38%	174%	-20%	-38%
Square	10	4	-57%	79%	-4%	-27%
Simple average	**27**	**14**	**-49%**	**99%**	**-15%**	**-36%**

Source: Sentieo. We made some adjustments to estimate current organic growth rate. EV/Sales multiples are taken using market data from CY20 and average estimates for CY21.

We were buyers of many of the stocks above over the last two weeks.

Software has also been hit, and we made some small purchases over the last week or so.

Software	EV/Sales 2020	EV/Sales 2021	Change in multiple	Growth rate	YTD price change	Distance from 52wh
Snowflake	133	77	-42%	117%	-19%	-56%
Cloudflare	51	34	-34%	50%	-8%	-30%
Shopify	45	29	-36%	110%	-2%	-30%
Crowdstrike	54	30	-44%	74%	-14%	-27%
Coupa	45	26	-42%	47%	-25%	-41%
Datadog	48	26	-47%	56%	-15%	-35%
Trade desk	45	20	-55%	32%	-19%	-49%
Atlassian	31	27	-14%	23%	-10%	-19%

OKTA	40	26	-34%	40%	-13%	-25%
Twilio	30	17	-42%	62%	1%	-39%
MongoDB	42	20	-52%	40%	-26%	-43%
Fastly	34	12	-65%	40%	-23%	-71%
ServiceNow	24	16	-33%	31%	-9%	-24%
Elastic	23	15	-35%	38%	-24%	-42%
Alteryx	16	9	-47%	3%	-32%	-60%
Average	**44**	**26**	**-42%**	**51%**	**-16%**	**-41%**

Source: Sentieo. We made some adjustments to estimate current organic growth rate. EV/Sales multiples are taken using market data from CY20 and average estimates for CY21.

Inflation

The latest fall was triggered by a US Inflation print of 4%. So why is the Fed so seemingly relaxed?

One reason is that the year-on-year number is flattered by being compared to the same time last year, when consumer prices actually fell (our own 12 month number shows a similar effect). Another is that there has been a clear change in policy preference towards full employment - and this is a very welcome change.

One of the hangovers of 2008/2009 was stagnant wages. Full employment disproportionally benefits all kinds of disadvantaged members of society, who are far more likely to find work when labour markets are tight.

The SPAC bust up continued and rightly so. CEOs that published financial forecasts out to CY25 are already beginning to downgrade expectations for CY21, in some cases barely weeks since marketing those same forecasts to new investors.

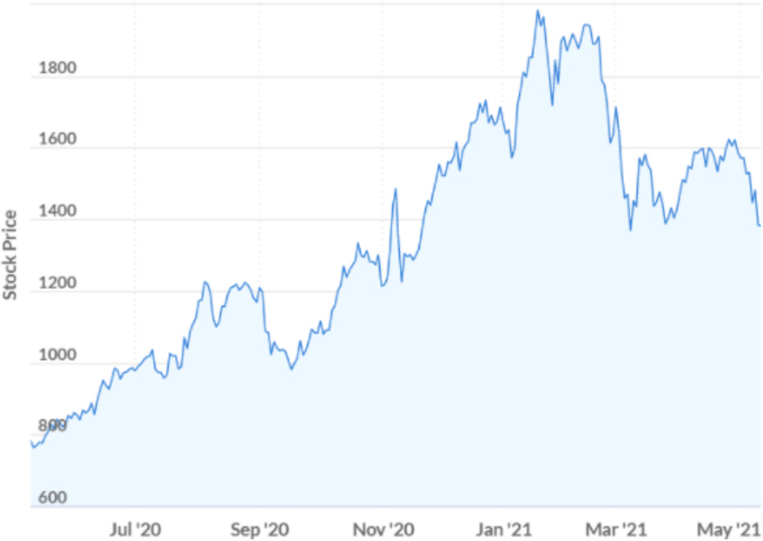
Furthermore, the many retail investors who bought their first shares in March or April last year are experiencing their first sell-off. Some have accumulated hundred of thousands of followers since, so watching this all play out on twitter is quite a sight.

Our view is that inflation is likely to benefit our companies, as they all have extensive pricing power. This was seen in their ability to grow during the short-lived contraction of 2020. Having said that, we think multiples are past their highs of this cycle, so returns from here will be driven by fundamentals. Through this reporting season we've had an opportunity to glimpse under the hood and see how companies are tracking, and make sure we own a portfolio of winners only.

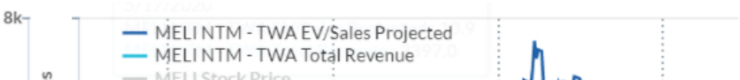
As with the sharp sell-offs of 2015, 2016, and late 2018, we see rate-induced sell-offs as rare opportunities to buy into rockstar companies, with the caveat that we expect the more speculative end of the market to continue to suffer.

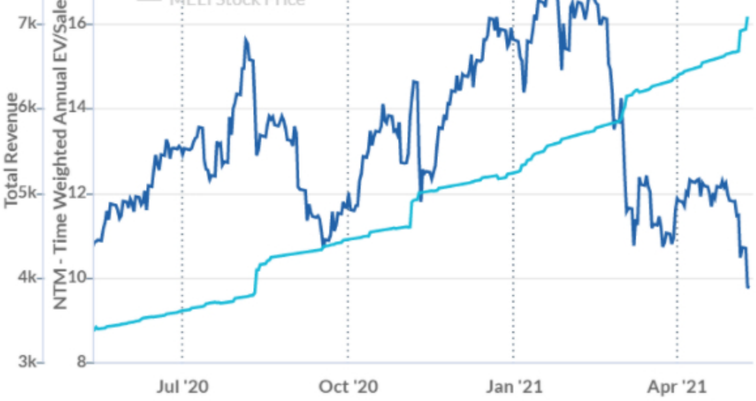
Here is a selection of portfolio companies showing how well they are currently performing, and how far they have fallen from recent heights.

MercadoLibre **(down 32% from recent highs)** is the largest online ecommerce and payments ecosystem in Latin America. They reported net revenues in the first quarter of 2021 of $1.4b, a year-over-year increase of 158%. They have now experienced three consecutive quarters of sales growth over 140%.

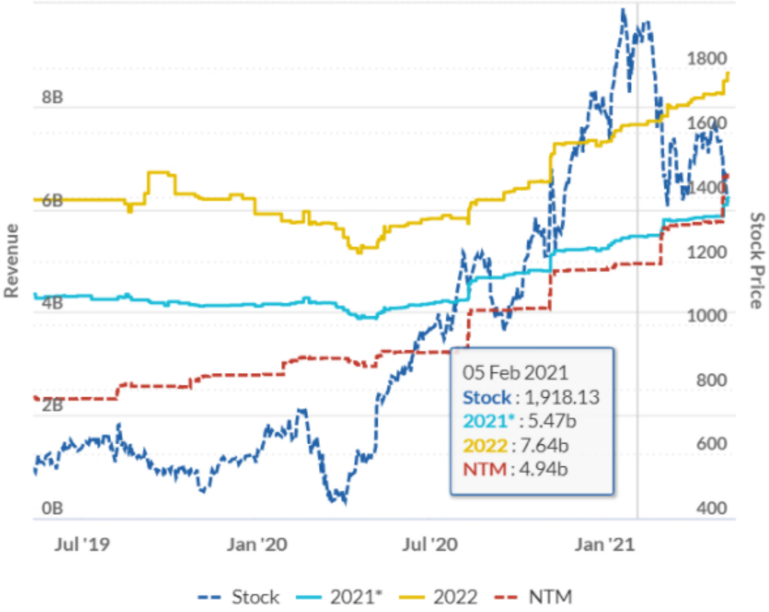


On an EV/Sales basis, this is as cheap as the company has traded in a year.





Estimates have also been steadily increasing:



We added to MercadoLibre over the past week and it is now one of our largest positions at ~6%.

Negative price momentum but positive operational momentum is something of a sweet spot for us.

Roblox **(down 10% from recent highs)** is a recent IPO we invested in, and in a sharp contrast to first-time SPAC reporters, smashed expectations recording $387m in first quarter revenue, an increase of 140% year on year.

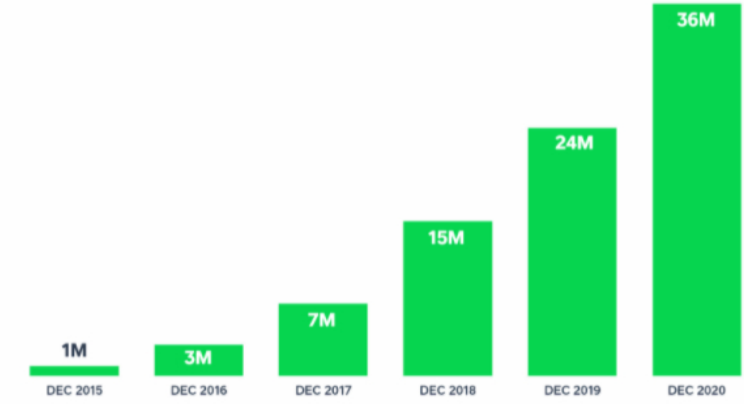
Bookings were up 160% and free cash flow was up over 4x year-on-year. These kind of growth rates in a US$40 billion dollar company are precisely where we focus our fund.

Daily active users are growing at 79%, but more impressively, spend per customer grew at 48%, showing the firm is getting better and better at monetising their enormous user base and justifying their serious free cash flow investment in user acquisition.

Square **(down 27% from recent highs)** reported over 200% growth, but this includes bitcoin, so perhaps a better metric is growth in gross profit, which grew 79% year-on-year.

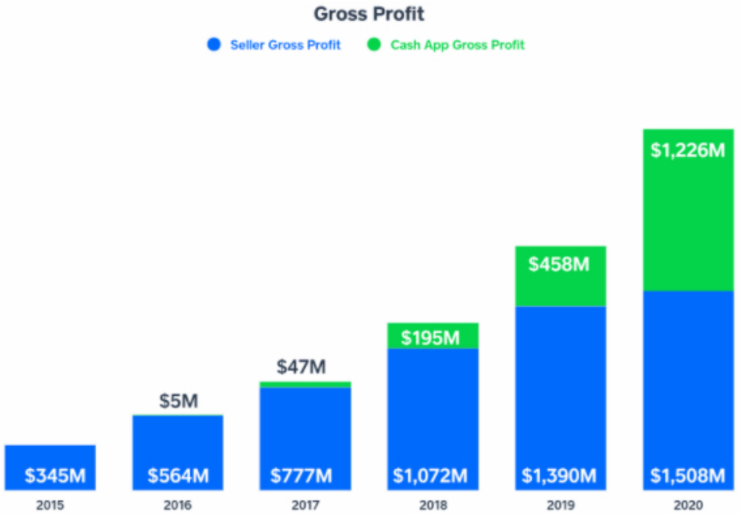
Our thesis here is that Square is one of only a handful of players that can create a closed payment loop between merchant and customer networks.

Square, ofcourse, started with merchants, but has invested heavily in their consumer offering. There are now over 36 million people transacting through Square's app:



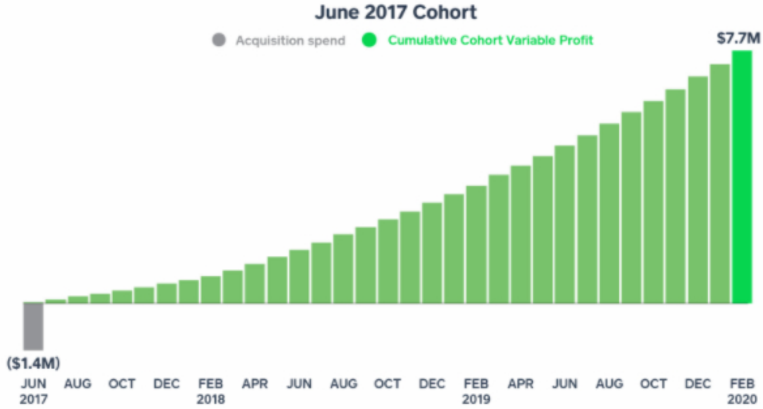
Source: Square Investor Relations

This is precisely the return on investment and profile we look for in portfolio companies:



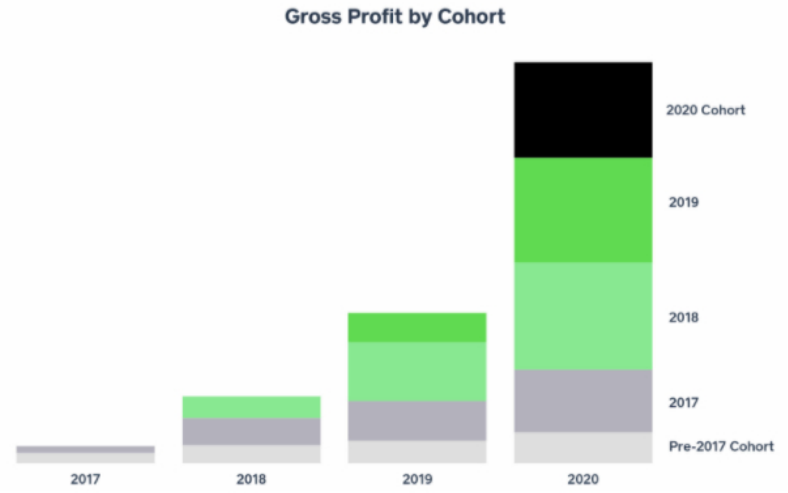
Source: Square Investor Relations

Square continues to get exceptional gross profit dollar returns on acquisition spend:



Source: Square Investor Relations

Another way of looking at this is by cohort. In five more years, there will be five more cohorts adding to this chart:



Source: Square Investor Relations

We are in these companies for the long term.

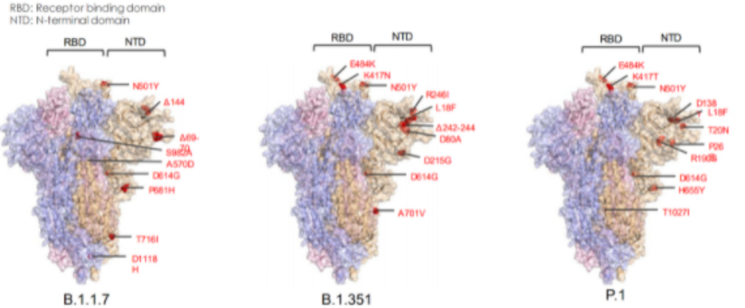
Moderna **(down 19%)** finally reaped the rare financial rewards of years of hard scientific work and risk, recording quarterly revenue of $1.9 billion and net income of $1.2 billion. 102 million doses were shipped, suggesting a ~$19 average dose price. The firm expects to ship 1 billion doses this year, and 2 billion doses next year.

Multiply those numbers by the average selling price and you can see why we think the current $60 billion market cap still represents good value.

The real value of course, is that $15-20 can vaccinate against a disease that resulted in trillions of dollars of spending. It was great to see the Australian Government finally spending up and purchasing 20 million doses from Moderna, a trivial amount relative to the fortunes spent on JobKeeper and JobSeeker, and equivalent programs around the world.

The company has signed Advance Purchase Agreements for $19.2 billion over the next twelve months, and has $8.2 billion cash already on its balance sheet. So far the vaccine seems to work against new variants from around the world, and in any case, can easily be amended.

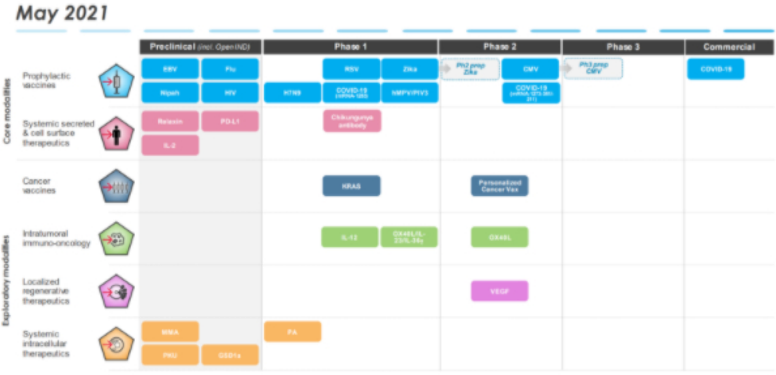
The red dots below mark the changes of different variants in the spike protein (B117 is a UK variant, B1351 is a South African variant, and P1 seems to have come from Brazil - usual caveats apply).



Coronavirus spike protein with mutations by variant. Source: Moderna Investor Relations

Moderna plans to target mutations in three ways: by developing vaccines for specific variants, by delivering a multivalent vaccine, and by offering third booster shots of their existing vaccine or the second generation equivalent.

As we have discussed at length, Moderna's approach is likely to be effective for a variety of other viruses from herpes to influenza, and a host of otherwise untreatable rare genetic diseases.



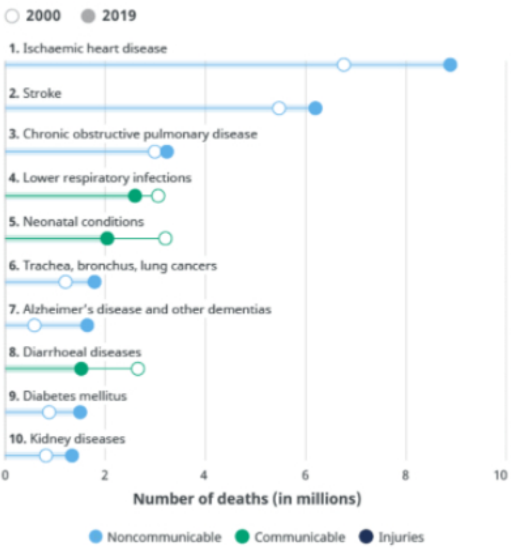
May 2021

		Preclinical *(incl. Open IND)*	Phase 1	Phase 2	Phase 3	Commercial
Core modalities	Prophylactic vaccines	EBV Flu Nipah HIV	HTN9 RSV Zika COVID-19 (mRNA-1283) hMPV/PIV3	*Ph2 prep Zika* CMV COVID-19 (mRNA-1273.351-211)	*Ph3 prep CMV*	COVID-19
	Systemic secreted & cell surface therapeutics	Relaxin PD-L1 IL-2	Chikungunya antibody			
	Cancer vaccines		KRAS	Personalized Cancer Vax		
Exploratory modalities	Intratumoral immuno-oncology		IL-12 OX40L/IL-23/IL-36γ	OX40L		
	Localized regenerative therapeutics			VEGF		
	Systemic intracellular therapeutics	MMA PKU GSD1a	PA			

Moderna's pipeline. Source: Moderna Investor Relations

Lower respiratory infections still consist of one of the leading causes of death globally, far ahead of most cancers.

Leading causes of death globally

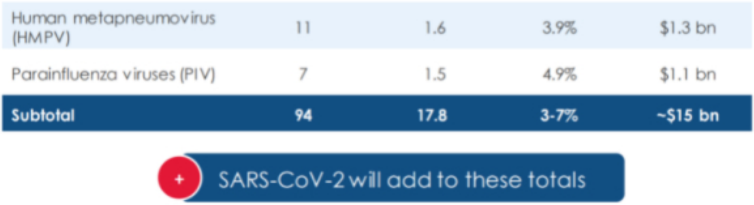


Source: WHO Global Health Estimates.

Current influenza viruses are manufactured in eggs, and accumulate mutations adapting to egg life that reduce their effectiveness. mRNA vaccines are a far more elegant approach to diseases that are particularly nasty for those young and old:

US adults age 65+

Respiratory Virus	Within Season Outpatient (Attack Rate per 1,000)	Annual Inpatient (Attack Rate per 1,000)	Inpatient Mortality	US Estimated Annual Cost
Influenza (all)	32	4.3	3-4%	$5.6 bn
Respiratory syncytial virus (RSV)	19	1.9	5.2%	$1.5 bn
Human coronavirus (HCoV) *excl. SARS-CoV-2*	18	2.6	7.3%	$1.4 bn
Human rhinovirus (HRV)	12	5.9	3.2%	$4.0 bn



Human metapneumovirus (HMPV)	11	1.6	3.9%	$1.3 bn
Parainfluenza viruses (PIV)	7	1.5	4.9%	$1.1 bn
Subtotal	**94**	**17.8**	**3-7%**	**~$15 bn**

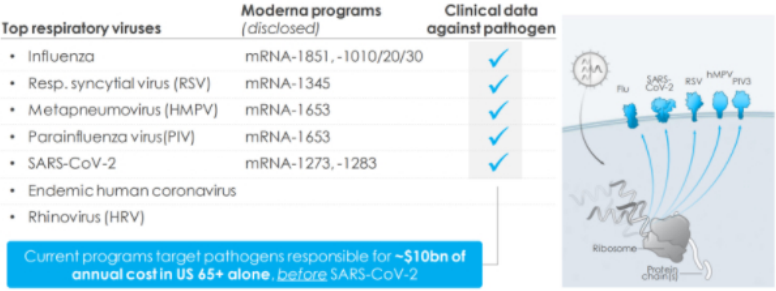
+ SARS-CoV-2 will add to these totals

Source: Moderna Investor Relations

Endemic coronaviruses from past epidemics are still causing serious trouble, and over the coming years Moderna will be able to offer regular injections targeting multiple indications, perhaps even with a single vaccine protecting from new coronavirus strains, influenza, and other respiratory diseases.

This isn't speculation: the principles have all been decisively proven and it would be far more surprising if this wasn't possible.

This line of thinking is what made us so optimistic about vaccine approvals last year, when Moderna was a fraction of the price. Given the success of their early safety and immunological studies, it would have been more surprising if it didn't work, though this was a time when it was taboo for any policymaker to be so optimistic.



Top respiratory viruses	Moderna programs *(disclosed)*	Clinical data against pathogen
• Influenza	mRNA-1851, -1010/20/30	✓
• Resp. syncytial virus (RSV)	mRNA-1345	✓
• Metapneumovirus (HMPV)	mRNA-1653	✓
• Parainfluenza virus(PIV)	mRNA-1653	✓
• SARS-CoV-2	mRNA-1273, -1283	✓
• Endemic human coronavirus		
• Rhinovirus (HRV)		

Current programs target pathogens responsible for **~$10bn of annual cost in US 65+ alone**, *before* SARS-CoV-2

Source: Moderna Investor Relations

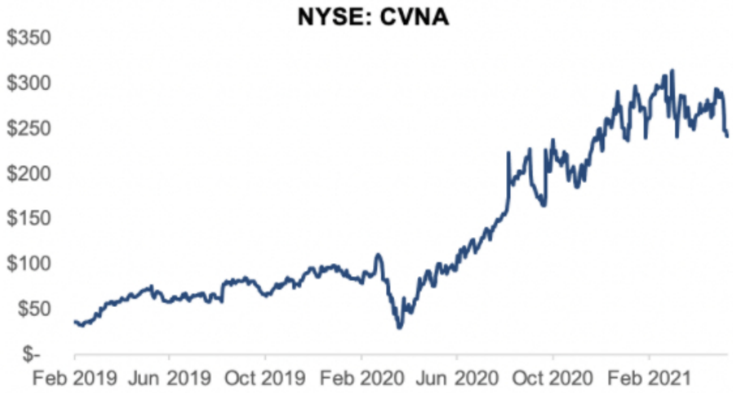
Other compelling late stage targets include CMV from the Herpes family, which affects one in 200 babies, causing congenital defects and, with age, immune dysfunction. Epstein-Barr Virus, which increases risk of multiple sclerosis by 10x-

15x, is another worthy target, as, ofcourse, is HIV, which while tamed, can still have frightening long term health consequences.

Moderna has promised not to enforce IP protections during the pandemic, but retains significant manufacturing know-how around mRNA and the proprietary lipid nanoparticles that proved the breakthrough technology.

Those working at Moderna and firms like it are the true heroes of the modern era, despite being under fairly vicious attack in 2020 from short sellers, and today from politicians and various celebrities.

We first wrote about **Carvana** **(down 30% from recent highs)** in early 2019. The company has advanced over 6x since then.

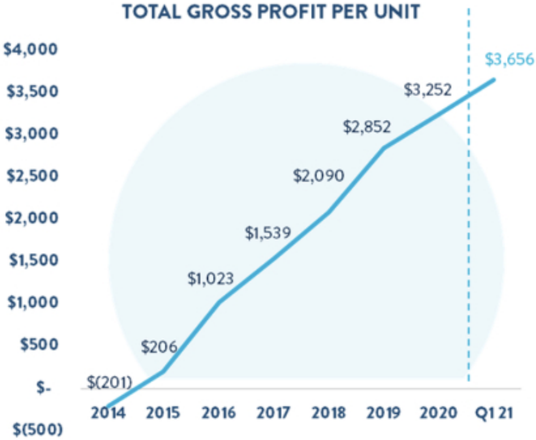


Return since initial purchase

Carvana is an online dealership where cars can be bought on an app and delivered days later. The firm can handle every part of the process from insurance, to trading in your old vehicle.

In addition to convenience, the customer experience is vastly ahead of that of visiting a dealership. Carvana offers a nationwide inventory rather than the several hundred vehicles that just so happen to be on the lot, and by saving on sales commissions they underprice the market by ~$1,000/car. Customers can return the car after a week for no cost - effectively a 7 day test-drive, and receive a 100 day warranty.

This quarter they recorded $2.2b in revenue, an increase of 104%, with gross profit increasing 145% to $338m year-on-year. Things remain on track, and despite all their progress, the firm has a miniscule market share.



Source: Carvana Investor Relations

Alnylam (down 25% from recent highs) has much in common with Moderna. It has proven platform technology, only instead of mRNA they own key technology around RNAi - the i standing for interference. Like Moderna, they've generated an extensive pipeline across genetic medicines, cardio-metabolic diseases, infectious diseases, and those of the eye and central nervous system.

And like Moderna, the company has already proved it can execute. Net product revenues for Q1 2021 were $136m, a 89% increase year-on-year. They have forecast 40% revenue growth to 2025, which unlike less scrupulous management forecasts, we think they can easily achieve.

The firm is targeting over 4 Investigational New Drug applications each per year.

Outlook

Feels strange to write this but today marks the best environment we've seen in a long time for over-leveraged, old economy industrial stocks. Supply chains are stretched and an industrial recovery is in full swing, fully supported by policymakers.

Nevertheless, irrespective of the growth-vs-value debate, the value of our portfolio companies will be driven by fundamentals,as they increase their user base, gross profit dollars, and in the case of the life sciences, bring additional treatments to market.

The beauty of ultra-growth companies is that you don't have to wait long for them to improve fundamentally. As we move into the second half of 2021, many are 30-50% larger than they were at the start of the year, and will do the same again over the next six months.

Situations when stock prices are down, but fundamentals higher make for good buying opportunities (in funds as well as stocks!) in our view.

We will post an update focused entirely on the work we have been doing in the life sciences next Monday morning at 10.30am Sydney time, please register here.

Best

Michael

Please note: We are now taking applications weekly, so if applications, funds and supporting documents are received by 2pm on a Friday, the investment will be priced for Friday COB / Monday morning start. We are also available on Netwealth and Hub24.

If you'd like to invest with us, you can access our investment portal and fund documentation through the button below, or simply reply to this email and we'll be in touch.

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