COGNIZANT

4TH QUARTER 2021

A NEW ERA IN VACCINOLOGY

DANAHER:
ALWAYS EVOLVING

ASPEN:
RIGHT PLACE, RIGHT TIME

WEALTH MANAGEMENT:
OPERATING IN COVID-19 AND BEYOND

OLDMUTUAL

WEALTH

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INTRODUCTION

CHRIS POTGIETER, MD: OLD MUTUAL WEALTH TRUST COMPANY (PRIVATE CLIENT SECURITIES | TREASURY AND ADVISORY SERVICES | FIDUCIARY SERVICES)

The discovery of the new Omicron variant by South African scientists in late November sent markets into a tailspin. In these uncertain times, there appears to be a preference to act first and find out the facts later, with detrimental effects on businesses and capital markets. While still too early to make sweeping statements, it does appear that SA did the world a favour by alerting it to the Omicron variant. Unfortunately, this openness and transparency was met with fear and knee-jerk reactions by both policymakers and investors.

The market's reaction is unsurprising. Whenever there is uncertainty, markets fill that void with fear, which presents in the form of heightened market volatility. Looking back over the past year, 2021 has been filled with many instances of uncertainty and resultant market volatility. In fact, a similar pattern emerged when the Delta variant was discovered in June, with markets selling off sharply and subsequently recovering. This serves as an important reminder of why it is important to maintain perspective and not to get caught up in the short-termism that dominates news headlines and markets. While predicting the future is a futile exercise, investing in high quality businesses that are able to withstand the market volatility that ensues from the onset of unknown events is not futile. Accepting this fact will help investors maintain the perspective and fortitude required to stay the course – through both good and bad times.

On that note, I'm pleased to introduce our latest issue of Cognizant, which delves into one of the most positive impacts of the COVID-19 pandemic — the technological advances and efficiencies achieved in vaccinology. In our feature article, Private Client Securities (PCS) Chief Investment Officer, Andrew Dittberner, takes us on an interesting journey through the history of vaccines and unpacks the technology and developments that led to the COVID-19 vaccines making major strides by going from development to approval in record time.

Given that COVID-19 vaccine manufacturers currently find themselves in an attractive position, Andrew then looks at the investment opportunities and explains how previously lesser-known biotechnology companies, Moderna and BioNTech have received a substantial boost in terms of current and future potential earnings. He also explains how the PCS Global Equity Portfolio maintains meaningful exposure to the exciting innovations and technologies that are set to shape the future of vaccine science and disease treatment.

The pandemic has also proven to be a tailwind for leading science and technology group, Danaher, which develops instruments, consumables and solutions that pharmaceutical and biotech companies use to research, develop and manufacture vaccines and other therapies. In addition, Danaher is one of the largest providers of COVID-19 testing equipment. In our global company article, PCS Senior Research Analyst, Victor Mupunga, discusses how Danaher (a holding in our Global Equity Portfolio since 2017) has successfully evolved from being a real estate and tyre manufacturing company to being an integral part of the most complex modern scientific achievements.

On the local front, Aspen entered into a much-publicised deal with Johnson & Johnson (J&J) that saw it becoming the first — and currently, only — African manufacturer of a COVID-19 vaccine. In our local company article, PCS Research Analyst, Tasneem Samodien, provides an analysis of Aspen and notes that while its future certainly appears bright, until fairly recently, the company was often used as a cautionary tale about what could go wrong with a business model dependent on leveraged acquisitions. However, management's more recent pivot to focus on manufacturing is a welcome strategic shift and we are keeping Aspen on our watch list.

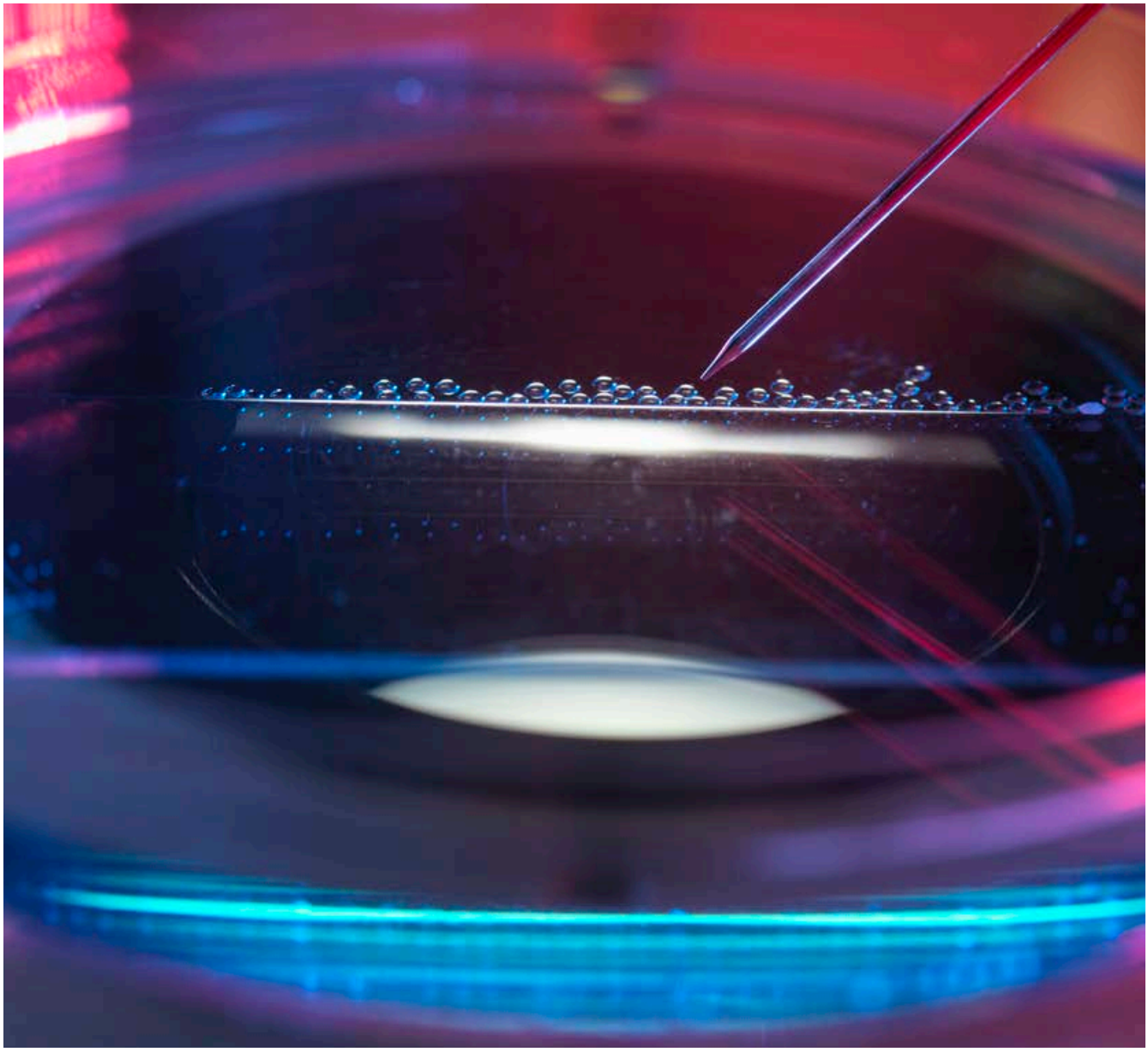
Farhad Sader, Managing Director at Old Mutual Wealth, wraps up this issue with an update on how our business has navigated the COVID-19 pandemic and other key changes during the past 18 months.

To conclude, I'd like to take this opportunity to wish you and your loved ones well over the holiday season. May you have a safe and peaceful break.

All the best,
Chris

A NEW ERA IN VACCINOLOGY

ANDREW DITTBERNER, CHIEF INVESTMENT OFFICER AT PRIVATE CLIENT SECURITIES



COVID-19 undoubtedly turned the world upside down. It profoundly changed how we live and interact with each other, how we work and how we move around. In essence, every aspect of our lives has been affected to various degrees. However, one of the most positive impacts of the COVID-19 pandemic lies in the area of vaccine development, as the technological advances and efficiencies achieved in tackling the virus have shaped the future of vaccine science and disease treatment.

"An unprecedented global collaborative effort and major technological advances were the main factors driving the rapid COVID-19 vaccine development timeline."

Vaccines have certainly become a hot topic of debate, with many people being uncertain about their effectiveness[1] and long-term impacts. However, perhaps understanding the history of vaccines, the technology currently being used to produce them, and the process of getting a vaccine to market, may go a long way in addressing many of these uncertainties.

A BRIEF HISTORY OF VACCINES

For thousands of years, Chinese medicine focused on prevention rather than cure. In contrast, Western medicine has predominantly focused on curing illness, rather than preventing it. Vaccines, however, are the one area of preventative medicine that the West has pioneered.

Despite disease pandemics littering human history, vaccinations are a relatively recent tool in our medical armoury. With the onset of smallpox in the 18th century, Dr Edward Jenner stumbled upon a preventative measure. During the smallpox epidemic, Dr Jenner noticed that the milkmaids rarely contracted the disease. He realised that they were not contracting smallpox as a result of them contracting cowpox, which was a much milder variant of smallpox found in cows. Milkmaids with cowpox generally got a few pustules on their hands, which healed relatively quickly. Thereafter, they were immune to the smallpox virus. Having put the pieces together, on 14 May 1796, Dr Jenner was confident enough to inject a child with material from a cowpox pustule on a milkmaid's hand. After recovering from cowpox, Dr Jenner exposed the child to the smallpox virus. As expected, the child developed no smallpox symptoms. Dr Jenner repeated the experiment two years later, and reported the same results. Having proved it worked with scientific evidence of the time, Dr Jenner devised the very first vaccination strategy.

A century later, medical knowledge had advanced to the point that infectious diseases were better understood. At this juncture, it became apparent that after the first exposure to certain infectious diseases, it was rare to contract the same disease a second time. Effectively, the first exposure immunised the individual. As scientific understanding continued to grow, so too did the approach to vaccines. Vaccinations have resulted in smallpox being the only fully eradicated infectious disease. Polio, however, is not far behind. Dr Jonas Salk played a pivotal role in achieving this by devising and implementing the first polio vaccine.

Prior to Dr Salk's vaccine, the paradigm of vaccine development was to first isolate a weakened micro-organism, and to then administer the weakened virus to a patient. The weakened virus would cause an innocuous infection that would allow the patient to develop immunity to the virus. However, in his prior work with the flu vaccine, Dr Salk had used non-infectious killed viruses to create immunity. Dr Salk was able to kill the poliovirus without destroying its ability to create an immune response. Dr Salk was so certain of the polio vaccine's safety and effectiveness that he administered the first vaccines to his three children.

It would be remiss not to mention another giant in the field of vaccinology, Maurice Hilleman. It is estimated that to this day, Hilleman's vaccines save an estimated eight million lives per year. Having initially developed a vaccine for Japanese B encephalitis, which was urgently needed for US troops at the Pacific

[1] The words "efficacy" and "effectiveness" are often used interchangeably. However, technically they do not mean the same thing. Efficacy pertains to the performance of a drug or vaccine during clinical studies. Effectiveness refers to the performance of a drug or vaccine in the real world.

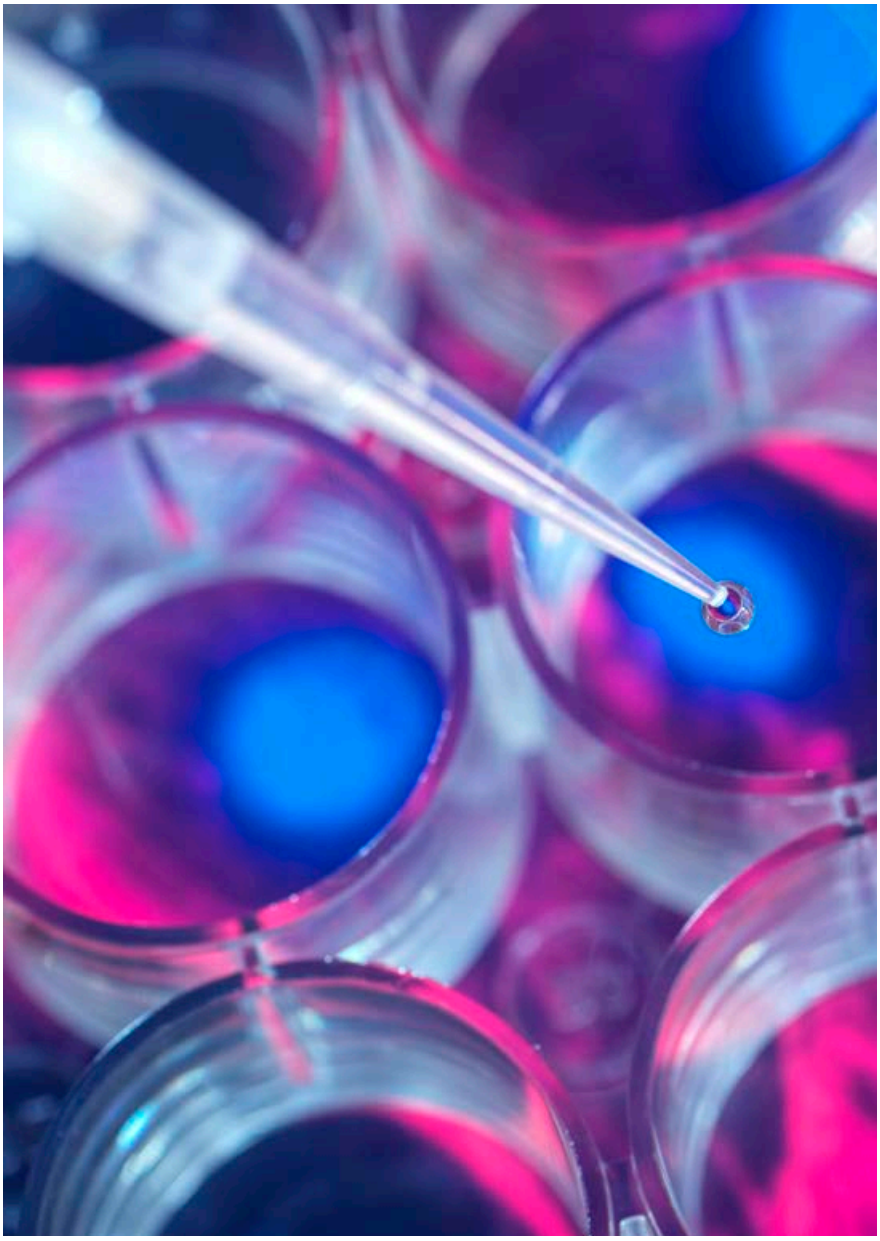
Front of World War II, Hilleman went on to develop vaccines for Asian (Hong Kong) flu, measles, mumps, rubella, MMR, meningococcal polysaccharide, pneumococcal pneumonia, hepatitis A, hepatitis B, and chickenpox. However, his discovery of the mumps vaccine highlights his dedication to his profession of virology.

In March 1963, Hilleman awoke to his five-year-old daughter not feeling well. Given her symptoms, he suspected mumps. Not wanting to waste an opportunity, he quickly drove to his Merck offices to get swabs and a vial of broth. Having swabbed his daughter's throat, and placing the swab in the broth, he returned to his office to freeze the broth before attending to his daughter. It was this swab that allowed Hilleman to create the mumps vaccine through a process of attenuating/weakening the virus by passing it through chicken eggs several times. With the current mumps vaccine at the time either causing severe mumps symptoms or not being effective enough, Hilleman knew he needed a different strain of the virus to create an effective vaccine, and his daughter gave him that opportunity. Having received many professional awards throughout his career, Hilleman never received the much-deserved Nobel Prize. As a result, despite having a huge impact on everyday life, Hilleman remains largely unknown to the general public.

A RACE AGAINST A VIRUS

Vaccines have continued to advance over the years. Historically, the length of time to develop a vaccine and take it to market varies, depending on the vaccine. As an example, the chickenpox vaccine took 28 years from the start of the research to full US Food and Drug Administration (FDA) approval, while the mumps vaccine took four years. However, for a number of reasons, the COVID-19 vaccines were able to break records by going from development to approval in less than a year.

An unprecedented global collaborative effort and major technological advances were the main factors driving the rapid COVID-19 vaccine development timeline. Vaccine technology used today has taken many years to develop, and it is this technology, explained below, that significantly reduces the first stage of a vaccine's development, i.e. the exploratory stage. Furthermore, the third stage of development (i.e. the clinical development stage) was reduced by overlapping the various phases of trials, as opposed to shortening the trials, as depicted in the accompanying images. Then finally, vaccine manufacturing began before licensing to allow the vaccines to reach the market as soon as possible following regulatory approval.



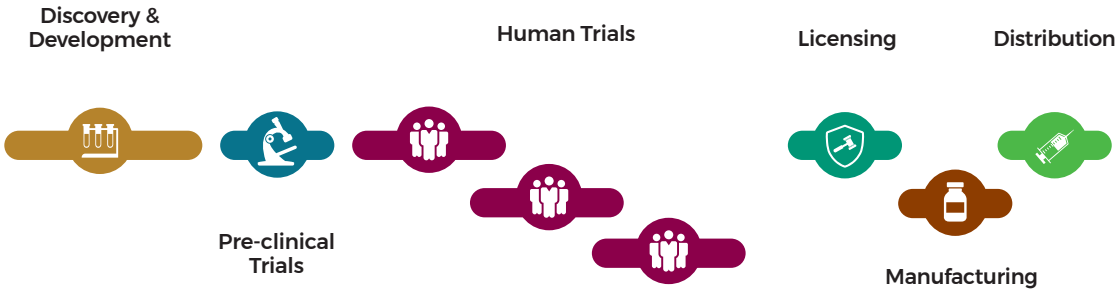
A POWERFUL NEW APPROACH TO VACCINOLOGY

Today's vaccine technology allows manufacturers to "program" cells to produce the required spike protein that stimulates the immune system to develop resistance to the relevant pathogen[2]. In order to do this, manufacturers require the genetic sequence of the virus. Amid the initial escalation of the health emergency in Wuhan, the Chinese authorities released the COVID-19 genetic sequence on 10 January 2020, having mapped it six days earlier. With the genetic sequence in hand, scientists around the world were immediately able to start developing their vaccine approach to the virus.

THE TRADITIONAL SIX STAGES OF VACCINE PRODUCTION

VS

THE SIX OVERLAPPING STAGES OF THE COVID-19 VACCINE PRODUCTION



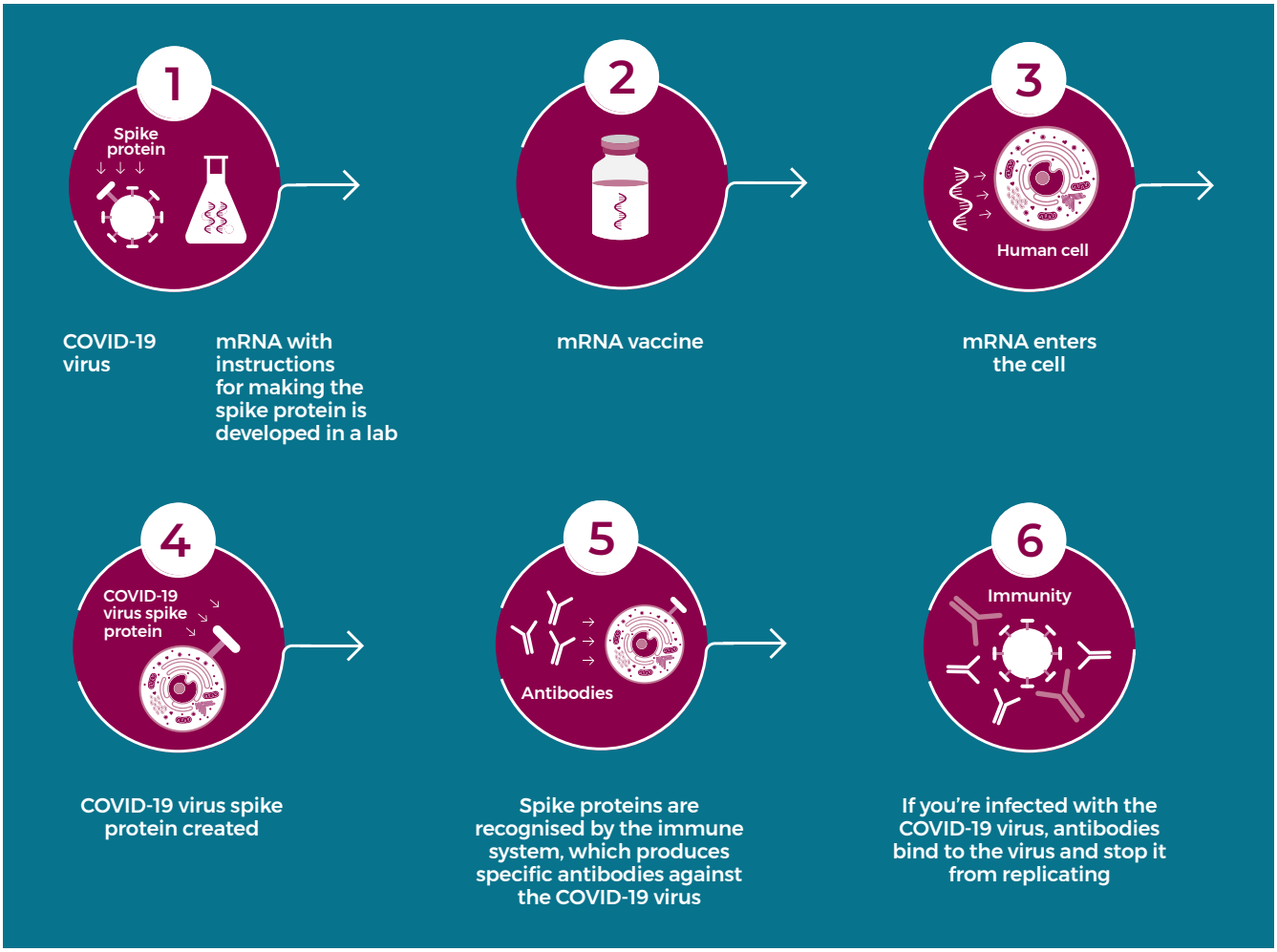
[2] A pathogen is an organism containing bacteria and/or a virus. It is more commonly known as a germ.

The COVID-19 vaccinations are the first to make use of this approach, which is expected to allow many other vaccinations and treatments against known diseases to be produced in a relatively short space of time at a much lower cost. The two types of vaccines that use this approach are messenger RNA (mRNA) and adenovirus vaccines.

To understand how these vaccines work, we need to take a step back and understand how a cell functions. Nearly every function in a living organism is carried out by proteins, and our cells therefore need to manufacture them constantly. In order to manufacture proteins, our cells make a single stranded copy of DNA, called mRNA. Each strand of mRNA holds the information on how to make one type of protein. Our cells are able to read the mRNA and follow the instructions to produce a protein.

While conventional vaccines contain viral proteins or disabled forms of the virus itself, mRNA vaccine researchers focus on the spike protein only, as opposed to the virus. However, instead of assembling and purifying the spike protein in the lab, these researchers identify the part of the genetic sequence that creates the spike protein. Synthesising mRNA then allows them to use the genetic sequence to program our cells to create the COVID-19 spike protein. Once inside the body, cells are able to read the mRNA and produce harmless spike proteins of their own. This creates the immune response required to build up antibodies that are ready to fight the real virus, should it appear. The Pfizer-BioNTech and Moderna vaccines employ this approach.

Adenovirus vaccines follow a similar approach, but use DNA, which is more stable, as opposed to mRNA. To get the adenoviral DNA into a cell, researchers need to use a harmless virus known as an adenovirus vector or a carrier. Once injected into the body, the carrier releases the adenoviral DNA into the cell, where the COVID-19 spike gene is transcribed into mRNA. From there, a similar process as described above ensues and the COVID-19 spike protein is produced by the cells. The Johnson & Johnson (J&J) and AstraZeneca vaccines employ this approach.



Despite the advantages of following these new approaches to vaccines, there are a couple of drawbacks. Firstly, mRNA breaks down very easily. As such, it must be delivered inside a fatty barrier and needs to be kept ultra-cold, which is not ideal for a vaccine that needs to reach all corners of the globe. Given that DNA is more stable than mRNA, adenovirus vaccines do not require the ultra-cold conditions. However, the drawback of adenovirus vaccines is that over time, the body can build up resistance to the adenoviral carrier. This means that the carrier needs to be updated constantly in order to ensure the vaccines' efficacy over time.

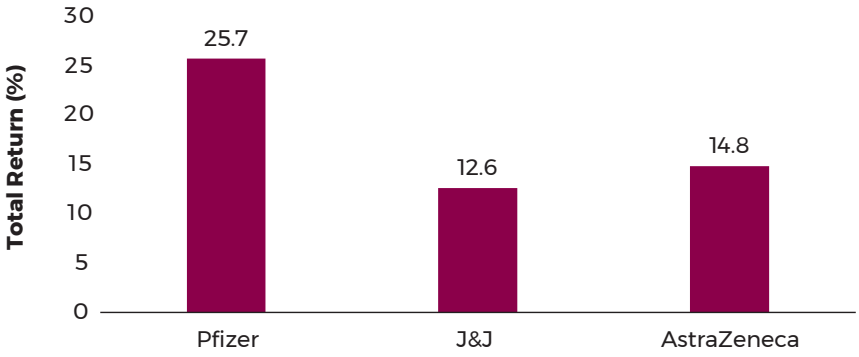
So while vaccine technology has come a long way, from an investment perspective, is investing in vaccine manufacturers an attractive investment opportunity?

THE INVESTMENT OPPORTUNITY

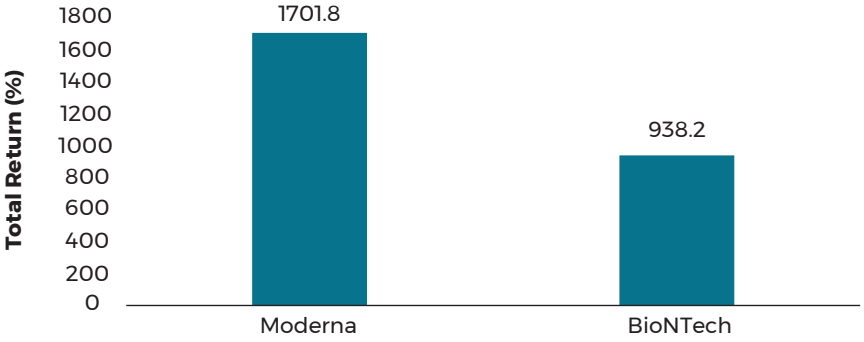
It is not often that a business can accurately cite the entire globe as its target market. Yet the manufacturers of the COVID-19 vaccines find themselves in that enviable position. And while vaccines are very much the talk of the town today, this has not always been the case. Curing illness through medicine has always been seen as a far more profitable business to undertake by pharmaceutical companies. Medical drugs are often taken on an ongoing basis, as opposed to a vaccine, which is typically a once-off treatment. As a result, vaccines have found their place in the back alley of the pharmaceutical industry. Until recently, of course.

Looking at the J&J, Pfizer and AstraZeneca share prices shown in graph 1, it would appear that these large pharmaceutical companies have not fully benefited from their participation in bringing the COVID-19 vaccines to market. This may be due

Graph 1: Share Price Total Returns of Large Pharmaceutical Companies
Jan 2020 – 1 Dec 2021



Graph 2: Share Price Total Returns of Biotech Companies
Jan 2020 – 1 Dec 2021



to investor hesitancy over the success of the vaccines, as well as the fact that both J&J and AstraZeneca have explicitly announced that they will be producing the vaccines on a non-profit basis. Pleasingly, it seems that in the event of a global pandemic, public benefit outweighs corporate profits.

For Moderna and BioNTech, previously lesser-known biotechnology companies, their involvement in producing the COVID-19 vaccines has resulted in exponential growth in their share prices (see graph 2). As their sector classification suggests, these companies have been involved in the technology aspect of medicine, and have been focusing their efforts in various technological spaces, including mRNA technology. As such, neither business has brought a profitable product to market until their respective mRNA vaccines.

There are two main reasons for the significant difference in the share price performance of the pharmaceutical and biotech companies. Firstly, the larger and more established pharmaceutical businesses have a sprawling array of pharmaceutical products that dwarf the potential earnings boost that may come from COVID-19 vaccines down the line. Conversely, the two biotech companies' earnings are solely reliant on the vaccines, at this stage. Therefore, the COVID-19 vaccines give these business a huge boost in terms of not only their earnings profile, but also by proving that their technology works and holds huge potential for the future. This future potential includes not only vaccines, but also medical drugs – both of which can be developed cost effectively within a short space of time.

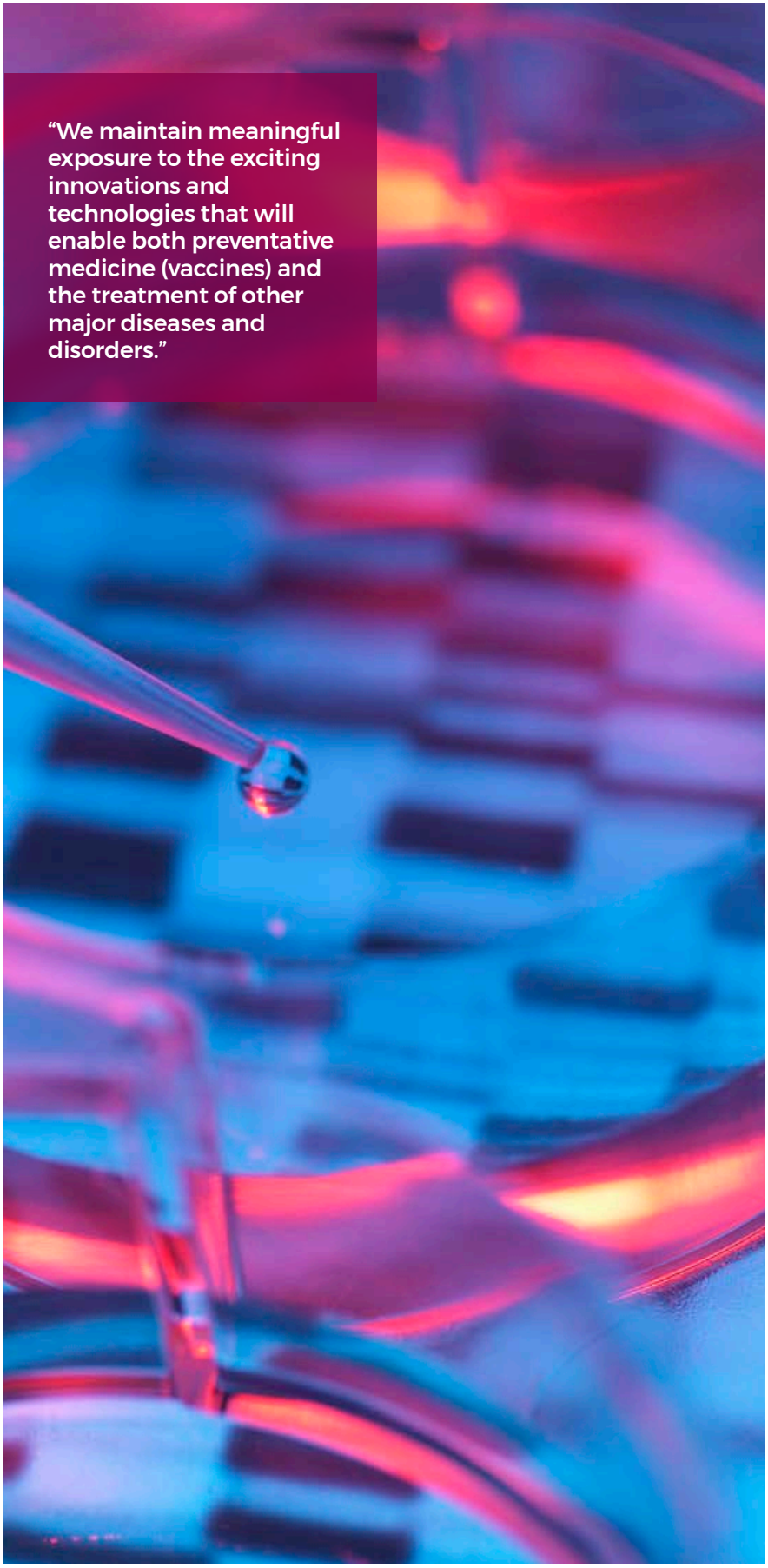
BALANCING GROWTH AND DEFENSIVE OPPORTUNITIES IN HEALTHCARE

With the World Health Organisation recently announcing their recommendation of a malaria vaccine to be used in Sub-Saharan Africa it is very clear that the use of vaccines is on the rise. And with recent advancements in technology, we can only expect that they will play an ever larger role in protecting us against infectious diseases.

The PCS Global Equity Portfolio maintains exposure to a number of biotech businesses. Through the iShares Biotechnology Exchange Traded Fund (ETF), the portfolio has exposure to a wide array of companies including both Moderna and BioNTech. Both companies contribute significantly to the ETF, given that they are in the top 10 holdings by weight.

The PCS Global Equity Portfolio also has direct exposure to J&J, which has been a holding in the portfolio since its inception in 2014. As the world's largest healthcare company, J&J offers exposure to a diverse portfolio of treatments for ailments in immunology, infectious diseases, cardiovascular and oncology. Importantly, there is no excessive exposure to a single ailment or patent loss. We believe that this diversification will continue to support stable earnings and dividend growth. J&J's large research and development budget helps to maintain a significant moat around its pharmaceutical segment. This is one of the key reasons the group has some of the leading drugs in the markets in which it operates – a position that we believe it will retain.

In this way, we maintain meaningful exposure to the exciting innovations and technologies that will enable both preventative medicine (vaccines) and the treatment of other major diseases and disorders.



TYPES OF VACCINES

Prior to the recent COVID-19 vaccines, there were traditionally four approaches to vaccinations.

ATTENUATED VACCINE:

Attenuated vaccines expose patients to a weakened form of the virus. The virus is passed through a series of cell cultures or animal embryos (typically chick embryos). The result is a weakened virus that is unable to replicate enough to cause illness. However, the weakened virus will still provoke an immune response that can protect against future infection. Vaccine examples include yellow fever, mumps and rubella.

INACTIVATED VACCINE:

Inactivated vaccines are created by "killing" a pathogen, typically through the use of heat or chemicals. While inactivating the pathogen, keeping it intact allows the immune system to still recognise it when used in a vaccine. Vaccine examples include polio, hepatitis A, flu, rabies and typhoid.

TOXOID VACCINE:

Not all bacterial diseases are directly caused by the bacteria themselves. Rather, some are caused by a toxin produced by the bacteria. Vaccines for these types of diseases are made by inactivating the toxin that causes the disease. As with viruses used in inactivated vaccines, a similar process is followed to inactivate the toxin. Vaccine examples include tetanus and whooping cough.

RECOMBINANT PROTEIN VACCINES:

Recombinant vaccines use only a part of the target pathogen to provoke a response from the immune system. This is typically done by isolating a specific spike protein from a pathogen and presenting it as an antigen[1] on its own. Vaccine examples include hepatitis B, HPV (human papillomavirus), and more recently, certain COVID-19 vaccines.

While safe and effective, these traditional approaches to producing vaccines are an arduous process. All four approaches require researchers and scientists to grow and transport large amounts of live pathogens in a lab, which takes a lot of time and money. Advancement in vaccine technology has not only enabled the production of vaccines to move away from the use of live pathogens, but has also significantly reduced the time required to develop a vaccine.

[1] Antigens are the protein that is found on the surface of the pathogens.

STAGES OF VACCINE DEVELOPMENT

There are six stages involved in the development of a vaccine. Each stage of the development process is aimed at ensuring ultimate safety, efficacy and eventual effectiveness of the final product. Each stage is briefly explained below.

1. EXPLORATORY STAGE:

The first stage of vaccine development requires the identification of antigens that have the potential to prevent disease. Previously, this would require scientists to work with live pathogens, which makes the process very time consuming. Given the progress in technology, as explained below, the COVID-19 vaccines were able to significantly reduce the time in this stage.

2. PRE-CLINICAL STAGE:

The pre-clinical stage sees the candidate vaccine undergo testing using tissue-culture or cell-culture systems and animal testing in a controlled environment. The purpose of this stage is to test whether the candidate vaccine produces immunity.

3. CLINICAL DEVELOPMENT:

The clinical development stage is focused on assessing whether the candidate vaccine is safe for human consumption, alongside whether it is effective at producing an immune response. Prior to human testing, the developer has to submit an application to the regulatory body, which must be approved before testing commences. Typically, clinical trials consist of three phases. However, the number of phases is dependent on jurisdiction.

Phase I:
The first phase is a small-scale trial aimed at determining whether the vaccine is safe and whether it produces an immune response. The number of participants is generally 20 to 100. Other objectives include determining dosage and side effects.

Phase II:
The second phase is aimed at a wider participant group of not less than 100. The purpose is to establish a proof of concept, while evaluating further safety and efficacy. The effectiveness of the vaccine across age and sex categories is another consideration during this phase.

Phase III:
The final phase is extended to a much wider participant group consisting of hundreds to thousands of participants, spanning different geographies. This phase serves as final confirmation of safety and efficacy. Provided the vaccine demonstrates its capability to retain safety and efficacy over a defined period, the manufacturer can then proceed to apply for a licence for mass production, marketing and consumption.

4. LICENSING:

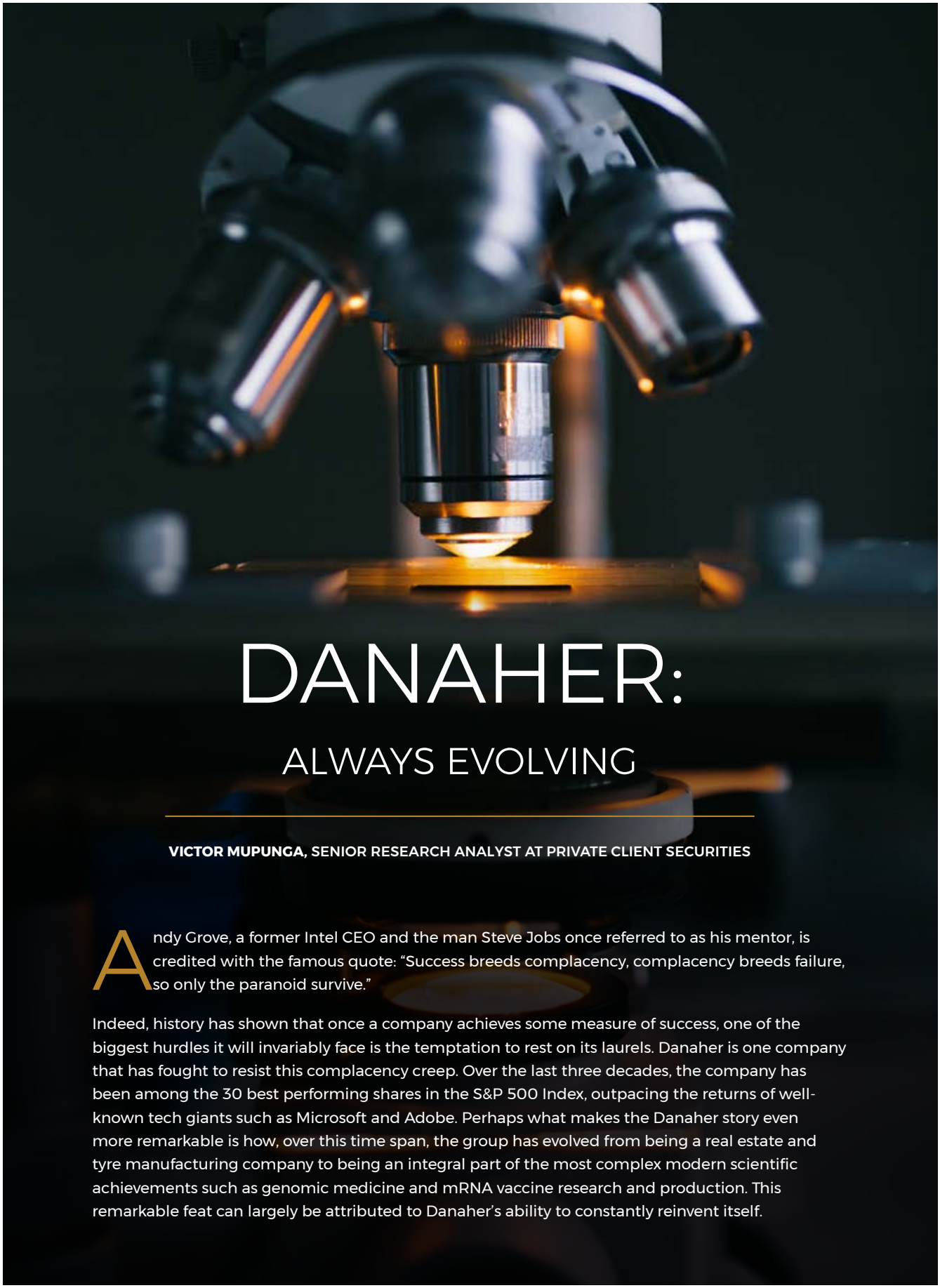
The licensing stage overlaps with the clinical development stage to a certain extent. Prior to the commencement of clinical trials, the manufacturer has to apply for a licence from the regulatory body. Both the manufacturer and regulatory body undertake continuous evaluation during the various phases of the clinical trials. Once both the manufacturer and regulatory body are satisfied that all criteria are met, then a licence to produce is awarded.

5. MANUFACTURING:

The manufacturing phase gets underway once regulatory approval has been received. Inspections of the manufacturing facilities is ongoing by the regulatory body to ensure standards are maintained. Product labelling and distribution also fall under the manufacturing stage of the process.

6. QUALITY CONTROL:

Given that the clinical trials involved a very small portion of the population, ongoing monitoring and quality control is necessary. Manufacturers employ a dedicated team of post-marketing surveillance professionals to continuously monitor the vaccine's progress from a safety and an effectiveness perspective.



DANAHER:

ALWAYS EVOLVING

VICTOR MUPUNGA, SENIOR RESEARCH ANALYST AT PRIVATE CLIENT SECURITIES

Andy Grove, a former Intel CEO and the man Steve Jobs once referred to as his mentor, is credited with the famous quote: "Success breeds complacency, complacency breeds failure, so only the paranoid survive."

Indeed, history has shown that once a company achieves some measure of success, one of the biggest hurdles it will invariably face is the temptation to rest on its laurels. Danaher is one company that has fought to resist this complacency creep. Over the last three decades, the company has been among the 30 best performing shares in the S&P 500 Index, outpacing the returns of well-known tech giants such as Microsoft and Adobe. Perhaps what makes the Danaher story even more remarkable is how, over this time span, the group has evolved from being a real estate and tyre manufacturing company to being an integral part of the most complex modern scientific achievements such as genomic medicine and mRNA vaccine research and production. This remarkable feat can largely be attributed to Danaher's ability to constantly reinvent itself.

GIVE THEM THE RAZOR, SELL THEM THE BLADES

The Danaher we see today is a leading science and technology group that is made up of three reporting segments, namely Life Sciences, Diagnostics and Environmental and Applied Solutions. Within these divisions are about 25 largely independent operating companies that tend to be the leaders in their respective markets and enjoy strong secular growth drivers.

A common thread running through Danaher's subsidiaries is that they have a similar business model, which is exemplified by a razor and a blade. This business strategy, which was popularised by Gillette, entails selling the initial equipment (razor) at a low price point in order to increase sales of the complementary and recurring consumable (blade). In the case of Danaher, this has resulted in 'only' 25% of the group's revenue being generated from selling equipment and instruments, with the balance (75%) generated on a repetitive basis by way of services, software and consumables. This inevitably increases switching costs for customers, while at the same time providing Danaher with pricing power.

Danaher's business segments and 2021E revenue

LIFE SCIENCES US$14.5BN	Leica Microsystems, SCIEX, cytiva, aldevron, IDT Integrated DNA Technologies, Beckman Coulter Life Sciences, PALL
DIAGNOSTICS US$9.0BN	Cepheid, Beckman Coulter, Leica Microsystems, RADIOMETER
ENV. & APPLIED SOLUTIONS US$4.5BN	X-rite PANTONE, ESKO, TROJAN technologies, VIDEOJET, HACH, ChemTreat

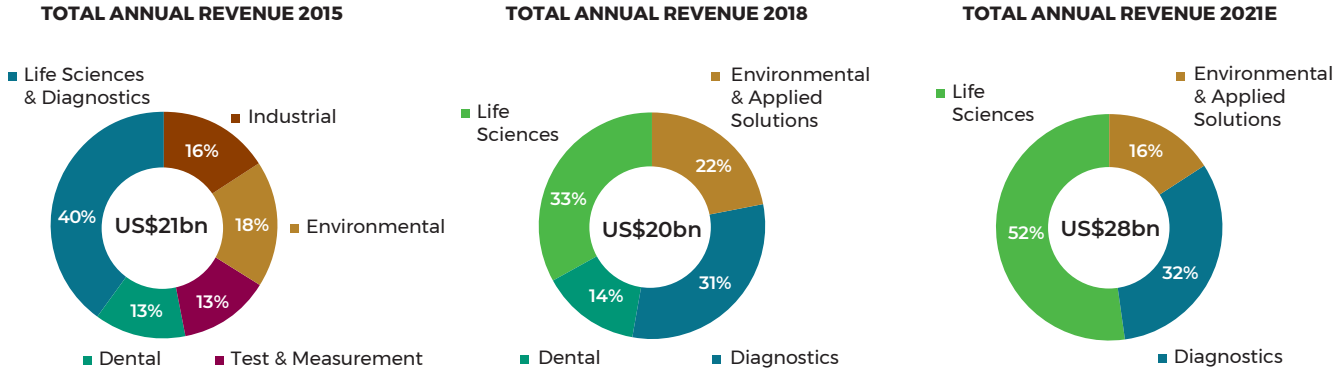
Source: Company reports

TIMEOUS, DELIBERATE EVOLUTION

To better appreciate Danaher's ability to reinvent itself, one only needs to look back at how the group's portfolio has changed over the last six years. During this period, the group acquired Pall, Cephid, Cytivia and Integrated DNA Technologies. These businesses bolstered Danaher's two largest segments, Life Sciences and Diagnostics, from 40% revenue contribution to the current 84%. At the same time, the group unbundled and separately listed Envista and Fortive, two businesses that continue to burgeon as standalone entities. While this evolution was the culmination of many years of strategic intent, the timing, just prior to the COVID-19 onset, could not have been better.

Established in 2004, Danaher's Diagnostics segment has been a beneficiary of the pandemic. The division's broad offering by way of analytic instruments, reagents, consumables and software, assists researchers and healthcare workers to diagnose a wide array of diseases. The segment has the largest installed base and testing menu within molecular diagnostics[1], which includes COVID-19 testing. Recent innovations such as the Xpert 4-in-1 SARS-COV-2 test,

Graph 1: Danaher segment contribution to revenue changes



Source: Company reports

[1] The process of identifying a disease by studying molecules, such as proteins, DNA and RNA, in a tissue or fluid

which concurrently screens for two flu variants, COVID-19 and Respiratory Syncytial Virus (RSV), will ensure that this segment continues its strong performance in a post-pandemic world.

THE RIGHT END MARKET

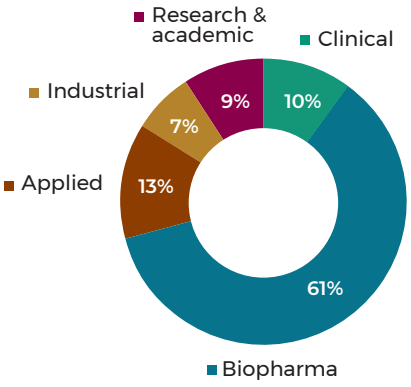
Vaccine efficacy and therapies are key to achieving some level of normalcy after the pandemic, and Danaher is exposed to these two areas via its Life Sciences segment. Within this segment, the group offers a range of instruments and consumables used by scientists, academics and health professionals to study genes and proteins, identify new therapies, as well as testing and manufacturing new drugs and vaccines. Graph 2 shows the end markets that the Life Sciences segment serves, the largest of which is the biopharmaceutical segment.

A FAST-GROWING SECTOR

A biopharmaceutical[2] is any medicinal product that is made from (or inside) any living organism such as a plant, human, animal or fungal cell. Bioprocessing is the procedure of converting these cells into vaccines, biologic drugs and novel gene therapies. This is an extremely intricate process that is at the cutting edge of medical technology. Well before the pandemic, significant amounts of research were already being directed towards this space, with scientists and doctors pointing to the high efficacy and reduced side effects of biologics versus synthetic drugs. This is illustrated by the strong share gains seen in biopharma drug approvals by the US Federal and Drug Administration (FDA) (graph 3), with other regions such as China growing their biopharma spending by a compound annual growth rate of 25% over the last decade.

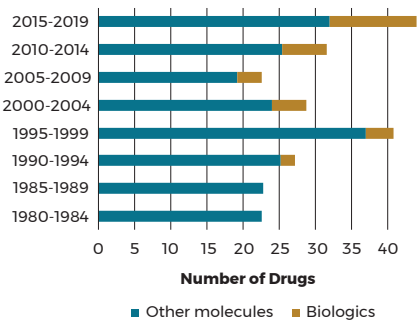
Through its subsidiaries in the Life Sciences segment – Pall and Cytvia – Danaher offers instruments and solutions that pharmaceutical and biotech companies use to research, develop and manufacture the aforementioned biologics, vaccines and gene therapies. The accompanying image shows the four key stages of the bioprocessing workflow and some of Danaher's offerings at each stage.

Graph 2: Danaher's Life Sciences segment end market exposure



Source: Company reports

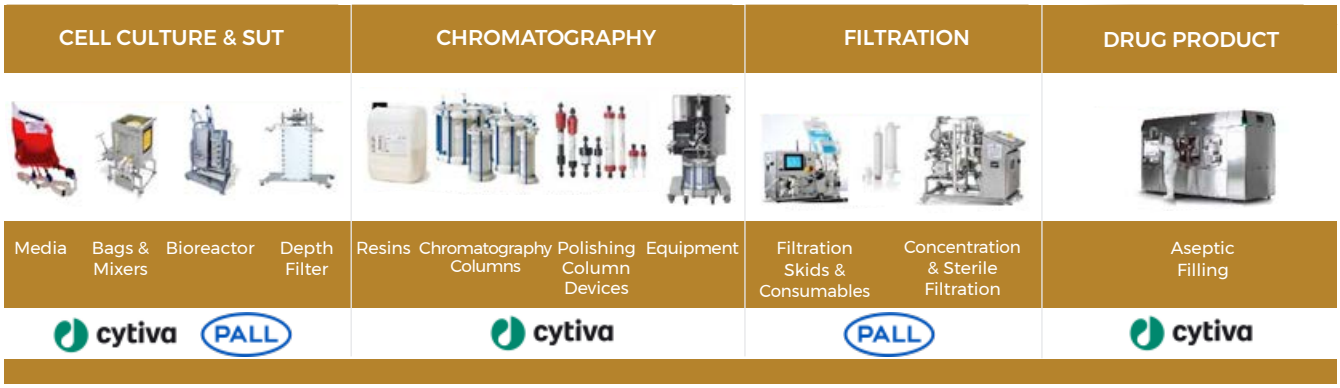
Graph 3: Average annual approvals of new drugs by the FDA



Source: FDA's Centre of Drug Evaluation & Research

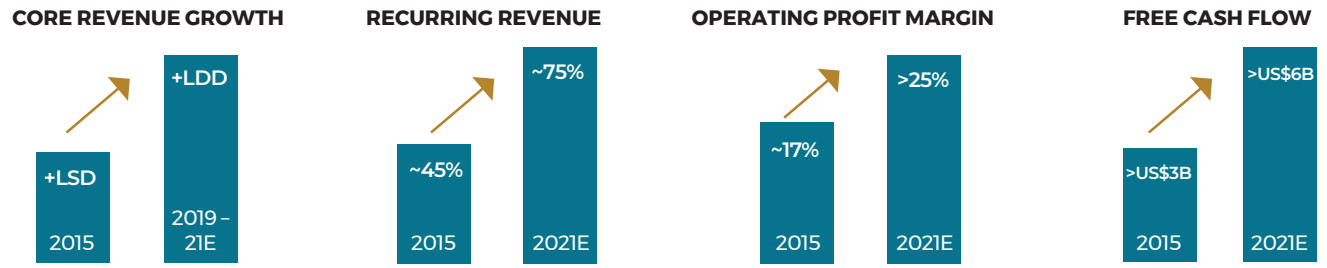
[2] Also known as a biologic

Broadest offering across bioprocessing workflow



Source: Company reports

Graph 4: Danaher's improved performance



2015 metrics shown include Fortive and Envista.
Recurring revenue is shown as a % of total revenue.
2019-21E core growth is average annual core growth for '19, '20, '21E.

Source: Company reports

WAITING IN THE WINGS

Not included in any of the above is Danaher's latest acquisition, Aldevron, a US$9.6 billion transaction that was concluded in late August. Aldevron is a high margin leading producer of plasmid DNA, mRNA, proteins and other biologicals. The company has been producing these key inputs into genomic medicine for over 20 years, aiding researchers and scientists in the discovery, development and production of therapies within gene editing, vaccines and cancer immunotherapy, among others. Since 2015, there has been an increase in the number of cell and gene therapies in development by over 10 times, which has led Danaher to estimate that Aldevron will grow organically by at least 20% per annum for the foreseeable future.

SUM OF THE PARTS IS GREATER

When one puts all these elements together, Danaher's portfolio is less cyclical and in much better shape than it was six years ago, and when we subsequently added it to the Global Equity Model Portfolio in 2017. Apart from the business now generating a third more revenue than it did in 2015, recurring revenue contribution has increased from 45% to 75%, while the operating margins have risen from 17% to more than 25% that is expected in 2021. Free cash flow generation is US$6 billion strong, double the level achieved in 2015.

Looking ahead, management now believe that the business' sustainable organic growth rate has risen from a range of 3% - 4% in 2015 to about 7% per annum in a post-pandemic world. Given management's track record of improving their operating businesses and the faster growing medical technologies Danaher is now exposed to, there is a strong sense in the analyst community that management's outlook is conservative. This may very well be the case. However, it could also be that it is this caution that somewhat sets Danaher apart, the 'good paranoia' that Andy Grove referred to. This should ensure that complacency never sets in and that the company not only survives, but thrives.

ASPEN:

RIGHT PLACE, RIGHT TIME

TASNEEM SAMODIEN, RESEARCH ANALYST AT PRIVATE CLIENT SECURITIES

At the height of the COVID-19 pandemic, governments around the world instituted economic "lockdowns", travel was restricted, ports were shut and global trade came to a near halt. To the detriment of many emerging markets, health exports including critical medication and vital personal protective equipment were caught up in the snare. The pandemic exposed the risks inherent in complex global supply chains and exacerbated already heightened geopolitical tensions.

GLOBAL SUPPLY CHAINS NO LONGER IN VOGUE

By May 2020, nearly 80 countries had imposed some form of restriction on medical exports. Medical importers quickly found themselves in the midst of two crises – COVID-19 and an inability to source critical pharmaceuticals. With little to no local pharmaceutical manufacturing capacity, Africa was severely impacted. Small pharmacies in Rwanda ran out of stock, psychiatric medication and oral contraceptives were nearly impossible to find in SA, Kenyan cancer patients had to forego treatments, while stock of medication to treat chronic illnesses including HIV ran dangerously low in Nigeria. What followed was an outcry from organisations around the world criticising medical exporters for forsaking Africa during what has been described as one of mankind's worst health pandemics. However, playing the blame game is futile. Instead, we should acknowledge the risks of relying on intricate global supply chains for essential and critical pharmaceutical products.

VACCINE DEPENDENCY

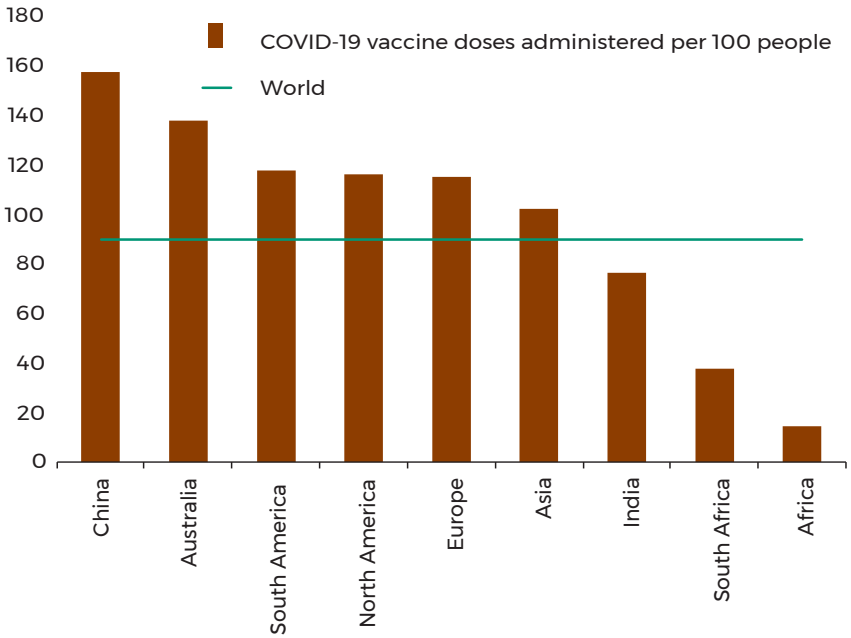
Once lockdowns were lifted and medical exports resumed, an additional challenge arose – vaccine inequality. Developed markets with bigger wallets were able to secure large volumes of the COVID-19 vaccine and emerging markets with more developed medical manufacturing capabilities were able to rely on local production (examples include China, India, Thailand). However, Africa lacks both deep pockets and local vaccine manufacturing capabilities. The result is that while the world has administered 90 doses per 100 people (as at 30 October 2021), Africa lags with only 14 doses administered per 100 people. This places Africa at a significantly higher risk of recurring COVID-19 waves and, more worryingly, new variants, as we are currently witnessing.

More recently, the rate at which COVID-19 is able to mutate and the severity of each successive wave has helped to motivate developed markets to support emerging markets' vaccination campaigns. To this end, an initiative involving the World Health Organisation, COVAX[2], dispatched 12 million COVID-19 vaccine doses to Africa in July 2021. The vaccinations, however, had onerous transportation and storage requirements, including the need to be stored at temperatures ranging from 8˚C to -70˚C. This exacerbates the risk of the vaccines deteriorating during transit.

VACCINE STORAGE TEMPERATURES	DEGREES CELSIUS
AstraZeneca	2 to 8
Moderna	-20 to -5
Pfizer/BioNtech	-70 to -10

Inability to source critical medical supplies during a crisis, inability to access vaccines timeously during a health pandemic, and the logistic requirements of pharmaceuticals all create a compelling and an urgent case for investment in local pharmaceutical manufacturing. Acknowledging that Africa will remain vulnerable to future global supply shocks and foreign trade policies without it, the African Union and Africa Centres for Disease Control and Prevention announced an ambition for Africa to manufacture 60% of its vaccine needs on the continent by 2040. Currently, Africa manufactures only about 1% of the vaccines it uses.

Graph 1: COVID-19 vaccine doses administered per 100 people



Source: Our World in Data – 30 October 2021 [1]

[1] For vaccines that require multiple doses, each individual dose is counted. As the same person may receive more than one dose, the number of doses per 100 people can be higher than 100.

[2] COVID-19 Vaccines Global Access, abbreviated as COVAX, is a worldwide initiative aimed at equitable access to COVID-19 vaccines directed by Gavi, the Vaccine Alliance, the Coalition for Epidemic Preparedness Innovations, and the World Health Organisation.

PRIME POSITION

Establishing a local manufacturing capability is not an easy task. Pharmaceutical production and manufacturing is one of the most regulated industries with high capital investment requirements. Aspen is therefore in a prime position to capitalise on the opportunity created by the COVID-19 pandemic. It is one of very few African pharmaceutical manufacturers that hold international manufacturing approvals from some of the most stringent regulatory agencies including the US FDA, the Australian Therapeutic Goods Administration and the European Directorate for the Quality of Medicines. Fortuitously, Aspen recently upgraded and expanded its sterile manufacturing capacity, paving the way for a vaccine-manufacturing contract with global pharmaceutical producers. Given the urgent need to support the development of vaccines in Africa, Aspen is a prime candidate for development finance. To that end, the International Finance Corporation (IFC) mobilised a long-term financing package of €600 million to assist Aspen with restructuring its debt and strengthening its financial position. This was the largest healthcare investment led by the IFC in its history.

A JAB FOR ASPEN

In November 2020, Aspen announced a preliminary deal entered into with Johnson & Johnson (J&J) to formulate, fill and package the J&J COVID-19 vaccine. In July 2021, Aspen delivered the first batch, becoming the first African manufacturer of a COVID-19 vaccine. Aspen's Gqeberha site is the only manufacturing site on the African continent selected by a global pharmaceutical company of this magnitude to manufacture COVID-19 vaccines. J&J's stamp of approval is therefore seen as a competitive advantage when tendering for future vaccine and pharmaceutical manufacturing contracts.

Initially, the objective of vaccination programmes was to attain herd immunity. This implied that vaccine-manufacturing contracts would be for a short duration and therefore represented a short-term earnings tailwind for Aspen. However, recent studies indicate reduced vaccine efficacy against new COVID-19 variants, necessitating vaccine booster shots. In all likelihood, we will need annual COVID-19 vaccine boosters similar to annual flu vaccinations in order to control the transmission and severity of the virus. This will see Aspen's one-off COVID-19 vaccine-manufacturing contract evolve into a potential source of annuity revenue.

Aspen has committed 300 million (50%) doses of its sterile manufacturing capacity to produce J&J's COVID-19 vaccine, and it is increasing vaccine capacity to 450 million doses by February 2022 and 700 million by January 2023.

This will allow it to support Africa's vaccination demand, with the African Union having already placed its order for 400 million J&J vaccine doses to be sourced through Aspen and delivered over 2020/1.

"It is worth noting that until fairly recently, Aspen was often used as a cautionary tale about what could go wrong with a business model dependent on leveraged acquisitions."

ONCE BITTEN, TWICE SHY

While Aspen's future certainly appears bright and to some, an investment case might be glaringly obvious, it is worth noting that until fairly recently, Aspen was often used as a cautionary tale about what could go wrong with a business model dependent on leveraged acquisitions.

Aspen is not a traditional pharma-ceutical producer. Traditional

Graph 2: Aspen's Share Price (ZAR)

Source: Our World in Data – 30 October 2021

pharmaceutical producers perform research and development, discover new drugs, undertake clinical trials and eventually launch them into the market, protected by patents for a specified period of time. Aspen, on the other hand, acquires older pharmaceutical products with expired patents and declining growth profiles and markets them aggressively, often introducing them to new markets. Through its manufacturing capability, Aspen tries to reduce the cost of production in order to increase the margin earned per product and then uses the sales of these products, in addition to debt, to fund the acquisition of the next product. For many years, this strategy was successful.

However, circumstances changed. Regulations regarding the pricing of pharmaceutical products intensified, particularly in the EU and the US. Governments scrutinised the cost of pharmaceuticals and placed significant pressure on manufacturers to reduce prices. Aspen was caught up in this austerity, subject to investigations by health authorities and the local Competition Commission, and was unable to achieve the earnings it had forecast for the acquired products. Consequently, cash flows were lower than anticipated, placing pressure on the company's ability to repay debt. The issue was exacerbated by the fact that most of Aspen's debt was denominated in euros. As the SA rand depreciated relative to the euro, leverage increased further. In 2018, after nearly breaching a debt covenant, management instituted a disposal strategy to relieve the group's debt issues.

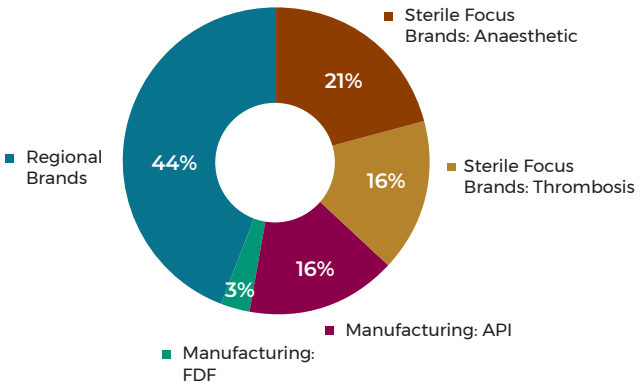
This disposal strategy is still in progress and has been successful, with debt in the most recent financial year (FY 2021) reducing from R35.2bn to R16.3bn. The COVID-19 pandemic, however, handed Aspen a golden opportunity to grow organically by using its excess sterile manufacturing capacity to produce vaccines. Growth through utilisation of excess capacity is far safer and is of a better quality compared to growth through M&A, and judging by the recent share price activity (up 95% between January and October 2021), investors clearly approve of this strategy.

A WELCOME STRATEGIC SHIFT

Currently, Aspen generates most of its revenue through its Regional Brands division (44% of revenue). This comprises a broad portfolio of consumer, prescription and over-the-counter medication. A few years ago, management decided to invest heavily into the company's Sterile Focus Brands division (37% of revenue), which consists of anaesthetics and thrombosis products, predominantly sold to hospitals. As these products typically attract higher margins, management decided to increase manufacturing capacity. It is this capacity that is now a strategic tailwind. The group's manufacturing facilities support both Aspen's internally produced brands as well as outsourced contracts such as the one entered into with J&J. The group's smallest contributor to revenue is the one receiving the most attention and the one expected to grow the fastest over the next few years – Manufacturing (19% of revenue). When considering analyst growth expectations, it is apparent that at least half of the growth forecasted for Aspen's earnings can be attributed to the utilisation of excess capacity and consequent increased contribution to revenue from the Manufacturing division.

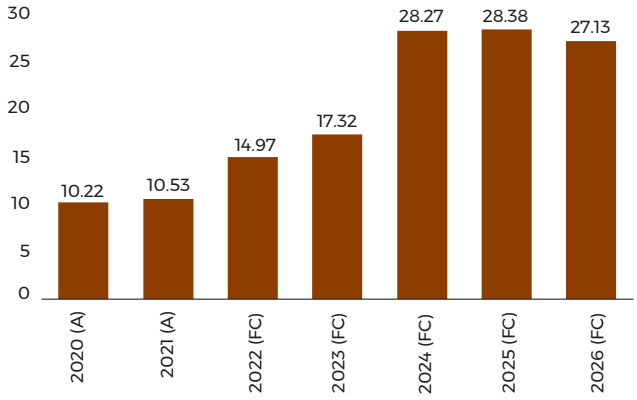
Previously, Aspen's investment case was reliant on management's ability to source and execute successful acquisitions. While this remains the case, the importance has been reduced if the business successfully executes its plan to utilise its excess manufacturing capacity and establish itself as the vaccine and pharmaceutical manufacturer for SA and the rest of Africa.

Graph 3: Aspen's Revenue Composition



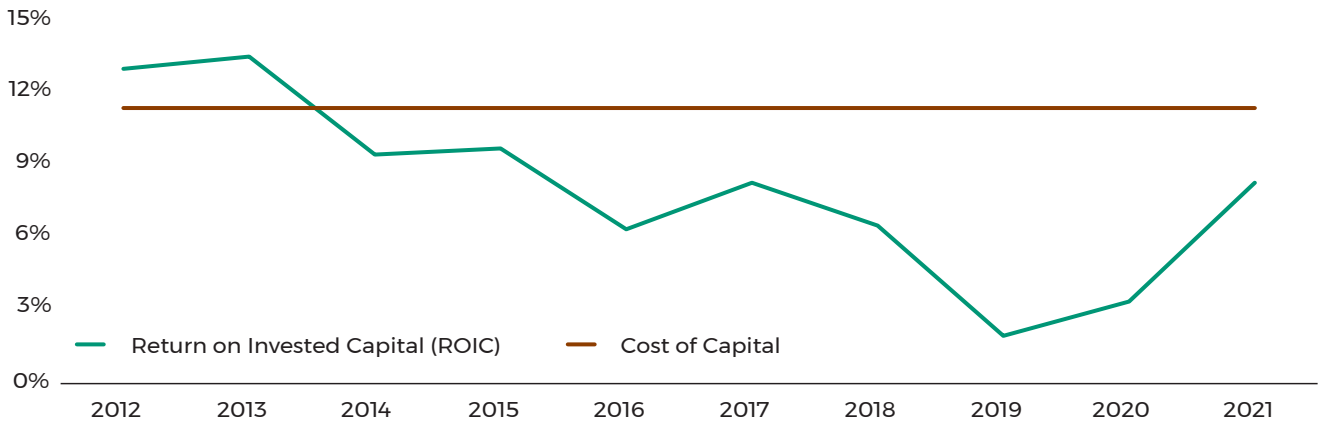
Source: Company reports

Graph 4: Aspen's Earnings Per Share (R)

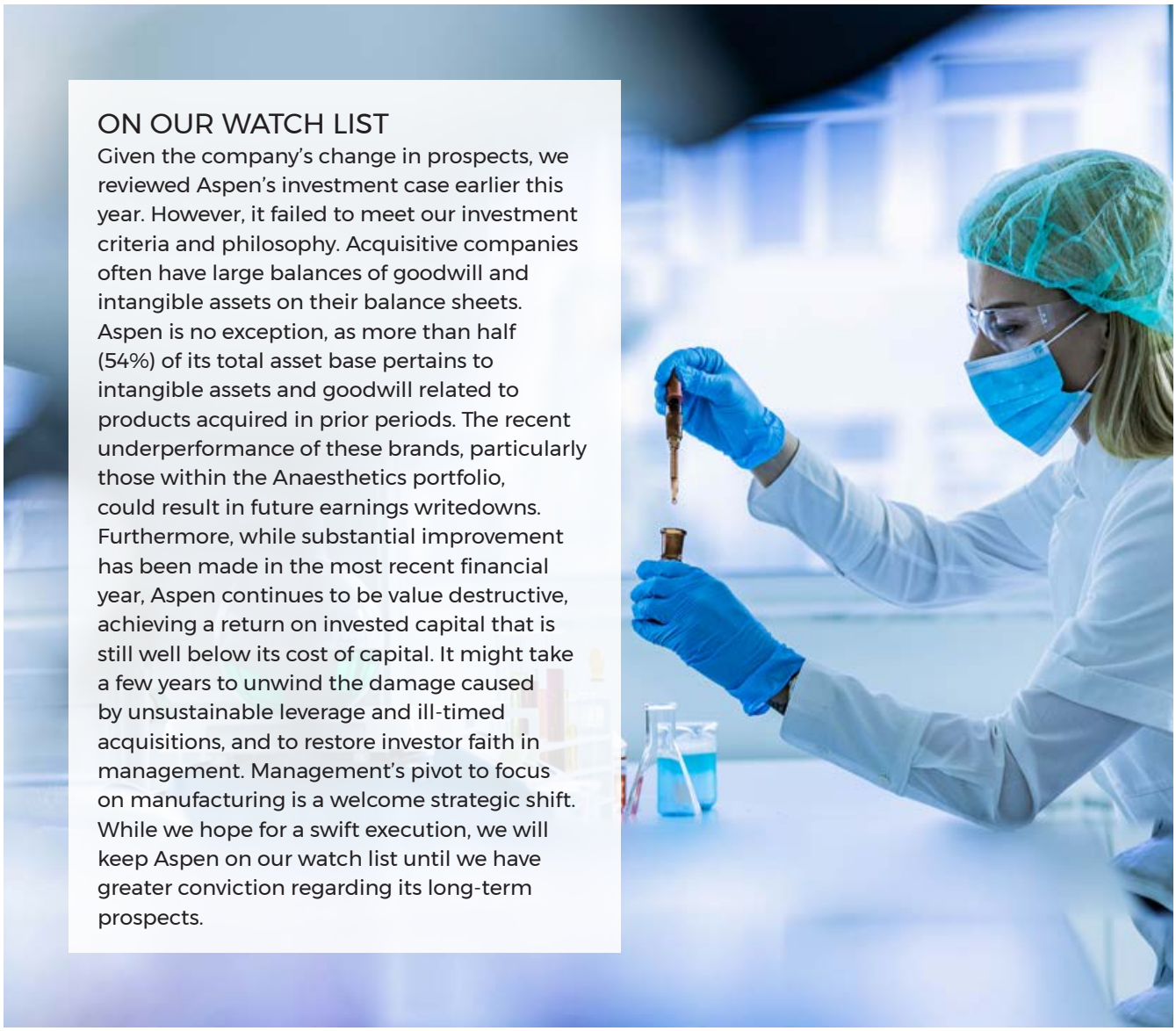


Source: Refinitiv

Graph 5: Aspen's Return on Capital vs Cost of Capital



Sources: Refinitiv, JP Morgan



ON OUR WATCH LIST

Given the company's change in prospects, we reviewed Aspen's investment case earlier this year. However, it failed to meet our investment criteria and philosophy. Acquisitive companies often have large balances of goodwill and intangible assets on their balance sheets. Aspen is no exception, as more than half (54%) of its total asset base pertains to intangible assets and goodwill related to products acquired in prior periods. The recent underperformance of these brands, particularly those within the Anaesthetics portfolio, could result in future earnings writedowns. Furthermore, while substantial improvement has been made in the most recent financial year, Aspen continues to be value destructive, achieving a return on invested capital that is still well below its cost of capital. It might take a few years to unwind the damage caused by unsustainable leverage and ill-timed acquisitions, and to restore investor faith in management. Management's pivot to focus on manufacturing is a welcome strategic shift. While we hope for a swift execution, we will keep Aspen on our watch list until we have greater conviction regarding its long-term prospects.

WEALTH MANAGEMENT:

OPERATING IN COVID-19 AND BEYOND

FARHAD SADER, MANAGING DIRECTOR AT OLD MUTUAL WEALTH

I recently watched Oscar-winning actor Will Smith's documentary on getting in the best shape of his life. In it he speaks about "impermanence: the state or fact of lasting for only a limited period of time", a reminder of how constant change has been, especially in the past 18 months.

The COVID-19 pandemic has been the catalyst for ongoing volatility for almost two, years now. It has impacted our lives whether it is in politics, investment markets, education, work, business, or travel and tourism. One of the biggest changes it brought was limiting our face-to-face contact. Within a few short months, it drove rapid migration to digital technologies and communication, accelerating digital adoption to years ahead of where we thought we would be.

As wealth managers, we had to adjust to navigate these changes, considering several factors to support our partners through this state of impermanence.

RI AND ESG FUND GAINS

Environmental, social and governance (ESG) was gaining momentum for a few years before 2020, but COVID-19 accelerated it. Across the world, ESG funds recorded double-digit growth rates in 2020. This continued into 2021 with global ESG funds recording a seventh consecutive quarter of growth and reaching a record high of US$3.9 trillion at the end of September. This is largely driven by growing public interest in responsible living, increased public discourse about climate change, inequality, environmental degradation, and governance, to name a few.

Growing evidence shows that areas with high greenhouse gasses, where populations were exposed over extended periods, were the most impacted in the first and second waves of COVID-19.

According to Morningstar, European sustainable funds accounted for most of the inflows into ESG recently, driven by the Sustainable Finance Disclosure Regulation of the European Union. At Old Mutual Wealth, we have given all the Old Mutual funds on our platform an ESG rating so that clients are able to choose to invest responsibly, should they wish to do so. For more information on responsible investment (RI), click here.

THE GROWTH OF DIGITAL INTERACTIONS

We've long identified the move to digital as one of our key priorities. However, the restrictions placed on travel and gatherings meant that we had to fast-track implementation. As quickly as we adapted, so too did our planner community. We continue to improve digital communication platforms and take advantage of all that digital delivers, from quick turn-around times to tracking.

With Facebook becoming Meta Platforms, and digital experiences turning into virtual reality, there's a lot of opportunity to be creative in how we do business.

CRYPTOCURRENCY

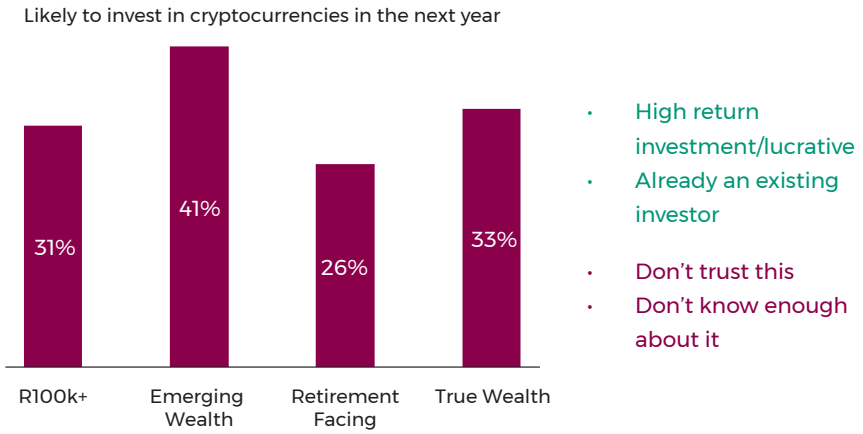
According to the 2021 Old Mutual Savings and Investment Monitor survey, a quarter of wealth clients said that they were invested in cryptocurrency, with a third indicating that they are likely to invest in the next year. Expert opinion on whether crypto qualifies as a new asset class varies widely because its underlying value cannot be quantified. Cryptocurrency has been very volatile over the past 10 years because investors buy and sell on sentiment and not fundamental issues, there is limited supply, and it has no controlling agency or legislated framework.

We're watching cryptocurrency closely because it continues to grow exponentially and is underpinned by blockchain technology. Investopedia says blockchain technology is a fast-growing area in companies across industries and may be the most important innovation out of cryptocurrency.

AUTHENTIC CLIENT RELATIONSHIPS

Lastly, after everything we've said about social distancing, blockchain and the metaverse, one might begin to think that personal relationships are fading. In a world where everything feels like it's turning digital and millennials use avatars to represent themselves, human connection remains essential. We believe that a partnership philosophy is central to delivering on wealth management needs, and we are committed to building long-term relationships based on trust and integrity. Therefore, despite all we've developed digitally over the past two years, we can honestly say we cannot wait to get back to the office at the beginning of 2022 and start to see more of our partners and clients, face to face. For now, we hope our clients enjoy their summer holidays and make time to refresh and recharge. Responsibly, of course.

Graph 1: 1 in 4 currently invests in cryptocurrencies



Appetite for cryptocurrency investing is average with a third of the market keen to invest, particularly the Emerging Wealth segment.

Source: Old Mutual Savings and Investment Monitor – Wealth

THE AUTHORS

Andrew Dittberner

Chief Investment Officer at Private Client Securities

Andrew joined PCS in 2017 and was previously employed at Cannon Asset Managers. He joined Cannon in 2007 as a research analyst and during his tenure, he rose through the ranks to become a portfolio manager in 2011 and was then appointed CIO in 2014. Andrew has extensive knowledge of and insight into valuing businesses across multiple industries and identifying suitable investment opportunities. He holds a master's degree in Economic Science from the University of the Witwatersrand, where he lectured for a while. Andrew also holds a PhD in Investments and Securities from the University of Pretoria.

Tasneem Samodien

Research Analyst at Private Client Securities

After graduating with a Postgraduate Diploma in Accounting in 2015, Tasneem joined the Old Mutual Chartered Accountant Training Programme in 2016. During the subsequent three years, she worked within various businesses in the Old Mutual Group, gaining valuable experience in functional areas such as internal audit, risk management, finance, group planning and investment analysis. In 2018, she was placed within Private Client Securities, first in the Finance team to assist with the annual financial statements and then in the Research & Investment team to assist with investment portfolio reviews. Tasneem successfully completed her articles at the end of 2018 and is a qualified Chartered Accountant (SA).

Victor Mupunga

Senior Research Analyst at Private Client Securities

Victor joined PCS in 2016 and was previously employed as an investment analyst at Maestro Investment Management, where in addition to equity research, he was responsible for managing a number of private client equity portfolios on a discretionary basis and managing the client relationships. Prior to that, he was a fund accountant at Investment Data Services where he prepared and reviewed valuations and accounting records of hedge funds. Victor graduated from the University of Cape Town with a Bachelor of Business Science (Hons) in Finance in 2007. He is also a CFA Charterholder.

Farhad Sader

MD: Old Mutual Wealth

Farhad was appointed as MD of Old Mutual Wealth on 1 February 2020. He is responsible for all clients' wealth management needs and ensures a holistic financial planning process through a comprehensive range of capabilities – including advice, fund management, estate planning, unit trusts and bespoke solutions. He has over 16 years of experience in strategy, distribution, operations and IT. He spent the last 10 years in executive management positions across various Old Mutual businesses, as the MD of Old Mutual Investment Administrators (OMIA), General Manager of the Agency Franchise Division and, more recently, as the Chief Operating Officer of Old Mutual Wealth, where he was involved in every element of crafting and delivering the Old Mutual Wealth strategy. Farhad holds a Master of Business Science degree and is an Alumnus of Harvard Business School.

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