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In the Moment or Fit for the Future?

The COVID-19 pandemic has transformed many aspects of our daily lives. As long-term fundamental investors we are focused on distinguishing themes that reflect a momentary advance from those that are fit for the future. Leading companies with a structural advantage can grow due to a cycle of innovation, underscoring the importance of a forward-looking, active approach to equity investing.

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Speed Read

In the Moment or Fit for the Future?

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Healthcare – You Can Never Be Too Prepared

We expect healthcare to remain top of the policy agenda even as a vaccine is found, generating a regulatory reset that is both risk-embracing and risk-avoiding. Risk-embracing regulations have potential to spur new drug development and serve as a tailwind for genomics and precision medicine. Risk-avoiding regulations may advance new health technologies that can ensure greater health system preparedness.

Telemedicine – The Doctor Will Video Conference You Now

The benefits of telemedicine are not confined to the duration of a global pandemic. We think use of telemedicine will be retained for certain appointments in certain areas. A prime example is repeat prescription appointments in rural areas with fewer doctors. This trend might create opportunities in companies that provide digital health infrastructure.

Working From Virtually Anywhere

We believe retained productivity and operational efficiency during stay-at-home orders will encourage greater adoption of remote working even as offices and workplaces reopen. We see investment potential in companies that can create effective working from home arrangements for 1.25 billion knowledge employees globally, defined as those using technology for at least an hour during their working day. Investment opportunities span virtual desktops to e-signatures and cloud computing to high-speed broadband.

Accelerated Adoption of Automation

Disruptions amid lockdowns have led businesses to re-evaluate global supply chains. Reordering global trade is a process not an event. We expect some localization of supply chains which will likely lead to increased adoption of automation. More broadly, manufacturing technologies—including automation and robotics—have potential to impact every sector we invest in.

The Millennial Mindset Goes Viral

The pandemic has led more generations to adopt online habits and lifestyle choices catalyzed by the millennial generation including e-commerce, online entertainment and e-learning. We may slide slightly down the penetration slope as virus suppression measures are eased, however, we think the new found familiarity with the online world will endure beyond the health crisis. Companies with solid digital footprints stand to outperform.

A 'New Social Contract' – a Problem Shared is a Problem Halved

We are optimistic that companies will be part of the solutions to global challenges including racial injustice, structural inequity and the climate transition. A unified approach to solving problems can place us on a cleaner, more equitable and sustainable growth path as we progress beyond the virus-induced economic downturn. Environmental, social and governance (ESG) factors can help us identify both structural competitive advantages of a company but also risks. More specifically, we believe it is our fiduciary duty to encourage good ESG behaviors and actions among our portfolio companies.

Introduction

The COVID-19 pandemic is a historic event with tragic human costs that, in our view, will reshape economies and societies. It is a continuous present; we're still living through it but as long-term fundamental investors we must also assess what may come out of it. We look for structural growth opportunities even as we navigate cyclical challenges. In seeking to understand lasting changes that will unfold from the global pandemic, we have identified two notable elements of the health crisis. First, it has **accelerated secular themes**, many of which we are already invested in, including e-commerce, the genome revolution and sustainability. Second, it has compelled us to **rapidly learn and adapt**; the great lockdown of 2020 has served as a crash course for working from home, e-learning and telemedicine among countless other activities.

But not all of today's trends will evolve into tomorrow's investment themes. In this publication we differentiate changes that we believe are a function of what we are experiencing **in the moment** and investment themes that are **fit for the future**. A clear candidate for the latter category is sharpened focus on public health. We expect health preparedness will remain at the top of national policy agendas even once a vaccine is found. Furthermore, we see two sides of a new regulatory framework emerging; one that is risk-embracing to facilitate development of new medicines and one that is risk-avoiding to ensure health systems are better equipped for future epidemics.

Meanwhile, we think use of cloud computing and other software that enable remote working will gain traction rather than be unwound. By contrast, although stay-at-home orders have led us to migrate many daily activities online, we do not expect to emerge from the pandemic as characters from The Sims, with our entire lives resembling an online simulation. Classroom learning will return but may be supplemented with e-learning. Similarly, in-person experiences, from dining out to visiting theatres, will gradually resume. That said, a dichotomy in consumer behaviors may develop. As our colleagues in Goldman Sachs Global Investment Research recently noted, after the Spanish flu of 1918-1919, we saw both the Prohibition era and the Jazz Age[1].

More broadly, penetration of new technologies has been propelled higher. As virus suppression measures are eased, the equilibria will shift once again, but we think the new steady state will remain above pre-crisis levels. For example, the e-commerce share of grocery shopping in the US is estimated to have increased to over 60% in April as more generations adopted millennial shopping habits[2]. We may slide slightly down the penetration curve as physical distancing measures are eased but we are confident that the convenience of online shopping will see many first-time users become regulars. This presents second-order investment opportunities in companies that facilitate digital payments.

We are also hopeful that the pandemic will be a temporary crisis that brings about permanent positive changes. A spotlight on corporate social responses has revealed positive innovations including 3D printing technology for ventilator production. But treatment of key stakeholders is not uniform across the corporate landscape and weak social actions can impact long-term investment value. This is why ESG factors are embedded into our investment process[3].

The COVID-19 pandemic is not the only crisis challenging communities. Job losses have been centered on low wage jobs, exacerbating both income and racial inequalities. We believe a "new social contract" is forming and we believe that companies will be part of the solutions to global social challenges, including racial injustice, structural inequity and the climate transition. Indeed, a green lining of the economic downturn is a clear ambition to unite the pandemic policy response with green objectives. As countries seize a climate opportunity from the pandemic, we see an opening for investors to diversify regional and sector investment exposures beyond the US and Technology towards global firms, including renewable energy companies and electric vehicle (EV) automakers.

This publication is by no means a comprehensive list of all the ways in which the COVID-19 pandemic will impact the world around us. We focus on where we see investment opportunities. Importantly, the crisis has enhanced our long-held belief in the value of investing on the right side of secular growth. The pandemic has been compared to war but in this battle we are all on the same side and **innovation**—a common thread of investment themes that we identify as being fit for the future—can help us overcome the adversary.

> "Digitization has been advanced across sectors: retailers have turned to e-commerce, patient care has pivoted to telemedicine, and restaurants have added online order-and-pay services.
>
> Kathryn Koch |
> Co-Head of Fundamental Equity;
> Co-Chair, GSAM Sustainability Council

[1] The Great Reset: A Framework for Investing After COVID-19, May 27, 2020 (Steve Strongin, Deborah Mirabal). [2] Source: McKinsey COVID-19 US Digital Sentiment Survey April 25-26, 2020. [3] For example, proprietary analysis by our Quantitative Investment Strategies (QIS) team revealed higher employee satisfaction can result in better equity returns. See ESG Amplified, May 2020 (GSAM) for details.

New Technologies: Tried and Tested

Learning is a time intensive process; it's hard to deny its benefits but it is also an easy investment to postpone. The COVID-19 pandemic has forced us to quickly learn—or try and test—new processes and technologies that we may have otherwise been hesitant to adopt. Remote working has boosted use of collaborative technologies and patient care has pivoted toward telemedicine.

From an investment perspective, we are interested in new technologies that will outlast the crisis. We had been focused on many of these technologies prior to the pandemic and below we discuss the outlook for the genome revolution, telemedicine and remote working. We also outline how automation and robotics might help companies balance cost-efficiency with operational resilience as they re-evaluate global supply chains.

A Healthcare Regulatory Reset

Major disruptions often generate a regulatory reset. Following the global financial crisis, banking regulation was overhauled to ensure capital resilience and market discipline. As we move beyond the immediate health policy response—and even once a vaccine is discovered—we expect public health to remain top of mind for policymakers. We see two sides of a new regulatory framework emerging: one that is risk-embracing to facilitate development of new medicines and one that is risk-avoiding to ensure health systems are better equipped for future epidemics.

Risk-Embracing Regulations

Easing of regulatory restrictions or the emergence of litigation shields have potential to spur drug development. This would be a tailwind for the field of **genomics**, the science of analyzing and editing the genetic material that makes us unique, and **precision medicine**, which seeks to deliver treatments based on an individual's genes rather than a 'one-size-fits-all' approach.

An exponential decline in genome sequencing costs allowed Biotechnology companies to decode the coronavirus genome (its 'DNA') and progress to human testing within 45 days, a process that took almost two years with severe acute respiratory syndrome (SARS). A broader recognition of the transformative power of genomics due to its contribution to vaccine development creates a promising outlook for these aspects of medicine. We have exposure to small- and medium-sized companies across the genomics value chain from gene sequencing and editing to medicine manufacturing, and see promising prospects from both an investment and humane perspective.

More than 90% of new drugs fail clinical trials. A supportive regulatory environment would also benefit next-generation technologies that, in our view, can improve the success and cost efficiency of trials. For example, cloud computing and artificial intelligence (AI) are expected to drive a 15% reduction in outsourced drug development costs[1].

Risk-Avoiding Regulations

In less than a decade we've experienced MERS, Ebola, Zika virus and COVID-19 outbreaks. Future epidemics are likely and all countries will want to fill important gaps in national health systems. Similar to utilities, hospitals may be required to function with excess capacity, a reversal of cost streamlining trends observed in recent years.

A 2019 study found that no country is fully prepared for epidemics or pandemics with the average Global Health Security Index score among 195 countries being just 40.2 out of a possible score of 100[2].

There are 6,000 genetic disorders but no cure for almost 95%; genomics and precision medicine will revolutionize our ability to treat these[3].

Technology will be crucial for ensuring health system preparedness going forward. Indeed, new technologies have already demonstrated their ability to improve coronavirus testing outcomes, contact tracing and epidemic tracking.

Alibaba's artificial intelligence (AI) software helped medics shorten coronavirus diagnosis from two hours to 20 seconds, with higher levels of accuracy than human detection. Toronto-based health monitoring AI platform, BlueDot, correctly anticipated the virus path from Wuhan to Tokyo.

Even before the crisis, modern medicine and rising life expectancies had created a need to leverage technology across all aspects of healthcare including prevention, diagnosis, treatment and insurance. We believe companies that innovate in next-generation health technologies will gain a competitive edge.

> "The pandemic has led us to try and test new technologies that we may otherwise have been hesitant or slow to adopt. The transformative power of genomics has been demonstrated by its contribution to vaccine development.
>
> Steve Barry |
> Co-Head & CIO of Fundamental Equity

[1] Source: Goldman Sachs Global Investment Research "Clinical Trials Go Digital" March 5, 2020. [2] Compiled by the Nuclear Threat Initiative and Center for Health Security and Johns Hopkins Bloomberg School of Public Health in conjunction with The Economist Intelligence Unit funded by the Open Philanthropy Project, the Bill & Melinda Gates Foundation, and the Robertson Foundation. https://www.ghsindex.org/wp-content/uploads/2019/10/2019-Global-Health-Security-Index.pdf. [3] Source: WHO

New Technologies: Tried and Tested

Telemedicine – the Doctor Will Video Conference You Now

Telemedicine enables doctors to expand their reach, treat more patients in less time and minimize the number of patients entering—and possibly overwhelming—hospitals and medical facilities. These potential benefits are not confined to the duration of a global pandemic.

Telemedicine is the delivery of healthcare services remotely using computer devices and customer-facing AI-powered apps.

With a COVID-19 vaccine still at least months away, both patients and doctors have reasons to continue to expand virtual interactions, overcoming any technology inertia that had previously prevented widespread adoption of telemedicine.

UK-based Push Doctor recorded a 70% rise in consultations in the week the country entered lockdown. Sweden's KRY International, one of Europe's biggest telehealth providers, reported a more than 200% rise in registrations.

Looking ahead, we think use of telemedicine will be retained for certain appointment types and in certain areas. For example, repeat prescription appointments are a good candidate for telehealth. Similarly, in rural areas with fewer doctors, telemedicine may be the key source of health provision. But for other appointment types—such as dental treatment or physiotherapy—in-person visits will still be required.

There are challenges to overcome from a regulatory, data privacy and reimbursement perspective, however, as *The American Journal of Managed Care* recently noted, the COVID-19 outbreak may be the impetus for regulators to promulgate measures that facilitate greater adoption of telemedicine[1]. Some countries, including the US and Germany, have already eased rules that limit the adoption of telemedicine.

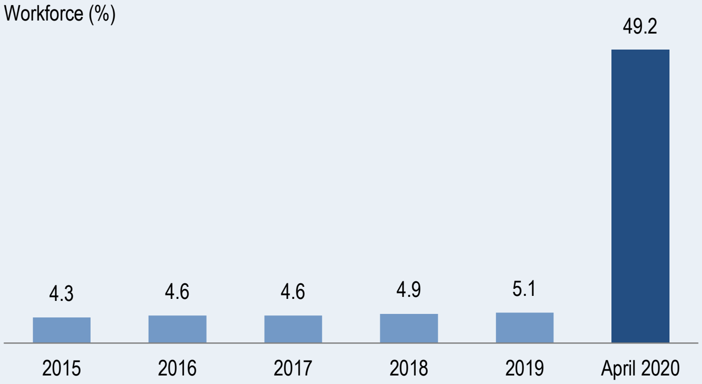
Many telemedicine providers are small private companies, though not all, and we are invested in a small-cap company that has over 25 million subscribers across more than 40 US health plans. We think telemedicine has significant runway to grow globally, particularly in remote locations across emerging markets. We also see investment opportunities in companies providing the digital health infrastructure for hospitals to facilitate telemedicine.

Working From Virtually Anywhere

Prior to the COVID-19 pandemic, few companies would have trialed remote working for majority of their employees on any given day. Yet during the peak of lockdowns in April, most firms functioned with more than 90% of their employees working from home. In the UK, almost half of the workforce was able to work remotely in April (Chart 1).

Zoom daily active video conferences increased almost 200% in March. As of June 24, Goldman Sachs employees had logged more than 176 million meeting minutes on Zoom..

Chart 1: Almost Half of the UK Workforce Was Able to Work Remotely in April



Source: ONS. For illustrative purposes only.

Retained productivity and continued operational efficiency have served as a pleasant surprise for many corporate executives. The potential for future unexpected shocks, including epidemics and natural disasters, necessitates resilient business continuity plans. This might involve effective working from home arrangements for 1.25 billion knowledge employees globally, defined as those using technology for at least an hour during their working day[2]. These workers present a significant opportunity set for companies that can power the evolution of a digital workplace (Box A). There are pros and cons to remote working (Box B), however, we think it is reasonable to expect greater flexible working relative to pre-virus arrangements going forward.

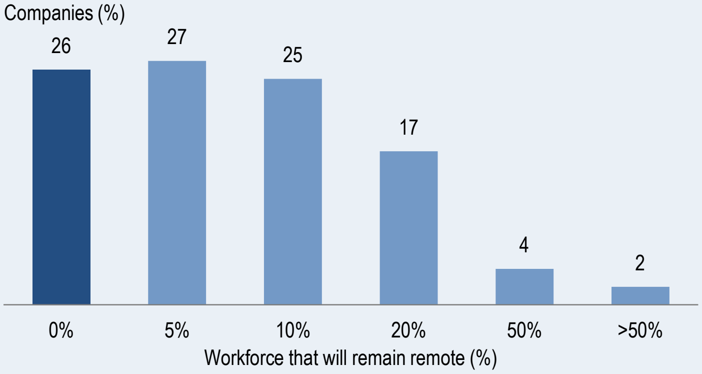
In a recent Deutsche Bank household survey, almost 50% of respondents said they expect to work from home at least one day a week going forward and 60% believe they are at least as productive at home as they are in the office.

[1] Source: Incorporating Telemedicine as Part of COVID-19 Outbreak Response Systems, March 19, 2020 (The American Journal of Managed Care). [2] Source: Forrester Research.

New Technologies: Tried and Tested

Chart 2: Nearly 75% of CFOs expect a portion of workers to permanently work remotely

What % of your workforce will remain permanently remote post-COVID-19 who were not before COVID-19?



Source: Gartner, data compiled by Goldman Sachs Global Investment Research: Future of Work: Accelerating the transition to Enterprise 4.0, the next evolution of the digital workplace (22 May 2020).

Reorganization of Globalization: Digital Trade and Automation

The latest wave of globalization began after the end of the Cold War and gained pace throughout the 1990s and 2000s. It enabled economic growth and has been centered on trade in physical goods and services, as well as cross-border capital flows. Since 2010, global trade has leveled off and in recent years, US-China trade tensions have reinforced assessments of "peak" globalization. The COVID-19 pandemic has exposed vulnerabilities in global supply chains, providing additional credence to expectations for de-globalization.

In our view, it is important to recognize that dismantling and localizing supply chains is a process rather than an event. Moreover, we consider current shifts to be a reorganization of globalization, something World Trade Organization Chief Economist Robert Koopman refers to as 're-globalization'. This reorganization will entail more digital cross-border trade, diversification in supply chain sourcing, greater flexibility in production processes (from 'just-in-time' to 'just-in-case' manufacturing) and higher levels of automation.

Digital Cross-Border Trade

According to the OECD, there is no single recognized and accepted definition of digital trade. Broadly speaking, it encompasses digitally-enabled transactions of trade in goods and services that can either be digitally or physically delivered. The purchase of a book online is digitally-enabled but physically delivered, while cloud computing is digitally-enabled and digitally delivered.

Underpinning digital trade is the movement of data. Data is at the core of new digital services such as the Internet of Things (IoT) and companies involved in the trade and storage of data are a key component of our investment portfolios.

Accelerated Adoption of Automation

The health crisis has highlighted the importance of supply chain resilience, particularly in relation to medical goods and other essential items such as food. Bolstering resilience will result in more local production. To balance cost efficiency with operational resilience as production moves closer to home, we expect companies to accelerate automation strategies. Automation can uphold David Ricardo's concept of comparative advantage and Adam Smith's theory of specialization in a modern economy. In short, automation can help companies match the advantage of lower labor costs associated with production abroad.

International trade theory - comparative advantage occurs when one country can produce a good or service at a lower opportunity cost than another. If countries specialize in producing (physical or digital) goods and services in which they have comparative advantage, overall trade will be greater than if both countries try to individually be sufficient in production of all goods and services.

We were alert to investment opportunities in companies providing and utilizing manufacturing technologies—automation and robotics—before coronavirus emerged and commentary from first quarter earnings releases cements our view that these technologies will continue to gain traction (Box C). Like all new technologies discussed in this publication, automation is not confined to one particular sector, but rather impacting (or has the potential to impact) every sector we invest in.

New Technologies: Tried and Tested

Box A: Investment Opportunities – Companies Powering the Digital Workplace

Communication and collaboration applications can connect teams and workers across geographies, allowing real-time interactions when workers cannot simply swivel their chair to ask a colleague working at the desk behind them a question. The number of workers utilizing video conferencing has skyrocketed as a result of the COVID-19 pandemic and we expect usage to remain elevated relative to pre-crisis levels.

Virtual desktop infrastructure enables secure access to a corporate desktop from remote locations. This technology has existed since the mid-1990s but adoption is modest, with only 15-30% of knowledge workers globally estimated to be using virtual desktops. We think the COVID-19 pandemic will accelerate demand for secure home setup, particularly as management teams plan to shift a portion of their workers to remote positions following the crisis (Chart 2).

Cloud computing stands to benefit from workforce mobility and a focus on business resiliency. The cloud office total addressable market is estimated to be as much as $77bn, with only 29% of global computing workloads currently being stored in public cloud databases[1].

What is the cloud?
The storage of data online (a remote sever on the internet) rather than on a local computer. Cloud infrastructure allows information to be accessed anywhere on any device that has an internet connection. This is a powerful proposition for more disbursed working environments.

Digitized project management software can offer real-time interactive dashboards that can automate workflows. These will eventually replace email chains and spreadsheets used to manually track and update project progress which can be prone to errors, particularly as workforces become more distributed.

E-signatures allow agreements to be signed in digital format on multiple devices from anywhere in the world. Companies that facilitate e-signatures have therefore been crucial for enabling agreements—from mortgage and rent contracts to tax filings and client onboarding—during the COVID-19 pandemic. We think the COVID-19 pandemic will accelerate use of e-signatures, which are more secure and easier to track and store than paper-based contracts.

High-speed broadband will never have been valued more than during stay-at-home orders which have led to a more than 20% increase in broadband network traffic, mainly due to an increase in video conferences relative to pre-crisis traffic. So far, communications companies have been able to meet surged demand with few disruptions. Looking ahead, we think workers will increasingly require high quality (fast and reliable) broadband. Governments will also retain focus on high quality internet provision[2].

Virtual reality (VR) and **augmented reality (AR)**, also known as **extended reality (ER)** have not been a focus during the COVID-19 pandemic but they have potential to enhance worker connectivity over time. VR technology can place workers into a virtual office room and AR can overlay digital information onto the physical world for more immersive team engagement. This technology could extend facial recognition log-ins from smartphones to virtual desktops. Since the 1990s, the computer has revolutionized the way we work. In the 2020s, ER has potential to transform how we interact with a computer. For example, a mouse and keyboard may simply be replaced with hand gestures. While video conferencing uptake has been immense to date, the more rapid shift to working remotely could accelerate efforts in transformative technologies. In short, AR and VR will mean that virtual desktops will no longer be confined to the physical four borders of a computer display screen.

We also see opportunities in **cybersecurity, data management platforms** and companies involved in **enterprise infrastructure** to ensure companies have adequate technology support for remote workers. The estimated total addressable market for home infrastructure solutions by 2025 is $9bn, assuming 2% of global households gravitate towards working from home more frequently[3].

[1] Source: Goldman Sachs Global Investment Research. [2] For example, in February 2020, the Federal Communications Commission announced a new $20.4bn Rural Digital Opportunity Fund with an aim to provide high-speed broadband access to rural homes and businesses across the United States. [3] Source: Goldman Sachs Global Investment Research and United Nations estimates of global households and broadband penetration. The economic and market forecasts presented herein are for informational purposes as of the date of this presentation. There can be no assurance that the forecasts will be achieved. Please see additional disclosures at the end of this presentation.

New Technologies: Tried and Tested

Box B: Working From Home – the Good, the Bad and the Flexibility

Working from home eliminates long commutes providing both financial and time savings. Work flexibility can also create a more inclusive environment by supporting employees at different life stages including parenthood, as well as individuals with disabilities or caring responsibilities. In addition, companies that empower employees to manage work-life schedules will likely benefit from higher employee morale which, as noted in our recent publication ESG Amplified, can result in better company stock performance.

The option to work from home could help to narrow the gender labor force participation gap by bringing more mothers into the labor market. This reinforces our belief that women are the next engine of growth, with their consumption potential amounting to more than the GDP of two emerging markets, China and India, combined[1].

That said, we recognize that remote working is not for all and not for all of the time. In our view, the decision to work from home will depend on many factors including childcare, home office space, privacy and personal choice. At the onset of careers, young workers living in small apartments in big cities may not have an appropriate work setup and would also benefit from face-to-face interactions. Idea generation and team collaboration will also require some in-person communication.

Box C: Management teams have escalated automation strategies in their operations and supply chains in order to lower costs and boost efficiency

Sealed Air Corporation (SEE)

"Longer term, we expect the learnings from the pandemic will drive secular global demand increases for automation…Producers will invest in more automation for efficiency and safety."

TE Connectivity Ltd. (TEL)

"Due to the high levels of automation, our revenue was minimally impacted in the quarter, and we were able to maintain production to meet our customer commitments even with periods of labor shortages."

Source: Goldman Sachs Global Investment Research - S&P 500 Beige Book: Four key themes from 1Q 2020 conference calls (12 May 2020). All management comments were taken from company transcripts accessed via Thomson Reuters.

[1] Source: World Bank, as of 2019.

The Millennial Mindset Goes Viral

The COVID-19 pandemic has led more generations to adopt online habits and lifestyle choices catalyzed by the millennial generation. Baby boomers have discovered online food delivery services and grocery e-commerce, children are engaged in e-learning, and most social interactions are hosted online or live-streamed. We think this newfound familiarity with the online world will endure past the current crisis.

We would categorize investment opportunities related to the millennial mindset in three categories. First, we remain optimistic on **cyclically boosted and secularly strong** investment opportunities. These include companies benefiting from increased **e-commerce** penetration (Chart 3 and Box D) such as retailers and **digital payment** processers, alongside **e-learning**, and **online entertainment** providers.

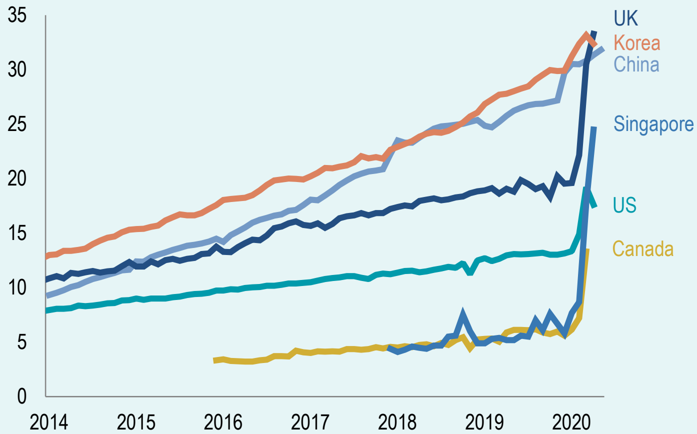
> All generations have had to tap into their inner Millennial, adopting new habits from online shopping to banking. We expect many of these habits will stick even as we come out of lockdowns around the world.
>
> Laura Destribats |
> Co-Portfolio Manager,
> GSAM Global Millennials Equity Strategy

Second, we retain conviction in companies that are **cyclically challenged but secularly strong**, including those involved in facilitating life experiences such as dining out and travel. Stay-at-home orders have led us to seek alternatives for all daily activities but we do not expect to emerge from the pandemic as characters from The Sims, with our entire lives resembling an online simulation.

As activity restrictions are eased, we expect the preference for **'experiences over things'** to return, as already evidenced by the recovery in restaurant visits as economies re-open (Chart 4). That said, we recognize the potential for greater divergence in consumer preferences going forward. For example, person A may be willing to eat in a restaurant and go to sporting events but unwilling to fly. Meanwhile person B may be willing to fly but unwilling to live in a city. We also appreciate that in the near term, virus developments will influence the services sector. Consumer firms will need to reshape themselves to fit varying consumer profiles or choose to specialize.

Chart 3: The pandemic has propelled higher e-commerce penetration

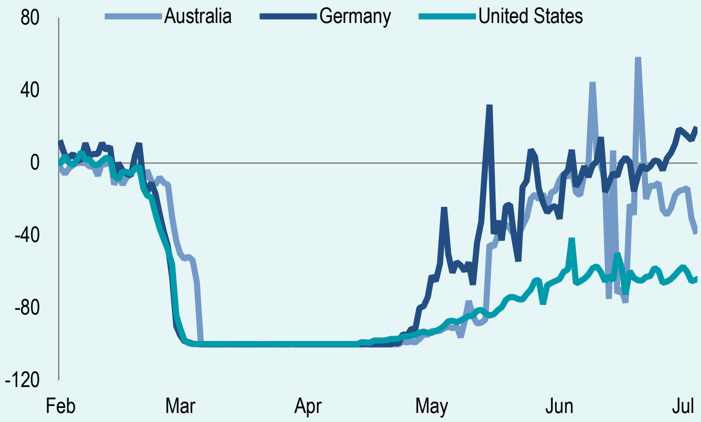
Share of E-Commerce in Total Retail Sales in Major Countries (%)



Source: Haver, UBS. Note: Three-month moving average for Korea. Canada data is to April 2020; Korea, US, Singapore and UK data is to May 2020, and China data is to June 2020.

Chart 4: Lockdowns constrained demand for experiences not consumer preferences

OpenTable Reservations Seated Restaurant Diners, YoY (%)



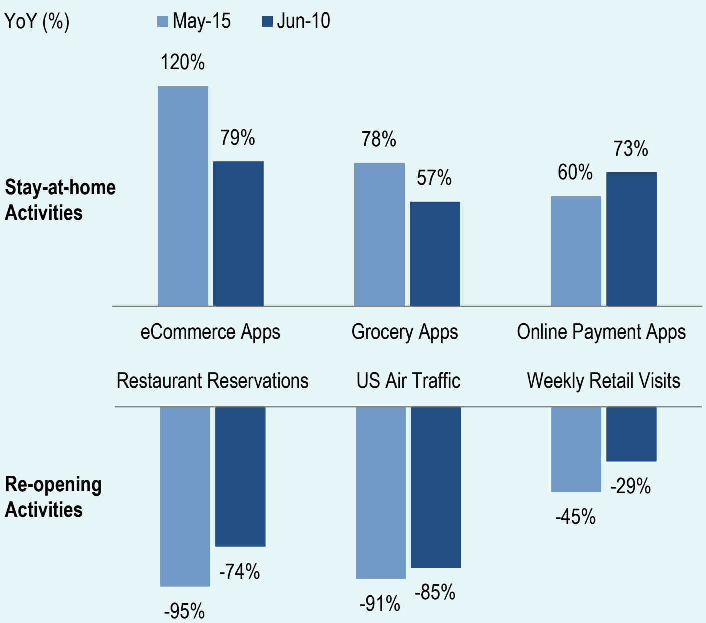
Source: OpenTable, seated diners from online, phone and walk-in reservations. As of June 21, 2020.

The Millennial Mindset Goes Viral

Finally, we remain bearish on companies that are both **cyclically and secularly challenged**, predominately traditional brick-and-mortar retailers that have not adopted a digital footprint. That said, we see potential for certain in-person retailers, including home improvement stores, to remain resilient, particularly if working from home trends inspire home restoration projects.

More broadly, adoption of millennial habits has migrated meaningfully higher. As lockdowns continue to be lifted, the equilibria will shift once again, but the new steady state for **secularly strong themes** outlined above will likely remain above pre-crisis levels. Indeed, we observe this in the data, with 'stay-at-home' activities remaining elevated relative to a year ago, while 're-opening' experiences that fall under our secularly strong category recover (Chart 5).

Chart 5: Secularly strong investment themes recover as economies re-open



Source: Goldman Sachs Global Investment Research "The GS US Reopening Scale".

Box D: A digital footprint can help companies survive the crisis and thrive in the recovery

Companies with a scalable online business model have been able to survive, and in some instances thrive, due to their capacity to manage a vast migration of offline to online activity. Innovation in business models and adaptability has also distinguished retailers. For example, electronics retailer, Best Buy, swiftly pivoted all stores to offer curbside order pickup within 48 hours.

> "The idea of moving faster as an organization than we ever thought possible is actually a really positive side benefit of what's been a really horrible health and financial crisis." – Best Buy CEO Corie Barry[1]

Looking ahead, we believe a strong digital strategy will differentiate companies and be a necessary complement for retail networks. For example, Nike's Run Club added over 1 million new users in March; this app engagement has potential to translate into online retail sales.

Digital store elements have also distinguished retailers. Instant checkout allows consumers to purchase items through an app and collect from stores without interaction with sales associates. This feature was not designed to accommodate social-distancing but will enable retailers to retain sales through a pandemic and beyond as speed, convenience and hygiene preferences remain intact.

[1] Best Buy CEO Corie Barry spoke to Goldman Sachs CEO David Solomon in a recent episode of Talks at GS which can be accessed on YouTube.

A 'New Social Contract': A Problem Shared is a Problem Halved

A new social contract is forming and the agreement will extend beyond governments and individuals to include corporates. We are optimistic that companies will be part of the solutions to global challenges including racial injustice, structural inequity and the climate transition. We believe a unified approach to solving problems can place us on a more sustainable growth path as we progress beyond the virus-induced economic downturn.

Social Purpose: A Necessity, Not a Luxury

The pandemic has held an unflattering mirror against inequalities and as a result—as noted in our publication ESG Amplified—it has also shone a spotlight on corporate social behaviors. Moreover, digital transparency raises accountability by revealing corporate missteps and ESG risks (Table 1). ESG integration in our investment process enables us to identify and manage ESG risks, including those that may emerge in real-time on social media.

Table 1: Digital Media Creates Greater Corporate Action Transparency

Year	Corporate Event	Timeline for Media to Report
1984	Bhopal - Union Carbide	**4 days** for first international media footage
2010	Deepwater Horizon - BP	Live streaming video of the leak within **24 hours**
2018	Vale & Jiangsu Tianjiayi	HD video on Social Media **before company press release**

Source: Goldman Sachs Global Investment Research, GS Sustain (April 2019).

The importance of the 'S' in ESG has also been strengthened by sadly frequent instances of racial injustice. We believe it is our fiduciary duty to encourage good social actions among our portfolio companies, including advocating diverse representation within firms and among senior leadership in an effort to combat systemic racism (Box E).

Good social actions can create positive investment implications; for example, they can build brand equity and customer loyalty. The global coronavirus pandemic has prompted companies to reexamine their social purpose, which will become an important determinant in consumer purchase decisions. Indeed, most millennial consumers would consider changing brands for one that advocates social values.

Moreover, the research on the advantages of diversity are clear: diverse teams produce innovative solutions to problems[1]. But statistics on a diverse team alone will not drive performance; an inclusive environment that enables companies to both recruit and engage diverse talent is needed to generate a positive correlation between diversity and company performance. Two key tenets of active management—fundamental research and company engagement—can enable us to identify both diverse teams and, more importantly, inclusive environments.

Similarly, simply investing in a company that commits to supporting the climate transition will not deliver both potential returns and good ESG outcomes; commitments need to be in the most cost-effective carbon reducing technologies. Again, active management can help us identify business models that achieve by ESG objectives and present potential for attractive returns.

Box E: Stewardship and Shareholder Engagement on ESG Topics

Our Global Stewardship Team has conducted 218 direct engagements with company management teams specifically focused on ESG and Proxy matters year-to-date (YTD)[2]. Through our stewardship responsibilities—company engagement and proxy voting—we seek to unlock long-term value. This includes championing the power of diversity. For example, at one Japanese electronics company, we have advocated greater disclosure of employee diversity data and the adoption of targets to steer progress on improving diverse representation among its workforce.

During this year's proxy season—a period of time between mid-April and mid-June when many large public companies hold annual meetings—we observed raised focus on ESG topics. A survey by Proxy Insight of 87 market participants stated that three quarters of respondents expect companies to report on pandemic preparedness going forward. Majority of participants also expect topics such as executive pay, board diversity and climate change to remain of equal or greater importance relative to their pre-virus standing. In fact, 44% of the participants believe climate change will be more important in a post-COVID-19 world.

[1] Marquis, Jefferson P., Nelson Lim, Lynn M. Scott, Margaret C. Harrell, and Jennifer Kavanaugh, Managing Diversity in Corporate America: An Exploratory Analysis, Santa Monica, Calif.: RAND Corporation, OP-206-RC, 2007. As of April 18, 2008: http://www.rand.org/pubs/occasional_papers/OP206/. [2] Source: GSAM. As of July 10, 2020. For illustrative purposes only. Performance results vary depending on the client's investment goals, objectives, and constraints. There can be no assurance that the same or similar results to those presented above can or will be achieved.

A 'New Social Contract': A Problem Shared is a Problem Halved

A Crisis Can Have a Green Lining

A common thread of the business models we invest in is a focus on sustainability. This includes companies involved in the themes listed in Table 2. Investing in these themes presents attractive investment potential but also serves broader society by enabling us to make progress on achieving the Paris Agreement and many of the United Nations Sustainable Development Goals (SDGs)[1].

A green lining of the virus-induced economic downturn is a clear ambition to unite the pandemic policy response with green objectives. For example, the European Green Deal has advanced a long-dated climate plan into a huge economic stimulus for the European economy. The sizeable economic and employment boost will be accompanied by a sharp acceleration in clean infrastructure investments by European utilities. This policy focus will serve as a tailwind for companies focused on cleaner and more sustainable growth, including renewable energy firms and EV automakers, as discussed by two members of our Fundamental Equity team in Box F.

As stewards of capital, investing in these companies is not only the right thing to do—as it enables a positive environmental and social impact—but it also places us on right side of future growth.

We don't have a Plan B, because we don't have a Planet B' – Ban Ki-Moon

> The European Green Deal is a key policy tool being used to revive the European economy; a wise decision in our view given investments in the energy transition could have a 5x multiplier effect on growth[2]. Companies providing renewable energy and infrastructure therefore benefit from the spending priorities of European governments in both the near- and longer-term.

Gurpreet Gill |
Macro Strategist

Table 2: Sustainable Investment Themes for a Sustainable Future

THEMES	Clean Energy	Resource Efficiency	Sustainable Consumption & Production	Circular Economy	Water Sustainability
SUB-THEMES	• Solar • Wind • Bioenergy • Energy Storage • Grid Services	• Electric & Autonomous Vehicles • Sustainable Manufacturing • Logistics • Smart Cities	• Agriculture • Food • Fashion • Tourism	• Waste Management • Recycling & Reuse • Single-use Substitution	• Water Treatment • Water Distribution • Desalination

For illustrative purposes only.

[1] The Paris Agreement is the first-ever universal, legally binding global climate change agreement, adopted in December 2015. It sets out a global framework to limit global warming to well below 2°C and pursuing efforts to limit it to 1.5°C. There are 17 United Nations Sustainable Development Goals. [2] Source: Analysis by the International Renewable Energy Agency (IRENA). The European Green Deal provides a roadmap with actions to boost the efficient use of resources by moving to a clean, circular economy and restore biodiversity and cut pollution.

A 'New Social Contract': A Problem Shared is a Problem Halved

INTERVIEW WITH

Alexis Deladerrière

Head of International Developed Markets Equities

MODERATED BY

Luke Barrs

Head of EMEA Fundamental Equity Client Portfolio Management

Box F: The Impact of COVID-19 on Renewable Energy

Q: Renewable power generation has accelerated in recent years. Has the global pandemic changed the outlook for the sector?

A: It is true that the industry has experienced rapid growth in recent years, with solar power use quadrupling over the last decade alone. However, the renewable energy industry is still in its infancy stages and we think momentous growth lies ahead. In the near term, the pandemic poses two headwinds. First, social distancing has curbed solar installation in homes and other property types. The second and more pertinent issue has been disruptions to supply chains. Renewable energy infrastructure relies on components from global suppliers; complex supply chains have therefore been challenged by production and trade disruptions. We entered the year expecting record annual solar installation growth. At this juncture, flat growth relative to 2019 appears more likely. But the good news is that the long-term trend of rising demand for renewable power sources remains intact. Projects may be delayed but they're not canceled.

Q: What are the main drivers of demand for renewables and why may they remain resilient?

A: There are three main drivers behind demand for renewable power sources: government policies and priorities, corporate preferences and innovation that will drive scale.

There are three components to public sector demand. First, governments have committed to green energy use, either through the Paris Agreement or with national targets such as the European Green Deal. China accounts for a large share of the renewable energy market and we think the next frontier of demand will be from other emerging market economies including South Korea, Taiwan and India. Second, geopolitical uncertainties have sharpened the focus on energy supply independence. Renewable energy is therefore an attractive proposition given all production is local. Third, investments and job creation in green technologies can form a key component of economic stimulus plans.

The private sector is also committed to the climate transition, with many companies unveiling carbon neutral targets. We consider the third tailwind to be the most exciting and promising. Technological innovation will drive down renewable power costs to incentivize demand that is independent of subsidies. We've already seen significant innovation in many corners of the renewable industry, including expanded capacity for wind turbines and a 50-60% cost reduction. Indeed, the cost effectiveness of wind power allowed the UK to register its longest stretch of coal-free power generation on record this year. The abandonment of coal was not just a function of lower energy demand amid the lockdown but also due to elevated power generated by solar farms. Importantly, this example highlights that the zero marginal cost of production for renewable energy means that carbon-intensive sources will be deserted when demand drops. As investors, this implies less volatility to potential return streams relative to traditional energy sources.

Q: Do lower oil prices present an added near-term headwind for renewables?

A: Crude oil accounts for just 3% of global power generation and so we don't expect it to alter the demand for renewable power sources. In addition, natural gas prices have decoupled from oil prices in recent years. We therefore also see limited risk of renewable demand being reoriented towards natural gas. Importantly, renewable power projects are long-term decisions that are unlikely to be altered by near-term volatility in markets.

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