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A Post-Lockdown, Pre-Vaccine World

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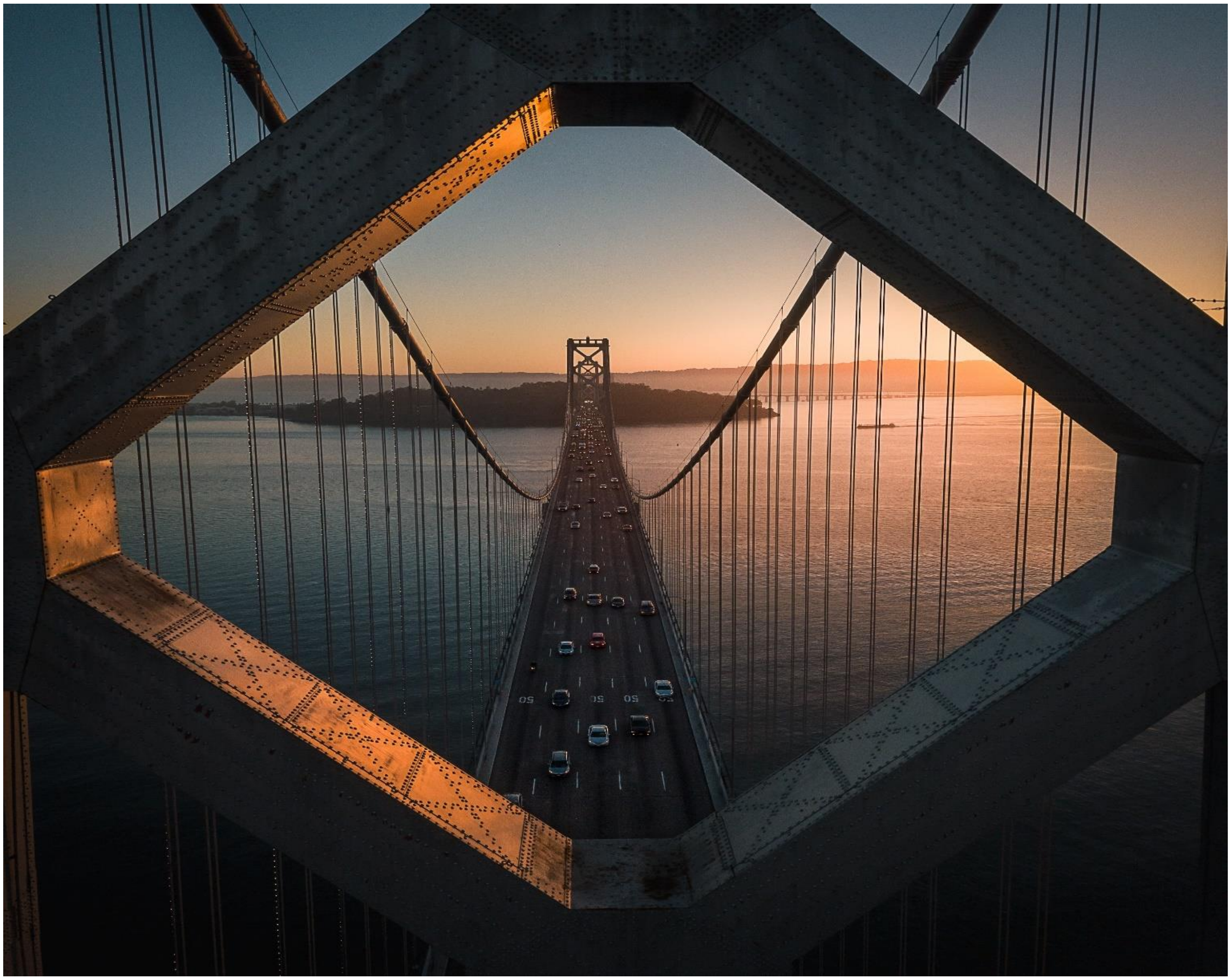

Cheryl Rowan / crowan@rockco.com
Chloe Duanshi / cduanshi@rockco.com

A Post-Lockdown, Pre-Vaccine World

The biomedical community is working overtime to produce a COVID-19 vaccine that will allow the world to be restored to its former state. Dr. Anthony Fauci, the top infectious disease expert on the White House coronavirus task force, estimated that a vaccine will take at least 12 to 18 months to be developed – a timeline that experts believe to be very optimistic and of relatively low probability. The record for developing an entirely new vaccine is four years.[1]

While the stringent measures implemented by many developed countries have been effective at containing the spread and lowering the rates of transmission, the need to reopen the economy has grown increasingly urgent. Over just eight weeks, 36.5 million American workers – or one in five – filed for first-time unemployment benefits.[2] Germany, which has the strongest labor market in Europe, experienced job cuts at 18% of companies in April.[3]

We need a new, sustainable model that is carefully designed, assessed, and calibrated for the "post-lockdown and pre-vaccine" world. Existing models that have been implemented by a few select countries – notably China, Sweden, and South Korea – provide reference points for the rest of Europe and US States as policymakers contemplate a path forward.

A Second Wave Is Bad Politics

While many developed countries are seeking to strike a balance between supporting the recovery of their economies while keeping the virus spread under control, China is aiming for zero new cases. For a country with a population of 1.4 billion,[4] such a goal seems inexplicably expensive, economically speaking. Nonetheless, China – where COVID-19 cases first emerged and officials' cover-up of early reports led to a failure to act in the initial weeks of the contagion – appears to have made up its mind that a second wave of new cases would be even more expensive, politically speaking.

As an example, Harbin, a city in northern China of 10 million people and the capital of a province that borders Russia, was put under lockdown in late April after the city reported a cluster of 52 new cases. Travelers from abroad are now required to spend 28 days in quarantine upon arrival.[5]

As another example, following reports over the weekend of six new cases in Wuhan (despite a strict 76-day lockdown that was lifted on April 8th), authorities launched a "ten-day battle" on Tuesday, May 12th, to conduct testing of the city's 11 million residents.[6] To put the scale of this into context, to date the US has carried out 10 million tests in total.[7]

China's brute force approach is combined with high-tech surveillance and contact tracing – the tracking of where people go and with whom they come in contact. As lockdown measures are lifted in most provinces and cities across the country, local governments have integrated tracking software into two commonly used apps, WeChat and Alipay. Individuals are issued a health code that is green, yellow, or red at any point in time. A green code is required to take public transport or enter restaurants, shopping malls, hotels, and apartment compounds. A yellow code indicates that the individual needs to self-quarantine due to contact with an infected person or proximity to a virus hot zone. A red code indicates that the individual is a suspected or confirmed COVID-19 case and should enter a supervised quarantine facility.[8]

The China model is nearly impossible to replicate in most developed countries given China's unique combination of having: (1) economic resources to

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[1] The New York Times, 4/30/2020
[2] Bloomberg, 5/14/2020
[3] Ifo Institute April Business Survey, 5/11/2020
[4] World Bank: 2019 Revision
[5] Reuters, 4/21/2020
[6] BBC, 5/12/2020
[7] CDC, 5/14/2020
[8] The New York Times, 3/1/2020

endure the costs of repeated, large-scale lockdowns until a vaccine is available; and (2) general public support for sacrificing individual autonomy for the prosperity and safety of the masses.

A Gamble on Trust and Herd Immunity

In sharp contrast to China, Sweden never implemented a mandatory lockdown as the COVID-19 pandemic swept through Europe – a controversial approach that drew criticism from doctors, virologists, and researchers as the country's death toll climbed in April.[9]

The Public Health Agency of Sweden argued that the uniqueness of their approach to navigating the pandemic may be overstated, and that Sweden shares the same objective as those countries that implemented stringent lockdown orders. The difference lies in their implementation methods. Sweden entrusts its citizens with the enforcement of social distancing measures.

Studies have shown that Sweden's "trust-based" approach may not be as naïve as some perceive. Although bars, restaurants, hair salons, and even some cinemas have remained open,[10] research by Copenhagen University found that recent aggregate-spending patterns in Sweden and Denmark reflect similar percentage declines.[11] While Denmark implemented a strict lockdown, the changes in Swedish citizens' behavior was driven by voluntary personal choice rather than mandatory government policy. As the country that invented Volvo and Ikea, the Swedes have a long history of embracing a culture of consensus and rule following. In response to the World Value Survey's question of whether most people can be trusted, 64% of Swedes answered "yes." Meanwhile, it is 40% for Americans, 30% for the British, and 20% for the Spanish.[12]

To a large extent, Sweden appears to have been as successful in slowing the spread of COVID-19 as many other European countries. Its death rate of 33 per 100,000 people is lower than those countries with stringent lockdowns, such as Belgium (77), Spain (57), Italy (51), UK (49), and France (40). However, Sweden's death rate per capita is significantly higher than those of neighboring Nordic countries, such as Denmark (9), Finland (5), and Norway (4).[13]

One may argue that, Sweden's death rate is front-loaded and may decline more quickly versus its Nordic neighbors, as its population develops herd immunity. The Public Health Agency of Sweden stated early on that it believed a continued lockdown would not be sustainable due to the time required for a vaccine to become widely available, and that herd immunity might eventually be an inevitable solution for most countries.

The World Health Organization (WHO) recently praised Sweden as a "future model" in the next phase of fighting COVID-19.[14] However, a complete adoption of the Sweden model is unlikely to occur in many countries. Sweden has the advantage of more than one-half of the country living in single-person households.[15] Further, working from home is common, so the economic cost associated with practicing social distancing is much lower for Swedes versus in other developed countries. Lastly, the net benefit – economically and socially – of establishing herd immunity still remains highly uncertain, not to mention the ethical ramifications of sacrificing a demographic group (older persons and those with underlying health conditions) in this process.

[9] The Local Sweden, 4/14/2020
[10] The New York Times, 4/28/2020
[11] Niels Johannesen (University of Copenhagen), 5/9/2020
[12] World Values Survey (Trust), 2009 - 2014
[13] Johns Hopkins University of Medicine, 5/12/2020
[14] The Times, 5/13/2020
[15] Bloomberg, 5/1/2020

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The Price of Privacy

If the China and Sweden models are the two extremes on the spectrum of potential paths forward for most developed countries in a post-lockdown world, the South Korea model falls somewhere in the middle.

It is tempting to consider the South Korea model as an exit strategy. By embarking on extensive testing, contact tracing, and strict social isolation measures of those infected, South Korea managed to contain the virus spread without instituting lockdown orders or shutting down nonessential businesses. Even at the height of the outbreak, the majority of the population remained mostly free to go about their daily lives.

Compared to other countries that also incorporated contact tracing in their strategies, South Korea stands out due to its public reporting of intimate, detailed information about the infected people under isolation. For example, residents within the same district can access the movement logs of an infected individual on a minute by minute basis, including bathroom visits. Information on which room within a building an infected individual is located, as well as the name of the business where a credit card transaction occurred, is all available to the public.[16]

The Economist reported on April 16th that, of the roughly 57,000 infected people in strict self-isolation at the time, just over 100 people were caught breaking social-distancing rules.[17] While South Korea's impressive success reinforcing strict social isolation measures may be largely attributed to the public reporting of such detailed personal information of those infected, this practice has raised privacy concerns among human-rights activists and epidemiologists. The extensive details can reveal the identities of infected people, exposing them to potential social stigma within the community, and – taking this one step further – discouraging people with mild symptoms from coming forward to be tested.[18]

Americans tolerated some loss of privacy after the 9/11 terrorist attacks. The Patriot Act was the first of many changes to surveillance laws that made it easier for the US government to monitor phone calls, email communications, and internet activity of ordinary Americans.

So far in the US, additional testing for COVID-19 exposure seems to be well received, but contact tracing is not so welcome. Google and Apple are partnering to build a contact tracing phone app, but in a recent poll conducted by the University of Maryland for the Washington Post, only 41% of adults responded that they "definitely or probably" would use a smartphone app designed to track coronavirus contacts.[19]

In a world where economic reopening with contained virus spread is predicated on mass testing and contact tracing, as well as a high percentage of population participation rate, it may be inevitable that Americans tolerate the risk of greater, permanent erosion of privacy in exchange for a return to normalcy.

76 Days Later

On April 8th, Chinese authorities lifted the Wuhan lockdown order imposed on January 23rd. Cautiously, the city came back to life.

What is the first thing you would do after 76 days of strict quarantine? "A long overdue haircut" answered many Wuhan residents. Hair salons were among the first businesses to fill up.[20] Restaurants and department stores, on the other hand, did not see much foot traffic, as residents remained wary of mingling with others in public spaces. Across China, manufacturing activity has quickly recovered to the same level as the year prior, while discretionary

[16] NatureResearch Journal, 3/18/2020
[17] The Economist, 4/16/2020
[18] NatureResearch Journal, 3/18/2020
[19] Washington Post-Univ. of Maryland, April 21-26
[20] Bloomberg Businessweek, 4/23/2020

consumer spending remains 40% lower.[21] Households are struggling with fear of contracting the virus as well as the financial stress caused by the loss of income during the first quarter. Many are actively saving rather than spending, to try and rebuild their balance sheets.

While subway stations are noticeably emptier versus the year before, auto sales in China have shown notable signs of recovery since restrictions began to ease. Volkswagen commented on May 6th that its sales in China are approaching last year's levels, quickly closing the gap created in the first quarter.[22] The positive uptick in auto sales, however, is likely of limited use as a blueprint for what to expect as countries in Europe and US States reopen. Much of China's strong underlying demand is driven by its large population of would-be first-time buyers. The China Association of Automobile Manufacturers warned that the recent rebound is largely driven by pent-up demand and therefore unlikely to be sustained.[23] We suspect that auto sales growth has been further fueled by the public's health concerns. While traffic has returned to pre-lockdown levels, many – those who can afford it – still prefer the longer but safer commute by cars to the risk of traveling via confined subways.

Much to our surprise, estimates by the CAPA Data Center for Aviation indicate that capacity on Chinese domestic flights has recovered to levels only 10% lower than the same period last year.[24] Meanwhile, although the hotel occupancy rate has bounced from its mid-February low, the recovery has been gradual. Marriott commented on Monday that its average occupancy rate in Greater China reached 25% in April – only slightly higher than the 20% level at limited-service hotels in North America, where many lockdown orders are in still place.[25] We suspect the rapid recovery of domestic flights within China may be partially due to pent-up travel demand. Inter-province traveling had been limited due to local government policies until recently. Many Chinese students and workers were stranded while visiting their hometowns during the Lunar New Year holiday, when lockdown orders and travel restrictions were issued across the country. Some are now finally returning to the cities where they study or work.

Just two weeks ago, China celebrated its first major national holiday post-lockdown. The week-long holiday at the beginning of May (Labor Day) is one of the three major holidays celebrated in China. It is commonly referred to as "the Golden Week" for its association with greatly heightened travel and consumer spending activity. Many families typically choose this period for long-distance traveling, such as international or cross-province vacations. We observed that most families elected to stay local this time, visiting large, open outdoor attractions such as public parks. Rather than dining in large groups at restaurants, many chose to host picnics instead. During the first three days of the holiday, Wuhan observed a 330% increase in food delivery orders to non-residential addresses (i.e., parks).[26]

We anticipate a shift from goods–related consumption to experience-related consumption and a greater focus on outdoor activities to be among the many temporary changes in post-lockdown life. Depending on how long it takes to develop a vaccine (and for life to truly return to normal), some of these temporary changes may just become permanent.

China's Response is a Guide but Not a Roadmap

As much as China and other countries rebounding from COVID-19 offer valuable lessons for the US, there is no direct roadmap to recovery. One important difference is that structurally, the US is more dependent on services and less on manufacturing than China or Germany. It is likely

[21] The Economist, 4/30/2020
[22] Financial Times, 5/6/2020
[23] The Wall Street Journal, 5/11/2020
[24] CAPA Center for Aviation, 5/7/2020
[25] The Wall Street Journal, 5/11/2020
[26] ChinaNews, 5/6/2020

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that manufacturing-oriented economies will bounce back more quickly. Services industries are not only more labor-intensive, but also rely on a high level of consumer confidence, and confidence is not likely to be restored so easily. As a society, China is more disciplined than the US, with state-directed policies more the norm. China also has some recent experience in quarantines and distancing, having dealt with SARS in 2002-2003. But the issue that might cause the most disruption for the US is the slow spread of the virus across the country, along with the process for re-opening directed by various state and local governments, rather than a coordinated national approach. Supply chains, industrial activity, and franchise locations often span state lines, complicating the recovery timeline.

Thinner Coffers and Fatter Mattresses

The economic impact of the coronavirus is likely to linger for several months, perhaps even years. In the span of just a few weeks, over 20 million Americans filed for unemployment benefits. In April, 16 million jobs lost were in the services industries, with over one-half of these from the leisure and hospitality sectors.[27] Bank of America reported that 72% of jobs lost in April are classified as temporary, implying that they could come back relatively quickly when the economy re-opens.[28] But in some of the hardest hit industries, unemployment benefits exceed the current level of wages. Combined with fear of getting sick, workers could be sidelined for longer, creating challenges for many smaller businesses.

Consumer spending, responsible for 70% of US economic output, was down 7.5% in March, the largest monthly drop since the government began tracking the data in 1959.[29] Roughly 40% of consumer spending can be attributed to those over the age of 55.[30] This demographic may be less inclined to resume normal activities any time soon. Spending is closely correlated with consumer confidence. Consequently, we expect any rebound will be related to abatement of the virus spread or favorable treatment news.

Coupled with dismal spending trends, Oxford Economics reports that more than one-half of US households have no emergency savings. Cornerstone Macro notes that savings rates usually rise around 2% during recessions; the deep nature of this slowdown suggests that savings may rise 3%, taking $500 billion out of consumption by the end of 2021.[31]The savings rate of 9.6% at the end of Q1 is likely to rise again in Q2 – a healthy trend for household balance sheets but further slowing down the recovery.

Heading Toward a New Normal

The current pandemic has both an economic and a psychological impact and is likely to create lasting structural shifts in behavior among individuals and businesses. In addition to saving more, individuals are likely to alter the way they work, shop, dine, travel, worship, and access health care and education. The human need for social interaction, balanced with concern over self-protection, has created unique behavioral challenges.

While consumers will return to stores once they feel comfortable, online shopping is likely to remain a popular alternative. Businesses without a digital presence could be left behind. And spending trends, if we follow China's lead, are likely to be focused on essential goods, along with personal health and wellness items.[32] Travel patterns might change a lot with less international travel and avoidance of airports and public transportation when possible. It is expected that traveling by car

[27] ADP
[28] Business Insider, 5/8/2020
[29] Barron's, 5/4/2020
[30] Deutsche Bank, April 2020
[31] Cornerstone Macro; The Wall Street Journal ,4/23/2020
[32] Barron's, 5/4/2020

will become more popular. Airlines are contemplating temperature checks for passengers; on-board dining will likely no longer be available. Separating passengers in tight fitting cabins will create logistical challenges once airline travel resumes to more normal levels.

Dining out is likely changed forever. Expect more outdoor dining, staggered seating areas, disposable menus, barriers between tables and more digital ordering/payment devices. These changes could be challenging for an industry that is already struggling if dining rooms have capacity limitations for an extended period.

The mode for education has clearly been re-shaped with virtual learning likely to maintain a permanent footprint. Remote learning offers the potential to make higher education more accessible and affordable. Colleges have difficult decisions to make in a short amount of time related to on-campus learning and housing, honoring deferral requests, etc.

Workplace of the Future: No More Water Coolers

Employers across a wide array of businesses have had to rapidly re-design work environments and instill new rules of engagement aimed at employee safety that will probably remain in a post-pandemic world for the foreseeable future. The adoption of workplace changes has introduced the term "de-densification" to the lexicon. Some of these changes, like extra sanitizing, spreading out desks or installing barriers between workstations, staggered assembly lines and offering employees the option of working from home, are prevalent. More radical changes face greater logistical hurdles and can be controversial.

Workers at Ferrari must undergo temperature checks, wear masks and are offered optional blood tests to check for antibodies.[33] Some companies are exploring the use of Feevr, a thermal imaging device from X.Labs whereby employees would submit to a facial scan, then have their temperatures taken digitally and, if within reasonable limits, are granted access to the office building.[34] PricewaterhouseCoopers LLP is developing a contact tracing app for employees that traces office worker daily interactions.[35] Contact tracing and dividing workers into groups based on perceived health risks raise safety vs. privacy debates.

Companies in "Fight or Flight" Mode

The shutdown of the US economy forced thousands of businesses to close a few months ago. Many hope to re-open soon and have enough liquidity to last until then. Others are in a more precarious position as we have seen with bankruptcy announcements from Nieman Marcus, Hertz, Whiting Petroleum, and several others. At the center of the debate over the future of corporate America is the question of liquidity (lack of access to credit) vs. solvency (no amount of credit can replace lost revenues).

Clearly, many companies and even entire industries need to adapt to the post-pandemic world. This could mean increased use of technology, shifts in capital allocation, re-distribution of supply chains and, in some cases, redefining business models.

In a world where social distancing is now expected, businesses are increasingly using technology in the form of video conferencing, digitalization, and cloud-based information sharing. We expect to see greater use of robots, 3D printers, drones, and other devices in place of human capital, even beyond the industrial sector. In some movie theaters in Korea, robots scan tickets and give out customer information. Technology can be used in

[33] The Wall Street Journal, 5/5 2020
[34] The Wall Street Journal, 5/6/2020
[35] The Wall Street Journal, 5/6/2020

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many ways to boost productivity, shifting automated processes to higher value-add products, and moving production closer to customers and restructuring supply chains.

Companies will likely be more conservative with cash. We expect a trend of less share buybacks, smaller dividend increases and lower capital spending (capex). Capital spending fell 8.6% in Q1.[36] Weak oil prices, higher debt levels and tighter lending standards should keep capex low for a while. Cutting back on capex by larger firms can have a devastating effect on smaller businesses that function as suppliers and that may already operate on thin profit margins. Small and Medium Businesses (e.g., those with less than $500 million in revenue) employ one-half of the workforce in the US and contribute roughly 40% to GDP.[37]

Many companies that received Federal aid were forced to suspend dividend payments recently. Others did so voluntarily to shore up cash. By the end of April, 83 companies suspended or cancelled dividends this year, more than in the last 10 years combined; and an additional 142 companies had cut payouts.[38]Goldman Sachs estimates that share buybacks within the S&P 500 Index are likely be one-half of 2019's value.[39] In addition to improving balance sheets, we expect companies to shift capital to programs designed to ensure employee and customer safety rather than rewarding shareholders.

Made in…India?

Supply chains are critical ingredients to efficient production, and US companies have spent decades creating vast networks of low-cost manufacturing and just-in-time deliveries. Shortages of necessary supplies and life-saving equipment during COVID-19 have forced companies across a wide array of industries to question their supply chain dynamics.

Highly automated industries in the US rely on global supply chains because many component parts are labor-intensive and are made in developing countries. For key medical supplies, the US is dependent on China: 80% of thermometers, 70+% of face masks and 50+% of protective surgical garments are imported from there.[40] Some policy makers have endorsed a more isolationist approach. Over the long-term, it is likely that the US reduces its dependence on others for critical products but that is not a likely near-term outcome, nor is it grounded in economic fundamentals. Nonetheless, we expect US companies to continue diversifying sources of materials and components, as they did during recent US-China trade conflicts.

US Secretary of State Pompeo hinted that the US, along with other nations, might work on a plan to restructure global supply chains that would respect China's manufacturing strength yet limit dependencies. While no major changes are likely in the near-term, there could be longer term beneficiaries among Asia/Pacific nations such as India, Vietnam, and South Korea.[41]

What Lies in Store

The economic consequences of business closures, high levels of unemployment, massive stimulus efforts and high levels of fear and anxiety are likely to be deep and long-lasting. At the very least, we expect the US economy to become less efficient. Nationalistic behavior and restructuring supply chains, such as more stockpiling of inventories, are not necessarily in the economy's best interest. Neither is bailing out "zombie" companies that have no profits but continue to hang on because they are provided with enough liquidity to service debt obligations, thereby draining investment capital from stronger firms.

[36] CreditSights, 5/1/2020
[37] Bridgewater Associates, 4/16/2020
[38] The Wall Street Journal, 5/3/2020
[39] The Wall Street Journal 5/1/2020
[40] Trade Data Monitor
[41] The Wall Street Journal, 5/7/2020

Recessions are characterized by lower incomes and lower associated tax receipts that, combined with mounting bills from the relief stimulus, suggest that tax rates are probably going to rise. As the Federal Reserve appears diligent at keeping its foot on the pedal of monetary stimulus, short-term interest rates in the US should remain unprecedentedly low. This should keep the US dollar in check; it may even signal an end to the US stock market's outperformance vs. international markets.

It is likely that the wealth gap in the US widens even further, despite attempts to assist the most vulnerable during the crisis. Shutdown of schools and day care centers creates a greater household burden for single parents and can impede their ability to work even when jobs return. Small businesses and individual workers are more exposed to a prolonged shutdown than large companies. Those just entering or exiting the job market are especially vulnerable in a slowdown, as new workers struggle to find jobs and baby boomers may need to tap retirement savings earlier than planned. The bottom 90% of Americans hold about one-half of the housing wealth but have little exposure to the financial markets.[42] When stocks rebound but real estate does not, the wealth gap widens.

Beneficiaries of Dislocation

In every market dislocation, assets get re-priced and create opportunities for investors. In the case of the recent pandemic, entire business models are likely to be re-drawn and new industries created. While we do not know what shape those will take, we can identify some current trends that we think are likely to continue.

Technology stocks have been beneficiaries of the stay-at-home economy, and many are likely to continue to do well as those behavior patterns persist. Areas within technology that seem especially well positioned are cloud-based software and applications, semiconductors, personal computing hardware such as tablets and printers, and e-commerce.

Health Care stocks, particularly those in diagnostics, life sciences, and biopharma, are likely to offer solutions to current challenges in testing and identifying potential treatments for COVID-19.

Real Estate stocks are increasingly becoming bifurcated. Some retail, office and residential REITs may be adversely affected by the liquidity challenges of their tenants. At the same time, REITs involved in distribution and logistics or telecom and data transmission/storage appear well positioned.

The high yield corporate bond market has become bifurcated as well, largely driven by the Federal Reserve's announced intervention. Fallen angels (bonds formerly rated investment grade but subjected to recent downgrades to high yield status) may be purchased by the Fed as part of its Corporate Credit Facility. These bonds are likely to have favorable bids compared to lower rated, more leveraged high yield bonds. We have seen significant retracement of BBB and BB rated corporate bonds from their March lows, whereas lower rated high yield bonds – segments that remain cut off from Fed support – have lagged.

The US stock market has held up well, in some cases surprisingly well, despite somber economic data and dismal expectations for corporate earnings. Clearly, massive stimulus has helped remove concerns about liquidity. We know that stocks are forward-looking and to some extent may be anticipating eventual recovery. However, we still think that the US stock market must deal with the reality of lower revenues and earnings challenges, and we expect much back-and forth price movement over the next few months. As that occurs, we anticipate that additional investment opportunities will arise.

[42] Bloomberg BusinessWeek, 5/4/2020

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