MORNING BRIEFING
May 28, 2020

US Declaration of (Cold) War

Check out the accompanying chart collection.

(1) Cyclical stocks rebound as economy reopens. (2) P/Es rising faster than Es are falling. (3) Progress on both the health and economic fronts of the war against the virus. (4) Cold war with China has the potential to replace hot war against virus as the new worry for investors. (5) China, not the US, started it, and the US is now declaring it. (6) China, not the US, has been upsetting the post-WWII global order. (7) Real vs wishful-thinking geopolitics. (8) A report that connects the dots. (9) Hong Kong Syndrome. (10) The market's next worry. (11) Robots with hands evolving quickly.

Geopolitics: The Gloves Are Off. The major US equity market indexes continued to rebound, with the Dow Jones Industrial Average crossing back above the 25,000 marker on Wednesday, fueled by the slow reopening of the US economy in the wake of the COVID-19 shutdown. The S&P 500 is now up 35.7% from its March 23 low and is down only 10.3% from its February 19 high (*Fig. 1*). Investor confidence in the improving economic outlook helped some of the most cyclical sectors outperform on Wednesday, with the S&P 500 Financials up 4.3% and S&P 500 Industrials up 3.3% (*Fig. 2*). They both clearly outperformed the 1.5% increase in the S&P 500 yesterday.

The Fed's ultra-easy monetary policies continue to stimulate rebalancing out of bonds and into stocks, boosting forward P/Es faster than forward earnings are dropping. In addition, the gradual reopening of the US economy confirms that we are making progress in our battle with COVID-19. Social distancing should continue to keep a lid on new infections if we keep our distance from others and wear masks. If we are very lucky, a vaccine may be available later this year or early next year.

Nevertheless, investors also should keep an eye on the battle brewing between the US and China. The Trump administration laid out its approach to the country's relationship with China in a remarkable report that was sent to certain congressional committees on May 21. It throws in the towel on expectations that China will behave according to the global norms of a developed country, stating that we must be "clear-eyed" in our assessment of China and how it has behaved. It also lays out the Trump administration's return to "principled realism," acknowledging the strategic competition between the countries. Finally, it proceeds to list the actions the administration has taken to protect the US from China.

Individually, the ideas and actions listed in the report are nothing new to those who have followed the deterioration of US/China relations over the past couple of years. Indeed, Vice President Mike Pence foreshadowed much of the report in an October 4, 2018 speech. But what the document does very effectively is connect economic, military, and political dots to present a picture of a Chinese government behaving badly under the leadership of the Chinese Communist Party (CCP) and a US government, under the Trump administration, acting to protect its interests. Any doubt that the US and China have entered a cold war will fade after reading this document.

In many ways, the report is a US declaration of a cold war with China that accuses the Chinese government of starting this war many years ago on US interests, in particular, and on the post-WWII global order based on free trade with open markets, in general. The report implicitly declares that it is China, not the US, that has upset this order. Here are some of the highlights:

(1) *Seeing China more clearly.* The Trump administration's report, *United States Strategic Approach to the People's Republic of China,* first reviews the relevant past developments. It notes that US policy was based on hopes that deepening engagement with China would spur the economic and political opening of that country, leading it to become a responsible global citizen with a more open society. However, China did not become a more open society. Its reforms have stalled or reversed. Instead, China has chosen to "exploit the free and open rules-based order and attempt to reshape the international system in its favor. … The [Chinese Communist Party's] expanding use of economic, political, and military power to compel acquiescence from nation states harms vital American interests and undermines the sovereignty and dignity of countries and individuals around the world."

(2) *Chinese misdeeds aired.* The Trump administration doesn't hold back when enumerating China's various wrongdoings. After joining the World Trade Organization (WTO) on December 11, 2001, Beijing failed to continue opening its markets. Instead, the report contends China exploited the benefits of WTO membership by becoming the world's largest exporter, while protecting its domestic markets. The country's economic policies have led to "massive

industrial overcapacity that distorts global prices and allows China to expand global market share at the expense of competitors operating without the unfair advantages that Beijing provides to its firms."

In addition, the People's Republic of China (PRC) does not treat companies operating in China fairly. It forces US companies to transfer technology to Chinese partners, restricts US companies' ability to license their technology on market terms, directs and facilitates acquisition of US companies and assets to obtain cutting-edge technology, and conducts and supports unauthorized cyber intrusions into US networks to steal sensitive information and trade secrets.

The administration casts aspersions on China's One Belt One Road projects, which it believes the country uses to advance its interests around the world and reshape international norms. These projects are "characterized by poor quality, corruption, environmental degradation, a lack of public oversight or community involvement, opaque loans, and contracts generating or exacerbating governance and fiscal problems in host nations."

The report continues its criticisms by noting China's failure to reduce pollution: China has been the world's largest greenhouse gas emitter; it exports polluting coal-fired power plants to developing countries; and it is the world's largest source of marine plastic pollution.

The administration criticized the CCP's methods of leadership at home. The CCP has purged political opposition; prosecuted bloggers, activists and lawyers; arrested ethnic and religious minorities; censored the media and others; and enacted surveillance and social credit-scoring of its citizens. Beijing has detained more than a million Uighurs and other minorities in indoctrination camps and persecuted people based on religion. And now China is exporting the technology and techniques it uses to control its citizens to other authoritarian states.

The report discusses Beijing's attempts to compel or persuade Chinese nationals and others living in the US to steal technology and intellectual property from companies and academic institutions. It notes that the country is attempting to intimidate neighboring countries by "engaging in provocative and coercive military and paramilitary activities in the Yellow Sea, the East and South China Seas, the Taiwan Strait, and Sino-Indian border areas" and that it is compelling companies such as Huawei and ZTE to cooperate with Chinese security services, creating security vulnerabilities in foreign countries.

(3) *US response.* Going forward, the Trump administration intends to respond to the PRC's "actions rather than its stated commitments." The Department of Justice and the FBI are working to identify and prosecute China's attempts to steal trade secrets, hack systems, engage in economic espionage, disrupt US infrastructure and supply chains, and subvert American policy.

The US will counter foreigners seeking to influence US policy and respond to CCP propaganda in the US. "We are working with universities to protect the rights of Chinese students on American campuses, provide information to counter CCP propaganda and disinformation, and ensure an understanding of ethical codes of conduct in an American academic environment." And it will prevent Chinese companies from accessing US technology "through minority investments to modernize the Chinese military." The US is looking to prohibit the import of counterfeit items, including drugs. And it will use tariffs and work with the European Union and Japan to counter abusive trade practices, including industrial subsidies, and forced technology transfers.

The US continues to improve our own military capabilities, help arm our allies, and encourage China to negotiate new arms-control and enter strategic-risk-reduction discussions. "The United States military will continue to exercise the right to navigate and operate wherever international law allows, including in the South China Sea." We will maintain strong unofficial relations with Taiwan and, as Beijing increases its military, the US will assist the Taiwan military to maintain a credible self-defense to deter aggression. It reinforced prior US calls to respect the rights of Uighurs, Muslims, Tibetan Buddhists, and others being persecuted.

The report noted that the US will criticize China if it doesn't uphold its international commitments to Hong Kong. Interestingly, the administration's accusations about China's role in spreading COVID-19 were not mentioned in the report.

(4) *No retreat.* In many ways, the conclusion of the 16-page report appears on page 8: "Similarly, the United States does not and will not accommodate Beijing's actions that weaken a free, open, and rules-based international order. We will continue to refute the CCP's narrative that the United States is in strategic retreat or will shirk our international security

commitments. The United States will work with our robust network of allies and likeminded partners to resist attacks on our shared norms and values, within our own governance institutions, around the world, and in international organizations."

In all, the report made clear that the administration has reevaluated how the US understands and responds to China. The US/China cold war passes the duck test: If it looks like a duck, swims like a duck, and quacks like a duck, then it probably is a duck.

(5) *Bad ending for Hong Kong.* Given the events unfolding in Hong Kong, the report takes on even more weight. Protesters returned to Hong Kong's streets Wednesday after China announced it would write a new national security law for Hong Kong that would prohibit "splittism, subversion, terrorism, any behaviour that gravely threatens national security and foreign interference," a May 27 *FT* article explained. The proposal was expanded on Tuesday to also prohibit activities that would seriously endanger national security, which could be interpreted as preventing activists' protests. If the proposal becomes a law, it would be the first time China bypassed Hong Kong's legislature and public consultation process to impose a law carrying criminal penalties.

President Trump responded on Tuesday, saying "he is preparing to take action against China this week" over China's proposed national security laws for Hong Kong, a May 26 Reuters article reported. No details were given. But on Wednesday, Secretary of State Mike Pompeo reported that the US no longer considers Hong Kong autonomous from China. The new designation could change Hong Kong's favorable trade relationship with the US and open up Chinese officials to sanctions, a May 27 CNBC article reported.

"Hong Kong and its dynamic, enterprising, and free people have flourished for decades as a bastion of liberty, and this decision gives me no pleasure. But sound policy making requires a recognition of reality," Pompeo said, according to CNBC. "While the United States once hoped that free and prosperous Hong Kong would provide a model for authoritarian China, it is now clear that China is modeling Hong Kong after itself."

(6) *No market impact, so far.* It's interesting to recall that the stock market's 20% correction in late 2018 was partly attributed to Pence's belligerent October 4, 2018 speech presenting a litany of complaints about China. The speech was similar to the administration's latest

assessment and set the stage for Trump's escalating trade war with China until a "Phase 1" deal was reached in January of this year. This time, the market seems totally unfazed by the rapidly deteriorating relations between the US and China. We will continue to monitor the situation to see if this becomes the market's next worry.

Disruptive Technologies: Robots Lending a Hand. Traditional industrial robots often have pinchers or suction cups at the end of their arms to move items from one place to another. Other robotic arms have tools at the end to execute a specific task, like welding or spray-painting. New robots, however, reflect major design advancements in the areas of dexterity and sensitivity. They have human-like hands, with five fingers moving in various directions. Some robotic hands have sensors capable of feeling, and others use artificial intelligence to "learn" their task.

Here's a look at some of the latest robots that may boost productivity and lure foreign manufacturing back to US shores:

(1) *Sensitive robots.* The Tactile Telerobot has a very human-like hand, which is both dexterous and sensitive, at the end of an arm. It is controlled by a human wearing a set of gloves that allows the human to feel what the robot is touching and allows the robot to move however the human directs.

Here's an amazing video that shows the robot—at the direction of the human--stacking plastic drinking cups, unscrewing a bottle cap, and writing with a pen. The robot's big tricks include manipulating a Rubik's Cube and allowing the human operator to pull a banana out of a bag, which the operator can touch through the robot but can't see.

The Tactile Telerobot includes parts from many manufacturers, including robot hands from Shadow Robot, arms from Universal Robots, sensors from SynTouch BioTac, and gloves from HaptX Gloves. Tangible Research provides expertise on tactile sensing and haptics. The human operator doesn't need to be in the same room as the robot to operate it; the operator can be on another continent with the proper communication network. As a result, the Tactile Telerobot is considered perfect for tasks that are too dangerous for humans, like decommissioning nuclear reactors, disposing of bombs, and exploring deep space as well as repetitive but delicate tasks like conducting research, manufacturing, and picking fruit.

(2) *AI robotic hand: Learning fast.* OpenAI is a San Francisco research lab focused on artificial intelligence (AI). It has created an AI program capable of operating a Shadow Dexterous Hand to manipulate and solve a Rubik's Cube puzzle. Here's an October 15 video by OpenAI showing the robotic hand, dubbed "Dactyl," in action.

Robots have been programed to solve Rubik's Cubes faster than humans in the past. But Dactyl is different because it learned to solve the Rubik's Cube and, in theory, could be taught to do a different task in the future. Buying a general robot able to be trained to do different tasks would eliminate the cost of buying robots designed specifically for a single task that might become unnecessary or changed in the future.

OpenAI uses automatic domain randomization to "teach" Dactyl's neural networks. The hand learns by running through multiple simulations with increasing levels of difficulty to provide various experiences retained as "memories." By teaching itself this way, Dactyl theoretically could handle situations that it has never encountered before, OpenAI's website explains.

The folks who created Tactile Telerobot maintain that their human-controlled approach is superior. "The reason we chose the Tactile Telerobot over an autonomous approach is that human intelligence is still far superior to AI. As Judea Pearl, a pioneer in AI, has rightfully pointed out, until AI learns to properly deal with cause and effect, it is just pattern recognition, which might be impressive in what it can do from a computational standpoint, but isn't actually intelligent in a general sense," explained Jeremy Fishel, founder of Tangible Research, in a January 28 article in *The Robot Report*.

(3) *Robots in space.* The US and the Russians both have developed robots that have been to space and back. In the US, NASA and General Motors built a robot that can work alongside humans in space, dubbed "Robonaut 2," or "R2." Initially, R2 was an upper torso with arms, very dexterous hands, and a head filled with vision equipment. Sensors prevented the robot from harming a human, and its hands could use all the tools that human hands can use.

In 2011, R2 was sent to the International Space Station. When two "legs" were attached to R2 three years later, the robot malfunctioned and was sent back to Earth in 2018 to be fixed. While there have been reports that R2 will return to the Space Station, a date hasn't been announced. If fixed, R2 could run basic, repetitive experiments in space, which would be much less expensive than sending a human to do these jobs.

NASA also has developed Valkyre, a robot designed to work independently of humans in harsh environments, perhaps on Mars or in other parts of deep space. A NASA video in an October 2016 *Wired* article showcases the impressive Valkyre. The article reports that Valkyre is "being developed to mine resources, build habitats autonomously on the surface of Mars, complete disaster-relief maneuvers and work alongside astronauts." At 6 feet 2 inches tall, the humanoid robot weighs 300 pounds and is being further developed by various universities around the world.

NASA actually has all manner of robots under development to help explore planets that are inhospitable to humans. Some drive, like the Mars Rover, while others fly or glide. This October 2019 Business Insider video presents eight of the robots being developed. They aren't slated to be on SpaceX's postponed flight, but our guess is that they'll be floating above us sometime soon!

CALENDARS

US: **Thurs:** Real GDP -4.8%, Durable Goods Orders Total and Ex Transportation -18.5%/-14.0%, Jobless Claims 2.10m, Pending Home Sales -15%, Kansas City Fed Manufacturing Index, EIA Natural Gas Storage, Williams. **Fri:** Personal Income & Spending -6.5%/-12.6%, Core PCED -0.3%m/m/1.1%y/y, Consumer Sentiment Index 74.0, Advance Goods Trade Balance, Chicago PMI 40, Baker-Hughes Rig Count, Powell. (DailyFX estimates)

Global: **Thurs:** Eurozone Economic Sentiment 70.3, Germany CPI -0.1%m/m/0.6%y/y, Japan Retail Sales -11.5% y/y, Japan Industrial Production -5.1% m/m. **Fri:** Eurozone Headline & Core CPI Flash Estimates 0.1%/0.8% y/y, Germany Retail Sales -14.3%, France GDP -5.8%, Italy GDP -4.4%, Canada GDP -10.0%, Japan Consumer Confidence, Japan Housing Starts -12.1%. (DailyFX estimates)

STRATEGY INDICATORS

Stock Market Sentiment Indicators (*link*): The Bull/Bear Ratio (BBR) rose again this week, and was above 1.00 for the seventh week, after three weeks below. The BBR climbed for the ninth straight week, to a 13-week high of 2.12, after falling from 2.89 to 0.72 (the lowest since

February 2016) the prior five weeks. Bullish sentiment climbed for the eighth time in nine weeks, by 20.4ppts to 50.5%, following a five-week plunge of 24.6ppts (to 30.1% from 54.7%) to its lowest percentage since late December 2018. Meanwhile, bearish sentiment sank 17.9ppts the past nine weeks to 23.8%, after shooting up 22.8ppts (41.7 from 18.9) the previous five weeks. The correction count slipped to 25.7% this week from 26.9% the prior two weeks; it had advanced 2.6ppts the previous two weeks, from 24.3%. The AAII Ratio last week increased for the second week from 31.0% to 39.2% over the period. Bullish sentiment advanced to 29.0% last week after falling from 30.6% to 23.3% the previous two weeks, while bearish sentiment dropped from 52.7% to 45.0% the past two weeks.

S&P 500 Earnings, Revenues, Valuation & Margins (*link*): Analysts continued to slow their pace of COVID-19 estimate cuts during the latest week. The consensus S&P 500 forecasts previously had been falling at rates that paralleled the declines during the financial crisis of 2008-09. Forward revenues dropped 0.4% w/w to its lowest level since June 2018 and is now 7.9% below its record high in mid-February. Forward earnings fell 0.5% w/w to its lowest level since September 2017 and is now 21.1% below its record high in early March. Forward growth forecasts fell w/w too. Analysts expect forward revenues growth of 0.6% and a forward earnings decline of 3.2%. The revenues growth measure was down 0.1ppt w/w, and earnings growth dropped 0.2ppts. Forward revenues growth is up from the lowest reading since June 2009 and 5.8ppts below its seven-year high of 6.3% in February 2018. Forward earnings growth is up from its record low of -5.6% at the end of April, but remains 20.2ppts below its six-year high of 16.9% in February 2018. Prior to the passage of the Tax Cuts and Jobs Act (TCJA), forward revenues growth was 5.5% and forward earnings growth was 11.1%. Annual growth expectations for 2020 continue to deteriorate. Analysts expect revenues to decline 5.4% y/y in 2020 compared to the 4.2% reported in 2019. That’s down 0.2ppts w/w and 10.3ppts since the start of the year. They’re calling for earnings to decline 22.6% y/y in 2020 compared to a 1.4% rise in 2019. The 2020 growth rate fell 0.4ppt w/w and is down 31.6ppt since the beginning of the year. The forward profit margin of 10.3% was steady for a fourth straight week at the lowest level since August 2013, but is down 2.1ppt from a record high of 12.4% in September 2018. That compares to 11.1% prior to the passage of the TCJA in December 2017 and the prior cyclical low of 10.4% in March 2016. Analysts now expect the profit margin to fall 2.2ppt y/y in 2020 to 9.4%—from 11.6% in 2019—and to improve 1.8ppt y/y to 11.2% in 2021. Valuations have been extremely volatile this year on both a daily and weekly basis. They rose last week for the first time in three weeks. The weekly snapshot of the S&P 500’s forward P/E was up 1.1pts to 21.2, which is the highest level since March 2002 and up from a 77-month low of 14.0 in mid-March. It's still well above the 14.3 bottom during the December 2018 selloff (that 14.3 bottom was the lowest reading since October 2013 and down 23% from the 16-year high of 18.6 at the market's valuation peak in January 2018). The S&P 500 price-to-sales ratio surged to a 13-week high of 2.18 from 2.06. That's up from the 49-month low of 1.65 in mid-March, which compares to mid-February's record high of 2.29. It's now back above the 1.75 trough during the December 2018 selloff, when it was the lowest since November 2016 and down 19% from its then-record high of 2.16 in January 2018.

S&P 500 Sectors Earnings, Revenues, Valuation & Margins (*link*): Consensus forward revenues fell w/w for ten of the 11 sectors, and forward earnings was lower for nine of the 11 sectors. Consumer Staples and Real Estate were the only sectors to post a w/w gain in forward earnings. Due to sharply lower forward earnings, forward P/E ratios are now back above the recent record or cyclical highs prior to the bear market for all sectors except Health Care, Real Estate, and Utilities. However, forward P/S ratios remain below their highs. Utilities is the only sector expected to record higher margins y/y in 2020, down from eight expected to do so in early March. During 2019, just two sectors improved y/y: Financials and Utilities. The forward profit margin rose to record highs during 2018 for 8/11 sectors, all but Energy, Health Care, and Real Estate. Since 2018, it has moved lower for nearly all the sectors. The profit margins of Consumer Discretionary and Tech dropped in the latest week, but Real Estate's and Utilities' both rose. Here's how the sectors rank based on their current forward profit margin forecasts versus their highs during 2018: Information Technology (21.7%, down from 23.0%), Real Estate (14.3, down from 17.0), Communication Services (13.4, down from 15.4), Utilities (13.9, back up to a record high), Financials (13.5, down from 19.2), S&P 500 (10.3, down from 12.4), Health Care (10.0, down from 11.2), Materials (8.8, down from 11.6), Industrials (7.3, down from its record high of 10.5% in mid-December), Consumer Staples (7.2, down from 7.7), Consumer Discretionary (4.7, down from 8.3), and Energy (0.6, down from 8.0).

US ECONOMIC INDICATORS

Regional M-PMIs (*link*): Four Fed districts now have reported on manufacturing activity for May (New York, Philadelphia, Dallas, and Richmond) and show a sharp drop in activity again—though at a slower pace than April's record contraction. The composite index (to -42.0 from -65.5) rebounded 23.5 points this month after plunging 77.6 points the prior two months. The coronavirus impacts remain severe in all four regions—New York (to -48.5 from -78.2), Philadelphia (-43.1 from -56.6), Dallas (-49.2 from -74.0), and Richmond (-27.0 from -53.0)—

though not as intense as a month ago. Meanwhile, May new orders (to -33.4 from -66.7) contracted at half of April's pace, after plunging steadily from January's recent peak of 13.8. As with the composite, orders in the New York (-42.4 from -66.3), Philadelphia (-25.7 from -70.9), Dallas (-30.6 from -68.7), and Richmond (-35.0 from -61.0) regions all contracted at a fast pace, though the decline eased considerably from April. Meanwhile, factories cut payrolls at a much slower pace this month than last month—with the employment (-12.2 from -36.3) measure soaring 24.1 points—as manufacturers tamed their freefalls in the New York (-6.1 from -55.3), Philadelphia (-15.3 from -46.7), and Dallas (-11.5 from -22.0) regions, while the Richmond (-16.0 from -21.0) factories saw declines more in line with April cutbacks.

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