MORNING BRIEFING
June 10, 2021

From China with Love

Check out the accompanying chart collection.

(1) China's Xi aims for a kinder, gentler image. (2) Vigil for Tiananmen Square massacre prohibited in Hong Kong, but brave residents come out anyway. (3) Companies and individuals looking to leave the changed city. (4) Chinese technology companies face tighter rules at home. (5) Yet China's rulers count on tech companies to help the country win on the world stage. (6) Chinese vessels still intimidating in the South China Sea. (7) Chinese planes menace Taiwan. (8) China's economy faces tougher comps and rising producer prices. (9) Turning coal ash into rare earth metals is a win-win-win.

China I: Changing Its Tune but Not Its Stripes. "Trustworthy" and "lovable" don't typically jump to mind to describe China's rulers, yet President Xi Jinping recently urged Chinese officials to cultivate an image for the country centered on those qualities. He urged officials to improve the way they tell stories to help global audiences see the warm and fuzzy side of Communism, an ideology that "strives for the happiness of the Chinese people."

This PR aspiration represents a major about-face. In recent months, Chinese diplomats—dubbed the "Wolf Warriors"—have been anything but diplomatic, threatening foreign countries and companies that don't fall into line with the Chinese Communist Party. After their behavior, getting foreigners to trust the Communist leadership will be a tough task. The aggressive Chinese diplomats have lifted the curtain and shown the world what that country's leadership really believes. Hopefully, the reveal won't soon be forgotten.

Now that the Chinese diplomats have marching orders to become more politically correct, we'll have to return to the days of watching what China does instead of what it says. And it's been busy doing things—clamping down on Hong Kong, regulating technology companies, and flexing its naval muscle in the China Sea. We visited these subjects in the April 15 *Morning Briefing*, but an update is especially important now that Xi has decided he wants China to be considered lovable. Here's a recap of what China has been up to:

(1) *Squelching democracy in Hong Kong.* The annual candlelight vigil in Hong Kong for the Tiananmen Square Massacre—normally attended by tens of thousands of people—was banned by authorities this year. Nonetheless, thousands of people came out and walked

around the perimeter of Victoria Park, avoiding the police inside the park. Others walked the streets of Hong Kong with their cellphones' flashlights shining. Prior to the event, two people were arrested for allegedly using social media to promote the vigil, a June 4 *WSJ* *article* reported.

The city's banning of the vigil was the latest impact from the national security law enacted last year, meant to increase China's control of the city and eliminate democratic protests. "Most of the city's democracy leaders have since been jailed, put on trial or chosen to go into exile," the above-linked article explained.

Individuals and businesses have been leaving the changed city. "In a survey of members of the American Chamber of Commerce in Hong Kong released last month, 42% of the 325 respondents said they were considering or planning to leave the city, citing uneasiness over China's new security law and a pessimistic outlook of Hong Kong's future," a June 7 *WSJ* *article* reported. Hong Kong's population shrank by 46,500 last year to roughly 7.5 million, its second contraction since being returned to China. The departures were somewhat offset by Chinese companies, which opened up 63 new regional headquarters and offices in Hong Kong during the 12 months ending June 3, 2020.

(2) *Saddling tech companies with new regulations.* Blocking Ant Financial's IPO and forcing the company to restructure over the past year was just the start of China's tightening control over its tech industry. In the months since, the country has been aggressively accusing Chinese tech firms of anticompetitive and illicit practices. Most recently, Xiaohongshu, a social media and e-commerce app backed by Alibaba Group Holding and Tencent Holdings, had its account shut down after posting "Tell me loudly, what is the day today?" on the anniversary of the 1989 Tiananmen Square massacre.

Prior to that, China's market regulator opened an antitrust investigation into Meituan, an online food-delivery company suspected of monopolistic behaviors, including preventing merchants from selling on platforms outside of Meituan. And in May, "China's cyber regulator accused 105 apps, including short-video and job-recruitment apps, of illegally collecting and using personal data. It ordered the companies to fix their problems within three weeks or risk legal action," a June 6 *WSJ* *article* reported. "The directives came days after another 117 apps were told to fix user-data problems. Regulators have also met with ride-hailing services for potential mistreatment of drivers, while internet firms have been ordered to reform their data and lending practices. Authorities have also criticized delivery platforms over what they view as deceptive pricing tactics."

Even while tightening tech regulations, Xi also has emphasized the importance of the tech industry and the country's willingness to spend on research to ensure its success. "Science and technology have become the main battleground of global power rivalry," he acknowledged in a recent speech. And in March, the country's new five-year plan included a 7% annual increase in research and development with a focus on semiconductors, AI, quantum information, among other "fundamental core areas" for national security," a May 29 *South China Morning Post* (*SCMP*) *article* reported. China's government also plans to develop an "advanced blockchain industrial system," including industrial standards, tax incentives, and intellectual property protections, in an effort to lead the world in blockchain by 2025, a June 9 *SCMP* *article* reported.

China's stance has not gone unnoticed by the US government. On Tuesday, the US Senate passed, with bi-partisan support, the US Innovation and Competition Act, a $250 billion bill funding tech research and offering subsidies to makers of semiconductors and robots to counter China's efforts. The bill, possibly with changes, is expected to pass the House of Representatives and be signed into law by President Biden.

(3) *Continuing the war games.* China has increased the number of its ships in the South China Sea from 200 in March to almost 300, said Philippines Foreign Secretary Teodoro Locsin Jr. He is considering filing another diplomatic protest about the situation, according to a May 12 *SCMP* *article*. The Philippines also plans to build a logistics hub on Thitu island, so that the country's ships could refuel and resupply. The island is part of the Spratly Islands, which are largely uninhabited but contested, as they are claimed by many countries and wanted for their oil, gas, and fishing rights. Thitu has been under Philippine control since 1971. If the Philippines goes forward with its plans, China is expected to respond in some fashion.

China also has continued to send its jets into Taiwan's air defense identification zone, but less frequently lately. China was buzzing Taiwan roughly five out of seven days from January through mid-April; that's dropped to roughly every other day, a June 8 NikkeiAsia *article* reported. We'll be watching to see whether China increases the invasive flights around Taiwan in response to last weekend, when US senators arrived in Taiwan on a large US military plane with Covid-19 vaccines. The Chinese defense ministry said the trip had "seriously damaged the foundation of the China-US ties and the stability of the Taiwan Strait, calling it 'extremely irresponsible,'" the *SCMP* reported in a June 9 *article*. The Chinese military subsequently conducted an amphibious landing exercise in waters near Taiwan.

China II: Growing but Facing Tough Comps. China managed to control Covid-19 within its borders faster than the US and the rest of the world. As a result, its economy bounced back sooner and by Q2-2020 had already entered recovery mode. So the year-over-year comparisons China faces now are tougher than those for the rest of the world.

China's GDP rose 18.3% y/y in Q1, but it's expected to be lower during the rest of the year (*Fig. 1*). The deceleration is already apparent in more frequent economic data, such as industrial production, which rose 9.8% in April, down from the 35.1% spike in January/February (*Fig. 2*). The country's manufacturing PMI also continued to show growth in May at 51.0, but it has trended down from its recent peak of 52.1 in November.

Nonetheless, China is seeing prices of industrial materials and goods climb sharply. Stocks of finished goods and raw materials both registered under 50 in the May manufacturing PMI, while the purchase price soared to 72.8 (*Fig. 3*). Likewise, China's PPI for industrial products jumped 9.0% y/y in May, as prices of all manner of raw materials have risen this year (*Fig. 4* and *Fig. 5*). So far, anyway, producer inflation has not seeped through to consumer prices, which increased by only 1.3% y/y in May.

Tougher comparisons and the risk of inflation may have made stock investors more cautious. The local currency MSCI China stock price index is down 0.3% ytd, and down 16.5% from its February 17 record high (*Fig. 6*). Companies in the China MSCI index are forecast to grow revenue by 15.7% this year and 10.4% in 2022, while earnings for those companies are forecast to climb 16.3% this year and 18.6% in 2022 (*Fig. 7* and *Fig. 8*). That compares with S&P 500 earnings forecast to grow 37.0% in 2021 and 11.7% next year. The MSCI China index's forward P/E, at 16.1, is far below the S&P 500's 21.2 forward P/E, though (*Fig. 9*).

Disruptive Technologies: Rare Earth Metals Rising from Coal Ash. Scientists are working on how most economically to pull rare earth metals from coal ash, the stuff that remains after burning coal. Rare earth metals are of growing importance, as they're used in windmills' magnets, electric vehicles' batteries, nuclear submarines, and the F-35 joint strike fighter jet. There are rare earth metals in the US, but the dirty and expensive processing of them has moved to China, where it is done less expensively and with fewer environmental regulations.

If pulling rare earth metals from coal ash becomes a viable business, it would help the US, which is dependent on China for roughly 90% of the rare earth metals we use. It would also benefit the coal-fired utilities, which have to spend money cleaning up the environment spoiled by coal ash. And it would provide jobs to those who used to work in coal mines or coal-fired utilities. I asked Jackie to take a look at this promising development. Here's her report:

(1) *DOE jumps into the fray.* The Department of Energy (DOE) on April 29 *awarded* grants totaling $19 million to 13 projects at US universities as part of an effort to discover how to remove rare earths from coal ash. The research group that can discover how to do so economically at scale will open the door to new business opportunities.

(2) *Purdue is shouting "Eureka!"* Purdue University believes that it has solved the separation problem, and it has sold exclusive rights to the separation and purification technologies it developed to American Resources Corp., a February 2 *press release* stated. Purdue uses ligand-assisted chromatography for the separation and purification of rare earth metals from coal or from recycled permanent magnets, and lithium-ion batteries. It claims its separation method is the most cost efficient and the greenest method of extraction, offering higher yields, productivity, and efficiency.

For any scientists reading today, Purdue's Professor Linda Wang explained in a 2017 *interview* that Purdue's separation method uses "only a few chromatography units. The processes involve ligand-assisted elution or displacement chromatography methods using robust, low-cost, inorganic sorbent titania or polymeric sorbents." She estimated that the US has accumulated about 1.5 billion tons of coal ash and produces 129 million tons of new coal ash every year. There's enough coal ash to produce rare earth metals for decades.

(3) *Advancements in coal country.* Researchers at the National Energy Technology Laboratory developed technologies to extract rare earth elements from coal ash, and now they're building a pilot-scale production facility; the Advanced Carbon Products Innovation Center is under development in Campbell County, Wyoming, according to a July 5, 2020 *article* in the *Wyoming Tribune Eagle*. The project's goal is to show that doing so is economically viable.

(4) *Working on it in New Mexico, too...* SonoAsh has its own processing technology to separate rare earth metals from coal ash. It's working with the New Mexico Institute for Mining and Technology, a DOE grant winner. After separating out the rare earth metals, SonoAsh aims to mix the remaining ash into cement.

A May 24 *article* in the *Albuquerque Journal* explained: "The company's clean-processing technology uses sound waves to bust up wet coal ash into two fractions—one that includes the high-carbon concentrations with rare earth elements and other metals, and the other a very low-carbon, coal-ash powder. It then uses a froth flotation process to separate the fractured ash into separate piles. Through that process, about 25% of the ash is pushed into the high-carbon concentrate, with the other 75% resulting in a low-carbon ash pile that's ideal for creating cement for concrete building materials. And there's no waste left over."

(5) ...*And in Pennsylvania.* Jim Winner started Winner Water Services in Sharon, Pennsylvania with a plan to clean the wastewater streams polluted by the region's mining, oil, and gas industries. He housed the company in a former Westinghouse facility, a Superfund site, that spanned 12 city blocks and was polluted after years of functioning as a steel mill. Winner has passed away, but his company lives on and is working on how to separate rare earth metals from coal ash.

An interesting February 23 *article* in *Sierra* explains that Winner Water Services chooses the coal ash with the highest concentration of rare earth metal. "Then, his research partner, a mineral engineer from the [University of Kentucky] named Jack Groppo, does the physical processing. Groppo uses magnets, mesh screens with minute holes, and a system called froth flotation to refine the coal. The pair ship their fine, feather-light, finished product to [Todd] Beers, who leaches out the payload. All three report to a Massachusetts group called Physical Sciences Inc., or PSI, which invented the original laboratory model for the research and owns the intellectual property. PSI is a private company that creates a wide range of technologies, from methane-leak detectors to hypersonic planes."

One of these many scientists is sure to find a profitable way to take rare earth metals out of coal ash. And they might just figure out how to clean up the environment at the same time.

Calendars

US: Thurs: Headline & Core CPI 4.7%/3.4% y/y, Initial & Continuous Jobless Claims 370k/3.60m, Federal Budget Balance, Import & Export Prices, Natural Gas Storage, OPEC Monthly Report. **Fri:** Consumer Sentiment Index Total, Current Conditions, and Expectations 84.0/92.3/79.0, US Baker Hughes Rig Count. **Fri:** (Bloomberg)

Global: Thurs: French Industrial Production 0.5%, Italy Industrial Production 0.3%, Japan Industrial Production, China New Loans & M2, ECB Interest Rate Decision. **Fri:** UK Industrial Production 1.2%m/m/30.5%y/y, UK Trade Balance -£12.1b, UK NIESR Monthly

Tracker, France CPI, Spain CPI 0.4%m/m/2.7%y/y. (Bloomberg)

Strategy Indicators

Stock Market Sentiment Indicators (*link*): The Bull/Bear Ratio (BBR) climbed for the second week to 3.36 this week, after falling four of the prior five weeks from 3.81 to 3.07. Bullish sentiment advanced for the second week to 54.5% after falling 12.2ppts (to 51.5% from 63.7%) the prior five weeks—with nearly all of the movement occurring between the bullish and correction camps recently. The correction count slipped for the second week to 29.3% this week after jumping 12.1ppts (to 31.7% from 19.6%) the prior five weeks. Meanwhile, bearish sentiment edged down for the second week to 16.2% this week; it had been fluctuating in a narrow band between 16.5% and 17.2% the prior nine weeks. The AAII Ratio continued its up-and-down pattern (prevalent since early March), rising to 69.0% last week after falling from 58.5% to 58.0% the prior week. Bullish sentiment climbed to 44.1% last week after sliding the prior week from 37.0% to 36.4%, while bearish sentiment ticked down to 19.8% after inching up from 26.3% to 26.4% the previous week.

S&P 500 Earnings, Revenues, Valuation & Margins (*link*): The S&P 500's forward profit margin was steady last week at a record high of 12.8%. Since the end of April, it has exceeded its prior record high of 12.4% in September 2018. It's now up 2.5ppts from 10.3% during April 2020, which was the lowest level since August 2013. Forward revenues and earnings also rose again. They've been making new record highs since the beginning of March and for the first time since February 2020. Since the Q2-2020 earnings season came in way better than expected, analysts have been playing catch-up with their lowball estimates from the Covid-19 shutdown. Consensus S&P 500 forecasts had been falling at rates paralleling the declines during the 2008-09 financial crisis. Forward revenues growth dropped 0.4pts w/w to 9.2% from a record high of 9.6%, and should continue to move lower due to base effects. Still, that's up from 0.2% during April 2020, which was the lowest reading since June 2009. Forward earnings growth dropped 2.0ppts w/w to 21.2%, and should also move lower due to base effects. That's just below its 23.9% reading at the end of April, which had been its highest since June 2010 and up substantially from its record low of -5.6% at the end of April 2020. On a positive note, analysts continue to boost their 2021 forecasts for revenues and earnings growth and the profit margin. They now expect revenues to rise 12.3% in 2021 and 6.7% in 2022 compared to the 2.2% decline reported in 2020. They expect earnings gains of 37.0% in 2021 and 11.7% in 2022 compared to a 13.3% decline in 2020. Analysts expect the profit margin to rise 2.3ppts y/y in 2021 to

12.5%—from 10.2% in 2020—and to improve 0.6ppt y/y to 13.1% in 2022. The S&P 500's forward P/E was steady w/w at 21.2, up slightly from a 28-week low of 20.8 in mid-May. That compares to 23.1 in early September, which was the highest level since July 2000 and up from a 77-month low of 14.0 in March 2020. The S&P 500 price-to-sales ratio ticked down 0.01pt to 2.72. That compares to a record high of 2.77 in late April and a 49-month low of 1.65 in March 2020.

S&P 500 Sectors Earnings, Revenues, Valuation & Margins (*link*): Last week saw consensus forward revenues and earnings rise w/w for ten of the 11 S&P 500 sectors. During 2019, just two sectors' margins improved y/y: Financials and Utilities. Consumer Staples, Tech, and Utilities were the only sectors with an improved profit margin in 2020. For 2021, all but Real Estate and Utilities are expected to improve y/y. Back in 2018, the forward profit margin was at record highs for 8/11 sectors, all but Energy, Health Care, and Real Estate. Four sectors are currently at record highs. Here's how the sectors rank based on their current forward profit margin forecasts versus their highs during 2018: Information Technology (24.3%, record high), Financials (19.2, down from a record-high 19.3 two weeks earlier), Communication Services (15.9, record high), Utilities (14.6, down from its 14.8 record high in early May), Real Estate (15.0, down from 17.0), S&P 500 (12.8, record high), Materials (12.6, record high), Health Care (10.9, down from 11.2), Industrials (9.6, down from its record high of 10.5% in mid-December), Consumer Staples (7.7, matches its prior high in May 2018), Consumer Discretionary (7.6, down from 8.3), and Energy (6.4, down from 8.0).

S&P 500 Sectors Forward Revenues and Earnings Recovery from Covid-19 Trough (*link*): The S&P 500's forward revenues and earnings as well as its implied forward profit margin bottomed at cyclical lows on May 28, 2020 after 14 weeks of Covid-19-related declines. Forward revenues and earnings have risen 13.9% and 42.2%, respectively, since then to new record highs. The forward profit margin has risen 2.7ppt to 12.8%, which now exceeds its prior record high of 12.4% in late 2018. During the latest week, all but the Utilities sector posted gains to new highs in either their forward revenues, earnings, or profit margin. Here's how the 11 sectors rank by their changes in forward revenues and forward earnings since May 28: Materials (forward revenues up 20.9%, forward earnings up 73.2%), Information Technology (19.7, 33.8), Communication Services (19.5, 42.4), Energy (18.8, 1229.1), Industrials (16.6, 52.0), Financials (13.9, 62.1), S&P 500 (13.9, 42.2), Health Care (11.8, 21.7), Consumer Discretionary (9.0, 76.5), Consumer Staples (7.5, 15.4), Real Estate (5.8, 11.9), and Utilities (-2.0, 2.8).

US Economic Indicators

Merchandise Trade (*link*): The real merchandise trade deficit narrowed in April, after widening steadily the first three months of the year; this suggests that trade could be a positive contributor to Q2 real GDP—though it's too early to tell. The real deficit narrowed to -$98.6 billion in April after widening the prior three months from -$96.6 billion in December to a record deficit of -$105.8 billion by March; the average monthly deficit during Q1 was -$101.7 billion. Real exports ticked up 0.3% in April, following March's 7.3% surge, and is 2.5% below its record high in May 2018, while real imports contracted 2.7% in April after jumping 6.3% in March to a new record high. Since bottoming last May, real exports and imports are up 37.7% and 26.9%, respectively. Here's a snapshot of growth in real exports by market group for April and during the 11 months through April: autos (-8.0% & 253.3%), consumer goods (nonfood) ex autos (-1.3% & 52.1%), capital goods ex autos (4.7 & 39.3), industrial supplies & materials (0.0 & 23.6), and food (0.1 & -0.5). Here's the same exercise for imports: autos (-3.6% & 223.0%), consumer goods (nonfood) ex autos (-4.0 & 36.3), capital goods ex autos (0.2 & 31.4), food (0.9 & 14.5), and industrial supplies & materials (-3.8 & -21.3).

Contact us by email or call 480-664-1333.

Ed Yardeni, President & Chief Investment Strategist, 516-972-7683
Debbie Johnson, Chief Economist, 480-664-1333
Joe Abbott, Chief Quantitative Strategist, 732-497-5306
Melissa Tagg, Director of Research Projects & Operations, 516-782-9967
Mali Quintana, Senior Economist, 480-664-1333
Jackie Doherty, Contributing Editor, 917-328-6848
Valerie de la Rue, Director of Institutional Sales, 516-277-2432
Mary Fanslau, Manager of Client Services, 480-664-1333
Sandy Cohan, Senior Editor, 570-228-9102

Copyright (c) Yardeni Research, Inc. Please read complete copyright and hedge clause.