MORNING BRIEFING
July 8, 2021

From China with Love No More

Check out the accompanying chart collection.

(1) Semi shortages hurting autos, helping semi companies. (2) Ford caught flat footed, suffers the most. (3) Toyota's bet on auto sales rebound pays off. (4) Countries consider semiconductor companies a national treasure. (5) May worldwide chip sales surpass 2018 peak. (6) The list of aggressive moves by the Chinese government grows longer. (7) China's latest crackdown on its tech companies hits US IPO investors' pocket books. (8) WHO investigation into origin of Covid-19 stymied. (9) Was the Wuhan Military World Games a super-spreader event? (10) Xi speech minces no words. (11) Take a trip to The Metaverse.

Semiconductors: Shortages Packing a Punch. The auto industry continues to reel from semiconductor shortages. The lack of one small part is holding up the production lines of automakers around the world and threatens to depress global auto sales by $110 billion this year, according to consulting firm Alix Partners. The strong demand for semiconductors, however, means companies producing the chips are having a banner year.

The S&P 500 Semiconductors stock price index is up 18.8% ytd through Tuesday's close, and the S&P 500 Semiconductor Equipment index has climbed 33.0% over the same period. Both indexes are beating the S&P 500, which is up 15.6% ytd, and the S&P 500 Information Technology sector's stock price index, up 15.3% (*Fig. 1* and *Fig. 2*). Let's take a look at recent headlines buffeting the industry along with strong May semiconductor sales data:

(1) *Ford takes it on the chin.* Ford Motor is the US auto company most impacted by the semiconductor chip shortage. Its June sales dropped 26.9% from the June 2020 level. The shortage will force Ford to reduce or stop production at a handful of factories in July, including those that produce high-margin pickup trucks and SUVs.

Ford was particularly hard hit because it buys chips from the plant in Japan that had a fire in March. Less impacted GM has said it sees signs of easing chip-shortage impacts and raised its pretax adjusted profit forecast for H1-2021 to $8.5-$9.5 billion from the previous $5.5 billion, a July 2 *WSJ* article reported.

Toyota Motor appears to be the best positioned company because it increased its chip inventories last year in an early bet on a strong recovery. In May 2020, Toyota CFO Kenta Kon called the bottom in the auto market, while other car executives were far more cautious, a May 12 *WSJ* article reported. That bet positioned Toyota to become the top seller of vehicles in the US from April through June for the first time, beating out GM.

US auto sales have rebounded sharply from the 2020 Covid-19-related drop. Sales hit a record low of 8.7 million units (saar) in April 2020 only to hit a cyclical high of 18.8 million this April before inventory constraints slowed sales down to 15.4 million units in June (*Fig. 3*). Inventories remain incredibly tight, with the domestic auto industry carrying only 24 days' supply, down from more normal levels of 50-70 (*Fig. 4*).

(2) *Questionable chip maker sale.* The semiconductor inventory shortage has highlighted the industry's importance. So it's surprising that the UK appears willing to allow the sale of the Newport Wafer Fab, the country's largest chip producer, to a Chinese-owned semiconductor company, Nexperia, according to sources quoted in a July 2 CNBC *article*. Newport owns one of "just a handful" of semiconductor fabricators in the UK.

Other deals have attracted regulatory scrutiny, including Nvidia's $40 billion deal to acquire the UK's Arm. South Korean regulators are evaluating Beijing-based Wise Road Capital's agreement to buy semi firm MagnaChip. And in March, the Italian government blocked a Chinese firm from acquiring a controlling stake in LPE, a Milan-headquartered semiconductor company.

(3) *May sales surged.* Worldwide semiconductor sales in May surged 26.2% y/y and 4.1% m/m using a three-month moving average, the Semiconductor Industry Association reported in a July 6 *press release* (*Fig. 5*). May sales surpassed the previous peak in October 2018, indicating the industry has ramped up production to address rising demand, said SIA CEO John Neuffer.

On a m/m basis, sales rose across all geographic areas: Americas (5.9%), China (5.4), Japan (3.1), Asia Pacific/All Other (2.6), and Europe (1.1). The surge in sales is confirmed by US industrial production of semiconductor and other electronic components, which continued to set new record highs in May, climbing 0.9% during the month (*Fig. 6*).

Analysts remain optimistic, forecasting that the S&P 500 Semiconductors industry's revenue will increase 17.6% this year and 8.4% in 2022, while profits surge 27.0% in 2021 and 14.1% next year (*Fig. 7* and *Fig. 8*).

Analysts are equally optimistic about the S&P 500 Semiconductor Equipment industry, forecasting a 32.7% surge in revenue this year and a 12.3% increase in 2022, resulting in a 52.5% jump in profits this year and a 16.3% increase in 2022 (*Fig. 9* and *Fig. 10*).

Forward P/Es in both industries are extended relative to the past decade, but not compared to the heady multiples enjoyed in the late 1990s. The S&P 500 Semiconductors industry's forward P/E is 20.7, only a touch below the S&P 500 Semiconductor Equipment's forward P/E of 21.2 (*Fig. 11* and *Fig. 12*).

China: Behaving Very Badly. The laundry list of aggressive Chinese government actions continues to grow longer. Most recently, Chinese leaders have prevented World Health Organization (WHO) officials from adequately investigating the source of Covid-19. Additionally, Chinese regulators cost US investors millions of dollars when they announced investigations into Chinese technology companies that had sold large IPOs to US investors over the past month. Meanwhile, China's President Xi Jinping delivered a speech last Thursday that was belligerent and aggressive.

These actions are antithetical to Xi's recent calls for Chinese diplomats to portray the Chinese government as trustworthy and lovable. We'll add China's recent moves to the laundry list we've been maintaining. It includes the elimination of democracy in Hong Kong, its military patrols in the South China Sea and in the airspace around Taiwan, and its harsher regulation of Chinese technology giants, as we described in the June 10 *Morning Briefing* "From China with Love."

The lack of US and global outrage over China's actions means either that the US is losing the global PR war to China or that the WHO and major companies won't risk jeopardizing the funding and business opportunities China offers. Either way, the silence may embolden Chinese leaders. Here's a look at recent events:

(1) *Xi costing US investors money.* President Xi continues to surprise US investors by increasing government control over the country's largest technology companies. Regulatory probes into the data security of Didi Global, a ride-hailing company, Full Truck Alliance, a truck-hailing platform, and Kanzhun Ltd., an online recruiting app, shook the markets this week. All three companies completed IPOs within the past 30 days, and two of the three offerings now trade below their IPO price.

Chinese regulators are concerned that Didi's data can be accessed by foreign interests and endanger national security, a July 6 *WSJ* *article* stated. However, the company says that's impossible with all its domestic user data stored on servers in China.

The Chinese government's position was well established before the IPO. The July 5 *WSJ* *reported* that: "Weeks before Didi Global Inc. went public in the US China's cybersecurity watchdog suggested the Chinese ride-hailing giant delay its initial public offering and urged it to conduct a thorough self-examination of its network security, according to people with knowledge of the matter." Didi went forward with the IPO anyway.

On Tuesday, the Chinese government went one step further, tightening rules for all companies seeking to sell shares abroad and strengthening its oversight of overseas listed companies. In one fell swoop, the Chinese government both reined in its tech giants and hurt US investors and capital markets.

Millions of dollars were lost when the Chinese ADS (American depositary shares) sold off in response to the news. Didi sold 316.8 million ADS at $14 each in an IPO on the NYSE last Wednesday. The shares traded as high as $16.88 on July 1 but tumbled around 25% after the news to close at $12.49 on Tuesday. Full Truck Alliance priced an IPO of 82.5 million ADS on the NYSE at $19.00 each on June 22. The shares traded as high as $21.50 that day but closed Tuesday at $17.75. Kanzhun sold 48 million ADS at $19 each in an IPO on Nasdaq on June 11. The shares closed at $42.05 on June 25 before tumbling to $30.52 by Tuesday's close. For comparison, the S&P 500 gained 0.5%, 2.3%, and 1.5% over the same time spans. Major investment banks, including Goldman Sachs, Morgan Stanley, JP Morgan, and UBS were involved with underwriting these deals.

(2) *Where did Covid-19 originate?* That question won't go away despite the Chinese government's insistence that it was transmitted to a human from an animal or from a US lab. The WHO considers it likely that the virus was introduced to humans by an animal and "extremely unlikely" that the virus came from a lab—but acknowledges that its investigation lacked important information. The lack of a definitive answer has increased calls to investigate whether the virus leaked from the Wuhan Institute of Virology, which studies coronaviruses among other things.

The possibility that the virus escaped from a lab, first embraced by conservative media, is now being voiced by liberal media sources. These include comedian Jon Stewart on the June 15 Stephen Colbert *show* and the notoriously liberal NPR in a June 17 *article* debating the pros and cons of pushing China to disclose more about the virus and its origins. "If China continues to obfuscate and to deny the world the possibility of the comprehensive investigation that we need, it would be entirely appropriate for there to be some penalties, whether economic, trade or otherwise," said Jamie Metzl, a senior fellow at the Atlantic Council, in the NPR article.

Additionally, a June 23 *Washington Post* opinion *column* noted that "multiple US lawmakers" are demanding the US government investigate whether the Wuhan Military World Games in October 2019 became a super-spreader event when the 9,000 international athletes (280 from the US) returned home—indicating far earlier spread in China than the country has acknowledged.

(3) *Xi's aggressive CCP speech.* China's Communist Party (CCP) has much to crow about: It has modernized the country, increasing its citizens' standards of living and becoming a technology and military powerhouse. But instead of graciously acknowledging the country's successes, President Xi recently gave a defensive and belligerent speech that should put the world on notice.

"Through tenacious struggle, the Party and the Chinese people showed the world that the Chinese people had stood up, and that the time in which the Chinese nation could be bullied and abused by others was gone forever," he said in his July 1 *speech* marking the Chinese communist Party's 100th anniversary. "We will not … accept sanctimonious preaching from those who feel they have the right to lecture us. … [W]e will make sure the destiny of China's development and progress remains firmly in our own hands," he said.

Xi emphasized the importance of the Chinese military: "We must accelerate the modernization of national defense and the armed forces. A strong country must have a strong military, as only then can it guarantee the security of the nation." He also warned off potential invaders: "We Chinese are a people who uphold justice and are not intimidated by threats of force. … We will never allow any foreign force to bully, oppress, or subjugate us. Anyone who would attempt to do so will find themselves on a collision course with a great wall of steel forged by over 1.4 billion Chinese people."

And finally, Xi warned foreigners not to interfere in China's relationship with Taiwan. "Resolving the Taiwan question and realizing China's complete reunification is a historic mission and an unshakable commitment of the Communist Party of China. … We must take resolute action to utterly defeat any attempt toward 'Taiwan independence,' and work together to create a bright future for national rejuvenation. No one should underestimate the resolve, the will, and the ability of the Chinese people to defend their national sovereignty and territorial integrity."

Disruptive Technologies: Welcome to The Metaverse. A number of different technologies—5G, blockchain, non-fungible tokens, cryptocurrencies, and virtual reality (VR) headsets—are maturing at the same time to make VR worlds an increasingly popular technology. In these worlds, users design an avatar to represent themselves, enjoy activities like concerts and viewing artwork, and buy things like land and clothing for their avatars. Right now, each new world exists in its own silo, is run by a founding organization, and is often viewed in 2D. But in the future, these virtual universes may be interconnected, creating "The Metaverse" and experienced in 3D.

Some of today's more popular Metaverses include Horizon run by Facebook, Decentraland, Somnium Space, The Sandbox, Earth2, Roblox, Fortnight, and Cryptovoxels. Right now, Metaverses are typically an entertainment niche enjoyed by techie gamers. But we'll certainly be watching to see if the space can broaden its appeal. Let's explore these brand new worlds:

(1) *Better equipment needed.* Today's Metaverses can be experienced using cell phones or computers for a 2D experience. But those looking for a 3D experience need to use VR headsets like Facebook's Oculus, Sony's PlayStation VR, or HP's Reverb.

Global shipments of VR headsets grew 52.4% y/y in Q1, according to IDC data discussed in a July 2 Display Daily *article*. IDC expects component shortages will weigh on sales over the rest of this year, resulting in slower full-year growth of 28.9%. Longer term, the forecaster expects global shipments will grow to 28.6 million in 2025, for a compound annual growth rate of 41.4%.

Facebook's Oculus captured almost two thirds of global headset shipments in Q1, followed by Chinese companies DPVR and Pico, HTC, and Sony. A July 1 CNET *review* called the Oculus the best standalone VR headset.

(2) *A whole new galaxy.* *Sensorium* Galaxy has rolled out its first metaverse: *PRISM*, a digital world offering virtual music experiences by the hottest DJs and players in the music industry. It counts Russian billionaire Mikhail Prokhorov as a founder and investor.

Video *clips* of PRISM are a bit like the movie "Avatar" crossed with techno house music. The privately held company has worked with DJs Eric Prydz, David Guetta, Carl Cox, and Black Coffee. While we're not nearly hip enough to know who they are, they each made *DJ Magazine's* *ranking* of the top 100 DJs in 2020. PRISM will hold performances from these "selected Earth artists," with their likenesses digitized so they can "appear" in this new world.

PRISM has its own cryptocurrency, Senso, which traded at 91 cents on Tuesday but has traded as high as $2.27 in April, according to the CoinMarketCap *website*. Senso runs on the Ethereum blockchain but Sensorium plans to migrate to the Polkadot ecosystem. "Polkadot aims to become the internet of blockchains, where various application-specific blockchains are interconnected with each other and can exchange information and value," an April 30 Sensorium *press release* stated. The transition will lower the transaction fees.

In addition to PRISM, Sensorium Galaxy is developing Motion World, which allows users to connect with their senses in an underwater space. Sensorium's CEO is Vladimir Kedrinsky, on whom little information was quickly available via Google.

(3) *Land rush.* Decentraland is another virtual world with land for sale. Users can buy more than one plot of land to build an estate. Land purchases are tracked using Ethereum smart contracts and funded with the cryptocurrency Mana. The number of land parcels is capped at 90,000. Decentraland developers own the common spaces, plazas, and roads of this virtual world.

Landowners can build on their land and use it for revenue-generating activities. Land gains value based on where in Decentraland it's located and how it's developed. Some of the more popular developments include art galleries that display digital non-fungible token art, casinos where players can win Mana, game sites, and music venues, states a June 22 *article* by Republic Realm. Atari even plans to sponsor an arcade in Decentraland that will make some of its most popular games, like Pong and Asteroids, available.

Calendars

US: Thurs: Initial & Continuous Jobless Claims 350k/3.34m, Consumer Credit $18.4b, Natural Gas Storage. **Fri:** Wholesale Inventories, Baker-Hughes Rig Count, Fed Monetary Policy Report. (Bloomberg estimates)

Global: Thurs: Germany Trade Balance €15.4b, China CPI & PPI 1.3%/8.8% y/y, ECB Monetary Policy Statement. **Fri:** UK GDP, UK Headline & Manufacturing Industrial Production 1.5%/1.0%, UK Trade Balance - £11.1b, France Industrial Production 0.8%, Italy

Industrial Production 0.3%, Canada Employment Change & Unemployment Rate 195k/7.7%, Lagarde, Bailey. (Bloomberg estimates)

Strategy Indicators

Stock Market Sentiment Indicators (*link*): The Bull/Bear Ratio (BBR) advanced this week for the fifth time in six weeks, from 3.07 to 3.92 over the period—the highest since late January 2018. Bullish sentiment climbed 9.3ppts (to 60.8% from 51.5%) over the six-week period, while the correction count fell 8.00ppts (to 23.7% from 31.7%). Meanwhile, bearish sentiment slipped to 15.5% this week—the fewest bears since early 2018—after climbing from 15.8% to 16.2% last week. Before the recent up-and-down movements, bearish sentiment had fluctuated in a narrow band (from 16.2% to 17.5%) the prior couple of months. The AAII Ratio advanced for the second week last week from 61.1% to 68.7% over the period, with bullish sentiment jumping from 40.4% to 48.7% last week and bearish sentiment falling for the second week, from 26.2% to 22.2%.

S&P 500 Earnings, Revenues, Valuation & Margins (*link*): The S&P 500's forward profit margin jumped 0.2ppts last week to a new record high of 13.0%. Since the end of April, it has exceeded its prior record high of 12.4% in September 2018. It's now up 2.7ppts from 10.3% during April 2020, which was the lowest level since August 2013. Forward revenues and earnings both rose w/w. They've both 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 0.4ppt w/w to 8.9%. That's down from a record high of 9.6% at the end of May 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 fell 1.7ppts w/w to 19.6% and should also continue to move lower due to base effects. That's down from 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 raise their 2021 forecasts for revenues and earnings growth and the profit margin. They now expect revenues to rise 12.5% in 2021 and 6.7% in 2022 compared to the 2.1% decline reported in 2020. They expect earnings gains of 37.8% in 2021 and 11.7% in 2022 compared to a 13.2% decline in 2020. Analysts expect the profit margin to rise 2.3ppts y/y in 2021 to 12.6%—from 10.3% in 2020—and to improve 0.6ppt y/y to 13.2% in 2022. The S&P 500's weekly reading of its forward P/E was 21.3, relatively unchanged for a sixth week. 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. Following flat readings for five weeks, the S&P 500 weekly price-to-sales ratio ticked up 0.03pt w/w to 2.76. 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. Six sectors have both their forward revenues and earnings at or near record highs: Communication Services, Consumer Discretionary, Consumer Staples, Health Care, Information Technology, and Materials. Energy, Industrials, and Real Estate have both measures well below record highs. Financials and Utilities have forward earnings at or near record highs, but their forward revenues are lagging. Only three sectors posted a higher profit margin y/y in 2020: Consumer Staples, Tech, and Utilities. For 2021, a y/y improvement is expected for all but two sectors: Real Estate and Utilities. The forward profit margin was at record highs during 2018 for 8/11 sectors, all but Energy, Health Care, and Real Estate. Currently, three sectors are at record highs, down from five in early May, but only slightly. Here's how they rank based on their current forward profit margin forecasts versus their highs during 2018: Information Technology (24.3%, record high), Financials (19.1, down from a record 19.3 several weeks earlier), Communication Services (15.9, record high), Utilities (14.6, down from its 14.8 record high in early May), Real Estate (15.3, down from 17.0), S&P 500 (13.0, a new record high), Materials (12.9, a new record high), Health Care (10.9, down from 11.2), Industrials (10.2, down from its record high of 10.5% in mid-December), Consumer Staples (7.7, matches its prior cyclical high in May 2018), Consumer Discretionary (7.8, down from 8.3), and Energy (7.0, 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 14.5% and 44.6%, respectively, since then to new record highs. The forward profit margin has risen 2.9ppt to 13.0%, which exceeds its prior record high of 12.4% in late 2018. During the latest week, all 11 sectors 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, 2020: Materials (forward revenues up 22.4%, forward earnings up 78.8%), Information Technology (21.0, 35.5), Communication Services (20.9, 44.1), Energy (19.0, 1356.9), Financials (14.5, 62.5), S&P 500 (14.5, 44.6), Industrials (12.9, 57.6), Health Care

(12.5, 22.7), Consumer Discretionary (10.8, 83.5), Consumer Staples (8.3, 16.1), Real Estate (6.3, 14.5), and Utilities (-1.5, 3.2).

US Economic Indicators

JOLTS (*link*): Job openings increased for the fifth time this year, though the pace slowed considerably in May, climbing 16,000 to a record-high 9.21 million, after soaring 2.4 million during the four months through April (averaging 610,000 per month). Openings in March (at 8.29 million) had surpassed the previous record high of 7.57 million, posted in November 2018, by 714,000. Job openings were as low as 4.63 million last April. The biggest increases in job openings (year to date) have occurred in accommodations & food services (563,000), followed by manufacturing (335,000), health care & social assistance (294,000), retail trade (210,000), and state & local government education (117,000). Hirings were little changed at 5.93 million last month, after climbing 603,000 the first four months of this year to 6.01 million—back around the levels that occurred before the pandemic-related swings. The biggest year-to-date gains have occurred in accommodations & food services (458,000) and arts, entertainment & recreation (127,000). Total separations—which include quits, layoffs & discharges—fell 485,000 in May to 5.32 million, led by a 388,000 drop in quits to 3.60 million. Quits are generally voluntary separations initiated by the employee, and therefore can be viewed as the workers' willingness or ability to leave jobs. The dip in quits in May followed a 686,000 three-month surge to a new record high of 3.99 million in April.

Global Economic Indicators

Germany Industrial Production (*link*): Industrial production in May fell for the fourth time in five months, which followed a big upswing the final eight months of 2020. Germany's headline number, which includes construction, slipped 0.3% in May following an identical decline in April—which was smaller than the initial estimate of a 1.0% shortfall. It's down 2.4% year to date, after jumping 30.4% during the eight months through December. It's currently 5.0% below its pre-pandemic reading. Excluding construction, output is down 2.1% ytd and 6.3% since February 2020. Capital goods production has been dragging headline production lower so far this year, while consumer nondurable goods production has had the best five-month performance, though still has a way to go to return to its pre-pandemic level. Here's a snapshot of output in the main industrial groupings through the five months through May, and where they stand relative to their pre-pandemic levels: consumer nondurable goods (+2.6% & -4.3%), intermediate goods (+0.6 & -0.2), consumer durable goods (+0.3 & +0.4), and capital goods (-6.8 & -13.2).

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