Yardeni Research

MORNING BRIEFING
July 7, 2022

China, Earnings & Batteries

Check out the accompanying chart collection.

Executive Summary: China's stock market has enjoyed a nice bounce this year as President Xi's policies have grown more business friendly as the Chinese Communist Party meeting approaches. We remain concerned about the heavy debt loads forcing Chinese real estate development companies to restructure. We're also watching Covid cases and Chinese exports to the slowing US and European economies. … We also take a look at which industries' consensus earnings have been revised down by analysts so far this year. … Electric vehicles may emit less CO2 than internal combustion engines, but manufacturing and disposing of lithium batteries is an awfully dirty business.

China: Real Estate Woes Continue. Just over a year ago, it was widely expected that President Xi Jinping would secure an unprecedented third term when the Chinese Communist Party meets this fall. That was before a number of headwinds hurt the once-unstoppable Chinese economy, casting doubt on Xi's prospects. Xi's zero-tolerance Covid policy placed major cities under quarantine for months at a time when Covid cases were detected. Some of the country's largest real estate developers have filed for bankruptcy protection, unable to make interest payments on their billions in outstanding debt. And now the global economy is slowing, jeopardizing China's exports.

The Chinese government hasn't sat on its hands. It provided fiscal stimulus with the latest round of government-funded infrastructure projects, announced last week, and monetary stimulus by lowering reserve requirements for banks. Also, China's central bankers have kept its prime lending rate steady instead of raising it to fight inflation, as many other major central banks have done (*Fig. 1* and *Fig. 2*). Moreover, President Xi has softened his disastrous anti-business policies, giving investors hope that a more business-friendly environment has arrived—at least until the CCP meets.

These business-friendly moves are reflected in the stock market's recent performance. After falling 54.5% from its peak on February 17, 2021 through its trough on March 15, China's MSCI stock market index has rebounded sharply this year, rising 27.0% from its lows (*Fig. 3*). And on July 4, the Caixin services purchasing managers' index jumped to 54.5 in June, up from 41.4 in May.

But we remain concerned about three matters over which even Xi has little control: The potential for new Covid cases and related quarantines, China's high real estate debt, and a recession in the US and Europe hurting Chinese exports. The continuation of Xi's zero-tolerance Covid policy seems unsustainable, and restructuring billions of dollars of debt across many companies could take longer than Xi would like.

Here's a look at some of the recent developments:

(1) *Deflating real estate bubble.* China's housing sales have fallen y/y for 11 months in a row, yet the unwinding of China's real estate market continues. The most recent casualty is Chinese developer Shimao, which defaulted on $1 billion of dollar-denominated bonds when it missed a payment on Sunday. The country's 14th largest builder (as measured by contracted sales) has about $5.5 billion of offshore bonds outstanding, a July 3 Bloomberg *article* reported.

In May, China's third-largest property developer, Sunac China Holdings, defaulted on a $750 million bond. Sunac's aggregated sales in March and April fell 65% from a year ago due to Covid outbreaks in various cities, and its refinancing and asset disposal plans did not materialize after a series of rating downgrades earlier this year, a May 12 Reuters *article* reported.

The largest real estate developer to default is China Evergrande Group, which filed for bankruptcy in December. Roughly $300 billion of the company's debt will need to be restructured.

All told, nineteen Chinese real estate developers have defaulted on billions of dollars of debt, and their woes are weighing on Chinese economic growth. Real estate and related sectors account for 28% of China's GDP, according to Moody's Investors Service.

Consider just the sale of land by municipalities to land developers. Last year, property developers and others paid 8.7 trillion yuan to local governments for land purchases. Revenue from land sales represented 42% of the total revenue generated by local governments excluding funding from the central government. Local governments' land sale revenue grew tremendously over the past decade. In 2011, it was only 3.3 trillion yuan, or 36.7% of their revenue, according to a May 21 *South China Morning Post* (*SCMP*) *article*. And for some cities, land sales brought in more revenue than taxes.

This year, land sales—and the revenue they bring to local governments—are down sharply.

Land sales in yuan terms fell by 14%-91% in 17 of the 19 cities surveyed in a May 21 *SCMP* *article* compared to a year ago. Here are a few cities mentioned with the change in their land sales over the same period: Tianjin (91%), Wuhan (89), Guangzhou (-63), Beijing (-56), and Shanghai (-48).

The Chinese government has taken some actions to help the real estate sector. The five-year loan prime rate was cut by 15bps to 4.45% on May 20, which was more than expected and the greatest reduction in that rate by since 2019, a May 20 Reuters *article* reported. It was the second rate cut this year. Additionally, the government has given buyers subsidies and required smaller down payments. Relaxation of Covid restrictions also has helped.

These moves appear to hit their mark: New home prices in 100 cities stopped falling in May and June, according to data from the China Index Academy, an independent real estate research firm quoted in a July 1 Reuters *article*. Of the 100 cities surveyed, 47 experienced price growth m/m, up from 40 cities in May.

But it's hard to get a true read on prices, as more than 22 cities have set limits on price cuts since the second half of last year. Prices are further distorted by developers who are offering additional perks or accepting food in lieu of cash to pay for apartments. One developer accepted watermelons to reduce the price on the apartment by $14,935, a June 29 Reuters *article* stated. It noted that "Among 100 major real estate firms, most achieved less than 30% of their sales targets as of the end of May." China's April property sales fell 47% y/y and 43% m/m.

(2) *Covid still percolating.* Just as occurred in the US, China's economy undoubtedly will receive a boost now that the Covid-related lockdowns have been lifted in Shanghai and Beijing. But there certainly are no guarantees that lockdowns won't occur again in those cities or elsewhere, as Xi's zero-tolerance policy continues.

Mainland China reported 418 new Covid cases on July 4 and 460 cases the prior day, according to a July 5 Reuters *article*. Beijing and Shanghai each reported three new cases on July 4, and there have been reports of cases in smaller cities around China.

Wuxi, a manufacturing city near Shanghai, closed many shops and supermarkets and suspended in-restaurant dining after 42 asymptomatic cases were discovered Saturday, a July 3 *New York Post* (*NYP*) *article* reported. Residents were asked to work from home and not leave the city unless absolutely necessary.

Si, a city of 760,000, is locked down after 288 cases were found Saturday, the *NYP* relayed. And flights from Yiwu to Beijing were canceled indefinitely after the smaller city reported three new Covid cases over the past week.

Two port workers in Wuhan came down with Covid, a June 30 Bloomberg *article* reported. And there were more than 570 Covid cases in Macau, where more than 7,000 people are in mandatory quarantine, a June 30 Reuters *article* reported. People have been asked to stay at home as much as possible, and bars, hair salons, outdoor parks, and other venues are closed. Casinos, though largely empty, are open. In Hong Kong, cases jumped to more than 2,000 a day in June.

As of March, only about half of China's people aged 80 and over were fully vaccinated, and fewer than 20% had gotten a booster shot, according to Statista *data*. Until China's population is better protected, Covid will continue to pose a threat to the country's economy and its people.

(3) Exports to US/Europe slowing. Chinese exports are a major engine of the country's economic growth, contributing 20% to 2021 GDP. Exports to the US surged 44.0% from the recent bottom to $827.5 billion (saar) through February, while exports to Europe jumped 44.3% from their recent bottom to $705.5 billion also through February. Since then, exports to both regions have fallen sharply, to $621.7 billion to the US and $580.4 billion to Europe both through May (*Fig. 4* and *Fig. 5*). Post Covid, US consumers have opted to spend more on experiences outside of the home than on stuff for inside the home.

Analysts have been slashing their revenues and earnings estimates to new lows for companies in the China MSCI index. The consensus revenue per share estimate for 2022 has fallen 19.7% since it peaked in November 2020. And the consensus per share estimate for 2022 earnings is down 31.2% over the same time period (*Fig. 6*).

Earnings: A Look at Revisions. In the first half of 2022, there was a major disconnect between the S&P 500's performance and analysts' earnings estimates. The S&P 500 has fallen 19.6% ytd through Tuesday's close, yet industry analysts forecast S&P 500 companies will log earnings growth of 10.8% this year and 9.1% in 2023.

Analysts have a lot of estimate slashing to do if the stock market is correct. So we decided to kick off the second half of the year by looking at which sectors and industries have had estimate cuts already this year, for perhaps those analysts are ahead of the curve.

First, here's how much earnings growth analysts currently project for companies in the S&P 500 and its 11 sectors this year and next: Energy (121.4%, -11.7%), Industrials (36.5, 19.5), Materials (20.2, -5.8), Information Technology (13.0, 11.2), Consumer Discretionary (11.0, 32.7), S&P 500 (10.8, 9.1), Health Care (5.9, 0.0), Consumer Staples (3.9, 7.3), Utilities (2.2, 7.9), Communications Services (-4.5, 15.6), Real Estate (-10.3, 3.0), and Financials (-10.6, 13.5) (*Table 1*).

Earnings estimates for 2022 have been revised upwards so far this year for Energy (79.4%), Real Estate (15.1), Materials (14.4), S&P 500 (2.9), Information Technology (2.7), and Health Care (0.6). There's no disconnect in the Energy sector's earnings revision direction and stock market performance, as its stock price index is up 25.5% ytd. But the stock price indexes of the four other sectors with upward revisions have suffered ytd declines, including the Technology sector's sharp 26.2% ytd drop (*Table 2*).

Conversely, analysts have trimmed their 2022 earnings estimates for the following sectors so far this year: Utilities (-0.4%), Financials (-1.3), Industrials (-1.4), Consumer Staples (-1.6), Communications Services (-7.5), and Consumer Discretionary (-15.7).

And they've cut their 2022 estimates for the following S&P 500 industries by more than 10% since the start of the year: Internet & Direct Marketing Retail (-70.7%), Hotels (-61.2), Broadcasting (-29.1), Airlines (-20.7), Office REITs (-20.5), Health Care Supplies (-20.2), General Merchandise Stores (-19.2), Footwear (-18.2), Interactive Home Entertainment (-15.6), Wireless Telecommunication Services (-14.8), Auto Parts & Equipment (-14.1), Movies & Entertainment (-14.1), Aerospace & Defense (-12.7), and Apparel Retail (-12.1).

Among S&P 500 sectors, some of the more dramatic reductions in forward earnings have occurred during the past 13 weeks: Consumer Discretionary (-5.2%), Health Care (-1.6), and Communications Services (-1.2). Among S&P 500 industries, the handful with the sharpest forward earnings declines are: Internet & Direct Marketing Retail (-37.3%), General Merchandise Stores (-17.5), Broadcasting (-15.0), Health Care Supplies (-13.3), Footwear (-10.8), and Copper (*Table 3*).

Disruptive Technologies: Dirty EVs. The surge in gasoline prices this year has accelerated interest in plug-in vehicles, both hybrid and solely electric. Almost 700,000 plug-in electric cars were registered globally in May, up 55% y/y, a July 6 InsideEVs *article* reported. As a result, the global plug-in vehicle's share of the overall global auto market grew to 12% in May.

Before environmentalists can rejoice over the increasing electrification of automobile transportation, however, they need to address the damage caused by the mining, processing, and disposing of the minerals used in batteries even as demand for those materials increases. By 2030, worldwide demand for lithium is expected to grow to six times the 2020 level of 350,000 tons, a March 28 PBS article reported.

Here's a quick look at some of the problems the industry will need to quickly address:

(1) *Damage from the beginning.* The US has 4% of the world's reserves of lithium, but there's only one mine in the US, first opened in the 1960s. It produces 5,000 tons of lithium a year, or 2% of the world's annual supply, the PBS article noted. California has so much of the mineral that Governor Gavin Newsom has called the state the "Saudi Arabia of lithium." There are various projects being developed in Maine, North Carolina, California, and Nevada. But right now, most of the raw lithium used in the US is mined in Latin America or Australia and processed in China, a May 6, 2021 *NYT* article stated.

Mining for lithium involves either open-pit mining, which uses ground water, can contaminate the water that remains in the ground, and leaves behind waste. The alternative involves extracting lithium from a mineral-rich brine that's pumped to the surface. "Opponents, including the Sierra Club have raised concerns that the projects could harm sacred indigenous lands and jeopardize fragile ecosystems and wildlife," the PBS article stated.

Lithium America plans an open pit mine in Nevada that may ultimately be 370 feet deep and produce 66,000 tons a year of battery-grade lithium. The company has said the mine will use 3,224 gallons of water per minute, which could cause the local water table to drop by about 12 feet, the *NYT* article reported. Federal documents say the mine may contaminate the groundwater with antimony, arsenic and other metals.

It gets worse. Per the *NYT*: "The lithium will be extracted by mixing clay dug out from the mountainside with as much as 5,800 tons a day of sulfuric acid. This whole process will also create 354 million cubic yards of mining waste that will be loaded with discharge from the sulfuric acid treatment, and may contain modestly radioactive uranium, permit documents disclose."

(2) *How green is your electricity?* How much good an electric vehicle does for the environment depends largely on where it's charged. If the utility providing electricity burns coal to generate electricity, the benefit isn't nearly as good as it could be if the utility uses

renewable sources, like solar, wind or hydro. So the benefit of driving an EV in the US, where 21.9% of electricity is generated using coal and 38.4% is generated using natural gas, is less than it would be if the EV was driven in Iceland, where the electric grid runs almost entirely on hydro, geothermal and solar energy.

(3) *Batteries filling landfills.* Batteries are built to last for a solid amount of time. Tesla's CEO Elon Musk *Tweeted* in 2019 that the Model 3's battery should last 300,000 to 500,000 miles and that "replacement modules" will cost between $5,000 and $7,000. The Model 3 contains four modules, but Musk says replacing 2 or 3 modules will allow the car to drive for up to 1 million miles, an April 13, 2019 Electrek *article* reported

Tesla has backed up its promises with various warranties on its Model 3 and Model Y high-voltage batteries. The warrantees range from eight years or 100,000 miles to 10 years and 150,000 miles in California, a July 5 JD Power *article* reported. The car company guarantees that the two cars will retain 70% of their original battery capacity for the duration of the battery warranty period.

But eventually even Tesla's batteries run out of juice. The car maker *says* that none of its scrapped batteries go to landfilling and 100% are recycled. The company doesn't explain exactly what that means. Is every piece of the battery reused by Tesla or do all of its batteries get sent to a recycler that manages to recycle some percentage of the battery only to throw what remains in a landfill?

Recycling lithium is tricky because it's tough to separate from other elements in batteries, like nickel, cobalt, and aluminum. The material can also be flammable, and has caused landfill fires that emit toxic gasses, an August 16, 2021 *article* in Vice reported. Historically it has been cheaper to mine for new lithium than it has been to recycle and reuse it.

Fortunately, there are many companies who are working to perfect lithium battery recycling. Will visit that subject next week.

Calendars

US: **Thurs:** ADP Employment 200k; Initial & Continuous Jobless Claims 230k/1.327m; Trade Balance -$84.9b; Natural Gas Storage; Crude Oil Inventories; Bullard; Waller. **Fri:** Nonfarm Payrolls Total, Private, and Manufacturing 268k/240k/15k; Average Hourly

Earnings 0.3%m/m/5.0%y/y; Average Weekly Hours 34.6; Unemployment Rate 3.6%; Consumer Credit $31.9b; Wholesale Trade Sales 0.9%; Baker-Hughes Rig Count; Williams. (Bloomberg estimates)

Global: **Thurs:** Germany Industrial Production 0.4%; UK Halifax Home Price Index; Canada Trade Balance $2.4b; Japan Household Spending 0.8%m/m/2.1%y/y; Japan Current Account; Japan Leading & Coincident Indicators; ECB Publishes Account of Monetary Policy Meeting; Enria; Nagel; McCaul; Jochnick; Lane; Mann**. Fri:** Italy Industrial Production -1.1%m/m/4.0%y/y; Canada Employment Change 23.5k; Canada Unemployment Rate & Participation 5.1%/65.3%; China CPI & PPI 2.2%y/y/6.4%y/y; Lagarde; Woods. (Bloomberg estimates)

Strategy Indicators

Stock Market Sentiment Indicators (*link*): The Bull/Bear Ratio (BBR) was below 1.00 for the 10th consecutive week this week—slipping to 0.76 from 0.82 last week; it had risen last week for the first time in four weeks, from 0.60 the week before (the lowest since March 2009's 0.56). The BBR has been bouncing around 1.00 since late February. Bullish sentiment slipped 2.4ppts this week to 30.5% after jumping 6.4ppts (to 32.9% from 26.5%) last week, while bearish sentiment was little changed at 40.3% after dropping 4.1ppts (40.0 from 44.1) last week. The correction count rose to 29.2% after slipping from 29.4% to 27.1% last week. Meanwhile, the AAII Sentiment Survey (as of June 30) showed pessimism among individual investors plunged this week, with the percentage expecting stock prices to fall over the next six months dropping by 12.6ppts (to 46.7% from 59.3)—though remaining at an unusually high level, above its historical average of 30.5%. The percentage expecting stock prices to rise over the next six months rose 4.6ppts (to 22.8 from 18.2); bullish sentiment is below its historical average of 38.0%.

US Economic Indicators

JOLTS (*link*): May job openings fell for the second month since reaching a new record high in March (11.855 million), falling 427,000 in May and 601,000 over the two-month period to 11.254 million. There were 5.95 million unemployed in May, so there were 1.9 million available jobs for each unemployed person that month. By industry, professional & business services (-325,000), durable goods manufacturing (-138,000), and nondurable goods manufacturing (-70,000) recorded the largest declines, while retail trade (+104,000), accommodations & food services (+73,000), and wholesale trade (+45,000) posted the biggest gains. The number of quits fell for the second month, by a total of 179,000, but remains high at 4.27 million, only 240,000 below November's record high of 4.51 million; over the past six months, quits has remained in a volatile flat trend just below its record high. Before the pandemic, quits hovered around 3.5 million. Many employers are raising wages and incentives amid a severe labor shortage, which gives workers confidence that they can get better pay elsewhere. Hirings are stalled around recent highs, falling 343,000 during the three months through May to 6.489 million, after a 406,000 rebound in February. Hirings are up 829,000 since their recent bottom during December 2020.

Auto Sales (*link*): Auto sales in June edged up to 13.2mu (saar) after slumping from 15.2mu at the start of the year to 12.9mu during May. Sales last April had rebounded to a high of 18.5mu—the best reading since summer 2005, when aggressive incentives boosted sales above 20.0mu—before sinking to 12.4mu by September. Sales have averaged 13.6mu the past 12 months. Domestic light-truck sales inched up to 8.0mu (saar) in June from 7.9mu in May—considerably below April's 8.9mu and January's 9.4mu; these sales were at 11.0mu last April. Meanwhile, domestic car sales continue to bounce around 2.0mu, edging up to 2.0mu (saar) in June after slipping from 2.2mu to 1.9mu in May, with the pace not far from its 1.4mu record low during the pandemic. Sales of imports remain on a volatile downtrend, averaging 3.3mu (saar) the first half of this year, with a high of 3.8mu in January and a low of 3.0mu in May and June sales ticking up to 3.2mu.

Global Economic Indicators

Global Composite PMIs (***link***): Global demand in June accelerated at a four-month high, as an easing in Covid lockdowns in China boosted growth. The C-PMI climbed from 51.3 to 53.5 in June, however, excluding China from the calculation, the index eased from 53.9 to 53.1. All 14 of the nations for which C-PMIs were available expanded in June, with Brazil, India, and China in the top three spots. Both China and Russia moved from contraction to expansion in June, while growth rates accelerated in Japan, the UK, and Brazil—with the remaining countries showing a deceleration in growth. The M-PMI (to 52.2 from 52.3) showed manufacturing activity held steady in June, while the NM-PMI (53.9 from 51.9) showed an acceleration in services activity. The C-PMI for the advanced economies eased for the third month, to 52.5 in June, after accelerating the prior two months, from an 18-

month low of 51.3 in January to 55.9 by March, while the C-PMI for the emerging economies shot up for the second month from 43.5 in April to 55.2 in June—expanding for the first time since February.

US Non-Manufacturing PMIs (*link*): ISM's NM-PMI saw the services sector slow for the third month in June to its lowest level since May 2020—though activity remained at a respectable level—while the price index eased for the second month. The NM-PMI eased steadily from 58.3 in March to 55.3 in June, though June's 0.6-point drop was smaller than expected; the index was at a record high of 68.4 in November. Of the four components of the NM-PMI, the business activity (to 56.1 from 54.5) measure showed an improvement, though was down from November's record high of 72.5, while the employment (47.4 from 50.2) measure continued to bounce around the breakeven point of 50.0, with June's reading showing the biggest decline in jobs since July 2020. Meanwhile, the new orders measure (55.6 from 57.6) eased, though remain solid, while the supplier deliveries (61.9 from 61.3) gauge was little changed. The price index eased slightly for the second month from April's record high 84.6 to 80.1 in June. Anthony Nieves, chair of the survey notes, "Logistical challenges, a restricted labor pool, materials shortages, inflation, the conronavirus pandemic and the war in Ukraine continue to negatively impact the services sector."

Eurozone Retail Sales (*link*): Eurozone retail sales in May ticked up 0.2% after contracting 1.4% in April—its first decline this year—with sales flat ytd and fluctuating in a flat trend around November's record high. Sales of nonfood products (ex fuel) jumped 1.2% in May, reversing April's 1.2% drop and more than offsetting declines in food, drinks & tobacco (-0.3%) and automotive fuels (-0.2). This year to date, sales of nonfood products excluding fuel (2.4) and automotive fuel (1.1) were in the plus column, while sales of food, drinks & tobacco (-2.3) fell to its lowest level since January 2020. Data are available for three of the four largest Eurozone economies and show sales in Germany edged up 0.6% after tumbling 5.4% in April, while sales in France and Spain were flat during the month. Meanwhile, compared to a year ago, sales in Germany are down 3.6%, while sales in France and Spain are up 3.7% and 1.5%.

Germany Manufacturing Orders (***link***): German factory orders in May rose an unexpected 0.1%, after sliding 7.1% during the three months through April; May's increase was the first since January's 2.2%. Orders were expected to decline 0.6% in May. May's increase was driven by a 3.7% jump in orders from outside the Eurozone, after plunging 15.9% during the three months through April. These orders had soared 15.9% in January. Meanwhile, May domestic billings contracted 1.5%, with orders from within the Eurozone down 2.4%. Through the first five months of this year, orders from outside the Eurozone are up 1.1%, while domestic orders and orders from within the Eurozone have plunged 9.3% and 5.7%, respectively. Here's a look at movements in domestic orders, along with the breakdown from both inside and outside the Eurozone for the main industry groupings, respectively, year to date: consumer durable goods (+23.0%, +18.0%, -3.2%), consumer nondurable goods (-6.9, 4.4, 2.2), intermediate goods (-6.8, -7.6, -7.3), and capital goods (-12.6, -7.3, +4.8).

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