MORNING BRIEFING
March 9, 2023

China, Defense & AI Videos

Check out the accompanying chart collection.

Executive Summary: China's economy has recovered after the country lifted its zero-Covid lockdowns. But that news has been eclipsed by the rising geopolitical tensions between the US and China. Jackie examines the escalating tensions. … Also: A look at projected defense spending in the US and China and how the S&P 500 Aerospace and Defense industry's stock price index has been faring after a super-strong 2022. … Finally, our Disruptive Technologies segment focuses on how AI is transforming the production of movies and video games.

China: Rocky US Relations. The mainstream media coverage of China has been focused on the souring relationship between the US and Chinese governments. Meanwhile, China's economy and stock market improved after the lifting of China's zero-Covid policy. The China MSCI share price index has risen 40.1% since its October 31, 2022 low, though it's down 10.9% from its recent high on January 27 (*Fig. 1*).

Here's Jackie's look at the many items causing tension between the two nations and the recent improved economic data out of China:

(1) *Tense times.* There have always been multiple points of disagreement between the US and Chinese governments, but this year the animosity between the nations has reached epic levels.

Specifically, the US and China have been on opposite sides of the Ukraine war since it began, but this year China reportedly has been considering supplying arms to Russia. Likewise, the US and China have always disagreed about who should control Taiwan, but this year the US has increased the number of troops on the island to train Taiwan's military, and China has reacted to Lockheed Martin's and Raytheon's sale of arms to Taiwan by banning the companies' goods from trade with China. Moreover, both countries have made recent military maneuvers around Taiwan: A US warship sailed through the Taiwan Strait in January, and Chinese air force planes regularly enter Taiwan's air defense zone.

In the first step away from brinkmanship, Taiwan's President Tsai Ing-wen convinced US House Speaker Kevin McCarthy to meet in California instead of Taiwan to avoid "an aggressive Chinese military response," a March 6 *FT* *article* reported.

In addition to tangling over Taiwan, China isn't happy about US government restrictions on the export of sophisticated semiconductor chips and equipment to China, nor does it agree with the threatened ban of TikTok. China has responded by initiating a trade dispute at the World Trade Organization.

The appearance of what seems to be a Chinese spy balloon drifting across the US sparked the ire of US politicians and nixed the US Secretary of State Anthony Blink's planned visit to Beijing. And when the US military shot down the balloon and kept it, Chinese officials—who claim it's a weather balloon blown off course—were none too pleased.

(2) *Heated words.* These aggressive actions have been accompanied by heated words. Chinese President Xi Jinping accused the US of pushing Western nations to "implement the all-round containment and suppression of China," while China's new Foreign Minister Qin Gang warned of "catastrophic consequences if the US fails to 'hit the brakes' and allows the relationship with China to continue to go downhill," a March 7 *South China Morning Post* *article* reported. Qin blamed the US for escalating the Ukraine conflict and for harming emerging market countries by raising US interest rates so high. And perhaps most importantly, he warned the US not to cross China's "red lines" on Taiwan.

(3) *Xi consolidates power.* China is establishing two new organizations to regulate the country's financial industry and data, and it's restructuring its science and technology ministry. The moves were widely seen as Xi's attempt to consolidate and increase his power over each of these important areas.

The National Financial Regulatory Administration, the new financial regulator, will supervise the financial industry and report directly to the State Council, or cabinet. It will consolidate regulation that had occurred under three separate entities and eliminate loopholes. "The setting up of the new financial regulatory body comes as Beijing seeks to rein in large corporate and financial institutions that may bring systemic risks via regulatory arbitrage among multiple authorities," a March 7 Reuters *article* explained.

It's a bit ironic that a new financial services regulator is being created by a government that apparently has detained billionaire technology investment banker Bao Fan. Bao has been missing since late February. His company, China Renaissance Holdings, has been tight-lipped about his disappearance except to say that he is cooperating with Chinese authorities conducting an investigation.

China's new data agency will centralize the management of China's data, replacing a system where data are stored in multiple ministries, which each share responsibility for oversight of the data. The data agency will be run by the state planner, the National Development and Reform Commission, reinforcing China's belief that data has become a strategic economic resource. The agency will control the flow of data within and outside of China.

The Ministry of Science and Technology is being restructured to focus resources on achieving scientific and technology breakthroughs. "It will also form a Central Commission on Science and Technology, increasing Communist Party control in the field," the Reuters article stated. The agency is expected to help China become more self-sufficient in areas like semiconductors, where US trade sanctions and restrictions have hampered the company's ability to manufacture the most advanced semiconductors.

Renowned emerging markets investor Mark Mobius warned that China is taking golden shares in many Chinese companies, implying that the country will try to control the companies in the future. These stakes—which may be given to the government in exchange for the ability to remain in business—may be small, but they often confer the right to board seats, voting power, and give the government sway over business decisions, explained a March 8 *WSJ* article.

(4) *Slow growth anticipated.* China expects real GDP growth of roughly 5% this year, which is sluggish for an emerging market economy. It is an improvement from the Covid-impaired 2.9% growth in GDP last year (*Fig. 2*). Economic growth has been helped by the elimination of Covid restrictions throughout China and by bank reserve ratio requirements that have been lowered in recent years (*Fig. 3*). China's manufacturing PMI surged in February to 52.6, up from 47.0 in at the end of last year, and its non-manufacturing PMI jumped to 55.0 in February from 46.7 in November (*Fig. 4* and *Fig. 5*). China's bank loans also popped in January, up 5.5% m/m to a record high (*Fig. 6*).

Conversely, economic activity is being weighed down by falling exports and high debt. China's exports fell 6.7% y/y during January and February, continuing a string of declines since October. Rising interest rates around the world could be pinching demand for Chinese-made items. Meanwhile, China's imports fell 10.1% in January and February (*Fig. 7*). (China reports imports and exports for January and February together to eliminate the effect of the Lunar New Year holiday, which falls some years in January and some in February.)

China's economic growth may also slow as global companies look to diversify where they manufacture goods, with India and Mexico among the contenders. There are reports that Foxconn Technology Group, an Apple supplier, plans to spend $700 million to build a new plant in India. And numerous semiconductor chip manufacturers are planning to build plants in the US, lured by government incentives.

(5) *Debt high.* Local municipalities are struggling with billions of dollars of debt due to the expenditures on Covid mass testing and lockdowns. And municipal revenue has fallen sharply because land sales have dropped due to the country's faltering real estate market. "Two-thirds of local governments are now in danger of breaching unofficial debt thresholds set by Beijing to signify severe funding stress, with their outstanding debt exceeding 120% of income last year," a March 6 *WSJ* *article* reported. About a third of China's major cities are struggling to pay just the interest on the debt they owe, it continued.

Complicating the situation, 84% of the $84.2 billion of offshore debt owed by local government financing vehicles matures between this year and 2025. At best, this means cities will have to cut spending to service their debt. At worst, there will be defaults. The article relayed stories of bus drivers whose salaries were cut in 2021 and haven't been restored, teachers who didn't receive bonuses, and street sweepers who haven't been paid at all.

(6) *Odd development.* Mark Mobius *told* Fox Business that he's unable to withdraw funds he has at HSBC in Shanghai. The Chinese government hasn't officially said he can't transfer his funds; instead it has thrown up barriers, asking him for things like 20 years of records on how the money was made. China's currency regulator said there hadn't been any changes to policies regarding the country's "cross-border remittance of funds," and HSBC said its policies hadn't changed either.

Industrials: Defense Spending Keeps Rising. The Biden administration is expected tomorrow to unveil its defense spending budget for fiscal 2024 (ending September 30, 2024). Given the Ukraine war and verbal hostilities with China, there's no doubt that the amount spent will rise. A Bloomberg *article* yesterday reported that the administration will request more than $835 billion for the Defense Department, up from $816 billion this fiscal year. If that report is correct, the 2.3% jump wouldn't even keep up with inflation.

The spending increase also seems paltry relative to the 7.2% jump in defense spending that China plans, to $224 billion, according to a March 5 *WSJ* *article*. China's defense spending has been growing faster than the 5% growth expected for Chinese GDP this year.

Moreover, the *WSJ* noted that "many Western experts believe China's actual military spending greatly exceeds the official figure."

The US defense budget does not include $113 billion in military and economic aid given to Ukraine since last year's Russian invasion, a February 28 *Defense News* *article* reported. The funding is expected to last through September but will then need to be replenished, as munitions are rapidly consumed by Ukraine.

The S&P 500 Aerospace and Defense industry was among the top performers last year, rising 15.5% compared to the S&P 500's 19.4% decline. This year, the industry has had a sluggish start, falling 0.3% ytd through Tuesday's close compared to the S&P 500's 3.8% increase (*Fig. 8*). But it's still expected to post solid revenues and earnings results this year and next. Revenue is expected to climb 7.6% this year and 7.7% in 2024 (*Fig. 9*). Earnings per share are forecast to jump 45.4% this year and 23.4% in 2024 (*Fig. 10*).

Something to keep an eye on, however, is the industry's valuation. Its forward P/E is at a record high of 22.3 (*Fig. 11*).

Disruptive Technologies: AI on the Big Screen. Artificial intelligence (AI) is changing the way that videos, video games, and movies get made. It's allowing creative types to focus more on the message as AI helps make the process of making the video or movie faster and more efficient. Let's take a look:

(1) *AI films look super-real.* Epic Games' Unreal Engine 5, once used just to create video games, is now being used to make short videos that look amazingly realistic. One user uploaded 1,500 pictures of an alley to Unreal Engine, and the software program turned it into a short *video* on YouTube. The user did the same thing with a castle, and this *video* switches back and forth between a real video of the castle and the Unreal Engines' version of it. It's very hard to see the difference.

RunwayML is another company that uses Gen-1, which harnesses AI to turn pictures into video or to dramatically change videos into whatever the creator desires. This *video* explains some of what Gen-1 can do.

(2) *AI expedites film-making.* AI is being used in many parts of the film creation process. ScriptBook analyzes film scripts to project movies' potential box-office haul, predict audience demographics, and make recommendations to increase profitability, a March 6 *article* on Raindance.org stated.

AI can speed post-production tasks by automating color grading, visual effects, and sound design. Blackmagic Design's DaVinci Resolve can automatically color-grade footage, remove unwanted objects, apply visual effects, and generate subtitles. ChatGPT can expedite marketing by quickly generating social media posts that promote the film.

(3) *Gamers get in on the action too*. Roblox is adding AI tools to lower the technical skills developers need to create games and allow them to create games more quickly, according to the company's *website*. It's also encouraging AI creators to put tools they've developed on Roblox. "[I]f you develop an AI model that builds the most expressive superhero characters based on a combination of text prompts, graphical queues, and photo examples, that capability is something you should be able to offer directly to those Roblox users who want an incredible superhero avatar. We envision the community as a force multiplier for generative AI, creating an ecosystem that our creators and users can leverage to create content and tools more effectively."

Calendars

US: Thurs: Initial & Continuous Jobless Claims 195k/1.675m; Natural Gas Storage; Barr. **Fri:** Payroll Employment Total, Private, and Manufacturing 203k/213k/10k; Average Hourly Earnings 0.3%m/m/4.8%y/y; Average Weekly Hours 34.6; Unemployment Rate 3.4%; Federal Budget Balance -$256.0b; Baker-Hughes Rig Count. (Bloomberg estimates)

Global: Thurs: France Nonfarm Payrolls 0.0%q/q/; Japan Household Spending 1.4%; Japan PPI -0.3%m/m/8.4%y/y; Japan Machine Tool Orders; BOJ Monetary Policy Statement, Rogers. **Fri:** Germany CPI 0.8%m/m/8.7%y/y; Spain Retail Sales; UK GDP 0.1%m/m/-0.1% 3m/3m; UK Trade Balance -17.75b; UK Headline & Manufacturing Industrial Production -0.15m/m/-4.0%y/y & -0.1%m/m/-5.0%y/y; UK NIESR Monthly GDP Tracker; Canada Employment Change & Unemployment Rate 10k/5.1%; BOJ Press Conference; Lagarde; Panetta; McCaul. (Bloomberg estimates)

Strategy Indicators

Stock Market Sentiment Indicators (*link*): The Bull-Bear Ratio jumped to 1.83 this week after falling from 1.89 (highest since early January 2022) during the first week of February to 1.33 by the last week of February. *Bullish* sentiment rebounded 6.8ppts this week to 45.2%

after a three-week drop of 10.2ppts, to 38.4% from 48.6%—which was the highest percentage since the final reading of 2021. Bulls outnumbered bears for the 16th consecutive week. Meanwhile, *bearish* sentiment sank to 24.7%—the fewest bears since January 2022—after climbing two of the prior three weeks, from 25.7% to 28.8%. Recent readings are well below the 44.1% reading in early October of last year. The *correction count* slipped to 30.1% this week after climbing by 7.1ppts (to 32.8% from 25.7%) the prior three weeks—remaining well below its late September 2022 peak of 40.3%. Turning to the *AAII Sentiment Survey* (as of March 2), bearish sentiment rose to an unusually high level, while bullish sentiment held at an unusually low level. Meanwhile, neutral sentiment extended its streak of above-average readings to nine consecutive weeks, despite falling during the latest week. The *percentage expecting stock prices to rise* over the next six months climbed 1.8ppts to 23.4%, after plunging 15.9ppts the prior two weeks, from 37.5% to 21.6% over the period. Optimism was unusually low for the second straight week, with bullish sentiment below its historical average of 37.5% in 65 of the past 67 weeks. The *percentage expecting stocks to fall* over the next six months climbed 19.8ppts the past three weeks, to 44.8%, after sinking 11.7ppts the prior two weeks, from 36.7% to 25.0%—which was the lowest since November 11, 2021's 24.0%. Pessimism is at an unusually high level for the first time since January 5, 2023, and at its highest level since December 29, 2022. It's above its historical average of 31.0% in 62 of the past 67 weeks. The *percentage expecting stock prices will stay essentially unchanged* over the next six months fell 8.0ppts to 31.8%, above its historical average of 31.5% for the ninth successive week—the longest streak of above-average readings since a nine-week stretch between April and June 2021.

S&P 500 Earnings, Revenues, Valuation & Margins (*link*): The S&P 500's forward profit margin remained steady during the March 2 week at a 21-month low of 12.4%. That's down 1.0ppts from its record high of 13.4% achieved intermittently in 2022 from March to June. It's now up 2.1pts from 10.3% during April 2020, which was the lowest level since August 2013. Forward revenues improved 0.3% w/w to a record high during the February 2 week. Forward earnings rose 0.5% w/w to 5.4% below its record high during the June 16, 2022 week. Both had been steadily making new highs from the beginning of March 2021 to mid-June; prior to that, they peaked just before Covid-19 in February 2020. The consensus expectations for forward revenues growth rose 0.2ppt w/w to 2.6%, barely above its 33-month low of 2.3% during the February 2 week. That's down from a record high of 9.6% growth at the end of May 2021 and compares to 0.2% forward revenues growth during April 2020, which was the lowest reading since June 2009. Forward earnings growth rose 0.6ppt w/w to 4.2% and is up from a 31-month low of 3.5% in mid-February. That's down from its 23.9% reading at the end of April 2021, which was its highest since June 2010 and up substantially from its record low of -5.6% at the end of April 2020. Analysts expect revenues to rise 1.7% in 2023 (unchanged w/w) and 4.8% in 2024 (down 0.2ppt w/w) compared to a revenue gain of 12.2% in 2022. They expect earnings gains of 0.3% in 2023 (down 0.2ppt w/w) and 11.9% in 2024 (up 0.1ppt w/w) compared to an earnings gain of 7.1% in 2022. Analysts expect the profit margin to drop 0.1ppt y/y to 12.1% in 2023 (down 0.1ppt w/w) compared to 12.3% in 2022 and to rise to 13.0% in 2024 (unchanged w/w). The S&P 500's weekly reading of its forward P/E fell 0.3pt w/w to 17.5 and is down 1.0pt from a 43-week high of 18.5 several weeks earlier. That's up from a 30-month low of 15.3 in mid-October. It also compares to 23.1 in early September 2020, 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 weekly price-to-sales ratio dropped 0.03pt w/w to 2.17 and is down from a 24-week high of 2.29 several weeks earlier. That's up from a 31-month low of 1.98 in mid-October and down from a four-month high of 2.38 in mid-August, and also compares to a record high of 2.88 at the end of 2021 and a 49-month low of 1.65 in March 2020.

S&P 500 Sectors Earnings, Revenues, Valuation & Margins (*link*): Looking at the 11 S&P 500 sectors, last week saw consensus forward revenues rise for 10 sectors and forward earnings rose for nine. The forward profit margin rose w/w for four sectors and fell for three. Two sectors have forward earnings at a record high: Consumer Staples and Utilities. Two other sectors are holding up well, with their forward earnings down less than 5% from their record highs: Financials and Industrials. The following five sectors have forward revenues at record- or post-pandemic highs: Consumer Staples, Financials, Health Care, Industrials, and Utilities. Since mid-August, all sectors have seen forward profit margins retreat from their record highs. Those of Energy and Industrials remain close to their post-pandemic highs. Energy and Industrials were the only two sectors to have their profit margin improve y/y for full-year 2022, and these five sectors are expected to improve y/y in 2023: Communication Services, Consumer Discretionary, Financials, Industrials, and Utilities. Here's how they rank based on their current forward profit margin forecasts along with their record highs: Information Technology (24.1%, up 0.2ppts w/w from a 21-month low and down from its 25.4% record high in June 2022), Financials (17.5, down 0.1ppt w/w to a 22-month low and from its 19.8 record high in August 2021), Real Estate (16.7, unchanged w/w and down from its 19.2 record high in 2016), Communication Services (14.4, up 0.1ppt w/w and down from its 17.0 record high in October 2021), Utilities (13.5, unchanged w/w and from its 14.8 record high in April 2021), S&P 500 (12.4, unchanged w/w at a 21-month low and down from its record high of 13.4 achieved intermittently in 2022 from March to June), Energy (11.8, down 0.4ppt w/w and from its 12.8 record high in November), Materials (11.5, up 0.5ppt w/w from a 25-month low and down from its 13.6 record high in June), Industrials (10.1, up 0.1ppt w/w from an 18-month low and down from its 10.5 record high in December 2019), Health Care (9.6, down 0.1ppt w/w to a record low and down from its 11.5 record high in March 2022), Consumer Staples (7.1, unchanged w/w at a 56-month low and down from its 7.7 record high in June 2020), and Consumer Discretionary (7.1, unchanged w/w at a 21-month low and down from its 8.3 record high in 2018).

S&P 500 Sectors & Industries Forward Profit Margin Since Peak (*link*): Since the S&P 500's forward profit margin peaked at a record-high 13.4% during the June 9 week, it has fallen 7.9% to 12.4% through the February 23 week. All sectors are down since the peak, with the S&P 500's drop paced by five of the 11 sectors. Here's the sector performance since the June 9 peak: Energy (down 0.9% to 11.8%), Utilities (down 2.6% to 13.5%), Industrials (down 2.9% to 10.1%), Consumer Staples (down 3.0% to 7.1%), Information Technology (down 5.3% to 24.1%), Real Estate (down 7.1% to 16.7%), S&P 500 (down 7.7% to 12.4%), Financials (down 8.0% to 17.5%), Consumer Discretionary (down 8.5% to 7.1%), Communication Services (down 10.5% to 14.4%), Health Care (down 12.1% to 9.6%), and Materials (down 15.4% to 11.5%). These are the best performing industries since the June 9 peak: Wireless Telecommunication Services (up 70.2% to 11.5%), Casinos & Gaming (up 68.6% to 3.8%), Oil & Gas Refining & Marketing (up 62.8% to 5.5%), Airlines (up 29.3% to 5.3%), Reinsurance (up 22.1% to 14.3%), and Oil & Gas Equipment & Services (up 19.2% to 11.0%). The worst performing industries since the June 9 peak: Alternative Carriers (down 75.4% to 2.1%), Commodity Chemicals (down 42.2% to 5.9%), Home Furnishings (down 38.8% to 5.4%), Copper (down 36.8% to 12.2%), Housewares & Specialties (down 35.6% to 5.4%), and Broadcasting (down 30.2% to 3.9%).

US Economic Indicators

ADP Employment (*link*): "There is a tradeoff in the labor market right now," noted Nela Richardson, chief economist, ADP. "We're seeing robust hiring, which is good for the economy and workers, but pay growth is still quite elevated. The modest slowdown in pay increases, on its own, is unlikely to drive down inflation rapidly in the near-term." *Private payrolls* in February advanced a larger-than-expected 242,000 (vs 200,000 expected), while January (to 119,000 from 106,000) payrolls increased at a slightly faster pace than first reported. Total payrolls reached a new record high in February, as employment in service-providing and goods-producing industries rose 190,000 and 52,000, respectively, both to new record highs. Within *service-providin*g industries, leisure & hospitality (+83,000) once again posted the largest gain, followed by financial activities (+62,000) and education & health services (+35,000); professional & business services fell 36,000, its first monthly decline since July 2020. *Goods-producing* industries saw a 43,000 increase in manufacturing payrolls and a 25,000 gain in natural resources & mining employment, while construction jobs were cut by 16,000. Manufacturing payrolls were just shy of a new record high. Turning to ADP's median *annual pay* measures, the yearly rate for *job-stayers* ticked down to a 13-month low of 7.2% in February, down from last September's 7.8% peak, while the rate for *job-changers* eased to 14.3%, 2.1ppts below last June's 16.4% peak.

JOLTS (*link*): *Job openings* took a step back in January, falling 410,000 to 10.8 million, still a high reading—within 1.2 million of last March's record-high 12.0 million. Employers have posted at least 10 million job openings for the 20th straight month in January—a level never reached before June 2021 in the history of the series going back to 2000. There were 5.7 million unemployed in January, so there were 1.9 available jobs for each unemployed person that month, up from 1.7 last October. The Conference Board's jobs plentiful series increased for the fourth month, from 44.8 last October to a 10-month high of 52.0 this February, suggesting that job openings remained strong last month. By industry, the *biggest declines* occurred in construction (-240,000), accommodation & food services (-204,000), and finance & insurance (-100,000), while the *biggest gains* occurred in transportation, warehousing & utilities (+94,000) and nondurable goods manufacturing (+50,000). *Hirings* rose for the second time in three months, by 208,000 to a five-month high of 6.4 million; hirings were at 6.8 million last February. Meanwhile, the number of quits remained at a high level in January, at 3.9 million, but that's down from the record-high 4.5 million during November 2021.

Merchandise Trade (*link*): The *real merchandise trade deficit* widened for the second month to $101.8 billion in January after narrowing from $112.4 billion in October to $96.1 billion in November; it was at a record-high $135.2 billion during March 2022. Real exports climbed for the second month in January, by a total of 5.3%, to within 0.6% of last August's record high, after a three-month slide of 5.6%, while real imports rebounded 5.5% during the two months through January, after plunging 7.3% in November. On a year-over-year basis, real exports are up 10.2%, while real imports are basically flat. Looking at *real exports* versus a year ago, exports of automotive vehicles, parts & engines (20.8%) and nonfood consumer goods ex autos (20.7) posted the biggest gains, followed by industrial supplies & materials (8.8), capital goods ex autos ex autos (3.2), and foods, feeds & beverages (0.6). As for *real imports*, automotive vehicle, parts & engines (14.2) posted a double-digit gain, followed by capital goods ex autos (3.2) and foods, feeds & beverages (1.5), while imports of nonfood consumer goods ex autos (-6.6) and industrial supplies & materials (-3.2) both were in the red.

Global Economic Indicators

Germany Industrial Production (*link*): Output rebounded in January, posting its best monthly performance since mid-2020, led by a spike in intermediate goods production. Germany's *headline production, which includes construction*, climbed a stronger-than-expected 3.5% in January (more than double the 1.4% expected gain), after falling two of the previous three months by 2.5%. Meanwhile, *production excluding construction* (which the overall Eurozone uses) rose 1.8% following a 1.5% loss and a 0.8% gain the prior two months. Looking at the main industrial groupings, *output of intermediate goods* soared 6.9% in January after slumping two of the prior three months by the identical percentage, while energy output rose for the second time in three months by 3.5%. Meanwhile, *capital goods output* ticked down 0.6% after a five-month jump of 6.2%. *Consumer durable goods production* plunged for the fifth successive month, by 3.5% m/m and 8.6% over the period, after climbing to its highest level since March 2019 last August, while *consumer nondurable goods production* slipped 1.4% in January after climbing four of the prior five months by 3.0%. On a *year-over-year basis*, only capital goods production (3.2% y/y) was in the plus column, while energy (-9.0) output posted the biggest decline, followed by intermediate goods (-4.3), consumer durable goods (-2.8), and consumer nondurable goods (-2.5) output.

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