

Monthly Thematic Commentary

May 2023



by Mirae Asset AP Research Team

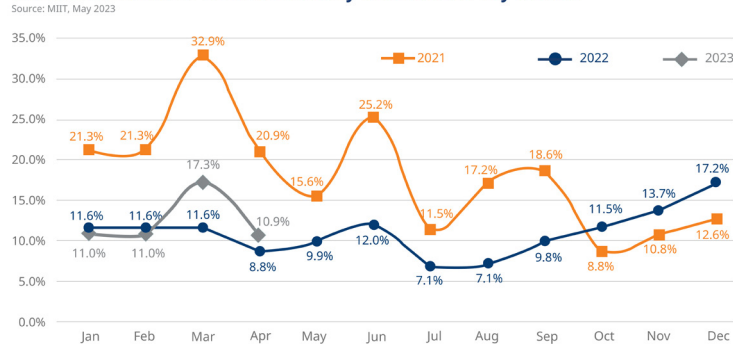
China Cloud Computing

According to the Ministry of Industry and Information Technology, China's software and IT service revenues were up 10.9% year-on-year (YoY) in April 2023, decelerating from 17% YoY growth in March. This drop-off likely reflects the slower macro recovery and lower-than-expected government spending on software localization initiatives due to budget constraints.

On the other hand, Chinese telco companies' cloud revenue continued to grow strongly. It is an industry consensus that government policies are currently a tailwind for telcos' cloud businesses since state-owned enterprises (SOEs) would favor telcos as a "safe" choice, especially when considering data security risk and the need to support localization initiatives. As SOEs and industrial digitization will be the main driver of cloud growth in China, telco companies will likely continue to see a sustainable advantage and, thus, more market share gain. As such, we expect private cloud demand growth will continue to outgrow that of public cloud in the near term.

However, with the fast development of artificial intelligence-generated content (AIGC), there should be a meaningful uplift in terms of public cloud resource demands driven by AI model training. We expect public cloud providers such as AliCloud, Tencent Cloud, and Baidu Cloud to be well-positioned to capture such demands in the medium to longer term.

Total Software and IT Services Monthly Revenue and Yoy Growth



China Robotics & AI

The growing attention to AI:

After the booming use of ChatGPT, there has been a growing interest in AI. The potential of AI to transform various industries has led to increased investment in AI-based technologies. As a result, the share prices of many companies have rebounded as investors flocked to take advantage of this trend.

China robotics and automation cycle:

We believe China's prompt reopening process will drive a higher capital investment appetite for Chinese companies in 2023. However, this anticipated trend may be partially postponed by the growing concerns about the global economic slowdown. Such concerns could cause uncertainty around the investment plans of some export-oriented Chinese companies. Based on the latest PMI data points, we see signs of US and Europe industrial activities slowing down.

Quality automation solution might gain global market share:

As China quickly passes the reopening disruptions, we see a growing interest for Chinese companies to resume global expansion plans. Many industrial products and solutions have been well developed in the past few years, and this could accelerate their global penetration with corporates' focus and improved sales support.

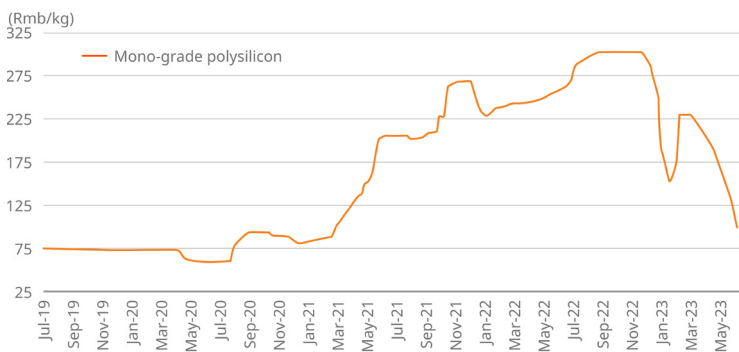
China Clean Energy

Regarding solar, feedback from the 2023 SNEC PV Power Expo in Shanghai, which attracted surprisingly huge traffic, showed N-type solar cells (mainly TOPCON) are replacing PERC as the new mainstream. TOPCON cell became a clear winner for 2023, while HJT cell will likely emerge as the mainstream cell technology from 2024 onward.

Polysilicon prices are falling sharply, breaking below RMB 100 per kg, which is close to the price level before 2021. The dramatic price change was due to the massive capacity build-up in polysilicon production.

Polysilicon Price Trend

Source: PV InfoLink, PV Insights, UBS, June 2023



As of April 2023, solar installations in China reached 48.31GW year-to-date (YTD), vs 16.88GW YTD as of April 2022 (+186% YoY). Over the first quarter of 2023, solar module exports ended at 51GW (+37% YoY), while solar cell exports ended at 8.6GW (+66% YoY). The whole year installation number has been guided up to over 450GW globally amid the SNEC event.

Regarding the wind industry, the latest monthly data points indicate that wind tendering procurement pricing has stabilized around RMB 2000/kW, similar to April but higher than the 1Q average of RMB 1844/kW. The wind turbine installation in March and April has picked up after several months of logistics and installation disruptions. Year-to-April wind installations grew by 48% and reached 14.2GW, still much below the record-high full-year tendering volume we saw last year at 91GW. With that, we believe the strong new order growth in 2022 will continue to translate into actual installations in the remainder of 2023. Many component suppliers will be beneficiaries as they can enjoy strong operating leverage when actual installations pick up.

According to Windmango's news on 31 May 2023, the Guangdong Provincial Development and Reform Commission recently announced the 2023 offshore wind competitive bidding work plan, with a remarkable capacity of 7GW (or 15 projects) offshore wind farms located in provincial-jurisdiction areas

and 16GW (or 15 projects) in national-jurisdiction areas. The competitive bidding will start in early June, with the final bidding results to be announced by the end of August. This is a positive update to support a growing offshore wind capacity in China.

China EV & Battery

Battery material costs have stabilized:

Lithium prices declined sharply year-to-date, consistent with our view that the overall lithium supply tightness will ease into 2023. Prices began stabilizing in May after battery and battery material destocking was almost complete. The prices have also hit levels around RMB 150,000/ton, which is considered a balanced price point – leaving enough profit to lithium resources players while allowing battery cell makers to lower the product cost meaningfully. Of late, battery makers have become more willing to produce and start restocking to meet the potential demand in the second half. For other battery materials, there were modest levels of annual price cuts. The sharp correction in lithium price may be negative for short-term sector sentiment but positive for long-term EV and battery competitiveness.

China EV sales and competition landscape are still challenging:

Post the Shanghai Auto show, we saw various new and competitive EV and plug-in hybrid EV (PHEV) car models to be launched this year. According to news media, more than 60% of new car models launched in China year-to-date are NEVs.

Risk of further price competition remains:

In late 2022 and early 2023, Tesla announced an EV price cut, which initiated a price war in China amid seasonally weak industry-level sales volume. Huawei, Xpeng, Nio, Aion, and BYD have also announced price cuts. Tesla sales in China have rebounded after the price cut, but the magnitude was not as high as expected as their car models are relatively outdated. In May, Tesla raised some model prices modestly, reversing the price cut trend year-to-date and sending stabilizing signals to car buyers. With still a short order lead time and high inventory, we can't rule out the possibility of Tesla's further price adjustment in the rest of 2023.

US Inflation Reduction Act yet to have clarity:

The IRA detail announced this March was similar to the December version. There were limited new implications for Chinese battery suppliers. The Ford-CATL collaboration is yet to be finalized. Any progress will provide clarity to Chinese players on whether to enter the US battery market.

China Semiconductor

Japan restricts chip-making equipment exports to China:

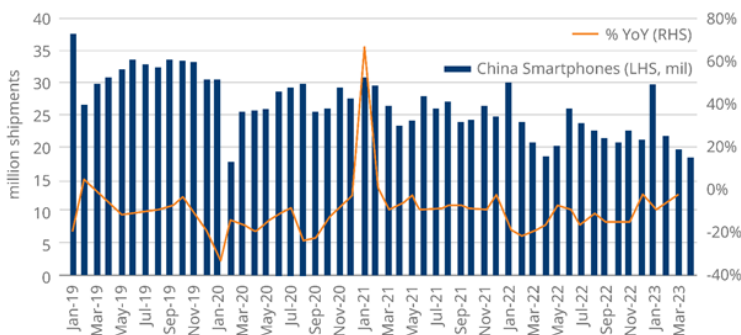
On 23 May, the Japanese government unveiled details of its updated export control on China, under which local companies must have a license to sell 23 types of chip-making equipment to China. The curbs are set to take effect on 23 July. Japanese companies will need licenses to ship a broad range of semiconductor equipment spanning cleaning, deposition, annealing, lithography, etching, and testing. The scope of the ban is largely in-line with US export restrictions published in 4Q 2022. There are concerns about Japan's restriction on the immersion lithography tool, which could become a reference for the Netherlands to draft its upcoming export control rule.

Smartphone shipments see monthly improvement in China:

Global smartphone units sell-through for the month of April 2023 came in at 88.7 million units (-10.5% YoY), continuing from last month's recovery in YoY growth, where February and March sell-through was -14.4% and -13.6% YoY, respectively. (Counterpoint, UBS, April 2023) Similar to last month, the incremental improvement was most notably driven by YoY sell-through in China, improving to -1.9% YoY or 18.1 million units (was -9.9%/-5.7% in February/March). From an original equipment manufacturer (OEM) perspective, the month-on-month (MoM) improvement in YoY smartphone sell-through was primarily led by Android smartphones. Oppo, Vivo, and Xiaomi all showed incremental improvement in YoY sell-through for April to -11.1%/-18.5%/-8.0% YoY (was -17.2%/-29.5%/-14.4% YoY in March). The recovery was, for the large part, centered on both China (Xiaomi and Vivo) and the rest of the world (Oppo and Vivo).

China Smartphone Monthly Units Sell-Through

Source: Counterpoint, UBS, April 2023



China Consumption

China's consumption recovery continues, but the pace remains somewhat slower than anticipated. April retail sales growth came in at +18.4% YoY, higher than +10.6% YoY in March but lower than the market expectation of +21.9% YoY. China's consumer confidence remains low, around 95 levels, i.e. still 15% below the pre-lockdown level in March 2022. We need to see a job market and wage growth recovery before we see improvements in consumer confidence, which by then should translate Chinese consumers' current high savings into consumption and lead to a more broad-based recovery.

If the recovery pace continues to remain sluggish, we expect to see more government stimulus announcements to support growth. In fact, the government just extended the tax exemption for new energy vehicle (NEV) purchases beyond 2023 and also relaxed property purchase restrictions in some cities. We think such property-related measures may possibly extend to other cities as well. Also, monetary policy remains accommodative to support infrastructure and other investments to drive growth.

The 618 online shopping festival just kicked off, and we are currently monitoring whether this can boost consumption. We maintain our view that private consumption will be China's major economic growth driver and remain positive on the consumption outlook this year.

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