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Topics *Implication of high youth unemployment in China*

China's youth unemployment rate has reached a record high. What is behind this? Will the unemployment rate decline? How will it affect the country's economy? In this report, we looked at these issues from a medium- to long-term perspective.

■ Youth unemployment reaches record high

The youth unemployment rate is rising in China. The country's surveyed unemployment rate for youth aged 16–24 in urban areas reached a record high of 19.9% in July 2022. This means one in five in this age group is unemployed. Meanwhile, the overall surveyed unemployment rate remains low. This is because the unemployment rate for people between 25 and 59 years of age is low, and youth employment accounts for only 16.0% of the total employment in China.

The National Bureau of Statistics began releasing surveyed unemployment rates in June 2013 to improve the accuracy of statistical data. The rates are calculated based on the results of surveys on regular urban residents, including migrant workers. Unemployed persons are defined as persons who have been seeking for a job over the past three months and can start working within two weeks if a suitable job arises.

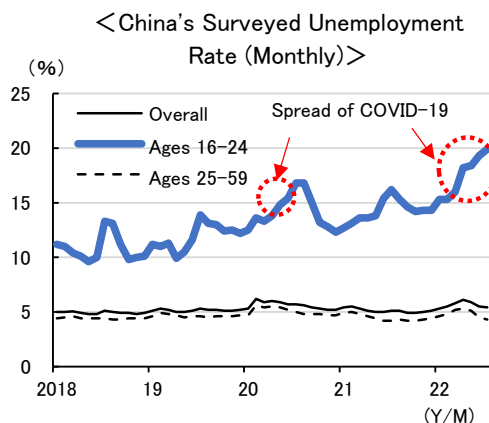
The surveyed unemployment rate is based on a door-to-door survey of a sample of 120,000 households and considered to be fairly reliable. However, unemployment rates in China tend to be lower than should be, because 1) employees often choose to accept pay cuts, because they are deemed to have voluntarily quit a job and will not be eligible to claim unemployment insurance benefits if they do not accept pay cuts; and 2) even in the case of insured employees, it is not best to be unemployed, given the small amount of insurance payout.

Local governments are required to set the level of unemployment benefits, which should at least equate the minimum livelihood guarantee for urban residents (the equivalent of Japan's public livelihood assistance program). The actual payout per insured (total insurance payout divided by the number of insured) stood at RMB 24,671 in 2021. This is less than 30% of the average wage of RMB 88,115 in the same year and closer to the urban population's minimum livelihood guarantee of RMB 8,131.

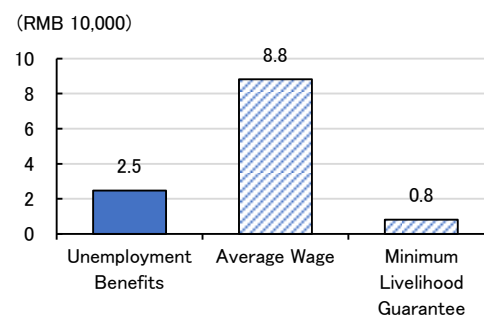
■ Background of rising youth unemployment rate

Youth unemployment rose substantially in 2020 and 2022. The COVID pandemic is the key driver behind this. China's real GDP dropped 6.9% year on year in the first quarter of 2020 due to the spread of COVID-19, which was observed for the first time in Wuhan City, Hubei Province. The real GDP growth decelerated to 0.4% year on year in the second quarter of 2022, due to a pandemic-induced lockdown in Shanghai. The sudden economic downturn had a serious impact on demand for hiring young workforce members.

However, that is not the only problem. Another one is the supply-side issue: pressure is increasing for the youth labor market. According to the Ministry of Education (the equivalent of Japan's Ministry of Education, Culture, Sports, Science and Technology), the number of university graduates (including graduates from junior colleges and graduate schools) rose 1.67 million from the previous year to 10.76



<Unemployment Benefits, Average Wage, and Minimum Livelihood Guarantee Levels (Annual)>



million in 2022, surpassing 10 million for the first time. This, on top of the pandemic, accelerated youth unemployment in 2022. One in four university graduates hopes to work in the information technology (IT) industry. However, the IT industry is downsizing amid deteriorated performance due to tightened regulations under the Xi Jinping administration's "Common Prosperity" policy. This has widened the supply-demand gap.

Another issue is the precarious work environment for young workers, making them vulnerable to layoffs. In China, employers are allowed to lay off employees subject to mandatory severance pay based on years of service. This prompts employers to lay off young employees. An online survey by a human resources company on job cuts in the IT industry has identified that younger workers, with less than three years of employment, were mainly targeted for layoff. The unemployment rate for the population aged 25–59 is steadily low at the expense of vulnerable young workers facing difficulties both in finding and keeping a job.

■ Youth unemployment will likely remain high for the next 10 years

High youth unemployment means that young people, whom the country's future relies upon, are not participating in society through employment. Younger people have less savings, and many are missing out on available safety nets, such as unemployment insurance. Thus, unemployment can easily lead them to poverty and greater inequality. High youth unemployment leads to significant macroeconomic losses. Inevitably, failure to utilize the workforce segment that is most likely to improve productivity will reduce the vitality of the overall economy as well as of companies. It will also erode the country's labor base, causing a drop in birthrate and an outflow of human resources.

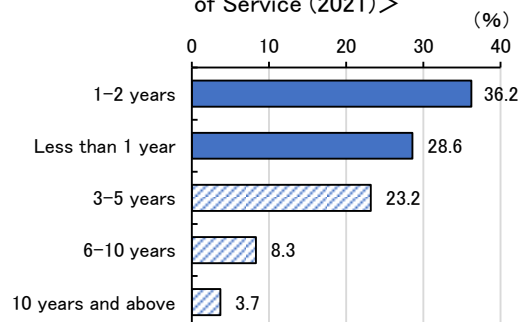
Rising youth unemployment is a serious issue in any country, as it affects social stability and national power. It is therefore a policy issue that should be prioritized. However, China's unemployment rate will likely remain high. One reason is that the number of university graduates is projected to keep rising. The number of people enrolling in universities will continue increasing, based on the popularization of higher education. There is no doubt that the number of university graduates will stay over 11 million.

Even in the long term, there is little hope of easing the glut. According to the United Nations World Population Prospects 2022, the population aged 16–24 in China started to decline in 2007. After hitting the bottom at 144.39 million in 2022, it will grow through to 2033. Even though China's population may start declining as early as 2022, it is important to assume that its youth unemployment will remain high over the next 10 years.

While high youth unemployment is not unique to China, it carries special weight for the Xi Jinping administration. The administration is highly wary of a growing tang ping or "lying flat" sentiment (characterized as having no material desires, being reluctant toward competition, work, marriage, and having children) among young people. A continued high youth unemployment rate will worsen this problem. It may not only accelerate the declining birthrate and sluggish personal consumption, but also erode the social foundation centered on gaining strength through friendly rivalry, which has underpinned China's economic development.

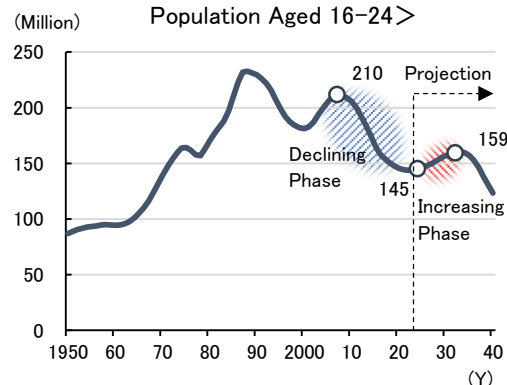
(Yuji Miura)

<Layoffs in the IT Industry by Years of Service (2021)>



Source: Prepared by JRI based on local media coverage

<Long-term Projection of Chinese Population Aged 16–24>



Source: Prepared by JRI based on data from the United Nations

Note: Medium variant

Topics Chip industry faces downturn amid signs of easing shortage

The global semiconductor shortage is easing based on aggressive capacity expansion. However, inventories are piling up amid cyclical decline in demand for PC and smartphone, which has been weighing on economies in Asia, including South Korea and Taiwan.

■ Moves to ease semiconductor shortages both in supply and in demand

The semiconductor shortage has caused disruptions to the world's manufacturing industry. However, it seems to be coming to an end. Lead times (i.e., time taken from order placement to delivery) for semiconductors dropped slightly for the third consecutive month to 26.8 weeks in August 2022. In addition, Global Electronics PMI suppliers' delivery time index (below 50 indicates longer delivery times) rose to 40 in August, indicating gradually shortening delivery times.

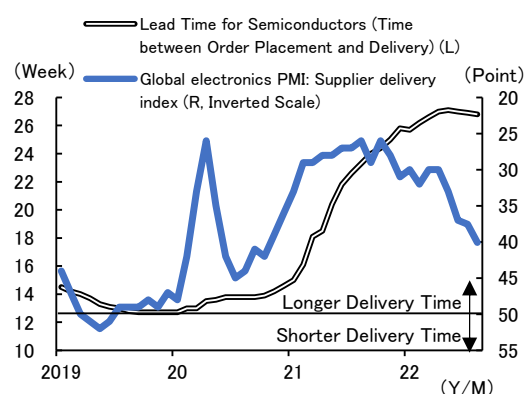
Both supply and demand factors play roles in easing the semiconductor shortage. On the supply side, chipmakers have aggressively expanded their production capacity. Global semiconductor equipment sales started picking up around 2020. Sales remained high at \$26.43 billion in the second quarter of 2022.

The background to this is that strengthening semiconductor supply chains has become increasingly important in various countries, from the perspective of economic security. More than 70% of semiconductor equipment sales have been generated in South Korea, Taiwan and China. However, sales have been sluggish in these countries since the beginning of 2022. Meanwhile, sales in other areas, including the United States, have increased at faster paces, reflecting a move to diversify semiconductor production sites. The U.S. government supports capital investments of chip makers by budgeting \$52.7 billion under the CHIPS and Science Act passed in August. The Japanese government is also looking to increase the country's production capacity by attracting foreign investments. For example, it has made available as much as JPY 476 billion in support of Taiwan-based TSMC's construction of a semiconductor plant in Kumamoto Prefecture. These efforts to enhance supply capacity will likely continue for the foreseeable future and mitigate the semiconductor shortage.

On the demand side, demand for high-tech products, such as PCs and smartphones, has entered the phase of cyclical decline, partially because the pandemic-accelerated move toward digitization has subsided. Additionally, demand for luxury goods tends to drop in the inflationary period. These put demand for semiconductors used for PC and smartphone under pressure.

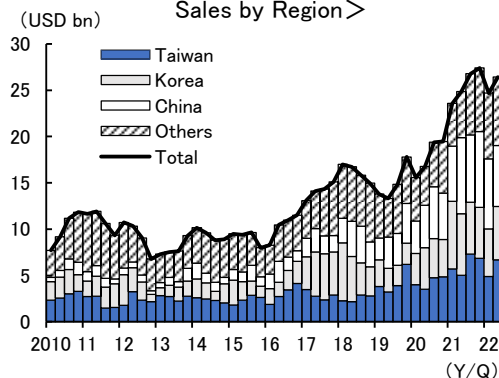
Capacity expansion vary by product, with advanced semiconductors given priority. In fact, supply for automobiles and home appliances fell seriously short, while that for PCs and smartphones remained largely uninterrupted. Semiconductors used for automobiles and consumer electronics are often old-tech based, so-called "legacy" semiconductors. There was little incentive to increase capacity for these legacy semiconductors, because they do not provide high profit margins, unlike advanced semiconductors used for PCs and smartphones. The shortage is particularly serious for automobiles. New car sales continued to be sluggish in Japan, down 9.2% year on year in August 2022. It takes several months for new cars to be

<Delivery Delays in Semiconductor/Electronics Sectors>



Source: JRI based on S&P Global and Bloomberg L.P.

<Global Semiconductor Equipment Sales by Region>



Source: JRI based on SEAJ

delivered after sales are complete.

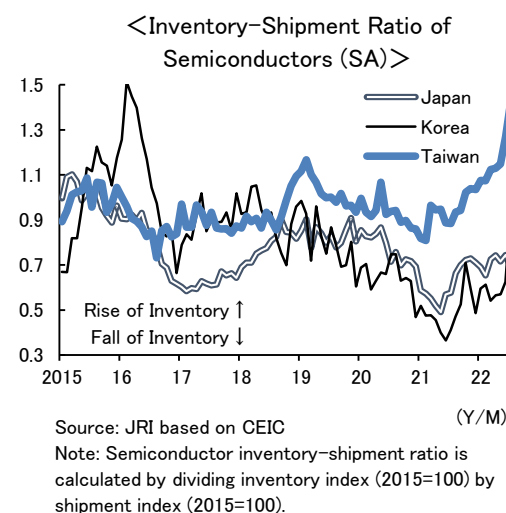
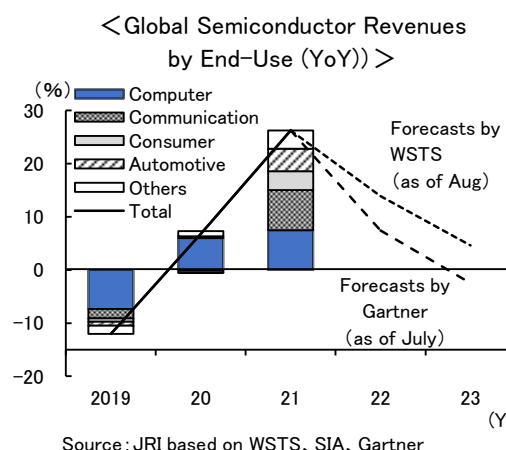
Chipmakers have become hesitant toward strengthening their capacity for PC and smartphone chips to meet the demand. They instead will likely concentrate on automobiles and home appliances, even though their profits may erode. We anticipate these movements will correct the ongoing supply imbalance and further eliminate shortages in the overall industry. This could have a favorable impact on the global economy, such as by easing inflationary pressures.

■ Semiconductor inventories are piling up in Taiwan and South Korea

On the other hand, some chipmakers face downturn in demand and must adjust production levels, given declining demand for PC and smartphone chips, which account for more than 60% of total demand. Global semiconductor sales in July 2022 were down 1.8% (up 6.2% in June) from the same month in 2021, the first negative monthly move in 32 months. Both World Semiconductor Trade Statistics (WSTS) and U.S.-based research firm Gartner expect the sales growth to slow sharply in 2022 and 2023 from 26.2% in 2021.

It should be noted that advanced chips and memory chips, used for PCs and smartphones, are the main products for Taiwan and South Korea. The increase of demand for these products had been the key driver of the two country's economy. Thus, recent declines in demand have put a damper on their economies. Inventory levels in both countries are rising rapidly. Taiwan's shipment of semiconductors dropped 1.3% in July 2022 from the same month in 2021, while inventories grew 57.9%. In South Korea, shipments dropped 22.7%, while inventories were up 80.0%. It will likely take some time to switch their production systems into ones that can manufacture chips for automobiles and home appliances. Taiwan and South Korea will likely remain in the inventory adjustment phase.

Furthermore, if overall global consumer spending cools rapidly amid high inflation and economic slowdown, the semiconductor market, including automotive and home appliance segments, will enter a serious correction phase. If this happens, caution will be necessary not only of the risk of production adjustments in Taiwan and South Korea, but also of the risk of major economic deterioration in the entire economy of Asia, where semiconductor supply chains are concentrated.



(Minoru Nogimori)