

# ASIA MONTHLY

## June 2022

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## Topics *China's economy shows signs of recovery from blow of lockdowns*

In China, the reach of lockdowns expanded through April, and economic activity contracted significantly. Since the beginning of May, there have been moves toward easing activity restrictions due to a reduction in infections, and economic activity is expected to pick up in the coming months.

### ■ Lockdowns have put a major dent in economic activity

The Chinese government expanded lockdowns through April 2022 to contain COVID-19. According to data on numbers of new cases published by the governments of 31 provinces, municipalities, and autonomous regions, the number of regions reporting infections increased significantly from five at the beginning of February to 13 at the end of April. In these regions, whole cities or parts of them were locked down.

The lockdown of Shanghai, which began in late March, has been prolonged, while some parts of other large cities such as Suzhou and Beijing in Jiangsu Province and Zhengzhou in Henan Province have also been subject to lockdowns. Shanghai's subway ridership fell to zero at the end of April, while that of Suzhou, Beijing, and Zhengzhou dropped to 30%, 60%, and 70%, respectively, of the level in the first half of January 2020, just before the COVID pandemic.

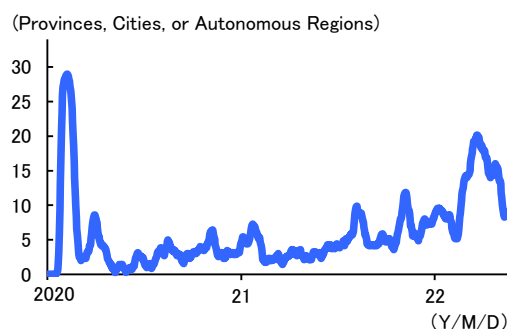
Economic activity shrank accordingly, especially personal consumption, which declined sharply. Retail sales in April were down 11.1% year on year (YoY), the first double-digit decline in two years and one month. The drop in services consumption was particularly pronounced, with food service consumption decreasing by 22.7% YoY. By region, retail sales fell below the previous year's level in six of the nine provinces, municipalities, and autonomous regions that released March statistics, indicating a consumption decline in broad-based areas.

Production activity in the manufacturing sector was also down. Due to suspended factory operations and stalled logistics, industrial production in April was down 2.9% compared with the same month the previous year, the first year-on-year decline since COVID emerged. By product category, output declined in a wide range of sectors, including automobiles, PCs, smartphones, industrial robots, and cement. By region, industrial production in three of the 31 provinces, municipalities, and autonomous regions was already below the previous year's level as of March, and in April, year-on-year declines had spread to encompass 11 regions.

### ■ Fixed asset investment also slumped

Fixed asset investment, which is expected to play a role in supporting the economy, has also declined. Despite the government's financial support for investment by local governments and businesses,

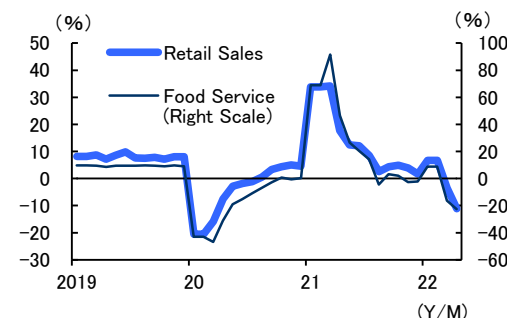
#### <No. of Regions Reporting New Infections>



Source: Prepared by JRI based on data from Wind Database

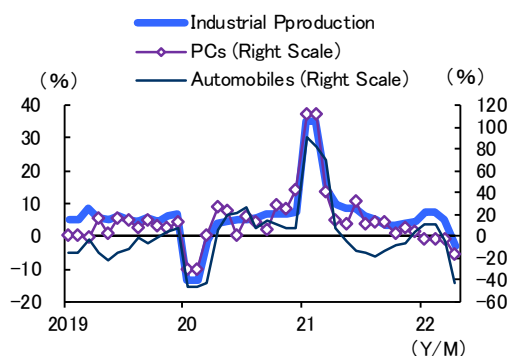
Note: Moving average of previous seven days

#### <Retail Sales (YoY Change)>



Source: Prepared by JRI based on data from the National Bureau of Statistics

#### <Industrial Production (YoY Change)>



Source: Prepared by JRI based on data from the National Bureau of Statistics

construction equipment operating hours fell further in April. The following three points can be identified as providing the backdrop for this: First, there was a downward swing in infrastructure investment and corporate fixed asset investment due to logistical disruptions and labor shortages caused by the strict activity restrictions. Second, companies refrained from investing due to growing uncertainty about the future, such as the continuation of the zero-COVID policy and the worsening situation in Ukraine. And third, there has been a slump in real estate development investment. In addition to sluggish demand for housing, companies in the sector continue to have difficulty raising funds.

### ■ Recently there have been moves toward lifting the lockdowns

However, since the beginning of May, the number of regions where strict activity restrictions are in place has decreased significantly, to eight as of May 17, as infections have abated. Shanghai's lockdown is also scheduled to be lifted in June.

Economic activity is expected to pick up going forward as lockdowns are lifted in more and more locations. Already, there are signs of recovery in the automotive industry. In Jilin Province, Shanghai, and Suzhou, where the auto industry is concentrated, the government has eased activity restrictions on companies and is helping factories restart operations. In Shanghai, as of mid-May, operations had resumed in 16 of the 24 areas where activity restrictions have been relaxed. As a result, supply constraints in the automotive industry and other sectors are easing.

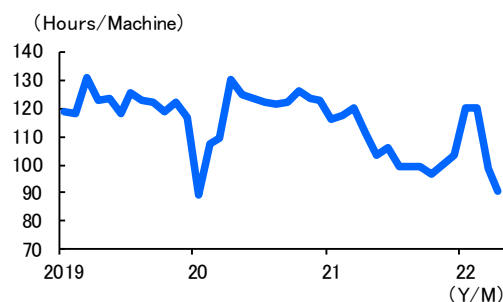
With the lifting of the lockdowns, people are getting out and about once more, and there are also signs of economic recovery on the demand side. In fact, mega-cities such as Wuhan, Suzhou, and Guangzhou are already seeing a recovery in subway ridership. With supply constraints easing and people getting out and about once more, the decline in nationwide passenger vehicle sales in the first half of May narrowed significantly.

Along with personal consumption, an expansion of fixed asset investment also looks set to drive the recovery in economic activity. While adhering to its zero-COVID policy, the government has set this year's growth target at "around +5.5%," and intends to significantly expand fiscal spending. At present, the 21 provinces, municipalities, and autonomous regions that have announced investment plans for transportation infrastructure in 2022 plan to increase such fixed asset investment by 5% over the previous year to 2.68 trillion yuan.

As the above shows, the Chinese economy looks set to pick up as there have been moves toward easing activity restrictions due to a reduction in infections, and also because fixed asset investment will expand going forward. However, since the outbreak has not been completely contained, it can be said that excessive optimism is not warranted.

(Shinichi Seki)

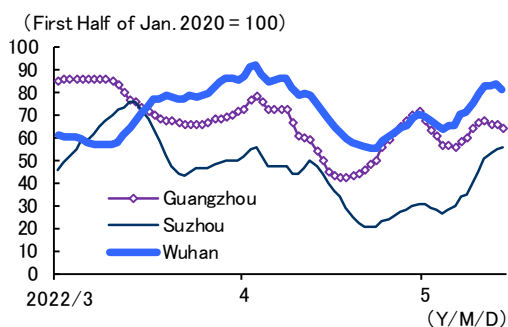
### <Construction Machinery Operating Hours (Seasonally Adjusted Figures)>



Source: Prepared by JRI based on data from Komatsu Ltd.'s KOMTRAX system

Note: Monthly average operating hours per machine in China

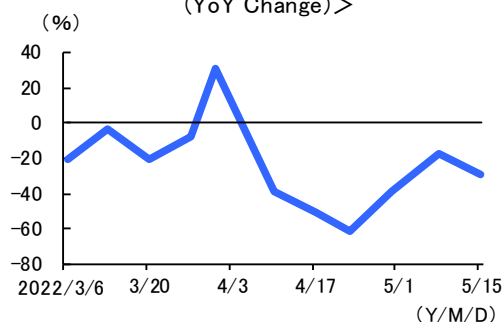
### <Subway Ridership>



Source: Prepared by JRI based on data from Wind Database

Note: Moving average of previous seven days

### <No. of Passenger Vehicles Sold (YoY Change)>



Source: Prepared by JRI based on data from the China Passenger Cars Association

## Topics *Developments with carbon pricing in Asia*

Although the situation with the introduction of carbon pricing in Asian countries varies widely from country to country, more progress has been made with establishing emissions trading schemes than introducing carbon taxes.

### ■ Interest in carbon pricing is growing in Asia

As the world becomes more environmentally oriented, Asian countries are building production and consumption systems with less environmental impact in order to reduce GHG (greenhouse gas) emissions. Specifically, companies are focusing on (1) shifting from gasoline vehicles to EVs (electric vehicles), (2) revamping production methods for steel products (shifting production from blast furnaces to electric furnaces and utilizing hydrogen to produce steel in blast furnaces), and (3) expanding the adoption of renewable energy. Related to this is carbon pricing, which has been attracting a lot of attention. Carbon pricing makes the social costs associated with GHG emissions visible, and spurs efforts to reduce environmental impact, while also making it possible to secure the tax revenue necessary for environmental measures.

Carbon pricing can be broadly divided into two types: emissions trading and carbon taxes, each of which has its advantages and disadvantages. With the former, emission caps for emitting entities are determined by the government, and companies that exceed their emission caps purchase emission credits from other companies. While this has the advantage of making it easier to forecast overall emission reductions, it also has disadvantages: Emissions trading schemes are prone to complexity, and it can be difficult to keep trading prices stable.

In contrast, a carbon tax has the advantages of a fixed per-emission tax amount and a simple system, but a disadvantage is that there is no cap on emissions, making it hard to forecast emission reductions. A shared challenge with both emissions trading schemes and carbon taxes is the difficulty of performing detailed measurement of the emissions of each economic entity, which limits the scope of trading schemes and taxation to large companies.

In light of this, countries are seeking to establish realistic systems, combining emissions trading schemes and carbon taxes with changes to taxation systems related to energy production and consumption. In addition to its efforts in this area, the EU, a leader in environmental measures, has introduced a carbon border tax, which is effectively a tariff on imports from countries with less stringent environmental regulations, and is aimed at providing an impetus for reductions in emissions outside the bloc.

While the EU's innovative initiatives are garnering attention, the future of global emissions reductions will depend on what kind of carbon pricing is introduced in Asia, where China, India, the ASEAN zone, and other Asian countries account for about 40% of global GHG emissions.

### ■ Many Asian countries are focusing on developing emissions trading schemes

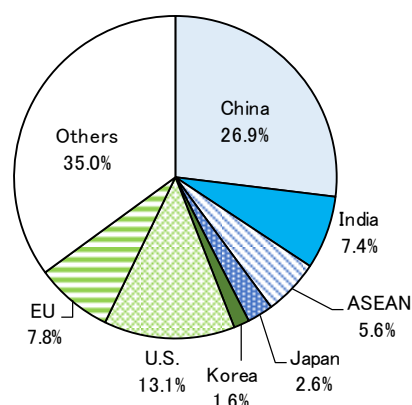
The implementation of carbon pricing in Asia varies from country to country, but in general, more progress has been made with establishing emissions trading schemes than introducing carbon taxes. China,

<Types of Carbon Pricing and Their Features>

	Emissions Trading Schemes	Carbon Taxes
Emission Price	Determined by Market Transactions	Determined by Government
Emissions Upper Limit	Set by Government	None Stipulated
System Complexity	Complex	Simple
Practical Issues	Due to the difficulty of measuring CO <sub>2</sub> emissions of economic agents, only large companies are subject to trading schemes and taxation	

Source: JRI

<GHG Emissions by Country and Region (2018)>



Source: World Bank

which had previously introduced emissions trading schemes in some regions, began operating a unified nationwide emissions trading market in July 2021. Thailand, Indonesia, Malaysia, and Vietnam are also planning to introduce emissions trading schemes for some industries and are conducting pilot projects to that end. Hong Kong and Singapore, meanwhile, are moving ahead with designing financial instruments related to emissions trading and expanding such trading. Although India has not introduced a CO<sub>2</sub> emissions trading scheme, the state of Gujarat has gone ahead with its own PM2.5 (fine particulate matter) emissions trading scheme in an effort to eliminate air pollution.

On the other hand, regarding carbon taxes, Singapore, which introduced such a tax in 2019, plans to raise the tax amount significantly through 2030, but other countries are cautious about imposing carbon taxes, fearing that doing so could worsen their economies in the short term. The IMF and other international organizations have proposed the introduction of a global uniform minimum carbon tax to prevent carbon leakage (i.e., shifting production to countries with less stringent emission regulations), but Asian countries saddled with various economic and social problems stemming from low incomes are expected to oppose this proposal, so achieving international cooperation is likely to be difficult.

<Recent Developments with Carbon Pricing in Asian Countries/Territories>

	Emissions Trading Schemes	Carbon Taxes
Japan	Plans to put the GX League, a framework for voluntary emissions trading, into full operation in FY2023	Phased in a tax for global warming countermeasures from 2012 (current tax rate is 289 yen per ton of CO <sub>2</sub> emissions)
China	Began operation of a nationwide unified emissions trading market in July 2021	Considering future introduction. Opposes the introduction of a carbon border tax by the EU based on the view that it violates WTO (World Trade Organization) principles
Hong Kong	Hong Kong Exchanges and Clearing Limited and Guangzhou-based China Emissions Exchange signed an MOU to cooperate in globalizing China's emissions trading market (March 2022)	Believed to be considering future introduction, but there have been no significant developments or media reports
Taiwan	Considering future introduction	Plans to introduce a carbon tax for companies with high CO <sub>2</sub> emissions in some industries in 2023
South Korea	Created an emissions trading market in 2015	Considering future introduction
Indonesia	Considering introducing an emissions trading market for some industries from 2024 onward	Announced a plan to postpone the introduction of a carbon tax of 30,000 rupiah per ton at coal-fired power plants from April 2022 until around July
Malaysia	Policy to introduce an emissions trading scheme at the end of 2022	Considering future introduction
Philippines	Considering future introduction	Negative on the introduction of a carbon tax (Energy Minister's statement in March 2021).
Singapore	Climate Impact X, an exchange for CO <sub>2</sub> emission credits, was established by financial institutions in 2021	Introduced a carbon tax of S\$5 per ton of CO <sub>2</sub> emissions in 2019. Plans to increase it to S\$50–80 by 2030
Thailand	Considering introducing an emissions trading scheme for some industries from 2022 onward	Considering future introduction
Vietnam	Plans to establish an emissions trading market in 2025, with full-scale operation beginning in 2028 after a trial period	Believed to be considering future introduction, but there have been no significant developments or media reports
India	No trading scheme for CO <sub>2</sub> emission credits exists (Gujarat introduced a fine particulate matter (PM2.5) emissions trading scheme in 2019)	Clean Energy Cess was introduced for coal in 2010, but abolished in 2017 with the introduction of the GST (Goods and Services Tax)

Source: Prepared by JRI based on World Bank "Carbon Pricing Dashboard," ASEAN Secretariat "State of Climate Change Report," and various media reports

Note: Energy taxes that are not explicitly priced according to carbon emissions are not included in carbon pricing in a narrow sense (but are included in carbon pricing in the broad sense).

(Shotaro Kumagai)