INSIGHTS

## Insights on China's Economic Potential at CDF

#### Voice of the World

Edited by QI Liming

More than 100 participants from international organizations, Fortune 500 companies and the global business communities exchanged their views on economic recovery, stabilization of global industrial chains, and the green transition at the China Development Forum (CDF) 2023 on March 25-27.

Axel van Trotsenburg, World Bank senior managing director, said China has made great economic achievements in the past decades, eradicating extreme poverty and building a thriving middle class.

Noel Quinn, Group Chief Executive at HSBC, said that China's reform and opening- up have yielded fruitful results. In recent years, China's economic development has been the most important stabilizer for the world economy.

Many multinational companies have benefited from China's reform and opening-up and achieved successful development. He is optimistic about China's economic growth potential, innovation vitality, and investment opportunities.

Apple's CEO Tim Cook, and Jakob Stausholm, chief executive of Rio Tinto Group expressed their excitement at returning to China three years after the outbreak of COVID-19, and their appreciation of China's abundant achievements in economic and social development.

They said that multinational com-



Solar panels and wind turbines. (PHOTO: VCG)

panies have benefited from China's reform and opening-up and rapid development, while multinational companies have also made positive contributions to China's development. They will continue to deepen cooperation with China in the future. They are confident that China will further promote opening-up and make significant contributions to the world economy.

As China's utilized foreign investment rose from 144.4 billion USD in

2020 to 189.1 billion USD in 2022, Yi Xiaozhun, former WTO deputy directorgeneral, said that "China has already been deeply embedded in the international value chain and become a global manufacturing hub and a 'world factory,' due to over 40 years of reform and opening-up."

Denis Depoux, co-president of Roland Berger Global Management Committee, said that China has played a crucial role in the global green development path. Over the past few decades, China has been actively participating in the transformation of the global energy industry.

China's renewable energy equipment has become significantly more competitive internationally, as a result of aggressive domestic carbon reduction. He believes that China will continue to give full play to its competitive advantages to promote reform of the world energy industry.

#### Comment

# Who Are U.S. 'Guardrails' Actually Guarding?

By GONG Qian

On March 21, U.S. Commerce Department unveiled its proposed "national security guardrails", which is intended to ensure technology and innovation funded by the *CHIPS and Science Act* is not used for projects in "foreign countries of concern" such as China's mainland.

Under the new guidelines, funding recipients will be limited to expanding a facility's production capacity by five percent, while being prohibited from adding new production lines or expanding an existing legacy facility's production capacity beyond 10 percent. It also includes a 100,000 USD spending cap on investments in advanced capacity in China.

This is a part of U.S. claims to strengthen global supply chains and enhance collective security of the superpower and its allies.

But, what it has done only makes the global chip supply chain even more bifurcated.

Without doubt, the new restriction would affect all chip manufacturers who are operating their factories in China while planning to build factories in the U.S. as they may apply for the fund. So literally, it is another instance that the U.S. leverages its hegemony to force its allies to pick a side in China-U.S. tech rivalry.

At the start of this year, President Joe Biden lobbied U.S. allies Japan and the Netherlands to take the same restriction measures on chip exports to China. Now, the U.S. once again put its allies in the passive situation of adjusting their policies, based on the demands of the U.S., rather than on their own interests.

The impact of the proposed new U.S. guidelines is expected to be more significant on major South Korean chip makers, Arisa Liu, a senior semiconductor research fellow at the Taiwan Institute of Economic Research, told South China Morning Post.

"Companies like Samsung and SK Hynix have a high proportion of their production capacity invested in China," said Liu. "If they cannot upgrade production processes or expand capacity, their business will be greatly affected."

Although South Korea's trade ministry said that U.S.-proposed rules will not force recipients to shut down their China factories, uncertainties are unpredictable when the one-year waiver for Samsung and SK Hynix to receive chip equipment needed in China expires in October of 2023, according to Reuters.

The hope of the *CHIPS* and *Science Act* is to revitalize U.S. semiconductor manufacturing, but the editors of Bloomberg believe 52 billion USD chipmaking plan is racing toward failure as the U.S.-based manufacturers face three serious impediments: red tape, lacking the needed workforce and politics. As for the last concern, politics is a real concern for U.S. chip makers as the *CHIPS* and *Science Act* asks the companies receiving the funding to take social responsibilities such as offering "community investment," and access to "affordable, accessible, reliable and high-quality child care."

"But larding already-uncompetitive businesses with crippling new costs to advance completely unrelated social goals is simply at odds with the stated purpose of this law," said the editors.

So the curbs neither bring more benefits to the U.S. nor benefit its allies. Contrarily, it comes at the cost of economic loss for all stakeholders involved.

Biden once said that the U.S. and China need to establish "common-sense guardrails" to manage a bilateral relationship. The U.S. so- called "establishing guardrails" for China-U.S. relations and "not seeking conflict" actually means that China should not respond in words or action when slandered or attacked. "That is just impossible!" said China's foreign minister Qin Gang in his first media briefing in March.

#### Research Box

## Geoeconomic Fragmentation Slowing Global Growth

Rising tensions between U.S. and China have led to higher trade barriers, tighter cross-border investment restrictions, and greater domestic production of critical goods deemed to be of strategic importance.

On the trade front, slightly more than 60 percent of the trade between the two countries is subject to tariffs from one side or the other.

Investment flows between the U.S. and China have slowed amid tighter regulations by the U.S. to safeguard national security and supply chains.

These measures have led to not just reduced trade and investment between the two countries but is also shaping broader shifts in global trade patterns and supply chains. These shifts are most evident in the electronics industry.

America's share in China's electron-

ic exports fell by 4 percent points between 2017 and 2021.

Looking ahead, increased domestic

capacity for electronics production in both China and the U.S. will likely lead to a substitution of imports.

At the same time, it is also possible that some trade could be diverted from China to lower cost regions such as Vietnam, India and Mexico, which are emerging as competitive assembly locations for final electronics products.

The result of all this geoeconomic fragmentation is most likely slower global growth. Supply chain diversifica-

tion will increase inflationary pressures.

First, relocating operations will incur high upfront costs. Even if governments have the fiscal resources to subsidize duplicate supply chains, there may be insufficient labor to sustain it.

Second, restrained global competition will increase the market power of larger firms, resulting in reduced innovation and higher prices.

Third, reduced technology sharing and collaboration will hamper the widespread adoption of best practices, thereby reducing efficiency and increasing costs.

In short, no country will emerge unscathed with rising geoeconomic fragmentation, with emerging market economies set to bear the brunt of reduced trade and capital mobility.

— Mr. Ravi Menon, Managing Director of Monetary Authority of Singapore



China and the U.S. should strengthen cooperation to boost world economy. (PHOTO: VCG)

#### Hi! Tech

#### Deer Antlers Help Organ Regeneration

By TANG Zhexiao

Chinese scientists recently identified a population of stem cells with strong regenerative potential in deer antlers, which provides a valuable model for studying organ regeneration in mammals.

The surface of the antlers has a layer of downy skin with a large number of blood vessels and nerves. With stem cells which involved regenerative function, the antler can grow two to three centimeters per day, and the length can reach 1.2 meters within three months.

The researchers collected samples from eight consecutive stages of antler regeneration to establish a cell map of antler regeneration development at single-cell resolution, and identified a population of antler blastema progenitor cells (ABPCs).

Cross- species comparisons of the study also identified ABPCs in several mammalian blastema. According to the results, in vivo and in vitro ABPCs displayed strong self- renewal abilities and could generate osteochondral lineage cells.

Adult mammals have largely lost the capacity to regenerate appendages or organs. Researchers said this study has important research potential for bone regeneration and bone injury repair, bringing new hope to mammalian organ regeneration and organ injury repair.

## Decoupling of EU from China Reduces German Economic Output

China dominates the world market and German demands of specific raw materials and products, particularly in the field of electronics, and could not be replaced as a supplier in the short term.

Product groups that are indispensable for the German economy and for which dependence on China

is particularly high, are laptops with an import share of around 80 percent, cell phones (import share 68%), certain textile products (textile goods, 69%) computer units such as sound and graphics cards (62%), photographic elements and LEDs (61%), or printed circuit boards (printed circuits, 58%).

Germany's dependence on China is also extremely high in certain medical products, such as medical masks or painkillers, with import shares of over 90 percent in some cases.

According to model calculations, a decoupling of the EU from China, in which trade is reduced by 97 percent, would reduce German economic out-

put by 1 percent in the long termmeaning that new supply structures have been found and established. Measured in terms of gross domestic product in 2021, this corresponds to lost value added of 36 billion euros every

— Kiel Institute for the World Economy

#### Washington Gets Wrong About China and Technical Standards

Technical standards are a critical part of the global technology ecosystem. As Chinese participation at international standards bodies increases, Washington contends that China is taking over international standards bodies, and is successfully manipulating those standards as part of its quest for global tech domination.

However, Washington's assertion is wrong because it fundamentally misunderstands what international technical standards do and how Standards Development Organizations (SDOs) operate. International technical standards would not be on most policymakers' radars if it weren't for China's growing presence in these activities.

Despite China's growing presence, the international standards regime remains quite robust. The quality of governance varies from SDO to SDO, but standards participants agree that, by and large, the system remains in a good place.

Given that robustness, there's currently more risk if the U.S. government

tries to disrupt the system, particularly by pulling public funding or banning Chinese participation, than if it trusts SDOs to continue their work.

— Matt Sheehan & Jacob Feldgoise,
- Carnegie Endowment for International

## New Invention Makes Hydrogen Production Easy

By GONG Qian

A Chinese tech company Youon Technology has made its miniature solar-powered hydrogen charging machine public in March.

The machine weighs about 15 kg and is shaped like a computer case, with a height of 40 cm, length of 46cm and width of 22cm. The machine is mainly made up of a water injection port, hydrogen energy rod, hydrogen charging chamber, electrolyzer, hydrogen- water separator and other components.

By using the machine, water can be electrolyzed into hydrogen and oxygen.

The hydrogen is generated after the separation of hydrogen and water. The hydrogen can then be stored in a hydrogen energy bar through a low-pressure automatic filling system, so as to make home-use hydrogen production and charging possible.

The purity of hydrogen produced by the machine is greater than 99.99 percent. Generally, it takes about five hours for 200ml of water to produce 200L of hydrogen and drive a hydrogen bicycle for 40 kilometers. The production requires only 1 KWH of electricity and by plugging into solar panels, hydrogen can be produced without the use of mains electricity.