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Made in China How China can deal with its industrial overcapacity

EXECUTIVE SUMMARY

China's industrial overcapacity is prevalent in more sectors and faces more global pushbacks this time, compared to past episodes. This situation is not as severe as in 2016 but risks worsening if domestic demand fails to absorb the new capacity expansions. Overcapacity is no longer confined to specific sectors (textile and home appliances in late 1990s, and steel and aluminum in the 2010s), but has spread across traditional and emerging sectors. For the current round, we see idle capacity most evident in consumer goods (food, medicine), construction-related materials (cement, glass), and machinery and transportation equipment (automobiles). Our estimates show there is enough excess capacity in China to potentially double the exports of new energy vehicles and lithium batteries. With rising protectionist tendencies globally, the Chinese excess capacity has triggered trade disputes and retaliatory actions, centering on green technology products.

There are four solutions to address China's overcapacity issue. First is to revitalize domestic demand. This requires time, and the economy cannot risk chronic overcapacity that could make deflationary pressures entrenched. The second is to regulate the expansion of production capacity, which will hurt near-term economic growth. The third is to tap into export markets, but trade barriers are growing, and are set to be amplified by a second Trump presidency. Finally, to facilitate outbound investment. Given shortcomings of the first three, the fourth solution is the most feasible because overseas production bolsters intermediate goods exports but avoids trade frictions by bringing in jobs and technologies. Overtime, the industrialization in host countries could generate demand to absorb the excess capacity while helping to build new trade blocks for China with potentially less trade barriers.



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SOME OF THE THINGS YOU'LL LEARN...

China's idle production capacity in new energy vehicles and lithium batteries is enough to double current exports

> One thousand barriers of local protectionism within China were removed in 2023

Emerging markets with close trade ties to China are also considering raising trade barriers against China: Thailand, South Korea, Indonesia... Saudi Arabia is the second largest destination for Chinese investment

Discussions about China's overcapacity problem have been recurring for years. But it received renewed attention recently, with advanced economies increasingly concerned that Chinese state support has led to industrial overcapacity in clean tech products and enabled Chinese producers to export these products at unfairly low prices. During her visit in April, U.S. Treasury Secretary Janet Yellen expressed concerns about the issue in green tech such as new energy vehicles (NEVs), batteries, and solar panels. German Chancellor Olaf Scholz raised similar concerns. In a collective effort, while acknowledging China's importance in global trade, the G7 leaders expressed in a communiqué in June their "concerns about China's persistent industrial targeting and comprehensive non-market policies and practices that are leading to global spillovers, market distortions and harmful overcapacity in a growing range of sectors".

Beijing has not shied away from the controversy, saying overcapacity is a natural result of industrial development and pointing to subdued demand as a key driver of it. In fact, overcapacity risks, not mentioned in major economic meetings since 2018, were raised at the latest Central Economic Work Conference last December and National People's Congress in March this year. The Government Work Report released in early March mentioned the risk of overcapacity caused by insufficient demand and called for reducing overinvestment and narrowing the supply-demand gap. In addition, it attributed China's product competitiveness in global markets to economies of scale, technological advancement, an established supply chain, rather than subsidies.

The main dispute lies not in China's "overcapacity" problem, but whether the production capacity is subsidized and has potential repercussions on the global economy. In this report, we review China's recurring episodes of industrial overcapacity, differences in this round, and possible solutions.

Overcapacity not new to China

The investment-driven growth model was central to China's stellar economic growth over the past three decades, but it is prone to supply-demand imbalances. China's stock of fixed assets has grown significantly faster than economic output **(Chart 1)**. The longstanding tendency to have an imbalance of supply over demand led to episodes of industrial overcapacity in China.



Source: NBS, Coface N.B. FAI refers to fixed asset investment Episodes of industrial overcapacity can be traced back to the 1990s, when accelerated market reforms led to a glut of labor-intensive manufactured goods. The shift in global demand after the Asian Financial Crisis has failed to sustain the rapid build-up of industrial capacity amid a quickened transition from a planned economy to a more market-oriented economy in southern China in the early 1990s. Capacity utilization was as low as 10% for some products, and mostly concentrated in labor-intensive manufactured goods, such as textile, home appliances and plastic goods. The excess supply was resolved through fiscal support helping to stimulate the underdeveloped domestic market, and the WTO accession which expanded overseas demand for Chinese goods.

The 2014-2016 episode was a legacy of the investment boom that followed the global financial crisis. The massive stimulus package centered on infrastructure and property construction triggered a significant capacity build-up in a range of related sectors. But as fiscal boost faded and Europe's sovereign debt crisis weakened external demand, overcapacity emerged in construction-related products such as steel and aluminum. This overcapacity saw few pushbacks globally as housing and infrastructure investment primarily provided domestic services and therefore generated less spillovers through international trade compared to manufacturing investment.

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It's clear that these demand-supply imbalances are not new in China, but they became apparent again during the COVID-19 pandemic outbreak, largely due to a production-driven stimulus approach aimed at reducing social interaction. As the pandemic hit, China has launched more stimulus measures to boost production, rolling out generous tax credits, production subsidies, and interest rate cuts to keep struggling companies afloat and workers employed. The strategy was a success in 2020 and 2021, when excess production capacity was stomached by a world in lockdown and led to China's exceptional export performance. But there was little support for domestic household consumption (i.e. cash or consumption vouchers handout). As the economy emerged from the pandemic, household consumption failed to pick up enough to achieve a consumption-led recovery, leading to renewed overcapacity pressure as the capacity build-up was not matched by equivalent domestic demand (Chart 2).



Meanwhile, current policy settings aimed at further expanding manufacturing capacity could exacerbate the growing imbalances. As the economy strives to transition away from a property-driven economy, the Chinese government has proactively cultivated new growth engines (i.e. manufacturing upgrades and green transformation) to pick up the slack from housing. The "New Three" of new energy vehicles (NEVs), lithium-ion batteries, and solar cells have showcased the progress of manufacturing upgrades. Total output of these new energy products has surged in the past few years (Chart 3), aided by the global green transition and ample policy support (banks have significantly increased lending under government guidance) (Chart 4)



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still in the driver's seat?

The main challenge to even stronger production capabilities lies on the demand side. At the heart of the controversy, foreign demand for green technology products is increasingly subject to trade barriers. Can Chinese domestic demand expand to meet with supply - if not, renewed capacity expansion could ultimately lead to a wider demand gap and add to the deflationary pressure¹. To gauge the extent of overcapacity in green technology products, we first calculate total potential output based on the capacity utilization rates of these products. Due to the lack of exact utilization rates for these products, we use utilization rates for the broader categories to which these products fall into (i.e. automobiles for electric vehicles and special purpose machinery for lithium batteries). We then deduct actual industrial output from total potential output and use the difference as a proxy for excess capacity. Based on our estimates, excess capacity in NEVs and lithium batteries is sufficient to double the size of exports (Chart 5 & 6). Even if utilization were to return to only 80% of full production potential from the current threshold of 73% and 77% respectively, exports of NEVs and lithium batteries would have to grow by around 30% and 70%, respectively.



N.B. Green loans refer to loans specifically used for renewable energy development, carbon emission reduction and energy saving.





In addition to foreign demand, subsidies may be another factor contributing to overcapacity in China, and they come in many forms. According to a study by the Center for Strategic and International Studies (CSIS), China spends considerably more on industrial support than other major economies. As of 2019, China's industrial subsidies accounted for approximately 1.7% of GDP, at least three to four times higher than other major economies in the study **(Chart 7 - next page)**.

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Source: CSIS, Coface

However, the proportion of outright subsidies such as direct subsidies and R&D support to GDP is roughly the same as that of France and South Korea. But the government is proactive in extending preferential tax treatment and below-market credit provided by the state-led banking sector. These subsidies include some China-specific instruments, such as land subsidies. In addition, subsidies to upstream suppliers (i.e. lowering input costs) and subsidies to consumers (i.e. tax breaks or consumption subsides) also benefit industrial firms, which further complicate the assessment on overall subsidies. For the EV sector, another CSIS study shows that from 2009 to 2023, the Chinese government provided a cumulative of USD 231 billion in subsidies, including USD 45 billion in 2023 alone, equivalent to 0.2% of 2023's annual GDP.

Current overcapacity more widespread

At first glance, the extent of overcapacity appears to be milder than the last severe episode. The most common way of measuring overcapacity is capacity utilization, the ratio of actual output to potential output. Lower capacity utilization equates to a larger amount of idle capacity and is commonly seen as a sign of overcapacity. At an aggregate level, China's industrial capacity utilization rate fell from 77.5% in Q4-19 before the pandemic outbreak to 74.9% in Q2-24 (Chart 8) amid muted domestic demand and persistent PPI deflation. That is just above the historic lows reached in the last severe episode of overcapacity and in early 2020 when the COVID-19 outbreak hit, and was also below the level of around 80% considered "normal," according to a <u>commentary</u> by the Communist Party's leading financial body.



N.B. Sectoral breakdown only available from 2016 Source: China NBS, Coface But this time, the problem is more widespread. Idle capacity is observed across consumption goods, construction materials as well as machinery and transportation equipment **(Chart 9)**. Specifically, high-tech manufacturing equipment, including automobiles, electronic equipment and electrical machinery equipment, has generally seen lower capacity utilization rates over the past few years. There is also lower capacity utilization in construction materials, most notably for nonmetallic minerals and chemicals. There have been varying degrees of capacity underutilization for consumer goods, whether it is necessities such as food and medicine and discretionary goods such as automobiles.

Meanwhile, capacity utilization may even worsen unless industrial output reaccelerates into double digits. The faster growth in fixed investment relative to production adds to spare capacity if demand fails to keep pace (Chart 10). By products, capital expenditure growth is stronger than output growth for most products in the past three years (Chart 11). Automobiles and metals are exceptions. This may be more understandable for metals, given that capex in the real estate supply chain remains subdued. But the situation for automobiles is more surprising as it is widely blamed as a key area of overcapacity.





Source: China NBS, Coface







Source: China NBS, Coface

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In fact, in recent years, fixed investment in the automobile supply chain has been modest, and the pace has failed to keep up with the growth in production. But since the data does not differentiate between internal combustion and electric vehicles, it is difficult to tell whether the underinvestment is primarily led by internal combustion vehicles, which could have outweighed the increased investment in EVs driven by the ongoing electrification of the car fleet. In addition, concerns about overinvestment in China's auto sector may include investment in other segments of the supply chain, such as batteries, that are not counted in auto investment.

Revitalize domestic market to absorb excess capacity takes time

The obvious solution to absorb excess production capacity is to expand domestic demand. In 2020, President Xi Jinping proposed the concept of dual circulation in the context of rising global uncertainty and increasingly severe external environment. The strategy envisions a new balance from global integration (external circulation) to increased domestic dependence (internal circulation). But that appears to be more challenging than ever as consumer confidence remains near historic lows, with slowing income growth and a stagnant housing sector dampening households' willingness to spend. And the economyalso cannot afford to endure chronic overcapacity, as this will amplify deflationary pressures, affect corporate profits and hinder business expansion.

Amid the ongoing supply-demand imbalance, recent policy focuses appeared to have shifted from investment to consumption. To reinvigorate household spending, the Chinese government historically leaned towards auto purchase tax cut and home appliance replacement subsidies. This time is not much different. In July, the Ministry of Finance announced to allocate 30% of the RMB1 trillion ultra-long treasury bonds issued this year, which were originally intended to support infrastructure investment, to subsidize household durable goods and corporate equipment consumption. With enhanced financing support, local governments have increased the scale of subsidies and expanded the scope of subsidized products. For example, trade-in subsidies new energy vehicles and gasoline vehicles were doubled from RMB,10,000 to RMB20,000, which boosted auto sales in September. While this effort is clearly welcome in removing excess supply of the subsidized products, it may not fully address the issue given the wide range of products involved.

In addition, stabilizing the housing market is necessary to curb the drag on household wealth given the substantial role of real estate in household assets. The ongoing buyback program for social housing supply is the right move to disincentive the "saving for housing" motive, while access to affordable public housing can reduce rental burdens to unleash more spending power. So far, a RMB300bn loan program has been introduced for local state-ownedenterprises (SOEs) to acquire completed but unsold residential units and convert them into public housing. However, the size of the financing is still small compared to around RMB 3.7tr worth of completed but unsold inventory nationwide as of July 2024, which allows SOEs to purchase around only about 10% of such inventory. For the government to play a more meaningful role in housing destocking, greater financial support is still needed. The good news is that the Ministry. Ministry of Finance has announced in October to allow local governments to use proceeds from special local government bonds, which were previously restricted to infrastructure and environmental projects, for the buy-back programs.

At the same time, a more sustained transition to a consumptiondriven economy also hinges on strengthening the social safety net, which may weaken households' propensity for precautionary saving. During China's 20th Third Plenum held in July, which usually sets aside high-level economic reforms,

top policymakers have vowed to completely remove "hukou"² restrictions on social security participation. In fact, amid an aging population and a weak real estate market, a few highertier cities have significantly lowered the standards to obtain urban "hukou" to attract young workers in recent years. This is particularly important to improve the social welfare of migrant workers, accounting for about 20% of the total population. who reside in urban areas but many of them do not have urban "hukou". Without local household registration, these migrant workers are usually unable to enjoy the full benefits of local permanent residents. Among the five pillars of China's social security system (pension, unemployment, medical care, work-related injury, and maternity), migrant workers used to be only eligible to participate in pension and unemployment insurance, but the requirements for participating in the rest was typically higher. The lack of full social benefits for migrant workers also results in a significantly lower share of social spending as a percentage of GDP at roughly 10%, compared with OECD average of around 20%.

Regulate production expansion via industrial upgrading

While lifting domestic demand is key to managing excess capacity, supply side measures to regulate excess capacity have also been implemented. To this end, higher quality standards for production or investment across different sectors have been introduced to boost production quality while accelerating an orderly exit of excessive production capacity. But these measures are unlikely to be replicated across a broad range of sectors, as doing so hurts near-term economic growth and would be less technically feasible for advanced technology products with already high standards. For example, China's Ministry of Industry and Information Technology issued new <u>guidelines</u> in June to scale back lithium battery projects that "purely expand production capacity". They also called for phasing out of projects built on farmland and ecological zones. Additionally, the ministry has drafted <u>new rules</u> to tighten investment regulations for solar photovoltaic (PV) manufacturing projects. The regulations increase the minimum capital ratio for polysilicon manufacturing projects from 20% to 30%, and stipulate minimum efficiency levels for different types of solar panel technologies. Meanwhile, the National Development and Reform Commission (NDRC) also released <u>a plan</u> to control clinker production capacity at 1.8 billion tons per year by the end of 2025. Energy efficiency of existing capacity will be used as the benchmark to determine which production lines can remain open. 30% of capacity will be required to be above the benchmark energy efficiency level. Factories below this threshold will be forced to upgrade or face elimination.

Moreover, emphasis on building a unified national market can optimize resource allocation nationwide and reduce duplicated production. The lack of coordination among local governments, who are the main implementation bodies of central government goals, can lead to unintended discrepancy between policy intentions and actual outcomes. In the process of promoting the development of some hand-picked strategic industries, this may sometimes lead to an investment herd effect, spurring a flood of market entrants in a new technology and resulting in poor capital allocation. For instance, nearly 3,000 counties across the country want to invest in emerging industries, including biopharmaceuticals, new energy and semiconductors after 2018. Better coordination among local governments can help reduce duplicated production while optimizing domestic resource allocations based on their respective edges. Meanwhile, more unified market regulation may crack down on local protectionism that tends to ensure local businesses survival regardless of their ineffective production capacity. According to the NDRC, over a thousand barriers of local protectionism and market segmentation were removed in 2023. Meanwhile, efforts were made to unify basic systems and rules across the country, such as a unified negative list for market access.

Era of easily accessing export markets seems fading

Historically, exports have made up for shortfalls in domestic demand. Now, Chinese exporters have to navigate a more complex global trade environment as free trade is longer the hype it used to be, and likely even more under a second Trump presidency. Most pronouncedly, the outgoing U.S. President Joe Biden expanded Section 301 tariffs on imports from China to cover goods such as NEVs and batteries in May, and the European Commission has imposed additional tariffs on Chinese NEVs since July.

Against this backdrop, China's Belt and Road Initiative (BRI), a central component of Xi's "Major Country Diplomacy", can be instrumental in securing market access to the emerging world. By building transport infrastructure in a hub-and-spoke mode, the initiative creates demand for construction-related materials in countries still in the midst industrialization, which was key to eliminate excess capacity in the last severe episode. Meanwhile, it ensures that economies connected to such infrastructure become increasingly dependent on Chinese imports, not just for construction-related materials but also for a wide range of low-cost Chinese goods. The drive to boost bilateral trade ties with countries under the BRI, coupled with the Sino-US trade war and growing geopolitical tensions, have notably lifted shares of emerging market economies in China's total exports. Shares of ASEAN, Latin America, and Africa in China's exports rose to 17%, 8%, and 5% in the first seven months of 2024, respectively, from 13%, 6%, and 4% in 2018 - before the Sino-US trade war broadened out.

Despite China's efforts to build closer diplomatic relation with the Global South, trade barriers erected by emerging countries have not significantly abated as policymakers face increased pressure to protect domestic manufacturers and jobs. For the use of formal trade remedies such as anti-dumping duties and countervailing duties, there is a clear focus for emerging markets on basic goods such as metals and plastics (Chart 13), while anti-dumping and countervailing investigations initiated by advanced economies on transport equipment imported from China have increased (Chart 12). In the meantime, likely due to the costs of conducting a formal investigation and the fear of losing access to Chinese supply chains, some emerging countries with close trade ties with China are turning towards informal trade barriers. For example, in response to the threat from e-commerce platforms, Thailand imposed a 7% value-added tax on imported goods priced below 1,500 baht since July, and South Korea announced in May to consider reducing overseas tax-free limits for online purchases. Indonesia is reportedly considering imposing tariffs of up to 200% on basic industrial goods imported from China, including textiles, clothing, footwear, electronics, ceramics and cosmetics.



More outbound investment to seek a win-win outcome

Growing trade frictions may in turn prompt Chinese companies to invest directly in recipient countries. Unlike exports, overseas production can also support industrial development in recipient countries through job creation, know-how transfer, and infrastructure development. Therefore, this will likely be more popular with some trading partners, while allowing Chinese companies to shift some of their excess production capacity overseas. At the same time, Chinese producers may be able to bypass import tariffs by selling directly to end markets, or even take advantage of government subsidies offered by recipient countries.

Some actions in this direction are already underway. Balance of payments statistics released by the State Administration of Foreign Exchange (SAFE) show that China has experienced a net outflow of direct investment since the second half of 2022, with a net deficit of US\$142.6 billion in 2023 (Chart 14). This is the second time China run a deficit in direct investment flows. The last time was in 2016, which coincided with the previous round of underutilized industrial capacity. But this time, the net outflows are larger in size, which is not just due to cyclical factors such as higher rates abroad, but also concerns about a structural slowdown in China's economy and rising geopolitical tensions. And the outflows also appear to be more sustained, which could signal a shift in China's role from a net importer of capital to an exporter.

Chart 13 - Number of CVD and anti-dumping investigations targeting China by emerging economies



Source: WTO, Coface

N.B. CVD refers to countervailing duty, which is a specific form of duty that the government imposes in order to protect domestic producers by countering the negative impact of import subsidies.



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The rise in outbound foreign direct investment (OFDI) from China has spread across a range of emerging countries. According to publicly announced transaction data compiled by the American Enterprise Institute **(Chart 15)**, ASEAN remained the most appealing destination for Chinese investors, with 11.5% of outflows going to Indonesia, 5.4% in Singapore, 4.4 in Malaysia, 2.6% in Cambodia and 2% in Vietnam from 2022-2023. In Europe, Hungary was the main beneficiary, accounting for 4.5% of China's foreign direct investment. Other major recipient countries include Saudi Arabia, Brazil and Congo, taking up 7.0%, 5.3% and 4.7% respectively.



Source: The American Enterprise Institute, Coface

Amid rising national security concerns and geopolitical friction, China's foreign direct investment into developed countries is faced with increased government oversight. In the United States, the Committee on Foreign Investment (CFIUS) has enhanced the reviewing process for the national security implications of foreign acquisitions and direct investments in 2018. Similarly, the EU also launched a Foreign Direct Investment Screening Framework in 2019, setting out the minimum standards that member states should follow when assessing foreign direct investments. But despite its hardening stance, the EU remains more receptive to Chinese investment than the US in part because its industrial structures are more complementary,

and the different national interests of member states also prevent a unified approach. Hungary, Poland and Italy all signed agreements with China between May and July 2024, emphasizing their openness to Chinese investment in the EV sector. And during Xi Jinping's visit to Europe in May 2024, the French government made it clear that Chinese automakers like BYD are "very popular in France."

Meanwhile, as major advanced economies seek to derisk from China, there will also be increased scrutiny of trade and investment being routed through third countries, which potentially masks indirect dependence on Chinese inputs. For instance, the US Department of Commerce initiated in May anti-dumping and antisubsidy investigations into solar panel products (whether assembled into modules or not) from Cambodia, Malaysia, Thailand and Vietnam. The move followed the announcement of tariffs increases on Chinese imports in "strategic" industries (including solar cells) and appeared aimed at blocking possible tariff workarounds by Chinese suppliers through transshipment.

Domestically, there could be greater pressure to retain manufacturing jobs at home in a period of elevated youth unemployment and weak economic growth. To make up for the possible loss of job opportunities caused by increased outbound investment, the Chinese government has been striving to attract foreign direct investment by promoting further openness. The negative list, which details the list of the sectors where foreign investors are restricted and prohibited from entering in China, has have been significantly reduced in recent years. In September, the two remaining foreign direct investment restrictions in the manufacturing sector were officially lifted, while the government strived to further liberalize the services sector (internet, education, culture, telecom, healthcare), which tend to employ more workers and create more job opportunities. Having said that, foreign investment in certain critical and sensitive sectors will still be subject to increasingly stringent regulatory scrutiny for national security, with the Security Review of Foreign Investment being enhanced in 2020.

CONCLUSION

China's overcapacity issue, while not yet as severe as in 2016, is prevalent in more sectors and faces more global headwinds this time. Domestically, the excess supply in a wide range of products makes it difficult to resolve by either consumption subsidies or production cut. The lingering supply-demand imbalances may keep inflation close to zero, which, coupled with slowing trend growth, should prompt the Chinese central bank to lower interest rates further. Externally, the increased trade frictions may facilitate more outbound investment to access foreign demand. This is the most feasible solution in our view. In the near-term, In the near-term, this strategy will facilitate intermediate goods exports and contribute to a trade surplus for China. Meanwhile, trade tensions are likely to be avoided as these investments bring jobs and technologies and modernizes infrastructure for trading partners. This is particularly true for emerging economies where demand is still growing. The industrial development of host countries, over the medium term, would generate new demand to absorb the excess capacity and help to develop new trade blocks for China with potentially less trade barriers. The capital outflow pressure due to increased outbound investment, along with the easing bias for the central bank, may exert depreciation pressure on the Renminbi. But this, in turn, could mitigate the loss of competitiveness of Chinese exports due to tariff measures.

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