

CHINA'S EMERGING ECONOMIC ENGINE

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Many outside observers think China's economy is in a rut. The engines that powered growth for decades—investment in property and infrastructure—are sputtering. Domestic demand, real estate, and consumer confidence are weak and show scant signs of recovery. Measured by traditional, top-line data such as nominal GDP growth, China's economic vigor is flagging.

Yet a myopic focus on the old investment-driven economy misses the emergence of one led by new technology, green industries, and digitalization. Consider what China's statistics bureau calls the "three new" economies—evolving industries, business formats, and business models, whose combined value added surged by about 10 percent a year between 2016 and 2024.

DeepSeek's low-cost artificial intelligence breakthrough in 2025 is an example of the new economy. Others include advances in electric vehicles, commercial aircraft, innovative drugs, and robotics. Seen through the prism of these new industries, China's industrial competitiveness continues to strengthen and is now emerging as the main engine of growth.

This shift has largely escaped the notice of outside observers because the old engine is weakening faster than the new one can support the whole economy. This explains why aggregate demand and confidence remain soft even as competitiveness strengthens in the new industries.

The success of a technology-led model requires more balanced growth

Economic policy is adjusting to the shift. In the past, the government responded to slowing growth by stepping up spending and cutting borrowing costs to stimulate investment. But now, policymakers are seeking to stabilize the old economy without the old engines of property and debt-financed investment. The economic transition is already visible; its sustainability depends on whether China can turn stronger production capability into a more balanced growth model—supported by household income, services consumption, and domestic demand.

A large testing ground

How can China make this transition? It starts with scale, on both the demand and supply sides.

On the demand side, China is an unusually large testing ground. Once surplus farm labor was fully absorbed by factories around 2010, tighter rural labor supply lifted wages and incomes, helping raise consumption from about 49 percent of GDP to roughly 57 percent by 2025.

China's demand-side advantage also reflects consumers' willingness to embrace new technologies after seeing the country leapfrog from an agrarian to an industrial and digital society in only four decades. This combination of market size and rapid adoption allows firms to test products on a large scale, gather feedback, and commercialize innovations quickly. In 2025, electric vehicles accounted for nearly half of new car sales, and generative AI attracted more than 600 million users of all ages.

On the supply side, scalability is possible thanks to industrial depth and innovation capacity. Dense industrial clusters allow firms to specialize while working closely with nearby suppliers. In the Yangtze River Delta, an EV maker can source all the components it needs from suppliers within a four-hour drive, which means lower coordination costs and a shorter loop between design and production.

Supply-side competitiveness benefits from China's ability to innovate. Spending on research and development rose from RMB 2.4 trillion in 2020 to RMB 3.9 trillion in 2025, up about 10 percent a year on average. It is now No. 2 globally in R&D spending, and its full-time-equivalent R&D workforce has been No. 1 for 13 consecutive years. Firms can spread out research costs, draw on a large pool of engineers, and quickly turn new technologies into commercial products.

Intense competition

China's support for green industry, particularly for EVs, has drawn sharp international criticism. The prevailing narrative attributes the country's suc-



A visitor controls a robot at the Digital China Summit in Fuzhou, Fujian Province.

cess largely to subsidies. This is a narrow reading that misses the bigger picture. Public support in the early stages of a technology with clear positive externalities is neither unusual nor unreasonable: It's how emerging industries can compete with incumbents and scale up to drive costs down.

The United States and Europe have done the same through the Inflation Reduction Act and the Green Deal Industrial Plan. China's programs, moreover, were designed to let the market pick winners: Subsidies went to consumers, with payments tied to vehicle sales regardless of brand. Tesla, producing at its Shanghai "gigafactory," was among the largest recipients of these subsidies from 2016 to 2022.

If subsidies had driven China's EV success, the market would have the telltale fingerprint of government protection: a crowd of mediocre firms kept alive by government support. Instead, China's EV industry is brutally competitive. Private firms such as BYD, NIO, XPeng, and Li Auto competed against each other, longtime domestic and foreign automakers, and hundreds of new entrants—all chasing the same pool of subsidized demand. Of 487 EV makers in 2018, only about 1 in 10 was still selling passenger cars by 2023. The survivors stayed

alive through economies of scale, rapid technological iteration, and intensely competitive engineering. Policy helped create the market; competition selected the winners.

Geopolitical pressure

China's advantages are long-standing. Then why have they translated into faster industrial upgrading only recently? Because of the interaction between internal and external drivers. Internally, the green and digital revolutions have led to greater returns from scalability, dense supply chains, and rapid adoption. And resilience is at a premium in a fragmented world.

The first internal driver is the green transition. Fossil fuels are finite and often face rising marginal extraction costs. Wind and sun are unlimited, and the technologies they power—solar panels, wind turbines, batteries, electric vehicles—are manufactured products by nature. They therefore benefit from economies of scale: Expanded production spreads out fixed costs, speeds learning, lowers unit costs, and encourages further innovation. The green transition has amplified China's advantages in market size and industrial depth.

The second internal driver is the AI transition. If the green transition strengthens economies of scale in production, the AI transition does so through learning. The more widely models are deployed, the more data, feedback, and engineering experience they generate. This improves applications, lowers adoption costs, and encourages further use, creating a self-reinforcing cycle between deployment and innovation.

China is well placed to capture these gains because it combines a deep talent pool with unusually broad opportunities for deployment. Thirty-eight percent of researchers publishing at leading AI conferences received their undergraduate education in China, compared with 24 percent in the United States, according to the MacroPolo Archive. Many later moved to the United States, but the flow is increasingly two-way.

This pool of talent spans a dense industrial base: Applications in manufacturing, logistics, e-commerce, finance, health care, and smart vehicles allow firms to move quickly from models to use cases—and from use cases back to better models. Little wonder, then, that Stanford University's 2026 *AI Index Report* found that the gap between the leading US and Chinese models had narrowed to 2.7 percent by March 2026.

Finding new markets

The external driver is geopolitical fragmentation. The global economy has suffered, but China has responded with a more self-reliant growth model. Chinese firms have found new routes to global demand, reducing dependence on any single market. The US share of China's trade fell from 12.6 percent in 2020 to 8.8 percent in 2025 while the trade shares of Southeast Asia, Africa, and Latin America all rose. Export controls and technology restrictions have accelerated domestic innovation and industrial upgrading. In 2025, China's imports and exports of high-tech products grew by 11.4 percent and contributed nearly 60 percent of overall trade growth.

Geopolitical and energy shocks have weakened supply capacity elsewhere. In 2025, for example, EU imports from China reached €558.8 billion, 54 percent above 2019, while EU exports to China fell to €199.5 billion, 14 percent below their 2022 peak. Meanwhile, China's share of EU imports rose from 18.7 percent in 2019 to 22.3 percent in 2025; electric vehicles, batteries, solar products, and chemicals accounted for about 70 percent of that increase.

Some of this shift reflects China's upgrading. Some reflects conditions in Europe: Higher energy costs weakened chemical and other energy-intensive industries, but the green transition raised demand for equipment that China could supply

on a large scale. This suggests that trade outcomes reflect, at least in part, what other economies can or cannot produce competitively.

Recycling the surplus

Some interpret China's trade surplus as evidence that excess production is displacing output elsewhere. But trade arithmetic alone cannot establish that direction of causality. By definition, a country's current account balance equals national savings minus domestic investment. Yet the same accounting identity can support two opposite stories: China's excess production may displace output abroad, or weak production and excess spending abroad may create demand for Chinese goods. In practice, both mechanisms can operate at the same time.

Even so, policymakers cannot ignore the geopolitical backlash, in the form of tariffs and other restrictions, that China's growing surplus has provoked among its trading partners. The country's very success poses risks to its growth model.

How can this tension be resolved? One way is to recycle more of the surplus into productive investment abroad. In the early 2000s, much of the surplus was invested in US Treasuries and other dollar assets. But increasingly, Chinese surplus savings are being invested in factories and infrastructure, creating jobs, strengthening local supply chains, and supporting industrial upgrades. In 2025, Alibaba Cloud opened a third data center in Malaysia, BYD moved ahead with its first European passenger car plant in Hungary, and Haier-owned GE Appliances announced a \$3 billion expansion of its US manufacturing footprint.

An industrial pipeline robot is displayed at the Digital China Summit.



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Rebalancing at home

External recycling can ease pressure, but it cannot substitute for rebalancing at home. Alongside the green and digital transitions, a more durable growth model requires a third transition—to higher household incomes and services-led consumption. Without this shift, China’s transformation risks becoming increasingly K-shaped: Richer households will capture a larger share of wealth than poorer ones.

New domestic growth drivers have not grown enough to fully replace property as a source of income, employment, and aggregate demand. In 2025, China’s automobile industry generated more than RMB 11 trillion—exceeding property sales, which fell to about RMB 8 trillion from RMB 18 trillion in 2021.

But revenue is not the same as GDP value added. Revenue measures gross sales; GDP counts only the value added minus intermediate inputs. Automobile sales include substantial spending on components and other inputs, and margins are relatively thin. Property development, however, transforms low-value land into high-value buildings. Automobile manufacturing contributed only about 1.6 percent of GDP, far less than real estate’s 6 percent. More important, the property downturn since mid-2021 has weighed on domestic demand through weaker local finances, negative wealth effects, and lower employment.

The digital transition may deepen income inequality and labor displacement. AI can raise productivity, but if its gains outpace job and wage growth, income inequality will rise even more. This problem is not unique to China but is especially important for it: If productivity gains do not translate into stronger household incomes and consumption, more output must be absorbed abroad, widening an already large external surplus just as trading partners become less willing to accommodate it.

Macroeconomic policy will therefore play an essential part in the transition. Stronger social protection and public services are central to the third

transition and would help avoid a more K-shaped economy. Higher spending on pensions, health care, childcare, education, and unemployment insurance would reduce precautionary saving and make consumption a more reliable source of demand.

Policy must also repair balance sheets to reduce the debt overhang. When households, local governments, and property-related firms deleverage, lower interest rates alone do not easily translate into new borrowing or spending. Debt restructuring, especially at the level of local governments and firms across the property value chain, would help restore credit availability.

Deeper reform

China’s advantages in both demand and supply mean it’s well placed for the transition to a new model driven by green and digital technologies. Those strengths matter more today because the green and digital revolutions reward high volume, and resilience is at a premium amid geopolitical fragmentation. This—not subsidies—explains China’s record trade surplus.

But only deeper reform will sustain the transition and the surplus. Household consumption in China rose from about 35 percent of GDP in 2010 to 40 percent in 2024, but it is still well below the 53 percent average for middle-income countries. Stronger household incomes, better social protection, more services consumption, and more productive investment abroad will rebalance growth. If China can match industrial upgrading with domestic rebalancing, the benefits will extend beyond its borders: a more durable Chinese economy and a more reliable supply of affordable technologies in an increasingly uncertain world. **F&D**

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