

Advantages and investment opportunities in China's New Quality Productive Forces from a global business perspective

PwC Insights

Today's world is in the midst of great changes that have not been seen in a century. Accelerating technological change and the reshaping of the geopolitical landscape are together driving a deep adjustment in the global economy. PwC's 28th Global CEO Survey reveals that 42% of CEOs believe their companies will not survive the next decade if they continue with their current business models, underscoring the need for transformation in how companies create, deliver, and obtain value. Over the past two years, driven by New Quality Productive Forces, China has demonstrated a commercial evolution path distinct from those of the traditional industrialised nations, marked by improvements in production factors, transformations in business models, and the intelligent reshaping of industrial chains. This has opened up new opportunities for global business investment and development in China, highlighting the new advantages of the Chinese market during the global economic transition period.

1. The three major challenges to transforming the global business environment

PwC's latest survey of 4,701 CEOs from 109 countries shows that, as in the past two years, 42% of CEOs believe that their companies will not survive the next decade if they continue on their current development path.

1.1 The reshaping of geopolitics triggers the restructuring of global supply chain.

Rivalry among major powers, geopolitical tensions, and changes and upgrading to regional trade rules are leading to a restructuring of global supply chains. Trade as a share of global GDP has stagnated and begun to decline since 2008. Since 2020, the overall cost of global supply chains (logistics + compliance + inventory) has risen by 12.8%¹. The emergence and adjustment of regional trade agreements, such as the Regional Comprehensive Economic Partnership (RCEP), have changed the flow and pattern of global trade. Multinational corporations are forced to constantly assess the macroeconomic risks they are facing so as to adjust

¹ 2023 Supply Chain Risk Report, S&P Global

global resource allocation and regional strategies.

1.2 The technological revolution is reshaping industrial value structures.

According to the Gartner 2024 Hype Cycle for Emerging Technologies, the pace of industrialisation for frontier technologies such as artificial intelligence (AI) and quantum computing has shortened by approximately 40% compared to 2010, with technological innovation showing exponential growth. The latest wave of technological revolutions—driven by AI, big data, the Internet of Things, and blockchain—is playing an increasingly significant role in reshaping industry. This rapid technological transformation and its penetration across industries are shifting competition among enterprises from traditional product and price battles within specific sectors to a more comprehensive competition centered on integration of technology, ecosystem development, and innovative services.

1.3 Green governance reshapes corporate strategic frameworks

The United Nations Industrial Development Organization (UNIDO) reports that investment in global clean technology reached \$1.2 trillion in 2023, marking a 400% increase since 2015. PwC's 2024 Global Investor Survey reveals that, while short-term green investments may not yield immediate financial returns, 75% of institutional investors have incorporated ESG metrics into their decision-making processes. The implementation of the European Union's Carbon Border Adjustment Mechanism (CBAM) has further positioned green technology as a prerequisite for market access among multinational corporations. These changes are compelling companies to prioritise green governance and to establish environmental cost accounting mechanisms.

2. New Quality Productive Forces reshape China's business advantages.

PwC has observed that China's factors of production—including input-output mechanisms, traditional industry development pathways, business decision-making processes, and innovation strategies—are undergoing significant upgrades, reflecting new and enhanced characteristics.

2.1 Upgrading factors of production creates an efficiency-boosting system, achieving sustainable growth by enhancing total factor productivity.

In recent years, China's total factor productivity has significantly improved, driven not only by improvements in factor structure and quality but also by the amplification of factor efficiency through the country's open-source collaborative

ecosystem, resulting in a multiplying effect.

2.1.1 Shifting from demographic dividend to talent dividend, leveraging human capital to overcome the constraints of traditional factor-driven growth.

According to China's Ministry of Education, the number of STEM graduates in China has surpassed 5 million. With more than 9.4 million software developers – roughly one-third of the global total - China holds the top spot worldwide. The country's strong digital ecosystem and innovative collaborative models have endowed software engineers with exceptional cross-industry capabilities that allow them to rapidly develop intelligent solutions tailored to diverse industries. Huawei's HarmonyOS has engaged over 2,000 universities worldwide through its collaborative "open-source community + developer program". This initiative has mobilised more than 4 million developers globally, establishing a unique and sustainable talent ecosystem advantage for Huawei. According to PwC's 2024 Workforce Hopes and Fears Survey, 36% of Chinese Mainland employees use generative AI weekly, outpacing the global average of 16%. Meanwhile, DeepSeek garnered over 100 million users in just two weeks of its launch, reflecting the Chinese public's eagerness for embracing new technologies to upgrade their own skills.

2.1.2 The value of data as a factor of production is accelerating, and the accumulation of commercial data has created new opportunities for leapfrog growth.

Data, as a factor of production, exhibits strong externalities and network effects, unlocking unlimited opportunities for business innovation - such as optimizing production processes and accurately targeting customers - while defying the law of diminishing marginal returns. In 2024, China's data trading exceeded 160 billion yuan, a year-on-year increase of 30%, marking a rapid acceleration in data assetisation. Combined with advances in computing power and algorithms, China's rich and vast data resources are enabling enterprises to achieve breakthroughs in AI technology. China's digital economy now accounts for more than 40% of the country's GDP, with data contributing over 15%² to total factor productivity.

2.1.3 The combined impact of scale economies and synergy accelerate the diffusion of new technologies across industries.

² Empowering High-Quality Development through the Digital Economy: An Empirical Analysis Using Chinese Provincial Panel Data (2022), the National Bureau of Statistics of China. It reveals that, according to computational models, data factors contribute 15.7% to the overall efficiency of production, as measured by total factor productivity (TFP).

China's leading technology firms are increasingly adopting the "technology middle platform" strategy, which significantly reduces barriers to the adoption and deployment of new technologies. The "plug-and-play" approach to technology infrastructure allows for the rapid integration of innovative technologies across a wide range of sectors. The capabilities of "modular empowerment" have enabled Chinese enterprises to develop an operational model for rapidly industrialising commercial data. Tencent Cloud TI Platform offers versatile modules, such as data analytics and AI model training, that have been integrated into 19 industries, including manufacturing, finance, and education. Alibaba's "Aliyun-DingTalk Integration" middle platform strategy provides standardised modules for low-code development, AI algorithms, and data intelligence. These modules are designed to be easily accessible and ready for use, allowing various industries to swiftly tailor digital solutions to their specific needs.

2.2 China's successful intelligent transformation of the entire industrial chain has positioned the country as a leading provider of digital solutions across all industrial sectors.

Building on the foundation of the country's digital industries and industrial upgrades driven by digital technology innovation, China's industrial advantages have evolved from a model of "low cost + low-end labour" to one defined by highly flexible, intelligent and digital solutions across the entire industrial chain.

2.2.1 The world's leading digital infrastructure is reshaping the industrial foundation.

Digital and information infrastructure have emerged as critical drivers of business transformation. China is vigorously advancing the construction of new infrastructure, such as 5G networks, data centers, and the industrial internet, forming a powerful scale effect. As a result, the small-medium-large sized Chinese enterprises can share the advantages of digitalisation, enhancing production efficiency and supply flexibility. Enterprises can leverage 5G networks to achieve device interconnectivity, using big data and AI technologies to monitor and optimise production processes in real time, thereby improving efficiency and product quality. For example, in industrial hubs such as the Yangtze River Delta and the Pearl River Delta, the integrated application of 5G and the industrial internet has been adopted across more than 30 key industries, including electronics and automotive.

2.2.2 Traditional industries are revitalised with new competitiveness through technological empowerment.

Leveraging industrial internet platforms to streamline supply chains, digitising

key manufacturing processes, and adopting robotics are key advantages that position China's manufacturing sector as a global leader. In 2023, the numerical control rate of key manufacturing processes in China reached 58.6%, with industrial robot installations totaling 276,300 units, accounting for 51% of the global total. By applying AI-powered visual inspection technology, CATL has achieved a power battery yield rate of 99.9% and a defect detection accuracy of 98.5%, setting a new standard for intelligent manufacturing. Currently, China is actively advancing its "AI + Manufacturing" initiative, intensifying efforts in the research and deployment of general-purpose and industry-specific large-scale models for key application scenarios.

Our 28th Global CEO Survey reveals that CEOs of the Chinese companies are reaping significantly greater benefits from generative AI than their global counterparts, particularly in advanced manufacturing and high-value-added service industries. Generative AI has not only improved operational efficiency but also boosted financial performance. The survey finds that 66% of Chinese CEOs (Global: 56%) reported efficiency gains in their personal work time over the past 12 months, 64% saw an increase in profitability (Global: 34%), and 58% experienced revenue growth (Global: 32%).

2.2.3 Certain advanced technologies are now being deployed globally.

In emerging sectors such as high-end equipment, new energy, AI, and biopharmaceuticals, China is steadily exporting its technology outputs globally through a strategy of independent innovation, intelligent transformation, and global deployment. The Fuxing bullet train continues to lead in global high-speed rail technology, with about 10% lower energy consumption than Japan's Shinkansen when operating at a speed of 350 km/h. Domestically produced tunnel boring machines (TBMs) now command a 70% market share, with CRCHI's independently developed 16-meter-class ultra-large diameter TBM breaking foreign technological dominance in this space. By refining its approach to exporting technical standards and fostering localised innovation ecosystems, China's high-end products are poised to transition from a "cost-performance advantage" to a "technology-driven advantage", reshaping the global industrial landscape.

2.3 Agile decision-making drives business model iteration, positioning China as the decision-maker in the global market.

Accurately understanding consumer preferences, dynamics, and market trends is essential for strategic business decision-making. China's digitised consumer network, its fully integrated business model that connects consumption and production, and the emerging shifts in consumption trends have all become key

factors for investment in the country. PwC believes that China has the potential to evolve from a traditional endpoint for product acceptance and consumption into a leader at the forefront of global business decision-making.

2.3.1 The Chinese consumption model deeply influences global consumer culture and concepts.

New consumption trends and hotspots in China continue to emerge, making the country the preferred destination for globally renowned brands to study user preferences across industries. Procter & Gamble China leverages its integrated “consumer insight-R&D-testing” platform to submit over 200 patent proposals annually in China, with 30% of them being integrated into the company’s global product development plans³. **The Guochao (China Chic) trend has sparked a global movement**, prompting many overseas brands to recognise the influence of Chinese culture. These brands are incorporating Chinese cultural elements to launch new bestselling products worldwide. For instance, L’Oréal China, in collaboration with the National Museum of China, has initiated the “Way of Beauty” cultural partnership, which integrates Chinese aesthetic culture and consumer perceptions of beauty into the brand’s global strategy. **China is also at the forefront globally in sustainable consumption.** According to PwC’s 2023 Voice of the Consumer Survey report, 76% of Chinese respondents are willing to pay a premium for environmentally friendly products (US:61%, Europe: 65%). The number of SKUs (Smallest Stock Keeping Units) of green products in China’s daily chemical industry will grow at a cumulative rate of 341.7% from 2020 to 2023, with a CAGR of 63%⁴. **Digital consumption models are driving this trend forward.** Innovative business formats such as live-streaming e-commerce and community group buying have rapidly gained traction in China and are now being exported to markets in Southeast Asia, the Middle East, and beyond. Notably, innovative consumption models developed during Tmall’s “Double 11” shopping festival, such as “pre-sale + deposit discount” strategy, have been included in Harvard Business School’s collection of classic case studies.

2.3.2 Data-driven decision-making transcends the entire value chain, while flexible and customised models empower businesses to quickly respond to consumer demand changes.

China’s real-time interactive decision-making network, built on a digital framework connecting the “consumer end – supply chain – production end”, empowers businesses with enhanced decision-making capabilities in areas such as market forecasting, product development, and marketing strategies. This enables

³ 2023 Multinationals’ Innovation in China Report, Boston Consulting Group (BCG).

⁴ White Paper on Green Development of China’s Daily Chemical Industry in 2023, China National Detergents Association, January 2024.

companies to launch products and services that better align with consumer needs. Xiaomi's MIUI system, through its "User Co-Creation Committee" mechanism, iterates user needs every 7 days, demonstrating the commercial value of the "agile development + precision marketing" model. Fast fashion brand Rhino Intelligent Manufacturing utilises digital twin technology to shorten its clothing design cycle from 14 days to just 3 days, while boosting inventory turnover by 40%. Starbucks analyses data on consumption patterns, product preferences, and geographic locations to customise the delivery of electronic coupons, driving an increase of over 10% in average customer spending.

2.4 China's comprehensive application scenarios make it a leading hub for global innovation.

From smart cities to rural revitalisation, and from industrial internet to healthcare, China's unified market of over 1.4 billion people provides a globally unique testing ground for technology commercialisation. This environment has spurred technological breakthroughs among domestic companies while drawing top global multinational enterprises (MNEs) to consider China as the core hub for their frontier R&D. As a result, a virtuous cycle has emerged where demand-driven innovation in China fuels global advancements.

2.4.1 Diverse application scenarios nurture product development.

China's innovative approach to the "development-validation-promotion" cycle significantly shortens the path from laboratory to market. At Tesla's Shanghai Gigafactory, closed-loop data and simulation testing have slashed the iteration cycle for autonomous driving models from 18 months to 6 months. Internet companies adopt a nimble, rapid-iteration approach to quickly address market needs. WeChat has evolved from voice messages to an expansive mini-program ecosystem, cutting its average product iteration cycle to just 2-3 weeks.

2.4.2 Complex market demand drives technological breakthroughs.

In Michael Porter's national competitiveness model, a renowned framework from Harvard Business School's strategic management scholar, consumer demand is seen as a vital driver of ongoing business innovation. For example, after addressing the last-mile travel problem, the concept of bike-sharing has led to the development of complementary technologies like electronic fences and BeiDou navigation, China's satellite navigation system. Tesla's Model Y Long Range, tailored to Chinese consumer preferences, later became a best-seller in the European market. To meet the needs of electric vehicles in cold climates, CATL pioneered sodium-ion battery technology, achieving a 30% improvement in range in low-temperature conditions. Meanwhile, Meituan tackled China's complex food delivery landscape with a "drone delivery + smart scheduling" system, improving

efficiency several times over traditional methods.

2.4.3 Adaptive mechanisms promote R&D collaboration.

China's innovation ecosystem, blending efficiency with inclusivity, is gradually transforming the country from a testing ground for technology to a global source of technological innovation. Policy initiatives such as the "open talent bidding" and the "industrial chain leadership model" reflect a deep integration of government leadership and market dynamics. Regions such as the Yangtze River Delta Science and Technology Innovation Community and the Guangdong-Hong Kong-Macao Greater Bay Area International Science and Technology Innovation Center have established a dynamic diffusion mechanism: top-level design, regional pilot projects, and nationwide scaling. The new energy vehicle cluster in the Yangtze River Delta has forged an innovative industrial chain spanning batteries, motors, electronic controls, and intelligent connected vehicles (ICV). Many companies are expanding their application scenarios by disclosing their underlying architectural designs, subsequently monetising through intellectual property (IP) licensing and customized services. At the same time, China's open stance – supported by free trade pilot zones and the Foreign Investment Law - draws multinational corporations to establish R&D centers and join local innovation efforts.

3. Strategic insights and investment opportunities.

By steadfastly pursuing its strategy for New Quality Productive Forces, China has established a competitive business ecosystem driven by factor upgrades, technology-led innovation, and market-driven decision-making. Going forward, it is essential for China to further highlight market opportunities, strengthen macro-level guidance, and attract global capital to participate in the development of the country's business ecosystem, while exporting its innovative solutions globally to achieve mutual gains.

3.1 Market opportunities: structural drivers of China's economic growth.

In 2024, China's GDP grew by 5%, adding an economic increment equal to the total economic output of a mid-sized country. PwC sees immense investment and growth potential in China's consumption upgrading, integrated industrial innovation, and green transformation.

3.1.1 Three Key Areas for Growth in the Consumer Market.

Expansion of premium consumption among youth: China's young consumers are becoming a powerhouse in the consumer market, boosting high-ticket experiences such as art exhibitions, immersive role-playing games, and escape

rooms, where per-customer spending is soaring. Additionally, their appetite for digital and smart products continues to increase, expanding markets for e-sports equipment, smart wearables, and related industries.

Rural market expansion unlocks new growth: From home appliances and automobiles to daily essentials, robust demand in rural markets is set to unleash significant market potential. In 2024, China's rural online retail sales grew by 6.4% year-on-year, with agricultural product sales jumping 15.8%. There are abundant investment opportunities in e-commerce platforms, logistics and distribution, and cultural-educational services catering to rural consumers.

Silver generation leads high-quality living: The silver generation, particularly those aged 50 to 65, boasts higher disposable incomes and leisure time, sparking transformative growth across multiple sectors. Their pursuit of premium lifestyle experiences is fueling the demand for advanced health supplements, top-tier outdoor products, luxury cultural tourism, and education and training services.

3.1.2 Industrial integration and innovation.

Industrial integration and innovation are reshaping the global industrial system and the division of labour. China is unlocking a wealth of opportunities for technological crossover, by encouraging cross-disciplinary technology exchange, inter-industry resource mobility, and the reconfiguration of practical applications. Notable examples include: the deep integration of biotechnology and information technology, driving growth in AI algorithm- and bioinformatics-powered drug discovery platforms, automated synthetic biology production lines, and smart medical devices paired with digital therapeutics; the incorporation of data into agricultural services to drive the development of gene-edited crops, big data platforms for agricultural drones, and blockchain-tracked agricultural supply chains; the integration of space technology with terrestrial economies to unlock vast growth potential in fields like satellite internet-powered smart city services, low-altitude economies, and civilian aerospace materials; and cultural creativity paired with cutting-edge technology to yield popular consumer innovations such as VR content creation, AIGC copyright trading, and smart wearables.

3.1.3 Technical services in green and low-carbon development.

China's green investment has transcended individual industries, forming a trillion-dollar blue ocean through the interplay of advancing technology, solid policy support, and expanding markets. Key areas shine: the new energy vehicles (NEVs) sector presents significant investment value, with China leading globally in smart vehicle R&D and charging infrastructure delivering both social and economic benefits; the photovoltaic energy storage market continues to thrive, with distributed solar power becoming increasingly cost-effective and the energy

storage technologies near commercialisation; prefabricated construction gains traction rapidly, opening up a vast and untapped green building market; the carbon emissions trading market has surpassed 2 billion tons in annual transactions, elevating the worth of carbon financial instruments. Investors can capitalise on the entire green value chain - from clean energy substitution to low-carbon technology applications and carbon asset growth- to achieve both societal and financial rewards.

3.2 Investment recommendations: MNEs integrating into China's value co-creation network.

Looking ahead, China will not only serve as a global innovation hub but also as a core arena for setting standards and reshaping industrial chains. Integrating into China's value co-creation ecosystem will be a critical move for MNEs seeking to enhance their global competitiveness. It is recommended that MNEs optimise their China market strategy, shifting from a "single growth market" strategy to one of strategic integration and ecosystem collaboration. This will enable the formation of a new development paradigm characterised by co-innovation, standard co-governance, and value sharing.

3.2.1 Building a collaborative research ecosystem network to achieve technological breakthroughs.

China's decades of accumulated investment in foundational research, adaptive innovation networks, abundant tech talent, and complex application scenarios provide the MNEs with a globally unique innovation advantage. Nearly one-third of foreign direct investment flowing into China targets its high-tech sectors.

MNEs should establish an innovation framework blending China-driven R&D innovation and global adaptation, crafting a "China innovation ecosystem map" to identify key technologies relevant to their operations. By establishing local R&D centers, joint laboratories, and engaging in government technology pilot programs, companies can form a mutually beneficial partnership that leverages China's R&D strengths for global reach. In addition, they could consider establishing a special fund to co-build such ecosystem so as to amplify and expand its R&D efforts.

3.2.2 Integrating into regional collaboration networks to optimise global division of labour.

China leverages platforms such as RCEP and the Belt and Road Initiative to export business standards and infrastructure, enabling MNEs to reduce globalisation costs. For instance, Amazon China's overseas warehouses have improved order response times in Southeast Asia by 60%, while Siemens'

Chengdu plant delivers its products to Europe in 72 hours via the China Railway Express.

MNEs should capitalise on China's cutting-edge consumer market advantage, leveraging local data to tailor their global products and implement a "reverse customization + regional focus" strategy to penetrate global markets. China's big data can refine global supply chain decisions, while its 5G private network technology creates cross-border digital twin factories, helping MNEs to spread their digital expertise to global branches. Enterprises should also tap into China's cross-border logistics and energy networks such as the China Railway Express-backed "transportation hub + overseas warehouse" system. In addition, establishing an RCEP compliance navigation system will help dynamically optimise raw material sourcing across countries, enabling tariff-efficient layouts.

3.2.3 Building a resilient management framework to mitigate global risks.

China's growing role as the anchor of the global industrial chains is becoming increasingly prominent, serving as a strategic fulcrum for MNEs to mitigate global risks.

MNEs should establish an annual synergy assessment to quantify the technology, costs, and market gains brought by China's business ecosystem; adjust their investment levels in China and business mixes to gradually transition from a growth engine to a strategic buffer zone. They should also set up regional risk emergency teams and establish a full-cycle management system that includes early warnings, response, and recovery. In addition, MNEs should develop a "China as a core + regional backup" production model and conduct regular stress tests for trade barriers and black swan events, and other contingencies. In the future, MNEs need to focus on cultivating their policy awareness, tech adaptability, and cultural inclusivity to thrive.

3.3 Empowering the Globe: driving global economic growth with China's new advantages.

China's vast commercial practices have accumulated significant momentum for paradigm shifts. However, its impact hinges on strengthening the synthesis and refinement of insights from practice to theory and institutional frameworks. It is recommended that China should: 1) establish a cycle of case-building, theory extraction, policy alignment, and paradigm iteration, and strengthening comprehensive support for business innovation and continuously fostering emerging driving forces; 2) through institutional innovation, integrate data sharing, technology middle platforms, and open-source research and development into the technological innovation system to enhance the original innovation capabilities of cutting-edge technologies; 3) explore the global applicability of Chinese standards

by implementing super app-bundled standards, rewarding enterprises that adopt Chinese standards with “green standard credits”, and building an open-source standard ecosystem; 4) leverage the global network platform of various professional intermediary service institutions such as PwC to enhance the international recognition of “Chinese business innovation” and co-create trade rules that align with new business models. The practice of China’s new advantages on a global scale is crucial not only for improving domestic economic efficiency but also for transforming China’s business strengths into global economic momentum, fostering shared prosperity and development worldwide.