

The limits of techno-optimism: AI, employment, and social progress in China

Erik Mo Welin
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Executive summary

- Concern about AI-driven job displacement is increasingly visible among both the Chinese public and the expert community. Leading Chinese economists have called for policy reforms ranging from large-scale retraining to expanded social protection and new redistributive mechanisms.
- The Chinese leadership may struggle to reconcile its goal of rapidly diffusing AI throughout the economy with the need to protect workers displaced by the technology.
- The Chinese public has remained overwhelmingly positive about technological change. But large-scale AI-driven job displacement could challenge the techno-developmental promise that technological advancement ultimately translates into broadly shared material progress.

Artificial intelligence (AI) has become a cornerstone of China's strategy for technological modernization and economic development. Chinese leaders increasingly portray AI as both a driver of productivity growth and a key pillar of China's pursuit of technological self-reliance and global technological leadership. Through its ambitious "AI+Initiative", China aims to [duplicate](#) the success its "Internet+" initiative had 10 years ago. The "AI+Initiative" aims for 70 percent adoption of the technology in [key sectors](#) by 2027 and 90 percent adoption by 2030.

China's embrace of AI builds on a tradition of [techno-optimist narratives](#). These view technology as a key-driver of modernization and national strength. In the early years of China's economic opening and market reforms that began in 1978, China's paramount leader Deng Xiaoping (邓小平) hailed Science and Technology (S&T) as a "primary productive force". He argued that computer science and automation technology could [help](#) to increase productivity in the

labor process. Under the current leadership of Xi Jinping (习近平), who has been in power since 2013, technology has become even more central to China's development strategy. The concept of "new quality productive forces" (高质量新生产力) [encapsulates](#) this techno-developmental turn. This envisions future economic growth as increasingly driven by technological upgrading in fields such as AI and green energy, rather than by the expansion of industrial capacity which underpinned earlier phases of China's development. Technology, in other words, is increasingly central to the Chinese leadership's promise that it will deliver development and growing prosperity to its citizens.

Techno-optimism among the broader population in China

There are also clear indications that state driven, techno-developmental narratives have had a broad resonance amongst the Chinese public. Social scientists doing qualitative field work in China have found unwavering optimism about the positive effects of technology.

This optimism has also been seen in the results of multiple quantitative surveys. [The World Values Survey](#), for instance, has measured the general public's views about technology over several decades. It has consistently found overwhelmingly positive views about the benefits of technology among the broader Chinese population. For example, in the 2017-2022 round of this survey, 93 percent of the respondents from China thought that emphasis on technology in the future was a good thing, compared to 54 percent of respondents from the United States and 68 percent of respondents from Japan. In the same survey, China ranked first out of 65 countries and territories for the number of positive responses to a question about whether the world would be better off because of science and technology. It ranked sixth for the number of positive responses to a question about whether future generations would have more opportunities because of science and technology.

So far, this Chinese public optimism about the benefits of technology has included AI. A [study](#) made by Ipsos in 2023 showed that 87 percent of respondents in China agreed that AI is having a positive effect on the world we live in, compared to an average of 57 percent globally. Notably, Chinese public attitudes towards AI stand in stark contrast to attitudes in the United States. For the United States, several [polls](#) have pointed to increasingly negative views of AI in recent years. The construction of data centres has been shown to have resulted in a significant [backlash](#) against AI among a large portion of the American public.

The threat of disruptions to China's labour market

Yet rapid AI diffusion also risks substantially disrupting China's already strained labour market. The International Monetary Fund (IMF) [estimates](#) that, in advanced economies, such as the United States, Germany, South Korea and Japan, approximately 60 percent of jobs are exposed to AI. It also estimates that half of these jobs have a high risk of being replaced by the new technology. There has been considerably less research focused specifically on AI's potential impact on the Chinese labour market. However, the American financial services company Citibank [estimates](#) that around 10 percent of Chinese jobs - approximately 70 million workers - are at high risk of being displaced by AI. Such estimates might be too conservative: an academic [study](#) published by scholars based in China and the UK found that approximately 54 percent of jobs in China could face substitution by AI in the coming decades.

China's AI transition is also taking place against an existing structural mismatch in its labour market. In China, automation and declining employment opportunities in manufacturing and construction have already pushed many [low-skilled workers](#) into informal employment. Meanwhile low educational attainment makes transitioning to higher-skilled jobs difficult for these members of the Chinese public. At the same time, growing cohorts of university graduates struggle to find suitable white-collar employment. [Youth unemployment](#) reached 18 percent in July 2026.

Concerns about job disruption

Concerns about AI-induced labour replacement are also increasingly present in Chinese society at large. In 2024, the Chinese technology company Baidu introduced self-driving [robotaxis](#) in Wuhan. This rollout intensified pressure on already struggling taxi drivers and sparked discontent online. One taxi company wrote in an [open letter](#) that although “the original intention of the technology was to improve people’s lives, the reality is that it means that people on the lower side of the social ladder do not have enough to eat.” More recently, the term “[AI anxiety](#)” (AI焦虑) has been frequently used on Chinese social media platforms, pointing to increasing concerns about the impact of AI on the job-market. Notably, in a recent poll conducted by the Chinese technology corporation Tencent (whose products include internet software and AI tools) and Fudan university, with results [published](#) by the state media outlet China Daily, 54 percent of respondents said they were worried that their jobs might be replaced by AI.

The expert community in China has also noted the gravity of a potential problem with AI-related job displacement among large segments of the population. Chinese economists have [warned](#) that AI is increasingly challenging people employed in white-collar professions, in particular entry-level jobs, marking a shift from previous automation waves that primarily affected routine manual labor. The unusually rapid diffusion of AI may further complicate adjustment. The economist Zhang Dandan from Peking University [describes](#) the present as a “critical window of opportunity” for adapting to the transition.

More broadly, a major concern among Chinese experts is that the impact of AI on the labour market might increase inequality. Some Chinese scholars describe AI as a form of capital-biased technological change. This means it is a form of change that disproportionately increases the profits of those who own, or invest in, companies while [reducing](#) the share of national income that goes to members of the workforce within companies. One [analysis](#) from the Chinese Academy of Social Sciences (CASS) argues that AI may compress the employment and income of the middle class and widen income disparities. It suggests that AI will potentially transform China’s income distribution from an “olive-shaped” structure towards a more polarized social structure, potentially resulting in “growth with impoverishment” (贫困化增长). Such an outcome would be in conflict with Xi Jinping’s emphasis on “common prosperity” (共同富裕), which seeks to reduce excessive inequality and ensure that the benefits of economic development are more broadly shared. It would make technological progress increasingly difficult to reconcile with the promise of broadly shared material progress.

Responding to AI disruption

Chinese economists and other social scientists consistently argue that the rapid diffusion of AI will require a fundamental [reform](#) of the educational system and new ways of [upgrading](#) workforce skills. They suggest that, rather than attempting to preserve existing occupations, the government should [support affected workers](#) by expanding vocational education, strengthening lifelong learning, and improving opportunities for retraining.

The Chinese authorities are taking the threat seriously. Official media has published multiple [editorials](#) arguing against replacing workers with AI. In April, the State Council also [approved](#) an Action Plan for Stabilizing, Expanding and Improving the Quality of Jobs (稳岗扩容提质行动方案). This policy document called on those enterprises which choose to introduce AI to provide workers with retraining and opportunities for reassignment, with the aim of retaining affected employees wherever possible.

However, these measures are likely to prove insufficient. Chinese economists, such as the prominent labor economist Cai Fang (蔡昉), have [argued](#) that the AI-transition will also require an expansion of social protection and new redistributive mechanisms to combat the increasing risk of inequality. They state that required expansions to social protection include unemployment insurance, pension systems, and legal protections for displaced workers. Meanwhile, they suggest redistributive mechanisms including robot taxes, reforms to capital taxation, and even the introduction of a universal basic income.

Such proposals could encounter [ideological resistance](#) within the Chinese leadership. As Xi Jinping himself has [made clear](#), “common prosperity” does not mean that China should develop into a European welfare state, something which he has condemned as “welfarism” (福利主义). Because of this kind of ideological barrier, even if AI leads to substantial job disruption, the leadership might still fail to implement sufficient measures to protect workers.

Conclusion: The political risks of AI disruption

The Chinese regime relies heavily on its [performance](#), rather than public elections, to gain legitimacy or the right to rule. Economic development and improving living standards have therefore been central to its broader narrative of progress. Technology has played a pivotal role in this narrative going back as far as the leadership of Deng Xiaoping in the late 1970s and 80s. It has assumed even greater prominence under the current Chinese leadership of Xi Jinping. Xi has proclaimed that the so-called “new quality productive forces” are a crucial driver of economic growth and a key to Chinese wealth and power. Technological progress has thus become increasingly intertwined with the Chinese Communist Party’s broader promise of continued national development and material improvement.

Until now, the Chinese public has remained overwhelmingly positive about technological change. This undoubtedly makes the leadership’s narrative about technology easier to sustain. However, if AI proves to be as disruptive as some estimates suggest, this could pose a severe challenge to this techno-developmental narrative. In the event of large-scale AI-induced unemployment across multiple sectors, parts of the population, perhaps most notably the young, might increasingly question the assumption that technological progress necessarily translates into improvements in their own lives. Early indications of such a shift would not necessarily take the form of outright opposition to technological development.

Instead, they could appear as growing anxiety about AI-driven job displacement or declining confidence that education provides a path to upward mobility. They might also appear in the form of a widening gap between the Chinese public's enthusiasm for China's technological achievements and their expectations about their own economic future. In such a scenario, the political challenge for the Chinese Communist Party would not simply be unemployment itself, but a potential divergence between technological and social progress.

This presents Beijing with a dilemma. AI could deliver precisely the productivity gains, technological leadership, and national power that the leadership seeks. However, it might simultaneously create greater job insecurity, inequality, and declining opportunities for social mobility among significant parts of the population. In such a scenario, AI would not necessarily destroy Chinese techno-optimism, but it could weaken the techno-developmental promise that the Chinese leadership's narratives depend upon. This is a promise that technological advancement ultimately produces broadly shared material progress. Such a development could, in turn, undermine an important source of Chinese Communist Party legitimacy and increase the risk of social and political instability. Although AI is framed as a cornerstone of future prosperity for China, it may therefore also become one of the regime's greatest political challenges.



Erik Mo Welin

Erik Mo Welin is an analyst at the Swedish National China Centre.

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