

China's innovation future depends on intellectual property rights protection

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As China's working age population shrinks and cheap labour dries up, the country's leaders have been keen to stress the urgency to move from an economy based on investment and heavy industry to a sustainable, innovation-led one.

According to a new paper by Lily Fang, INSEAD Associate Professor of Finance, forthcoming in the *Review of Financial Studies*, Intellectual Property Rights Protection, Ownership, and Innovation: Evidence from China, the success of these efforts will depend on building more robust institutions.

"Until now, China has achieved the fastest growth in history despite having poor legal and financial institutions. It has also become one of the most prolific patent filers in the world," said Fang. "This has led many to question whether China is an exception to the rule that effective legal and [financial institutions](#) lay the foundation for stronger economies. However, we find that it is not," she added.

Her study used China's privatisation drive of 1995-2005 to identify how private ownership and [intellectual property](#) protection contributed to innovation and importantly, how varying levels of intellectual property protection across China affected it.

Examining firms pre and post-privatisation, Fang and her colleagues found that innovation measured by patents filed, increases significantly after firms are privatised. On average, firms' patent stock increases

200-300 percent in the five years following privatisation. But, crucially, the increase in innovation is significantly larger in cities with high intellectual property protection than in cities with low protection.

Privatisation alone has essentially no effect on innovation in places where protections are weak. But just a small increase in intellectual property protection leads to large gains in post-privatisation innovation. For example, Fang shows that a one standard-deviation increase in the local [intellectual property protection](#) score nearly quadruples the post-privatisation increase in patent stock.

Further solidifying the results, Fang found that in addition to quantity, the quality of such patents was higher than that of state-owned firms. They find evidence that patents of these private sector firms are cited more often internationally than patents of state-owned firms, which shows much higher quality.

"The letter of the law is consistent with international standards but in practice, there is evidence that China has a poor record in enforcement and significant differences exist across regions in the interpretation and enforcement of [intellectual property law](#)," said Fang.

"While China has demonstrated that it is capable of achieving incredible growth without strong legal enforcement of intellectual property, as it advances to the technology frontier, it will have to develop a stronger legal system to support the [innovation](#) it so desperately wants," she added.

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