State Capacity in China's Innovation Subsidy Ighted Materials *Policy: A Perspective on Government Knowledge**

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Abstract

This article studies state capacity in innovation policy from the perspective of government knowledge. In the market-oriented reform, the Chinese state has changed its way to coordinate technological development from the planning approach such as administrative orders and plan targets to the market approach such as innovation subsidy policies. Through case studies and regression analysis, this research finds that China's state capacity in its innovation subsidy policies is highly limited in all because the government knowledge is too thin to achieve the state's goals. However, its policy performance is different between the two categories of innovation subsidy policies. Policies that use qualification certification as the main instrument rely on grassroots governments as the main executors, and they do not have industry-specific human resources and have failed to make use of potential connecting network with the industry. Policies that use project contracting as the main instrument do fare better. The central government, as the main policy maker and performer, has industry-specific personnel and has made better use of the penetration network of local governments.

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Consequently, state actors are more effective in identifying potential innovators and monitoring the process, and enterprises are more likely to comply with institutions in "project-based" policies, which lead to better policy performance than "qualification-based" policies.

China has undergone a dual transformation in the past two decades, namely a transformation of economic institutions from a planned economy to a market economy, and a transformation of growth pattern from imitation-oriented to innovation-oriented. As part of these changes, the Chinese government has changed its ways of coordinating economic and technological development. Under the planned economy, China had a hierarchical system with specialized division among industrial ministries under the leadership of the "central headquarters," which originally began with the State Planning Commission and later included the National Economic Commission. The main mechanism of development of coordination was direct central administrative intervention, including written plans and administrative orders to coordinate production and technical activities. Under market reforms, China has begun to emphasize market mechanisms and enterprise autonomy. Thus, it has narrowed the scope of administrative intervention, abandoning the hierarchical system and has developing policies to promote innovation through contracting or fiscal and tax instruments.

Obviously, not all innovation policies will succeed, and evidence from the literature suggest state capacity is a decisive factor. State capacity is an important foundation on which China seeks to promote innovation activities and the structural transformation of its economy. Thus, this paper examines the state's capacity through information and knowledge. Innovation activities are characterized by complexity, uncertainty, and multiagent coevolution.² In a single state as large as China, many firms will participate in innovation activities, and they have their own profitmaking motivation when facing innovation subsidies. Defining effective policy depends on understanding this complex situation. The state needs sufficient information and knowledge to identify innovative applicants and encourage and monitor recipients.

Inspired by Michael Mann, developmental state theory, enterprise capacity theory, and organizational learning theory, we assess China's capacity to shape innovation policy effectively from two dimensions: penetration capacity and professional capacity. The former enables the