



Culture and Privatization: The Agricultural Legacy and Politicians' Decisions in China



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Abstract

- We examine the role of local politicians' cultural attributes, in particular individualism vs. collectivism, in their policy decisions on the massive privatization of China's state-owned enterprises (SOEs).
- Drawing on the well-documented link between wheat cultivation and individualistic culture, we employ the soil suitability for wheat relative to rice in their birth places to measure Municipal Party Secretaries' (MPS) individualism. We find that individualistic MPS introduced more private ownership and were more likely to transfer control rights to private owners in privatization. We further show that MPS individualism had little effect on the efficiency gains of privatization.
- Our findings highlight an important factor—politicians' cultural attributes—in shaping China's privatization.

Background & Hypothesis

China's privatization reform

- China's privatization of SOEs between the late 1990s and the mid-2000s was arguably the largest in the world. A distinct feature of privatization in China is that it is highly decentralized and administered by the local governments (Gan et al., 2018). This decentralized feature allows local politicians' cultural attributes to play an important role in their privatization decisions.

Culture and privatization

- In individualistic societies, individual interests are often prioritized over the collective interest and people are encouraged to make and bear the consequences of their decisions.
- Individualistic leaders might believe that private ownership is more efficient in organizing production and put less emphasis on retaining residual ownership to influence the economy.

The agricultural legacy of culture

- Traditional farming practices can shape the foundations of individualism and collectivism (Talhelm et al., 2014). A legacy of rice production yields more collectivism while wheat production yields greater individualism.

□ **Hypothesis:** Individualistic politicians are more likely to privatize SOEs.

Research Design

Our econometric model is specified as:

$$Privatization_{ikcst} = \alpha + \beta wheat - rice\ ratio_{kc} + \Theta Controls + \delta_c + \phi_i + \gamma_s + \delta_t + \varepsilon_{ikcst}$$

where i, k, c, s, t denote firm, Municipal Party Secretary (MPS), city, industry, and year, respectively.

- **Privatization** includes 1) *Private share*, the share of registered capital held by private investors; 2) *Private dummy*, a dummy variable that equals one if *Private share* is above 50%.
- *wheat-rice ratio* is the relative suitability of wheat versus rice in the MPS's city of birth, measured as the differences in log suitabilities for wheat and rice.
- **Controls** include firm characteristics, MPS personal characteristics, and city-level controls.

Data

- **Firm-level data**
 - Annual Survey of Industrial Firms (ASIF) from 1998 to 2009
- **MPS biographical information**
 - Manually collect data on city-level government officials from various resources including websites, newspapers, and press releases
- **Agricultural suitability data**
 - Global Agro-Ecological Zones (GAEZ) database
- **City level controls**
 - China City Statistical Yearbook

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Baseline Results

Dep. Vars.	Private share				Private dummy			
<i>wheat-rice ratio</i>	0.9555*** (0.2627)	0.8779*** (0.2550)	0.9482*** (0.2551)	0.8701*** (0.2466)	0.0110*** (0.0029)	0.0103*** (0.0029)	0.0109*** (0.0029)	0.0101*** (0.0028)
Firm Controls	No	Yes	Yes	Yes	No	Yes	Yes	Yes
MPS Controls	No	No	Yes	Yes	No	No	Yes	Yes
City Controls	No	No	No	Yes	No	No	No	Yes
Year FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
City FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Industry FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
City × Time trend	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Observations	299,151	299,151	299,151	299,151	299,151	299,151	299,151	299,151
R ²	0.4264	0.4397	0.4398	0.4399	0.3519	0.3626	0.3626	0.3627

□ We find that individualistic MPS introduced more private ownership and were more likely to transfer control rights to private owners in privatization.

➤ Robustness checks:

- Alternative privatization definitions
- Alternative agricultural suitability measures
- Placebo tests using provincial and central SOEs
- Control for firm fixed effects
- City Mayor's individualism
- A fuzzy regression discontinuity (RD) design by exploiting the variations in traditional farming practices generated by a natural geographic boundary in China
- Check whether the assignment of MPS workplace was influenced by the farming practices in their birth places (Personnel selection)

Further Analysis

➤ Heterogeneous effects

- Test whether the effect of MPS individualism on privatization varies with
 - ✓ MPS's personal characteristics
 - ✓ City characteristics

➤ Understanding mechanisms

- Using household surveys and focusing on members of the Chinese Communist Party (a group of individuals comparable to MPS), we examine whether wheat cultivation could influence one's attitude toward the role of government in the economy.

➤ The impact of agricultural legacy on the relation between privatization and firm efficiency

- Examine the impact of privatization on firm efficiency (profit, TFP, etc.)
- Explore whether the effect of privatization on firm efficiency depends on MPS individualism

Contribution

- We contribute to the literature on privatization. Different from existing studies focusing on economic and financial factors, we document that politicians' cultural attributes can be an important determinant of privatization.
- Our study relates to the research on the policy impact of politicians' personal characteristics. The existing research has emphasized the importance of politicians' personal characteristics in economic growth and institutional transformation. We focus on the influence of politicians' individualism in their privatization decisions while in office.
- We add to the broader literature on cultural traits and economic outcomes. Our findings regarding the impact of individualism vs. collectivism on privatization enrich the literature that emphasizes the persistent and profound impact of culture on economic and financial outcomes.

References

- Ang, J.B. (2019). Agricultural legacy and individualistic culture. *Journal of Economic Growth*, 24(4), 397-425.
- Boubakri, N., Guedhami, O., Kwok, C.C.Y., Saffar, W. (2016). National culture and privatization: The relationship between collectivism and residual state ownership. *Journal of International Business Studies*, 47(2), 170-90.
- Gan, J., Guo, Y., Xu, C. (2018). Decentralized Privatization and Change of Control Rights in China. *The Review of Financial Studies*, 31(10), 3854-94.
- Hsieh, C.-T., Song, Z.M. (2015). Grasp the large, let go of the small: The transformation of the state sector in China. *Brookings Papers on Economic Activity*, 295-346.
- Ma, L. (2022). Ruling with Ideology: Politician Beliefs and the Decision to Privatization. Available at SSRN 3859878.
- Ru, H., Zou, K. (2022). How Do Individual Politicians Affect Privatization? Evidence from China. *Review of Finance*, 26(3), 637-72.
- Talhelm, T., Zhang, X., Oishi, S., Shimin, C., Duan, D., Lan, X., Kitayama, S. (2014). Large-Scale Psychological Differences Within China Explained by Rice Versus Wheat Agriculture. *Science*, 344(6184), 603-08.
- Xu, C. (2011). The Fundamental Institutions of China's Reforms and Development. *Journal of Economic Literature*, 49(4), 1076-151.