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How does privatization work in China?

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ABSTRACT

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Using a comprehensive panel data set of China's state-owned enterprises, we investigate the impacts of privatization on social welfare and firm performance indicators. The privatization of China's state-owned enterprises was found to have little impact on the change of firm employment, but it did lead to increasing sales and hence higher labor productivity. Meanwhile, there was a gain in firm profitability contributed to mostly by the reduction of managerial expenses to sales. The impact of privatization was sustainable in the long run, and was more pronounced when state ownership was reduced to minority position as opposed to majority position. *Journal of Comparative Economics* **37** (3) (2009) 453–470. School of Economics and Management, Tsinghua University, Beijing, China; Department of Business Strategy and Policy, and Center for China in the World Economy, Tsinghua University, Beijing, China; School of Business, and School of Economics and Finance, University of Hong Kong, Pokfulam Road, Hong Kong.

1. Introduction

It has been thirty years since China adopted the twin policies of opening its door to foreign trade and investment and reforming its state-owned enterprises in 1978. Spectacular progress has been made in line with the first policy.[1] On reforming its state-owned enterprises, however, China has taken a gradual and selective approach, despite the fact that state-owned enterprises have had poor financial performance as compared with China's private enterprises and foreign multinationals operating in China (Cao et al., 1999).[2] Accounting for 35% of China's GDP, state ownership remains a significant, if not dominant, force in the Chinese economy after thirty years of economic reform (CAI JING Magazine, 2007).

Indeed, the speed of reforming its state-owned enterprises has distinguished China from other formerly centrally planned economies, and has thus attracted much attention in the economics literature. Studies have focused on the rationales for the Chinese government to keep inefficient state-owned enterprises. One argument is that, faced with low-powered incentives for sales and profits, China's state-owned enterprises focus on absorbing surplus labor and help to maintain social stability,

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[1] China has attracted more than US$500 billion foreign direct investment (China Statistical Yearbook, 2005), and it was the second largest exporter in the world after Germany in 2007 (The World Factbook, 2008).

[2] Indeed, much improvement in efficiency and performance could be obtained from privatizing those state-owned enterprises (see, for example, Gordon and Li, 1995; Groves et al., 1994, 1995; Li, 1997; Li and Xu, 2004; Zhang et al., 2001). See Djankov and Murrell (2002) for a survey of enterprise restructuring in the transition economies, and Megginson and Netter (2001) for a survey of privatization in both developed and developing economies.

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which is crucial to the successful functioning of the whole economy, including China's private enterprises and foreign multinationals (Bai et al., 2000).[3] Delaying the privatization of inefficient state-owned enterprises is a second-best arrangement before the setup of an independent and efficient social security system. Another argument is that state-owned enterprises in China are controlled by their management, because they are widely held by all people in the society and the supervision by the State Assets Agency – a state agency in charge of managing state-owned enterprises for all people in the society – is not entirely profit driven and could be circumvented. Thus privatization cannot take place unless the private interests of the management are well taken care of.[4]

To shed light on why China has taken a gradual and selective approach to reforming its state-owned enterprises, we propose to investigate how the payoffs of relevant interest groups of China's state-owned enterprises changed during the privatization process (i.e., how privatization really worked in China) using a comprehensive panel data set.[5] Our data is from the annual surveys of manufacturing and mining firms conducted by the National Bureau of Statistics of China for the period of 1998 to 2005. The number of firms covered in the surveys varied from approximately 162,000 to approximately 270,000. Using a set of consistent firm identifications such as original firm identification code, firm name, firm address, region code, and industry code, we construct a panel data set of 25,970 state-owned enterprises that appeared at least three consecutive years during the period of 1998–2005 and were wholly state-owned the first time they entered in the panel.

Our data-set contains information that can be used to construct social welfare and firm performance indicators. Specifically, we have: (1) social welfare indicators on labor (size of employment and wage per labor), consumers (price index), and governments (tax contributions), (2) indicators on firm performance (logarithm of sales, sales per labor, liability to assets, and operating income to sales), and (3) individual components of the operating income to sales (profits from main products to sales, profits from other products to sales, managerial expenses to sales, and financial expenses to sales).

There are two challenges for establishing the impacts of privatizing China's SOEs. One is the potential selection bias problem. As China's privatization has been gradual and selective, the impacts of privatization could be due to the characteristics of those SOEs chosen for privatization, rather than the ownership changes. The other problem is to control for all possible factors that may affect social welfare and firm performance indicators. We take two strategies to address these problems. The first strategy is to use firm fixed effect models to account for firm-specific and time-invariant factors, and the second and more important strategy is to use the Heckman two-stage estimation method on top of the firm fixed effect models. With the second strategy, we can directly deal with the selection bias problem, and estimate the impacts of privatization after addressing that problem.

We find that the privatization of China's state-owned enterprises had little impact on changes in employment, and instead the focus of privatization was on increasing sales with the existing workforce so as to improve labor productivity. We also find that there was significant gain in firm profitability, and most of the gain came from the reduction of managerial expenses to sales.

The benefits of privatization might be transitory, as there could be under-reporting of financial performance prior to privatization or one-time government subsidies at the time of privatization (Frydman et al., 1999; Song and Yao, 2004). To address this concern, we look at the long-run performance of privatized firms. It is found that the gains in firm profitability were sustainable up to four years after the privatization, and most of the gains still came from the reduction of managerial expenses to sales.

One of the consequences of gradual and selective privatization in China is that significant state ownership could still be retained after the privatization. It is thus interesting to know if the benefits of privatization varied with the extent of privatization. We find that the impacts of privatization on social welfare responsibility were statistically significant only for privatization with state ownership reduced to minority position, and that the effects on firm profitability were more pronounced when state ownership was reduced to minority position as opposed to majority position.

Our results are highly consistent with the two arguments in the literature regarding why China has had gradual and selective privatization. China has maintained state-owned enterprises as a second-best way of absorbing surplus labor and maintaining social stability. Both anecdotal evidence and our statistical analysis show that the Chinese government has made job preservation an important pre-condition for privatization. As a result, there was no accelerated layoff of surplus labor after privatization, even though the surplus labor problem was severe in both pre-privatization SOEs and post-privatization SOEs. Facing the constraint in laying off surplus labor, privatized firms resorted to increasing sales with the existing labor force so as to improve labor productivity. Meanwhile, our finding that most of the gain in firm profitability came from the reduction in managerial expenses to sales implies that it is inefficient to keep state-owned enterprises as a way of maintaining social stability. Given the *de facto* capture of state-owned enterprises by their management, there could be significant challenges in reforming China's state-owned enterprises if the private interests of management are not taken care of during the process of privatization.

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[3] The multi-task theory of state enterprise reform by Bai et al. (2000) is similar to the efficiency theory of public ownership by Hart et al. (1997) in that low-powered incentives under state-ownership may induce effort on some difficult-to-measure tasks that are of importance to the general economy. It builds upon the efficiency theory by highlighting the specific multiple tasks relevant to China (i.e., sales and social stability), and focusing on the public good nature of maintaining social stability. Li and Lui (2004) define surplus labor ratio as the percentage of workers who would be laid off if the company were operating at the industry-average level of sales per labor.

[4] The theoretical support for the management control view comes from the political patronage theory of Shleifer and Vishny (1994) that government officials use state-owned enterprises to create jobs and win popular support so as to stay in power, and they then extract private benefits from these enterprises.

[5] There are empirical studies focusing on the incentives for the Chinese central and local governments to privatize its state-owned enterprises (Bai et al., 2005; 2006; Guo and Yao, 2005; Li and Lui, 2004; Li and Rozelle, 2000; Wang, Xu and Zhu, 2004).