Relative performance evaluation and the turnover of provincial leaders in China

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Received 17 January 2005; accepted 11 May 2005
Available online 28 June 2005

Abstract

Using data from China, this paper examines the role of relative performance evaluation in the turnover decisions made by the central government. We find that the turnover of provincial leaders hinges on provincial economic performance relative to their immediate predecessors.

Keywords: Relative performance evaluation; Incentives of local government; China

JEL classification: H11; H7

1. Introduction

How to motivate government officials to aid in economic development has become a central issue in economic transition and development (Frye and Shleifer, 1997). However, the design of incentive contracts for government officials has been constrained because it is hard to measure their performance (Tirole, 1994). As a result, officials in these countries usually have poor incentives, and are often associated with shirking, rent seeking and corruption. China provides a remarkable contrast in this
regard. Chinese local officials have devoted tremendous attention and energy to enhancing regional economic growth, which is rarely observed in other transition and developing countries (Blanchard and Shleifer, 2001).

Two major explanations have been offered for the strong incentive of the Chinese local officials in the reform era. The first emphasizes the role of decentralization and high-powered fiscal incentives local governments have during this period (Oi, 1992; Montinola et al., 1995; Jin et al., 2000). The second points to the career concerns of local officials empowered by the performance-based promotion scheme (Maskin et al., 2000; Blanchard and Shleifer, 2001; Whiting, 2001; Li and Zhou, in press). Maskin et al. (2000) show that the political status of a Chinese province (measured by the number of Central Committee members) is positively correlated with the provincial economic ranking. Li and Zhou (in press) present evidence on the link between political turnover of top provincial leaders and provincial economic performance.

This paper provides further evidence on the second view. Using a more recent dataset on the turnover of top provincial leaders, we show that their turnover is not only related to their own performance, as found in Li and Zhou (in press), but also related to the performance of their immediate predecessors. Our finding shows that the Chinese central government consciously motivates local officials by linking their turnover to economic growth. Moreover, it employs relative performance evaluation to reduce the noise in evaluation and thus strengthens the incentive effect.¹

2. Data and empirical analysis

Since the early 1980s, China, as a unitary state, has shifted its focus of personnel evaluation criteria away from political loyalty to economic performance.² The enforcement of the performance-based evaluation in China is facilitated by a score of salient institutional features. First, personnel control is centralized at the central government, and the economic performance of provincial leaders is a crucial indicator in personnel evaluations. Second, local officials have substantial influence over the local economy by controlling key economic resources, such as land, credit and designing local economic policies such as taxation and government spending. Because of their direct influence on the local economy, these officials are also held responsible for local economic performance. Third, the M-form structure of the Chinese economy makes each provincial leader’s performance individually distinguishable and comparable and thereby allows for a sensible link between performance and turnover (Qian and Xu, 1993; Maskin et al., 2000).

Our data cover 344 top provincial leaders (187 party secretaries and 157 governors) from China’s 28 provinces for the period 1979–2002. This dataset, compiled from a multitude of sources,³ contains detailed information regarding the provincial leader’s age, education, previous working experience in the

² See Lieberthal (1995) and Li and Zhou (in press) for more details about China’s political system and personnel control in the reform era.
³ They include three books in Chinese, i.e., Who’s Who in the Chinese Communist Party (1997), The Documentation of Administrations of the People’s Republic of China (1996), and China Yearbook (1995–2002), and one newspaper, i.e., the People’s Daily.
The data track the month and year in which leaders took and/or left office and the nature of the turnover—promotion, lateral moves, staying at the same position or retirement. Among all 344 provincial leaders, 25.9% were promoted, which is equivalent to 6.6% of the 1308 province-year observations, and 41.6% were terminated, where terminations include both demotions and retirements.

We use the growth rate of real per capita GDP (at 1980 constant prices) as the indicator for provincial economic performance. To reflect the fact that the central government uses the cumulative or average performance in its evaluation of provincial leaders (Li and Zhou, in press), we employ the moving average of provincial GDP growth rates over their tenure as the performance measure. Different from Li and Zhou (in press), we also capture the role of relative performance evaluation, i.e., the central government using the performance of peers as a benchmark to evaluate provincial leaders, by introducing two benchmark variables: the average GDP growth rate of the immediate predecessor and the GDP growth of neighboring provinces. Table 1 presents summary statistics of these variables.

We employ the ordered probit model to examine how the probability of promotion and termination for provincial leaders is affected by their relative economic performance. The dependent variable, or leader turnover, is a character variable, which equals 0 for a termination, 1 for remaining at the same level (including lateral moves as well as staying in the same position), and 2 for a promotion. We are primarily interested in the effects of the performance measures including the provincial GDP growth, the provincial GDP growth of the immediate predecessor and the GDP growth of neighboring provinces. In addition, we will also control for personal characteristics which might affect the probability of mobility, such as age, education, previous experience in the central government (denoted by “central origin”), and tenure on the post. Central origin might affect the prospect of political turnover because it may represent close connections with the central government. To capture the potential non-linear effect of age on the probability of turnover, and in particular the effect of the forced retirement at 65 implemented since the

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4 See Li and Zhou (in press) for more details about the career mobility of provincial leaders in the reform era.
mid-1980s, we add a dummy variable “age65” which equals one if the leader is 65 or older and zero otherwise. Our regressions also include provincial and year dummies which account for the effects of both province-specific characteristics and cyclical shocks in personnel control policies common to all provinces.

Regression results reported in Table 2 support the view that the Chinese central government uses relative performance evaluation in turnover decisions. In particular, it puts a large weight on the provincial benchmark set by the immediate predecessor, but not on the benchmark set by neighboring provinces. As seen from columns 1 and 3, the provincial GDP growth has a positive coefficient, while the provincial GDP growth of the immediate predecessor has a negative coefficient, both of which are significant. This means that the likelihood of promotion (termination) for provincial leaders is positively (negatively) associated with their own economic performance, but negatively (positively) associated with the performance of the immediate predecessor. However, as indicated by columns 2 and 3, the estimated coefficient of the performance of neighboring provinces is not significant. We also try alternative specifications in columns 4 and 5 by using the differences between provincial GDP growth and the two benchmarks, and the results are similar. This finding supports the notion that the Chinese central government consciously takes advantage of relative performance evaluation, but only puts weight on provincial benchmarks set by the immediate predecessor. The benchmark choice by the central government can be rationalized by the substantial disparity across provinces in China as well.

<table>
<thead>
<tr>
<th>Table 2</th>
<th>Ordered probit regressions examining the role of relative performance evaluation in provincial leader turnovers in China</th>
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</thead>
<tbody>
<tr>
<td>Dependent variable: turnover (promotion = 1, lateral moves = 0, termination = −1)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>(1)</td>
</tr>
<tr>
<td><strong>Provincial GDP growth (A)</strong></td>
<td>3.001*** (2.10)</td>
</tr>
<tr>
<td><strong>Provincial GDP growth of the immediate predecessor (B)</strong></td>
<td>−3.584** (2.36)</td>
</tr>
<tr>
<td><strong>GDP growth of neighboring provinces (C)</strong></td>
<td>0.897 (0.39)</td>
</tr>
<tr>
<td><strong>(A)−(B)</strong></td>
<td></td>
</tr>
<tr>
<td><strong>(A)−(C)</strong></td>
<td></td>
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<tr>
<td><strong>Age</strong></td>
<td>−0.071*** (6.81)</td>
</tr>
<tr>
<td><strong>Age65</strong></td>
<td>−0.303** (2.07)</td>
</tr>
<tr>
<td><strong>Education</strong></td>
<td>0.183 (1.48)</td>
</tr>
<tr>
<td><strong>Tenure</strong></td>
<td>−0.062** (2.44)</td>
</tr>
<tr>
<td><strong>Central origin</strong></td>
<td>0.082 (0.74)</td>
</tr>
<tr>
<td><strong>Cutoff point 1</strong></td>
<td>−6.992*** (8.42)</td>
</tr>
<tr>
<td><strong>Cutoff point 2</strong></td>
<td>−3.736*** (4.64)</td>
</tr>
<tr>
<td><strong>Number of observations</strong></td>
<td>1227</td>
</tr>
<tr>
<td><strong>Log-likelihood ratio</strong></td>
<td>−582</td>
</tr>
</tbody>
</table>

Note: The numbers in parentheses are t-ratios based on robust standard errors. The significance levels of 1%, 5%, and 10% are noted by ***, **, and *. The provincial and year dummies are controlled in all regressions.
as concerns about the potential costs of non-cooperation generated by the tournaments among neighboring provinces (Lazear, 1989). The effects of other variables are similar to those in Li and Zhou (in press).

References