

РОССИЙСКАЯ ЭКОНОМИЧЕСКАЯ ШКОЛА

NEW ECONOMIC SCHOOL

Petra Persson and Ekaterina Zhuravskaya

Incentives or Background of Party Chiefs?  
Determinants of Variation in Provincial Policy Outcomes  
in China

**Working Paper # WP/2008/084**

This paper is prepared in the framework of the 2006-2007 NES research project "Bureaucratic incentives in a federation". We thank Georgy Egorov, Sergei Guriev, David Li and conference participants of the 3rd Russia-China conference Global Institute Conference in Tsinghua University for helpful comments. We also thank Ryan Monarch and Lynn Liu for excellent research assistance.

Moscow  
2008

**Ekaterina Zhuravskaya and Petra Persson.** Incentives or Background of Party Chiefs? Determinants of Variation in Provincial Policy Outcomes in China. / Working Paper # WP/2008/084 – Moscow, New Economic School, 2008. – 33 p. (Engl.)

The variation in performance and public policy of Chinese provinces to a large extent are determined by backgrounds of CEOs of the provinces, i.e., provincial party secretaries. Provinces under the leadership of party secretaries with work experience in other provinces or the center perform worse, are less open, have higher share of SOE employment, and shift more revenues off budget compared to provinces with party secretaries who built their careers within the province. The magnitude of these effects is large even after we control for differences in fiscal incentives of provinces, career concerns of provincial leaders, cross-province variation, and macroeconomic trends. The results contradict the "local capture" hypothesis, which predicts that "home-grown" provincial leaders are more influenced by local vested interests. The results are consistent with a combination of two (not mutually-exclusive) explanations: differences in central entrenchment and differences in preferences.

**Key words:** China, federalism, career concerns

**Журавская Е.В., Перссон П.** Стимулы или подноготная партийных лидеров? Факторы, определяющие экономическую политику в Китае / Препринт # WP/2008/084 - М.: Российская Экономическая Школа, 2008. – 33 с. (Англ.)

Различия в экономическом росте и политике Китайских провинций во многом объясняются биографиями лидеров провинций, то есть «первых секретарей обкомов» партии. Провинции под руководством первых секретарей с опытом работы в других регионах или в центре растут более низкими темпами, менее открыты, имеют более высокий уровень занятости на гос предприятиях и менее транспарентные государственные финансы по сравнению с провинциями под руководством первых секретарей, построивших карьеру в провинции. Эти различия вылики даже после учета разницы в бюджетных и политических стимулах, а также фискированных эффектов по времени и для провинций. Результаты отвергают гипотезу о «захвате власти местными элитами».

**Ключевые слова:** Китай, федерализм, карьерные стимулы

**ISBN**

© Журавская Е.В., 2008 г.

© Российская экономическая школа, 2008 г.

# 1 Introduction

Chinese amazing economic performance over the last 30 years has attracted much attention among fiscal federalism scholars. Many works have attributed Chinese success to the structure of incentives provided by the system of inter-governmental relations.<sup>1</sup>

It has been widely argued that the local and provincial governments were the ones who fostered growth by providing growth-enhancing public goods.

Literature names two alternative sources of high-powered incentives of Chinese subnational public officials:

First, Oi (1992) and Montinola, Qian and Weingast (1995) (among others) argued that “fiscal incentives” (i.e., long-term revenue-sharing contracts that affectively make provincial governments residual claimants on marginal tax collections) were the source of Chinese growth. Jin, Qian and Weingast (2005) have shown empirically that power of fiscal incentives was correlated with growth-promoting reforms in Chinese provinces.

Second, Blanchard and Shleifer (2001) applied theory of Riker (1964) to Chinese development and argued that “political incentives” (i.e., career concerns for promotion to the higher-level positions within the communist party hierarchy) are the main determinant of the Chinese miracle. Related argument was put forward by Qian and Xu (1993) and Maskin, Qian and Xu (2000) who argued that government incentives are created by yardstick competition among provincial leaders. Li and Zhou (2005) and Chen, Li and Zhou (2005) found empirical support to the political incentives argument by showing that the main criteria of promotion and demotion of provincial government officials in China have been the provincial growth performance relative to the average performance and to performance under the predecessor.

Performance of Chinese provinces, however, varies a great deal even after one controls for both political and fiscal incentives. The goal of this paper is to use this variation to study

---

<sup>1</sup>See, for instance, Montinola, Qian and Weingast (1995); Qian and Roland (1998); Maskin, Qian and Xu (2000); Qian and Weingast (1996).

the origin of different governance styles.

Which factors could potentially influence subnational policies once fiscal and (performance-based) political incentives are taken into account? First, the degree of local capture may differ, i.e., local leaders may have different degree of susceptibility to vested interests' influence, which in turn, would result in differential performance.<sup>2</sup> Second, skills and knowledge of provincial leaders should have an effect on their policy choices. Third, innate preferences of government officials over policy space may differ (as they do for company CEOs as Bertrand and Schoar (2003) show). Finally, career concerns may have determinants in addition to growth performance. For example, provincial officials with special connections to the central authorities, e.g., those who went to Tsinghua University with Hu Jintao or worked in Shanghai with Jiang Zemin, may face very different political incentives compared to officials with no such special ties to the center.<sup>3</sup>

We attempt to shed light on these different theories by looking at how performance and policies in Chinese provinces depend on backgrounds of the top province officials—provincial party secretaries.

We find that work histories of provincial party secretaries (prior to their current positions) have a significant impact on provincial performance and public policies after controlling for cross-sectional differences among provinces with province fixed effects and macroeconomic trends with time dummies.

Party secretaries who made their careers within the province perform significantly better than party secretaries who have work experience in the center or several other provinces. Provinces under the leadership of “home-grown” party secretaries on average achieve one percentage point faster annual growth than provinces with party secretaries who previously worked in the center or in several other provinces.

---

<sup>2</sup>The basic argument is due to Buchanan and Tullock (1962); Stigler (1971); Olson (1982). For recent empirical applications to fiscal federalism, see Slinko, Yakovlev and Zhuravskaya (2005) and Gennaioli and Rainer (2007).

<sup>3</sup>For example, Russia's president Vladimir Putin has promoted his college friends to close-to-all key positions in the Russian government.

Policies also differ with leader’s background. Most strikingly, “outsider” party secretaries (both those with experience in the center and with experience in other provinces) hide significantly higher shares of provincial revenue in untransparent off-budget funds and maintain significantly higher share of industrial employment in state-owned enterprizes compared to “home-grown” party secretaries.

Interestingly, backgrounds in the center and in other provinces have the opposite effects on the composition of government expenditure: party secretaries transferred from the center allocate larger share of provincial budgets to social spending and smaller share to capital investment compared to home-grown party secretaries, while the opposite is true for comparison of party secretaries transferred from other provinces and “home-grown” party secretaries.

In addition, policies of party chiefs who came from other provinces results in lower private sector employment.

We perform a number of checks to ensure robustness of these results. First, we show that the results are not driven by endogeneity of appointments by looking at subsample of changes in provincial leadership that occurred due to exogenous reasons, such as term and age limits. Second, we show that the difference between party chiefs that come from other provinces and “home-grown” party chiefs in provincial performance, openness, shift of revenue off-budget, and composition of budget spending is not driven by innate preferences of different individuals choosing different career paths. We use the fact that a number of party secretaries in our sample served in two different provinces at different points in time. On the subsample of provinces which share the same individuals as leaders, we run regressions controlling for individual fixed effects in addition to province and year fixed effects. We find that the same individuals perform worse, shift more revenue off budget, have lower export share, lower share of social spending and higher share of investment spending when they become party secretaries the second time around. Yet, our results about the SOE and private employment shares may be driven by self-selection of people into different career

paths, as the second-time party secretaries have lower SOE and higher private employment.

It is worth noting that in all our regressions we directly control for fiscal incentives with marginal retention rates and for political incentives related to relative performance evaluation with predecessor’s performance.

Our results help differentiating between different public choice theories of subnational governance. First, local capture hypothesis which implies that “home-grown” party secretaries (having closer relations to local vested interests) should have lower performance and maintain higher favors to vested interests, e.g., SOE enterprises, is inconsistent with our findings.

Second, we attempt to test for the three theories which are consistent with our baseline results: (i) “outsider” lack of local knowledge and networks hypothesis which implies a learning and establishment of network period for “outsiders”; (ii) central entrenchment hypothesis which implies lower power of career concerns for “outsiders”; and (iii) differences in preferences which implies that “home-grown” party chiefs care about populations of their province.

We find little support to the lack of knowledge and networks hypothesis; while both the central entrenchment and the difference in preferences hypotheses find some support in the data.

Our results have important parallels in corporate governance literature. Corporate policies and performance have been found to depend on the background of CEOs controlling for their incentives (see, for instance, Bertrand and Schoar (2003) and Barberis et al. (1996)).

## 2 Data

### 2.1 Data Sources

The main goal of our empirical exercise is to estimate the relationship between backgrounds of the top Chinese provincial officials—provincial party chiefs—and provincial performance

and public policies.

We collected data on provincial party secretary backgrounds and economic and policy outcomes for 30 Chinese provinces (all except Tibet) for 26 years, from 1980 to 2005, resulting in 755 province\*year observations.<sup>4</sup>

Information on backgrounds of party secretaries (place and year of birth, place and level of studies, work histories, and current affiliations) came from various sources, primarily in Chinese language. The main sources are “Whos Who in the Chinese Communist Party,” the *Peoples Daily*, and the website of the Center for China Studies at the NCCU in Taipei, Taiwan.<sup>5</sup> We also used the official government portal of the Government of the People’s Republic of China, [www.gov.cn](http://www.gov.cn) and, occasionally, other web resources.

We relate party chiefs backgrounds to the following performance indicators and policy outcomes: provincial performance, measured by log growth of gross provincial product (GPP); openness, measured by export share in GPP; private and state industrial sector development, measured by the share of employment in private and state-owned industrial enterprises<sup>6</sup>; off-budget revenue as a share of total revenue; and shares of provincial public spending allocated to social and investment expenditure. Information on policy outcomes comes from Chinese Official Statistical Abstracts. Summary statistics for our outcome variables are given in Table A.1 in Appendix. All monetary variables are in real terms.

## 2.2 Backgrounds of Party Chiefs

161 different individuals served as party secretaries of Chinese provinces during our sample period.

Our main focus is on the work histories of these party secretaries. We collected information on whether party secretaries worked in the central government or central party organs

---

<sup>4</sup>Data on Chongqing start from 1997, when it was separated from Sichuan and became a self-governed municipality.

<sup>5</sup>The CCS’s website is <http://ics.nccu.edu.tw/newweb/eng/index.php>.

<sup>6</sup>Private employment is recorded by official Chinese statistics as employment of “other” enterprises, i.e., not SOEs, TVEs, or collectives.

or other provinces, whether they had prior experience of working in the province where they currently serve as party secretaries. In the data for work histories, we distinguish between any-level positions and high positions. High position in the center is defined as deputy minister or higher; high position in a province is defined as deputy governor, deputy party secretary or higher.

In addition, for each point in time, we collected information on the length of tenure of party secretaries, politburo membership, the place of birth and study, the level of education, age, whether party secretaries belonged to a “favored faction,” i.e., had a Shanghai connection in the Jiang Zemin times or Tsinghua connection since Hu Jintao became the leader of China.

Figure 1 summarizes selected indicators of background for 161 individuals who serves as party secretaries in our sample period. Their maximum tenure as a party chief in a particular province varied from 1 to 12 years. 22 of the 161 individuals served as party chiefs in two different provinces during our sample period. Table 1 presents summary statistics of all variables describing party secretary backgrounds for the 755 province\*year observations.

### 3 Baseline results

First, we estimate the following OLS panel regressions with province and year fixed effects:

$$I_{pt} = \phi_p + \rho_t + \alpha_1 C_{pt} + \alpha_2 O_{pt} + \alpha_3 F_{pt} + \alpha_4 P_{pt} + \alpha'_5 \mathbf{B}_{pt} + \alpha_6 Y_{p,t-1} + \varepsilon_{pt}, \quad (1)$$

where  $p$  indexes provinces;  $t$  indexes years;  $\phi_p$  and  $\rho_t$  are the province and time fixed effects, respectively.

$I$  stands for policy outcome and performance variables (as listed in section 2.2). Our main focus is on coefficients on variables  $C$  and  $O$  variables.  $C$  denotes the dummy for whether the party secretary in province  $p$  worked in the center and  $O$  stands for one of the following variables describing party secretary’s work experience in other provinces: dummy



for whether the party secretary worked in another province, whether he worked in more than one other province, and the number of provinces party secretary worked in. We run two sets of regressions: one in which  $C$  and  $O$  variables account for positions at all level, and the other, in which these two variables take into account only high-level positions. We also try specifications where we do not make a distinction between work in the center and in other provinces, lumping them together and estimating the effect of work experience outside the province  $p$ .

We control for a number of characteristics of party secretaries with the vector  $\mathbf{B}$ ; it includes tenure, dummy for higher education, dummy for politburo membership, dummies for being born and studied in the province  $p$ , and age.

It is important to control for fiscal incentives and political incentives, as they have been shown to affect outcomes we are interested in. We control for fiscal incentives with the marginal retention rate ( $F$ ) which was the main variable used by Jin et al. (2005).  $F$  varies from .08 to 1 and represents the fraction of marginal local tax revenues that the province can keep in local budget (instead of directing it to the center). In addition, we control for the average performance (GPP growth) of the party secretary's predecessor. This variable accounts for the exogenous (from the point of view of the current party secretary) variation in political incentives, since as Chen, Li and Zhou (2005) show, party secretaries are evaluated on the basis of provincial growth under their own leadership relative to provincial growth under their predecessor's leadership. Finally, we control for the level of provincial development with the lagged value of the log gross provincial product per capita ( $Y_{p,t-1}$ ).

Baseline results are presented in Tables 2 - 8; each table presents the results for a particular policy outcome. The signs of estimated coefficients are summarized in the first five columns of Table A.2.

We find that work histories of party secretaries have a large and statistically significant effect on performance and public policies.

Regressions presented in Table 2 show that work experience in the center has a significant

negative effect on provincial growth rate. Work experience in other provinces is insignificant, but the number of provinces and the dummy for work experience in more than one province (not reported) are negative and significant. Table 3 shows similar result for our openness measure; here, however, work experience in the center has a negative effect only for higher positions. Table 4 presents results for the share of employment in state-owned enterprises, it increases when a party secretary is transferred from another province and from a high position in the center. In contrast, private employment share decreases with a transfer of party chief from another province, but increases with a transfer from the center (see Table 5). Share of revenue hidden from the center in off-budget funds is also strongly related to party secretary background: those party secretaries with work experience in the center and in other provinces shift significantly large share of revenue off-budget compared to party secretaries who made their career within the province. Tables 7 and 8 present the effect of party secretaries' backgrounds on the composition of public spending. Work experience in the center increases social expenditure share and decreases investment expenditure share; whereas work experience in other provinces decreases social expenditure share and increases investment expenditure share.

It is worth noting that our control variables behave as expected. In particular, marginal retention rate is a significant predictor of policy outcomes. Higher education and politburo membership also have a significant effect on some of the outcomes. The signs of the coefficients on control variables are as one would expect.

What is the interpretation of these results? First thing to note is that "local capture" theory does not seem to be consistent with these findings. According to "local capture" hypothesis, "home-grown" party secretaries should have stronger ties to local vested interests than party secretaries transferred from other provinces or the center. Therefore, this theory predicts that "home-grown" party secretaries should perform worse (according to Olson, 1982); should shift more revenues to untransparent off-budget funds; which, presumably, make it easier to channel funds to the special interests; and possibly, maintain higher levels

of SOE employment as SOEs are likely to be an important interest group. We observe the opposite relationship. Below we consider a number of explanations for our baseline results.

## 4 Theories explaining baseline results

### 4.1 Lack of local knowledge and networks

One can suppose that it takes time for the “outsiders” to learn how to govern the province and develop relationship with other important players in the province (i.e., SOE directors). This hypothesis implies lower performance and exports, patronage in the form of SOE employment, shifting revenue off budget (to buy-off SOE enterprises) just as the data show.

One clear-cut prediction of this story is that the difference between “outsider” party secretaries and “home-grown” party secretaries should decrease with tenure as “outsiders” learn and establish relationship with other key players in the province. We test this prediction by including an interaction of tenure with the variables describing party secretary’s work experience ( $C$  and  $O$ ) into specification (1). Table 9 presents the results. Contrary to the prediction of this theory, the effect of work experience in other provinces significantly increases (rather than decreases) with tenure for SOE and private employment shares and the share of off-budget revenues. Tenure does not affect the difference between “coming-from-other-province” party secretaries and “home-grown” party secretaries for other outcomes. We also find that tenure strengthens the effect of work experience in the center for shift of revenue off-budget and the composition of public spending. Tenure, however, has the opposite effect on the difference between SOE and private employment shares for “home-grown” party secretaries and those with work experience in the center. The effect of “outsiders” on performance is unaffected by tenure. Overall, this prediction does not find a solid support in the data.

Another clear-cut prediction of the lack of local knowledge and networks story is that the difference between “outsiders” and “insiders” should come from not having experience

in this province, rather than having experience in other provinces. To test this, we run the same type of regression, but including two interactions: one of having experience working in the center and not having experience of working in this province and the other of having experience working in other provinces and not having experience of working in this province. Table 10 presents the results. The first and the third rows of coefficients represent effect of having work experience in the center and other provinces (respectively) given that the party secretary also has experience in this province; while the second and the fourth rows of coefficients represent the difference in the effects of having “outside” experience for those who had no prior experience of working in this province and for those who did work in this province. It is clear that most of the variation between “insiders” and “outsiders” comes from having experience elsewhere rather than having no experience in this province in contrast to the prediction of lack of local knowledge story. Overall, the data clearly reject this hypothesis.

## 4.2 Central entrenchment

Another possible explanation for the results has to do with differences in political connections of the “home-grown” and “outsider” party secretaries. Work in the center and other provinces (and the mere fact of being transferred to this province from elsewhere) may be an indication of a relational capital with the central authorities. Since “home-grown” party secretaries still need to earn this relational capital, they have higher incentives to perform than those who already have made themselves known in the center.

Since party secretaries who worked in the center, presumably, have better connections to the central authorities than those who served in other provinces but did not work in the center, the central entrenchment story predicts that work experience in the center should have a negative effect on party secretary performance not only compared to “home-grown” party secretaries, but also compared to party secretaries transferred from other provinces. Indeed, this is what we find: work in the center has bigger in magnitude and more significant

(negative) effect on growth compared to party secretaries with work experience in other provinces (the difference between the magnitude of the two effects is statistically significant). The difference disappears if we consider work experience in more than one other province (its effect is negative, statistically significant, and equal in magnitude to the effect of work in the center.) This is consistent with the central entrenchment story because those party secretaries who were transferred from one province to another several times probably had more opportunities to establish long-term relationship with the central authorities. Overall, we can not reject this story; it is consistent with the evidence on provincial performance. Yet, it cannot be the whole story because it does not explain the differences between the effects of work experience in the center and in other provinces regarding private employment and composition of public spending.<sup>7</sup>

### 4.3 Difference in preferences

One could also argue that “home-grown” party secretaries simply care about their province more and, that is why, they have better performance, more transparent government finances, and larger social expenditure than party secretaries transferred from other provinces. This story is perfectly consistent with the findings; but it also does not explain the difference between the effects of the work in the center and of the work in other provinces. Generally, anything can be explained by the differences in preferences, and therefore, one can explain the difference between party secretaries with experience in the center and with experience in the other provinces with differences in their preferences. If, however, politburo membership (30 party secretaries, 100 province\*year observations) may serve as a proxy for preferences

---

<sup>7</sup>We considered a couple of additional tests to verify central entrenchment story. First, one could argue that experience in high positions should mean more for relational capital with the center than experience in low positions. We find no robust difference between the effect of high and low positions on the difference between “insiders” and “outsiders.” It, however, may be the case that our definition of high positions (i.e., deputy minister level or higher for the center and deputy governor or higher for provinces) is too restrictive. Second, we checked whether the members of a “favored faction,” i.e., members of “Tsinghua Clique” and “Shanghai Gang” while their respective patrons were in office, have the same effect as “outsider” party secretaries, but found no statistically significant effect of favored faction on the outcomes (not reported for conciseness). This, however, is not surprising considering that only 14 party secretaries (70 province\*year observations) were the members of favored factions.

of the center, we can check whether politburo members from other provinces and party secretaries transferred from the center have similar preferences. Indeed, this is what we find: there are no statistically significant differences in effects of politburo members from other provinces and party secretaries transferred from the center (not reported for conciseness).

Overall, data seem to be consistent with some combination of central entrenchment and difference in preferences.

#### 4.4 Selection bias due to innate individual preferences

One should worry about the possibility that the difference between “insiders” and “outsiders” are driven by the innate differences in preferences of different individuals that chose different career paths. (For example, Bertrand and Schoar (2003) show that much of the differences in CEO’s governance styles are individual rather than company specific and are explained by individual fixed effects.) One could imagine a similar pattern for governance styles of party secretaries.

To check whether our results are driven by differences in innate preferences of individuals, we run regressions controlling for individual fixed effects in addition to province and year fixed effects on the subsample of provinces which share the same individuals as leaders.

We estimate the following regression equation with OLS:

$$I_{pti} = \phi_p + \rho_t + \theta_i + \alpha_1 S_{pti} + \alpha_2 F_{pt} + \alpha_3' \mathbf{B}_{pti} + \alpha_4 Y_{p,t-1} + \varepsilon_{pti}, \quad (2)$$

where  $i$  indexes individuals; and  $S$  denotes a dummy for the second term as party secretary (in a different province). The rest of the notation is as above, with the only exception  $\mathbf{B}$  does not include time-invariant individual characteristics (as they are controlled for my individual fixed effects).

Table 11 presents the results. We find that the same individuals perform worse, shift more revenue off budget, have lower export share, lower share of social spending and higher

share of investment spending when they become party secretaries the second time around. This is consistent with the results of baseline regressions about the differences between party secretaries with experience in other provinces and “home-grown” party secretaries.

In contrast, our baseline results about the SOE and private employment shares may be driven by self-selection of people into different career paths, as the second-time party secretaries have lower SOE and higher private employment (these results are the opposite to the effect of experience in other provinces from regressions without person fixed effects). Therefore, one should treat the results about employment shares with caution. (Table A.2 compares the results of baseline specification and of specification with individual fixed effects, which are presented in the last column of the table.)

## 4.5 Selection bias related to endogeneity of appointments

Throughout the analysis, we have treated party secretary appointments as exogenous. Could our results be driven by selection biases related to endogeneity of appointments?

There are two potential sources of selection:

First, party secretaries may get promoted to the central government or moved to another province if they perform really well or can get sacked if perform really poorly. (The link between province leaders’ performance and their turnover was documented in Li and Zhou (2005) and Chen, Li and Zhou (2005).) Then, the governors of the same province often automatically get promoted to the party secretary position to replace the (promoted or sacked) predecessor. One should expect a mean reversion pattern after such change in province leadership since it was driven by the exceptional performance of the previous leader. We should, particularly, worry about the situations when party secretaries were sacked because the mean reversion in this case biases the results in our favor.

Ways out:

First, we address this issue by restricting the sample to changes in leadership occurred due to exogenous reasons: 10-year term limits, 65 years-old age ceiling, and death. Table

12 presents the results of the estimation of baseline specification on such a subsample. The results for the effect of work experience in other provinces are robust. As far as the results for the work experience in the center, the most robust results turned out to be about shifting revenue off budget and maintaining high SOE employment. Other results lost statistical significance. This loss of statistical significance may, however, be driven by a drastic reduction in the number of observations.

Second, we control for previous party secretariess performance and previous party secretariess performance compared to his own predecessor. We include the performance of the immediate predecessor in all regressions of the baseline specification. We also tried to control for predecessor's performance relative to his own predecessor (not reported for conciseness). Inclusion or exclusion of these controls do not affect our results.

The second source of selection is as follows. Officials from the center and other provinces may be transferred to worse-performing regions in order to fix the crisis. Since we control for the average and the prior regional performance, such selection should not create a problem for our results as long as the central authorities do not make their decisions on the basis of expected future performance. If, in contrast, central officials can predict future crises, our results would be biased. We, however, are very skeptical about the ability of the center to forecast provincial performance and react before the change in performance actually occurred. Governments all over the world have very bad records in forecasting crises; and it is particularly hard for the central government to make a good forecast of subnational crises because it is against the interests of local authorities to provide necessary information to the center.

It is important to note that the story of central appointments to cope with upcoming crisis is inconsistent with the fact that "outsiders" shift more revenues away from the central control to to off-budget funds.

Thus, we conclude that our results are not driven by endogeneity of party secretaries' appointments.



## 5 Conclusions

Backgrounds of the party secretaries have an important effect on provincial performance and economic policies. Variables describing work histories of party secretaries add 2 to 5 percentage points to the adjusted overall R-squared in the province fixed effects regressions.

Provincial party secretaries transferred from other provinces perform worse, are less open, have higher share of SOE employment, and shift more revenues off budget.

The magnitude of these effects is large even after we control for differences in fiscal incentives and career concerns. Provinces under the leadership of “home-grown” party secretaries on average achieve one percentage point faster annual growth than provinces with party secretaries who previously worked in the center or in several other provinces.

The results contradict the “local capture” hypothesis, which predicts that “home-grown” governors are more subject to influence of local vested interests.

We provide evidence against the view that the differences in performance and policies of “insider” and “outsider” party secretaries can be explained by the outsider’s lack of local knowledge and local networks.

A lot more research is needed to understand the sources of difference between “insider” and “outsider” party secretaries. But our preliminary analysis suggests a combination of two theories: differences in preferences and central entrenchment.

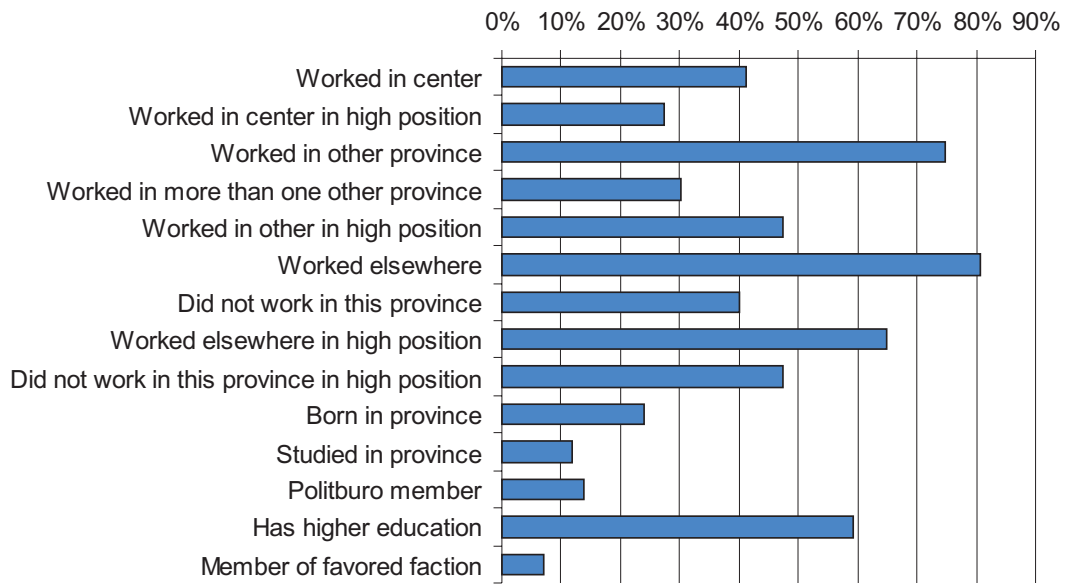
This work is preliminary; we plan to include data on governors.

## References

- Barberis, Nicholas, Maxim Boycko, Andrei Shleifer and Natalia Tsukanova. 1996. "How Does Privatization Work? Evidence from the Russian Shops." *Journal of Political Economy* 104(4):764–90.
- Bertrand, Marianne and Antoinette Schoar. 2003. "Managing With Style: The Effect Of Managers On Firm Policies." *The Quarterly Journal of Economics* 118(4):1169–1208.
- Blanchard, Olivier and Andrei Shleifer. 2001. Federalism With and Without Political Centralization: China versus Russia. In *IMF Staff Paper: Transition Economies: How Much Progress?*
- Buchanan, James .M. and Gordon Tullock. 1962. *The Calculus of Consent*. Ann Arbor: niversity of Michigan Press.
- Chen, Ye, Hongbin Li and Li-An Zhou. 2005. "Relative performance evaluation and the turnover of provincial leaders in China." *Economics Letters* 88(3):421–425.
- Gennaioli, Nicola and Ilia Rainer. 2007. "The modern impact of precolonial centralization in Africa." *Journal of Economic Growth* 12(3):185–234.
- Jin, Hehui, Yingyi Qian and Barry R. Weingast. 2005. "Regional decentralization and fiscal incentives: Federalism, Chinese style." *Journal of Public Economics* 89(9-10):1719–1742.
- Li, Hongbin and Li-An Zhou. 2005. "Political turnover and economic performance: the incentive role of personnel control in China." *Journal of Public Economics* 89(9-10):1743–1762.
- Maskin, Eric, Yingyi Qian and Chenggang Xu. 2000. "Incentives, Information, and Organizational Form." *Review of Economic Studies* 67(2):359–78.
- Montinola, Gabriella, Yingyi Qian and Barry R. Weingast. 1995. "Federalism, Chinese Style: The Political Basis for Economic Success in China." *World Politics* 48:50–81.
- Oi, Jean C. 1992. "Fiscal Reform and the Economic Foundations of Local State Corporatism in China." *World Politics* 45(1):99–126.
- Olson, Mancur. 1982. *The Rise and Decline of Nations: Economic Growth, Stagflation, and Social Rigidities*. New Haven, CT: Yale University Press.
- Qian, Yingyi and Barry Weingast. 1996. "China's Transition to Markets: Market-Preserving Federalism, Chinese Style." *Journal of Policy Reform* 1(2):149–185.
- Qian, Yingyi and Chenggang Xu. 1993. "Why China's Economic Reforms Differ: The M-form Hierarchy and. Entry/Expansion of the Non-state Sector." *Economics of Transition* 1(2):135–170.
- Qian, Yingyi and Gerard Roland. 1998. "Federalism and the Soft Budget Constraint." *American Economic Review* 88(5):1143–62.

- Riker, William H. 1964. *Federalism: Origins, Operation, Significance*. Boston, MA: Little, Brown and Co.
- Slinko, Irina, Evgeny Yakovlev and Ekaterina Zhuravskaya. 2005. "Laws for Sale: Evidence from Russian Regions." *American Law and Economics Review* 7(1):284–318.
- Stigler, George J. 1971. "The Theory of Economic Regulation." *Bell Journal of Economics* 2(1):3–21.

**Figure 1: Backgrounds of Provincial Party Chiefs**



The figure presents percentage for 161 individuals

**Table 1: Summary Statistics for Party Secretary Backgrounds**

Variable	Obs	Mean	Std.Dev.	Min	Max
Worked in center	755	0.32	0.47	0	1
Worked in center in high position	755	0.20	0.40	0	1
Worked in other province	755	0.70	0.46	0	1
Number of provinces worked in	755	1.99	1.00	1	5
Worked in more than one other province	755	0.28	0.45	0	1
Worked in other in high position	755	0.48	0.50	0	1
Worked elsewhere	755	0.75	0.43	0	1
Did not work in this province	755	0.38	0.49	0	1
Worked elsewhere in high position	755	0.61	0.49	0	1
Did not work in this province in high position	755	0.48	0.50	0	1
Born in province	755	0.27	0.45	0	1
Studied in province	753	0.14	0.35	0	1
Tenure in current position	755	3.28	2.19	1	12
Politburo member	750	0.13	0.34	0	1
Age	755	60.61	5.67	27	79
Has higher education	752	0.56	0.50	0	1
Member of favored faction	755	0.09	0.28	0	1

**Table 2: Growth rate of Gross Provincial Product**  
Province and Year Fixed Effects Regressions

	GPP growth rate		
	In all positions	In high positions	
Worked in center	-0.011 [2.83]***	-0.012 [3.06]***	-0.009 [1.90]*
Worked in other province	-0.001 [0.20]		-0.001 [0.14]
Number of provinces worked in			
Worked elsewhere		-0.004 [2.02]**	
Did not work in province		-0.010 [2.39]**	-0.007 [1.78]*
Marginal Retention Rate	0.049 [4.74]***	0.050 [4.89]***	0.048 [4.61]***
Performance of predecessor	-0.019 [0.33]	-0.007 [0.12]	-0.017 [0.29]
Tenure	0.001 [0.51]	0.001 [0.39]	0.001 [0.64]
Higher education	0.008 [1.62]	0.008 [1.65]*	0.008 [1.63]
Politburo member	0.000 [0.04]	0.000 [0.07]	0.000 [0.04]
Born in province	0.001 [0.32]	-0.001 [0.30]	0.000 [0.20]
Studied in province	-0.002 [0.43]	-0.004 [0.68]	-0.002 [0.40]
Age	0.000 [0.89]	0.000 [0.72]	0.000 [1.14]
Lagged GPP per capita	-0.065 [5.58]***	-0.063 [5.41]***	-0.066 [5.52]***
Province FE	Yes***	Yes***	Yes***
Year FE	Yes***	Yes***	Yes***
Observations	738	738	738
Adjusted Overall R-sqrd	0.32	0.32	0.31

Note: Dependent variable is expressed in logarithm. Absolute values of t-statistics are in brackets. Standard errors are adjusted for heteroscedasticity. \* significant at 10%; \*\* significant at 5%; \*\*\* significant at 1%.

**Table 3: Export share in Gross Provincial Product**  
Province and Year Fixed Effects Regressions

	Export share in GPP		
	In all positions	In high positions	
Worked in center	0.013 [0.30]	-0.008 [0.17]	-0.162 [3.16]***
Worked in other province	-0.120 [3.18]***		-0.020 [0.54]
Number of provinces worked in			
Worked elsewhere	-0.041 [2.03]**		
Did not work in province		-0.121 [2.63]***	-0.116 [2.87]***
Did not work in province		-0.054 [1.46]	-0.045 [1.32]
Marginal Retention Rate	-0.443 [3.60]***	-0.413 [3.40]***	-0.460 [3.75]***
Performance of predecessor	0.505 [0.76]	0.657 [0.96]	0.353 [0.53]
Tenure	0.006 [0.85]	0.009 [1.27]	0.008 [1.12]
Higher education	0.151 [3.79]***	0.157 [3.99]***	0.126 [3.20]***
Politburo member	0.044 [0.85]	0.047 [0.90]	0.030 [0.59]
Born in province	-0.195 [3.69]***	-0.179 [3.64]***	-0.150 [2.86]***
Studied in province	0.031 [0.61]	0.021 [0.41]	0.059 [1.23]
Age	0.005 [1.49]	0.004 [1.21]	0.003 [0.91]
Lagged GPP per capita	0.569 [4.36]***	0.570 [4.26]***	0.588 [4.46]***
Province FE	Yes***	Yes***	Yes***
Year FE	Yes***	Yes***	Yes***
Observations	736	736	736
Adjusted Overall R-sqrd	0.84	0.84	0.84

Note: Dependent variable expressed in logs. Absolute values of t-statistics are in brackets. Standard errors are adjusted for heteroscedasticity. \* significant at 10%; \*\* significant at 5%; \*\*\* significant at 1%.

**Table 4: State-owned enterprises share of employment**

	Province and Year Fixed Effects Regressions		SOE employment share	
	In all positions		In high positions	
Worked in center	-0.004 [1.02]	0.001 [0.24]	0.009 [1.95]*	
Worked in other province	0.023 [6.03]***		0.008 [2.41]**	
Number of provinces worked in		0.009 [5.30]***		
Worked elsewhere		0.017 [4.09]***	0.012 [3.71]***	
Did not work in province				0.008 [3.07]***
Marginal Retention Rate	-0.047 [4.37]***	-0.053 [4.96]***	-0.049 [4.56]***	-0.047 [4.43]***
Performance of predecessor	-0.135 [3.08]***	-0.167 [3.91]***	-0.128 [3.03]***	-0.138 [3.26]***
Tenure	0.000 [0.33]	0.000 [0.50]	0.000 [0.42]	-0.001 [0.40]
Higher education	0.002 [0.58]	0.001 [0.18]	0.003 [0.94]	0.004 [1.04]
Politburo member	-0.024 [4.31]***	-0.024 [4.45]***	-0.022 [4.04]***	-0.022 [4.06]***
Born in province	0.014 [3.81]***	0.012 [3.29]***	0.008 [2.17]**	0.009 [2.67]***
Studied in province	0.004 [0.67]	0.006 [1.04]	0.003 [0.42]	0.003 [0.52]
Age	0.000 [0.36]	0.000 [0.89]	0.000 [1.26]	0.000 [1.56]
Lagged GPP per capita	-0.075 [6.62]***	-0.075 [6.33]***	-0.072 [6.06]***	-0.072 [5.91]***
Province FE	Yes***	Yes***	Yes***	Yes***
Year FE	Yes***	Yes***	Yes***	Yes***
Observations	712	712	712	712
Adjusted Overall R-sqrd	0.89	0.88	0.88	0.88

Note: Absolute values of t-statistics are in brackets. Standard errors are adjusted for heteroscedasticity. \* significant at 10%; \*\* significant at 5%; \*\*\* significant at 1%.



**Table 5: Private sector share of employment**  
Province and Year Fixed Effects Regressions

	Private employment share		
	In all positions		In high positions
Worked in center	0.012 [2.85]***	0.009 [2.22]**	0.007 [1.14]
Worked in other province	-0.029 [7.84]***		-0.009 [2.30]**
Number of provinces worked in		-0.012 [6.55]***	
Worked elsewhere		-0.023 [5.59]***	-0.010 [2.65]***
Did not work in province			-0.012 [3.10]***
Marginal Retention Rate	0.085 [6.61]***	0.091 [7.18]***	0.093 [6.76]***
Performance of predecessor	0.053 [0.85]	0.064 [1.03]	0.053 [0.78]
Tenure	-0.001 [1.24]	0.000 [0.31]	0.000 [0.25]
Higher education	0.004 [0.88]	0.007 [1.72]*	0.004 [0.87]
Politburo member	0.026 [4.93]***	0.027 [5.11]***	0.025 [4.69]***
Born in province	-0.014 [3.08]***	-0.010 [2.10]**	-0.005 [1.04]
Studied in province	0.000 [0.00]	-0.004 [0.71]	0.000 [0.01]
Age	0.000 [0.81]	0.000 [0.52]	0.000 [0.43]
Lagged GPP per capita	0.202 [13.03]***	0.201 [12.32]***	0.197 [11.10]***
Province FE	Yes***	Yes***	Yes***
Year FE	Yes***	Yes***	Yes***
Observations	597	597	597
Adjusted Overall R-sqrd	0.92	0.91	0.91
			-0.006 [1.72]*
			0.085 [6.76]***
			0.029 [0.43]
			0.000 [0.04]
			0.004 [0.04]
			0.089 [0.89]
			0.024 [4.61]***
			-0.003 [0.68]
			0.003 [0.53]
			0.000 [0.25]
			0.205 [11.54]***
			Yes***
			Yes***
			597
			0.91

Note: Dependent variable expressed in logs. Absolute values of t-statistics are in brackets. Standard errors are adjusted for heteroscedasticity. \* significant at 10%; \*\* significant at 5%; \*\*\* significant at 1%.

**Table 6: Share of revenue off-budget**  
Province and Year Fixed Effects Regressions

	Share of revenue off-budget	
	In all positions	In high positions
Worked in center	0.020 [3.45]***	0.026 [3.30]***
Worked in other province	0.019 [3.28]***	0.012 [2.25]**
Number of provinces worked in	0.014 [4.85]***	
Worked elsewhere	0.033 [5.49]***	0.019 [3.43]***
Did not work in province		0.001 [0.26]
Marginal Retention Rate	0.168 [8.32]***	0.165 [7.88]***
Performance of predecessor	-0.307 [3.30]***	-0.320 [3.30]***
Tenure	0.002 [1.58]	0.001 [1.13]
Higher education	0.006 [1.02]	0.006 [0.91]
Politburo member	-0.040 [4.16]***	-0.043 [4.37]***
Born in province	0.014 [2.18]**	0.015 [2.21]**
Studied in province	-0.026 [3.40]***	-0.023 [3.09]***
Age	-0.001 [1.51]	-0.001 [1.00]
Lagged GPP per capita	0.149 [7.25]***	0.158 [7.83]***
Province FE	Yes***	Yes***
Year FE	Yes***	Yes***
Observations	642	642
Adjusted Overall R-sqrd	0.72	0.72

Note: Dependent variable expressed in logs. Absolute values of t-statistics are in brackets. Standard errors are adjusted for heteroscedasticity. \* significant at 10%; \*\* significant at 5%; \*\*\* significant at 1%.

**Table 7: Share of provincial expenditure spent on social expenditure**  
Province and Year Fixed Effects Regressions

	Social expenditure share			
	In all positions		In high positions	
Worked in center	0.008 [3.00]***	0.005 [1.97]**	0.003 [0.76]	
Worked in other province	-0.018 [6.46]***		-0.012 [4.79]***	
Number of provinces worked in		-0.005 [3.36]***		
Worked elsewhere		-0.009 [2.95]***		-0.008 [3.15]***
Did not work in province				0.000 [0.19]
Marginal Retention Rate	0.022 [2.95]***	0.026 [3.65]***	0.022 [2.96]***	0.022 [2.96]***
Performance of predecessor	0.075 [2.36]**	0.093 [2.76]***	0.077 [2.37]**	0.071 [2.17]**
Tenure	0.000 [0.84]	0.001 [1.81]*	0.001 [1.37]	0.001 [1.41]
Higher education	-0.006 [1.76]*	-0.005 [1.45]	-0.006 [1.86]*	-0.008 [2.37]**
Politburo member	-0.005 [1.25]	-0.004 [1.10]	-0.005 [1.67]*	-0.006 [1.58]
Born in province	-0.009 [2.87]***	-0.006 [1.78]*	-0.008 [2.28]**	-0.002 [1.65]*
Studied in province	-0.007 [1.86]*	-0.008 [2.11]**	-0.007 [1.90]*	-0.005 [1.30]
Age	0.000 [1.83]*	-0.001 [2.29]**	-0.001 [2.12]**	-0.001 [2.35]**
Lagged GPP per capita	-0.027 [3.18]***	-0.028 [3.18]***	-0.031 [3.48]***	-0.029 [3.19]***
Province FE	Yes***	Yes***	Yes***	Yes***
Year FE	Yes***	Yes***	Yes***	Yes***
Observations	704	704	704	704
Adjusted Overall R-sqrd	0.69	0.67	0.68	0.67

Note: Absolute values of t-statistics are in brackets. Standard errors are adjusted for heteroscedasticity. \* significant at 10%; \*\* significant at 5%; \*\*\* significant at 1%.

**Table 8: Share of provincial expenditure spent on fixed capital investment**  
Province and Year Fixed Effects Regressions

	Fixed capital investment share		
	In all positions	In high positions	
Worked in center	-0.012 [2.77]***	-0.009 [2.40]**	-0.009 [1.78]*
Worked in other province	0.012 [3.51]***		0.017 [4.71]***
Number of provinces worked in		0.003 [1.57]	
Worked elsewhere		0.003 [0.75]	0.007 [1.86]*
Did not work in province			0.009 [3.14]***
Marginal Retention Rate	-0.033 [2.52]**	-0.037 [2.71]***	-0.038 [2.85]***
Performance of predecessor	0.003 [0.07]	-0.008 [0.16]	0.011 [0.22]
Tenure	-0.002 [2.24]**	-0.002 [2.77]***	-0.001 [2.18]**
Higher education	0.011 [2.15]**	0.010 [2.03]**	0.013 [2.43]**
Politburo member	-0.016 [2.34]**	-0.015 [2.19]**	-0.015 [2.12]**
Born in province	0.015 [3.66]***	0.012 [2.91]***	0.012 [2.89]***
Studied in province	-0.001 [0.21]	0.000 [0.05]	-0.003 [0.62]
Age	0.001 [2.26]**	0.001 [2.57]**	0.001 [2.47]**
Lagged GPP per capita	0.047 [3.33]***	0.048 [3.46]***	0.048 [3.39]***
Province FE	Yes***	Yes***	Yes***
Year FE	Yes***	Yes***	Yes***
Observations	711	711	711
Adjusted Overall R-sqrd	0.75	0.75	0.75

Note: Absolute values of t-statistics are in brackets. Standard errors are adjusted for heteroscedasticity. \* significant at 10%; \*\* significant at 5%; \*\*\* significant at 1%.

**Table 9: Interactions with Tenure**  
Province and Year Fixed Effects Regressions

	GPP growth	Export share	SOE empl. share	Private empl. share	Off-budget rev. share	Social exp. share	Investment exp. share
Worked in center	-0.012 [1.87]*	0.079 [1.11]	0.006 [1.05]	-0.004 [0.63]	0.004 [0.45]	0 [0.06]	-0.004 [0.54]
Worked in center X Tenure	0.001 [0.26]	-0.026 [1.32]	-0.003 [2.26]**	0.005 [3.13]***	0.006 [2.16]**	0.003 [2.59]***	-0.003 [1.68]*
Worked in other province	-0.004 [0.60]	-0.093 [1.48]	0.017 [3.23]***	-0.022 [3.84]***	0.007 [0.75]	-0.021 [5.32]***	0.008 [1.45]
Worked in other province X Tenure	0.001 [0.55]	-0.007 [0.52]	0.002 [1.70]*	-0.002 [1.77]*	0.003 [1.67]*	0.001 [1.19]	0.001 [1.20]
Tenure	0 [0.08]	0.016 [1.76]*	0 [0.16]	-0.001 [0.90]	-0.001 [0.77]	-0.001 [0.84]	-0.002 [1.85]*
Marginal Retention Rate	0.049 [4.72]***	-0.456 [3.70]***	-0.049 [4.66]***	0.092 [7.24]***	0.17 [8.29]***	0.022 [3.09]***	-0.035 [2.58]**
Performance of predecessor	-0.017 [0.29]	0.559 [0.85]	-0.107 [2.44]**	0.001 [0.02]	-0.314 [3.58]***	0.064 [2.00]**	0.013 [0.26]
Higher education	0.008 [1.63]	0.148 [3.64]***	0.001 [0.43]	0.003 [0.74]	0.006 [1.02]	-0.007 [2.04]**	0.012 [2.30]**
Politburo member	0 [0.06]	0.046 [0.90]	-0.024 [4.44]***	0.028 [5.30]***	-0.04 [4.21]***	-0.003 [0.94]	-0.017 [2.48]**
Born in province	0.001 [0.26]	-0.196 [3.67]***	0.014 [3.81]***	-0.014 [3.09]***	0.014 [2.17]**	-0.01 [2.99]***	0.015 [3.70]***
Studied in province	-0.003 [0.46]	0.034 [0.67]	0.004 [0.62]	0.001 [0.11]	-0.026 [3.52]***	-0.006 [1.68]*	-0.001 [0.33]
Age	0 [0.88]	0.004 [1.31]	0 [0.03]	0 [0.84]	-0.001 [1.48]	-0.001 [2.05]**	0.001 [2.34]**
Lagged GPP per capita	-0.064 [5.51]***	0.543 [4.14]***	-0.079 [6.93]***	0.209 [13.35]***	0.156 [7.56]***	-0.025 [3.00]***	0.046 [3.24]***
Province FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Year FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Observations	738	736	712	597	642	704	711
Adjusted overall R2	0.32	0.84	0.89	0.92	0.73	0.69	0.75

Note: Absolute values of t-statistics are in brackets. Standard errors are adjusted for heteroscedasticity. \* significant at 10%; \*\*significant at 5%; \*\*\* significant at 1%.

**Table 10: Experience Elsewhere vs. Lack of Experience at Home**  
Province and Year Fixed Effects Regressions

	GPP	Export	SOE	Private	Off-budget	Social	Investment
	growth	share	empl. share	empl. share	rev. share	exp. share	exp. share
Worked in center	-0.009 [1.70]*	0.15 [2.36]**	-0.008 [1.60]	0.018 [2.83]***	0.013 [1.69]*	0.008 [2.29]**	-0.011 [2.70]***
Worked in center and not in this province	-0.003 [0.34]	-0.318 [4.05]***	0.008 [1.03]	-0.013 [1.28]	0.018 [1.50]	-0.001 [0.12]	-0.004 [0.47]
Worked in other province	0 [0.07]	-0.144 [3.17]***	0.021 [4.85]***	-0.028 [6.50]***	0.018 [2.74]***	-0.017 [5.44]***	0.004 [0.95]
Worked in other and not in this province	-0.002 [0.48]	0.101 [2.26]**	0.005 [1.22]	-0.001 [0.20]	-0.002 [0.31]	-0.002 [0.52]	0.019 [3.66]***
Marginal Retention Rate	0.048 [4.54]***	-0.443 [3.65]***	-0.044 [4.12]***	0.083 [6.82]***	0.169 [8.11]***	0.021 [2.78]***	-0.026 [2.04]**
Performance of predecessor	-0.025 [0.42]	0.013 [0.02]	-0.095 [2.07]**	0.013 [0.20]	-0.256 [2.70]***	0.069 [2.06]**	0.027 [0.54]
Tenure	0 [0.54]	0.008 [1.16]	0 [0.51]	-0.001 [1.18]	0.002 [1.43]	0.001 [0.98]	-0.002 [2.38]**
Higher education	0.008 [1.59]	0.138 [3.46]***	0.002 [0.47]	0.003 [0.69]	0.008 [1.34]	-0.006 [1.97]**	0.012 [2.47]**
Politburo member	0 [0.06]	0.025 [0.49]	-0.022 [4.08]***	0.025 [4.59]***	-0.039 [4.10]***	-0.004 [1.19]	-0.015 [2.21]**
Born in province	0.001 [0.13]	-0.181 [3.33]***	0.015 [4.06]***	-0.015 [3.28]***	0.015 [2.19]**	-0.01 [3.00]***	0.019 [4.54]***
Studied in province	-0.002 [0.33]	0.037 [0.75]	0.003 [0.47]	0.002 [0.28]	-0.027 [3.58]***	-0.006 [1.59]	-0.004 [0.97]
Age	0 [0.90]	0.004 [1.11]	0 [0.03]	0 [0.84]	-0.001 [1.30]	-0.001 [1.99]**	0.001 [2.40]**
Lagged GPP per capita	-0.065 [5.48]***	0.609 [4.86]***	-0.078 [6.82]***	0.206 [13.17]***	0.145 [6.65]***	-0.028 [3.23]***	0.05 [3.39]***
Province FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Year FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Observations	738	736	712	597	642	704	711
Adjusted R2	0.32	0.84	0.89	0.92	0.73	0.69	0.76

Note: Robust standard errors in brackets. \* significant at 10%; \*\*significant at 5%; \*\*\* significant at 1%.

**Table 11: Second-time vs. First-time Party Secretaries**  
 Person, Province, and Year Fixed Effects Regressions

	GPP	Export	SOE	Private	Off-budget	Social	Investment
	growth	share	empl. share	empl. share	rev. share	exp. share	exp. share
Second time PS	-0.279 [5.12]***	-2.414 [8.64]***	-0.013 [1.68]*	0.023 [1.72]*	0.039 [1.74]*	-0.031 [3.58]***	0.076 [6.93]***
Marginal Retention Rate	0.138 [3.90]***	-0.012 [0.06]	0.04 [3.73]***	0.016 [0.95]	0.159 [2.73]***	0.012 [0.74]	0.01 [0.64]
Tenure	0.003 [1.68]*	-0.01 [0.75]	-0.004 [7.09]***	0.006 [11.51]***	-0.017 [4.72]***	0.002 [3.05]***	-0.004 [3.68]***
Born in province	-0.872 [4.98]***	-6.201 [6.60]***	-0.005 [0.52]	0.078 [4.24]***	-0.119 [2.69]***	0.012 [0.80]	0.19 [8.90]***
Lagged GPP per capita	-0.219 [6.07]***	0.112 [0.56]	-0.073 [3.74]***	0.118 [5.13]***	0.125 [2.89]***	-0.054 [3.09]***	0.07 [3.95]***
Province FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Person FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Year FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Observations	610	608	591	497	527	584	586
Within R-squared	0.38	0.8	0.89	0.93	0.75	0.61	0.73

Note: Absolute values of t-statistics are in brackets. Standard errors are adjusted for heteroscedasticity. \* significant at 10%; \*\*significant at 5%; \*\*\* significant at 1%.

**Table 12: Sample Reduced to Changes in Leadership Due to Exogenous Reasons:**  
Province and Year Fixed Effects Regressions

Panel A: Regressions with dummy for worked in other province												
	GPP	Export	SOE	Private	Off-budget	Social	Investment		Private	Off-budget	Social	Investment
	growth	share	empl. share	empl. share	rev. share	exp. share	exp. share		empl. share	rev. share	exp. share	exp. share
Worked in center	-0.002	-0.017	0.008	0.004	0.039	0.005	-0.002					
	[0.47]	[0.29]	[1.93]*	[0.76]	[5.55]***	[1.32]	[0.45]					
Worked in other province	-0.001	-0.05	0.016	-0.017	0.03	-0.016	0.022					
	[0.20]	[0.92]	[3.83]***	[3.11]***	[3.35]***	[4.10]***	[3.55]***					
All baseline controls	Yes	Yes	Yes	Yes	Yes	Yes	Yes					
Province FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes					
Year FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes					
Observations	459	458	452	370	423	445	448					
Adjusted overall R2	0.35	0.86	0.92	0.93	0.77	0.71	0.82					
Panel B: Regressions with the number of provinces worked in												
	GPP	Export	SOE	Private	Off-budget	Social	Investment		Private	Off-budget	Social	Investment
	growth	share	empl. share	empl. share	rev. share	exp. share	exp. share		empl. share	rev. share	exp. share	exp. share
Worked in center	-0.004	-0.039	0.01	0.002	0.045	0.003	0					
	[0.74]	[0.66]	[2.45]**	[0.38]	[6.61]***	[0.70]	[0.10]					
Number of provinces worked in	-0.004	-0.061	0.005	-0.008	0.016	-0.005	0.005					
	[1.59]	[2.31]**	[2.75]***	[3.41]***	[4.51]***	[2.04]**	[1.68]*					
All baseline controls	Yes	Yes	Yes	Yes	Yes	Yes	Yes					
Province FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes					
Year FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes					
Observations	459	458	452	370	423	445	448					
Adjusted overall R2	0.35	0.86	0.92	0.93	0.78	0.7	0.82					

Note: Absolute values of t-statistics are in brackets. Standard errors are adjusted for heteroscedasticity. \* significant at 10%; \*\*significant at 5%; \*\*\* significant at 1%.



# A Appendix

**Table A.1: Summary statistics for provincial policy outcomes**

Variable	Obs	Mean	Std.Dev.	Min	Max
Log GPP growth	748	0.092	0.047	-0.064	0.427
Log export share in GPP	746	4.946	0.909	2.327	7.316
Share of SOE employment	722	0.744	0.093	0.392	0.905
Share of private employment	595	0.080	0.104	0.000	0.491
Share of revenue off-budget	647	0.419	0.099	0.142	0.726
Social expenditure share	714	0.254	0.043	0.128	0.434
Investment expenditure share	721	0.121	0.067	0.031	0.517

**Table A.2: Summary of results (full sample)**

	Center		Other province			2nd-time PS Dummy Person FE
	All Dummy	High Dummy	All Number	All Dummy	High Dummy	
GPP growth	-	-	-	0	0	-
Export share	0	-	-	-	0	-
SOE employment	0	+	+	+	+	-
Private employment	+	0	-	-	-	+
Off-budget revenues	+	+	+	+	+	+
Social expenditure	+	0	-	-	-	-
Investment expenditure	-	-	(+)	+	+	+

Note: The table presents signs of statistically significant coefficients. Parentheses indicate insignificant coefficients with absolute value of t-statistics above 1.5.