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Authoritarian Environmentalism Undermined? Local Leaders' Time Horizons and Environmental Policy Implementation

Sarah Eaton and Genia Kostka

ABSTRACT China's national leaders see restructuring and diversification away from resource-based, energy intensive industries as central goals in the coming years. On the basis of extensive fieldwork in China between 2010 and 2012, we suggest that the high turnover of leading cadres at the local level may hinder state-led greening growth initiatives. Frequent cadre turnover is intended primarily to keep local Party secretaries and mayors on the move in order to promote implementation of central directives. While rotation does seem to aid implementation by reducing coordination problems, there are also significant downsides to local leaders' changing office every three to four years. Officials with short time horizons are likely to choose the path of least resistance in selecting quick, low quality approaches to the implementation of environmental policies. We conclude that the perverse effects of local officials' short time horizons give reason to doubt the more optimistic claims about the advantages of China's model of environmental authoritarianism.

Keywords: authoritarian environmentalism, cadre rotation, environmental policy, implementation, China, leadership, time horizons

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In light of wealthy democracies' generally lackluster responses to global environmental crises, the question of whether authoritarians might make better environmental managers has attracted attention in recent years.¹ In the face of a rapidly-unfolding climate change crisis, advanced democracies have often seemed flat-footed, frozen in place by interminable negotiations at the international level and ceaseless pressure of lobby groups and highconsuming voters at home. In contrast, authoritarian regimes are seen as potentially more nimble and capable. The combination of a higher degree of state autonomy and a society habituated to the exercise of coercive power may confer certain advantages on "eco-elites" in non-democracies.² China's rapid advances in environmental protection have made it a focal point of debate over the relative merits of democratic and authoritarian environmentalism.³ Proponents of China's approach admire state leaders' ability to compel businesses and citizens to comply with stringent environmental regulations. Chinese authoritarians' toolkits contains many more, and sharper, implements to elicit such compliance. For instance, many energy-inefficient companies that shirked on demanding energy efficiency regulations have found their electricity and water supply summarily cut off by local governments. In contrast to politicians in democracies who, heavily constrained by electoral cycles, weigh the cost of environmental protection in terms of lost votes, authoritarian leaders are potentially better environmental stewards, so the story goes, as they are comparatively insulated from societal pressure and can take the long view on environmental issues.

This paper casts a critical eye on optimistic claims about China's authoritarian advantage. While national leaders in Beijing have committed to addressing China's environmental crisis, local leaders, who bear responsibility for interpreting and carrying out environmental policies, typically have very short time horizons and are not strongly incentivized to take on the difficult business of changing lanes from a growth-at-any-cost model to a resource-efficient and sustainable path.⁴ While there are some advantages of cadre rotation for environmental policy implementation, our research highlights the negative unintended

¹ See for example Josephson 2004; Beeson 2010, 276-294.

² Shearman and Smith 2007.

³ Gilley 2012, 287-307.

⁴ At the national level, environmental protection and resource and energy security have taken a place on the core political agenda. China's two most recent national FYPs, the 11th (2006-2010) and 12th (2011-2015), outline Beijing's ambitious vision for shifting towards a more sustainable, environmentally-friendly growth path. The 11th FYP defined conservation, efficient use of resources and economic transformation in the interests of sustainable development as key national policies. The 12th FYP has added substance to these concepts by establishing the shift to higher value-added manufacturing, improvement of energy and resource conservation and expansion of the service sector as key goals. "Hard", literally restricted (*yueshuxing* 约束性), and "soft", expected (*yuqixing* 预 期性) targets have been incorporated in the 11th and 12th FYPs as incentives for local cadres.

consequences of a system that keeps local officials on the move. The immense pressure of a short term of office, in which leaders must produce results to be considered for promotion, incentivizes local leaders to select highly visible projects that deliver outcomes in their own tenure periods, while long-term, complex initiatives are often sidelined.

The findings are based on extensive fieldwork between 2010 and 2012. In a first phase of research during 2010 and 2011, covering a period of five months, the authors studied variations in cadre turnover and its influence on environmental policy implementation in five municipalities and 11 counties in Shanxi province. Shanxi is an appropriate choice since leaders' efforts to diversify away from heavy reliance on the coal industry and embark on a "green rise" (*lüse jueqi* 绿色崛起) offer critical insights into the opportunities and challenges on the road ahead for the country as a whole. The empirical section also draws on two months of fieldwork on the same topic in Hunan and Shandong provinces in 2012. In total, the authors conducted 89 interviews (45 in Shanxi, 26 in Hunan and 18 in Shandong). The majority of interviews were held with leading officials in the Chinese Communist Party (CCP) Organization Department, Environmental Protection Bureau (EPB), Development and Reform Commission (DRC) and Economic Commission. We also interviewed industrial enterprise managers involved in economic transformation programs. In addition, our findings are based on government reports provided in interviews, as well as local gazetteers and media accounts.

The Rationale and Policy Impact of High Cadre Turnover

China's local officials gather no moss. Most government leadership positions at county and municipal levels have a prescribed term-length of five years, yet only a small minority of leading officials actually serves out these terms in full. The majority move on to the next position within three or four years' time. In the context of China's complex central-local relations, central authorities have long seen the periodic rotation of local officials as a tool to enhance control and monitoring of local officials. While these comprise the core goals behind the tangle of regulations and informal practices that govern official post-switching, a number of auxiliary aims—related to cadre training, diffusion of local policy innovations and bridging administrative gaps—have been woven into the system in recent years. Despite the evident importance which China's leaders attach to this system, there is surprisingly little research on whether high cadre turnover actually delivers its intended benefits.

Available data suggest that the two pillars of local leadership groups (*lingdao banzi* 领导 班子), Party secretaries and mayors, are typically whisked off to a new locale well before the recommended five-year term for civil servants and Party cadres in leadership positions.⁵ Cadre turnover takes the form of promotion, lateral rotation and, much less frequently, demotion.⁶ Short-term appointments are also common in China's cadre management system, whereby officials are temporarily stationed in a particular department or locality for a short period (such cadres are known as *guazhi* 挂职). Data on 898 former municipal Party secretaries appointed across China between 1993 and 2011 reveal that the average time in

⁵ The five-year tenure limit is, in reality, a firm recommendation rather than a hard and fast rule. A 1999 CCP Organization Department document set ten years as the absolute limit for cadres in leading position but rules stating that cadres change positions at five year intervals is phrased in the language of "should" (*yinggai* 应该) rather than "must" (*bixu* 必须). This flexibility explains why some cadres have tenures longer than five years.

^b The post-switching of leading cadres takes place via two systems, both of which are managed ultimately by the CCP Organization Department. The "cadre selection and appointment system" (*lingdao ganbu xuanba renyong zhidu* 领导干部选拔任用制度) handles promotion and demotion decisions for leading cadres while the cadre rotation system (*ganbu jiaoliu zhidu* 干部交流制度) applies to cadre flows between positions of equal rank.

office was 3.8 years with a minimum tenure of 0.2 years and maximum of 12.8 years.⁷ 23 per cent of municipal Party secretaries spent two years or less in their positions, while only 25 per cent stayed for five years or more. Previous work has found that mayors at county and municipal levels also tend to serve between three and four years before moving on to their next assignment.⁸ Beyond the leadership group, departmental heads with a key role in environmental policy implementation also rotate on average every four years.⁹

And the trend is toward faster rotation of local officials. There has been a significant drop in average tenure time over the last two decades. While, in the 1990s, average tenure length was 4.2 years and more than 35 per cent of 898 municipal Party secretaries served longer than five years, between 2002 and 2011 average tenure dropped to 3.3 years and less than 14 per cent stayed beyond five years. Landry's analysis of average tenure times of 2,058 municipal mayors serving during 1990 to 2001 is even more striking as it suggests that tenure times steadily declined from an average of 3.2 years in the 1990s to 2.5 years by 2001.¹⁰

Policy Origins of High Cadre Turnover

This churning of local leaders is largely a legacy of the Deng-era leadership's interest in strengthening the center's levers of control over the localities. As part of a broad effort to rebuild the cadre management system in the early reform period after 1978, the central leadership strove to place limits on local cadres' incentives and opportunities to engage in localism by both keeping them away from their home turf and on the move. Central leaders sought, first, to revive the imperial "Rule of Avoidance" (huibi zhidu 回避制度) which directs cadres away from holding office in their places of origin. References to the Rule of Avoidance began to reappear in policy documents after 1978 and the terms have been gradually clarified and hardened over time.¹¹ The Central Organization Department's 1999 "Interim Measures for Rotation of Party and Government Leading Cadres" significantly broadened the scope of avoidance by stipulating that leading cadres in key Party and governments positions should not serve in their ancestral homes, places of birth nor in the place they grew up (though exceptions may be granted in autonomous regions for ethnic minorities). To combat problems of nepotism, the policy also stated that leading cadres must not be married to, nor have direct blood relations with, other cadres working in the same organization.

The central control rationale also informed the leadership's calls for restoring the practice of periodic leadership rotation on the principle that "Flowing water does not get stale, a door hinge is never worm-eaten" (*liushui bu fu, hushu bu du* 流水不腐, 户枢不蠹). An official rotation system had been in existence prior to the onset of the Cultural Revolution that mandated the exchange of senior cadres in central and provincial Party and government organs as well as leading cadres in municipal and county levels.¹² Previous work

⁷ The source is the authors' database of biographic information for 898 municipal Party secretaries and 124 provincial departmental heads.

⁸ Seckington 2007, 19; Mei 2009, 102.

⁹ For instance, the average time served as head of a provincial DRC, the head of a provincial EPB, and the head of a provincial Construction Bureau was 3.56 years, 4.00 years, and 4.60 years, respectively (Kostka 2013). As discussed below, frequent rotation of directors in functional departments can be disruptive to local development planning. However, while leading cadres are frequently rotated, ordinary cadres are not, meaning that standard administrative tasks will continue despite leadership changes.

¹⁰ Landry 2008, 90.

¹¹ Mei 2009, 49.

¹² Zhong 2003, 117.

has argued that, after 1978, reviving the rotation system was a key move in the center's largely successful efforts to enhance its control and monitoring of local agents.¹³ The control logic is that a leading cadre stationed in a post for no longer than five years will be less inclined, all else equal, to side with local interests against the center's demands than would a leader with long-standing ties to their locality. Frequent cadre turnover is thought to enhance monitoring, since each changing of the guard represents an opportunity for the new leader to provide upper levels with inside information on the predecessor's reign.¹⁴

While control and monitoring constitute the core aims of the rotation system, relevant policy documents now more often link cadre circulation to the broader mandate of rejuvenating the cadre ranks and strengthening the state's leadership capacity emphasized in Deng's "Four Transformations" (*sihua* 四化) reforms. This emphasis on frequent post-switching as a method of cadre training is evident in central and local policy documents as well as interviews with active and retired officials. The first major policy document on cadre rotation, the Central Organization Department's 1990 "Decision on the Implementation of Exchange System of Party and Government Leading Cadres" characterizes the main objectives of rotation in terms of cadre development and training as well as improving their overall "quality" (*suzhi* 素质). Of the various ways in which rotation has been promoted in the name of cadre training, perhaps the most significant practice is the temporary posting of cadres to gain experience (*guazhi duanlian* 挂职锻炼).

Over time, policy documents and specific rotation programs have increasingly framed rotation as a means of reducing regional disparities and bridging administrative gaps. Cadre rotation has come to be seen as a potential source of assistance to less developed regions. The Central Organizations Department's 2000 document, "Outline for Deepening Cadre Management Reform", calls for greater "emphasis on using policy to encourage cadre rotation to difficult regions and difficult posts." To that end, the policy advocates intensification of east-west cadre rotation schemes in support of the Western Development Strategy (*xibu da kaifa zhanlve* 西部大开发战略) and calls for cadres from central government institutions and highly economically-developed eastern provinces to be temporarily posted in western regions. Recent rotation schemes also increasingly envisage cadre exchange as a means of bridging administrative hierarchies and institutional gulfs. For example, the 2006 Civil Servant Law states that leaders at and below provincial rank should implement cross-regional, cross-department lateral transfers (*zhuanren* 转任). Civil servants can be sent to lower or upper-level authorities, state-owned enterprises (SOEs) or service organizations for short-term training.

In sum, in addition to the core goal of monitoring and controlling local officials, numerous other supplementary aims of cadre rotation have been added over the years. Cadre circulation is increasingly also seen as a tool to improve policy implementation through cadre training, the diffusion of policy innovation, and bridging cleavages between departments, administrative hierarchies, and regions. Yet, very little research has examined how cadre rotation schemes affect policy implementation processes and whether it actually delivers its intended benefits.

The Significance of Cadre Rotation for Policy Implementation

Of course, the term-length of local officials is far from the only factor relevant to policy implementation. In China, as elsewhere, policy implementation is a complex process in which the dispositions and behavior of local leaders constitute just one piece of the puzzle;

¹³ Huang 2002, 61-79; Edin 2003, 35-52.

¹⁴ Huang 2002, 72.

however, compared to their counterparts in most other countries, powerful local leaders in China's "decentralized authoritarian" system make up a considerably larger piece of the implementation puzzle.¹⁵ It is for this reason that we characterize high cadre turnover as an issue of considerable significance for implementation processes and outcomes.

Although the comparative public policy implementation literature is based primarily on examples drawn from democratic, federalist systems, it is useful in providing a broad outline of the factors relevant to implementation in China. Sabatier and Mazmanian's classic work groups a total of 17 variables bearing on policy implementation into three categories: "tractability of the problem"; "ability of statute to structure implementation" and; "nonstatutory variables affecting implementation."¹⁶ Lester and Bowman's statistical test of the Sabatier-Mazmanian framework found that some of these variables had more reach than others in explaining a pattern of state-level variation in implementation of the American Resource Conservation and Recovery Act (1976).¹⁷ Among the "tractability" variables, they found that the difficulties of measuring and monitoring technically complex issues as well as a high degree of economic importance in the target group made implementation less likely. In matters of organizational structure ("statutory" variables) they found partial support for hypotheses positing that bureaucratic fragmentation, the placement of implementation responsibility with an "unsympathetic" agency as well as state leaders' ambivalence over policy goals weakened implementation. Of particular relevance to this paper, Lester and Bowman found support for two "non-statutory" hypotheses related to political leadership: "the greater the support of sovereigns, the more likely is implementation" and "the greater the commitment and leadership skills of implementing officials, the more likely is implementation." Despite the obvious differences between the American and Chinese systems, many of the factors identified here are relevant to China as well. The pathologies of fragmented bureaucracy, difficulties in monitoring of less readily measurable complex environmental targets as well as official foot-dragging stemming from environment vs. growth trade-offs are all problems familiar to scholars of Chinese environmental politics.

One aspect of the Chinese political system that is perhaps not so easily accommodated by the comparative literature on implementation is the expansive role and broad powers of local leaders in the environmental policy implementation process. Policies formulated at the central level generally articulate very broad aspirations, the interpretation and implementation of which are left to the discretion of local authorities. In this process, Party secretaries and mayors in the local leadership group wield significant authority and influence over almost all major decisions in a locality as they formulate interpretations of national directives, establish a hierarchy of policy priorities and oversee the implementation process. Most important affairs, particularly economic and financial affairs, are decided by the leadership group of a locality (either at the municipal or county level). Within the leadership group, Party secretaries usually hold the pre-eminent position and are seen as the first hand (*yi ba shou* 一把手), while mayors are, ordinarily, the second hand (*er ba shou* 二把手), subordinate to the Party secretaries.

The center's typically loosely-worded environmental directives coupled with the broadranging powers of the local leadership group, and particularly the Party secretary, gives local leaders substantial room for maneuver in the implementation of directives from on high. Allowing local leaders such significant flexibility to interpret central directives is seen as necessary in a country as vast and diverse as China. The system is also designed to elicit creative local experimentation, the most successful examples of which are designated as models to be promoted nation-wide.¹⁸ Of course, flexibility has its price. Significant room for

¹⁵ Landry 2008.

¹⁶ Sabatier and Mazmanian 1980, 538–560.

¹⁷ Lester and Bowman 1989, 731-753.

¹⁸ Heilmann 2008, 1-30.

maneuver combined with a governance system that lacks thorough checks and balances provides local leaders the opportunity to shirk on unpopular initiatives and, generally, to engage in the "selective" implementation of upper directives.¹⁹

The cadre responsibility and evaluation system is seen as the one big stick wielded by upper-level authorities in eliciting implementation compliance from local leaders. It is for this reason that studies of selective policy implementation in China have so often focused on analysis of incentives embedded in the cadre responsibility and evaluation systems, especially the carrots of bonus and promotion prospects. Economic, social and environmental targets are built into the cadre responsibility and evaluation system, a personnel incentive system that evaluates and monitors the performance of public officials holding a position in the Party or government.

Yet, as an accountability mechanism, the cadre responsibility and evaluation system is not without its flaws. Presented with a menu of policy goals, promotion-hopeful "street-level bureaucrats" tend to apportion their finite energy and resources to projects that they expect will enhance their career.²⁰ While the true bases of personnel decisions remains something of a black box in the study of Chinese politics, we surmise that cadres strive to enhance their chances of promotion through a combination of informal personal relationship-building with decision-makers and on-the-job efforts to deliver "political accomplishments" (*zhengji* ϖ). So-called "political accomplishment projects" (*zhengji gongcheng* ϖ (π) often take the form of extravagant construction projects which draw resources away from implementation of more hum-drum policies.²¹

Given that local leaders in China wield such considerable powers, establishing the various effects of leaders' brief tenures is, in turn, an aid to our understanding of the complex process of implementing environmental policy. While there has been relatively little research on the implications of official turnover for policy implementation in China, the existing literature has generally viewed cadre rotation in a favourable light. Huang found that local officials with short tenures were more likely to comply with the center's efforts to curb inflationary investment in periods of austerity.²² Edin's analysis of cadre turnover between township and county levels finds that the system strengthens political control and helps to curb localism as it encourages town leaders to identify more with the next administrative level rather than their own local community.²³

And yet, theoretical contributions to the field of political economy suggest that leaders in authoritarian systems with short time horizons are an untrustworthy lot. Drawing from the historical example of Chinese warlords in the Republic period, Olson famously argued that "roving" bandits aimed to maximize their plunder (via taxation) before sweeping on to the next locale. The acquisitiveness of "stationary" bandits with no such outside options is, by contrast, more far-sighted and more moderate: "The rational stationery bandit will take only a part of income in taxes, because he will be able to exact a larger amount of income from his subjects if he leaves them with an incentive to generate income that he can tax."²⁴ The following section suggests that the behavior of some of China's high-rotating officials finds parallels in Olson's roving bandits analogy.

Other studies underscore the significance of leaders' time horizons in determining the level of state intervention in public policy and public goods provision, both in democratic and autocratic systems.²⁵ Dionne's statistical study of HIV/AIDS initiatives in 15 autocracies

¹⁹ O'Brien and Li 1999, 167-186.

²⁰ O'Brien and Li 1999, 167-186.

²¹ Cai 2004, 20-41.

²² Huang 1996.

²³ Edin 2003, 48.

²⁴ Olson 1993, 568.

²⁵ Wright 2008, 971-1000; Dionne 2011, 55-77.

and democracies in Africa found that leaders with a short time horizon are less likely to invest in AIDS public health policies as they do not expect to be in power when AIDS problems emerge, while leaders with long time horizons intervene and invest more heavily in HIV pandemic prevention.²⁶ Wright argues that the time horizons of authoritarian leaders shape how foreign aid funds are disbursed. Dictators secure in their rule can take the long view and, in the manner of stationary bandits, have a greater incentive to invest in public goods. Conversely, leaders preoccupied with fighting off political rivals have shorter time horizons and, Wright argues, tend to see foreign aid funds as a resource with which to secure their political survival through buying repression and political support as well as a means of building their personal wealth as insurance against possible regime change.²⁷

In sum, the effects of high cadre turnover on policy implementation in China are not well understood. Given the considerable powers of local officials in the process of policy implementation, we would expect their frequent post-switching to be a salient factor in shaping policy outcomes. Yet, findings in the existing literature point in opposite directions as to the nature of that effect. While cadre rotation is seen by some as enhancing the prospects of local implementation of central directives, the above-cited comparative literature suggests that short time horizons result in rapacious behavior and underinvestment in public policies and public goods provision. In this view, short time horizons of local leaders are likely to have significant negative unintended consequences because local leaders will shirk on the implementation of central directives which do not deliver significant particularistic benefits or which cannot be realized within their own tenure. Policy areas that are particular affected by such behavior are those in which costs are incurred in the short term but benefits appear only in the long term, such as AIDS prevention or environmental policies. This paper sheds additional light on the matter by bringing findings from fieldwork in several provinces of China to bear on the question of how frequent cadre turnover affects implementation of environmental policies.

Characteristics of Environmental Policy

Environmental policies have a number of distinctive characteristics that tend to make implementation difficult. Many environmental policies are characterized by a time lag such that costs are incurred in the short term but benefits only materialize in the long run. Whereas building a waste water management facility might provide results within three years, the fruits of many policies in the environmental field, such as reduction of greenhouse gases, are only realized many years or even decades hence. Compared to many other policy fields, environmental policies also have the disadvantage that policy outcomes are not always visible and easily measureable. But there is, of course, variation across environmental issues in this regard; whereas reforestation projects produce unambiguous, visible results, the results of carbon intensity reduction are less visible and less readily measurable. Environmental policies also often involve stark tradeoffs against economic growth.²⁸ For instance, China's recent "green" plans call on local governments to restructure their economies towards a more diversified, greener industrial structure. Local foot-dragging results from leaders' reluctance to impose high costs on local businesses and depress local employment in the short term. In addition, restructuring the economy is a lengthy and uncertain process. A leader's efforts will take years to come to fruition and they cannot be assured that new, cleaner industries receiving investments today will thrive tomorrow. Finally, environmental policy implementation is frequently hampered by organizational challenges. Many environmental policies touch on diverse issue fields that require the

²⁶ Dionne 2011, 56.

²⁷ Wright 2008, 971-1000.

²⁸ Matland 1995, 145-174.

cooperation of different functional departments. Also, the units of environmental protection such as lakes, rivers or wetlands are complete ecosystems that span discrete administrative units. In these conditions, varying levels of economic development, in particular, tend to inhibit cooperation on environmental protection across localities.

Effects of Cadre Rotation on Environmental Policy Implementation in China

While the political rationale behind high cadre turnover is clear, there has, as yet, been little empirical work on the effects of the system on environmental policy implementation. Previous work and interviews with current or retired cadres reveal a complex picture showing both pros and cons to cadre rotation schemes. In the following, we discuss our findings on the most important advantages and disadvantages of frequent post-shuffling among local cadres.

Pros of the Cadre Turnover System

Short leadership cycles can, indeed, aid the implementation of environmental policies in certain ways. Frequent post-shuffling among local cadres helps to reduce institutional cleavages and bureaucratic fragmentation that tend to inhibit environmental policy implementation.

Bridging horizontal gaps: Improved coordination among departments

Recent rotation schemes help to bridge departmental gulfs, an eternal problem in China's huge and fragmented bureaucracy. Cadres who rotate through departments within their locality are thought to develop a deeper knowledge of particularistic bureaucratic interests and policy priorities of different local departments. Gaining an understanding of the policy mandates of particular agencies and forging cross-departmental networks can help local leaders identify areas of common interest and aid the formation of formal or informal "green coalitions." Such networks can also be helpful in the process of policy implementation. For example, according to EPB officials working in a county in Northern Shanxi, the EPB head's prior work experience in the Coal Management Bureau (*mei guan ju* 煤管局) brought "additional *guanxi* and enterprise knowledge. Our leader understands how to deal with big coalmines and he knows the mine owners very well. His previous experience also helped the EPB to establish very good working relationship with the Coal Management Bureau."²⁹ Such coordination between departmental bureaucratic interests is especially important in environmental policy implementation, which often requires more than 10 departments to work jointly on a particular issue.

Bridging vertical gaps: Transfer of resources, knowledge, and policy support

Many rotation schemes employ cadre exchange also as a means of shortening vertical administrative hierarchies. In 2010, for example, Heilongjiang province rolled out a program to increase rotation between provincial, municipal and county-level cadres in order to improve information flows downwards and upwards. In its first year, 100 cadres from local levels were posted to provincial offices and the province sent 110 cadres down to local positions. Many EPBs across China have also launched similar rotation schemes across administrative levels. In Wenshan prefecture in Yunnan, for instance, two thirds of all cadres

²⁹ INT10_09092011.

in the EPB undergo rotation. By exchanging county and municipal EPB cadres for a minimum of a six-months period, the program intends to smooth environmental policy implementation by enhancing communication across administrative levels and improving cadres' knowledge of upper or lower governments' daily environmental tasks.

Circulating cadres between different administrative levels also channels scarce resources to localities to aid environmental implementation.³⁰ For example, a government official who had previously worked at the Ministry of Commerce in Beijing recalls how his networks in Beijing helped a municipal city win a coveted model environmental city designation:

While working as a vice mayor at a municipality in Zhejiang, I served as an important link to the central government. Municipal leaders had declared, as one of their five-year plan goals, to obtain the national title of a "model environmental city "(*huanbao mofan chengshi* 环保模范城市). They had completed all the paper work and fulfilled all criteria, but with hundreds of cities applying for the title at the same time, the municipality could have waited a long time for inspection and a final decision. To speed up the process and to ensure that the municipality got the title, I went to Beijing and talked to the Ministry of Environment. I convinced them that comprehensive plans were behind the municipality's application. At the Ministry of Environment, they took me seriously because I previously worked as a mid-level civil servant in the Beijing Ministry of Commerce. I was familiar with the procedures and regulations and the Ministry of Environmental "gave me face". In the end, the municipality got the title quickly, which in turn meant fulfilling its five-year objectives plus having access to additional finance.³¹

Fieldwork provided numerous additional examples in which local cadres' personal networks established in previous posts proved critical to attracting investors and securing project funding. Provincial cadres also gain from personal networks linking them to municipal and county leaders. One official working at the Anhui provincial government recalls how "having worked as a vice mayor made it easier for me to convince leaders from the same municipality to join our provincial pilot program aimed at restructuring local economies because they trusted me. While working together, communicating with municipal leaders was also much simpler because I was so familiar with the municipality".³²

Bridging regional gaps: Dissemination of ideas and information

Cadre rotation also helps with the dissemination of innovative implementation methods. Leading cadres are frequently rotated to a different locality at the same administrative level.³³ Many localities in China are searching for alternatives to energy-intensive or resource-reliant economic development models and look to rotating leaders for ideas. For example, in 2008, it became clear that Datong, a coal-mining municipality in northern Shanxi, urgently needed to restructure its economy as the municipality was running out of coal. Among different restructuring alternatives, developing the third sector by building up the tourist sector was seen to be a feasible strategy. Accordingly, provincial leaders appointed a new Mayor to the municipality with the proven ability to transform local economies by building up tourism.³⁴ Indeed, the past performance of Datong's Mayor after

³⁰ INT31_29092011.

³¹ INT05_08092011.

³² INT141_11022007.

³³ For example, of 898 newly appointed municipal Party secretaries during 1993-2011, 14% of them were already working as a municipal Party secretary in their previous work position but in a different locality.

³⁴ INT02_01092011.

2008, Geng Yanbo, shows that he had successfully restructured other cities in Shanxi by developing tourism.³⁵ According to a staff member in the local leadership group in Datong, Geng's previous successes and experience with tourist sector development helped him to persuade other leaders in Datong to support his plan to leverage the city's cultural riches in order to attract tourism.³⁶

Government-enterprise links: Relationships and building alliances

Job rotations through SOEs and bureaucracies can also aid the enforcement of environmental regulations. Among all 31 provincial EPB heads as of 2011, 19 per cent of them had worked at some point for an SOE.³⁷ For example, prior to taking up his government post, the Jiangxi EPB head made his career in a provincial chemical SOE, beginning as a factory assistant and eventually rising to become chairman of the board. Cross-sector work experiences of departmental heads improve information flows between state-owned businesses and government sectors and provide government leaders with key management and negotiation skills. For instance, the head of the Economic Commission in Datong municipality worked, prior to his appointment, as chief manager at an SOE and in the local State-Owned Assets Supervision and Administration Commission (SASAC). His background proved to be very helpful in his current work as a head of the Economic Commission in Datong as "he is very skilled in dealing with SOEs." ³⁸

Such informal linkages between local cadres and SOEs can aid effective environmental management in China. In the context of the immense difficulties presented by regulation and supervision of enterprises, cadres' insider knowledge can reduce information asymmetries between regulator and regulated. In addition, since formal incentives such as national subsidies for energy or emission savings are often insufficient in themselves to change enterprise behaviour, cadres often need to persuade local enterprises of the benefits of energy and emission savings through unofficial means, such as personal appeals, or furnish side payments outside the formal implementation structure.³⁹ In such informal negotiations, government officials with prior work experience at an SOE can draw from their knowledge of enterprises' decision-making processes and internal politics.

Cons of the Cadre Turnover System

Yet, there are also significant downsides to the rotation system in its current form. As outsiders sent to a post for three or four years, leading cadres face severe time pressure in delivering quick results. Their lack of local knowledge and personal contacts can make it difficult to craft effective implementation plans. As well, the initiatives developed by local leaders sometimes reflect leaders' particularist interests in promotion more than the objective needs of the locality.

Roving Bandits: Self-maximizing and rent-seeking

³⁵ For example, in Lingshi, where Geng was vice Party secretary and then mayor (1993-2000), a major project was restoration of the Wang Family Mansion. In Yuci (2000-2006), Geng presided over a large number of construction projects in order to promote tourism (INT37_16072010).

³⁶ INT02_01092011.

³⁷ Kostka 2013.

³⁸ INT22_23092011.

³⁹ Kostka and Hobbs 2012, 765-785.

Our research suggests that Olson's insights are applicable to China: short tenure cycles do incentivize cadres to prioritize short-term over long-term gains. Such "roving bandit" behavior was, for example, apparent in Datong municipality prior to the arrival of the new Mayor Geng Yanbo in 2008. In that time, Datong had a run of unremarkable leaders who stayed an average of 2.9 years and did little to correct the city's coal dependence. One well-placed city official recalls how the leaders used their time in Datong primarily as an opportunity for career advancement:

Usually, previous leaders stayed for a couple of years and then found a chance to get promoted. They used Datong as a springboard. The Party secretary of Datong is a position from which it's easy to get promoted because there are many coal bosses here. That means they can get a lot of bribes and use them to bribe the upper level government to get promoted. They didn't even need any political achievements ["zhengji"] to prove themselves.... None of them made any difference. When they left, Datong was the same as when they came. For them, all was good so long as no major problems arose.⁴⁰

Next to bribes from coal bosses, kickbacks for illegal real estate construction apparently provided further sources of income to buy promotions in the provincial capital city.⁴¹

Under the succession of Datong's "roving bandits", implementation outcomes were disappointing. These leaders failed to develop any strategy to correct the heavy environmental toll of Datong's coal mining activities and did little to reduce Datong's coal-reliance despite rapidly dwindling supplies of marketable coal. By 2008, national guidelines mandating coal mining restructuring had not been implemented, the city lacked a strategy for a long-term viable economic growth path, and air and water pollution caused by the predominance of coal in Datong's industrial structure was so severe that Datong was said to wear a "black hat" (*hei maozi* 黑帽子) for environmental degradation. On the whole, these leaders successfully extracted rents from local industries but did not undertake painful restructuring the city urgently needed.

Focus on short-term, visible results

While such roving bandits are probably more the exception than the rule, state officials are nevertheless increasingly concerned about "short-termism" at local levels. China's cadre management system should, in theory, curtail such predatory behaviours and incentivize local officials not to neglect environmental issues by assessing their performance against standards set by upper-level authorities. And yet, recent public commentary suggests that short-termism associated with high cadre turnover is a significant and growing problem for environmental governance in China. The short tenure of leaders combined with a general preference for costly show projects (which often create rent streams for local officials) leads to short-sighted behavior and can inhibit the formation of long term sustainable development plans. As one commentator in a prominent Party journal put it:

[T]here are some cadres who, because they know there is a 'when the time comes they'll move on' guarantee, give weight to 'apparent accomplishments' (*xianji* 显绩) and much less to 'potential accomplishments' (*qianji* 潜绩). They place less emphasis on foundational, long-term, strategic work and pursue short term, false political accomplishments.⁴²

⁴⁰ INT34_30092011.

⁴¹ INT34_30092011.

⁴² Yi 2007.

As discussed in more detail below, Party and government leaders have recently begun to think of ways to incentivize local officials to prioritize "foundational, long-term, strategic work."

Incentives in the cadre evaluation system interact with the typically short time horizons of local leaders and predispose them to select the path of least resistance in implementation of environmental initiatives. By contrast, environmental projects which are not seen to enhance a cadre's chances of promotion and which take a long time to produce results will tend to be ranked at the bottom of the prioritization list. As such, cadres' incentives to secure short-term goals can be much at odds with the center's expansive green growth mandate and many environmental projects that are not realizable in the short term are sidelined. For instance, many leaders have invested significant amounts in tree planting in order to meet their annual forest coverage targets in the 11th and 12th FYPs, an initiative that produces quick and visible results, but many of them have delayed economic restructuring, as it is a difficult and complex process that can take years to bear fruit.

Interviews revealed a number of other negative unintended consequences of a system in which leading cadres are pressured to deliver visible and measurable environmental outcomes within their short tenure. For instance, the EPB head in a Shandong county, notes that the incentive for visible and measurable results can lead to wasteful misallocation of resources:

In order to further reduce COD in the 12th FYP, our county is planning to build one sewage treatment plant for each town. Personally, I do not think that this is a good idea. It would be better to expand the existing sewage plant and build a better pipe network to collect wastewater rather than build many small plants in each town. This would be less expensive. For some towns, it is also financially infeasible to build their own treatment plant and their township government will face severe financial burdens in the future. But this is a political problem. Some leaders think that building a sewage treatment plant for each town sounds better and provides more "political accomplishment" value. In the short term, the plans sound impressive to their superiors but the next leaders inherit these financial burdens and have to deal with failures as not every town will be able to complete the constructions.

The short time horizons of cadres can also lead to a cavalier attitude to costs since leaders can expect to be onto their next assignments by the time the bill comes. For instance, aside from the inherent risks of his all-in tourism-based strategy, Mayor Geng's successors will inherit huge amounts of municipal debt. Under the pressure of a de facto five-year term limit, Geng launched many initiatives almost immediately upon taking office and project financing has been pieced together on the fly. Enterprise investment has played only a minor role in Datong's transformation so far and the majority of project financing came from land sales and bank loans. Typical of his "can't wait" (deng bu gi 等不起) attitude, Geng's reply to questions about city construction projects plagued by legal violations was "I do not have time to wait, so demolition cannot wait."44 Some funding for cultural restoration projects has come from the central and provincial governments but money for a huge city wall construction project is drawn exclusively from municipal finances.⁴⁵ The final tab for these projects may total 50 billion RMB, a vast sum considering that Datong municipality's revenue came to only 14 billion RMB in 2010. Revenue shortfalls have been made up with bank loans, land sales and high ticket prices for the refurbished sites. Geng has, reportedly, begun to run out of credit with local banks and a saying circulating in Datong officialdom is that "Geng cannot get a loan" (geng ban bu liao daikuan 耿办不了贷款). It is Geng's

⁴³ INT16_14052012.

⁴⁴ The Beijing News 2011.

⁴⁵ INT34_30092011.

successor who will be saddled with the costs of his big bang approach to industrial restructuring.

Leaders' short time horizons also create problems for the environmental planning system. An official in Chenzhou notes that cadres' short time horizons have forced a change in the allocation of energy intensity targets in local five-year plans:

Because of political cycles, leaders sometimes select lower energy saving target at the beginning of a five-year period because they will only stay in the locality for two more years and leave the problem for the next leader. This is also one of the reasons why the emphasis has shifted from five-year targets in the 11th FYP to annual targets in the 12th FYP.⁴⁶

Cadres' short time horizons also affect the quality of environmental implementation. Many of the environmental targets in the 11th FYP were implemented at the eleventh hour and did not yield lasting change. In some localities, mandatory energy intensity targets were fulfilled at the very end of the planning period using extreme and sometimes socially harmful measures. These included cutting electricity to hospitals, homes and rural villages. Local governments also temporarily shut down energy-intensive companies for a given period of time only to allow the same enterprises to reopen, a method known as "sleeping management" (*xiumian guanli* 休眠管理).⁴⁷ These low quality implementation approaches ensured that leading cadres met their energy intensity target outlined in their individual responsibility contracts but effectively put off the difficult matter of how localities can find more long-term, energy efficient solutions.

New lords, new laws

Institutionalized post-shuffling of local leading cadres can result in damaging discontinuity in local sustainable development initiatives. Local officials who are strongly self-maximizing may prefer to gain exclusive credit for successful initiatives rather than share the glory with successors and predecessors. This can result in adverse effects for local green growth when newly-posted cadres indiscriminately stop existing initiatives, regardless of their merits, in order to place their own stamp on a locality in accord with the tradition of "new lords, new laws" (xin guan xin fa 新官新法).

Leadership discontinuity often comes along with policy uncertainties and "policy freezes." For instance, Party secretaries have changed 13 times during 2000 and 2010 in Baoding, a municipality in Hebei province, and each leadership change was accompanied with departments in the city taking a "wait and see" approach, "trying to decipher signs from the new leader(s) and determine "in which direction the wind will below" (*feng wang nali chui* 风往哪里吹)."⁴⁸ And with every new leader arriving on stage, important environmental policy decisions were put on hold, resulting in transition periods of months or even a year.⁴⁹ As a result, local officials working at the departmental level in Baoding complained that policy meddling from their constantly changing superiors in the city government prevented them from achieving any kind of coherence in their policies.⁵⁰

Baoding is by no means an exception. The case of Datong's maverick mayor described above also illustrates the practice of "new lords, new laws." Soon after taking office in 2008,

⁴⁶ INT6_22052012.

⁴⁷ Kostka and Hobbs 2012.

⁴⁸ INT04_11092011; Shin 2013.

⁴⁹ INT04_11092011.

⁵⁰ Shin 2013.

Geng let it be known that he would play by different rules. A government official recalls one of Geng's first new measures:

When Geng first arrived in Datong, he stopped all the real estate projects that did not meet construction standards. Real estate developers interpreted this as a sign that Geng wanted bribes but they were wrong. Geng directed his subordinates to take the money they offered him and deposit it in a special government fund used for city construction.⁵¹

This illustrates that, as outsiders, rotating leaders can break with existing patterns and habits. Geng subsequently consolidated the coal industry and initiated a large restructuring program to develop a non-coal industry based on tourism. While many credit Geng with laying a firm foundation for Datong's industrial transformation, it remains to be seen whether this greening growth strategy is in fact viable and whether the next leader with follow Geng's vision of tourism development or select a different focus.

Leadership changes at the departmental level can be equally disruptive. A high-ranking official in the Datong government described how ongoing projects can be indiscriminately stopped because of the arrival of a new departmental head:

If a leader changed, he or she may have different priorities and stop the previous work. For example, I worked for a year and half on a project that included a lot of background research and discussion with different partners and it was almost completed....Then the leader in the Commission changed and thought this project was not promising and put a stop to it.⁵²

Coupled with leaders' focus on short-term results, the tradition of new lords, new laws contributes to a structural bias against faithful implementation of policies with a long time to maturity.

Constraint on implementation capacities: Limited local knowledge and networks

Cadre rotation can also affect the business of environmental policy implementation in more prosaic ways. In the space of a three- or four- year tenure, circulating officials spend much of their time simply getting up to speed in their new localities. Zhong offers a pointed description of the problem:

It usually takes key county or township/town officials one or two years to settle in, familiarize themselves with the environment and various governmental agencies under their jurisdiction, and establish smooth working relationships with colleagues and subordinates. It probably takes the same amount of time, if not longer, to study and develop a new comprehensive economic development plan for the locale.⁵³

In an average tenure period, potentially more than half of a leader's time could be taken up with getting to know the lay of the land and gaining the trust of subordinates. Since cadres only have a short window in which to familiarize themselves with a new locality, their implementation capacity might be constrained by limited knowledge of local circumstances. Some officials noted that newcomers sometimes make outsized promises as a result. In Chenzhou, Hunan, a local cadre complained: "Sometimes, local leaders do not do deep research about their localities. Instead, they set even higher targets compared to the ones

⁵¹ INT34_30092011.

⁵² INT34_30092011.

⁵³ Zhong 2003, 119.

received from the upper level in order to impress their superiors. But these targets are not suitable and not realistic for the locality."⁵⁴

The few localities that are exceptions to the rule of rapid leadership turnover also illustrate the salience of leaders' time horizons and its effect on cadres' local knowledge and networks. Xiaoyi county in Northern Shanxi is one such place. Like Datong, Xiaoyi is a resource-based economy with an undiversified, coal-dependent industrial structure in the midst of transformation. In contrast to Datong's rushed implementation approach to economic transformation, Xiaoyi's greening growth strategy has built up gradually with guidance from a strong and locally-rooted leadership group. Recent Party secretaries in Xiaoyi have served for an average of 8.3 years and mayors an average 6.2 years, much longer than the average tenure of local leaders.⁵⁵ This high degree of continuity in the local leadership group has helped Xiaoyi's leaders to stay focused on transforming the local economy over the last decade. According to one former deputy mayor, leadership continuity has given local development a stepwise quality:

The worst thing for a local government is frequent change in the leadership group and planning. In Xiaoyi, the mayor will usually become the next Party secretary so the top leaders of the two terms are old partners meaning there is good continuity. Also, every new period the leaders are doing better. The mayor and Party secretary in the 1990s built roads to connect Xiaoyi with the outside. The next leaders started industrial restructuring. The current Party secretary has placed greater emphasis on equitable growth and environment as well. Each period's achievements serve as inspiration for the next.⁵⁶

This continuity helped Xiaoyi's leadership group make very effective use of the relationships it has built over time with upper levels of government and especially with local industry. These precious *guanxi* resources are effectively preserved over time since long-serving mayors typically become long-serving Party secretaries in Xiaoyi. Consistent leadership helped the city win national awards and secure planning support from upper levels since stability meant follow-through on policy priorities and the absence of "new lords, new laws" problems. In 2002, for example, the Xiaoyi leadership fixed on the goal of attaining a central-level experimental city designation (*shidian chengshi* 试点城市) to aid their economic transformation. Local leaders were first dispatched to learn from experimental cities in the Northeast in preparation for their application. After seven years of careful project development and implementation, Xiaoyi was finally named a *Resource-Exhausted Transformation Experimental City* in 2009, one of only 44 nationwide and the only one in Shanxi. The title is not just a bright spot on the list of local leaders' accomplishments; it has also brought the city 200 million RMB in central government funding.⁵⁷

Leaders in Xiaoyi's leadership group have also used their *guanxi* ties to induce local businesses to share the burden of reducing Xiaoyi's coal dependence. Strikingly, local coal enterprises, many of which are privately-owned, have actually been given soft targets in local plans for investment in economic transformation projects: "Coal production enterprises should each launch non-coal projects of between one and two billion RMB; each coking enterprise should launch projects of one billion RMB or more in non-coal or downstream processing projects."⁵⁸ In addition, Xiaoyi leaders have effectively "bundled" coal restructuring with the goal of developing non-coal industries by providing incentives for

⁵⁴ INT21_28052012.

⁵⁵ Xiaoyi county leaders' tenure times are twice the average of other leading county cadres in the same municipality; Party secretaries in other counties in Lüliang stayed an average of 3.6 years (N=28) and mayors an average of 3.1 years (N=35).

⁵⁶ INT15_21092011.

⁵⁷ INT11_26092011.

⁵⁸ Government Work Report 2011, 20.

former coal bosses whose enterprises were eliminated as part of a 2006 industry clean-up to start greener businesses. For instance, with government backing, a former mine owner whose enterprise was shuttered brought a Walmart outlet to Xiaoyi and also has a new business marketing agricultural products. Leadership continuity likely contributed to the leaders' success in securing investment because investors can be confident that plans will not shift radically with personnel changes in the leadership group.

Discussion and Conclusion

The evidence gathered in interviews suggests that, while cadre rotation has some benefits for environmental policy implementation, high cadre turnover has also generated significant negative, unintended consequences. We find that cadre rotation affects both cadres' incentives as well as their implementation capacities. In terms of cadres' incentives, shifting cadres around every three to four years keeps officials' feet to the fire, as they are required to regularly report accomplishments to superiors. Yet, as with leaders in Dionne's study of HIV/AIDS policy, Chinese leaders with short time horizons tend to select cheap and quick approaches to environmental policy implementation. All else equal, they prefer short-term, highly visible projects that yield outcomes in their own tenure periods, while long-term, costly, and complex initiatives are often sidelined. As mentioned, state leaders are increasingly concerned about short-termism and local leaders themselves see the constraints of this system. For example, Geng Yanbo demanded a five-year term in Datong so that he could make significant changes and receive credit for them. One informant told us: "When Geng was working in Taiyuan as vice mayor [2006-2008] and he knew he was going to be sent elsewhere, he demanded to be stationed in Datong for at least five years, otherwise he would not want to go. He wanted to make a long-term impact and be a leader with vision."59

While the effect of frequent rotation on officials' incentive structures is problematic, the implications for cadres' implementation capacity is more mixed. On the one hand, by frequently changing their posts across departments and regions, cadres can play a role in dissemination of new ideas and resources across localities. Cadres with previous work experience in SOEs are well-placed to negotiate effectively with managers on implementation of onerous environmental regulations. On the other hand, cadres who come in as an outsider to a new locality lack local knowledge and networks that are necessary to draw local businesses into greener growth initiatives or to obtain additional funding from provincial and central governments. When local leaders have attained sufficient understanding of local conditions and interests to serve as effective leaders, it is already time to take up a new post elsewhere.

How might China's policymakers rectify the adverse effects of high cadre turnover suggested by our interviews? This is a complex question deserving of its own paper, yet our analysis suggests that national leaders could strive to lengthen local cadres' time horizons. A step forward in this regard was the central government's 2006 "Interim Provisions on the Tenure of Leading Party and Government Cadres" which stipulates that, except in special cases, leading cadres ought to serve out their five year terms in full. Short-termism associated with "tenure rush" (gan renqi 赶任期) prompted the Guangdong Provincial Party Committee in 2011 to remind local leaders that "success does not have to be realized in my tenure" (gongcheng bu bi zai wo renqi 功成不必在我任期).⁶⁰ In spite of recent national calls to adhere strictly to the recommended five-year rules, there has not yet been a discernible

⁵⁹ INT2_01092011.

⁶⁰ People's Daily Online 2011.

impact on official tenures at the provincial and municipal level; indeed, the current trend is toward faster rotation of officials.

In all, the considerable perverse effects of local officials' short time horizons give reason to doubt the more optimistic claims about China's version of environmental authoritarianism. The purported authoritarian advantage is that, in comparison to their counterparts in democratic systems, eco-elites enjoy greater freedom of action due to their relative autonomy from interest groups and secure positions in power. Our analysis suggests that behaviors linked to leaders' short time horizons serve to undermine any such potential advantage. Local leaders under pressure to produce "political achievements" in a few short years tend to select the path of least resistance in selecting quick, low quality approaches to implementing environmental policies and, while nominally following national directives, are actually putting off the difficult business of creating a sustainable growth path.

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