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Multiple mechanisms of policy diffusion in China

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ABSTRACT

An increased interest in policy diffusion research on China has emerged in recent years. However, the multiple diffusion mechanisms in China have not been explored adequately. In this research, we employ the directed dyadic event history analysis, a new approach introduced into recent policy diffusion research, to examine the diffusion of China's provincial level administrative licencing centres from 1999 to 2015. Our research provides consistent evidence that horizontal learning, imitation, and the vertical top-down diffusion mechanisms can coexist in China, which provides substantial empirical support for the application of policy diffusion theory in non-western countries.

KEYWORDS Policy diffusion; dyadic analysis; China

Introduction

Numerous policy diffusion studies have been published in the past decades (Graham, Shipan, and Volden 2013; Shipan and Volden 2012). Policy diffusion research is both theoretically and practically important because it helps identify and accumulate knowledge on the determinants of policy adoption. Existing literature shows that government policies are diffused through vertical or horizontal mechanisms (Shipan and Volden 2008; Weyland 2005). However, most existing theoretical achievements are derived from the United States or other European countries, which have electoral democracies and developed economies (Boushey 2010; Desmarais, Harden, and Boehmke 2015). These achievements raise the question of whether the policy diffusion mechanisms identified in existing research apply to other contexts. If so, how can the specific mechanisms behind the diffusion process of a policy innovation in a non-western country be identified and disentangled?

We point out that a key precondition for policy diffusion is the existence of policy autonomy among the subnational governments. For instance, in the United States, a subnational government could observe and exploit the knowledge from other governments to adopt new policy practices only if its discretion in a specific policy field has not been pre-empted by the federal government (Woods 2008). Similarly, diffusion could occur in non-democratic or centralized countries so long as the national governments have delegated certain economic or administrative powers to the subnational governments. In the recent decades, many countries have joined the

worldwide trend of decentralization and various economic and administrative powers are devolved to the local governments (Fan, Lin, and Treisman 2009; Treisman 2000). Thus, we should expect to observe more policies diffused in diverse contexts.

Despite its theoretical relevance, the exploration of policy diffusion mechanisms in non-western countries could also produce important practical implications. First, non-western practitioners could employ the knowledge accumulated by the academic research to form a better understanding of the diffusion pressures and their influences on policy choices. Second, as governments in non-western countries only have limited resources, they should take advantage of the academic research findings to differentiate between beneficial innovations and merely fads (Shipan and Volden 2012). Third, many developing countries have adopted an experimentalist style of governance to identify and promote appropriate policy innovations (De Burca, Keohane, and Sabel 2013; Ko and Shin 2017; Zhu and Zhao *Forthcoming*). Policy diffusion research in these contexts could offer lessons and opportunities to help policymakers develop a better design of their policy experimentation.

A group of researchers have noticed these gaps and have begun to test the policy diffusion theory in an authoritarian context, such as China. China is an excellent case for testing the generalizability of policy diffusion theory because China has a setting with a developing economy, political authoritarianism, and a Confucian culture that is radically different from typical western countries. If the theory of policy diffusion applies to China, then its worldwide generalizability would gain substantial support. Moreover, China has the world's largest population and second largest economy; examining policy diffusion in China is practically important in its own right. Nevertheless, the present diffusion research on China has two general limitations. First, important mid-level provincial diffusion dynamics are often ignored. Former quantitative analyses on policy diffusion are conducted mainly at the city level (Ma 2013, 2014; Zhang 2012, 2015; Zhu and Zhang 2016), while only some case studies focus on provincial level diffusion (Zhu 2012; Zhu 2014). **The applicability of the policy diffusion theory in China can be substantiated further if the researchers have found additional systematic supportive evidence at the provincial level.**

Second, previous empirical studies based on case studies or state-year event history analyses (EHAs) cannot tell us why a government tends to acquire a policy from one government rather than another. Studies on western countries have identified multiple mechanisms, such as learning, competition, and imitation (Shipan and Volden 2008), as well as top-down and bottom-up diffusion mechanisms (Shipan and Volden 2006; McCann, Shipan, and Volden 2015). The extant diffusion research on China mainly tests the existence of policy diffusion and rarely tells us which mechanisms mainly drive the process of policy diffusion in China. Hence, the conclusions from previous case studies in China can be easily confounded by the multiple diffusion explanations. Also, the state-year EHA can only test the relationships between adoption in one state and the proportion of earlier adopters (Nicholson-Crotty and Carley 2016). This approach cannot show a correlation between the adoption of a policy in one government and the adoption of a similar policy in another government.

This study advances the diffusion research in non-western contexts by systematically **testing both horizontal and vertical diffusion mechanisms in China.** Our empirical subject is the spread of provincial-level administrative licencing (business registration) centres (ALCs) between 1999 and 2015. Administrative licencing reform

is one of the most important topics on China's policy agenda. China's central, provincial, and city governments have expressed support for the administrative licencing reforms in the last 20 years, thereby providing us with a good opportunity to examine multiple policy diffusion dynamics in China.

Based on directed dyadic EHA approach, a new method introduced by Volden (2006) and later refined by Boehmke (2009), our research contributes by, for the first time, systematically analysing 'who learns from, competes with, and imitates whom' during China's policy diffusion. We find that both learning and imitation mechanisms have significantly positive effects on the adoption of ALCs across China's provincial governments. Statistical evidence on the top-down effect shows that the policy signals of the national government have a strong stimulating effect on provincial governments. However, we do not find statistically consistent evidence to support the existence of competition and bottom-up mechanisms in the diffusion process of provincial level ALCs.

In this paper, we first briefly describe provincial administrative licencing reforms in China, then present our theoretical framework, and discuss the operation of the subnational policy diffusion mechanisms. We test the arguments by offering empirical evidence obtained through directed dyadic EHA. Finally, we discuss the theoretical and practical implications of our findings for the adoption of policy innovation in governments and offer research ideas for understanding policy innovation diffusion in China.

The diffusion of provincial level administrative licencing centres in China

Administrative licencing reform is one of the most significant reforms on China's policy agenda in this modern era. In the last 20 years, every chairman of the Communist Party of China (CPC) would highlight the importance of streamlining administrative licencing procedures at the party's congress.¹ In addition, every premier, the leader of the State Council, would hold multiple meetings and issue multiple policy documents to facilitate the reform of the old administrative licencing system (ALS). For instance, in 2013, the current premier of China, Keqiang Li, specifically promised that the government under his leadership would reduce one-third of the existing licencing procedures to create a more efficient market system. In March 2016, he stated that although the government had already achieved that goal in advance, he would continue cutting administrative procedures by half this year.²

China's ALS emerged when Xiaoping Deng initiated the marketization reform process in the early 1980s. The government created the system to maintain market order and provide public service for citizens and enterprises. However, during the transitioning era, ALS degenerated into an obstacle in the development of the market economy (Zhu 2014; Zhu and Zhang 2016). Licencing procedures were increasingly laborious and time-consuming, which dampened the incentives of market players because of the increased cost of time, resources, and lost opportunities. Moreover, little transparency existed in the decision-making process of the local government agencies, which created opportunities for bureaucratic corruption.

In the early 1990s, the central leadership reoriented China's efforts to 'reform and open up' a socialist market economy. Many local governments started to simplify government functions and reform the existing ALSs to attract foreign investors and stimulate economic growth. The establishment of one-stop government service

facilities (also known as ALCs) soon became a core strategy of administrative licencing reforms (Wu, Ma, and Yang 2013). The creation of ALCs included the integration of traditionally distributed functions, restructuring of redundant agencies, and the establishment of office buildings. Shaanxi was the first province to create a provincial level ALC in 1999. As of 2015, 24 out of 31 provinces in Mainland China have adopted this policy instrument (see Figure 1).

The creation of ALCs is an appropriate case for testing policy diffusion mechanisms for three reasons. First, during the last 20 years, China’s central, provincial, and city governments supported administrative licencing reforms in different periods, which provides us with a good opportunity to examine the multilevel policy diffusion dynamics in China. Second, ALC is a common economic policy instrument that does not involve radical ideological or factional conflicts. China’s subnational governments often have more autonomy in economic areas, which allowed them to choose different policy instruments according to their own requirements (Zhu 2017). Third, the entire process occurred within a well-defined period and a considerable variation in the timing of the adoption of ALCs across provinces could be observed, making the diffusion of China’s provincial level ALC an excellent case to test the policy diffusion theory.

Multiple diffusional mechanisms

Since Jack Walker’s seminal research on innovation diffusion among the American states (Walker 1969), a considerable number of research on policy diffusion have been conducted, thereby suggesting that the policymaking process of a government can be affected by the policy choices of other governments (Berry and Berry 1990; Walker, Avellaneda, and Berry 2011; Shipan and Volden 2012).³ The mechanisms of policy diffusion can be classified into two main categories: horizontal and vertical

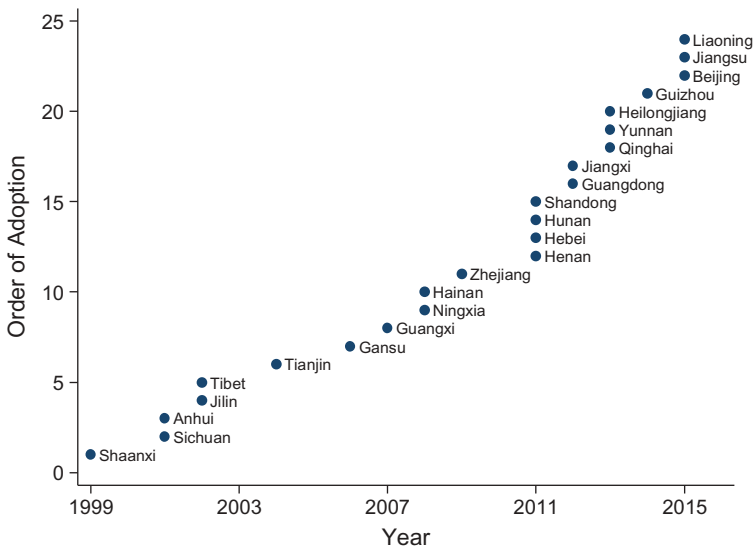


Figure 1. Diffusion process of provincial ALCs in China (1999–2015).

mechanisms. Horizontal mechanisms, such as **learning, competition, and imitation, received the most attention in previous literature** (Walker 1969; Gray 1973; Volden 2006; Gilardi 2010). Vertical dynamics in the subnational innovation diffusion process, such as coercion mechanism, bottom-up and top-down federalism (Karch 2006, 2012; Shipan and Volden 2006, 2008; McCann, Shipan, and Volden 2015), have also drawn scholars' attention in recent years. However, most of these studies are still driven by the analogy of democratic laboratories, such as the United States, and rarely focus on whether the current policy diffusion theory applies to non-western contexts.

A common unstated assumption behind prior horizontal subnational diffusion research is that subnational governments have certain discretion to voluntarily adopt the corresponding innovations. In fact, one of the most important limits of policy diffusion is the constraint on policy autonomy of subnational governments. A range of possibilities between centralization and decentralization can exist in the real world due to the political, economic, or ethnic concerns (Cerniglia 2003). In a democratic context, a subnational government has a chance to learn from, compete with, or imitate other governments to adopt an innovation only if it has enough autonomy in a specific policy field (Pacheco 2012). Moreover, in many federalist countries, the policy autonomy of subnational governments is limited, which restrained the subnational governments to benefit from the new policy opportunities (Rodden 2004; Watts 1998). By contrast, in some countries with a unitary system, the subnational governments could enjoy certain economic or administrative autonomy (Lockwood 2004; Osaghae 1990). **Therefore, the prerequisite of policy diffusion is specific policy autonomy rather than competitive democracy or a federalism system.**

We argue that besides the United States and other European countries that have been examined by scholars, the horizontal policy diffusion theory could be generalized to a much broader context of the world. In recent decades, many countries have joined the worldwide trend of decentralization (Escobar-Lemmon 2001; Fan, Lin, and Treisman 2009; Martinez-Vazquez and McNab 2003). Various economic and administrative powers have been delegated to the subnational governments and plenty of local governments have their own discretion to adopt new policy practices (Cai and Treisman 2009; Bardhan 2002; Treisman 2000). Thus, we should expect to observe more policies diffused in various political contexts. Theoretically, even in a non-democratic centralized context, horizontal diffusion mechanisms could shape subnational policy decisions provided that these governments have enough discretion in some policy fields.

By contrast, it is much easier to accept the claim that 'vertical diffusion' can exist in a non-democratic or centralized context due to the coercive powers of the central government. In fact, vertical policy diffusion has a long history in China. For instance, during the Great Leap Famine (1958–1961) in China, the political radicalism in the central government spread fast across subnational governments due to the centralized nomenclature-style personnel system, which led to 16.83% of the excess death rate (Kung and Chen 2011). Some researchers find that the Chinese central government often promotes or terminates local innovations through a series of national policy instruments, such as coordination, guidelines, protection, sponsorship, and political deterrence and punishment (Heilmann 2008; Mei and Pearson 2014; Zhu 2014).

A group of scholars have noticed the underemphasis of diffusion research in non-western contexts and attempted to apply the present policy diffusion theory to a non-democratic country such as China. For instance, Zhu (2014) found that vertical

government intervention significantly stimulated the diffusion of economic policy instruments across Chinese cities. Zhang (2012) discovered that pressures from peer cities or provincial governments play a crucial role in accelerating the diffusion of China's land banking systems. Liu and Li (2016) showed that performance management spreads across Chinese cities when superior governments only set a policy goal rather than specific policy instruments.

Nevertheless, emerging literature in this area is not yet well developed. First, limited studies have examined provincial level diffusion dynamics systematically. Existing quantitative analyses have been conducted mainly at the city level (Ma 2013, 2014; Zhang 2012, 2015; Zhu and Zhang 2016), and only several case studies have attempted to explore provincial level diffusion (Zhu 2012; Zhu 2014), except for Wu and Zhang (2018). In recent decades, China's decentralized reforms have occurred mainly between the central government and the provincial governments (Lin and Liu 2000; Xu 2011). Most classic policy diffusion theories are developed based on quantitative evidence across states in America (Berry and Berry 1990; Gray 1973; Shipan and Volden 2006), which are actually more comparable to China's provinces in terms of geographical size and administrative powers.⁴ Hence, studying provincial level policy adoptions in China is an essential step to test and generalize current diffusion theories. We have observed that previous city-level diffusion research focuses on horizontal diffusion findings probably because of the absence of available data, which limits the research in examining the influences of vertical diffusion such as the top-down mechanism from the superior government, and the bottom-up mechanism from the subordinate governments (Shipan and Volden 2006; McCann, Shipan, and Volden 2015). Although Wu and Zhang's (2018) recent research explored multiple diffusion mechanisms of a performance-based reform programme in Chinese provinces, knowledge on the applicability of the policy diffusion theory to most policy areas at the provincial level remains limited.

Second, the use of the traditional analysis methods (case studies or state-year EHA) constrained the researchers from analysing the multiple horizontal mechanisms on policy diffusion in China. For instance, Ma (2013, 2014) and Wu and Zhang (2018) only demonstrated the Chinese local governments' tendency to adopt the policies of their peers but failed to discuss the possibility of successful policies spreading more quickly or completely across governments (Volden 2006). However, horizontal diffusion is potentially characterized by multiple mechanisms, including learning, competition, and imitation (Berry and Berry 2014; Shipan and Volden 2008). Learning refers to the process of a government adopting a policy that has proven successful elsewhere. Economic competition occurs when policy adoption leads to economic spillovers across jurisdictions. Imitation means 'copying the actions of another in order to look like the other' (Shipan and Volden 2008, p.842). The difference between learning and imitation mechanisms is that the former focuses on policy consequences whereas the latter focuses on the adopter (Shipan and Volden 2008, p. 842–843). Therefore, the horizontal diffusion findings of previous studies in China might have multiple theoretical and practical implications. Fortunately, the directed dyadic EHA can help identify the effects of various diffusion mechanisms in China, which will be discussed in detail in the methodology section.

We use an integrative framework to test both horizontal and vertical diffusion hypotheses of the current theory empirically by analysing the diffusion of ALCs across provincial level governments in China.

Horizontal diffusion mechanisms

In the post-Mao era, the goal of the central government became more outcome-oriented in the areas of economic growth and social stability. The Chinese central government incrementally reformed the highly centralized management style inherited from the former socialist-planned type of economy (Caulfield 2006; Edin 2003). The limited information and resources to establish a market economy prompted the central government to delegate economic authority to subnational governments and encourage the adoption of appropriate policies to facilitate institutional innovation and avoid reformist leaps (Appleton, Song, and Xia 2005; Pei 2012; Treisman 2006). Therefore, on the one hand, local governments have motivations and resources to join the process of policy diffusion to improve local economic performance. On the other hand, the central government may accelerate the process of policy diffusion to promote best practices among the subnational governments.

Hence, local governments have incentives and opportunities to search and adopt successful economic policy instruments. Policy innovation is more likely when the experience of other provinces suggests that the policy change leads to the desired results. For instance, local governments can remove inflexible and inefficient administrative procedures (e.g., creating ALCs) to attract foreign investments and increase local economic performance or revenue (Heilmann 2008; Treisman 1999). Hence, a substantial increase in foreign investments in an early adopter province after creating an ALC might be regarded as a signal of policy success. This signal prompts other provinces to adopt the same policy practice to streamline administrative licencing procedures. By contrast, if a policy innovation does not perform well in the early adopter provinces, the other provinces will probably be less likely to adopt it. In practice, China's provincial leaders continually seek advice from policymakers in other provinces and feared being labelled failures. For instance, researchers document that during the evolution of China's rural healthcare system, officials from multiple provinces adopted Shanxi Province's cooperative medical system after field investigations to make sure this innovative policy practice was reliable in terms of providing preventive healthcare in rural areas (Wang 2009). Researchers also observe that organizational reforms that have already been proven somewhere gain a certain level of legitimacy in China (Tsai and Dean 2014). Learning from the successful reforms of other provinces can help to reduce the costs and risks that may be absorbed by the decision-making process.

Horizontal Learning Hypothesis: A province is more likely to adopt a policy innovation of another province with higher policy performance than it.

An institutional environment can influence the legitimacy of a government organization, which can strongly affect other governments' decision to emulate its policy innovation (Weyland 2005; Korteland and Bekkers 2008). Diffusion study has long discovered American states tend to emulate 'leader' states that are large or wealthy or that have earned strong reputations or high levels of credibility (Walker 1969; Berry

and Berry 2014). In China, economic success does not merely rely on any single policy or institution but also on the government's capacity to implement reforms, which constitutes the primary base of state legitimacy (Yang and Zhao 2015). Therefore, economic leader jurisdictions at all administrative levels are essentially regarded as leaders of policy reforms at the same level. Given the scarcity of resources and time during the decision-making process, poorer Chinese provinces may view wealthier provinces as their role models and emulate the latter's policy adoptions.

Horizontal Imitation Hypothesis: A province is more likely to adopt a policy innovation of another province wealthier than it.

Researchers have found that economic competition among subnational governments could result in a 'race to the top' or 'race to the bottom' (Berry and Baybeck 2005; Konisky 2007). In other words, one government's action could lead to similar actions of other governments because of economic spillovers. Provinces with similar economic industrial structures are more likely to compete for foreign enterprises and investments in the same pool. By contrast, provinces with dissimilar industrial structures would not target the same sources of foreign investment in the market. As the purpose of adopting efficiency-oriented ALCs was to create a more attractive business environment, one province's adoption is likely to create competitive pressures for another province with similar economic structures to adopt the same policy to avoid being outperformed.

Horizontal Competition Hypothesis: A province is more likely to adopt a policy innovation of another province with similar economic characteristics.

Neighbouring diffusion is a frequently cited mechanism in the existing literature. As some researchers point out, the diffusion dynamics behind geographic contiguity could be any of the above three mechanisms (Volden, Ting, and Carpenter 2008; 328; Gilardi 2016). However, Zhu (2014) found that neighbouring Chinese local governments often competed with one another in all dimensions and were reluctant to be regarded as 'followers' by their neighbours. Hence, political competition in China's performance evaluation-based personnel system can lead to the divergence of policy instruments in neighbouring local governments. Zhu (2014) provided qualitative evidence of this mechanism by comparing the administrative licencing reforms in the provinces of Sichuan and Tianjin. The following hypothesis is based on X. Zhu's logic:

Neighbouring Diffusion Hypothesis: A province is less likely to adopt a policy innovation when a neighbouring province has adopted the same policy innovation.

Vertical diffusion mechanisms

The CPC has maintained a strict personnel control of the subnational governments since the establishment of the People's Republic of China. China's political leaders are not elected by citizens within their jurisdictions. Instead, they are selected and appointed by superior committees of the CPC based on economic performance, social stability, or political factions (Choi 2012; Shih 2008; Shih, Adolph, and Liu

2012). The central government has full authorities to determine the political careers of subnational leaders, including evaluation, monitoring, appointment, promotion, rotation, and demotion (Choi 2012; Edin 2003). The local governments have to pay serious attention to the central government's policy signals. For example, if the national government advocates a particular policy on business and investment, subnational governments may adopt that policy to gain praise or attention of the national leaders. Therefore, we have the following hypothesis:

Top-Down Coercion Hypothesis: The likelihood of a province's policy adoption increases with the national government's advocates of the same policy.

The so-called snowball effect and pressure valve effect under bottom-up federalism could also potentially exist in China (Shipan and Volden 2006). Theoretically, China has no formal local lobbying groups and thus, provincial governments could easily ignore their subordinate governments' new policy signals. However, CPC's political evaluation and promotion arrangements provide strong incentives for provincial leaders to strengthen subordinate policy innovations that can help promote local economic development. In other words, subordinate governments are important information sources for the superior government to find appropriate ways to improve their performance. When a subordinate government adopts a new policy instrument, the superior government would have more knowledge about the innovation and be more willing to adopt it.

Bottom-Up Snowball Hypothesis: Cites' innovation adoption within a province is positively associated with the likelihood of the provincial government's innovation adoption.

Data and methodology

We collected the information about ALCs from 31 provincial level government websites, and the socio-economic data from the websites of the China Statistics Bureau (CSB) and China National Knowledge Infrastructure. We applied the directed dyad year EHA approach to identify potential diffusion mechanisms (Gilardi 2010; Volden 2006, 2016). As an alternative to traditional state-year EHA (Berry and Berry 1990), the dyadic approach has gained popularity in recent years because of its convenience in conducting a direct test of hypotheses regarding the specific mechanisms of policy diffusion (Gilardi and Fuglister 2008; Nicholson-Crotty and Carley 2016; Volden 2006, Volden 2016). In other words, directed dyadic analysis can delicately demonstrate a correlation between the adoption of an innovation in province i and the adoption of an innovation in province j (Nicholson-Crotty and Carley 2016).

Specifically, we modelled directed dyads by pairing provinces with other provinces from which they may collect innovation information. The dependent variable equals 1, if province i adopts an innovation within year t after province j has adopted it by year $t - 1$, and 0, if otherwise. The observations after i 's adoption were removed. Following Boehmke's (2009) advice on addressing potential sample bias, we eliminated the observations if province i in year t does not have a chance to emulate province j , when the latter has not adopted the innovation by year $t - 1$ yet. For

instance, Shaanxi and Tianjin established their provincial level ALCs in 1999 and 2004, respectively. Therefore, when we paired Tianjin (i) with Shaanxi (j), the observation period of Tianjin–Shaanxi dyad was between 2000 and 2004. In contrast, when we paired Shaanxi (i) and Tianjin (j), because Shaanxi's ALC was established earlier than Tianjin and had no chance to emulate Tianjin, no observation was made in the Shaanxi–Tianjin dyad.

The horizontal diffusion effects consist of four aspects. An increase in foreign enterprises is the main policy goal of the creation of ALC as ALC is designed to attract external businesses. To measure the learning effect, a dummy variable was set, which equals 1 if the increase of foreign enterprises in the early adopter j is higher than i , and 0, if otherwise. An advantage of this measure is that it is constructed based on the official statistics instead of each government's claim of success, which could simply be a result of political manipulation. To measure the imitation effect, meaning poorer Chinese provinces tend to emulate wealthier provinces, a dummy variable was also set, which equals 1 if the early adopter j has a higher GDP per capita than province i , and 0, if otherwise.

To measure the competition effect, we borrowed the formula of representation index in Pitts (2007) to measure the similarity of economic structure between i and j . Specifically, this measure ranges from 0 to 1, where 0 represents a perfect mismatch between the economic structures in i and j and 1 represents a perfect match between the economic structures in i and j . The index was calculated based on the information regarding the gross products of seven specific industries provided by CSB, including agriculture, building, transportation, retail, manufacturing, finance, and catering.⁵ In addition to the above three measures of horizontal diffusion mechanisms, we also included a measure of neighbouring diffusion. Specifically, a dummy variable was set, which equals 1 if province i and province j are geographical neighbours, and 0, if otherwise.

We included both top-down and bottom-up effects in the model to test the vertical diffusion mechanisms. Previous research shows that the yearly number of policy documents released by the Chinese authorities has a high level of reliability and validity in terms of measuring their supportive signals (Zhang 2014, 2015; Zhu and Zhao Forthcoming). Hence, the top-down effect was measured using the yearly number of administrative licencing policy documents issued by the State Council since 2001,⁶ which represents the level of central governments' support for the ALS reform. After intensively reading many of these documents, we determined that these documents showed consistent support for ALS reform. The bottom-up effect was measured by the accumulated percentage of city governments that have built city-level ALCs within each province.⁷

Other control variables consist of potential internal determinants. The socio-economic variables consisted of province i 's economic level, economic growth, industry structure, and the number of foreign enterprises. We also controlled for the administrative categories of each provincial level unit, including normal provinces (baseline category), minority autonomous regions, and municipalities directly under the central government. Compared with normal provinces, provincial level minority autonomous regions, such as Inner Mongolia, Xinjiang, Guangxi, Ningxia, and Tibet, are more tightly controlled by the central government to account for potential instability issues because of ethnic, religious, and border conflicts. In

contrast, municipalities directly under the central government, such as Beijing, Shanghai, Tianjin, Chongqing, often enjoy more administrative and economic privileges because of their historically superior political status and geographical advantages.

We assumed that the subnational leaders utilized mainly the statistical and policy information of the previous year when they created the ALCs. Hence, all independent variables were lagged by 1 year.⁸ Table 1 provides the details of the operationalization of variables. Finally, Hong Kong, Macao, and Taiwan were excluded in the empirical analysis because the CPC government does not control them directly. We chose the logit model to conduct empirical analyses.

Empirical results

Table 2 presents the directed dyadic logit analysis of the diffusion of provincial ALCs in China between 1999 and 2015. We report both the coefficients and per cent changes in odds ratio for a one-unit increase in each independent variable. The robust standard errors clustered by each dyad are presented in the parentheses. To ensure that our results are not contaminated by problems of multicollinearity and measurement error, we conducted four regressions altogether. Model 1 includes only key variables of horizontal diffusion. In Model 2, the variables that capture the vertical diffusion effects are added, whereas in Model 3, the internal social and economic factors are controlled. In Model 4, the duration and cubic splines of time to account for the potential time dependence problem are included (Beck, Katz, and Tucker 1998; Nicholson-Crotty and Carley 2016). In general, Table 2 shows that both horizontal and vertical diffusion mechanisms substantially increase the goodness of fit.

Specifically, Model 1 shows that statistically, both learning and imitation mechanisms have significant and positive effects on the adoption of provincial level ALCs, which suggests that the specific policy performance and overall economic performance can become incentives for provincial governments to emulate others. Model 2 shows that after controlling for the vertical diffusion mechanisms, horizontal diffusion effects are still statistically significant and positive. This finding suggests that China's horizontal diffusion is not simply manipulated (confounded) by the central government. Models 3 and 4 indicate that the learning and imitation effects are statistically significant and positive after controlling for various internal determinants and possible exogenous shocks, which provides further empirical support for the generalizability of the horizontal diffusion theory.

In contrast, the competition mechanism has a slightly negative effect, which is counter-intuitive compared with existing evidence on competitive diffusion in western countries (Berry and Baybeck 2005; Shipan and Volden 2008). This finding seems to suggest that economic similarity does not play a positive and influential role in the process of interprovincial policy diffusion and needs to be further explored. The negative sign of neighbouring effect is consistent with Zhu's (2014) recent qualitative diffusion research regarding China's administrative licencing reform, which argues that competition in the performance evaluation-based personnel system contributes to the formation of the neighbouring 'championship' mentality, leading to the avoidance of emulating policy instruments across China's neighbouring governments. Nevertheless, the estimated coefficient of neighbouring effect is not statistically significant.

Table 1. Variables summary.

Variables	Description of measurements	Data sources	Mean
Dependent variables			
<i>Adoption_{i, dyad}</i>	In a dyad year, the dummy equals 1 if province <i>i</i> establishes an ALC after province <i>j</i> has established it; zero otherwise	Government websites	0.10
Horizontal diffusion			
Learning effect	Dummy = 1 if the increase of foreign enterprises in earlier adopter <i>j</i> was higher than <i>i</i> in the previous year	China Statistics Bureau	0.36
Imitation effect	Dummy = 1 if the earlier adopter <i>j</i> had a higher GDP per capita than <i>i</i> in the previous year	China Statistics Bureau	0.30
Competition effect	$EconomicSimilarity = 1 - \sqrt{\sum_{k=0}^7 \left(\frac{Industry_{i,k}}{GDP_i} - \frac{Industry_{j,k}}{GDP_j} \right)^2}$ The index is calculated based on the information regarding the gross products of 7 specific industries provided by China Statistics Bureau, including agriculture, building, transportation, retail, manufacturing, finance, and catering	China Statistics Bureau	0.85
Neighbouring effect	Dummy = 1 if province <i>i</i> and province <i>j</i> are geographical neighbours	China Statistics Bureau	0.17
Vertical diffusion			
Top-down effect	Yearly number of policies with titles including 'administrative licencing' from the State Council in the previous year	China National Knowledge Infrastructure	1.82
Bottom-up effect	Accumulated percentage of city governments that have built city-level ALCs within each province in the previous year	Government websites	74.28
Internal determinants			
Province <i>i</i> 's economic level	Province <i>i</i> 's GDP per capita in the previous year (1,000 yuan)	China Statistics Bureau	33.46
Province <i>i</i> 's economic growth	Province <i>i</i> 's annual GDP growth rate in the previous year	China Statistics Bureau	11.70
Province <i>i</i> 's proportion of service industry	The proportion of service (third) industry in the previous year. We only include this industry because of its collinearity with the manufacturing (second) industry and its relatively more prominent contribution to local tax and employment status	China Statistics Bureau	42.08
Province <i>i</i> 's number of foreign enterprises	Province <i>i</i> 's number of foreign enterprises in the previous year (1,000)	China Statistics Bureau	14.90
<i>i</i> = Minority autonomous regions	Dummy = 1 if <i>i</i> is a provincial level minority autonomous region	China Statistics Bureau	0.17
<i>i</i> = Municipality directly under the central government	Dummy = 1 if <i>i</i> is a provincial level municipality directly under the central government	China Statistics Bureau	0.14

ALC: Administrative licencing centre.

Note: *i* indicates the focal province and *j* represents the dyadic province.

The vertical diffusion dynamics are also supported by empirical findings. Table 2 illustrates that the policy signals from the central government (top-down mechanism) have significant positive effects on the diffusion of ALC. This is not a surprising finding in an authoritarian country with a strict party-state system. If the national government publicly expresses its support for a policy goal (e.g. government efficiency), subnational governments may take the policy innovation as a good

Table 2. Diffusion mechanisms and the adoption of provincial level ALCs in China.

	Model 1		Model 2		Model 3		Model 4	
	Coefficient (SE)	%change Odds ratio	Coefficient (SE)	%change Odds ratio	Coefficient (SE)	%change Odds ratio	Coefficient (SE)	%change Odds ratio
Horizontal diffusion								
Learning effect	0.469*** (0.14)	59.8	0.411** (0.14)	50.8	0.495*** (0.16)	64.0	0.571*** (0.17)	77.1
Imitation effect	0.469*** (0.14)	59.9	0.663*** (0.16)	94.0	0.731*** (0.20)	107.7	0.724*** (0.20)	106.2
Competition effect	-0.700 (0.58)	-50.3	-1.133 (0.67)	-67.8	-1.358 (0.76)	-74.3	-1.430 (0.78)	-76.1
Neighbouring effect	-0.236 (0.18)	-21.1	-0.196 (0.20)	-17.8	-0.180 (0.20)	-16.5	-0.174 (0.20)	-16.0
Vertical diffusion								
Top-down effect			0.241*** (0.04)	27.2	0.166** (0.05)	18.0	0.167** (0.06)	18.2
Bottom-up effect			0.010** (0.00)	1.1	-0.001 (0.00)	-0.1	-0.001 (0.00)	-0.1
Internal determinants								
Province <i>i</i> 's economic level					0.028*** (0.01)	2.8	0.027*** (0.01)	2.7
Province <i>i</i> 's economic growth					0.047 (0.04)	4.8	0.052 (0.04)	5.4
Province <i>i</i> 's proportion of service industry					0.074*** (0.01)	7.6	0.073*** (0.01)	7.6
Province <i>i</i> 's number of foreign enterprises					-0.005 (0.00)	-0.5	-0.004 (0.00)	-0.4
<i>i</i> = minority autonomous regions					-3.924*** (0.46)	-98	-3.873*** (0.45)	-97.9
<i>i</i> = municipality directly under the central government					-1.497*** (0.42)	-77.6	-1.491*** (0.42)	-77.5
Controls of duration dependence								
Duration							-1.310 (1.12)	-73.0
Cubic spline 1							-0.239 (0.25)	-21.2

(Continued)

Table 2. (Continued).

	Model 1		Model 2		Model 3		Model 4	
	Coefficient (SE)	%change Odds ratio	Coefficient (SE)	%change Odds ratio	Coefficient (SE)	%change Odds ratio	Coefficient (SE)	%change Odds ratio
Cubic spline 2							0.084 (0.10)	8.7
Cubic spline 3							−0.002 (0.01)	−0.2
Constant	−1.774*** (0.48)		−2.847*** (0.61)		−5.653*** (1.04)		−4.183*** (1.46)	
Observations	1941		1941		1941		1941	
Pseudo R-squared	0.02		0.06		0.13		0.14	
AIC	1367.34		1305.08		1222.84		1227.61	
Log likelihood	−678.69		−645.54		−598.42		−596.8	
Wald χ^2 (df)	27.90 (4)		84.39 (6)		239.27 (12)		248.10 (16)	

Note: * $p < 0.05$; ** $p < 0.01$; *** $p < 0.001$ (two-tailed); robust standard errors clustered by dyad in parentheses. The dependent variable is equal to 1 if province i adopts an innovation after province j has adopted it; 0, if otherwise. All the independent variables are lagged by 1 year.

opportunity to promote local economy and demonstrate loyalty to the national leaders. However, the positive bottom-up effect is only statistically significant when we do not control for a province's socio-economic characteristics. Hence, our empirical analysis does not provide enough evidence to support the existence of bottom-up snowball effect in China.

Finally, similar to previous literature, we find that a province's economic level and service industry development have substantial positive effects on the adoption of innovation, which suggests that the overall social requirement is an important predictor of subnational policy innovation (Berry and Berry 1990; Ma 2013; Zhu and Zhang 2016). However, we observe no significant evidence that economic growth rate or the existing number of foreign enterprises in Chinese provinces have an effect on their adoption of provincial level ALCs. In addition, the provincial level minority autonomous regions and municipalities directly under the central government are much less likely to adopt an innovation compared with the normal provinces, which confirms the political and economic advantages of these administrative jurisdictions in China.

Conclusion

This research adds to the existing literature by exploring to what extent policy diffusion theory holds in non-western or non-democratic countries. We illustrate that the key assumption behind existing policy diffusion research is that the subnational governments have discretion in a specific policy field. Hence, intergovernmental policy influence and policy laboratories are not restricted to the typical western countries. These policy phenomena can be found in the developing, non-democratic, and centralized countries as long as their subnational governments have autonomy when they make policy decisions. Nevertheless, without a comprehensive analytical framework and well-designed empirical test, previous research might over- or underestimate the importance of certain diffusion mechanisms and the generalizability of existing policy diffusion mechanisms cannot be fully verified.

We, therefore, integrate multiple horizontal and vertical diffusion mechanisms and test them in China based on a directed dyadic analysis of the diffusion of provincial level ALCs. Our research indicates that choosing an appropriate approach to identify specific mechanisms in the policy diffusion process outside the typical western context has important theoretical and practical implications. We find that learning and imitation effects can significantly and consistently accelerate the process of innovation diffusion among provincial governments. By contrast, the economic competition and geographic neighbouring mechanisms seem less effective in stimulating diffusion. The empirical results also indicate that top-down effects can significantly increase the probability of adopting new economic policy tools in China. Past research mainly focuses on testing the existence of policy diffusion but rarely demonstrates which mechanisms mainly take effect. Hence, different from the partial evidence from the existing qualitative or quantitative research, the present research contributes to the literature as the first comprehensive study on multiple horizontal and vertical diffusion mechanisms in a non-democratic government context.

Our research does not suggest that policy diffusion is something new in China; instead, it provides evidence that policy diffusion is indeed an important component of the regular policy process in the subnational governments. Of course, not all policy innovations are appropriate for all subnational governments, and,

therefore, the diffusion of certain policy innovations might produce unwelcome consequences (Park and Berry 2014) and ultimately leads to policy divergence (Phillips and Smith 2014). Moreover, there could be other channels (e.g. political cohorts or political mobility) through which policy diffusion could occur. Future research with more fine-grained data could build on our research to explore these questions.

Practically, our research implies that China's subnational policymakers should begin policy adoption activities by assessing the effectiveness of policy innovations in other places. The policy environment in a transitioning country such as China is often highly uncertain and frequently changing, which suggests that local leaders need to be aware of various resources and opportunities to adopt an appropriate innovation. Practitioners need to promote evidence-based decision-making and pay attention to policy signals from multiple directions, including peer, superior, and subordinate governments. The empirical patterns identified in our research could help both local leaders find the most effective approach to absorbing policy experience and central leaders choose an appropriate way to promote best policy practices among local governments.

Notes

1. Sixteenth Party Congress Report. Retrieved from http://language.chinadaily.com.cn/news/2013-11/26/content_17132209.htm; Seventeenth Party Congress Report. Retrieved from http://language.chinadaily.com.cn/2007-10/31/content_6218870_2.htm; Eighteenth Party Congress Report. Retrieved from http://language.chinadaily.com.cn/news/2012-11/19/content_15941774.htm.
2. Retrieved from <http://finance.sina.com.cn/roll/2016-03-17/doc-ifyqnsy4399968.shtml>.
3. This has also become a broadly accepted definition of policy diffusion in recent years (Graham, Shipan, and Volden 2013).
4. Mainland China (excluding Hong Kong, Macao, and Taiwan, which are not under the direct control of Chinese Communist Party) has a unitary administrative system with five tiers of government organizations, including the unique central government, 31 provincial level governments, nearly 300 prefecture-level city governments, around 3,000 county-level government, and over 40,000 town-level governments (Ma 2013). Note that all the governments below the central level are viewed as the local governments in China.
5. The missing information in catering industry leads to an additional loss of 266 observations in the sample. However, dropping the economic similarity measure does not change the signs and statistical significance of other coefficient estimates in the models. Therefore, we choose to include this variable in the model to avoid a potential omitted variable bias at the cost of a smaller sample.
6. The central government initiated its reform of the administrative licencing system in 2001, 2 years after the establishment of the first provincial level ALC in 1999. Note that the central policies never formally coerced the provincial governments to create ALCs.
7. Many city-level ALCs were established earlier than the creation of provincial level ALCs (Zhu and Zhang 2016). For instance, Jiangmen city of Guangdong province created the first city-level ALC of China in 1997, while Guangdong province built its provincial level ALC in 2012.
8. This could also help avoid potential reverse causation problems between the dependent variable and the independent variables.

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References

- Appleton, S., L. Song, and Q. Xia. 2005. "Has China Crossed the River? The Evolution of Wage Structure in Urban China during Reform and Retrenchment." *Journal of Comparative Economics* 33 (4): 644–663. doi:[10.1016/j.jce.2005.08.005](https://doi.org/10.1016/j.jce.2005.08.005).
- Bardhan, P. 2002. "Decentralization of Governance and Development." *The Journal of Economic Perspectives* 16 (4): 185–205. doi:[10.1257/089533002320951037](https://doi.org/10.1257/089533002320951037).
- Beck, N., J. N. Katz, and R. Tucker. 1998. "Taking Time Seriously: Time-series-cross-section Analysis with a Binary Dependent Variable." *American Journal of Political Science* 42 (4): 1260–1288. doi:[10.2307/2991857](https://doi.org/10.2307/2991857).
- Berry, F. S., and W. D. Berry. 1990. "State Lottery Adoptions as Policy Innovations: An Event History Analysis." *American Political Science Review* 84 (2): 395–415. doi:[10.2307/1963526](https://doi.org/10.2307/1963526).
- Berry, F. S., and W. D. Berry. 2014. "Innovation and Diffusion Models in Policy Research." In *Theories of the Policy Process*, edited by P. A. Sabatier and C. M. Weible, 3rd ed., 307–362. Boulder, CO: Westview Press.
- Berry, W. D., and B. Baybeck. 2005. "Using Geographic Information Systems to Study Interstate Competition." *American Political Science Review* 99 (4): 505–519. doi:[10.1017/S0003055405051841](https://doi.org/10.1017/S0003055405051841).

- Boehmke, F. J. 2009. "Policy Emulation or Policy Convergence? Potential Ambiguities in the Dyadic Event History Approach to State Policy Emulation." *The Journal of Politics* 71 (3): 1125–1140. doi:10.1017/s0022381609090926.
- Boushey, G. 2010. *Policy Diffusion Dynamics in America*. New York, NY: Cambridge University Press.
- Cai, H., and D. Treisman. 2009. "Political Decentralization and Policy Experimentation." *Quarterly Journal of Political Science* 4 (1): 35–58. doi:10.1561/100.00008039.
- Caulfield, J. L. 2006. "Local Government Reform in China: A Rational Actor Perspective." *International Review of Administrative Sciences* 72 (2): 253–267. doi:10.1177/0020852306064613.
- Cerniglia, F. 2003. "Decentralization in the Public Sector: Quantitative Aspects in Federal and Unitary Countries." *Journal of Policy Modeling* 25 (8): 749–776. doi:10.1016/S0161-8938(03)00069-3.
- Choi, E. K. 2012. "Patronage and Performance: Factors in the Political Mobility of Provincial Leaders in Post-Deng China." *The China Quarterly* 212: 965–981. doi:10.1017/S030574101200118X.
- De Burca, G., R. O. Keohane, and C. Sabel. 2013. "New Modes of Pluralist Global Governance." *New York University Journal of International Law and Politics (JILP)* 45 (1). NYU School of Law, Public Law Research Paper No. 13–08. <https://ssrn.com/abstract=2225603>
- Desmarais, B. A., J. J. Harden, and F. J. Boehmke. 2015. "Persistent Policy Pathways: Inferring Diffusion Networks in the American States." *American Political Science Review* 109 (02): 392–406. doi:10.1017/S0003055415000040.
- Edin, M. 2003. "State Capacity and Local Agent Control in China: CCP Cadre Management from a Township Perspective." *The China Quarterly* 173: 35–52. doi:10.1017/S0009443903000044.
- Escobar-Lemmon, M. 2001. "Fiscal Decentralization and Federalism in Latin America." *Publius: The Journal of Federalism* 31 (4): 23–41. doi:10.1093/oxfordjournals.pubjof.a004919.
- Fan, C. S., C. Lin, and D. Treisman. 2009. "Political Decentralization and Corruption: Evidence from Around the World." *Journal of Public Economics* 93 (1): 14–34. doi:10.1016/j.jpubeco.2008.09.001.
- Gilardi, F. 2010. "Who Learns from What in Policy Diffusion Processes?" *American Journal of Political Science* 54 (3): 650–666. doi:10.1111/j.1540-5907.2010.00452.x.
- Gilardi, F. 2016. "Four Ways We Can Improve Policy Diffusion Research." *State Politics & Policy Quarterly* 16 (1): 8–21. doi:10.1177/1532440015608761.
- Gilardi, F., and K. Fuglister. 2008. "Empirical Modeling of Policy Diffusion in Federal States: The Dyadic Approach." *Swiss Political Science Review* 14 (3): 413–450. doi:10.1002/j.1662-6370.2008.tb00108.x.
- Graham, E. R., C. R. Shipan, and C. Volden. 2013. "The Diffusion of Policy Diffusion Research in Political Science." *British Journal of Political Science* 43 (3): 673–701. doi:10.1017/S0007123412000415.
- Gray, V. 1973. "Innovation in the States: A Diffusion Study." *American Political Science Review* 67 (4): 1174–1185. doi:10.2307/1956539.
- Heilmann, S. 2008. "Policy Experimentation in China's Economic Rise." *Studies in Comparative International Development* 43 (1): 1–26. doi:10.1007/s12116-007-9014-4.
- Karch, A. 2006. "National Intervention and the Diffusion of Policy Innovations." *American Politics Research* 34 (4): 403–426. doi:10.1177/1532673X06288202.
- Karch, A. 2012. "Vertical Diffusion and the Policy-Making Process the Politics of Embryonic Stem Cell Research." *Political Research Quarterly* 65 (1): 48–61. doi:10.1177/1065912910385252.
- Ko, K., and K. Shin. 2017. "How Asian countries understand policy experiment as policy pilots?" *Asian Journal of Political Science* 25 (3): 253–265. doi:10.1080/02185377.2017.1360784.
- Konisky, D. M. 2007. "Regulatory Competition and Environmental Enforcement: Is There a Race to the Bottom?" *American Journal of Political Science* 51 (4): 853–872. doi:10.1111/j.1540-5907.2007.00285.x.
- Korteland, E., and V. Bekkers. 2008. "The Diffusion of Electronic Service Delivery Innovations in Dutch E-policing: The Case of Digital Warning Systems." *Public Management Review* 10 (1): 71–88. doi:10.1080/14719030701763195.
- Kung, J. K. S., and S. Chen. 2011. "The Tragedy of the Nomenklatura: Career Incentives and Political Radicalism during China's Great Leap Famine." *American Political Science Review* 105 (1): 27–45. doi:10.1017/S0003055410000626.
- Lin, J. Y., and Z. Liu. 2000. "Fiscal Decentralization and Economic Growth in China." *Economic Development and Cultural Change* 49 (1): 1–21. doi:10.1086/452488.
- Liu, W., and W. Li. 2016. "Divergence and Convergence in the Diffusion of Performance Management in China." *Public Performance & Management Review* 39 (3): 630–654. doi:10.1080/15309576.2015.1138060.

- Lockwood, B. 2004. "Decentralization via Federal and Unitary Referenda." *Journal of Public Economic Theory* 6 (1): 79–108. doi:[10.1111/j.1467-9779.2004.00158.x](https://doi.org/10.1111/j.1467-9779.2004.00158.x).
- Ma, L. 2013. "The Diffusion of Government Microblogging: Evidence from Chinese Municipal Police Bureaus." *Public Management Review* 15 (2): 288–309. doi:[10.1080/14719037.2012.691010](https://doi.org/10.1080/14719037.2012.691010).
- Ma, L. 2014. "Diffusion and Assimilation of Government Microblogging: Evidence from Chinese Cities." *Public Management Review* 16 (2): 274–295. doi:[10.1080/14719037.2012.725763](https://doi.org/10.1080/14719037.2012.725763).
- Martinez-Vazquez, J., and R. M. McNab. 2003. "Fiscal Decentralization and Economic Growth." *World Development* 31 (9): 1597–1616. doi:[10.1016/S0305-750X\(03\)00109-8](https://doi.org/10.1016/S0305-750X(03)00109-8).
- McCann, P. J. C., C. R. Shipan, and C. Volden. 2015. "Top-down Federalism: State Policy Responses to National Government Discussions." *Publius: The Journal of Federalism* 45 (4): 495–525. doi:[10.1093/publius/pjv013](https://doi.org/10.1093/publius/pjv013).
- Mei, C., and M. M. Pearson. 2014. "Killing a Chicken to Scare the Monkeys? Deterrence Failure and Local Defiance in China." *The China Journal* 72: 75–97. doi:[10.1086/677058](https://doi.org/10.1086/677058).
- Nicholson-Crotty, S., and S. Carley. 2016. "Effectiveness, Implementation, and Policy Diffusion or 'Can We Make That Work for Us?'" *State Politics & Policy Quarterly* 16 (1): 78–97. doi:[10.1177/1532440015588764](https://doi.org/10.1177/1532440015588764).
- Osaghae, E. E. 1990. "A Reassessment of Federalism as a Degree of Decentralization." *Publius: The Journal of Federalism* 20 (1): 83–98. doi:[10.1093/oxfordjournals.pubjof.a037864](https://doi.org/10.1093/oxfordjournals.pubjof.a037864).
- Pacheco, J. 2012. "The Social Contagion Model: Exploring the Role of Public Opinion on the Diffusion of Antismoking Legislation across the American States." *The Journal of Politics* 74 (1): 187–202. doi:[10.1017/S0022381611001241](https://doi.org/10.1017/S0022381611001241).
- Park, S., and F. Berry. 2014. "Successful Diffusion of a Failed Policy: The Case of Pay-for-performance in the US Federal Government." *Public Management Review* 16 (6): 763–781. doi:[10.1080/14719037.2012.750835](https://doi.org/10.1080/14719037.2012.750835).
- Pei, M. 2012. "Is CCP Rule Fragile or Resilient?" *Journal of Democracy* 23 (1): 27–41. doi:[10.1353/jod.2012.0008](https://doi.org/10.1353/jod.2012.0008).
- Phillips, S. D., and S. R. Smith. 2014. "A Dawn of Convergence?: Third Sector Policy Regimes in the 'Anglo-Saxon' Cluster." *Public Management Review* 16 (8): 1141–1163. doi:[10.1080/14719037.2014.965272](https://doi.org/10.1080/14719037.2014.965272).
- Pitts, D. W. 2007. "Representative Bureaucracy, Ethnicity, and Public Schools: Examining the Link between Representation and Performance." *Administration & Society* 39 (4): 497–526. doi:[10.1177/0095399707303129](https://doi.org/10.1177/0095399707303129).
- Rodden, J. 2004. "Comparative Federalism and Decentralization: On Meaning and Measurement." *Comparative Politics* 36 (4): 481–500. doi:[10.2307/4150172](https://doi.org/10.2307/4150172).
- Shih, V., C. Adolph, and M. Liu. 2012. "Getting Ahead in the Communist Party: Explaining the Advancement of Central Committee Members in China." *American Political Science Review* 106 (01): 166–187. doi:[10.1017/S0003055411000566](https://doi.org/10.1017/S0003055411000566).
- Shih, V. C. 2008. "Nauseating" Displays of Loyalty: Monitoring the Factional Bargain through Ideological Campaigns in China." *The Journal of Politics* 70 (4): 1177–1192. doi:[10.1017/S0022381608081139](https://doi.org/10.1017/S0022381608081139).
- Shipan, C. R., and C. Volden. 2006. "Bottom-up Federalism: The Diffusion of Anti-smoking Policies from US Cities to States." *American Journal of Political Science* 50 (4): 825–843. doi:[10.1111/j.1540-5907.2006.00218.x](https://doi.org/10.1111/j.1540-5907.2006.00218.x).
- Shipan, C. R., and C. Volden. 2008. "The Mechanisms of Policy Diffusion." *American Journal of Political Science* 52 (4): 840–857. doi:[10.1111/j.1540-5907.2008.00346.x](https://doi.org/10.1111/j.1540-5907.2008.00346.x).
- Shipan, C. R., and C. Volden. 2012. "Policy Diffusion: Seven Lessons for Scholars and Practitioners." *Public Administration Review* 72 (6): 788–796. doi:[10.1111/j.1540-6210.2012.02610.x](https://doi.org/10.1111/j.1540-6210.2012.02610.x).
- Treisman, D. 1999. "Political Decentralization and Economic Reform: A Game-Theoretic Analysis." *American Journal of Political Science* 43 (2): 488–517. doi:[10.2307/2991803](https://doi.org/10.2307/2991803).
- Treisman, D. 2000. "Decentralization and Inflation: Commitment, Collective Action, or Continuity?" *American Political Science Review* 94 (4): 837–857. doi:[10.2307/2586211](https://doi.org/10.2307/2586211).
- Treisman, D. 2006. "Fiscal Decentralization, Governance, and Economic Performance: A Reconsideration." *Economics & Politics* 18 (2): 219–235. doi:[10.1111/j.1468-0343.2006.00169.x](https://doi.org/10.1111/j.1468-0343.2006.00169.x).
- Tsai, W. H., and N. Dean. 2014. "Experimentation under Hierarchy in Local Conditions: Cases of Political Reform in Guangdong and Sichuan, China." *The China Quarterly* 218: 339–358. doi:[10.1017/S0305741014000630](https://doi.org/10.1017/S0305741014000630).

- Volden, C. 2006. "States as Policy Laboratories: Emulating Success in The Children's Health Insurance Program." *American Journal Of Political Science* 50 (2): 294-312. doi:10.1111/j.1540-5907.2006.00185.x.
- Volden, C. 2016. "Failures Diffusion, Learning, and Policy Abandonment." *State Politics & Policy Quarterly* 16 (1): 44-77. doi:10.1177/1532440015588910.
- Volden, C., M. M. Ting, and D. P. Carpenter. 2008. "A Formal Model of Learning and Policy Diffusion." *American Political Science Review* 102 (3): 319-332. doi:10.1017/S0003055408080271.
- Walker, J. L. 1969. "The Diffusion of Innovations among the American States." *American Political Science Review* 63 (3): 880-899. doi:10.2307/1954434.
- Walker, R. M., C. N. Avellaneda, and F. S. Berry. 2011. "Exploring the Diffusion of Innovation among High and Low Innovative Localities: A Test of the Berry and Berry Model." *Public Management Review* 13 (1): 95-125. doi:10.1080/14719037.2010.501616.
- Wang, S. 2009. "Adapting by Learning: The Evolution of China's Rural Health Care Financing." *Modern China* 35 (4): 370-404. doi:10.1177/009770040933538.
- Watts, R. L. 1998. "Federalism, Federal Political Systems, and Federations." *Annual Review of Political Science* 1 (1): 117-137. doi:10.1146/annurev.polisci.1.1.117.
- Weyland, K. 2005. "Theories of Policy Diffusion Lessons from Latin American Pension reform." *World Politics* 57 (2): 262-295. doi:10.1353/wp.2005.0019.
- Woods, N. D. 2008. "Serving Two Masters? State Implementation of Federal Regulatory Policy." In *Public Administration Quarterly*, 571-596.
- Wu, J., L. Ma, and Y. Yang. 2013. "Innovation in the Chinese Public Sector: Typology and Distribution." *Public Administration* 91 (2): 347-365. doi:10.1111/j.1467-9299.2011.02010.x.
- Wu, J., and P. Zhang. 2018. "Local Government Innovation Diffusion in China: an Event History Analysis Of a Performance-based Reform Programme." *International Review Of Administrative Sciences* 84 (1): 63-81. doi: 10.1177/0020852315596211.
- Xu, C. 2011. "The Fundamental Institutions of China's Reforms and Development." *Journal of Economic Literature* 49 (4): 1076-1151. doi:10.1257/jel.49.4.1076.
- Yang, H., and D. Zhao. 2015. "Performance Legitimacy, State Autonomy and China's Economic Miracle." *Journal of Contemporary China* 24 (91): 64-82. doi:10.1080/10670564.2014.918403.
- Zhang, Y. 2012. "Institutional Sources of Reform: The Diffusion of Land Banking Systems in China." *Management and Organization Review* 8 (3): 507-533. doi:10.1111/j.1740-8784.2011.00256.x.
- Zhang, Y. 2014. "From State to Market: Private Participation in China's Urban Infrastructure Sectors, 1992-2008." *World Development* 64: 473-486. doi:10.1016/j.worlddev.2014.06.023.
- Zhang, Y. 2015. "The Formation of Public-private Partnerships in China: An Institutional Perspective." *Journal of Public Policy* 35 (2): 329-354. doi:10.1017/S0143814X15000185.
- Zhu, X. 2014. "Mandate versus Championship: Vertical Government Intervention and Diffusion of Innovation in Public Services in Authoritarian China." *Public Management Review* 16 (1): 117-139. doi:10.1080/14719037.2013.798028.
- Zhu, X. 2017. "Inter-Regional Diffusion of Policy Innovation in China: A Comparative Case Study." *Asian Journal of Political Science* 25 (3): 266-286. doi:10.1080/02185377.2017.1339619.
- Zhu, X., and H. Zhao. *Forthcoming*. "Recognition of Innovation and Diffusion of Welfare Policy: Alleviating Urban Poverty in Chinese Cities during Fiscal Recentralization." *Governance*. doi:10.1111/gove.12332.
- Zhu, X., and Y. Zhang. 2016. "Political Mobility and Dynamic Diffusion of Innovation: The Spread of Municipal Pro-Business Administrative Reform in China." *Journal of Public Administration Research and Theory* 26 (3): 535-551. doi:10.1093/jopart/muv025.
- Zhu, Y. 2012. "Policy Entrepreneur, Civic Engagement and Local Policy Innovation in China: Housing Monetisation Reform in Guizhou Province." *The Australian Journal of Public Administration* 71 (2): 191-200. doi:10.1111/j.1467-8500.2012.00768.x.