

## **FEDERALISM AND THE BALANCE OF POWER: CHINA'S HAN AND TANG DYNASTIES AND THE ROMAN EMPIRE**

RONALD A. EDWARDS\* *Tamkang University and Academia Sinica*

*Abstract.* This paper compares the institutional history of the Han Dynasty (206 BC–AD 220), Tang Dynasty (AD 618–AD 906) and the Roman Empire (27 BC–AD 476). I document a common institutional reform in all three cases: the central government assumed power to appoint key regional officials and diffused authority across a greater number of regional officials. I argue that this served to increase coordination costs among key regional officials, making rebellion and resistance to central directives more costly. As a result, this institutional reform shifted the balance of power toward the central government, giving it more control.

### 1. INTRODUCTION

A fundamental issue in federalism, and – more generally – constitutional theory, is the relationship between the central government and its constituent regional governments. Comparative studies of federalism tend to focus on Western countries. This paper considers two major dynasties in Chinese history – the Han Dynasty (206 BC–AD 220) and the Tang Dynasty (AD 618–AD 906) – and the Roman Empire (27 BC–AD 476). A common institutional phenomenon is identified and analysed.

This paper focuses on the relationship between the central and regional governments. The centre receives tax revenue from the regions and in return provides services, including security. The degree to which the central government can enforce its directives depends, most fundamentally, on the level of resistance from regional governments. This paper shows that the central governments of Imperial China and the Roman Empire used a common institutional reform to gain control over the regions; specifically, they assumed the power to appoint key regional officials and diffused authority among a greater number of officials. I argue that this set of reforms had the effect of increasing coordination costs within the regional governments, thereby making rebellion and resistance to central directives more costly. This shifted the balance of power toward the central government.

*\*Address for Correspondence:* Department of Economics, Tamkang University, Tamsui, 251 Taipei County, Taiwan. Email: redwards@mail.tku.edu.tw. The first draft was researched and written while I was a visiting scholar at the Institute of Political Science, Academia Sinica. I thank Pin-Tsun Chang, Kelly Olds, Matt Rudolph, Kam-Chau Wong and seminar participants at Academia Sinica, Chinese University of Hong Kong, Hong Kong University, Hong Kong Science and Technology University, Taiwan University and Peking University as well as two anonymous referees for helpful comments. I would like to particularly thank Richard Hoffman for numerous discussions on the Roman Empire. I gratefully acknowledge financial support from the NSC.

There is massive literature on federalism related to the general theme of this paper, much of it stemming from Riker (1964). Studies that consider social constraints against the central government are most closely related. Notable recent work on Western federalism includes Bednar (2003) and Weingast (1995). Bednar (2003) argues that the lack of electoral controls in the US constitution has limited the ability of state governments to check the powers of the central government. Weingast (1995) argues that citizen groups face coordination costs in placing limits on the state.<sup>1</sup> A more general treatment of institutions has recently been given by North (1990). This paper focuses on the institutional structure of the regional governments themselves and it argues that central control over the power of appointment and the diffusion of regional authority can reduce checks on the central government.<sup>2</sup>

### 1.1. *The balance of power toward the central government*

More generally, regarding European *v* Chinese comparisons there is an important, emerging literature in political science. A major pioneering contribution in this area is Hui (2005). This path breaking work has contributed to East *v* West comparisons and added much to our understanding of the process of state formation.

One of this paper's contributions to the related literature is that it shows that similar techniques have been used by central governments in Europe, the Roman Empire and Imperial China. The central governments of both Brandenburg-Prussia and France used similar techniques to gain control over their regions. In Brandenburg-Prussia, during the Northern War (1655–1660) and the war with France in 1672, Frederick William used his army to collect taxes in his constituent regions. The local governments in Brandenburg and Prussia lost power during this period and their decline was associated with the appearance of a network of officials to manage taxes, administration and judicial affairs. These officials were directly responsible to the central authority and not under the control of the regional governor. During the Thirty Years' War (1618–1648), the French crown dispatched regional intendants to collect taxes for the army. After the French Civil War (1649–1653), the authority of the intendants expanded at the expense of regional governments, most notably in fiscal and judicial affairs. The French court gained control over its regional governments during this period. These periods marked important turning points in the political history of France and Brandenburg-Prussia, where the central government assumed the power to appoint officials in the regions and

<sup>1</sup> A more general theory of federalism could consider how both the regional government institutional structure and local groups interact in placing limits on the central government.

<sup>2</sup> Other related important theoretical work on institutions has recently been done by Daron Acemoglu and colleagues. This innovative research has brought political and military power into the analysis of institutions – see Acemoglu *et al.* (2007, 2008a,b). An important series of theoretically informed case studies has been produced by James A. Robinson and colleagues. This influential research merges institutional history and political economy – see Robinson (2005), Robinson and Parsons (2006), and Baland and Robinson (2006). These two scholars have also co-authored an influential book in the field of political economy – see Acemoglu and Robinson (2006).

possibly diffused authority among officials. The fact that we see similar techniques being applied in Imperial China and the Roman Empire strongly suggests that this is a fundamental technique for central authorities to gain regional control.<sup>3</sup>

My analysis will focus on the key regional officials. While rebellion, or the threat thereof, by local residents can play a role and local groups can influence the decisions of key officials in various ways, the role of key regional officials is pivotal because of their position of power. In the following analysis I abstract from regional groups and their influence on regional officials and focus attention instead on key regional officials.

This paper is organized as follows. In the following three sections the cases of the Han Dynasty, the Tang Dynasty and the Roman Empire are presented. Each historical case begins with a description of regional institutions and is followed by some brief background history. The institutional reforms are then described in detail. Each case ends with a brief summary. The final section concludes and a simple game theory model is presented in the appendix.

## 2. CHINA'S HAN DYNASTY (206 BC–AD 220)

Two types of regional governments existed during the Han Dynasty: regional commanderies (郡, *jun*), and kingdoms (國, *guo*). The county (縣, *xian*) was the lowest level of administration in both regional governments. Contiguous collections of counties were grouped into commanderies. Commanderies were two-tiered regional governments, with the county administration managing local affairs at the lower level and the commandery (upper) level administration overseeing its constituent counties. Note the term 'regional commandery' is used to designate a particular type of commandery, where the distinguishing feature is the line of authority above the commandery. In regional commanderies, where officials were court appointed, the commandery administration reported directly to the court. Kingdoms, the second type, can be viewed as groups of commanderies, with a king (國王, *guo wang*), serving as a third tier between his constituent commanderies and the court. In the early Han Dynasty, a typical kingdom contained two to six commanderies and kingdoms composed about two-thirds of the country, while the remaining area contained 16 regional commanderies.

Within the kingdom, kingships were hereditary and constituent commandery and county administrations were essentially the same as their counterparts in two-tiered regional governments. However, these constituent commandery and county administrations were responsible to the king who had the right to appoint these subordinate officials.<sup>4</sup>

The First Emperor, Qin Shihuang (秦始皇), unified China for the first time in 221 BC. After a brief rule, the Qin Dynasty collapsed and civil war ensued. Liu Bang (劉邦) unified the country and founded the Han Dynasty. The founding emperor inherited the existing regional governments, which consisted of regional

<sup>3</sup> Carsten (1964, pp. 218–28, 259–60); and Downing (1992, pp. 90–1, 123–7).

<sup>4</sup> Bielenstein (1980, pp. 93–108); Jiang (1987, pp. 168–73); Loewe (1986, p. 126); Shang (1980, p. 54); Wang (1949, pp. 143–51); Yang (1963, p. 33); and Yen (1997, pp. 10–11, 18).

commanderies and kingdoms. Liu Bang came to believe that only family members from the royal line could be trusted to serve as kings. By the time of his death in 195 BC, a brother or son of the emperor, with one exception<sup>5</sup>, had replaced all the previous kings. After the death of Liu Bang, one of his consorts, Empress Lu (呂后), set up two young puppet emperors and dominated the Han court from 195 to 180 BC. Empress Lu had several kings, sons of the founding emperor by other concubines, put to death. In addition, she had four of her own family members, from outside the royal line, installed as kings. In some instances lands were taken from Liu kings and used to establish Lu family kingdoms. This conflict between the Liu and Lu families manifested itself in a growing federal tension, where the Liu kings were increasingly leery of the court dominated by Empress Lu. In 180 BC, Empress Lu died and a son of the founding emperor took the throne. Although Empress Lu's family had been removed from power, some Liu kings remained distrustful of the court and Emperor Wendi (文帝), who reigned from 180 to 157 BC. This lingering distrust along with the fact that the passage of generations weakened the family ties between the emperor and kings contributed to the federal tensions of the Han Dynasty.<sup>6</sup>

Although they were quickly suppressed, two rebellions by kings in 178 and 175 BC changed the federal status quo. A talented court official, Jia Yi (賈誼), suggested to Emperor Wendi that he should act against these regional threats and proposed a 'strategy of pacification' (治安策). The idea was to establish new kingdoms within existing kingdoms. In taking a single kingdom and increasing the number of kings ruling over it, the Han court increased political tension in the administration of the area of the original kingdom. In order to mobilize the resources within the original kingdom against the court, the consent of an increased number of kings was required. In addition, some areas within kingdoms were turned into regional commanderies which reported directly to the court. The later reform increased even more political conflict than creating a new kingdom within an existing kingdom since the court gained the power to appoint all of the officials in the regional commandery.<sup>7</sup>

During the reign of Emperor Wendi, 180–57 BC, the court established many new kingdoms within existing kingdoms and in some instances stripped areas from kingdoms, which were then turned into regional commanderies. Around 176 BC the kingdom of Liang had a part of its territory turned into a regional commandery. The kingdoms of Zhao, Qi and Dai all had new kingdoms set up in areas originally exclusively theirs. More important for the court was the weakening of two of the most powerful kingdoms in the Han Empire, Huainan and Qi. In 164 BC two new kingdoms were established within the original territory of Huainan. In that same year the king of Qi died without an heir apparent and within one year, five additional kingdoms were established within

<sup>5</sup> This was Changsha (長沙國). Shang (1980, pp. 53–4); and Tian and An (1993, pp. 99–100).

<sup>6</sup> Jian (2001, p. 196); Joyner (1978, p. 8); Liao (1998, p. 94); Loewe (1986, pp. 123–7, 135–7); Shang (1980, pp. 52–4); Tian and An (1993, pp. 99–100); and Yang (1963, pp. 14–15, 113).

<sup>7</sup> Shang (1980, p. 54); and Tian and An (1993, pp. 142–4).

its original territory. Under Emperor Wendi many of the kingdoms had seen their territories reduced. Kingdoms increased in number and in some cases new regional commanderies were set up.<sup>8</sup>

Emperor Jingdi (景帝) took the throne in 157 BC upon the death of his father. During his reign (157–141 BC), federal tensions rose to levels previously unseen and more institutional reforms of the regional governments were implemented. An advisor to Emperor Jingdi, Chao Cuo (鼂錯), suggested even stronger centralizing reforms than his predecessor, Jia Yi. Rather than increasing the number of kings within a region, Chao Cuo (鼂錯) advised that more emphasis should be placed on removing commanderies from under kingdoms and turning them into regional commanderies, which directly reported to the court. The emperor followed this advice and began to declare that certain commanderies, previously under the control of regional kings, would come under central control, that is, the court would appoint all the officials of the commanderies and they would report directly to the central government.<sup>9</sup> The emperor removed some of the commanderies rich in resources from powerful kingdoms. With increasing distrust of the court's centralizing reforms over the previous decades, the stage was set for a major federal crisis. Emperor Jingdi's edict to take two commanderies away from the king of Wu, Liu Pi (劉濞), was the spark that ignited a major rebellion. This imperial edict caused many of the kings to feel they must submit or rebel. In 154 BC, the king of Wu along with six other kings defied the order and rebelled in what has come to be known as the famous Seven Kings Rebellion (七國之亂). The emperor tried to appease the kings by having Chao Cuo publicly executed but this did not stop the rebellion. The Han court had not previously experienced such a large-scale regional upheaval and the court was forced to dispatch two generals to suppress the rebellion.<sup>10</sup>

Following the rebellion, the court concerned itself with institutional reforms. New regional commanderies were established, further reducing the size of existing kingdoms in some of the richest lands of the valleys of the Yellow River (黃河), the Huai River (淮河) and the Shandong peninsula. In many cases kingdoms were reduced to a single commandery, with other commanderies reverting to the court. The kingdom of Wu, the instigator of the rebellion, was renamed and had a new line of kings installed. After the king of Liang died without a successor, the kingdom was split into five regions each under a separate king. The institutional reforms of emperors Wendi and Jingdi, especially those after the Seven Kings Rebellion, had reduced the power of the kings by reducing the size of their kingdoms and increasing their number and by increasing the area governed by regional commanderies.<sup>11</sup>

By 150 BC the court had gained a measure of control over the regional governments. With the kingdoms weakened, the court introduced an institutional reform that effectively eliminated the threats of the kings. In 145 BC, the kings

<sup>8</sup> Loewe (1986, pp. 140–1).

<sup>9</sup> Loewe (1986, p. 138); Shang (1980, p. 54); and Tian and An (1993, pp. 144–6).

<sup>10</sup> Joyner (1978, p. 8); Loewe (1986, pp. 125–6); and Tian and An (1993, pp. 144–6).

<sup>11</sup> Loewe (1986, pp. 141–52); and Shang (1980, p. 55).

were stripped of administrative authority over their kingdoms. The status of their senior officials was reduced and all higher officials were henceforth to be appointed by the central government. The chancellor, now the highest-ranking official in the kingdom, came under the control of the court and was responsible for reporting illegal activities of the king. Many senior posts in the kingdom were permanently eliminated, most notably the key fiscal and military officers. Kings were given an income from their kingdom and not allowed to interfere in administration.<sup>12</sup>

In 141 BC, at the age of 15, Emperor Wudi (武帝) assumed the throne upon the death of his father. During Han Wudi's reign (141–87 BC) the centralizing institutional regional reforms continued. The size of the kingdoms was further reduced. In 115 BC a new kingdom was established within the kingdom of Chu. Between 136 and 114 BC, 14 kingdoms were reorganized or lost areas that were turned into regional commanderies. After a failed rebellion in 122 BC, the kingdom of Huai-nan was terminated and its territory was turned into regional commanderies.<sup>13</sup>

### 2.1. *Summary of Han political history*

During the second and first centuries BC, regional kings posed a major threat to the central government of the Han Dynasty. Although the kings were from the imperial family line, factional fighting within the court and the passage of generations both worked to weaken the personal ties between the emperor and his regional kings. Due to circumstance, reforms and luck, by the first century AD the regional kings were largely eliminated as regional threats and the balance of power clearly shifted from the regions to the Han court.

Two main types of institutional reforms were employed by the Han court to weaken the kings' power. First, a new kingdom was created within an existing kingdom. The original region was thereafter governed by two kings in adjacent kingdoms. The use of resources against the court now took the consent of two kings rather than one. The second type of institutional reform was to strip a commandery from an existing kingdom and turn it into a regional commandery, that is, the court gained the power to appoint all the officials in the commandery and require that they report directly to the court. This reform increased political conflict even more as the court not only increased the number of key regional officials, whose consent is needed to resist central directives, but also gave the court the ability to appoint temporary regional officials who would be less likely to cooperate with a hereditary king. It is clear from the history of the Han Dynasty that these institutional reforms were used to gain control over recalcitrant regional governments. It was the court's announcement of one such reform that caused the Seven Kings Rebellion in 154 BC. In addition, we see the Han court carving up and reducing the size of kingdoms after rebellions

<sup>12</sup> Bielenstein (1980, p. 106); Ch'u (1972, p. 166); Loewe (1986, pp. 144, 149); Shang (1980, p. 55); Yang (1963, p. 45); and Yen (1997, pp. 26, 99).

<sup>13</sup> Loewe (1986, p. 156).

were suppressed. This clearly shows that the Han court's main objective in institutional reform was to gain regional control, that is, give incentives to key regional officials to follow central directives. By the mid-second century BC the court had considerably reduced the threats posed by regional kings. Given the stronger position of the central government, a major move was made by the court. In 145 BC, regional kings were stripped of their administrative authority and placed on income and stripped of their power to appoint high officials in the kingdom. Thereafter, centralizing reforms continued and by the beginning of the first century AD the administrative difference between a kingdom and a commandery was negligible.

### 3. CHINA'S TANG DYNASTY (AD 618–AD 906)

During the Tang Dynasty two types of regional governments existed: regional prefectures (州, *zhou*) and provinces. The county (縣, *xian*) was the lowest level of administrations in both types. Contiguous collections of counties were grouped into prefectures, two-tiered regional governments with the county administration managing local affairs at the lower level and the prefecture, or upper level administration overseeing its constituent counties. Note the term 'regional prefecture' is used to designate a particular type of prefecture, where the distinguishing feature is the line of authority above the prefecture. Regional prefectures had court appointed officials who reported directly to the court. Provinces, the second type, were groups of prefectures with a military governor (節度使, *jie du shi*) serving as a third tier in the regional hierarchy between his constituent prefectures and the court. Here the provincial level or third level administration was a military governor and his officers. In the late Tang Dynasty, there were about 50 military governors who typically controlled from two to 12 prefectures each.

Military governorships were hereditary and within the province the constituent prefectures and county administrations were essentially the same as their counterparts in two-tiered regional governments. However, these constituent prefectures and county administrations were responsible to the military governor who had the right to appoint these subordinate officials. A distinction needs to be made between two types of prefectures under a military governor. The seat of the military governor was always located in one prefecture in the province designated the headquarters prefecture (使府, *shi fu*), while all other prefectures within the province of the military governor were called non-headquarter prefectures (支郡, *zhi jun*). This distinction played an important role in the Tang institutional reforms of the ninth century.<sup>14</sup>

Early in the Tang Dynasty as the empire expanded, military governors were established on a limited basis along the northern frontier. A build-up of forces on the northeastern frontier came under the control of an able Tang general,

<sup>14</sup> Meng (1995, pp. 263–5); Peterson (1973, pp. 176–7); Shang (1980, pp. 158–60, 171–6); Wang (1988, pp. 10–11); Wang (2002, pp. 16–17, 509–10); and Zhang (1987, p. 39). Here I abstract from inspection circuits (道 *dao*), which played a relatively minor role in the reforms considered.

An Lushan (安祿山). Due in part to factional court politics, An Lushan and his subordinate Shi Siming (史思明) turned against the court and set off an eight-year civil war, the An-Shi Rebellion (安史之亂), AD 755–763. The capital was sacked and with the court facing dynastic collapse, a major institutional reform was introduced. Military governors were established throughout the country and given regional administrative and fiscal authority as well as the authority to appoint subordinate officials in order to raise armies to suppress the rebellion. Rebel generals were encouraged to defect by the promise of the court that they could keep their regional positions as military governors if they surrendered. After the rebellion was suppressed the court faced a country full of military governors, each legitimized by the court. These military governors encroached upon their prefecture and county administrations and became the chief administrators of a province. The major political problem facing the court during the later half of the Tang Dynasty was gaining control of these military governors. Emperor Dezong (德宗), who reigned from 779 to 805, tried to gain control too fast and set off a series of provincial revolts from 781 to 786. Thereafter the emperor recovered somewhat, improving the imperial finances and army.<sup>15</sup>

Emperor Xianzong (憲宗) ascended to the throne in 805. The An-Shi Rebellion had fundamentally altered the federal balance, with the regions gaining autonomy at the expense of central government control. The court lost much administrative, fiscal and military authority to the regional military governors. Having inherited a strong army and a sound purse, Emperor Xianzong aimed to reassert the authority of the Tang court over the regions. Emperor Xianzong's reign was a success in these respects and is commonly referred to as the Yuan He Restoration (元和中興).<sup>16</sup>

The Tang court was able to gain control by dealing with individual cases as they presented themselves and by enacting country-wide reforms affecting all regional governments. The Tang court commonly used the following strategy to gain the power to appoint regional officials. On the occasion of a change in succession of a military governorship, the court would attempt to influence the change of leadership in its own interests. With a succession crisis/opportunity the court could exploit various groups in an attempt to garner enough political support to sustain its own appointee. Such an opportunity presented itself early in the reign of Emperor Xianzong.

In the western area of Sichuan were two provinces, Jian-nan West (劍南西) and Jiaen-nan East (劍南東). The former played an important role in the defence of the western border. A very powerful and loyal military governor, Wei Gao (韋皋), died in the summer of 805. Although he had been virtually independent – controlling a strategically crucial region, appointing his own officials and conducting his own foreign policy on the western frontier – he remained

<sup>15</sup> Meng (1995, pp. 263–5); Peterson (1973, pp. 153–77); Pulleyblank (1955, pp. 82–103); Shang (1980, p. 176); Twitchett (1970, p. 18); Wang (2002, p. 259); and Zhang (1987, pp. 39–44). Official names and titles given to military governors varied. Wang (1969, p. 4).

<sup>16</sup> Emperor Xianzong's reign period (805–20 AD) is often referred to as the Yuan He Restoration (dated 806–20 AD), even though the periods do not exactly coincide. Peterson (1973, p. 159, ft. 29).



fiercely loyal to the Tang court, forwarding taxes and giving advice to the court. The personal loyalty of the next leader became a critical issue. A subordinate of Wei Gao, Liu Pi (劉闢), took the position of military governor of Jian-nan West in 805. The court was hesitant to accept this self-appointed leader and decided to sanction him as assistant governor of Jian-nan West, but with 'full powers of command'. In response to this, Liu Pi attacked Jian-nan East, the province to the east. The court dispatched the central government army and defeated Liu Pi, who was executed and six prefectures from Jian-nan West were removed. Thereafter, the court began appointing provincial military governors of Jian-nan West. There were many other individual provinces where the court moved to assume the power to appoint the military governor during a succession crisis.<sup>17</sup>

In addition to reforming individual provinces as circumstances presented themselves, Emperor Xianzong also introduced two major country-wide provincial institutional reforms. In AD 809 a major institutional reform was directed to provincial fiscal institutions, while in 819 provincial military institutions were reformed.

One consequence of the two-tax reform (兩稅) of AD 780 was to partition tax revenue received by prefectures from their constituent counties. One part was to remain in the prefecture for administrative expenses, another part was assigned to the provincial military governor and the third part was assigned to the central government. In practice, military governors ordered their constituent prefectures to forward to them their assigned tax portion and that of the central government. Military governors then forwarded taxes to the court at their discretion and this caused problems for the court.<sup>18</sup>

In the spring of 809 the Chief Minister Pei Ji (裴玪) advised Emperor Xianzong to enact a major fiscal reform in the regional governments. There were three important parts to this institutional change: (i) military governors were to be limited to drawing tax revenue from their headquarters prefecture; (ii) military governors were no longer required to forward tax revenue from their headquarters prefecture to the central government; and (iii) in non-headquarters prefectures tax revenue was to be divided into two parts – one to be retained by the prefecture of origin for its own costs of administration and one assigned and sent directly to the central government.

This reform was designed to weaken the role of military governors in the regional fiscal hierarchy. The military governors were no longer required to pay taxes to the court from their headquarters prefecture but lost fiscal authority in their non-headquarters prefectures. It appears that this reform was largely implemented, albeit in an uneven fashion. The fact that Emperor Xianzong was able to mobilize resources for campaigns against recalcitrant provinces around this time strongly suggests regional fiscal control. In addition, with the

<sup>17</sup> Peterson (1973, pp. 157–60). Note there are many other individual cases where the court moved to assume the power to appoint military governors, including Wei-bo (魏博), Zhao-yi (昭義), Yi-wu (義武), Cheng-de (成德) and Ping-lu (平盧).

<sup>18</sup> Li (1995, p. 263); and Peterson (1973, pp. 177–9).

exception of the region of Hebei (河北), the provinces ceased to exhibit independent tendencies after this reform.<sup>19</sup>

With the military governors fiscally weakened, the court was poised to enter a new stage of institutional reform. On the advice of Wu Ch'ung-yin (烏重胤), in 819 Emperor Xianzong initiated another major institutional reform. Like the reform of 809, its purpose was to further weaken the military governors' administrations. This reform concerned the military authority of the military governor and had one main provision – it limited the military governor to control over the army of the headquarters prefecture. The prefects of non-headquarter prefectures were given military authority within their prefecture. This reform diffused the military authority of a province and further weakened the power of the military governors.<sup>20</sup>

### 3.1. *Summary of Tang political history*

The Tang court was dealt a major shock with the outbreak of the An-Shi Rebellion (AD 755–763). After the suppression of the rebellion, military governors had established themselves as a regional level of administration above the prefectures and counties in their jurisdiction. These military governors had gained fiscal, military and administrative authority in their regions at the court's expense. Military governors were at the head of a three-level regional government, where they managed the affairs of their constituent prefectures and counties. They controlled from two to 12 prefectures, each of which contained many counties. The prefecture in which the military governor set up his administration was called the headquarters prefecture, while the remaining prefectures were called non-headquarters prefectures. Since the civil war, the military governors had enjoyed hereditary rights to their position and had usurped the power to appoint the officials in their regional administrations.

During the reign of Emperor Xianzong (AD 805–820), institutional reforms reduced the power of the military governors and increased court control over the regions. There were two methods by which the Tang court gained control. First, when a military governor died the court attempted to assume power of appointment in the region. This took various forms and was dictated by circumstances. In some cases the court rejected self-appointed successors. Sometimes this led to military action against the region. The Tang court took advantage of many instances of regional succession of military governors in order to gain the power to appoint regional officials.

The second method employed by the Tang court was to reduce the power of military governors through empire-wide institutional reforms. Two such major reforms – one fiscal reform in AD 809 and one military reform in 819 significantly reduced the powers of the military governors. Prior to reform, military governors directly managed the affairs of their constituent prefectures,

<sup>19</sup> Li (1995, pp. 266–7). Note this author's view on enforcement largely follows that of Hino Kaizaburo. See Peterson (1973, pp. 179–81).

<sup>20</sup> Li (1995, pp. 91–2); and Peterson (1973, pp. 181–3).

which in turn managed the affairs of their constituent counties. This three level regional hierarchy of authority was reorganized in the fiscal reform of 809. The headquarters prefecture of the military governor was no longer required to forward taxes to the court. Non-headquarters prefectures were to split their tax revenue only between the prefecture and the court while delivering the court's portion directly to the capital. In effect, military governors were fiscally reduced to the tax revenue of their headquarter prefecture. Although the court lost tax revenue from the headquarters prefecture it gained direct tax payments from the non-headquarter prefectures, where military governors were removed from the fiscal hierarchy. In AD 819, a similar reform was implemented in military affairs. In effect, military governors were limited to raising and controlling an army in their headquarters prefecture. The prefects of non-headquarters prefectures were given military authority within their prefecture. This reform diffused the military authority in a region where all the authority had previously been vested in the military governor.

In the decades after Emperor Xianzong's reforms there was greater central government control than at any other time in the post-rebellion period. Federal stability was clearly attained and regional rebellions were virtually unknown for more than five decades, when the Tang Dynasty began its collapse. Although the Tang court never regained the level of control known before the rebellion, these reforms increased central control and stabilized the federal tensions in the court's favour.<sup>21</sup>

#### 4. ROMAN EMPIRE (27 BC–AD 476)

The Roman province of the first and second century AD was very similar to its counterpart in China – a political–military unit used to raise Roman legions for security purposes. The Roman province was a two-tiered government with an upper and lower level of administration. There were, however, some important differences. The Roman provinces were less developed than the Chinese provinces, especially the European provinces. The lower level or local level of Roman administration was typically seated in a village or small town. In the lesser developed western provinces, military garrisons served as the local administration. With the exception of garrisons, local administrations were typically local small town councils. Rome did little more to influence the local government institutions than provide a model charter. Local officials then dealt with the provincial governor and his administration.<sup>22</sup>

Roman provinces were of two types, armed and unarmed. The armed provinces, typically along defensive borders, were called 'imperial', while the unarmed provinces were designated 'senatorial'. The emperor controlled the appointments of governors to imperial provinces for terms of three years. The Senate picked

<sup>21</sup> Peterson (1973, pp. 172, 185). Note that the one exception to court control was the Hebei region where military governors reestablished their autonomy and rid themselves of their court appointed officials after the death of emperor Xianzong.

<sup>22</sup> Bowman (1996, pp. 353–7); Lintott (1993, pp. 50–9); Millar (1967, pp. 1–2); and Stevenson (1939, pp. 166–8). Egypt was an exception to the standard Roman provincial institution.

the governors for senatorial provinces. The choice was by lot, although various rules applied to the candidates. Governors of senatorial provinces served a one-year term. All provincial governors had full administrative, military and legal authority with the assistance of a modest staff, small and relatively undeveloped when compared with its Chinese counterpart. The governor's staff included a fiscal officer, *quaestor*, to manage the provincial finances, a *procurator provinciae*, and a few assistants to manage imperial properties in the province. In an armed province there was a contingent of military officers and supply officials.<sup>23</sup>

From the beginning of the Roman Republic ca 500 BC, Rome started a gradual and uneven expansion of power. Over the next few centuries, through a combination of conquest and allied support of the Latin League, Rome established her dominance on the Italian peninsula. Thereafter, conflicts abroad with Carthage, Macedon and others led to Rome's annexation of territories throughout the Mediterranean region, which was most often accomplished by the establishment of a Roman province.<sup>24</sup> The conclusion of a civil war propelled Augustus to the position of supreme leader of Rome. During his reign from 27 BC–AD 14, Augustus had established the basic constitutional framework of the Roman Empire.<sup>25</sup> By the end of the first century AD, Rome had established provinces around the Mediterranean, stretching from Britannia to Syria to northern Africa. The basic Roman provincial institutions were not fundamentally altered until a major provincial reorganization under Emperor Diocletian, who reigned from AD 284 to 305.<sup>26</sup>

The Roman Empire experienced a major crisis during the later third century AD. Invasions from Germanic tribes penetrated across the Rhine and the Danube frontiers and into Spain and the Italian peninsula. Persia overtook Syria and other eastern Roman cities. In addition, there were numerous provincial rebellions – Britain and Spain withdrew their allegiance to Rome and Egypt revolted. It was during this turbulent period that the Emperor Diocletian ascended to the throne in November 284. In order to militarily consolidate the empire, Diocletian in AD 293 established a hierarchy of four emperors, each of which was in effect assigned a region of the empire to consolidate and defend. The hierarchy of four emperors, often called the Tetrarchy, proved effective in suppressing rebellions. It was during this era of military consolidation that a major provincial institutional reform was carried out.<sup>27</sup>

The provincial institutional reforms of AD 293 had three main features: (i) subdivision of the provinces; (ii) separation of administrative and military authority; and (iii) creation of a new level of regional administration.<sup>28</sup>

<sup>23</sup> Bowman (1996, pp. 351–3); and Millar (1967, pp. 54–6).

<sup>24</sup> Lintott (1993, pp. 5–15, 22–7).

<sup>25</sup> Note that strictly speaking Augustus did not rule as 'emperor'. His official position was that of *princeps* – the first man in the state, to whom the Senate and people delegated responsibility. His powers derived from numerous official titles – emperor not included. Millar (1967, pp. 33–5).

<sup>26</sup> Arnold (1914, p. 4); and Williams (1997, p. 104).

<sup>27</sup> Jones (1964, pp. 37–9); Mitchell (2007, pp. 54–8); and Potter (2004, pp. 276–90).

<sup>28</sup> The pace these reforms were implemented is debated. Barnes (1982, pp. 224–5).

Although he was not the first Roman emperor to do so, Diocletian carried out the subdivision of Roman provinces on a larger scale than previously known.<sup>29</sup> After the Egyptian revolt was suppressed, Egypt was divided into three regions, which were gradually assimilated into other provinces. Late in Diocletian's reign, Numidia was subdivided into two provinces and, by this time, Britain into four. Dacia was split into two provinces with the outer, which faced the frontier, remaining armed and the inner becoming an unarmed province. Belgica, Gaul, Lugdunensis, Noricum and Pannonia were similarly divided. Many unarmed provinces were also subdivided, such as the provinces of Africa and Asia. Africa was carved into three provinces and Asia six provinces. Italy was also subdivided. At the end of Diocletian's reign the number of Roman provinces had roughly doubled from 50 to 100 without any significant change in Roman territory.<sup>30</sup>

Diocletian's reforms included a separation of military and administrative authority in the provinces.<sup>31</sup> Roman military generals, *duces*, took command of troops in the armed provinces, in contrast to previous institutions where provincial governors had military authority. Their authority was limited to command of military personnel. Civil officials, *iudices* (provincial governors and *vicarii*), were charged with administrative and judicial responsibility. Such a distinction had begun by AD 289 in the province of Panegyric and by the end of Diocletian's reign there was – with some exceptions – considerable separation of provincial civil and military authority. In addition, the career track of civil and military officials became distinct. During the reign of Constantine (AD 306–337), this separation continued and became more widespread. Furthermore, the subdivision of the provinces caused the number of these officials to increase.<sup>32</sup>

The increased number of provinces made management from Rome more difficult. To meet the greater administrative demands a new regional level of administration was created. The provinces were grouped into 12 administrative units – *dioeceses*. Each *dioecesis* was headed by a *vicarius*. Appointed by and accountable to the emperor, the *vicarii* were civil officials who assumed some of the duties of the provincial governors. Within the regional institutions *vicarii* and governors provided checks on each other.<sup>33</sup>

#### 4.1. *Summary of Roman political history*

In the process of building the Roman Empire, Rome established provinces around the Mediterranean region. From the reign of Augustus (27 BC–AD 14) Roman provinces for nearly three centuries retained their basic institutional features. During the later third century AD the empire experienced a major crisis, with

<sup>29</sup> Previous Roman emperors had subdivided Syria and Britain. Ensslin (1939, p. 391).

<sup>30</sup> Ensslin (1939, pp. 390–4); and Williams (1997, pp. 104–5).

<sup>31</sup> Previous emperors had carried out this reform in some provinces. Arnold (1914, pp. 171–2).

<sup>32</sup> Ensslin (1939, pp. 394–5); and Williams (1997, pp. 107–8).

<sup>33</sup> Ensslin (1939, pp. 393–4); Williams (1997, pp. 105–8). The introduction of the *dioeceses* was associated with a legal reform in the provincial courts. Harries (1999, pp. 53–5). A series of censuses and tax reform were implemented. Jones (1964, pp. 62–3); Mitchell (2007, pp. 170–1).

invasions from abroad penetrating her borders and rebellions from provinces. During the reign of Diocletian (AD 284–305) the provincial rebellions were suppressed and the borders were re-established. It was under Emperor Diocletian that a major provincial institutional reform was carried out.

The provincial reorganization had three main parts. First, there was a large-scale subdivision of the provinces. Without any considerable change in the size of the empire, the number of provinces roughly doubled from 50 to 100. Second, there was a separation of civil and military authority in the provincial governments. Whereas previously the provincial governor controlled both civil and military authority in a province, the institutional reform divided civil and military authority across different provincial officials. Third, as provinces were organized into groups called *dioeceses*, an additional level of administration was established above the provinces. The head official of the *dioecesis* took over some of the duties of his constituent provincial governors. All of these features clearly served to spread authority across a larger number of provincial officials. Diocletian's provincial reforms were successful and brought the Roman provinces under the control of the central government, considerably extending the life of the Roman Empire.

## 5. CONCLUSION

A comparison of the regional institutional reforms of the Han, Tang and Roman Empires reveals common characteristics. In all cases, the central government used two techniques to gain control of a regional government. First, they would assume the power to appoint key regional officials.<sup>34</sup> Second, changes were effected to diffuse authority among a greater number of regional officials. This diffusion took place in one of two forms. In the first form, the central government subdivided regional governments and introduced duplicate administrations, thereby increasing the number of officials. In the second, the central government increased the degree of specialization of the regional administration. For example, fiscal and military powers were separated where they had previously been vested in a single official.

These reforms were often implemented following a military defeat of a region or in the face of a threat of military force led by the central government. Subsequent to these institutional reforms the central government gained control over the regional governments. Although quantitative measures are lacking, historians are in general agreement that the Han kings lost power over the second and first centuries BC, the Tang military governors lost considerable power in the mid-ninth century AD and Roman provinces came under better control in the fourth century AD.<sup>35</sup> European central governments, such as in

<sup>34</sup> Prior to the crisis of the late 3rd century, Rome appointed the provincial governors. However, during the civil wars of the late 3rd century regional military leaders usurped this power. After the provinces were subdued Rome regained this power.

<sup>35</sup> In the case of the Tang Dynasty, during the reign of emperor Xianzong the number of registered households for tax purposes increased over 60%. Peterson (1973, p. 185). In the case of Diocletian's reforms there was a large increase in the number of provincial officials. This indicates a considerable increase in tax revenue to support these new officials.

Brandenburg-Prussia and France, used similar techniques to gain regional control. The more examples we find from different time periods and regions in history, the more confident we can be that a general phenomenon has been revealed.

I argue that regional institutional reforms discussed here served to introduce political tension within regional administration. By assuming the power to appoint, the central government gained the ability to strategically place loyal officials in temporary positions. Such officials were more likely to follow central directives than hereditary regional officials since their future interests were more tightly aligned with the central government. These officials were also less likely to collude with regional hereditary officials who had different interests. A hereditary governor would be likely to face more resistance when asking a court appointed official dispatched for a set term of office to act against central directives than when dealing with another hereditary governor. In the language of modern political science, when the central government gains the power to appoint key regional officials the coordination costs of cooperation among them increases. When authority is diffused among a greater number of regional officials the coordination costs of cooperation also increase as the consent of more key officials is required. These reforms, I argue, increase the coordination costs of cooperation among key regional officials, making rebellion and resistance to central directives more costly. As a result, these institutional reforms shifted the balance of power toward the central government giving it more control.

#### APPENDIX

##### *Simple game theoretic model*

To analyse the institutional reforms in this paper I shall consider four institutions, each of which is modeled as a game. In this context, regional institutional change by the central government can be considered as a selection among the four games. Using the games constructed I shall show that the central government prefers some games or institutions over others. The preference ordering is shown to correspond to the clear patterns seen in the historical cases considered, namely that when given the chance the central government will assume the power to appoint regional officials and diffuse authority across an increased number of regional officials.

The four games will be grouped into two types. In the first there is one regional official, while in the second there are two. Here I shall introduce the first type. Assume there is a central government (or court), *C*, and a regional government official, *R*. There is no asymmetric information problem. The key issue for the central government is one of authority, that is, getting regional government official to follow central directives. In particular, the central government wants the regional government official to forward tax revenue to the capital.

The sequence of actions for the first type of game is shown in Fig. 1. The central government, *C*, moves first and gives a fiscal order to the regional

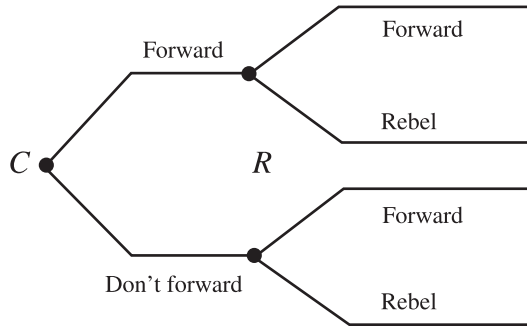


Figure 1. The Institution 1 and 2 game sequence: only one regional official.

Table 1. Payoffs for Institution 1 game (Court has no power to appoint)

Region Court	Forward	Rebel
Forward	(2, 8)	(0, 10)
Don't forward	(-1, 6)	(-3, 10)

Table 2. Payoffs for Institution 2 game (Court has power to appoint)

Region Court	Forward	Rebel
Forward	(4, 14)	(0, 10)
Don't forward	(-1, 8)	(-3, 10)

government official – to forward taxes or not to forward taxes. After the central government announces its order, the regional government official, *R*, chooses whether to forward taxes or to decline and rebel (no taxes forwarded). It is assumed that if the regional official chooses to rebel he will succeed. There are two games corresponding to this sequence of actions. Under Institution 1, or the first game, the court does not have the power to appoint the sole regional official, while under Institution 2, or the second game, the court does have this power. The payoffs in the two games differ and reflect this institutional difference.

The outcomes and payoffs of all four games are determined by the strategy combination chosen by the two players. The payoffs for games of the first type, that is, there is one regional official, are given in Tables 1 and 2.<sup>36</sup> Under Institution 1, the central government or court does not have the power to

<sup>36</sup> Formally, the solution concept is subgame perfect equilibrium. To simplify the analysis the reduced normal form of this extensive form game is used. Since dominant strategies are used no problems arise. A similar comment is relevant to the second type of games in what follows.



appoint the sole regional official. If the court orders the region to not forward taxes and the region rebels the court's payoff is  $-3$ . If the region forwards taxes the court's payoff is  $-1$ . The negative payoffs to the court can be interpreted as loss in tax revenue from other regions resulting from the political problems of not ordering the region considered to forward taxes. In this case, the payoff to the regional government official for rebellion is 10, while the payoff to forwarding taxes is six. The lower payoff resulting from forwarding taxes can be interpreted as the result of resistance from key regional supporting groups. If the court orders the region to forward taxes and if the regional official complies he gets a payoff of eight and the court's payoff is two. While if the regional official rebels he gets a payoff of 10 and the court gets 0. In this game each player has a dominant strategy, the court – forward taxes, regional official – rebel. Thus there is a unique Nash equilibrium, which is Pareto optimal.

Under Institution 2, the court has the power to appoint the sole regional official. If the court orders the region to not forward taxes and the region rebels the court's payoff is  $-3$ . If the region forwards taxes the court's payoff is  $-1$ . The negative payoffs to the court can again be interpreted as a loss in tax revenue from other regions resulting from the political problems of not ordering the region considered to forward taxes. In this case, the payoff to the regional government official for rebellion is 10, while the payoff to forwarding taxes is eight. The lower payoff resulting from forwarding taxes can be interpreted again as the result of resistance from key regional supporting groups. If the court orders the region to forward taxes and if the regional official complies he gets a payoff of 14 and the court's payoff is four. While if the regional official rebels he gets a payoff of 10 and the court gets zero. Note that the payoff to rebellion is the same under both institutions. This is because the returns from rebellion come from the region and not the court. This is not the case when the region forwards taxes and the court gives some benefits to the regional official. Also note that some of the payoffs to the regional official under Institution 2 are higher than their counterparts under Institution 1. The higher payoffs under Institution 2 can be interpreted as increased benefits to the regional official associated with the assumption of the power to appoint the regional official. There is a unique Nash equilibrium for this game, which is Pareto optimal – the court order is to forward taxes and the region complies.

The second type of game is where there are two regional officials. Institutions 3 and 4 are of this type. Under Institution 4 the central government has the power to appoint the regional officials, while it does not have this power under Institution 3. In this situation the game structure is different because there are now three players. A coordination problem emerges as the two regional officials must choose their move simultaneously. This simultaneous move can be modeled formally by having the two officials choose in sequence with the second official not knowing the first official's choice (having all relevant choices made from the same information set).

The sequence of actions for the second type of game is shown in Fig. 2. There are three players: the court,  $C$ , and the two regional officials,  $R1$  and  $R2$ . The central government,  $C$ , moves first and gives a fiscal order to both

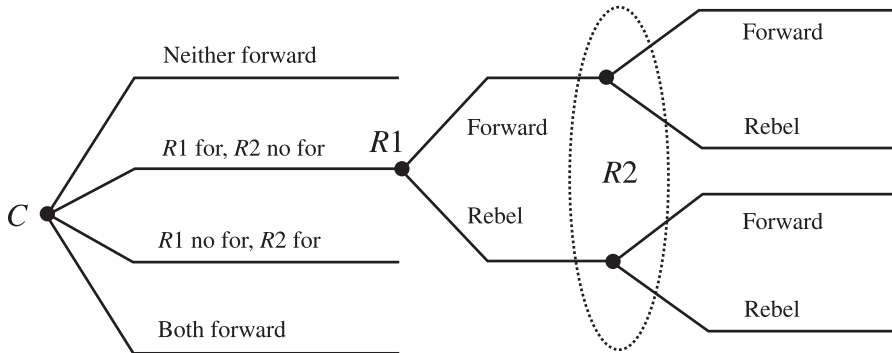


Figure 2. The Institution 3 and 4 game sequence: two regional officials.

Table 3. Payoffs for Institution 3 game

Court's choice	Induced subgame between R1 and R2			
	Payoffs: (C, R1, R2)			
Neither forward taxes	R1	Forward	R2 Forward (-1, 3, 3)	R2 Rebel (-2, 6, 0)
		Rebel	(-2, 0, 6)	(-3, 5, 5)
R1 forward and R2 don't forward	R1	Forward	R2 Forward (0, 4, 3)	R2 Rebel (-1, 6, 0)
		Rebel	(-1, 0, 6)	(-2, 5, 5)
R1 don't forward and R2 forward	R1	Forward	R2 Forward (0, 3, 4)	R2 Rebel (-1, 6, 0)
		Rebel	(-1, 0, 6)	(-2, 5, 5)
Both forward	R1	Forward	R2 Forward (4, 4, 4)	R2 Rebel (1, 6, 0)
		Rebel	(1, 0, 6)	(0, 5, 5)

of the regional government officials – to forward taxes or not to forward taxes. The first regional government official then chooses whether to forward taxes or to decline and rebel (no taxes forwarded). Thereafter, the second regional official makes his choice without knowing the choice of the first regional official. It is assumed that for a rebellion to succeed both regional officials must choose to rebel, otherwise rebellion will fail. Two games correspond to this sequence of actions. Under Institution 3, or the third game, the court lacks the power to appoint the two regional officials, while under Institution 4, or the fourth game, the court does have this power. The payoffs in the two games differ, reflecting this institutional difference.

The payoffs from the game under Institution 3 are given in Table 3. Here the central government lacks the power to appoint the two regional officials. Therefore, in the cases where the central government gives the same order to

Table 4. Payoffs for Institution 4 game

Court's Choice	Induced subgame between R1 and R2			
	Payoffs: (C, R1, R2)			
Neither forward taxes	R1	R2		
		Forward	Forward	Rebel
R1 forward and R2 don't forward	R1	Forward	(-1, 4, 4)	(-2, 6, 0)
		Rebel	(-2, 0, 6)	(-3, 5, 5)
R1 don't forward and R2 forward	R1	R2		
		Forward	Forward	Rebel
Both forward	R1	Forward	(0, 4, 3)	(-1, 6, 0)
		Rebel	(-1, 0, 6)	(-2, 5, 5)
Both forward	R1	R2		
		Forward	Forward	Rebel
Both forward	R1	Forward	(0, 3, 4)	(-1, 6, 0)
		Rebel	(-1, 0, 6)	(-2, 5, 5)
Both forward	R1	R2		
		Forward	Forward	Rebel
Both forward	R1	Forward	(6, 7, 7)	(1, 6, 0)
		Rebel	(1, 0, 6)	(0, 5, 5)

both officials and both officials make the same choice, the regional officials' payoffs in Institution 3 are half of their counterparts in Institution 1 since it is assumed that each official governs half of the original region.

If the C orders both regions not to forward taxes and R1 forwards taxes while R2 rebels, the payoffs are -2 to C, 6 to R1 and 0 to R2. In all four induced subgames corresponding to each move by C, R1 and R2 face a prisoner's dilemma game and there is a unique Nash equilibrium – both officials choose to forward taxes. The central government then simply compares its payoff across all four subgames where both officials choose to forward taxes. The central government strictly prefers to order both regions to forward taxes. Thus there is a unique Nash equilibrium for the game under Institution 3, where the court orders both regions to forward taxes and both comply. A similar situation exists under Institution 4, where the court has the power to appoint both regional officials.

The payoffs from the game under Institution 4 are given in Table 4. Under Institution 4 the central government has the power to appoint the two regional officials. Therefore, in the cases where the central government gives the same order to both officials and both officials make the same choice, the regional officials' payoffs in Institution 4 are half of their counterparts in Institution 2 since it is assumed that each official governs half of the original region.

If C orders both regions not to forward taxes and R1 and R2 both forward taxes, the payoffs are: -1 to C, 4 to R1 and 4 to R2. In all four induced subgames corresponding to each move by C, there is a unique Nash equilibrium – both officials choose to forward taxes. The central government then simply compares its payoff across all four subgames where both officials choose to forward taxes. The central government strictly prefers to order both regions to forward taxes. Thus there is a unique Nash equilibrium for the game under

Institution 4, where the court orders both regions to forward taxes and the two regional officials comply.

Finally, consider a comparison of the four institutions from the central government's point of view. In each game there is a unique Nash equilibrium. Under Institution 1, where the court does not have the power to appoint the sole regional official, rebellion occurs and the payoff to the court is zero. If the court gains the power to appoint the sole official (Institution 2) or chooses to increase the number of regional officials to two (Institution 3) the outcome would be strictly better for the court. Under both of these cases, regional officials forward taxes, avoiding rebellion, and the payoff to the court increases to four. The court's situation is even better if it gains the power to appoint regional officials and increases the number of officials to two, since officials forward taxes and the payoff to the court increases to six. Therefore if the centre could costlessly pick the institution the above analysis shows its preference. Although much subjective judgment was used to pick the payoffs, these results show that the observed historical pattern identified in this paper can be formally modeled in a game theory framework.

#### REFERENCES

- Acemoglu, D. and J. A. Robinson (2006) *Economic Origins of Dictatorship and Democracy*. New York: Cambridge University Press.
- Acemoglu, D., E. Georgy and S. Konstantin (2007) 'Coalition Formation in Nondemocracies', Working paper. Department of Economics, MIT.
- Acemoglu, D., E. Georgy and S. Konstantin (2008a) Dynamics and Stability of Constitutions, Coalitions, and Clubs, Working paper. Department of Economics, MIT.
- Acemoglu, D., T. Davide and V. Andrea (2008b) *A Theory of Military Dictatorships*, Working Paper. Department of Economics, MIT.
- Arnold, W. T. (1914) *The Roman System of Provincial Administration to Constantine the Great*, 3rd edn. Oxford: B.H. Blackwell.
- Baland, J.-M. and J. A. Robinson (2006) 'Land and Power: Theory and Evidence from Chile', Working paper. Department of Government, Harvard University.
- Barnes, T. D. (1982) *The New Empire of Diocletian and Constantine*. Cambridge, MA: Harvard University Press.
- Bednar, J. (2003) 'The Madisonian Scheme to Control the National Government,' *James Madison: the Theory and Practice of Republican Government*, in S. Kernell (ed). Stanford: Stanford University Press.
- Bielenstein, H. (1980) *The Bureaucracy of Han Times*. Cambridge: Cambridge University Press.
- Bowman, A. K. (1996) 'Provincial Administration and Taxation', in A. K. Bowman, E. Champlin and A. Lintott (eds), *The Cambridge Ancient History: Volume X, The Augustan Empire, 43 BC –AD 69*, 2nd edn. Oxford: Cambridge University Press.
- Carsten, F. L. (1964) *The Origins of Prussia*. Oxford: Clarendon Press.
- Ch'u, T. (1972) *Han Social Structure* in J. L. Dull (eds). Seattle: University of Washington Press.
- Downing, B. M. (1992) *The Military Revolution and Political Change: Origins of Democracy and Autocracy in Early Modern Europe*. Princeton: Princeton University Press.
- Ensslin, W. (1939) 'The Reforms of Diocletian', in S. A. Cook, F. E. Adcock, M. P. Charlesworth and N. H. Baynes (eds), *The Cambridge Ancient History: Volume XII The Imperial Crisis and Recovery, AD 193–324*. Cambridge: Cambridge University Press.
- Harries, J. (1999) *Law and Empire in Late Antiquity*. Cambridge: Cambridge University Press.
- Hui, V. T. (2005) *War and State Formation in Ancient China and Early Modern Europe*. New York: Cambridge University Press.
- Jian, P. 翦伯贊 (2001) *Qin Han Shi 秦漢史*. Beijing 北京: Beijing University Press 北京大學出版社.
- Jiang, W. 姜文奎 (1987) *Zhongguo Lidai Zhengzhi Kao 中國歷代政制考*. Taipei 台北: Guoli bianyi guan. 國立編譯館.

- Jones, A. H. M. (1964) *The Later Roman Empire, 284–602: a Social, Economic and Administrative Survey*. Oxford: Basil Blackwell Ltd.
- Joyner, H. (1978) 'The Recruitment, Organization, and Control of Former Han Military Leadership.' Unpublished Master's Thesis, Department of Far Eastern Languages and Civilizations, University of Chicago.
- Li, T. 李天石 (1995) 'Tang Xianzong' 唐憲宗. Jilin 吉林: Jilin wenshi chubanshe 吉林文史出版社.
- Liao, P. 廖伯源 (1998) *Lishi Yu Zhidu – Handai Zhengzhi Zhidu Shi Shi* 歷史與制度---漢代政治制度試釋. Taipei 台北: Taiwan shangwu yin shuguan 台灣商務印書館.
- Lintott, A. (1993) *Imperium Romanum. Politics and Administration*. London: Routledge.
- Loewe, M. (1986) 'The Former Han Dynasty', in D. Twitchett and M. Loewe (eds), *The Cambridge History of China – Volume 1, The Ch'in and Han Empires, 221 BC – AD 220*. Cambridge: Cambridge University Press.
- Meng, Y. 孟彥弘 (1995) 'Tang Qian Qi De Bing Zhi Yu Bian Fang' 唐前期的兵制與邊防. *Tang Yanjiu* 唐研究 1, 245–76.
- Millar, F. (1967) *The Roman Empire and its Neighbours*. New York: Delacorte Press.
- Mitchell, S. (2007) *A History of the Later Roman Empire, AD 284–641*. Malden, MA: Blackwell Publishing.
- North, D. C. (1990) *Institutions, Institutional Change and Economic Performance*. New York: Cambridge University Press.
- Peterson, C. A. (1973) 'The Restoration Completed: Emperor Hsien-tsung and the Provinces,' in A. F. L. Wright and D. Twitchett (eds), *Perspectives on the T'ang*. Taipei: Rainbow-Bridge Book Co.
- Potter, D. S. (2004) *The Roman Empire at Bay: AD 180–395*. London: Routledge.
- Pulleyblank, E. G. (1955) *The Background of the Rebellion of an Lu-Shan*. London: Oxford University Press.
- Riker, W. H. (1964) *Federalism: Origin, Operation, Significance*. Boston: Little, Brown Co.
- Robinson, J. A. (2005) 'A Normal Latin American Country? A Perspective on Columbian Development', Working paper. Department of Government, Harvard University.
- Robinson, J. A. and Q. N. Parsons (2006) 'State Formation and Governance in Botswana', *Journal of African Economies* 15 (Suppl 1), 100–40.
- Shang, W. 商文立 (1980) *Zhongguo Lidai Difeng Zhengzhi Zhidu* 中國歷代地方政治制度. Taipei 台北: Zheng zhong shuchu 正中書局.
- Stevenson, G. H. (1939) *Roman Provincial Administration: Till the Age of the Antonines*. Oxford: Basil Blackwell.
- Tian, C. and Z. An eds. 田昌五, 安作璋主編 (1993) *Qin Han Shi* 秦漢史. Beijing 北京: Renmin chubanshe 人民出版社.
- Twitchett, D. C. (1970) *Financial Administration Under the T'ang Dynasty*. Cambridge: Cambridge University Press.
- Wang, S. 王壽南 (1969) *Tang Dai Fanzheng Yu Zhongyang Guanxi Zhi Yanjiu* 唐代藩鎮與中央關係之研究. Taipei 台北: Jiixin suini wenhua jijin hui 嘉新水泥文化基金會.
- Wang, S. 王壽南 (2002) *Sui Tang Shi* 隋唐史. Taipei 台北: Sanmin shuju 三民書局.
- Wang, Y. (1949) 'An Outline of the Central Government of the Former Han Dynasty', *Harvard Journal of Asiatic Studies* 12, 134–87.
- Wang, Z. 王仲孳 (1988) *Sui Tang Wu Dai Shi* 隋唐五代史. Shanghai 上海: Renmin chubanshe 人民出版社.
- Weingast, B. R. (1995) 'The Economic Role of Political Institutions: Market – Preserving Federalism and Economic Development,' *Journal of Law, Economics and Organization* 11, 1–31.
- Williams, S. (1997) *Diocletian and the Roman Recovery*. New York: Routledge.
- Yang, S. 楊樹藩 (1963) *Liang Han Difang Zhidu* 兩漢地方制度. Taipei 台北: National Chengchi University Press 國立政治大學出版社.
- Yen, K. 嚴耕望 (1997) '*Zhongguo Difang Xingzheng Zhidu Shi*' 中國地方行政制度史. Taipei 台北: Institute of History and Philology, Academia Sinica 中央研究院歷史語言研究所.
- Zhang, G. 張國剛 (1987) *Tangdai Fanzhen Yuanjiu* 唐代藩鎮研究. Hunan 湖南: Hunan jiaoyu chubanshe 湖南教育出版社.