IOWA STATE UNIVERSITY Digital Repository

Graduate Theses and Dissertations

Iowa State University Capstones, Theses and Dissertations

2016

Constraints that Bind? A Comparison of Ruler Longevity in Merit and Feudal Institutions

Cody Schmidt Iowa State University

Follow this and additional works at: http://lib.dr.iastate.edu/etd Part of the <u>History Commons</u>, and the <u>Political Science Commons</u>

Recommended Citation

Schmidt, Cody, "Constraints that Bind? A Comparison of Ruler Longevity in Merit and Feudal Institutions" (2016). *Graduate Theses and Dissertations*. 15806. http://lib.dr.iastate.edu/etd/15806

This Thesis is brought to you for free and open access by the Iowa State University Capstones, Theses and Dissertations at Iowa State University Digital Repository. It has been accepted for inclusion in Graduate Theses and Dissertations by an authorized administrator of Iowa State University Digital Repository. For more information, please contact digirep@iastate.edu.

Constraints that bind? A comparison of ruler longevity in merit and feudal institutions

by

Cody Schmidt

A thesis submitted to the graduate faculty

in partial fulfillment of the requirements for the degree of

MASTER OF ARTS

Major: Political Science

Program of Study Committee: Robert Urbatsch, Major Professor Jonathan Hassid Amy Erica Smith Mack Shelley

Iowa State University

Ames, Iowa

2016

Copyright © Cody Schmidt, 2016. All rights reserved.

TABLE OF CONTENTS

LIST OF FIGU	RES	iii			
LIST OF TABLES					
ACKNOWLEDGMENTS					
ABSTRACT		vi			
CHAPTER 1	INTRODUCTION: A THEORY OF CONSTRAINT	1			
CHAPTER 2	HOW INSTITUTIONS CONSTRAIN	3			
CHAPTER 3	CONSTRAINTS IN MEDIEVAL JAPAN	9			
CHAPTER 4	CONSTRAINTS IN ANICENT CHINA	14			
CHAPTER 5	RESEARCH DESIGN AND RESULTS	21			
CHAPTER 6	CONCLUSION	36			
REFERENCES					
APPENDIX: DATA					

LIST OF FIGURES

Figure 1	Distribution of Rule Longevity in Japan.	23
Figure 2	Distribution of Rule Longevity in China.	23
Figure 3	Transformed Ruler Duration for Japan.	23
Figure 4.	Transformed Ruler Duration for China.	23
Figure 5	Boxplots of Ruler Duration by Dynasty.	24
Figure 6	Boxplots of Ruler Duration by Dynasty (Continued).	24
Figure 7	Boxplots of Duration of Rule, Imperial.	24
Figure 8	Boxplots of Duration of Rule for Emperors, Shogunate Period.	24
Figure 9	Probability of being removed in Japan, with Time Controls.	29
Figure 10	Probability of being Removed in China, with Time Controls.	30
Figure 11	Probability of Being Removed from Office, Merit Constraint.	32
Figure 12	Probability of Being Removed from Office Using De Facto Data.	35

LIST OF TABLES

Table 1	Timeline of Japan.	13
Table 2	Timeline for China.	20
Table 3	Predicting Duration of Rule based on Feudal Constraint.	26
Table 4.	Predicting Removal of Office using OLS Regression.	27
Table 5	Probability of Being Deposed based on Feudal Constraint.	28
Table 6	Duration of Rule and Probability of Removal Based on Merit.	31
Table 7	OLS Estimates for de facto rulers.	33
Table 8	Combined Dataset.	41
Table 9	Dataset for de Facto Data.	56

ACKNOWLEDGMENTS

I would like to thank my committee chair, Robert Urbatsch, and my committee members, Jonathan Hassid, Amy Erica Smith, and Mack Shelley, for their guidance, patience, and support throughout the course of this research. In addition, I would also like to thank my friends, colleagues, the department faculty and staff for making my time at Iowa State University a wonderful experience.

ABSTRACT

This study examines the theory that veto players constrain executives and create a more stable political environment. This study extends previous research by looking at two new cases, the empires of China and Japan. I focus on the unconstrained rule of Chinese Emperors compared to their Japanese counterparts in part because of the existence of a developed feudal society in Medieval Japan, but also because China represents one of the earliest forms of meritocratic recruitment for higher offices in the government. Using data on imperial rule, this thesis analyzes the constraining effect of feudal institutions in a context found outside typical literature. I show that constraining the executive this way decreases the probability of being removed from office in both cases, yet has an ambiguous effect on duration of rule once time trends are taken into account. Unexpectedly, the effect of other institutions-namely merit-based-increased the duration of rule for Chinese Emperors. In times when bureaucrats were recruited solely based on merit, Chinese emperors ruled for a longer duration of time and enjoyed a decreased probability of being removed from office. I conclude by theorizing that the merit system created an independent power base that insulated the bureaucracy from executive reprisal, yet still created a powerful centralized state apparatus that undermined feudal elites.

CHAPTER 1

INTRODUCTION: A THEORY OF CONSTRAINT

Recent scholarship has explored the connection between feudal institutions and the divergence in political stability between Western Europe and the Middle East, in part as an attempt to explain why the Western world developed growth enhancing institutions whereas the Middle East did not¹. In this thesis I endeavor to extend this analysis to alternative cases in an attempt to explain political stability—or lack thereof—as a result of two types of institutions. If the feudal institutions were the causal mechanisms for stability, a higher duration of rule should be observed in other cases that had feudal institutions.

This thesis also explores alternative institutions unique to the cases used to test feudal constraint theory and their potential role in constraining the executive. Merit based institutions could have increased the constraint a ruler felt when making unilateral decisions because they establish rules of conduct; yet they also create unity of "mission, culture, and leadership education" that undermine the constraining effect of feudal institutions². Institutions that structure hierarchies by merit based on educational standards increase the capacity of the ruler to exert his or her rule unilaterally, but they also set up the standards in which they are deemed "unfit" to rule.

¹ Blaydes and Chaney 2012, specifically compare longevity of rule between European leaders and leaders of the Middle East. Ruler duration was similar between these two societies until 1100 CE when there is a divergence. Blaydes and Chaney argue it is due to the constraints that feudal institutions created for the executive. European leaders' longevity increased relative to leaders of the Middle East after 1100 CE until the end of their data set 1500 CE.

² DiCicco 2003

Using data on imperial rule in Ancient China (1045 BCE to 1912 CE and Medieval Japan (40 BCE to 1868 CE), I show that constraint—by feudal or unexpectedly, merit institutions—increases political stability and lowers the probability of executives being removed from office prematurely. This conclusion may provide a useful insight for scholars looking into the origins of various political systems, especially theories that include some notion of path dependency. By understanding the constraining effect of particular institutions, scholars may find some insight to the formation of polities that exist today³.

This study is organized as follows. The next chapter is a discussion of veto players, constraints, and how feudal and merit based institutions constrain executives differently and the expectations of longevity of each. More specifically, the section develops the standards in which "constraint" is measured in the rest of the study. Chapter 3 is a case study of Japan that focuses on historical analysis to measure constraint emperors experienced in different time periods. Chapter 4 repeats the process of the third section, except for the Chinese case. The fifth chapter takes the independent variable measurements established in the previous two chapters and conducts empirical tests to determine if constraint extends longevity for rulers. The last chapter concludes with a summary of findings and some direction for future research into this topic.

³ This discussion is not new. Authors speaking on the determinants of democracy frequently cite the constraint that European leaders faced compared to other polities where such constraint did not exist. This thesis merely extends this analysis to other cases in the hope that future scholarship may explore the topic further.

CHAPTER 2

HOW INSTITUTIONS CONSTRAIN

Veto Players Theory

In order to delve into the constraining effect of feudal institutions, it is necessary to first explain the logic of veto players theory. Once the logic is explained I will apply it to discuss how feudal institutions constrain and merit institutions fail to constrain. Veto players theory describes how easy or difficult it is for a political system to change. Veto players in a political system are those who have the ability to decline or prevent action taken by another actor. In essence veto players have the ability to reject a deviation from the status-quo. In a system with many veto players there are more opportunities to block a proposed change. The difficulty of creating change increases with the number of veto players. In addition, the ideological disposition of the veto players can reduce or increase the problem of collective action. If veto players agree on a deviation from the status-quo, it is likely that the change could be pushed through compared to a system where the veto players have widely divergent ideological dispositions or preferences for policy. Thus policy stability is predicted to be the highest in systems with many veto players who have large ideological differences between one another. In these systems incremental change is much more likely to occur than rapid action.

Feudal Institutions

While the above made the connection between the numbers of veto players combined with their ideological disposition to the likelihood of rapid policy change, I have yet to establish the link between policy stability and rule stability in the context of feudalism. Blaydes and Chaney make the connection with two pathways. First, by definition the existence of effective veto players in a political system allows those players to have a voice in the game. Veto players have the ability to communicate grievances to the ruler and may in fact force the ruler to act upon them. This method of communicating grievances increases the chances that a sovereign may address problems that could build up to reasons for revolt or reasons for forcible removal of the sovereign, each reducing the length of the average rulers' reign. Second, the relatively equal standing of rulers and elites makes the preference for removal or revolt lower because the benefits gained by taking the ruler's place is lower.

If veto players constrain and constraint increases the longevity of a ruler's reign, how did feudal institutions in Europe reflect these effects? To answer, it is important to note the origins and characteristics of what scholars consider feudalism. The fall of the Western Roman Empire took with it a vast military and civic bureaucratic system that once ruled and managed Europe. The polities and rulers that took its place had fewer economic and military resources at their disposal. Instead, kings relied on economic and military support from nobles who in return enjoyed a virtual monopoly of influence over a piece of land in return for said support. Feudal Europe was then organized like a pyramid, with the king at the top, nobility in the middle, and the peasantry on the very bottom. This hierarchical system implies that the king was the supreme ruler of the polity, but while the king was relatively more powerful than any single noble, he relied on and was heavily constrained by the nobility in general. The invention of the stirrup dramatically altered warfare, making heavily armored cavalry the leading technology. Armor and cavalry was expensive and would have put an incredible economic strain on the king if a standing army was created. Instead, nobles, who could afford the technology

for themselves acted when called upon by the king—if they were so inclined. In return for the land, nobles would serve in the military of the king (or later could purchase their way out of their duty). This created a privileged class of warriors and a lower class that was used for economic—mostly agricultural—production⁴.

To measure the constraining effect of feudalism, standards that indicate constraint need to be established. First, the constraining effect outlined in Blaydes and Chaney (2012), defines a ruler who lacks a monopoly on force in their own polity is constrained. Disputes among elites and rulers could escalate to warfare and by sharing the coercive means of the state with the nobility, the ruler faced internal rivals and subsequently powerful veto players. Second, the estate system (bound by hereditary succession) found in Europe constrained the executive by increasing the independent power base of nobles relative to the king. Smaller farms, looking for protection of powerful nobles, consolidated under one estate. These estates gradually created a significant check on the king's economic position. Third, the lack of a well-developed bureaucracy that the sovereign can use to extract resources from the land, to raise and manage a central army, and in general to manage a society is also an indication of a constrained rule. Thus, I measure constraint under feudal institutions when: there exists a powerful warrior class semi-independent from the ruler, a powerful landed aristocracy under a variant of the estate system whose power was determined by birth and inheritance, and a lack of fiscal capacity because a lack of a well-developed bureaucracy. I thus expect in times where these constraints are present there is an increased length of rule for sovereigns because of powerful veto players and a reduced payoff for removal of the sovereign.

⁴Oppenheimer 1945

Merit Based Institutions

While feudal institutions constrained executives, rulers were not without methods for resisting this effect. The existence of feudal arrangements implies a powerful aristocracy—militarily and economically—that could constrain the executive by having feudal lords staff the bulk of positions in a feudal bureaucracy. Merit-based systemsparticularly civil-service examinations—reduce the influence of hereditary succession because they introduce an alternative standard which qualifies potential bureaucrats for governmental and political service. Instead of land and title being the determinant of a power base it is now based on knowledge or skill measurable by the exam. Under such a system, knowledge of a certain subject would establish position for political elites rather than an individual having economic or military resources independent of the state. However, it should be noted that the more economic influence an individual possessed, the greater the access to materials-teachers, books, etc.-one could use to increase performance on the exam. Under a civil-service examination system the effect of the resources is lessened and is not the sole determinant of political influence, but cannot be completely disentangled from political influence. The key characteristic of the institution is then the change in determinant of influence from military, economic, and hereditary resources to that of just merit—usually in the form of knowledge.

The effects of merit based institutions on constraint for the executive can be more challenging to tease out than feudal institutions. Meritocracy establishes state sponsored standards for rule that each player must have in order to have a voice in governance. This seems to imply a constraining effect, where each individual veto player (including the king) is constrained by the standards deemed acceptable in the system. This creates a less

personalistic method of rule and the office, rather than the person, is now the defining characteristic of the potential veto player. Another way of thinking of this effect, is the constraining effect of the particular ideology that is the standard for "merit". Specifically, civil-service exams reward performance based on a certain ideology. This ideology can be constraining or unconstraining depending on the context. In this study's case, Chinese ideology in the examination system rewarded Legalist and Confucian ideals, which focused on a powerful, yet virtuous ruler⁵.

Merit based institutions can also create more capable bureaucrats for a specific mission or vision of governance⁶. If the leader is on board with that vision and acts in accordance with it (like Confucian ideals), the ruler is less constrained than if the meritocratic system was not in place because potential elites are all on the same ideological page. In addition, removing aristocratic heritage as the sole determinant of political authority would decrease the voice of aristocratic elites in issues of governance⁷. By definition the elites' reduced influence on the system lessens the constraint the executive experiences. The latter logic seems to be more convincing, due to the decreased ideological distance between veto players and the reduction in the number of potential veto players (removing the political influence of the landed elite). This would imply less policy stability where the sovereign could be punished for poor outcomes, even with ideological similarity with the ruler.

⁵For example, the emperors of the Qing dynasty sometimes restrained themselves in order to enable a coercive method of moral indignation instead of the use of violence. See Metzger 1973. In contrast, it could be argued that contemporary ideology (particularly of the West) consists of restrained, decentralized authority that is made legitimate based on checks and balances. ⁶DiCicco 2003

⁷Miyazaki 1976 and Kracke 1947

In addition, by reducing the political influence of the landed elite, merit-based systems also reduce pathways to articulate grievances. If elites lack the ability to communicate grievances, there is a diminished probability that the sovereign will stumble upon a solution that addresses the specific problem. With grievances uncommunicated, elite action against the sovereign may occur, potentially reducing the length of rule if the political system's inability to address grievances outweighs the benefits of political stability. I propose that merit based systems eliminated constraints on officeholders but also created the standards by which rule was judged. Thus I expect shorter duration of rule for times when meritocracy is firmly in place as it lessens the real constraint on authority, but establishes standards by which punishment of the ruler—removal or otherwise—is legitimate.

CHAPTER 3

CONSTRAINTS IN MEDIEVAL JAPAN

Having described veto players theory, how feudal and merit based institutions can constrain, and the expectations associated with each, it is now time to show how feudal and merit institutions existed within Japan. As stated previously, feudal institutions— defined as a system where military and economic resources determine political influence and where the central ruler does not have a monopoly on both—existed within both cases. In fact, this study proposes that the constraining effect of these institutions can be measured dichotomously given limited historical data⁸. This chapter and the next is broken down by case and time. A chronological account of institutions and measurement of constraint during time periods is constructed.

Feudal Institutions in Japan

The Yamato period (40 BCE to 700 CE) signifies the beginning of a semi-unified Japanese state. Compared to the imperial state of the 7th through the 12th centuries CE, the Yamato period consisted of a decentralized political system of clans and weak adherence to a "royal" Yamato house. While members of the Yamato clan were considered the supreme Japanese rulers and dispensed land and title, in reality most of the clans were regional hegemons and enjoyed independent power bases⁹. Regions were under aristocratic control that was inherited. The Yamato did not enjoy a monopoly of

⁸ A continuous measure of "constraint" is imaginable, but the creation of standards for a continuous measurement is beyond the scope of this paper. Categories of "high", "intermediate", and "low" can be easier to devise within the cases and since my two cases are similar in many respects, are likely comparable between cases as well.

⁹Ferejohn and Rosenbluth 2010

the coercive nor productive means of the state, implying a fairly constrained rule. This began to change when Japan entered the Nara Period.

Faced with the threat of the strong imperial dynasty of the Tang in China, Japan began to undertake reforms that dramatically altered the distribution of power within Japan. Elites who would have otherwise resisted these reforms were faced with the reality that the "state" army under Yamato was insufficient to deal with the Tang army. The Taika Reforms under Emperor Tenji created the imperial state and put the coercive means of the state solely in the hands of the emperor. Universal conscription replaced a semi-feudal system of elites lending soldiers to the Yamato, which undermined the aristocratic elites' ability to be veto players. The large standing army was created to deal with the Chinese but also disgruntled former chieftains under the newly centralized (and unconstraining) system. However, the Chinese invasion never came and some of the reforms began to give way to more feudal arrangements once more. The expensive standing army was reorganized into smaller units, whose main purpose was to police the state, fighting small bands of criminals rather than organized armies.

With the reduction of standing armies also came imperial outsourcing of the military. Elites now employed small bands rather than a military under the direct command of the state. These small bands eventually became the infamous system of samurai, private soldiers who were loyal to feudal lords rather than the state itself¹⁰. In addition, peasants began to consolidate influence to protect themselves against raiders and criminals. Farmers traded their labor and agricultural production for protection of local lords, creating an independent economic base that was immune to state taxation¹¹.

¹⁰Ferejohn and Rosenbluth 2010

¹¹Oppenheimer 1947

At the same time, elites competed amongst themselves for political influence. Various levels of elites fought with each other and tried gaining allegiances of lower elites. Provincial governors—the main mechanisms of central control over the land were not immune to this infighting and members of the aristocracy proved to be important allies. Posts became entrenched within certain families. Certain clans had a monopoly on military posts and other clans had monopolies over civil appointments. In addition, former office holders moved from the capital to the countryside, forming influential estates¹².

The foundations of feudal arrangements began to solidify when the rivalry between the Minamoto and Taira escalated into full blown war. In the provinces the Minamoto conquered martial law was declared, and created a divide in the country: those under the direct political control of the Minamoto and those under the control of the Imperial Court. Yorimoto of the Minamoto clan eventually won and gained legal recognition of the martial powers he had amassed, formally creating the Kamakura Shogunate.

From 1185-1300 CE, the Shogun and the Emperor shared influence in the country. It wasn't until a failed attempt to remove the Shogunate system that the power sharing system broke down and gradually all political influence was absorbed into the office of the Shogun and away from the Emperor. Under the Shogunate system the Shogun ruled supreme, but was also propped up by regional warlords called daimyo¹³, very similar to the role the aristocracy played in Europe. The Emperor was in theory the

¹²Ferejohn and Rosenbluth 2010

¹³The previous influential aristocratic class, the kuge, gave way to the bushi—samurai—who were organized around the Diaymo lords.

ruler of Japan, but for all practical matters was ultimately so constrained that decision making influence was severely compromised. This system lasted until 1868 when the feudal systems began to break down and Emperor Loyalists rose to remove the Shogun leading to the Meiji Restoration.

This history provides context where a measurement of constraint can be devised. Emperors in the Yamato period were constrained by aristocratic chieftains because Emperors lacked the full coercive and economic means of the state. Thus rule under the Yamato was constrained compared to the time period that came after. The Nara and Heian periods were relatively unconstrained for the Emperor. They attempted centralization reforms, some of which were reorganized after the threat of the Chinese crumbled. However, the aristocracy's political authority was significantly reduced relative to the Emperor. Thus the Emperor during this time was unconstrained. It wasn't until feudal arrangements began to solidify that the Emperor was once again constrained, first by the power sharing of the 1200s and then ultimately by the Shogunate system, where the Emperor was the ruler of Japan in name only. This implies a period of constraint for the Emperor that extends until the end of the dataset used in this study. Thus periods of constraint included the Yamato and the Shogunate, whereas the periods of unconstraint were the Nara and Heian. If constraint and stability do have a relationship, I expect ruler duration to be highest under the Shogunate system and lowest in the Nara and Heian periods.

Table 1. Tir	neline of Japan.
Year	Event
40 BCE	Yamato period begins with Jimmu (traditional founder of ruling dynasty)
	Yamato period associated with decentralized rule
	Yamato period military based on kinship and clan relations
	Weak adherence to royal house
	Taika Reforms undertaken to centralize authority in response to Chinese
	threat
700 CE	Nara period begins
	Ritsuryo military system
	Literary works such as Kojiki and Nihon Shoki written to empower rule of
	Emperors
	Japan's capital moved to Heijo-kyo and is modeled after Chinese capital.
	Conscription based armies disbanded in most provinces
794 CE	Heian period begins.
	Ties to countryside become stronger rather than weaker
	Provincial governors' level of private expropriation becomes a problem
	Court nobles begin to emigrate from capital to countryside
	Aristocratic (kugyo) alliances with provincial officials (zuryo)
	Mid-Heian private militaries formed, yet under "state" banner until the
	1300s
	Leader of Minamoto supports clumsy attempt to remove Emperor
	Office of the cloistered Emperor" In-no-cho formed (1086-1116)
1185 CE	Taira and Minamoto clash, Minamoto no Yoritomo seize power
	establishing shogunate in Kamakura
	Emergence of Samural as a social and political class
	Establishment of "feudalism" in Japan
	Imperial court maintains power in the East
	Jokyu War between Cloistered Emperor Go-Toba and Hojo Yoshitoki,
	Imperial court under the Shogunate
	Emperor Go-Daigo pushed claim to throne. Rebellion in 1331. Ashikaga
1226 CE	Takuji turned against Kamakura. Hojo dereated.
1330 CE	Tools over imperial rempente
	Strong regional rulars formed: the Daimue
	Shoung weakened after Veshimitau
	Onin War breaks out
1573 CE	Oda Nobunaga, Toyotomi Hidevoshi, and Tokugawa Levasu
1375 CL	Many regional daimyo that consolidate over time
	Hierarchy: Shinnan Fudai Tozama
1868 CE	Boshin war restores Emperor and eliminates office of the Shogun
	200 million and contract and commuted of the brogun

CHAPTER 4

CONSTRAINTS IN ANICENT CHINA

China has a long historical record. The data considered in this paper ranges from 1045 BCE to 1911 CE. During this time executive constraint due to institutions has varied significantly. The political system of the Zhou dynasty (1045 to 256 BCE) had a central authority ruling over semiautonomous states. This system was akin to the first among equals system of the Yamato Period for Japan. The king of the Zhou ruled over a feudal system that had similar institutions to that of Europe¹⁴. Military and economic power was decentralized, where regional hereditary leaders were the norm¹⁵. Political relationships were hierarchical, with aristocratic and patronage connections creating power in the system. Even though the "son of heaven"¹⁶ had the only state authority to form armies, lords paid no attention¹⁷. The military was organized around powerful nobles (Zhouli or "feudal lords")¹⁸, particularly those who could afford chariots (Shi) which were technologically advanced for the time. The land tenure system was a manorial economy and mostly relied on slave labor. Each of these implies a parallel to European feudal arrangements. The system began to breakdown when the power dynamics between the central authority (Zhou) and the elites (Zhouli) shifted dramatically. The Zhou stopped expanding, while the states in the periphery continued to expand, consolidate resources, and create organizational structures that supported better

¹⁴Fu 1971

¹⁵Zhou 2011, Raaflaub and Rosenstein 1999

¹⁶Ropp 2010, The title of King Wu of the Zhou which was adopted by Chinese Emperors afterwards. It references the "mandate of heaven" (tianming) or the "right to rule", of which was used by the Zhou to justify removing the previous dynasty, the Shang, from power.

¹⁷Raaflaub and Rosenstein 1999

¹⁸Higham and Graff 2012

militaries¹⁹. The disparity in power eventually led to conflict and China entered into a period of warfare until the Qin unified the empire under their banners. The Qin was a former vassal of the Zhou on the periphery of the empire. Its "backwardness" by Zhou standards prevented the rise of a powerful aristocracy that could block Qin rulers²⁰. The Qin organized their military on the basis of peasantry conscription rather than reliance on noble lords. They also shifted from reliance on the chariot to infantry and cavalry. The highly organized standing armies of the Qin overcame former vassals and the Zhou alike.

The Qin dynasty (221 to 207 BCE) is considered one of the "earliest totalitarian superpowers in world history"²¹. In many ways the Qin was responsible for creating and popularizing institutions that unified China. One of the first acts of the unified empire was to disarm all of the other states' militaries, eliminating organized military resistance to the Qin's authority. It was this time when "legalism" (Fajia)—a philosophical system that promotes the state over the individual—took hold of China²². Ancient authors' writings on it indicate that the economy "must be geared to the consolidation of the state". Qin legalists also believed that people should only be rewarded based on performance—particularly only in the military and the production of agricultural goods—and were harshly punished for the slightest violation of the law to curtail crime²³. Land was semi-privatized to undermine the independent power base of the aristocracy that had existed under the Zhou. Peasants were assigned land and were taxed at a low rate to

¹⁹Hui 2005

²⁰Higham and Graff 2012

²¹Kulmar 2014 and Dreyer 2012, also to note is Confucian values which legitimizes the use of force for a state, yet highlights the importance of a virtuous ruler to be the example that the population can emulate. ²²Kulmar 2014

²³Higham and Graff 2012, specifically Shang Yang of the Qin abolished hereditary status and created new titles of nobility (jue) for such success.

encourage spending²⁴. However, the Qin did not last long as constant strife at court and the harsh penalties for violating the law led to mass riots²⁵. The Qin dynasty was built for war and once its external enemies were all defeated, domestic problems plagued the Qin. Advisers staged a coup d'état in 207 BCE and the Qin dynasty was no more. However, the Han dynasty (207 BCE to 189 CE)—succeeding the Qin—quickly dashed the hopes of the aristocracy by maintaining many of the institutions the Qin established. While the first Han Emperor lessened the harsh penalties that the legalism of the Qin promoted (partially because of the belief it incited the riots that ousted the Qin), the state was still seen as the most important part of Chinese life. The feudal institutions under the Zhou were effectively destroyed by the Qin and never returned.

The Han dynasty followed the Qin's military system as well. Peasant based conscription was the linchpin of that system. Conscripts served within their native province (jun) and the governor was the martial commander in the case of invasion. It was also during the Han that the use of eunuchs in palace affairs became popular. Eunuchs were seen as a means of curbing elite influence because they could not produce children and thus could not accumulate wealth²⁶. However, they did amass influence and subverted the political system at various times in Han history. With the rise of the eunuchs also came the decision to reduce the prominence of the peasant conscription system. Professional and voluntary armies took its place. These armies created personal ties to generals and military commanders rather than the Han court. When the Yellow

²⁴Ropp 2010

²⁵Ropp 2010

²⁶Ropp 2010, as well as ensuring that members of the royal house were truly legitimate.

Turbans, a religious revolt, plunged the capital into chaos, Han generals on the periphery declared independence and the dynasty became victim to civil war.

Three dynasties eventually formed out of the chaos: the Wei, Shu Han, and Wu. Eventually the Northern Wei Dynasty formed, which is of particular note because Empress Feng devised the equal field system which established all land as property of the state. The state assigned a set amount of land and resources to families. In return families paid taxes on their production. Only families with ties to officials could own more than the allotment. It was designed to ensure all available land was occupied by tax payers and no one single family could accumulate wealth that rivaled the royal family²⁷. This system survived the fall of the destruction of the Northern Wei and subsequent dynasties adopted the policy. The Sui, Song, Tang, Yuan, Ming, and Qing each tried implementing policies to increase the authority of the emperor and to limit aristocratic influence on the system in an attempt to prevent the removal of the "Mandate of Heaven"²⁸. One such policy that transformed Chinese society was the civil-service examination system.

China is one of the earliest examples of introducing a merit based civil-service examination system. Exams have their foundations in the Han, but were considered the only pathway to higher office in the Tang dynasty. The examination system was a way to recruit the best and brightest to operate within the state apparatus, but it was mostly "a way for the emperor to rule most effectively"²⁹. The civil-service system taught and

²⁷Ropp 2010

²⁸Ropp 2010, for example the Tang implemented the "Rule of Avoidance", a policy that forbade officials to serve the districts they were born in.

²⁹Miyazaki 1976

tested knowledge of the classics³⁰, whereas math and science were left to other sections of society. Analysis of the effects of the merit system focus on who eventually attained office and while the system did bring new blood into governance, candidates of elite background did fare better than those who did not have those connections³¹. The civilservice exam was an experiment in standardizing education and created strong socialization effects that resulted in "unity of culture, mission, and leadership education"³².

Given the variation in feudal and merit arrangements in China's history, there is sufficient evidence to determine levels of constraint on the executive. Based on the Zhou's feudal arrangements—powerful elites and potential veto players to the first among equals king—the Zhou dynasty seems to be a system of constrained rule, whereas the Qin and subsequent dynasties were far more unconstrained in rule. The aristocracy did regain some influence post-Qin, yet the system never went back to feudal arrangements even though they did contemplate it in various dynasties—especially the Southern Sung³³.

When considering the civil-service examination and how it increased the ability of the ruler to extend authority and influence³⁴, periods where the exam did not exist imply a relatively constrained executive. The Tang dynasty established the civil-service

³⁰Most of the literature they were tested over emphasized Confucian values. The importance of a virtuous yet strong leader was a common theme.

³¹Kracke 1947

³²DiCicco 2003

³³Song 2011

³⁴There is an issue of reverse causality to consider. It could be that the civil examination system was devised to limit the authority of unconstrained emperors. I cannot fully discount this explanation, but historical scholars have established the connection between origins of the system and an attempt to increase the capability of state capacity. A more capable state is likely to project the Emperor's power rather than limit it.

exam as the only means of acquiring office in the bureaucracy; this indicates an easy breakpoint for lack of constraint. It should be noted that with successful invasion of China by the Mongols, the examination system was disbanded from 1307-1320 CE, and this period is coded as "constrained". If constraint and rule longevity are indeed related, I then expect the Zhou period to be associated with the longest rule, the Qin the least, and post-Qin between the two. In addition, when the examination system was the only means of recruitment into the bureaucracy I suspect that ruler longevity was compromised. The next section establishes the research method I will use to test these expectations.

Table 2. Tim	eline for China.
Year	Event
1045 BCE	Zhou rule China
	Feudal lords (Zhouli) rule semiautonomous states
	In the state of Qin legalist reforms take place.
	Legalism is an ideology based on increasing authority of the ruler
	Qin adopts conscription based armies, removes hereditary status, semi-
	privatization of land
	A former vassal sacks the Zhou capital; states begin to fight one another
	for prominence
221 BCE	Qin unifies China
	Harsh legalist doctrine creates unrest
	Aristocracy's role in government is severely diminished
207 BCE	Coup de tat, replaced by the Han
	Han dynasty lessens the harsh penalties for violating the law
	Maintains many of the other institutions created by the Qin
	Later down the Han dynasty creates professional armies rather than
	conscription
104 00	Military commanders on the periphery gain loyalty of their soldiers
186 CE	Yellow Turban revolt, military commanders declare independence, civil
22 0 CE	war ensues
220 CE	Three Kingdoms period: Wei, Shu Han, Wu
265 CE	Jin Dynasty
420 CE	Northern and Southern Dynasties
589 CE	Sui Dynasty
618 CE	lang Dynasty
	Examinations set up to reduce influence of aristocracy
	Equal Field System
007.00	Fuoing military system
907 CE	Tang collapses as rebellions ripped the country apart resulting in Five
	Dynasties and Ten Kingdoms period
960 CE	Song dynasty lounded, conflict with Jin and Western Ala Dynasties
1227 CE	Western Via falls to the Mangels
1227 CE 1224 CE	Vesterii Ala fails to the Mongols
1234 CE	Jill falls to the Mongols Southern Song Dymostry destroyed by the Mongola
1279 CE	Southern Song Dynasty destroyed by the Mongols
12/9 CE	A ssigned families to small specific military units
1368 CF	Yuan dynasty falls and is replaced by Ming Dynasty
1644 CF	Oing replaces Ming
1011 CE	Last imperial dynasty falls
	East importat dynasty rans

CHAPTER 5

RESEARCH DESIGN AND RESULTS

The research design of this paper is rather simple. First, historical evidence was gathered to determine if feudal or merit based institutions were present in each case. Second, an analysis of the constraining effect of each institution was conducted to create the independent variable. Third, constraint was coded to reflect two levels of variation within and across the two cases of China and Japan. Fourth, data on ruler longevity and the probability of being deposed was gathered using *Dynasties of the World* written by John E. Morby (2002). Morby lists rulers, beginning and end dates of their reign, and provides information if the ruler was removed from office. It is a source used by previous articles on the subject and is the main source for this study's dependent variables³⁵. The Morby dataset is corrected in order to reflect the existence of "Cloistered Emperors" or retired emperors who were the de facto rulers of Japan. I use the longevity of these cloistered emperors and disregard emperors who held nominal authority. Boxplots of ruler duration by dynasty can be found in Figures 5-8. Finally, models were constructed to reflect the relationship between constraint, ruler duration, and the probability of being deposed.

The methodology of this paper utilizes ordinary least squares regression and logistic regression. The OLS regression is used to estimate ruler duration based on the level of constraint and the logit regression is used to estimate the probability of being deposed given the level of constraint an executive experienced. The first model is

³⁵Blaydes and Chaney 2012

estimated using data on Japanese rulers whereas the second model is estimate using data on Chinese rulers. I include a time variable represented by the start year of the reign of the emperor. I also include time squared and time cubed to pick up on other patterns. These time controls are included in the models to control for time trends like technological advances that increase longevity of life and thus rule for rulers. Each of these models use the two level and three level measurements of constraint. Using twolevel variation data, constraint is a dummy variable (coded 1 for constraint, 0 for unconstraint).

A discussion of the distribution of the data is needed in order to determine if pvalues can adequately detect statistical significance. For both China and Japan, ruler duration is significantly skewed to the right. Given that the data is skewed to the right, I take the log base ten of duration of rule plus one. Figure 3 and 4 show the new distribution of the data. I estimate regressions based on the transformed variable.







Figure 2. Distribution of Rule Longevity in China.



Figure 3. *Transformed Ruler Duration for Japan*.

Histogram of Duration



Figure 4. *Transformed Ruler Duration for China*.



Dynasty.



Figure 6. Boxplots of Ruler Duration by Dynasty (Continued).





Figure 8. Boxplots of Duration of Rule for Emperors (Continued).

Results

Below, Table 3 includes the results of the OLS regressions explained in the previous section. It shows the coefficient estimates for each variable in each model as well as including the models with time controls. Note that the coefficients are estimated off the transformed duration variable. Constraint for Japan is not statistically significant with and without the time controls. The sign is positive in the model without time controls, but it becomes negative when time controls are added. Constraint is significant in the model without time controls and a constrained ruler could expect to rule for a year longer if constrained. When time controls are added to the China model, the constraint variable once again loses significance, but still has a positive and statistically significant coefficient for constraint. A constrained rule could be expected to rule for .64 years longer than an unconstrained ruler. Since the time controls seem to absorb much of the effect of constraint, there may be other trends in time that are increasing rule in times that I have deemed constrained for rulers.

	With	out Time C	Controls	With Time Controls			
	Japan	China	Combine	Japan	China	Combine	
Intercept	1.07***	.934***	.993***	1.80***	1.16***	1.50***	
	(.062)	(.029)	(.057)	(.190)	(.301)	(.217)	
Constraint	.104	.302***	.216***	083	.165	.0265	
	(.073)	(.080)	(.057)	(.081)	(.190)	(.0822)	
State			048			187*	
			(.057)			(.754)	
Time				-1.80**	222	244	
				(.062)	(.518)	(.345)	
Time Squared				1.30*	0429	121	
				(.707)	(.326)	(.243)	
Time Cubed				23	.045	067	
				(2.4)	(.068)	(.053)	
Observations	121	283	404	121	283	404	

Table 3. Predicting Duration of Rule based on Feudal Constraint.

Note: $*p \le .10$, $**p \le .05$, $***p \le .01$; standard errors in parentheses; time controls are rescaled for presentation, time is multiplied by 10^3, time squared by 10^6, and time cubed by 10^9.

Another way to examine my theory empirically is through the probability of being removed from office. I theorized in Chapter # that political stability declines because of elite action against the sovereign. Thus I expect that constrained rulers would also have a decreased probability of being removed from office than those whose rule was unconstrained. OLS estimates of models predicting deposed can be found in Table #. Constraint is significant in the Japan, China, and Combined models without time controls, each having a negative coefficient. Statistical significance drops when time controls are added to the China model, but Japan and the combined models still retain significance. Overall this provides evidence for my theory: constraint decreases the odds of being removed from office.

C	With	out Time C	Controls	With Time Controls			
Intercept	Japan .64	China .24***	Combine .578*	Japan .26	China .059	Combine .81***	
	(.07)	(.026)	(.34)	(.21)	(.27)	(.21)	
Constraint	5***	21**	-2.3***	32***	099	346***	
	(.08)	(.072)	(.42)	(.092)	(.17)	(.080)	
State			-1.75***			30***	
			(.365)			(.073)	
Time*1000				-1.3	2.0	.76*	
				(7.0)	(4.7)	(.33)	
Time				1.1	03	.58*	
Squared 10.6				(.8)	(.3)	(.23)	
Time Cubed*10^9				58*	01	13*	
				(.27)	(.06)	(.051)	
Observations	121	283	404	121	283	404	

Table 4. Predicting Removal of Office using OLS Regression

Note: $*p \le .10$, $**p \le .05$, $***p \le .01$; standard errors in parentheses; time controls are rescaled for presentation, time is multiplied by 10^3, time squared by 10^6, and time cubed by 10^9.

Given that the popular method to predict a dichotomous variable is a logistic regression, it is important to run the models using this method as well. I provide the results of the logistic regression that predicts the probability of being deposed by using information regarding constraint in Table 4. Constraint has a negative sign across all models and is statistically significant in three of them which supports my expectations.

Without Time Controls With Time Controls								
Intercept	Japan .48	China -1.2***	Combine .58*	Japan³⁶ -56.6**	China -5.9	Combine 373		
	(.35)	(.15)	(.34)	(25.4)	(4.2)	(2.1)		
Constraint	-2.14***	-2.39**	-2.3***	1.35	33	-1.8***		
	(.46)	(1.03)	(.42)	(1.04)	(1.8)	(.48)		
State			-1.75***			-1.4***		
			(.365)			(.40)		
Time*1000				142**	7.6	-1.6		
				(68.6)	(7.3)	(3.6)		
Time Squared*10^6				-10.11*	-3.7	2.2		
				(5.93)	(4.1)	(2.2)		
Time Cubed*10^9				26	55	6		
				(16.4)	(7.5)	(.45)		
Observations	121	283	404	121	283	404		

Table 5. Predicting Probability of Being Deposed based on Feudal Constraint.

Note: $*p \le .10$, $**p \le .05$, $***p \le .01$; standard errors in parentheses; time controls are rescaled for presentation, time is multiplied by 10^3, time squared by 10^6, and time cubed by 10^9.

Since the coefficients are difficult to interpret directly, I provide predictions on the probability of removal for each emperor in Figures #-#. Figure # provides the probabilities for Japanese Emperors. Emperors faced lower probability of being removed from office in the Yamato period and increased over time until it peaks at .80 in the middle of the Heian Period. After that it decreases until it reaches Yamato period levels under the Shogunate. This trend in the data matches my expectations with regards to

³⁶ There is an issue of fitted probabilities numerically 0 or 1 in the Japan model with time controls. I still report the logit coefficients, but this result should be met with some skepticism.

constraint and stability. The Yamato and Shogunate periods constrained the office of the Emperor and is associated with lower probabilities of being removed from office. This provides evidence that supports the theory outlined in Chapter 2. However, China seems to be a different story.



Figure 9. Probability of being removed in Japan, with Time Controls.

Figure # provides information on China. Rulers of the Zhou period start out at a low probability of being removed from office, which is what I expected. However, the probability eventually decreases. The probability jumps to around .15 during the Qin Dynasty. It increases over time until peaking at .25 during the Sui Dynasty. It then

decreases until the end of the dataset. I expected that post Qin would be associated with increased probability of removal and ruler duration, yet the probability declines post-Sui. Interestingly enough this is around the time that merit based institutions began to take shape in Ancient China.



Figure 10. Probability of being Removed in China, with Time Controls

Table 5 provides the results of using a merit indicator in place of constraint for data from Ancient China. I include both the OLS estimates predicting duration and removal, with and without time controls. Merit is positive in both duration models and negative in the removal model with time controls, yet only the merit variable in the duration model with time controls is statistically significant. Contrary to the theory I built in Chapter 2, merit based civil-service examination system is actually associated with higher duration of rule and decreased probability of being removed from power. I had believed that a civil-service examination system would decrease the constraint the Emperor felt because of the reduction in ideological distance between elites. This evidence supports that merit based institutions may have constrained rather than eliminate the constraints on the executive.

	Without Time	e Controls	With Time Controls			
	Duration	Removal	Duration	Removal		
Intercept	.942***	.210***	1.26***	025		
	(.037)	(.033)	(.146)	(.134)		
Merit	.068	.0024	.309**	138		
	(.055)	(.049)	(.105)	(.096)		
Time*1000			.998	1.1		
			(4.32)	(3.96)		
Time Squared*10 ⁶			-47.9	144.0		
			(34.6)	(317.)		
Time Cubed*10^9			.14*	05		
			(.074)	(.068)		
Observations	283	283	283	283		

 Table 6. Predicting Duration of Rule and Probability of Removal Based on Merit.

 Without Time Controls
 With Time Controls

Note: $p \le .10$, $p \le .05$, $p \le .01$; standard errors in parentheses; time controls are rescaled for presentation, time is multiplied by 10^3, time squared by 10^6, and time cubed by 10^9.

Figure 11 provides a graphical representation of the probability of being removed based on logit estimators. The probability of being removed increases until again around the Sui and decreases significantly under the Tang. The probability decreases further until the end of the dataset. This provides some evidence that merit based institutions decreased the probability of removal and may have constrained the executive in some capacity.



Figure 11. Probability of Being Removed from Office, Merit Constraint

Shoguns

There may be a possibility that the theory only applies to the de facto rulers, rather than nominal rulers. I would argue that nominal rulers are still pertinent to the theory because they represent leaders who are supremely constrained, but I still think it is important to rerun models with data on the de facto rulers to see if there are similar results. In the following models I first use data on the Hojo regency which forced shoguns and emperors alike into a nominal role until the Ashikaga shogunate, where the shoguns reestablished their authority. I measure constraint for these de facto rulers unconstrained until the Ashikaga shogunate where shogunate constables acquired significant power to constrain the ruler. These new constables were referred to as the daimyo. Table 7 provides OLS estimates for ruler duration and deposal. In the models without time controls, the sign of the coefficient for constraint meets expectations. In the duration model it is positive and statistically significant at the .10 level, although this is not enough significance for a one-way test. In the removal model the coefficient is negative and is statistically significant. When you introduce time controls, the constraint variable loses all statistical significance in the duration model and the sign changes to negative, yet the constraint variable in the removal model retains its sign and statistical significance. This provides marginal support for the theory, mostly because of the removal models.

	Without Time	Controls	With Time Controls		
	Duration	Removal	Duration	Removal	
Intercept	.997***	.58***	1.65***	.26	
	(.058)	(.063)	(.22)	(.24)	
Constraint	.13*	37***	0049	34***	
	(.076)	(.082)	(.103)	(.11)	
Time			-1.4*	.44	
			(.7)	(.76)	
Time Squared			.91	19	
			(.82)	(.90)	
Time Cubed			18	.056	
			(.29)	(.032)	
Observations	124	124	124	124	

Table 7. OLS Estimates for de facto rulers.

Note: $*p \le .10$, $**p \le .05$, $***p \le .01$; standard errors in parentheses; time controls are rescaled for presentation, time is multiplied by 10^3, time squared by 10^6, and time cubed by 10^9.

Using logistic estimators for the probability of being removed from office there is again some evidence that supports the theory. Figure 12 provides a graphical representation of the probability of being removed from office for rulers over time. Probability starts out low for emperors in the Yamato period and slowly increases until it peaks for emperors in the Heian period. It then decreases over time and significantly decreases under the Ashikaga. The probability begins to increase again during the Tokugawa shogunate. This is somewhat unexpected, but could be due to the rising tension between elites who favored the emperor and the Tokugawa who were trying to retain power. In fact, the last few Tokugawa shoguns were removed from office at an exceedingly rapid rate, to which the probabilities reflect. The Tokugawa shogunate did oversee some of the efforts toward modernity for Japan and began to set the foundations for more traditional state structures³⁷. This could represent some change in constraint that I may be missing in the model.



Figure 12. Probability of Being Removed from Office Using De Facto Data.

³⁷ Osamu 1982

CHAPTER 6

CONCLUSION

This thesis has endeavored to clarify the theoretical arguments surrounding feudal constraints and political stability while also formulating a theory that can be used to explain merit-based institution's effects on constraint. Chapter 2 explored this endeavor in detail, but in summary I theorized that feudal institutions created veto players to block dramatic policy change. This opened up channels of communication between elites and executives while also decreasing the potential benefits of removing the sovereign. These connections result in increased duration of rule which is a proxy measure for political stability. I also explored merit-based institutions and theorized that these institutions would eliminate the constraints on the executive because knowledge-based merit systems would decrease the ideological distance between each veto player, yet I did note that the standard may be utilized as an independent power source that can be used to counter executive action.

Based on my theory, I expected in times where feudal institutions were present that duration of rule would increase and probability of being removed from office would decrease. However, the results indicate that while the probability of being removed from office did decrease, the results were ambiguous for duration of rule. Many of the time controls decreased the statistical significance of feudal constraint, yet signs were frequently in the expected, positive direction. Unexpectedly, in times when the bureaucracy was filled with merit-based appointments rather than feudal, duration of rule was higher and the probability of being removed from office was decreased. I had theorized that such a system would eliminate the constraints on the executive due to decreasing the ideological distance between veto players and also undermining hereditary status of feudal bureaucrats. Results do not support this theory, so there is a question of how a civil-service system could constrain the executive. The answer may be found in literature based on data from modern times.

Recruitment and selection of civil servants is stated to be one of the most important facets to modern bureaucracy and merit systems are frequently used to curtail the nepotism that exists in many developing countries.³⁸ Looking at bureaucratic change, reform preferences of current officeholders depend upon the chances of retaining the office in the next election. When current officeholders expect to win in the next election, they politicize the bureaucracy and when they fear they will lose, they try to insulate it from the political process³⁹. In this manner, merit-based systems may actually be created and shaped in a manner that builds an independent power base rather than built purely as a tool for the executive to exert their authority. The emperor may not have decided to insulate the bureaucracy from his will, but could have attempted to secure a lasting legacy by preventing successors from dramatically altering state policy. In effect, the aging emperor may have been a veto player to imperial successors.

There are a few problems with this thesis that leaves more room for future scholarship. I do not consider the outside constraints rulers frequently faced. Outside pressure from China forced Japanese rulers to undertake centralization efforts and nomadic invasions may have created institutions of limited constraint in China. However, outside threat may also have affected the dependent variables of this study.

³⁸ Moon and Hwang 2013

³⁹ Ting et al. 2012

The theory proposed here predicts rule would be shortened due to internal elites, but outside constraint may also cut short a ruler's reign by means of conquest. This study only marginally considers how outside pressures and thus outside constraint on the executive could have affected a sovereign's rule. In addition, there may be a geographic component of this theory that is unmentioned here. The distance between the core and the periphery may be important for constraint because the ruler may struggle to extend influence across long geographical distances, but at the same time potential veto players in the periphery may have a harder time overcoming collective action problems to block central actions. Unfortunately, geographic control variables for the time period and cases considered have been difficult to locate.

Nevertheless, this thesis has provided evidence that supports other literature which concludes that constraining the executive increases political stability and decreases the probability of being removed. It also provides an analysis of early meritocracy in China and provides evidence the civil-service examinations systems constraint rather than unconstrain the rule of leaders. While China today is still a far cry from becoming a democracy and Japan's technocratic form of democracy is highly centralized, feudal constraints affected their predecessors in similar ways to that of the developed democracies of the West, albeit potentially in different magnitude. Understanding the origins of constraint on the executive is a meaningful endeavor as it could provide more nuance to the determinants of political systems that persist today.

REFERENCES

- Blaydes, Lisa, and Chaney, Eric, "The Feudal Revolution and Europe's Rise: Political Divergence of the Christian West and the Muslim World before 1500 CE," *The American Political Science Review* 107, no. 1 (2013): 16-34.
- DiCicco, Joel M, "The Development of Leaders in Ancient China, Rome, and Persia," *Public Administration Quarterly* 27, no. 1-2 (2003): 6-40.
- Ferejohn, John A. and Rosenbluth, Frances McCall. *War and State Building in Medieval Japan.* Stanford: Stanford University Press, 2010.
- Graff, David and Higham, Robin. A Military History of China. The University Press of Kentucky, 2012.
- Hui, Victoria Tin-bor. War and State Formation in Ancient China and Early Modern Europe. New York, NY: Cambridge University Press, 2005.
- Kracke, E. A, "Family Vs. Merit in Chinese Civil Service Examinations Under the Empire," *Harvard Journal of Asiatic Studies* 10, no. 2 (1947): 103-123.
- Kulmar, Tarmo, "On the Nature of the Governing System of the Qin Empire in Ancient China," *Folklore-Electronic Journal of Folklore* (2014).
- Metzger, Thomas. The Internal Organization of Ch'ing Bureaucracy: Legal, Normative, and Communication Aspects. Cambridge, Mass: Harvard University Press, 1973.
- Miyazaki, Ichisada. China's Examination Hell. New York: Weatherhill, 1976.
- Moon, M. Jae and Hwang, Changho, "The State of Civil Service Systems in the Asia-Pacific Region: A Comparative Perspective," *Review of Public Personnel Administration* 33, no. 2 (2013): 121-139.
- Morby, John and Rozier, Charlie. Dynasties of the World. Oxford University Press, 2014.
- Oppenheimer, Franz, "Japan and Western Europe," *American Journal of Economics and Sociology* 3, no. 4 (1944): 539-551.
- Osamu, Wakita, "The Emergence of the State in Sixteenth-Century Japan: From Oda to Tokugawa," *The Journal of Japanese Studies* 8, no. 2 (1982): 343-367.
- Raaflaub, Kurt and Rosentein, Nathan. *War and Society in Ancient and Medieval Worlds*. Cambridge, Mass: Harvard University Press, 1999.

Ropp, Paul S. China in World History. Oxford University Press, 2010.

- Song, Jaeyoon, "Redefining Good Government: Shifting Paradigms in Song Dynasty (960-1279) Discourse on "Fengjian," *Toung Pao* 97, no. 4 (2011): 301-343.
- Ting, Michael M., Snyder, James M., Hirano, Shigeo, and Folk, Olle, "Elections and reform: the adoption of civil service system in U. S. States," *Journal of Theoretical Politics* 25, no. 3 (2012): 363-387.
- Tsbelis, George, "Veto Players and Institutional Analysis," *Governance* 13, no. 4 (2000): 441-474.
- Zhou, Haiwen, "Internal Rebellions and External Threats: A Model of Government Organizational Forms in Ancient China," *Southern Economic Journal* 78, no. 4 (2012): 1120-1141.

APPENDIX: DATA

					End			
Sovereign	State	Dynasty	Constraint	Start Date	Date	Duration	Merit	Deposed
Wu	China	Western Zhou	Yes	-1045	-1043	2	No	No
Cheng	China	Western Zhou	Yes	-1043	-1006	37	No	No
Kang	China	Western Zhou	Yes	-1003	-978	25	No	No
Chao	China	Western Zhou	Yes	-978	-957	21	No	No
Mu	China	Western Zhou	Yes	-957	-918	39	No	No
Kung	China	Western Zhou	Yes	-918	-900	18	No	No
Ι	China	Western Zhou	Yes	-900	-873	27	No	No
Hsiao	China	Western Zhou	Yes	-873	-866	7	No	No
Yi	China	Western Zhou	Yes	-866	-858	8	No	No
Li Gonghe	China	Western Zhou	Yes	-858	-841	17	No	No
Regency	China	Western Zhou	Yes	-841	-828	13	No	Yes
Hsuan	China	Western Zhou	Yes	-828	-782	46	No	No
Yu	China	Western Zhou	Yes	-782	-771	11	No	No
P'ing	China	Eastern Zhou	Yes	-771	-720	51	No	No
Huan	China	Eastern Zhou	Yes	-720	-697	23	No	No
Chuang	China	Eastern Zhou	Yes	-697	-682	15	No	No
His	China	Eastern Zhou	Yes	-682	-677	5	No	No
Hui	China	Eastern Zhou	Yes	-677	-652	25	No	No
Hsiang	China	Eastern Zhou	Yes	-652	-619	33	No	No
Ch'ing	China	Eastern Zhou	Yes	-619	-613	6	No	No
Kuang	China	Eastern Zhou	Yes	-613	-607	6	No	No
Ting	China	Eastern Zhou	Yes	-607	-586	21	No	No
Chien	China	Eastern Zhou	Yes	-586	-572	14	No	No
Ling	China	Eastern Zhou	Yes	-572	-545	27	No	No
Ching	China	Eastern Zhou	Yes	-545	-520	25	No	No
Тао	China	Eastern Zhou	Yes	-520	-520	0	No	No
Ching	China	Eastern Zhou	Yes	-520	-476	44	No	No
Yuan	China	Eastern Zhou	Yes	-476	-469	7	No	No
Chen-Ting	China	Eastern Zhou	Yes	-469	-441	28	No	No
Kao	China	Eastern Zhou	Yes	-441	-426	15	No	No
Wei-leih	China	Eastern Zhou	Yes	-426	-402	24	No	No
An	China	Eastern Zhou	Yes	-402	-376	26	No	No
Lieh	China	Eastern Zhou	Yes	-376	-369	7	No	No
Hsien Shên-ching	China	Eastern Zhou	Yes	-369	-321	48	No	No
(son)	China	Eastern Zhou	Yes	-321	-315	6	No	No
Nan	China	Eastern Zhou	Yes	-315	-256	59	No	No
Shih Huang Ti	China	Qin	No	-221	-210	11	No	No

Table 8. Combined Dataset.

Êrh Shih Huang								
Ti	China	Qin	No	-210	-207	3	No	No
Ch'in Wang	China	Qin	No	-207	-206	1	No	No
Kao Ti	China	Western Han	No	-207	-195	12	No	No
Hui Ti	China	Western Han	No	-195	-188	7	No	No
Lü Hou	China	Western Han	No	-188	-180	8	No	No
Wen Ti	China	Western Han	No	-180	-157	23	No	No
Ching Ti	China	Western Han	No	-157	-141	16	No	No
Wu Ti	China	Western Han	No	-141	-87	54	No	No
Chao Ti	China	Western Han	No	-87	-74	13	No	No
Hsuan Ti	China	Western Han	No	-74	-48	26	No	No
Yuan Ti	China	Western Han	No	-48	-33	15	No	No
Ch'eng Ti	China	Western Han	No	-33	-7	26	No	No
Ai Ti	China	Western Han	No	-7	1	8	No	No
Ping Ti	China	Western Han	No	1	6	5	No	No
Ju-tzu Ying	China	Western Han	No	6	9	3	No	Yes
Chai Huang Ti Huai-yang	China	Hsin	No	9	23	14	No	No
Wang	China	Hsin	No	23	25	2	No	Yes
Kuang Wu Ti	China	Eastern Han	No	25	57	32	No	No
Ming Ti	China	Eastern Han	No	57	75	18	No	No
Chang Ti	China	Eastern Han	No	75	88	13	No	No
Но Ті	China	Eastern Han	No	88	106	18	No	No
Shang Ti	China	Eastern Han	No	106	106	0	No	No
An Ti	China	Eastern Han	No	106	125	19	No	No
Shun Ti	China	Eastern Han	No	125	144	19	No	No
Ch'ung Ti	China	Eastern Han	No	144	145	1	No	No
Chih Ti	China	Eastern Han	No	145	146	1	No	No
Huan Ti	China	Eastern Han	No	146	168	22	No	No
Ling Ti	China	Eastern Han	No	168	189	21	No	No
Shao Ti	China	Eastern Han	No	189	189	0	No	Yes
Hsien Ti	China	Eastern Han	No	189	220	31	No	Yes
Wen Ti	China	Wei Dynasty	No	220	226	6	No	No
Ming Ti	China	Wei Dynasty	No	226	239	13	No	No
Fei Ti	China	Wei Dynasty	No	239	254	15	No	Yes
Shao Ti	China	Wei Dynasty	No	254	260	6	No	No
Yuan Ti	China	Wei Dynasty	No	260	266	6	No	Yes
Chao Lieh Ti	China	Minor Han	No	221	223	2	No	No
Hou Chu	China	Minor Han	No	223	263	40	No	Yes
Ta Ti	China	Wu	No	222	252	30	No	No
Fei Ti	China	Wu	No	252	258	6	No	Yes
Ching Ti	China	Wu	No	258	264	6	No	No
Mo Ti	China	Wu	No	264	280	16	No	Yes
Wu Ti	China	Western Chin	No	266	290	24	No	No

Hui Ti	China	Western Chin	No	290	307	17	No	No
Huai Ti	China	Western Chin	No	307	311	4	No	Yes
Min Ti	China	Western Chin	No	311	316	5	No	Yes
Yuan Ti	China	Eastern Chin	No	317	323	6	No	No
Ming Ti	China	Eastern Chin	No	323	325	2	No	No
Cheng Ti	China	Eastern Chin	No	325	342	17	No	No
Kang Ti	China	Eastern Chin	No	342	344	2	No	No
Mu Ti	China	Eastern Chin	No	344	361	17	No	No
Ai Ti	China	Eastern Chin	No	361	365	4	No	No
Hai-his Kung	China	Eastern Chin	No	365	372	7	No	Yes
Chien Wen Ti	China	Eastern Chin	No	372	372	0	No	No
Hsiao Wu Ti	China	Eastern Chin	No	372	396	24	No	No
An Ti	China	Eastern Chin	No	396	419	23	No	No
Kung Ti	China	Eastern Chin	No	419	420	1	No	Yes
Wu Ti	China	Liu Sung	No	420	422	2	No	No
Shao Ti	China	Liu Sung	No	422	424	2	No	No
Wen Ti	China	Liu Sung	No	424	453	29	No	No
Hsiao Wu Ti	China	Liu Sung	No	453	464	11	No	No
Chien Fei Ti	China	Liu Sung	No	464	466	2	No	No
Ming Ti	China	Liu Sung	No	466	472	6	No	No
Hou Fei	China	Liu Sung	No	472	477	5	No	No
Shun Ti	China	Liu Sung	No	477	479	2	No	Yes
Kao Ti	China	Southern Chi	No	479	482	3	No	No
Wu Ti	China	Southern Chi	No	482	493	11	No	No
Yu-lin Wang	China	Southern Chi	No	493	494	1	No	No
Hai-ling	China	Southern Chi	No	494	494	0	No	Yes
Ming Ti	China	Southern Chi	No	494	498	4	No	No
Tung-hun Hou	China	Southern Chi	No	498	501	3	No	No
Но Ті	China	Southern Chi	No	501	502	1	No	No
Wu Ti	China	Liang	No	502	549	47	No	No
Chien Wen Ti Yu-Chang	China	Liang	No	549	551	2	No	No
Wang	China	Liang	No	551	551	0	No	Yes
Yuan Ti	China	Liang	No	551	555	4	No	No
Ching Ti	China	Liang	No	555	557	2	No	Yes
Wu Ti	China	Ch'en	No	557	559	2	No	No
Wen Ti	China	Ch'en	No	559	566	7	No	No
Lin-hai Wang	China	Ch'en	No	566	568	2	No	Yes
Hsuan Ti	China	Ch'en	No	568	582	14	No	No
Hou Chu	China	Ch'en	No	582	589	7	No	Yes
Tao Wu Ti	China	Northern Wei	No	386	409	23	No	No
Ming Yuan Ti	China	Northern Wei	No	409	423	14	No	No
Tai Wu Ti	China	Northern Wei	No	423	452	29	No	No

Nan-an Wang	China	Northern Wei	No	452	452	0	No	No
Wen Cheng Ti	China	Northern Wei	No	452	465	13	No	No
Hsien Wen Ti	China	Northern Wei	No	465	471	6	No	Yes
Hsiao Wen Ti	China	Northern Wei	No	471	499	28	No	No
Hsuan Wu Ti	China	Northern Wei	No	499	515	16	No	No
Hsiao Ming Ti	China	Northern Wei	No	515	528	13	No	No
Lin T'ao Wang Hsiao Chuang	China	Northern Wei	No	528	528	0	No	No
Ti	China	Northern Wei	No	528	530	2	No	Yes
Tun-hai Wang	China	Northern Wei	No	530	531	1	No	Yes
Chieh Min Ti	China	Northern Wei	No	531	532	1	No	No
An-ting Wang	China	Northern Wei	No	532	532	0	No	Yes
Hsiao Wu Ti	China	Northern Wei	No	532	535	3	No	No
Hsiao Ching Ti	China	Eastern Wei	No	534	550	16	No	Yes
Wen Hsuan Ti	China	Northern Ch'i	No	550	559	9	No	No
Fei Ti	China	Northern Ch'i	No	559	560	1	No	Yes
Hsiao Chao Ti	China	Northern Ch'i	No	560	561	1	No	No
Wu Ch'eng Ti	China	Northern Ch'i	No	561	565	4	No	Yes
Hou Chu	China	Northern Ch'i	No	565	577	12	No	No
Yu Chu	China	Northern Ch'i	No	577	577	0	No	Yes
Wen Ti	China	Western Wei	No	535	551	16	No	No
Fei Ti	China	Western Wei	No	551	554	3	No	No
Kung Ti	China	Western Wei	No	554	557	3	No	No
Hsiao Min Ti	China	Northern Zhou	No	557	557	0	No	No
Ming Ti	China	Northern Zhou	No	557	560	3	No	No
Wu Ti	China	Northern Zhou	No	560	578	18	No	No
Hsuan Ti	China	Northern Zhou	No	578	579	1	No	Yes
Ching Ti	China	Northern Zhou	No	579	581	2	No	Yes
Wen Ti	China	Sui	No	581	604	23	No	No
Yang Ti	China	Sui	No	604	617	13	No	Yes
Kung Ti	China	Sui	No	617	618	1	No	Yes
Kao Tsu	China	T'ang	No	618	626	8	Yes	Yes
T'ai Tsung	China	T'ang	No	626	649	23	Yes	No
Kao Tsung	China	T'ang	No	649	683	34	Yes	No
Chung Tsung	China	T'ang	No	683	684	1	Yes	Yes
Jui Tsung	China	T'ang	No	684	690	6	Yes	Yes
Wu Hou	China	T'ang	No	690	705	15	Yes	Yes
Chung Tsung	China	T'ang	No	705	710	5	Yes	No
Jui Tsung	China	T'ang	No	710	712	2	Yes	Yes
Hsuan Tsung	China	T'ang	No	712	756	44	Yes	Yes
Su Tsung	China	T'ang	No	756	762	6	Yes	No
Tai Tsung	China	T'ang	No	762	779	17	Yes	No
Te Tsung	China	T'ang	No	779	805	26	Yes	No

Shun Tsung	China	T'ang	No	805	805	0	Yes	Yes
Hsien Tsung	China	T'ang	No	805	820	15	Yes	No
Mu Tsung	China	T'ang	No	820	824	4	Yes	No
Ching Tsung	China	T'ang	No	824	827	3	Yes	No
Wen Tsung	China	T'ang	No	827	840	13	Yes	No
Wu Tsung	China	T'ang	No	840	846	6	Yes	No
Hsiuan Tsung	China	T'ang	No	846	859	13	Yes	No
I Tsung	China	T'ang	No	859	873	14	Yes	No
His Tsung	China	T'ang	No	873	888	15	Yes	No
Chao Tsung	China	T'ang	No	888	904	16	Yes	No
Ai Ti	China	T'ang	No	904	907	3	Yes	Yes
T'ai Tsu	China	Later Liang	No	907	912	5	Yes	No
Ying Wang	China	Later Liang	No	912	913	1	Yes	No
Mo Ti	China	Later Liang	No	913	923	10	Yes	No
Chuang Tsung	China	Later T'ang	No	923	926	3	Yes	No
Ming Tsung	China	Later T'ang	No	926	933	7	Yes	No
Min Ti	China	Later T'ang	No	933	934	1	Yes	No
Fei Ti	China	Later T'ang	No	934	937	3	Yes	No
Kao Tsu	China	Later Chin	No	937	942	5	Yes	No
Ch'u Ti	China	Later Chin	No	942	947	5	Yes	Yes
Kao Tsu	China	Later Han	No	947	948	1	Yes	No
Yin Ti	China	Later Han	No	948	951	3	Yes	No
T'ai Tsu	China	Later Zhou	No	951	954	3	Yes	No
Shih Tsung	China	Later Zhou	No	954	959	5	Yes	No
Kung Ti	China	Later Zhou	No	959	960	1	Yes	Yes
T'ai Tsu	China	Liao (Khitan)	No	907	926	19	Yes	No
T'ai Tsung	China	Liao (Khitan)	No	926	947	21	Yes	No
Shih Tsung	China	Liao (Khitan)	No	947	951	4	Yes	No
Mu Tsung	China	Liao (Khitan)	No	951	969	18	Yes	No
Ching Tsung	China	Liao (Khitan)	No	969	982	13	Yes	No
Sheng Tsung	China	Liao (Khitan)	No	982	1031	49	Yes	No
Hsing Tsung	China	Liao (Khitan)	No	1031	1055	24	Yes	No
Tao Tsung	China	Liao (Khitan)	No	1055	1101	46	Yes	No
T'ien-tso Ti	China	Liao (Khitan)	No	1101	1125	24	Yes	Yes
T'ai Tsu	China	His Hsia/Tangut His	No	990	1004	14	Yes	No
T'ai Tsung	China	Hsia/Tangut His	No	1004	1032	28	Yes	No
Ching Tsung	China	Hsia/Tangut His	No	1032	1048	16	Yes	No
I Tsung	China	Hsia/Tangut His	No	1048	1068	20	Yes	No
Hui Tsung	China	Hsia/Tangut His	No	1068	1086	18	Yes	No
Ch'ung Tsung	China	Hsia/Tangut	No	1086	1139	53	Yes	No

		His						
Jen Tsung	China	Hsia/Tangut His	No	1139	1193	54	Yes	No
Huan Tsung	China	Hsia/Tangut His	No	1193	1206	13	Yes	No
Hsiang Tsung	China	Hsia/Tangut His	No	1206	1211	5	Yes	No
Shen Tsung	China	Hsia/Tangut His	No	1211	1223	12	Yes	Yes
Hsien Tsung	China	Hsia/Tangut His	No	1223	1226	3	Yes	No
Wei-ming Hsien	China	Hsia/Tangut	No	1226	1227	1	Yes	Yes
T'ai Tsu	China	Chin (Jurchen)	No	1115	1123	8	Yes	No
T'ai Tsung	China	Chin (Jurchen)	No	1123	1135	12	Yes	No
His Tsung	China	Chin (Jurchen)	No	1135	1150	15	Yes	No
Hai-ling Wang	China	Chin (Jurchen)	No	1150	1161	11	Yes	No
Shih Tsung	China	Chin (Jurchen)	No	1161	1189	28	Yes	No
Chang Tsung	China	Chin (Jurchen)	No	1189	1208	19	Yes	No
Wei-shao Wang	China	Chin (Jurchen)	No	1208	1213	5	Yes	No
Hsuan Tsung	China	Chin (Jurchen)	No	1213	1224	11	Yes	No
Ai Tsung	China	Chin (Jurchen)	No	1224	1234	10	Yes	No
Mo Ti	China	Chin (Jurchen)	No	1234	1234	0	Yes	Yes
T'ai Tsu	China	Northern Song	No	960	976	16	Yes	No
T'ai Tsung	China	Northern Song	No	976	997	21	Yes	No
Chen Tsung	China	Northern Song	No	997	1022	25	Yes	No
Jen Tsung	China	Northern Song	No	1022	1063	41	Yes	No
Ying Tsung	China	Northern Song	No	1063	1067	4	Yes	No
Shen Tsung	China	Northern Song	No	1067	1085	18	Yes	No
Che Tsung	China	Northern Song	No	1085	1100	15	Yes	No
Hui Tsung	China	Northern Song	No	1100	1126	26	Yes	Yes
Ch'in Tsung	China	Northern Song	No	1126	1127	1	Yes	Yes
Kao Tsung	China	Southern Song	No	1127	1162	35	Yes	Yes
Hsiao Tsung	China	Southern Song	No	1162	1189	27	Yes	Yes
Kuang Tsung	China	Southern Song	No	1189	1194	5	Yes	Yes
Ning Tsung	China	Southern Song	No	1194	1224	30	Yes	No
Li Tsung	China	Southern Song	No	1224	1264	40	Yes	No
Tu Tsung	China	Southern Song	No	1264	1274	10	Yes	No
Kung Ti	China	Southern Song	No	1274	1276	2	Yes	Yes
Tuan Tsung	China	Southern Song	No	1276	1278	2	Yes	No
Ti Ping	China	Southern Song	No	1278	1279	1	Yes	Yes
T'ai Tsu	China	Yuan/Mongol	No	1206	1229	23	Yes	No
T'ai Tsung	China	Yuan/Mongol	No	1229	1246	17	Yes	No
Ting Tsung	China	Yuan/Mongol	No	1246	1251	5	Yes	No
Hsien Tsung	China	Yuan/Mongol	No	1251	1259	8	Yes	No
Shih Tsu	China	Yuan/Mongol	No	1260	1294	34	Yes	No
Ch'eng Tsung	China	Yuan/Mongol	No	1294	1307	13	Yes	No

Wu Tsung	China	Yuan/Mongol	No	1307	1311	4	Yes	No
Jen Tsung	China	Yuan/Mongol	No	1311	1320	9	Yes	No
Ying Tsung	China	Yuan/Mongol	No	1320	1323	3	Yes	No
T'ai-ting Ti	China	Yuan/Mongol	No	1323	1328	5	Yes	No
Wen Tsung	China	Yuan/Mongol	No	1328	1329	1	Yes	No
Ming Tsung	China	Yuan/Mongol	No	1329	1329	0	Yes	No
Wen Tsung	China	Yuan/Mongol	No	1329	1332	3	Yes	No
Ning Tsung	China	Yuan/Mongol	No	1332	1332	0	Yes	No
Shun Ti	China	Yuan/Mongol	No	1332	1368	36	Yes	Yes
Hung Wu	China	Ming	No	1368	1398	30	Yes	No
Chien Wen	China	Ming	No	1398	1402	4	Yes	No
Yung Lo	China	Ming	No	1402	1424	22	Yes	No
Hung His	China	Ming	No	1424	1425	1	Yes	No
Hsuan Te	China	Ming	No	1425	1435	10	Yes	No
Cheng T'ung	China	Ming	No	1435	1449	14	Yes	Yes
Ching T'ai	China	Ming	No	1449	1457	8	Yes	Yes
Tien Shun	China	Ming	No	1457	1464	7	Yes	No
Ch'eng Hua	China	Ming	No	1464	1487	23	Yes	No
Hung Chih	China	Ming	No	1487	1505	18	Yes	No
Cheng Te	China	Ming	No	1505	1521	16	Yes	No
Chia Ching	China	Ming	No	1521	1567	46	Yes	No
Lung Ch'ing	China	Ming	No	1567	1572	5	Yes	No
Wan Li	China	Ming	No	1572	1620	48	Yes	No
T'ai Ch'ang	China	Ming	No	1620	1620	0	Yes	No
T'ien Ch'i	China	Ming	No	1620	1627	7	Yes	No
Ch'ung Chen	China	Ming	No	1627	1644	17	Yes	No
Hung Kuang	China	Southern Ming	No	1644	1645	1	Yes	Yes
Lung Wu	China	Southern Ming	No	1645	1646	1	Yes	No
Yung Li	China	Southern Ming	No	1646	1662	16	Yes	Yes
T'ien Ming	China	Ch'ing/Manchu	No	1616	1626	10	Yes	No
Ch'ung Te	China	Ch'ing/Manchu	No	1626	1643	17	Yes	No
Shun Chih	China	Ch'ing/Manchu	No	1643	1661	18	Yes	No
K'ang His	China	Ch'ing/Manchu	No	1661	1722	61	Yes	No
Yung Cheng	China	Ch'ing/Manchu	No	1722	1735	13	Yes	No
Ch'ien Lung	China	Ch'ing/Manchu	No	1735	1796	61	Yes	Yes
Chia Ch'ing	China	Ch'ing/Manchu	No	1796	1820	24	Yes	No
Tao Kuang	China	Ch'ing/Manchu	No	1820	1850	30	Yes	No
Hsien Feng	China	Ch'ing/Manchu	No	1850	1861	11	Yes	No
T'ung Chih	China	Ch'ing/Manchu	No	1861	1875	14	Yes	No
Kuang Hsu	China	Ch'ing/Manchu	No	1875	1908	33	Yes	No
Hsuan Tung	China	Ch'ing/Manchu	No	1908	1912	4	Yes	Yes
Jimmu	Japan	Yamato	Yes	-40	-10	30	No	No
Suizei	Japan	Yamato	Yes	-10	20	30	No	No

Annei	Japan	Yamato	Yes	20	50	30	No	No
Itoku	Japan	Yamato	Yes	50	80	30	No	No
Kōshō	Japan	Yamato	Yes	80	110	30	No	No
Kōan	Japan	Yamato	Yes	110	140	30	No	No
Kōrei	Japan	Yamato	Yes	140	170	30	No	No
Kōgen	Japan	Yamato	Yes	170	200	30	No	No
Kaika	Japan	Yamato	Yes	200	230	30	No	No
Sujin	Japan	Yamato	Yes	230	258	28	No	No
Suinin	Japan	Yamato	Yes	258	290	32	No	No
Keikō	Japan	Yamato	Yes	290	322	32	No	No
Seimu	Japan	Yamato	Yes	322	355	33	No	No
Chūai	Japan	Yamato	Yes	355	362	7	No	No
Ōjin	Japan	Yamato	Yes	362	394	32	No	No
Nintoku	Japan	Yamato	Yes	394	427	33	No	No
Richū	Japan	Yamato	Yes	427	432	5	No	No
Henzei	Japan	Yamato	Yes	432	437	5	No	No
Ingyō	Japan	Yamato	Yes	437	454	17	No	No
Ankō	Japan	Yamato	Yes	454	547	93	No	No
Yūryaku	Japan	Yamato	Yes	547	489	58	No	No
Seinei	Japan	Yamato	Yes	489	494	5	No	No
Kenzō	Japan	Yamato	Yes	494	497	3	No	No
Ninken	Japan	Yamato	Yes	497	504	7	No	No
Buretsu	Japan	Yamato	Yes	504	510	6	No	No
Keitai	Japan	Yamato	Yes	510	527	17	No	No
Ankan	Japan	Yamato	Yes	527	535	8	No	No
Senka	Japan	Yamato	Yes	535	539	4	No	No
Kimmei	Japan	Yamato	Yes	539	571	32	No	No
Bidatsu	Japan	Yamato	Yes	571	585	14	No	No
Yōmei	Japan	Yamato	Yes	585	587	2	No	No
Sushun	Japan	Yamato	Yes	587	592	5	No	No
Suiko	Japan	Yamato	Yes	592	628	36	No	No
Jomei	Japan	Yamato	Yes	628	641	13	No	No
Kōgyoku	Japan	Yamato	Yes	641	645	4	No	No
Kōtoku	Japan	Yamato	Yes	645	654	9	No	No
Saimei	Japan	Yamato	Yes	654	661	7	No	No
Tenji	Japan	Yamato	Yes	661	672	11	No	No
Kōbun	Japan	Yamato	Yes	672	672	0	No	No
Temmu	Japan	Yamato	Yes	672	686	14	No	No
Jitō	Japan	Yamato	Yes	686	697	11	No	Yes
Mommu	Japan	Yamato	Yes	697	707	10	No	No
Gemmei	Japan	Nara	No	707	715	8	No	Yes
Genshō	Japan	Nara	No	715	724	9	No	Yes
Shōmu	Japan	Nara	No	724	749	25	No	Yes

Kōken	Japan	Nara	No	749	758	9	No	Yes
Junnin	Japan	Nara	No	758	764	6	No	Yes
Shōtoku	Japan	Nara	No	764	770	6	No	No
Kōnin	Japan	Nara	No	770	781	11	No	Yes
Kammu	Japan	Heian	No	781	806	25	No	No
Heizei	Japan	Heian	No	806	809	3	No	Yes
Saga	Japan	Heian	No	809	823	14	No	Yes
Junna	Japan	Heian	No	823	833	10	No	Yes
Nimmyō	Japan	Heian	No	833	850	17	No	No
Montoku	Japan	Heian	No	850	858	8	No	No
Seiwa	Japan	Heian	No	858	876	18	No	Yes
Yōzei	Japan	Heian	No	876	884	8	No	Yes
Kōkō	Japan	Heian	No	884	887	3	No	No
Uda	Japan	Heian	No	887	897	10	No	Yes
Daigo	Japan	Heian	No	897	930	33	No	Yes
Suzaku	Japan	Heian	No	930	946	16	No	Yes
Murakami	Japan	Heian	No	946	967	21	No	No
Reizei	Japan	Heian	No	967	969	2	No	Yes
En'yū	Japan	Heian	No	969	984	15	No	Yes
Kazan	Japan	Heian	No	984	986	2	No	Yes
Ichijō	Japan	Heian	No	986	1011	25	No	Yes
Sanjō	Japan	Heian	No	1011	1016	5	No	Yes
Go-Ichijō	Japan	Heian	No	1016	1036	20	No	No
Go-Suzaku	Japan	Heian	No	1036	1045	9	No	Yes
Go-Reizei	Japan	Heian	No	1045	1068	23	No	No
Go-Sanjō	Japan	Heian	No	1068	1073	5	No	Yes
Shirakawa	Japan	Heian	No	1073	1129	56	No	No
Toba	Japan	Heian	No	1107	1156	49	No	No
Go-Shirakawa	Japan	Heian	No	1155	1192	37	No	No
Takakura	Japan	Heian	No	1180	1181	1	No	No
Antoku	Japan	Heian	No	1180	1185	5	No	No
Go-Toba	Japan	Kamakura	Yes	1183	1221	38	No	No
Tsuchimikado	Japan	Kamakura	Yes	1198	1210	12	No	Yes
Juntoku	Japan	Kamakura	Yes	1210	1221	11	No	Yes
Chūkyō	Japan	Kamakura	Yes	1221	1221	0	No	Yes
Go-Horikawa	Japan	Kamakura	Yes	1221	1232	11	No	Yes
Shijō	Japan	Kamakura	Yes	1232	1242	10	No	No
Go-Saga	Japan	Kamakura	Yes	1242	1246	4	No	Yes
Go-Fukakusa	Japan	Kamakura	Yes	1246	1260	14	No	Yes
Kameyama	Japan	Kamakura	Yes	1260	1274	14	No	Yes
Go-Uda	Japan	Kamakura	Yes	1274	1287	13	No	Yes
Fushimi	Japan	Kamakura	Yes	1287	1298	11	No	Yes
Go-Fushimi	Japan	Kamakura	Yes	1298	1301	3	No	Yes

Go-Nijō	Japan	Kamakura	Yes	1301	1308	7	No	No
Hanazono	Japan	Kamakura	Yes	1308	1318	10	No	Yes
Go-Daigo	Japan	Southern Court	Yes	1318	1339	21	No	No
Go-Murakami	Japan	Southern Court	Yes	1339	1368	29	No	No
Chōkei	Japan	Southern Court	Yes	1368	1383	15	No	Yes
Go-Kameyama	Japan	Southern Court	Yes	1383	1392	9	No	Yes
Kōgon	Japan	Northern Court	Yes	1331	1333	2	No	No
Kōmyō	Japan	Northern Court	Yes	1333	1348	15	No	No
Sukō	Japan	Northern Court	Yes	1348	1351	3	No	No
Go-Kōgon	Japan	Northern Court	Yes	1351	1371	20	No	No
Go-En'yū	Japan	Northern Court	Yes	1371	1382	11	No	No
Go-Komatsu	Japan	Muromachi	Yes	1382	1412	30	No	No
Shōkō	Japan	Muromachi	Yes	1412	1428	16	No	No
Go-Hanazono Go-	Japan	Muromachi	Yes	1428	1464	36	No	No
Tsuchimikado Go-	Japan	Muromachi	Yes	1464	1500	36	No	No
Kashiwabara	Japan	Muromachi	Yes	1500	1526	26	No	No
Go-Nara	Japan	Muromachi	Yes	1526	1557	31	No	No
Ōgimachi	Japan	Muromachi	Yes	1557	1586	29	No	No
Go-Yōzei	Japan	Tokugawa	Yes	1586	1611	25	No	No
Go-Mizunoo	Japan	Tokugawa	Yes	1611	1629	18	No	No
Meishō	Japan	Tokugawa	Yes	1629	1643	14	No	No
Go-Kōmyō	Japan	Tokugawa	Yes	1643	1654	11	No	No
Go-Sai	Japan	Tokugawa	Yes	1654	1663	9	No	No
Reigen	Japan	Tokugawa	Yes	1663	1687	24	No	No
Higashiyama	Japan	Tokugawa	Yes	1687	1709	22	No	No
Nakamikado	Japan	Tokugawa	Yes	1709	1735	26	No	No
Sakuramachi	Japan	Tokugawa	Yes	1735	1747	12	No	No
Momozono Go-	Japan	Tokugawa	Yes	1747	1762	15	No	No
Sakuramachi	Japan	Tokugawa	Yes	1762	1771	9	No	No
Go-Momozono	Japan	Tokugawa	Yes	1771	1779	8	No	No
Kōkaku	Japan	Tokugawa	Yes	1779	1817	38	No	No
Ninkō	Japan	Tokugawa	Yes	1817	1846	29	No	No
Kōmei	Japan	Tokugawa	Yes	1846	1857	11	No	No
Meiji	Japan	Tokugawa	Yes	1857	1912	55	No	No

Sovereign	Period	Constraint	Rule Start	Rule End	Duration	Denosed
Iimmu	Yamato	Yes	-40	-10	30	No
Suizei	Yamato	Yes	-10	20	30	No
Annei	Yamato	Yes	20	50	30	No
Itoku	Yamato	Yes	50	80	30	No
Kōshō	Yamato	Yes	80	110	30	No
Kōan	Yamato	Yes	110	140	30	No
Kōrei	Yamato	Yes	140	170	30	No
Kōgen	Yamato	Yes	170	200	30	No
Kaika	Yamato	Yes	200	230	30	No
Sujin	Yamato	Yes	230	258	28	No
Suinin	Yamato	Yes	258	290	32	No
Keikō	Yamato	Yes	290	322	32	No
Seimu	Yamato	Yes	322	355	33	No
Chūai	Yamato	Yes	355	362	7	No
Ōjin	Yamato	Yes	362	394	32	No
Nintoku	Yamato	Yes	394	427	33	No
Richū	Yamato	Yes	427	432	5	No
Henzei	Yamato	Yes	432	437	5	No
Ingyō	Yamato	Yes	437	454	17	No
Ankō	Yamato	Yes	454	547	93	No
Yūryaku	Yamato	Yes	547	489	58	No
Seinei	Yamato	Yes	489	494	5	No
Kenzō	Yamato	Yes	494	497	3	No
Ninken	Yamato	Yes	497	504	7	No
Buretsu	Yamato	Yes	504	510	6	No
Keitai	Yamato	Yes	510	527	17	No
Ankan	Yamato	Yes	527	535	8	No
Senka	Yamato	Yes	535	539	4	No
Kimmei	Yamato	Yes	539	571	32	No
Bidatsu	Yamato	Yes	571	585	14	No
Yōmei	Yamato	Yes	585	587	2	No
Sushun	Yamato	Yes	587	592	5	No
Suiko	Yamato	Yes	592	628	36	No
Jomei	Yamato	Yes	628	641	13	No
Kōgyoku	Yamato	Yes	641	645	4	No
Kōtoku	Yamato	Yes	645	654	9	No
Saimei	Yamato	Yes	654	661	7	No
Tenji	Yamato	Yes	661	672	11	No
Kōbun	Yamato	Yes	672	672	0	No

Table 9. Dataset for de Facto Data.

Temmu	Yamato	Yes	672	686	14	No
Jitō	Yamato	Yes	686	697	11	Yes
Mommu	Yamato	Yes	697	707	10	No
Gemmei	Nara	No	707	715	8	Yes
Genshō	Nara	No	715	724	9	Yes
Shōmu	Nara	No	724	749	25	Yes
Kōken	Nara	No	749	758	9	Yes
Junnin	Nara	No	758	764	6	Yes
Shōtoku	Nara	No	764	770	6	No
Kōnin	Nara	No	770	781	11	Yes
Kammu	Heian	No	781	806	25	No
Heizei	Heian	No	806	809	3	Yes
Saga	Heian	No	809	823	14	Yes
Junna	Heian	No	823	833	10	Yes
Nimmyō	Heian	No	833	850	17	No
Montoku	Heian	No	850	858	8	No
Seiwa	Heian	No	858	876	18	Yes
Yōzei	Heian	No	876	884	8	Yes
Kōkō	Heian	No	884	887	3	No
Uda	Heian	No	887	897	10	Yes
Daigo	Heian	No	897	930	33	Yes
Suzaku	Heian	No	930	946	16	Yes
Murakami	Heian	No	946	967	21	No
Reizei	Heian	No	967	969	2	Yes
En'yū	Heian	No	969	984	15	Yes
Kazan	Heian	No	984	986	2	Yes
Ichijō	Heian	No	986	1011	25	Yes
Sanjō	Heian	No	1011	1016	5	Yes
Go-Ichijō	Heian	No	1016	1036	20	No
Go-Suzaku	Heian	No	1036	1045	9	Yes
Go-Reizei	Heian	No	1045	1068	23	No
Go-Sanjō	Heian	No	1068	1073	5	Yes
Shirakawa	Heian	No	1073	1129	56	No
Toba	Heian	No	1107	1156	49	No
Go-Shirakawa	Heian	No	1155	1192	37	No
Takakura	Heian	No	1180	1181	1	No
Antoku	Heian	No	1180	1185	5	No
Go-Toba	Kamakura	No	1183	1203	20	No
Hojo Tokimasa	Нојо	No	1203	1205	2	Yes
Yoshitoki	Нојо	No	1205	1224	19	No
Yasutoki	Нојо	No	1224	1242	18	No
Tsunetoki	Нојо	No	1242	1246	4	No
Tokiyori	Нојо	No	1246	1256	10	Yes

Nagatoki	Нојо	No	1256	1264	8	No
Masamura	Нојо	No	1264	1268	4	Yes
Tokimune	Нојо	No	1268	1284	16	No
Sadatoki	Нојо	No	1284	1301	17	Yes
Morotoki	Нојо	No	1301	1311	10	No
Munenobu	Нојо	No	1311	1312	1	No
Hirotoki	Нојо	No	1312	1315	3	No
Mototoki	Нојо	No	1315	1315	0	Yes
Takatoki	Нојо	No	1316	1326	10	Yes
Sadaaki	Нојо	No	1326	1326	0	Yes
Moritoki	Нојо	No	1327	1333	6	Yes
Ashikaga Takauji	Ashikaga	Yes	1338	1356	18	No
Yoshiakira	Ashikaga	Yes	1359	1367	8	No
Yoshimitsu	Ashikaga	Yes	1369	1395	26	Yes
Yoshimochi	Ashikaga	Yes	1395	1423	28	Yes
Yoshikazu	Ashikaga	Yes	1423	1425	2	No
Yoshinori	Ashikaga	Yes	1429	1441	12	No
Yoshikatsu	Ashikaga	Yes	1442	1443	1	No
Hosimasa	Ashikaga	Yes	1449	1474	25	Yes
Yoshihisa	Ashikaga	Yes	1474	1489	15	No
Yoshitane	Ashikaga	Yes	1490	1493	3	Yes
Yoshizumi	Ashikaga	Yes	1495	1508	13	Yes
Yoshitane	Ashikaga	Yes	1508	1522	14	Yes
Yoshiharu	Ashikaga	Yes	1522	1547	25	Yes
Yoshiteru	Ashikaga	Yes	1547	1568	21	No
Yoshihde	Ashikaga	Yes	1568	1568	0	No
Yoshiakira	Ashikaga	Yes	1568	1573	5	Yes
Tokugawa Leyasu	Tokugawa	Yes	1603	1605	2	Yes
Hidetada	Tokugawa	Yes	1605	1623	18	Yes
Lemitsu	Tokugawa	Yes	1623	1651	28	No
Letsuna	Tokugawa	Yes	1651	1680	29	No
Tsunayoshi	Tokugawa	Yes	1680	1709	29	No
Lenobu	Tokugawa	Yes	1709	1712	3	No
Letsugu	Tokugawa	Yes	1713	1716	3	No
Yoshimune	Tokugawa	Yes	1716	1745	29	Yes
Leshige	Tokugawa	Yes	1745	1760	15	Yes
Leharu	Tokugawa	Yes	1760	1786	26	No
Lenari	Tokugawa	Yes	1787	1837	50	Yes
Leyoshi	Tokugawa	Yes	1837	1853	16	No
lesada	Tokugawa	Yes	1853	1858	5	No
lemochi	Tokugawa	Yes	1858	1866	8	No
Yoshinobu	Tokugawa	Yes	1867	1868	1	Yes

