

Taxation and Peasant Rebellion: Evidence from Late Ming Dynasty China

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Abstract—The Ming dynasty embarked on a desperate path of excessive taxation to maintain the faltering state machinery, and eventually collapsed under the impact of the peasant rebellion and the Manchu regime. This paper examines the impact of the Ming Dynasty taxation system on protest and specifically focuses on the Three Military Campaign Taxes. Using a novel dataset on 215 prefectures from 1573 to 1644, I find that increased taxation leads to peasant unrest. The results suggest that an increase of 1% in taxation in the late Ming dynasty corresponds to an increase of 3.3% in the number of peasant unrest. The results are robust to various specifications. This study thus provides support to the claim that informal taxation can affect social stability.

Keywords—Ancient China, peasant unrest, social stability, taxation

I. INTRODUCTION

The taxation system has a profound impact on the stable development of society [1]. In China's imperial era, taxation is an important link between the imperial court and the people, thereby having a salient impact on social stability. In the period under well-ordered administration, the taxation system is more reasonable with a relatively low tax rate, leading to lower social unrest, development of production, and consolidation of imperial power. However, when imperial politics and the officials were corrupt, the taxation system became inevitably chaotic and arbitrary. The imperial society is often unstable, and the regime was in danger of collapse.

The late Ming dynasty provided illustrated cases to unpack the causal relationship between taxation and social stability. In this paper, I specifically focus on the Three Military Campaign Taxes ("San Xiang," which refers to three types of field taxes imposed at the end of the Ming Dynasty). The taxation system is chaotic, and corruption prevails in the late Ming Dynasty. Reference [2] shows that during the Wanli Reign (1573-1620) alone, there was increasing civil unrest. Not only handicraft workers, businessmen, and the poor, but also merchants and workshop owners join in the collective actions against the Ming court. In the Wanli Reign, urban residents are involved in most of the rebellions against heavy taxation. However, the impact of unrest on regime stability was limited because of the small share of urban residents in the whole population of the Ming Dynasty. However, the social unrest caused by the Three Military Campaign Taxes during the Chongzhen Reign (1628-1644) was wide-spread, most of those rebellions are launched by peasants, which account for a large part of the Ming population. The economic shocks evolve into the political struggle that becomes the main cause of the decline of the Ming Dynasty. Moreover, the

Three Military Campaign Taxes were not taxes; they were additional and temporary sur-charges, not institutional nor permanent. The fall of the Ming dynasty was not due to a formal system but to an informal one. Because of the lack of formal institutional constraints, officials had greater rights to freely collect taxes, leading to excessive taxation.

The existing literature has focused on the effect of taxation on political stability in the contemporary era. For example, Devereux and Wen [3] identifies the relationship between political stability and government spending on the public good. Carmignani [4] examines that political instability generates uncertainty about the stability of institutions and hence uncertainty about the future course of economic policies. Alesina, Campante *et al.* [5] shows that fiscal policy is driven by voters and voters will demand more public goods or lower taxes when they observe a boom.

While numerous studies focus on this relationship in the contemporary era, we yet know little about that in traditional societies. In this paper, I explore the tax-stability relationship in late imperial China. Exploring such historical context has two main advantages. First, previous papers do not focus on the relationship between stability and taxation in traditional societies. This article is a study of the relationship between taxation and the rise and fall of the dynasty in ancient China. I find that social order is disrupted and peasant revolt increases when the tax burden increases in a traditional empire. Second, detailed and accurate data on taxation in various parts of China during the Ming Dynasty have been recorded, which allows me to observe the regional distribution characteristics of rebellion and taxation.

I present this finding by analyzing the effect of the tax burden on social unrest in imperial China. The case studied in this paper is the effect of Three Military Campaign Taxes on peasant rebellions. By the end of the Ming Dynasty, the financial system of the Chinese government was on the verge of collapse. Faced with the double crisis of the invasion of Manchurian and the rebellion of the peasant army in the Central Plains, the military expenditure of the Ming Dynasty rose year after year. Guo [6] finds that from 1618 to 1631, a total of thirteen years, the collection of Liao Tax increased from more than two million taels to more than ten million taels, an over five-fold increase, which is rare in the financial history of China. In addition to military expenses, disasters occurred frequently in the last years of the Ming Dynasty, especially in the Central Plains. Famine was prevailing and hungry people ate each other's children. If the government's money for disaster relief could not meet the needs of the famine victims, they would undoubtedly join the rebellion army and become bandits who burned, killed, looted, and

destroyed order everywhere.

This article uses data on taxation and peasant revolts in 215 Chinese prefectures from 1573 to 1644 to examine the impact of the taxation system on peasant revolts. I collected tax data from the Collection and Research on Accounting Records of Wanli in the Ming Dynasty (“Wan Li Kuai Ji Lu”) [7], which documents the taxation of each prefecture in 1580. The taxation system of the Ming Dynasty consisted of two components, one for agricultural products, including rice, silk, wheat, and horse straw, and the other for currency. Rice was the largest and most completely documented of the taxes paid by the prefectures, so it was chosen as the measure of taxation for this article. The unit of measurement for rice is dan, which is an ancient Chinese unit of measurement.

The result shows that an increase of 1% in taxation in the late Ming dynasty corresponds to a 3.3% increase in the number of peasant unrest. This finding remains robust after controlling for several covariates that may affect the occurrence of peasant unrest, including the number of population households, various natural disasters, and maize adoption, and with provincial fixed effects.

This study makes contributions to the relationship between the tax system and social stability and economic development. Olson has a classic theory that stationary bandits always tend to set the maximum tax rate [8]. The economic collapse at the end of the Ming Dynasty has well demonstrated Olsen’s point, as the ruling classes such as bureaucrats and emperors imposed an excessive tax burden on the peasants to the point that they revolted. Yu-Ch’uan emphasizes that the Ming dynasty’s demise was due to the excessive land tax imposed on the peasants, which drained China’s agricultural economy [9]. Renyu finds that the complex additional taxes of the Ming Dynasty placed a heavy burden on the peasants, and the inability and corruption of the Ming government to manage its finances eventually led to the collapse of the financial system [10]. Chen and Kung suggest that after a tax reform during the Tang Dynasty (618-907), the counties where the reform was implemented more effectively exhibited distinctly stronger signs of a commercial revolution 200 years later [11].

II. BACKGROUND

A. Protest

Fig. 1 shows the distribution of peasant unrest from 1573 to 1644. The peasant revolts mainly occurred in the northern border, the central region, and some south-western areas at that time. As Fig. 1 shows, unrest mainly occurred in Shaanxi province, Henan province, Shandong province, Sichuan province, Hubei province, and Hunan province. The peasant revolts mainly occurred in Shaanxi province, Henan province, Shandong province, Sichuan province, Hubei province, and Hunan province.

Most of the protests in the late Ming Dynasty were launched by peasants and soldiers. Protests in the late Ming Dynasty can be divided into three main types. The first type of protest was produced by deserters who did not receive military pay. For example, northern Shaanxi province was a major military town against the Mongols. Before the peasant revolt of the late Ming Dynasty, there was already a latent

mutinous force in Shaanxi. Due to political chaos and economic depletion, the government was financially depleted and defaulted on the payment of the border troops. For example, Yansui, Ningxia, and Guyuan, these three counties were short of pay for thirty-six months, which led the deserters to plunder everywhere in Shaanxi. In addition, during the Wanli and Tianqi Reign (1573-1627), as the Shaanxi army failed to assist the Manchurian, some soldiers fled and became the beginning of bandits. The border soldiers plundered and stole during the famine years so that the famine people were forced to become thieves. The soldiers and the starving people incited each other to grow more and more powerful.

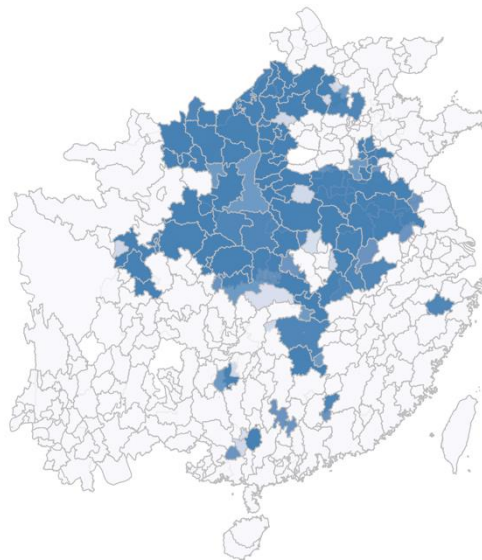


Fig. 1. Unrest Distribution Map, 1573-1644

Source: *Warfare in China's Dynasties* (“Zhong Guo Li Dai Zhan Zheng Nian Biao”) [14].

The second type of protest arose from the peasants’ rebellion against the heavy tax burden, which was the most dominant type of protest. In 1627, Wang Er killed Zhang Douyao, an official of Cheng city in Shaanxi province, for urging the collection of taxes, which officially kicked off the peasant uprising at the end of the Ming Dynasty. After Wang Er took the lead in the uprising, hungry people from all over the country responded. In November of 1627, large-scale peasant unrest broke out in northern Shaanxi Province, with Wang Jiayin of Fugu county, Wang Zuogang of Yichuan county, Gao Yingxiang of Ansai county, and Wang Daliang of Hannan county responding. In December of 1627, in Guyuan county, Shaanxi province, some of the mutinous soldiers joined the rebel army. At this time, the rebellion was small in scale, mostly composed of famine victims. In February of 1628, the Ming government abolished the border stations to save money, causing unemployed soldiers to loot. The poor land in Shaanxi that could not be cultivated, together with the abolition of the border stations made it difficult for people to make a living. Consequently, the soldiers lost their jobs, so the soldiers and starving people started looting [12].

The third type of protest is natural disasters related. For example, in June 1622, a peasant uprising led by Xu Hongru broke out in Shandong province. Sishui county in Shandong province was burdened with an annual tax of more than

12,000 taels of silver. Under the oppression of the heavy tax burden, the peasants either starved to death or fled. These poor peasants were also unable to resist natural disasters. In Shandong from 1537 to 1622, there was a serious disaster almost every two years. In addition, people in Shandong were also affected by external disasters. There were also the harassment of Japanese invaders and the impact of the war in the Liaodong region. From the end of Wanli Reign (1573-1620), during the frequent wars, troops passing through Shandong would loot food and clothes. These heavy burdens and harassment made the people of Shandong so miserable that they were forced to fight to survive. The armed peasants were active in the space between Shandong province and Hebei province, and they were very powerful. Fearing the power of the armed peasants, local officials shirked their responsibilities and did not dare to suppress them. In 1622, the Manchurian army crossed the Liao River and people became angrier with the Ming government for its decadence and incompetence. At the same time, in Sichuan province and Guizhou province, the struggle against the Ming government led by An Bangyan began. The peasant uprising in Shandong province led by Xu Hongru broke out in this situation [13].

B. Three Military Campaign Taxes

Three Military Campaign Taxes refer to additional taxation, including Liao tax, Jiao tax, and Lian tax. The purpose of collecting the Liao tax was to cope with the invasion of Manchurians and the military food shortage caused by the war in Liaodong region. Jiao tax aimed to gain the military expenditure needed to suppress peasant unrest. Lian tax focused on training the soldiers for suppressing the peasant revolt. In the beginning, the collection of Three Military Campaign Taxes was only a temporary policy. However, as the war in Liaodong region became increasingly intense, the amount of the levy also increased, and it became a regular tax, which imposed a heavy burden on the people in the late Ming Dynasty.

Liao tax was collected in units of one mu of land from 1618. Until 1620, it was increased three times, which became 9 percent of silver per mu of land. The total amount of silver collected was 520 taels a year, which was equivalent to more than one-third of the total tax revenue of the whole country. By 1644, the Liao tax had been increased to 9 million taels of silver. Jiao tax was originally scheduled to be collected in 1637 for one year, with a levy of 164 percent of silver per mu, but it was not canceled after one year. By 1644, a total of 3.3 million taels of silver had been collected. Lian tax began to be levied in 1639, and an additional 14 percent of silver was collected per mu of land on the original basis, reaching a total of 7.3 million taels of silver.

According to the 1585 local records of Shunde county in Guangdong province [10], before the collection of Three Military Campaign Taxes, the tax on one mu of land was decided according to the quality of the land. The tax rate for upper-quality, middle-quality, and lower-quality fields was 28 percent per mu, 20 percent per mu, and 13 percent per mu, respectively.

What at first seemed to be a single tax policy gradually gave rise to a large number of complex additional taxes. Moreover, a variety of criteria were used, such as the quality of the land and the number of people per household. Three

Military Campaign Taxes reflect only the tip of the iceberg of the various complex taxation of the late Ming Dynasty. The fundamental problem of the tax system in the Ming Dynasty was not the excessive tax rates or the lack of equality in the legislation of taxes. Rather, it was a direct consequence of the diversity and complexity of the basic tax structure. The additional taxes imposed a heavy tax burden on the peasants.

Fig. 2 shows the time trend of peasant unrest from 1573 to 1644. The number of peasant revolts began to increase fiercely since 1618. The timing of the start of the three taxes coincided with the increased peasant revolt. It indicates that with the collection of Three Military Campaign Taxes, unrest would rise.

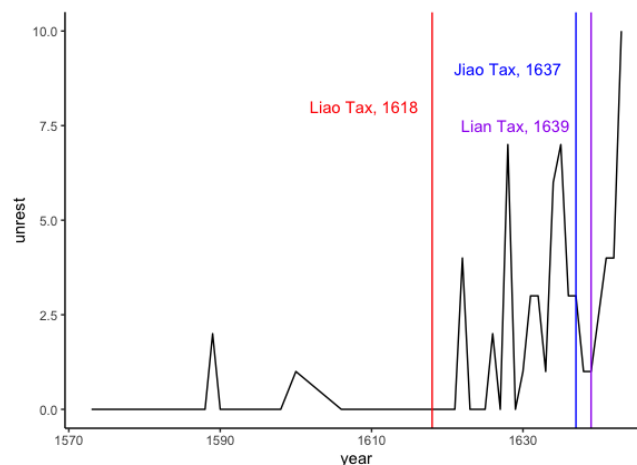


Fig. 2. Time Trend

Source: *Warfare in China's Dynasties* ("Zhong Guo Li Dai Zhan Zheng Nian Biao") [14]

III. THE EMPIRICAL SETUP

A. Data and Variables

Unrest. The outcome measure is a binary variable of peasant unrest in a given year. The information on peasant unrest comes from *Warfare in China's Dynasties* ("Zhong Guo Li Dai Zhan Zheng Nian Biao") [14], which is a chronological list of the wars that took place in ancient China from the legendary Shennong era in the thirtieth century B.C. to the end of the Qing Dynasty (1911 A.D). It also briefly introduces the cause, process, and consequence of the wars, and is a valuable tool for studying ancient Chinese military history. During the sample period, there were 195 rebellions, 63 of them were peasant rebellions and the rest were the invasion of foreign nations. I only use those peasant rebellions to measure unrest.

Tax. The key explanatory variable is tax_i , which refers to the collection of rice, silk, wheat, and horse grass of prefecture i during the Wanli Reign. Taxes levied at that time were mainly in-kind taxes. The data is collected from *Collection and Research on the Accounting Records of Wanli in the Ming Dynasty Specifically*, which is the first systematic compilation and study of the Wanli Accounting Records, completed over a decade of collaboration between scholars of history and mathematics [7]. With 43 volumes, about a million words and more than 45000 data, the Wanli Accounting Records is a large data document of the Ming Dynasty's finance, a direct product of Zhang Juzheng's

reforming phase, and the only general volume of state finance and accounting in ancient China that has survived to date. I choose rice to measure tax_i because it accounts for the highest percentage of tax revenue and is relatively completely recorded.

It is necessary to control for some variables that may affect peasant unrest. In this study, I control for three covariates, including population, disaster and maize adoption.

Population. Population pressure can also have an impact on peasant unrest. Based on the data from Cao, the late Ming Dynasty experienced a rapid increase in the population [15]. Peasants might be forced to revolt due to the lack of land per capita. As a result, the growing population needs to be controlled, this article selects 153 prefecture households from 1560 to 1640.

Disaster. I consider disaster as a covariate. The data on natural disasters are obtained from A collection of Chinese Agricultural Natural Disaster Histories [16], which documents the 5000-year history of agricultural disasters in China, including meteorological disasters, biological disasters, environmental disasters, and famine. There were 394 natural disasters during the sample period.

Maize adoption. Agriculture can be another factor that affects unrest. I control for the adoption of maize, the main crop in China. The information comes from Chen and Kung [17].

Summary statistics of these variables are shown in Table 1. Of the 215 prefectures, 14% had peasant uprisings and 34% had suffered natural disasters.

Table 1: Summary statistics

Statistic	N	Mean	St. Dev.	Min	Max
Peasant Unrest	215	0.144	0.352	0	1
Tax	156	94,233.	137,019.1	30,000	812,186.200
Disaster	215	140	00	0	1
Logged	205	0.344	0.476	-2.892	4.369
Population	215	1.171	1.513	0	1
Maize Adoption		0.070	0.255		

Notes: The discrepancy between tax and peasant unrest statistics is due to the fact that the tax data of some remote areas are not included in Collection and Research on Accounting Records of Wanli in the Ming Dynasty [7].

B. Model

I begin with the baseline of the following specification to examine whether tax burden affects peasant unrest. The cross-sectional data from 1573 to 1644 is an aggregate of each variable.

$$Y_i = \beta_0 tax_i + \gamma_1 X_i^p + \gamma_2 X_i^d + \gamma_3 X_i^m + \alpha_p + \epsilon_i \quad (1)$$

where i indexes a prefecture; p indexes population; d indexes disaster; m indexes maize adoption; α_p denotes province fixed effects; the dependent variable Y_i represents the number of peasant unrest that occurred from 1573 to 1644. I choose the prefecture as the unit of analysis to observe the variation of Y_i within a prefecture.

IV. RESULTS

The results are reported in Table 2. I use tax, which refers to the collection of rice, silk, wheat and horse grass of

prefecture i during the Wanli Reign, as the key explanatory variable. Tax has a highly significant and positive influence on the number of peasant unrest. In Column 1, the estimation shows that the coefficient on taxation is 0.049, and it is statistically significant at the 1% level. The estimate suggests that if there is a 1% increase in taxation, we expect a 4.9% increase in peasant unrest. In Column 2, I control for disasters and find that the core variable is still positively and statistically significant. It is likely that more densely populated areas have a higher probability of peasant uprisings. In Column 3, I add additional control on population, which is the number of households, consistent with my previous results, taxation is also statistically correlated with peasant unrest. Social conflicts can be influenced by agricultural productivity. Consequently, in Column 4, I control for maize adoption and find the effect of tax still remains significant. The estimate suggests that if there is a 1% increase in taxation, there will be a 3.3% increase in peasant unrest.

Table 2: Cross-sectional analysis

	Peasant Unrest			
	(1)	(2)	(3)	(4)
Tax	0.049*** (0.013)	0.032** (0.014)	0.038** (0.018)	0.033* (0.018)
Disaster		0.191*** (0.069)	0.205*** (0.071)	0.189*** (0.071)
Population			-0.018 (0.033)	-0.013 (0.033)
Maize Adoption				0.188 (0.114)
Constant	-0.316** (0.130)	-0.205 (0.133)	-0.250 (0.157)	-0.219 (0.157)
N	156	156	150	150
Adjusted R ²	0.083	0.121	0.121	0.131

Notes: ***Significant at the 1 percent level.
**Significant at the 5 percent level.
*Significant at the 10 percent level.

To further check the robustness, I control for provincial fixed effects. Table 3 shows the result. In Column 1 when the variables are not controlled, the result is already significant. After controlling the variables in Column 2, the result suggests that a doubling of tax in the late Ming dynasty corresponds to an increase of 4.3% in the number of peasant unrest.

Table 3: Provincial fixed effect model

	Peasant Unrest	
	(1)	(2)
Tax	0.043** (0.020)	0.143* (0.072)
Disaster		-0.012 (0.094)
Population		-0.001 (0.001)
Maize Adoption		0.070 (0.137)
Province FE	Y	Y
N	156	91
Adjusted R ²	0.282	0.229

Notes: ***Significant at the 1 percent level.
**Significant at the 5 percent level.
*Significant at the 10 percent level.

Beyond estimating the average effect of taxation on

peasant rebellions, I further ex-amine the tax effect on several sub-types of rebellions. I classified rebellions into three types: tax-related, disaster-related and deserter-related.

I use the same specification to estimate the model. Table IV shows the results. In Column 1, the estimate is marginally significant at the 10% level. It suggests that if there is a 1% increase in taxation, there will be a 13% change in unrest against the heavy tax burden. In Column 2, I estimate the effect of tax on unrest caused by disasters. I find the estimate for tax is also statistically significant at the 10% level. In Column 3, the estimation shows that a 1% increase in taxation leads to a 3% change in unrest that is caused by deserters. However, the estimate is not statistically significant.

Table 4 shows that taxation has led to tax-related rebellions and disaster-related rebellions. Disaster-related rebellions are notable because the combination of inherently poor conditions and the heavy tax burden can lead to serious rebellions. Tax-related rebellions are notable because it is obvious that people must rebel to resist exploitation.

Table 4: Heterogeneous effect model

	Tax Related	Disaster Related	Deserter Related
	(1)	(2)	(3)
Tax	0.130* (0.069)	0.133* (0.074)	0.030 (0.023)
Disaster	0.050 (0.070)	-0.016 (0.052)	0.112 (0.077)
Population	-0.001 (0.001)	-0.001 (0.001)	-0.0004 (0.0003)
Maize Adoption	0.100 (0.136)	0.077 (0.138)	0.063 (0.077)
Province FE	Y	Y	Y
N	91	91	91
Adjusted R ²	0.260	0.309	0.306

Notes: ***Significant at the 1 percent level.
**Significant at the 5 percent level.
*Significant at the 10 percent level.

A. Panel Data Estimation

To further demonstrate the causality between informal taxation and rebellion, I also use the panel data of prefectures between 1573 and 1644 to estimate a difference-in-differences model that is specified as follows:

$$Y_{it} = \beta_0 tax_i + \beta_1 tax_i * LiaoTax_t + \beta_2 tax_i * JiaoTax_t + \beta_3 tax_i * LianTax_t + \gamma_1 X_{it} + \alpha_i + \delta_t + \epsilon_i \quad (2)$$

where i indexes a prefecture; d indexes disaster; t indexes year. The dependent variable Y_{it} represents the number of peasant unrest that occurred in year t . $\beta_1 tax_i * LiaoTax_t$ indexes the interaction term of Tax and Liao tax. $\beta_2 tax_i * JiaoTax_t$ indexes the interaction term of Tax and Jiao tax. $\beta_3 tax_i * LianTax_t$ indexes the interaction term of Tax and Lian tax. α_i denotes prefecture fixed effects; δ_t denotes time fixed effects.

Table 5 shows that the adoption of Three Military Campaign Taxes increases peasant unrest. It indicates that each time a new additional tax was created, it causes the rise of peasant rebellion. In Columns 1, 2, and 3, I regress the interaction term separately and find each of them is significant. The coefficients on Liao tax, Lian tax and Jiao tax

are 0.003, 0.007 and 0.005 respectively, indicating that the level of peasant unrest increases with each start of an additional tax collection. Column 4 is a joint estimation, which shows that only coefficients on Liao tax and Lian tax are significant. From 1618 to 1620, Liao tax levy was increased three times, with a total increase of 9 percent of silver per mu of land. The tax burden of Shandong province reached 550 million taels of silver. Customs duty, salt tax, miscellaneous items and field tax levies totaled more than 7,590,000 taels of silver. At that time, the Ming government's formal tax revenue was only 3,600,000 taels per year. The number of miscellaneous items in Liao tax was the most difficult to determine and it was related to the interests of officials, so the default was the most serious. After Liao tax and Jiao tax, another 7 million taels of Lian tax were levied again. Under internal and external pressure, the imperial court was forced to waive the collection of Jiao tax in 1640, attempting to use this policy to disguise its true purpose of continuing to levy the Lian tax. As for the shortage of the Jiao tax, the court made up for it with Lian tax. The so-called Lian tax already includes Jiao tax [6]. People were burdened with heavy military expenses, which may be the reason why Liao tax and Lian tax were so significant.

Table 5: Panel Data Estimation

	Peasant Unrest			
	(1)	(2)	(3)	(4)
Tax	-0.001** (0.0003)	-0.0002 (0.0003)	-0.0002 (0.0003)	-0.001** (0.0003)
Disaster	0.041* (0.022)	0.041* (0.022)	0.041* (0.022)	0.041* (0.022)
Liao tax	0.003*** (0.001)			0.002** (0.001)
Lian tax		0.007*** (0.002)		0.006** (0.003)
Jiao tax			0.005*** (0.002)	-0.001 (0.002)
Prefecture and year FE	Y	Y	Y	Y
N	19,968	19,968	19,968	19,968
Adjusted R ²	0.031	0.032	0.031	0.033

Notes: ***Significant at the 1 percent level.
**Significant at the 5 percent level.
*Significant at the 10 percent level.

V. DISCUSSIONS

In addition to formal taxes, there were many additional taxes in the Ming Dynasty, which was closely linked to the growing decadence of the ruling class and the deepening financial crisis. Three Military Campaign Taxes added 20 million taels of taxation, but the government could not receive such an amount of taxes. The actual amount collected was always less than the amount due. However, the shortage of the actual amount collected by the government did not equal the reduction of the burden of the people. The main reason for this situation, especially before 1628, was official corruption and the arrears of powerful landlords. Some officials refused to pay, relying on their political power. Some landlords were forced to pay, but at the same time they increased the collection of money and grain from their tenants, which transferred the additional taxes directly to the tenants. In order to ensure the full amount of tax collection, the rulers

of the Ming Dynasty strictly ordered local officials to collect the taxes completely. After the collection of Liao tax in 1618, the imperial court issued repeated edicts. In such a tense atmosphere, officials exerted pressure on each other to cope with policy requirements, with superiors oppressing subordinates, and subordinates oppressing subordinates. Eventually, people were forced to pay these additional taxes.

The increase of Three Military Campaign Taxes was also related to corruption, especially in the military. In the late Ming Dynasty, a system of recruiting soldiers was implemented, and after the incident in Liaodong region, the Ming government kept recruiting soldiers from all over the country. Each time a soldier was recruited, 2.5 taels of silver would be given to his family. Due to recruitment difficulties, the fee was gradually raised to 10 taels of silver. In addition to this fee, there were various other fees, which together were a large annual financial expenditure. All these fees went into the pockets of the officers.

The collection of Three Military Campaign Taxes reflected the corrupt and dark politics in the late Ming Dynasty, which brought great suffering to the people and seriously damaged social productivity. The previous part of this article is quantitative evidence. For direct evidence, I found the example of Xu Hongru. In Shandong province, before the Three Military Campaign Taxes collection, there were many barren fields because the farmers fled from famine. By the end of the Wanli Reign, each mu of land had a high tax burden of 0.04 taels of silver. Under such cruel oppression, almost all the people in the Denglai area (northeast part of Shandong province) fled, and those who did not flee returned their land to the landlords and stopped farming. In 1622, the Bailian Rebellion led by Xu Hongru broke out in Shandong province, which was a reflection of the intensification of the above conflicts [6].

VI. CONCLUSION

This paper examines the relationship between taxation, especially peasant uprisings in the late Ming Dynasty. Using a dataset during 1573-1644, I find a positive correlation between tax burden and peasant uprisings. The purpose of collecting Three Military Campaign Taxes was to deal with the Manchurian forces and suppress the peasant uprising, but eventually it led to the sharpening of social contradictions and provoked peasant rebellion, which accelerated the downfall of the Ming Dynasty.

I also acknowledge several concerns that require future research. First, more systematic and complete data on protest

can be collected from Emperor of the Ming Dynasty Record ("Ming Shi Lu") in the future [18]. Second, since Warfare in China's Dynasties ("Zhong Guo Li Dai Zhan Zheng Nian Biao") was prepared by searching for information from historical sources, there are inevitably some omissions [14].

CONFLICT OF INTEREST

The authors declare no conflict of interest.

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