On the Reform of the Legislature in Taiwan: Number Matters*

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Crime is a deviation from social norms, causing societal disorder and economic loss. Many researchers have pointed out that economic factors constitute a critical element in the decision on committing a crime. The police are supposed to control crimes. To be sure, the law is enforced by human beings, subject to similar potential deviation. Consequently, the deviant behaviors of law enforcement must also be addressed. This paper explores the general issue of monitoring, in addition to enforcement. Similar monitoring concerns exist in the political arena and the business environment. A simple model based on monitoring concerns is proposed and used to delineate a possible evolutionary path of the political system. Politicians and representatives can be considered as guards hired

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by the people to protect the fruits of their hard work. However, worries about the guards' misdemeanor may necessitate further deployment. Under rational guard hiring, the negative relationship between the effectiveness and the number of guards may shed light on the evolution of the political system. The result is applied to analyze a proposal on cutting the size of the legislature in Taiwan.

Key words: check and balance, guard, legislative reform, monitor, principal-agent problem.

I. Introduction

General enforcement issues have been the focus of many social, political, and economic studies. Law enforcement is only one of numerous ways to make sure that people behave in a desirable manner. Crime is a deviant behavior. Since committing a crime may bring benefits to the criminals and incurs costs to society, many researchers have devoted their efforts in examining the motives behind such deviant behaviors and in designing mechanisms to reduce the potential social impacts. Researchers, in general, consider the penalty imposed on the criminals, the illegal gains of the criminals, the impact on society, and the effectiveness of law enforcement. Becker (1968) systematically analyzes the incentive structures of crimes and explores a potential punishment strategy to deal with offenders. When dealing with crimes, the effectiveness of law enforcement must also be addressed, which is exactly one of the focuses of Becker and Stigler (1974). Though crime incurs costs to society, it does not mean that all of the resources must be devoted to deal with crimes (Stigler, 1970). The research mentioned above discusses crimes exclusively from economic perspectives. Enforcement issues occur in other occasions; there are other forms of deviant behaviors that will not necessarily violate the law, but may have similar economic impacts.

Business entities hire employees to perform certain functions and they are supposed to follow the rules of the company. Enforcing the rules of the company have been major concerns of all business entities since commerce started. Carlos (1991, 1992) explores the options available to early European trading companies in enforcing the rules, or in other words, monitoring the employees. Even in the seventeenth and eighteenth centuries, when communication was difficult and inefficient, some of those companies had adopted comprehensive measures to deal with the opportunism of employees (Carlos and Nicholas, 1988, 1990). The English East India Company (EIC) was a precedent to modern multinational companies (Chaudhuri, 1996). EIC made every effort and deployed various internal structures to monitor managers stationing in the colonies (Chaudhuri, 1965, 1986). The commercial development of the early European trading companies in the seventeenth century may shed a distinct light on the enforcement issues in the business arena.

Likewise, there is no shortage of enforcement concerns in the political forum. The government has to monitor the officials and the constituents have to ensure that the elected representatives are addressing their concerns. Some of the public servants may work for their personal gains and do not take care of the interests of the public. Similarly, some of the elected representatives may violate the constitutional rights of the constituents. A mechanism needs to be implemented to prevent such opportunistic behaviors. Barro (1973) discusses the control of politicians by salary and term structures, as well as other schemes. Sa (1975) describes a monitoring system used in ancient China sharing the features of modern checks and balances. To be sure, there are numerous other examples of enforcement issues that may interest economists, including proposals on the reform of the legislature in Taiwan.

This paper explores the enforcement issues from a political angle. A state needs to protect the basic rights of its citizens, including the security of life and property. If the government fails to perform these functions, the citizens will have to deploy their legitimate rights to enforce the protection that the constitution entitles them. In ancient time, the state was owned by the emperor and the civilians had little to call their own. As the economy of the state expanded and the citizens could claim a share of the economic pie, the regime gradually moved towards democracy and more people were active in guarding the fruits of their hard work. However, the importance of each citizen also decreases, as shown in the model. This result is applied to analyze a proposal on reducing the size of the legislature in Taiwan.

II. A Simple Model

"Who will guard against the guards?" the ancient Roman satirist Juvenal expressed his concerns and distrust over guards. The situation is a typical principal-agent problem. In this case, Juvenal is the principal and the guards are the agent. Hiring guards to protect properties is a direct measure against security concerns, but making sure that the guards are doing the job right may be difficult. Hiring more guards to guard against the other guards could be a solution. However, there are always worries about whether the recruits would perform properly. While hiring an infinite number of guards may be possible, the cost could be too much to bear. The extra hiring cost must be justified by the expected gain from additional deployment.

Suppose the probability that a guard does his job right is p, where $0 \le p \le 1$, and the cost of hiring a guard is C, where $C \ge 0$. The guard is employed to protect a jewel, which has a value J. Assuming that each guard is equally competent, works independently of the others, and as long as one is functional, the jewel is safe from being stolen or incurring any damage. To be sure, these assumptions may not reflect the reality. Human beings are social animals; more often than not they depend on each other in performing many functions. Some guards may cooperate with each other, enhancing their effectiveness; while some others may collude among themselves to commit thefts. In addition, more than one guard may be required to effectively protect the property.

Based on the above postulations, however, if there is only one guard, the probability that the jewel is safe is p. Adding another guard, the probability that the jewel is safe will be $1 - (1 - p)^2$ or $2p - p^2$. Since $0 \le p \le 1$, hiring one more guard could potentially make the jewel safer, other things being equal. Suppose (n-1) guards are hired, where $n \ge 2$, then the probability that the jewel is safe will be $[1 - (1 - p)^{n-1}]$. That is, as more guards are hired, the probability that the jewel is safe will approach to 1. Hiring more guards, nevertheless, will also result in higher costs.

The expected gain from hiring (n-1) guards is $[1-(1-p)^{n-1}]J-(n-1)C$. If an additional guard is hired, the expected gain will be $[1 - (1 - p)^n]J - nC$. Consequently, the expected benefit from hiring the nth guard is $p(1 - p)^{n-1}J - C$. The participation constraint for hiring the nth guard is $J \ge C/p(1-p)^{n-1}$. If J is less than $C/p(1-p)^{n-1}$, no extra guard will be hired. In equilibrium, if the value of J increases, the owner of the jewel will be able to employ guards with higher caliber or afford to employ more sophisticated and costly means to protect his property. To maximize the gain from hiring an extra guard with respect to the probability of guarding properly, the probability p will be equal to either 1 or 1/n. Since to err is human, the case that all guards are perfect is ruled out. Thus, if new hiring is warranted, as more guards are added, the competence of the recruits matters less.

III. Implications on the Evolution of the Political System

The operation of a political regime shares features of the principal-agent problem. To ensure that the executive officers perform the desired functions, installing a monitor to supervise them may be helpful. However, who will monitor the monitor?

A state, supposedly, is owned by all of its citizens. The ruler, via social contract, is entrusted by these same people to guard the fruits of their hard work and the national interests, which are analogous to the jewel mentioned above. The privileges to which the ruler is entitled incur a cost to the citizens. Were there only one ruler in charge of the regime, the competence of that person solely determines the superiority of the system. The higher the caliber and integrity of that ruler, the better the system. If the ruler is a despot, he will forfeit the jewel of the state and the citizens will be suffering under a totalitarian regime. On the other hand, if the ruler is a philosopher king, the system will be "the Republic" that all citizens are yearning for. To ensure that the ruler governs properly, throughout history, there have been numerous attempts to install "guards" against the ruler.

Political power, in ancient time, was shared by the ruler and a few aristocrats; the civilians had little to call theirs. Whether a guard against the ruler's abuse would be established depended on the expected gain from such actions. In thirteenth-century England, King John violated the trust of his barons and forfeited their jewel. The choice between losing the jewel and paying the bill for extra guards seemed transparent to the barons. Trying to keep the fruits of their hard work, gradually Parliament developed into a regular institution. Yet, the council might not work properly, as the story of "the Emperor's new clothes" suggests. Also, some courtiers had abused their powers, misleading the king and the kingdom to their own demise, as many historical episodes have shown.

As commerce prospered, the nation state developed, and the economy grew, the jewel of the state was enlarged; at the same time, more people were capable of calling part of the jewel theirs. When more people became owners of the jewel, they were themselves guards of the jewel. Hence, the loss of the jewel aroused vigorous victim enforcement, signifying the importance of the middle class in democracy (Becker and Stigler, 1974). Citizens began to care more about the integrity of the ruler and more costly means of monitoring rendered feasible. The aristocratic system in the modern period gave way to democracy, as more and more citizens felt the need to hire extra guards. In the eighteenth century, the majority of the French people could not have their interests addressed, while taxation without representation occurred in the thirteen colonies of northern America. Potential loss of the jewel was involved in both cases. The disastrous governing of relentlessly demanding rulers triggered the French Revolution and the independence of the United States, which in turn brought to life separation of powers as well as checks and balances. The distrust of politicians is exemplified in the Constitution of the United States, which tries to solve the infinite monitoring concerns. A similar system had been developed in ancient China. Former Han Dynasty instituted its own version of monitoring network, which relied on the monitors' mutual monitoring (Sa, 1975).

When the political system moves towards democracy, technically everyone has become a guard of the jewel of the state and the effectiveness of each individual citizen's guarding matters less. Communist China has repeatedly claimed that democracy is not compatible with the Chinese culture and that the Chinese are not as educated as the other peoples. In light of the above discussion, Communist China's assertion is irrelevant. By all means, people will guard against the ruler's corruptions and misdemeanors to protect their own rights. Whether or not they are educated does not matter since under democracy individual monitoring is less critical.

IV. Monitoring Issues Revisited

In an empire, the constraints of ability and time force the emperor to rely on his premier and ministers to manage the state. Likewise, in a company, the chief executive officer (CEO) has to relegate his power to various managers to run the business. Both situations can be characterized by the principal-agent problem, in which the principal has limited information about the agent's ability or performance. The emperor is uncertain about his ministers' integrity or competence, while the CEO is not always sure whether the managers are honest or capable. In this case, the emperor or the CEO can be looked upon as the principal and the ministers or the managers as the agents. The principal has to implement certain measures to control the behaviors of the agents.

Even if the agents have been selected through a screening process to ensure their loyalty and capability; nevertheless, it is very likely that they would still commit frauds or shirk duties. Monitoring is necessary to control the quality of the agents' performances.

Yet, how well the agents perform, to some extent, depends on the competence of the monitor. Therefore, another monitor may be necessary to oversee the monitor. Applying this monitoring concern to the extreme, we would need an infinite number of monitors in a country or a company to enforce every instruction.

Sa (1975) delineates concisely the monitor system of the Former Han Dynasty (206 BC- AD 7). The prime minister was in charge of the administrative affairs, while a monitoring officer was installed to oversee the prime minister. According to the law, the monitoring officer would replace the prime minister if he could successfully file an impeachment. This design gave the monitoring officer tremendous incentive to watch over the actions of the prime minister, especially for those eager to seize the premiership. The monitoring officer, indeed, might commit frauds or file unsubstantiated cases against the premier. Therefore, another monitor against the monitoring officer would be necessary. To be sure, under the prime minister office, there was an officer in charge of monitoring all other officials, to see if they followed the law; any unlawful conduct could lead to prosecution. This officer could potentially deter the monitoring officer from harassing the premier with unsubstantiated impeachment. The monitoring mechanism of the Former Han Dynasty devoted to the idea of infinitely monitoring. There would be someone watching over the other officers in each and every position of the government.

The modern democratic monitoring system works differently from that of the Former Han Dynasty. The constituents elect their representatives to establish the legislature, which, in turn, is supposed to monitor the operation of the governments since the officials may not function properly. In this case, the legislators monitor the government, while the constituents monitor the legislators. This modern monitoring system has not worked smoothly. As a result, other organizations, such as interest groups and lobbying companies, have been brought forward to further enforce monitoring. Spiller (1990) offers insights into the interactions among legislators, interest groups, and the government. Due to the intrinsic principal-agent problem in political affairs, numerous resources are wasted and the efficiency of the government is not optimal. Conversely, if trust is prevalent in society, without a doubt, many resources may be directed toward more productive employment. Nevertheless, trying to conserve on monitoring expenses may have unexpected consequences, as the following discussion will reveal.

V. On Reducing the Number of Legislators

Major Taiwanese newspapers in December 2000 reported that the central government of Taiwan seems to intend on reducing the number of legislators in the Legislative Yuan. The origin of this proposal may come from the confrontational sessions in the legislature, in addition to constant disputes, sometimes even violence, among legislators themselves. Some critics, many of them were legislators themselves, have argued that cutting the size of the legislature in half will ameliorate the chaotic situation in the Legislative Yuan and the consequent annual saving in budget can be up to 4.4 billion New Taiwan dollars. To certain extent, the provocative behaviors of the legislators may come from the nature of the issues involved, rather than the conflictive temperament of those legislators. Therefore, reducing the number of legislators would not mitigate the fierce and tedious argumentation in the legislature.

The legislators are monitors of the Executive Yuan and the guards of the interests of people. Based on the discussion in section II, other things being equal, if the number of the legislators is reduced, the efficiency of monitoring in the legislature may be compromised. Therefore, if the size of the Legislative Yuan is reduced by 50 percent as proposed, the welfare of Taiwanese citizens could be endangered, though the nation may save some expenses on the salaries of legislators. On the other hand, legislators hold monopoly power over the budget of the government. As the number of legislators is reduced, the monopoly power of each individual legislator over public funding increases. If the capability of the legislators did not increase at the same time, reducing their number could lead to more aggressive maneuver in the political arena, potentially causing more drastic conflicts in the legislature. Under this circumstance, the welfare of the people will

http://news.yam.com/forum/200012/05/25780700.html.

deteriorate. Peng (2001), from a different perspective, also argues against the proposal of cutting the size of the legislature in half.

Furthermore, reducing the size of the legislature may aggravate the potential collusion among legislators. The corruption scandal of Kaohsiung City Council is a lesson to remind all of us; ² were the number of legislators reduced, the legislature would be more easily bought off. Rasmusen and Ramseyer (1994) offer additional proof that the size of the legislature will affect the frequency and size of bribes; the smaller the legislature, the larger the bribes, and the less likely bribery would be banned. Consequently, savings from the disbursement on the salaries of the legislators or cutting the size of the legislature may be a proposal too dear to implement. The true saving for society as a whole may come from better legislation and efficient monitoring, rather than less monetary payout.

According to the simple model, other things being equal, installing another guard could enhance the efficacy of monitoring. Therefore, adopting the bicameral system, i.e. by adding another chamber to the legislature, may help improve the operation of the legislature. This type of system has been running successfully in the United States and the Great Britain for over two hundred years. In terms of the structures of the proposed legislature, legislators of one chamber may represent the respective counties, while those of the other may be elected based on the proportion of population in each county. The total number of legislators of the two chambers combined may be the same as before, but the efficacy of the legislature could be improved. The Control Yuan may be transformed to an institution equivalent to the US Senate, while the Legislative Yuan to the US House of Representatives.

To sum up, the vociferous debates in the legislature arise not because of too many legislators, but the lack of optimum monitoring structures in the legislature. To improve

^{2.} http://tw.news.yahoo.com/2003/04/08/polity/cna/3920334.html.

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the stability and integrity in the political arena, installing the second chamber in the legislature may work better than reducing the number of legislators, considering especially the recent scandals occurred in Kaohsiung City Council.

VI. Conclusion

To be sure, no single model could delineate clearly the evolutionary path of an institution as complicated as the political system. This paper has tried to offer a different perspective on that intricate process. The ruler could be considered as the guardian of the national interests and the welfare of the citizens. Extra guards may be necessary if the ruler fails to fulfill his duties. Similar concerns apply to the additional guards: "Who will guard the guards themselves?" The extra hiring cost must be justified by the expected gain from such actions. If the extra hiring is feasible, the relationship between the effectiveness and the number of guards is negative. Historically, as more citizens claimed a share of the economy, more became owners and guards of the fruits of their hard work. When the political system evolves towards democracy, ruled by the people, the effectiveness of each individual matters less.

Furthermore, the result derived in this paper has been applied to analyze a proposal on the reform of the legislature in Taiwan. Reducing the number of legislators may be inefficient and counter-productive, since it may deter competition and cause more corruptions in the political arena. A bicameral system could be a more feasible option, conferring the Control Yuan a more active role in the political forum as the Upper House, while the Legislative Yuan as the Lower House. Consequently, any single party would have more difficulties dominating the legislature and creating more opportunities for monitoring. The well being of the people would be enhanced as a result.

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論台灣的國會改革:人數是重要因素

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犯罪是一種社會偏差行為,造成社會不安及經濟損失。很多研究者指出, 經濟因素是犯罪的重要考量之一。警察的功能在控制犯罪。然而,法律由警 察來執行,而警察是人,也可能犯錯。因此,警察的偏差行為,也必須設法 防範。本文討論廣義的監察問題。在政治及商業的範疇,都有監察的必要, 以確保人人遵守規範。本文提出一個簡單的模型,並藉由此一模型,描畫一 個政治體系的可能的演進過程。從政者及民意代表,可以被看成人民的警衛, 保護人民辛苦工作的成果。不過,警衛也可能會犯錯,因此可能必須再雇用 額外的警衛,來看管原有的警衛。在理性的雇用原則之下,警衛人數和個別 警衛的保護的效率成負相關。此一關係對政治體系的演進,可能有若干啟示, 此一結果也可以應用在台灣國會改革,立法委員人數減半的議題上。

關鍵字:制衡、防衛、國會改革、監察、代理問題

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