Social Norms and the Law: Substitutes or Complements?*

Yoshinobu Zasu†
Graduate School of Law, Kobe University

Abstract

The present paper concerns the interaction between social norms and the law. Some scholars claim that the law just substitutes for social norms, other authors argue that social norms and the law are complements. If the former view is correct, we do not need the costly formal rules. Following the complementary view, the joint use of the formal rule by the government and social norm as a informal rule would provide more efficient outcomes than norms without law. The purpose of the paper is to show if they are substitutes or complements. Moreover, we provide a explanation of “the emergence of law”.

---

*This is a preliminary and incomplete draft. Comments will be appreciated.
†E-mail: yzasu@kobe-u.ac.jp; fax: +81-78-803-6763
1 Introduction

It is necessary to consider social norms to understand law well, as described Posner (1997). Both social norms and the Law are older than political society, and part of the Law has been a system of norms before there were government.

Following Posner (1997), social norms in this paper are defined as a “rule” that is not enforced by an official system or courts but is complied with. Some examples of this “rule” are the rules of etiquette, table manners, business manners and the like. A member of a community who commits an undesirable activity is punished by social norms, for example, ridicule, gossip, ostracism and so on. If people internalize social norms, they feel shame or guilt when they violate norms. In this way, a member of a community has incentive to comply with social norms by punishments by other members or self-restraint.

Social norms are not enforced by the official agency. For the purpose of that social norms serve as a rule which people obey, other members of a community need to identify the member who violates social norms. Other members can recognize the member who break the norms, and it is possible for them to punish him. If these conditions are satisfied, then people would comply with social norms. Even in the case of feeling a kind of shame as an internalized norm, people have stronger incentive to follow the norms by being observed their undesirable activity than not be observed. The ability of the members of a society or an organization to observe each other can be interpreted as a measure of the community’s social connectedness. In other words, if it is easy to observe another person’s action in a community, then this means that connectedness among members are strong. We might say that a society is a pre-modern (modern) if the social connectedness is high (low). Social norms are defined as maximizer of

\[ \text{See also Cooter (1998)} \]
the object of a community. The objective function consists of social welfare and other element. These elements are weighted by a parameter, which denotes separation from social welfare.

On the other hand, law is enforced by the official sources, such as a court, a legislature or the police. A member of a society who does not obey the law is punished, and accordingly he (or she) has incentive to comply with the law. However, such formal enforcement costs the society more than informal enforcement of social norms. Law is defined as maximizer of social welfare.

We model simply the above characteristics about social norms and law. We consider the community, which offers social norms, and the government, which designs law, as principals. Agent is the individual who takes an action. Accordingly, we apply a common agency model. Some authors suggest that formal rules complement informal arrangement (North, 1990; Baker et all., 1994; Lazzarini et al., 2004). Other researchers assert that formal rules merely substitute for social norms which supporting informal dealing or argue that people have solved daily problems without costly formal rules (Macaulay, 1963; Ellickson, 1991; Huang and Wu, 1993). Our model explains that social norms and the law become substitutes or complements depending on the circumstances.

In the pre-modern society, social connectedness is strong and the expected level of punishment by social norms is large. As a consequence, an undesirable activity is deterred. At this time, law, which is costly, is not needed. There is little possibility that law can improve this society. In other words, the relation between social norms and law is substitution and there is no reason for the existence of costly law. In contrast, social connectedness is weak in the modern society and the expected level of punishment by social norms is small. In this society only with social norms, the undesirable action is not deterred at the appropriate level. In this circumstance, law is required even if law
is costly (the emergence of law). Law complements social norms in this society and the society acquires more desirable outcome by the existence of law. This is consistent with a historical assertion that there has been gradual displacement of informal regulation by formal regulation.

Additionally, we also analyze the case that social norms confront the law as a maximizer of social welfare. An individual’s activity led only by social norms is inefficient in the term of social welfare when the object of social norms is different from maximizing social welfare. As same as the above modern society, the existence of law enhances social welfare.

The article is structured as follows. In section 2, the we provide a simple model and analyze the joint use of social norms and the law; in subsection 2-1, when social norms are inflexible and in subsection 2-2, when social norms are flexible. Section 3 provides a brief concluding remarks.

2 The Model

We examine the interaction between social norms and the law. For the purpose of the examination, we use a simple common agency model, where there are the government and the community as principals and an individual as an agent. Following Posner (1997), we define not only the law but social norms as rules or social regulations. The government designs law $s_g$ as a formal sanction and the community provides social norm $s_c$ as an informal sanction. The individual commits an act, which the individual benefits from but harms the society. The timing of events is as follows. First, The government chooses the law to maximize social welfare $SW$. The community provides social norms to maximize welfare of the community $CW$. The community welfare consists of weighted average between social welfare and other values. The government
and the community choose their rules simultaneously and non-cooperatively. Second, Given the above rules \((s_c, s_g)\), the individual decides the level of action \(a\).

An action \(a\), which the individual chooses, induces personal benefit \(b(a)\) but also produces social cost \(c(a)\). In order to compute closed form solutions, we assume that \(b(a) = \alpha \ln a\) and \(c(a) = \beta a\). The socially ideal or first best action, which satisfies marginal benefit equates marginal social cost, therefore is given as \(b'(a^b) = c'(a^b)\) or \(a^b = \frac{\alpha}{\beta}\). Given social norm \(s_c\) and law \(s_g\), the individual’s payoff is

\[
b(a) - (s_c + s_g)a,
\]

so the individual’s optimal action \(a^*\) is

\[
a^* = \frac{\alpha}{s_c + s_g}.
\]

Therefore, if \(s_c + s_g < \beta\), then \(a^* > a^b\) and this is under-deterrence since the socially ideal action is \(a^b = \frac{\alpha}{\beta}\).

The formal rule or the law, which the government supplies, is more costly than the informal rule or social norm because the enforcement cost of the law is larger than social norms and the existence of the government itself costs the society. Given \(a^*, s_c\), the government’s problem is

\[
\max_{s_g} SW = b(a^*) - (s_c + s_g)a^* - c(a^*) - e(s_g a^*),
\]

subject to \(b'(a^*) = s_c + s_g\),

where \(e(s_g a)\) is the enforcement cost of the law given \(a\) and \(s_g\) and depends on the magnitude of the sanction, we assume that \(e(s_g a) = \gamma s_g a\) as the same reason as the
above, where \(0 \leq \gamma \leq 1\). Thus, the government’s best-response is

\[
s^*_g = -(1 + \gamma)s_c + \beta. \tag{2}
\]

### 2.1 Inflexible Social Norms

Social norms are said to be likely to resist modification\(^2\). In other words, even if it is better for the community to modify social norms, they cannot change the norms. This might mean that social norms tend to be inflexible on external factors; for example, the government’s choice, social connectedness in the community and so on. Now let us consider the situation, where the community does not take account of the government’s decision when the community designs the social norm \(s_c\). The community, in other words, does not reflect on the strategic relationship with the government. Accordingly, the community’s problem, given \(a^*\), is

\[
\max_{s_c} CW = (1 - \theta) (b(a^*) - s_c a^* - c(a^*)) + \theta v(a^*),
\]

subject to \(b'(a^*) = s_c + s_g\),

where \(\theta\) is a parameter which denotes separation from social welfare, and \(v(a)\) is values which is different from social welfare. If \(v'(a) > 0(\leq 0)\), then the community over(under)estimates the personal benefit or under(over)estimates social cost. The community’s optimal regulation or social norm is

\[
s^*_c = \beta - \frac{\theta}{1 - \theta} v'(a^*).
\]

\(^2\)For example, see Kaplow and Shavell (2002) pp.76-77.
If social norms are decided not to distort the maximization of social welfare i.e. $\theta = 0$, we can achieve the first best action of the individual only by social norms without the law.

Additionally let us embody another external factor. Whether social norms serve as rule or not depends critically on the member’s in a community ability to observe each other. In the community where it is easy to observe other members’ action, the enforcement power of social norms is strong. In order to capture a kind of the enforcement power in the community, we incorporate a parameter $0 \leq \sigma \leq 1$. This parameter can be interpreted as a measure of the social connectedness in the community. The strong connectedness has the members comply with social norms. Given this parameter, the real power of social norms $\hat{s}_c^*$ is defined to be

$$\sigma \hat{s}_c^* = \sigma \left( \beta - \frac{\theta}{1 - \theta} v'(a^*) \right),$$

where $\hat{s}_c^*$ represents the real enforcement power of social norms. We can see that $\hat{s}_c^*$ decreases as $\sigma$ decreases. In other words, we assume that the community designs the norms when the enforcement of social norms is most effective or $\sigma = 1$, and that the community cannot respond to the change of social connectedness. The lower parameter $\sigma$ is, the less effective enforcement power is because social norm is not flexible. Similarly, the government’s best response function (2) is modified into

$$s_g^* = -(1 + \gamma)\hat{s}_c + \beta.$$  \hfill (4)

Given the social norm and the law ($\hat{s}_c^*, s_g^*$), we analyze the interaction between the formal regulation and informal regulation. In figure 1, we draw the government’s best response function $s_g^*(\hat{s}_c)$ and the community’s optimal social norm $\hat{s}_c^*$. The equilibrium
is achieved at the intersection between \( \hat{s}_c^* \) and \( s_g^*(\hat{s}_c) \), like the point A. The first best action of the individual is achieved on the dotted line, where \((\hat{s}_c^*, s_g^*)\) satisfies \( \hat{s}_c^* + s_g^* = \beta \).

If \( \theta = 0 \) and \( \sigma = 1 \) (the equilibrium is the point A), then only the social norm \( s_c^* \) (without the law) induces the first best action and social welfare is maximized. There is no need for the intervention of the government (i.e. \( s_g^* = 0 \)). In comparison to this situation, if there would be no social norm, the government’s best sanction would be \( s_g^* = \beta \).

This also leads the first best action. However the combination \((\hat{s}_c^* = 0, s_g^* = \beta)\) is Pareto-inferior to the combination \((\hat{s}_c^* = \beta, s_g^* = 0)\) since the use of the law is costly in our model.

\[
\begin{align*}
\text{Figure 1: No need for the law (left) Displacement of } & \hat{s}_c^* \text{ by } s_g^* \\
& \text{(right)}
\end{align*}
\]

Do we have no need for the law? Now let us consider whether we need the costly law. As we can see the equation (3) and the figure 1 (right), social norm’s line \( \hat{s}_c^* \) shifts to the right direction as \( \theta > 0 \) is larger given \( v'(a) < 0 \) or \( v'(a) < 0 \) is smaller given \( \theta > 0 \). The line \( \hat{s}_c^* \) shifts to the left direction as \( \theta > 0 \) is larger given \( v'(a) > 0 \) or \( v'(a) > 0 \) is larger given \( \theta > 0 \). Given any \( \theta \) and \( v'(a) \), as \( \sigma \) is smaller, the line \( \hat{s}_c^* \) also shifts to the left direction. When the social norm’s line shifts sufficiently to the left direction, we can see \( s_g^* > 0 \) on the intersection between the social norm’s line and the Law’s line.
That is, "the emergence of the law". As the line $s_c^*$ shifts the left direction after the line is beyond the critical point $\beta/(1 + \gamma)$. Let $\sigma'$ be $\beta/(1 + \gamma)(\beta - \frac{\theta}{1-\theta}v'(a))$. $\sigma'$ is the threat point whether the existence of the law is better for a society or not. If $\sigma \geq \sigma'$, then we do not need the law from the point of view of social welfare maximization. If $\sigma < \sigma'$, the existence of the law, in addition to social norms, enhances social welfare. In this area, We can see the replacement from social norms $s_c^*$ to law $s_g^*$. Especially, as $\sigma$ is smaller and smaller, this replacement gradually occurs. We summarize as follows.

**Proposition 1** Let $\sigma'$ be $\beta/(1 + \gamma)(\beta - \frac{\theta}{1-\theta}v'(a))$.

1. Suppose that $\sigma \geq \sigma'$. There is no need for the law given social norm $s_c^*$. The intervention of the government through the law (any $s_g > 0$) would deter the individual’s action, but would decrease social welfare.

2. Suppose that $\sigma < \sigma'$. The gradual displacement from social norm $s_c^*$ to the law $s_g^*$ arises on the equation (4) as the social connectedness in the community $\sigma$ is smaller. The intervention of the government $s_g^*$ increases social welfare more than social norms without the law.

The statement of (1) is consistent with Posner and Rasmusen (1999), suggesting that social norms’ enforcement is superior to the law’s one when costs to use the legal procedures are very high. We can interpret $\sigma$ as a measure of social connectedness, and in a community where social connectedness is sufficiently tight we do not need the law given social norms. The intervention of the government is, on the contrary, justified in a loose community. In a pre-modern society where there would exist tight social connectedness in a community. On the other hand, social connectedness is not tight so much and social norms are less effective to control undesirable actions in the modern society and we need the formal rule the government provides. In other words, the law
complements social norms to enhance social welfare. This replacement is consistent with a historical assertion that there has been gradual replacement of informal regulations, here social norms by formal regulations or the law.

2.2 Flexible Social Norms

Now let us consider the situation where the community takes into account the government’s decision, or social norms are flexible to the law. Given a government’s decision \( s_g \) and the individual’s action \( a^* \), the community’s problem is

\[
\max_{s_c} CW = (1 - \theta)(b(a^*) - (s_c + s_g)a^* - c(a^*) - e(s_ga^*)) + \theta v(a^*)
\]

subject to \( b'(a^*) = s_c + s_g \).

This problem leads to the following best-response of the community:

\[
s_g = \frac{\hat{s}_c^*}{\sigma} + \frac{1}{1 - \gamma} \left( \beta - \frac{\theta}{1 - \theta} v'(a^*) \right).
\]

In order to capture the real enforcement power of social norms, we introduce \( \sigma \) as a measurer of social connectedness. Then the community’s best-response is changed to

\[
s_g = \frac{\hat{s}_c^*}{\sigma} + \frac{1}{1 - \gamma} \left( \beta - \frac{\theta}{1 - \theta} v'(a) \right),
\]

(5)

where \( \hat{s}_c^* \) denotes the real sanction and \( \hat{s}_c^*/\sigma \) is the level of the nominal sanction. Given a \( s_g \), we can see that \( \hat{s}_c^* \) decreases as \( \sigma \) decreases. This means that the community can consider the strategic relationship but cannot react the change of social connectedness \( \sigma \). The government’s best-response is the equation (2) as the same in the former subsection.
Figure 2: No need for the law $s_g$ (left) Displacement from $s_c^*$ to $s_g^*$ (right)

The community’s best-response shifts to the left (right) direction as $v'(a) > 0$ ($v'(a) < 0$) decreases for $\theta > 0$. Moreover, the slope is steeper as $\sigma$ decreases (See the figure 2). We analyze a Nash equilibrium, which depends on a threat point. The critical point is whether the community best response’s $s_g$-intercept is larger than the government best response’s $s_g$-intercept (i.e. $\frac{\gamma}{1-\gamma}(\beta-\frac{\theta}{1-\gamma})v'(a) > \beta$ or $\beta \gamma > \frac{\theta}{1-\gamma} v'(a)$).

We summarize the results in this subsection as follows.

**Proposition 2**

Case (1) Suppose that $\beta \gamma > \frac{\theta}{1-\gamma} v'(a)$. There is the unique Nash equilibrium given a $\sigma$.

If $\sigma \geq \sigma' \equiv \beta/(1+\gamma)(\beta-\frac{\theta}{1-\gamma}v'(a))$, then there is no need for the law (i.e. $s_g^* = 0$). In this case, if the government would intervene a society (any $s_g > 0$), social welfare would decrease.

If $\sigma < \sigma'$, then there is gradual displacement from social norm $s_c^*$ to the law $s_g^*$ in Nash equilibria as $\sigma$ decreases. The invention of the government $s_g^* > 0$ increases social welfare compared to the social norms only.

Case (2) Suppose that $\beta \gamma \leq \frac{\theta}{1-\gamma} v'(a)$. There is the unique Nash equilibrium $(0, \beta)$
for any $0 \leq \sigma \leq 1$.

Figure 3: Case 2 of the proposition 2 (left) Case of no enforcement cost (right)

Assertion of case (1) is basically the same as the proposition 1. Decline of social connectedness in a community gets social norms less effective and displacement of social norms by the law arises. The joint use of social norms and the law is superior to the use of either regulation in isolation. Figure 3(left) indicates the case (2) of the proposition 2. In this case, the intervention of the government totally crowds out social norms. This might look a kind of substitution. Though social norms are crowded out by the law, the use of law in isolation is desirable on the view of not only social welfare maximization but the community’s welfare maximization since this crowding-out is best response for each other.

Finally let us consider that social norms and the law are substitutes on what condition. Suppose that we have no enforcement cost of the government ($\gamma \rightarrow 0$) and that the community’s goal is to maximize social welfare. The best response of the community coincides with the one of the government and the best responses converge with the first best combination of social norms and the law (figure 3 (right)). Therefore, if there were no cost to enforce the law and the community’s aim was not distorted, social norms and the law would become perfect substitutes and on the equilibrium the
first best outcome is achieved.

3 Concluding Remarks

References


