

A CONSTITUTION FOR KNAVES CROWDS OUT CIVIC VIRTUES*

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When discussing constitutional design, economists concentrate on the propensity of individuals to free ride. Preventing opportunistic behaviour by knaves has costs by crowding out civic virtue. Another view emphasises active citizen participation in order to bolster civic virtue. A viable constitution must therefore be strict enough to deter exploitative behaviour. At the same time, the constitution should fundamentally convey trust towards its citizens and politicians. Distrusting public laws risk destroying the positive attitude of citizens and politicians towards the state. Civic virtue can be maintained and fostered by direct citizen participation via popular referenda and initiatives.

Human beings act as knaves, if given the opportunity. A constitution should therefore be designed to limit the extent of exploitative behaviour. This view has been advanced by Brennan and Buchanan (1983), and forms the basis of constitutional economics.

Brennan and Buchanan offer two distinct propositions in their paper: (i) people are knaves if not constrained; (ii) a realistic model of (average) human behaviour is not a reasonable basis for normative institutional design because the harm caused by deviations away from the ideal is disproportionately large (convexity assumption). Rather, the worst-case scenario must be considered and society's laws must be so strict that they prevent such malevolent behaviour.

This vision has not gone unchallenged.¹ This negative view of human beings is rejected by many, and others even reverse the problem: 'What most needs explanation... is not why some people are criminals but why most are not' (Wilson, 1993, p. 24). Many authors (e.g., Reich, 1988; Mansbridge, 1994) point out that public spiritedness exists in many polities. A number of influential books (e.g. Etzioni, 1988; Wilson, 1993; Putnam, 1993; Fukuyama, 1995) show how moral obligations and trust in society shape the relationship between citizens and the state in a positive way.² These authors imply that, in

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¹ It should be made clear that Brennan and Buchanan are well aware of, and even stress, the role of moral principles; they explicitly and repeatedly refer to moral considerations as constraining individuals' behaviour in the political context in their 1983 article. The same holds for Adam Smith who is not solely the great champion of self-interest but he spent much of his life exploring the role of moral sentiments, explicitly including public spirit, to make the world a better place (see Sen, 1995, p. 24). The essential point in our context is, however, that neither Buchanan and Brennan, nor Smith take into account the causal effect of the constitution on citizens' morale.

² This literature looks, however, at trust (or similar concepts) in government by the citizens while this paper mainly looks at trust in citizens by the government (constitution).

many societies, civic virtue can be counted on and should be actively fostered. According to their view, a constitution should be designed to increase deliberation between the government and its citizens in order to overcome narrowly defined self-interest and to raise civic virtues. The basic (American) constitutional structures and many individual rights indeed serve this purpose (Sunstein, 1990).

The purpose of this paper is not to take issue with the two Brennan–Buchanan propositions as such, but to draw attention to a crucial aspect disregarded by them: A constitution designed for knaves, or even for purely self-interested citizens, tends to crowd out civic virtues. As a result, the citizens exploit all legal opportunities to the fullest and the constitution is less observed. The effort to constrain citizens constitutionally may thus lead to a perverse result. Although a constitution, and more generally public laws and regulations, must check against knaves and prevent the exploitation of the citizenry by free riders and by professional politicians, it should also support civic virtues. The general spirit of the law, including specific rules, should acknowledge the citizens' basic goodwill. The establishment of a trusting constitution does not automatically produce high civic virtues. This is only the case if the constitution is considered to be fair and productive, and hence is widely accepted. An important prerequisite for a trusting constitution is that it gives citizens extensive participation rights.

Crowding-out civic virtue, or more generally, intrinsic motivation echoes the well-known concern by Titmuss (1970) who claims that an inadequate public policy (in his case material rewards) destroys the moral incentives to donate voluntarily. Our knowledge of the conditions under which civic virtues and other moral motivations are undermined has progressed considerably since then. There now exists a well-defined crowding theory derived from social psychology and applied to economics which is much more differentiated than Titmuss' hunch. In particular, external intervention does not always crowd out intrinsic motivation. There are conditions under which it fosters intrinsic motivation (crowding-in). This theory is supported by much empirical evidence from laboratory experiments as well as from real life observations.

Section I expounds the crowding theory and the related spill-over effect of intrinsic motivation. Section II presents the respective empirical evidence. Section III applies the concept to the constitution and public rules in general, discussing the relevant conditions and drawing the consequences for legal design. Empirical evidence supporting the effect of the type of legal structure on civic virtues, in particular on tax morale, is presented in section IV. Concluding remarks are offered in Section V.

I. CROWDING THEORY

Social psychologists have analysed and empirically measured the 'hidden cost of reward' (Lepper and Greene, 1978; Deci and Ryan, 1985) which appear when an external intervention (a reward) reduces individuals' intrinsic incentives to act. People are intrinsically motivated when they undertake an

activity for its own sake. The hidden cost of reward has been observed, for instance, in asylums where paying the patients to perform certain tasks (such as making the bed or cleaning their room) undermines their motivation to complete them when they are not paid. An everyday example would be an invitation to a friend's home for dinner. Nobody would pay him for the effort because this would destroy his intrinsic motivation (his friendship).

Two psychological processes account for the hidden cost of reward: (i) when individuals perceive the external intervention to be 'controlling' in the sense of reducing the extent to which they can determine actions by themselves, intrinsic motivation is substituted by extrinsic control. The locus of control shifts from the inside to the outside of the person affected. Individuals who are forced to behave in a specific way by outside intervention, would feel 'overjustified' if they maintained their intrinsic motivation. They rationally reduce the motivational factor under their control, that is intrinsic motivation. (ii) An intervention from the outside undermines the actor's intrinsic motivation if it carries the notion that the actor's intrinsic motivation is not acknowledged. The person affected feels that his or her competence is not appreciated which leads to an impaired self-esteem, resulting in a reduced intrinsic motivation.

Based on these psychological processes, the hidden cost of reward can be generalised in two respects:

- (a) All outside interventions can affect intrinsic motivation: in addition to rewards the same effect can come about by external regulations (commands);
- (b) External interventions crowd-out intrinsic motivation if they are perceived to be controlling and they crowd-in intrinsic motivation if they are perceived to be supporting.

Psychological crowding theory only relates to the effect on motivation (in which psychologists are particularly interested) but not on behaviour. It is necessary to simultaneously take into account the disciplining or (generalised) relative price effect on behaviour normally considered in economics. This is best done in a principal-agent setting.

A (representative) agent adjusts his or her performance P considering the benefits B and the cost C induced. Moreover, benefits and costs are also influenced by the principal's external intervention E , yielding the following two equations:

$$B = B(P, E), \quad (1)$$

$$C = C(P, E). \quad (2)$$

Both benefits and costs increase in performance, i.e.

$$\frac{\partial B}{\partial P} \equiv B_P > 0 \quad \text{and} \quad \frac{\partial C}{\partial P} \equiv C_P > 0.$$

In addition, higher performance exhibits diminishing marginal returns ($B_{PP} < 0$) and has increasing marginal cost ($C_{PP} > 0$).

A rational agent chooses that level of performance P^* that maximises net benefits ($B - C$) which yields the first-order condition

$$B_P = C_P. \quad (3)$$

Differentiating this utility maximising condition with respect to E shows how the agent's optimal performance P^* is affected when the principal changes the extent of external intervention

$$B_{PE} + B_{PP} \frac{dP^*}{dE} = C_{PE} + C_{PP} \frac{dP^*}{dE}, \quad \text{or} \quad \frac{dP^*}{dE} = \frac{B_{PE} - C_{PE}}{C_{PP} - B_{PP}} \leq 0. \quad (4)$$

Following standard principal-agent theory, external intervention raises performance by imposing higher marginal cost on shirking or, equivalently, by lowering the marginal cost of performing, $C_{PE} < 0$. This is the relative price effect of an external intervention. As the crowding effect is neglected, i.e. a change in external intervention does not affect the marginal utility of performing ($B_{PE} = 0$), the orthodox economic theory predicts that external intervention always raises performance ($dP^*/dE > 0$). This positive effect is strengthened if the external intervention bolsters intrinsic motivation (crowding-in effect, $B_{PE} > 0$). On the other hand, the crowding-out effect ($B_{PE} < 0$) and the disciplining effect ($C_{PE} < 0$) of an external intervention work in opposite directions, so that the outcome dP^*/dE depends on the relative size of C_{PE} and B_{PE} .

This paper argues, and empirically shows, that the institutional design also systematically affects the factor B_{PE} : a constitution mistrusting its citizens under identifiable constitutions leads to a negative B_{PE} , while a constitution acknowledging and supporting its citizens' civic virtue has a positive B_{PE} .

A number of empirically observable conditions for the sign and size of the crowding effect have been identified in the literature (Lane, 1991; Frey, 1992). In the context of constitutional design, two conditions proved to be the most important:

(1) The individual's institutional participation possibilities. When a person is simply subjected to a decision, she perceives the interference to be controlling, and her intrinsic motivation for the respective activity is crowded out (condition 1a). If, on the other hand, a person is able to take part in a decision, her self-esteem is supported, and her intrinsic motivation is crowded in (condition 1b).

(2) The closer the interaction between the person or institution administering the intervention and the person being subjected to it, the more negative is the crowding effect (B_{PE}). In particular, the stronger the communication between the two sides, the more likely intrinsic motivation is crowded out.

External interventions may moreover have an indirect damaging effect on intrinsic motivation. The crowding out effect may spread to further areas, even into those where the external intervention has not been applied. There may thus be an indirect 'motivational spill-over effect' which has to be added to the direct crowding-out effect. The fact that changes in intrinsic motivations (in the broadest sense) may be linked across areas has been known as the 'spread

effect' in psychology and has also been noted by various economists, though they have not related it to crowding-out (e.g. Sugden, 1989, p. 93; Williamson, 1992, p. 256). In the United States, for instance, strong correlations have been identified between changes in voter participation, charitable contributions and other forms of social cooperation attributing to declines in intrinsic motivation (civic norms) in a multiple regression analysis (Knack, 1992).

II. CROWDING-OUT: EMPIRICAL EVIDENCE

Crowding theory is supported by a large number of experiments undertaken by social psychologists (see Deci and Ryan, 1985; Lane, 1991). Empirical analyses of real life behaviour also present evidence in favour of the crowding-out effect. A study by Barkema (1995) looks at 116 managers in medium-sized Dutch firms where the intensity of the personal supervision of lower level managers by supervisors varies. According to condition (2), the closer this personal interaction is, the more pronounced is the crowding-out effect. The more personalised the supervision, the more (statistically significantly) negative are the econometrically estimated parameters capturing the effect of external intervention on work (B_{PE} in (4)), which is consistent with the above hypotheses.

An important real life issue where crowding theory is relevant, is the resistance to the siting of locally unwanted projects (the so-called 'Not In My Backyard' or NIMBY-syndrome). Many economists have suggested monetary compensation to overcome the siting problem. Crowding theory suggests that when the citizens are involved in the decision process (condition 1b), the compensation offer reduces civic virtue and subsequently the support for the noxious facility. This proposition was tested for the siting of a nuclear waste repository in Switzerland (see, more fully, Frey *et al.* 1996). A survey based on 305 personal interviews were conducted in the communities chosen as possible sites by the government. More than half the respondents (50.8%) agreed to have the repository built in their community though a large majority of the respondents (80%) were well aware of the risks involved. To test the effect of a monetary reward offered, we repeated the same question, but added that the Swiss government had decided to compensate all residents of the host community. The amount offered varied between SFr 2,500 per individual and year ($N = 117$), to SFr 5,000 ($N = 102$), and SFr 7,500 ($N = 86$) which is substantial in view of a median household income of our respondents of SFr 63,000 per year.

While 50.8% of the respondents agreed to accept the nuclear waste repository without compensation, acceptance drops to 24.6% when compensation is offered.³ This (surprising) result is consistent with the hypotheses about crowding out intrinsic motivation also found in other research. Thus, increased tax rebates did not elicit an increased willingness to accept a nuclear waste facility in Nevada, and the suspicion that the rebates offered were simply too small is explicitly rejected (Kunreuther and Easterling, 1990).

³ The size of the compensation has no statistically significant effect on acceptance.

The motivational spill-over effect is also supported by real life evidence. In our study of the nuclear waste repository in Switzerland, it was found that compensating the citizens of the prospective host community (Wolfenschiessen) also reduced the civic virtue of individuals living in adjacent communities. As a result, a popular referendum of June 1995 in the communities surrounding Wolfenschiessen rejected the siting proposal because the citizens felt that their intrinsic motivation was not appreciated by the central government. Communities farther away from the planned site approved the proposal.

III. CONSTITUTIONAL DESIGN

Crowding theory helps to explain how constitutional and other legal rules affect the individual citizens. Civic virtue is bolstered if the public laws convey the notion that citizens are trusted. Such trust is reflected in extensive democratic participation possibilities (condition 1). Citizens are given the freedom to express themselves, to be heard by the politicians and public officials, and to carry out discussions with them. The basic notion enshrined in the constitution that citizens are on average, and in general, reasonable human beings thus generates a crowding-in effect of civic virtue. This implies, however, that interventions constraining citizens are mild because according to condition 2, the crowding-out effect is strong in this case.

In contrast, a constitution that implies a fundamental distrust of its citizens and seeks to discipline them tends to crowd out civic virtue and undermines the support which citizens are prepared to exert towards the basic law. 'If people feel that they are taken advantage of, why should they not rip off the system in return?' (Elster, 1989, p. 180). This distrust towards the citizens manifests itself in various ways. Institutions of political participation are curtailed because the 'classe politique' feels that citizens are unable to take reasoned political decisions.

Another sign of distrust towards the citizens is also enshrined in a constitution where the government is given great power to intervene in the economy and society, and where little room is left to the individuals to act on their own. Controls by bureaucracy and police are then extensive, and no citizen is taken to be trustworthy. The burden of the proof to have acted correctly lies with the individual citizen while the public authority is considered to be correct *a priori*. Such a distrustful constitution undermines the citizens' civic virtue. They respond by taking full advantage of all opportunities and by breaking the constitution and its laws whenever they expect to do so at low cost, and the political system is characterised by high transaction costs and low productivity. A vicious cycle of progressively lower civic virtue and increasing distrust by the rulers may lead to general cynicism. Such a development has occurred in many communist countries and still exists in totalitarian systems. Citizens may be unwilling to cooperate with the state in many other ways, e.g. by refusing to support projects in the national interest. Distrustful public laws also favour tax evasion, i.e. citizens make an effort to minimise their tax burden by illegitimate or illegal action.

The mistrust embedded in the constitution has so far been interpreted to be

directed against the citizens. The main thrust of the argument for a strict constitution as advanced by Brennan and Buchanan (1983) is, however, that (professional) politicians are to be mistrusted because they have an inherent tendency to abuse political power and to exploit the citizens. Following crowding theory, to imply in the constitution that politicians are crooks in any case is likely to undermine their civic virtue and to make them more dishonest. At the same time, 'bad' politicians can indeed impose great harm on others, while 'bad' citizens and politicians can do so much less. A constitution must thus reflect trust towards citizens and politicians in order to safeguard their civic virtue, and at the same time put limits on politicians in order to prevent them from exploiting the ordinary citizens. In so far as the ordinary citizens are given rights to reverse decisions taken (via referenda), and initiate laws opposed by the professional politicians (via initiatives), both goals can be achieved at the same time.

Mistrusting the 'classe politique' generally and deeply as done in the works of Brennan and Buchanan, and enshrined in their constitutional proposals, comes at a price. In the case of politicians, it does not only consist of the direct crowding-out effect which transforms average human beings with an average level of civic virtue into politicians with a low sense of public spiritedness. It also consists of a selection effect which accentuates the crowding-out effect: Persons with particularly low civic virtue are especially attracted to a political career because they do not feel unjustly constrained by the constitutional rules. They feel perfectly at ease in an environment in which public spiritedness is absent. In contrast, persons with high civic virtue are confronted with an additional cost when they consider to enter the political sphere. The price of having politicians with low civic virtue consists of the higher cost of safeguards designed to prevent them from exploiting ordinary citizens. As it is impossible to control politicians completely in the public sphere, trust and high civic virtue is even more important in politics than elsewhere. Politicians acting as knaves are then subject to the social control by other politicians who are likely to be endowed with particularly good information to detect and counteract such behaviour.

Obviously, not all strict public laws lead to harmful consequences. It has already been said that an outside intervention may have a positive effect on intrinsic motivation if it is perceived to be supporting. In particular, laws that prevent free riding by others, and establish fairness and equity serve to maintain or even crowd-in civic virtue. One of the most damaging effects on individuals' willingness to obey the laws is the perception that others do not, or are not willing, to contribute their fair share, most importantly with respect to paying taxes. It has been shown, e.g. that the propensity to evade taxes systematically increases with the perception of tax avoidance by other persons (for the empirical findings see e.g. Klasko (1992), pp. 179-86). In experiments with prisoners' dilemma and similar problems, the extent of cooperation drastically declines when others were observed, and tolerated to be, 'suckers' (see e.g. Brubaker (1975) for evidence; and Taylor (1987) on 'conditional cooperation').

IV. TESTING THE THEORY

Attempts to measure the effect of different constitutional conditions on citizens' civic virtue are faced with obvious difficulties and uncertainties. Most promising is an indirect approach looking at revealed behaviour in equilibrium. It is applied here to capture tax morale, an important component of civic duty. As has been well established, tax paying behaviour cannot be explained in a satisfactory way without taking tax morale into account. Thus, based on the American Internal Revenue Service's Taxpayer Compliance Maintenance Program, Gractz *et al.* (1986) attribute the falling tax compliance in the United States to the erosion of tax morale (see also Slemrod, 1992).

The state of tax morale depends on the type of constitution. Switzerland presents a suitable test case because the various cantons have different degrees of political participation possibilities (see more fully, Pommerehne and Frey (1993)). Following conditions 1 and 2 outlined above, it is hypothesised that the more extended political participation possibilities in the form of citizens' meetings, obligatory and optional referenda and initiatives are, and the broader the respective competencies are, the higher is tax morale and (*ceteris paribus*) tax compliance. On the basis of such characteristics, about one third of the 26 Swiss cantons are classified as pure direct democracies (*D*), another third as pure representative democracies (*R*), and the rest satisfies only some of these characteristics, and thus have an intermediate position.

A cross section/time series (for the years 1965, 1970, 1978, i.e. 78 observations) multiple regression explaining the part of income not declared Y_{nd} ,⁴ yields the following results⁵ (*t*-values in parentheses):

$$Y_{nd} = 7.17 - 3.52p - 2.42f + 0.79t - 0.36d - 2.72 \ln Y + 0.57^{**}NY - 1.09^*A - 7.70^{**}D$$

(-1.98) (-0.62) (2.10) (-2.51) (-0.30) (2.98) (-2.53) (-3.80)

$$R^2(\text{adj.}) = 0.69, \text{ d.f.} = 42, F = 11.08.$$

$$Y_{nd} = 8.98 - 3.22p - 2.32f + 0.59t - 0.42^{**}d + 1.03 \ln Y + 0.60^{**}NY - 0.82A + 4.02^*R$$

(-1.72) (-0.36) (1.70) (-3.47) (0.29) (3.07) (-1.93) (2.23)

$$R^2(\text{adj.}) = 0.65, \text{ d.f.} = 42, F = 9.43.$$

*, ** indicate statistical significance at the 95% and 99% levels respectively.

The variables are:

Y_{nd} = the part of income not declared;

p = probability of detection (the number of individual income tax audits per 1000 tax payers);

f = penalty tax rate;

t = mean marginal tax rate;

d = income deduction possibilities;

$\ln Y$ = natural log of *per capita* income;

NY = non-wage income;

A = old-age taxpayers' share (reflecting experience in tax matters).

⁴ As collected by the tax authorities and other sources, see Pommerehne and Frey (1993).

⁵ Due to collinearity between *D* and *R* ($r = 0.6$) two separate equations including *D* and *R* have been estimated.

The coefficients of the variables indicating the type of democracy (*D*, *R*) – the other variables are used to control for other influences⁶ – have the theoretically expected signs. In cantons with a high degree of direct political control (*D*), tax morale is (*ceteris paribus*) higher. The part of income concealed falls short of the mean of intermediate cantons by 7.7 percentage points. In absolute terms, the average amount of income concealed is about SFr 1,600 (per taxpayer) less than the mean income concealed in all cantons. In contrast, in cantons with a low degree of direct political control (*R*), tax morale is (*ceteris paribus*) lower. The part of concealed income is four percentage points higher than the average income gap, and the mean income undeclared exceeds the mean of intermediate cantons by about SFr 1,500. The estimation results are consistent with the hypothesis that, in equilibrium, greater democratic participation possibilities to with higher civic virtue as reflected in tax payer behaviour (corresponding evidence for the United States is provided in Smith, 1992).

The empirical evidence collected for Switzerland suggests that there are at least two stable social equilibria: In one the citizens have high tax morale and are prepared to contribute to public funds, provided this process is reasonably efficient and fair ('quasi-voluntary compliance', Levi, 1988). The corresponding tax laws trust the citizens by allowing them to declare their own income and to make generalised deductions. The tax statements are in principle assumed to be correct. The overall tax administration and transaction costs are low. In the second type of tax equilibrium, citizens have low tax morale; they exploit the tax laws to the fullest, and cheat whenever they can. The tax administration is large and costly. The corresponding tax laws distrust citizens.

The two types of tax equilibria can be empirically associated with the general level of civic virtue and tax evasion in particular countries. A trusting tax system, a correspondingly high tax morale and relatively low tax evasion exists in Switzerland. Econometric research on taxation has indeed revealed that the citizens' willingness to pay taxes cannot reasonably be explained by an expected utility calculus based on the probability of detection and magnitude of fine. The implied risk aversion to account for observed behaviour would be unbelievably higher than anywhere else empirically observed. A distrusting tax system exists in countries such as the Federal Republic of Germany, France and Italy where tax morale is low and tax evasion is relatively high (Frey and Weck, 1984).

The results of our econometric analysis have been indirectly supported by a larger set of other countries and also for civic virtue in general. An empirical study on an extensive sample of European as well as Central American countries clearly establishes a causation running from democracy to civic culture (Muller and Seligson, 1994), i.e. citizen participation rights help to promote public spirit. A cumulative body of research indicates that people's perceptions of how they are treated by government institutions strongly affect

⁶ It may be observed that while many coefficients are statistically highly significant and have the theoretically expected signs, the probability of detection p and the size of the fine f are not statistically significant at the conventional levels, i.e., it cannot be presumed that deterrence works.

their willingness to cooperate with them. Citizens who consider the constitution and its laws, and the authorities acting on their basis to be fair and to treat them respectfully, tend to be more compliant than those with more negative perceptions of government (for empirical evidence see Tyler and Kramer (1996)). The extensive use of adversary institutions for resolving public conflicts has been shown to negatively affect civic virtue, thereby appreciably raising transaction cost between the governments and citizens (Kelman, 1992).

V. CONCLUDING REMARKS

The discussion of constitutional design is dominated by two extreme views. On the one hand, Brennan and Buchanan, their forerunners and followers in the tradition of constitutional economics concentrate on the perennial propensity of individuals to behave as opportunists and to free ride. But preventing knaves from exploiting the political system has not only advantages but also costs by crowding out civic virtue which is indispensable for an effective constitution and other public laws. The other extreme view of constitutional design emphasises deliberation between politicians and citizens, and active citizen participation. The purpose is to support or crowd in civic virtue. A constitution is able to raise public spiritedness if it is widely accepted by the citizens to be fair and productive for all on average, i.e. in the long run. It has been argued here, and has been supported by empirical evidence, that a successful way to maintain and enhance civic virtue are extensive constitutional rights of direct citizen participation via popular referenda and initiatives. But such a constitution runs a greater risk of knaves free riding and exploiting other citizens.

What is needed is a balanced constitution which escapes the dangers inherent in the two extreme conceptions. A viable constitution must be strict enough to effectively deter exploitative behaviour, not least because it undermines civic virtue if it becomes widespread. At the same time, care must be taken to design a system of laws fundamentally trusting citizens and politicians. Public laws designed for the worst possible behaviour as suggested by Brennan and Buchanan, run the risk of destroying the positive attitude of citizens and politicians towards their constitution which is necessary to maintain in efficiency, and is vital for its long-run survival.

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