University of Dundee

Separation of powers and activism

Anant, T. C. A.; Mishra, Ajit

Publication date:
2003

Separation of Powers and Activism

T.C.A. Anant and Ajit Mishra

SEPARATION OF POWERS AND ACTIVISM[*]

T.C.A. Anant
Delhi School of Economics, Delhi, India-110007
(anant@cdedes.ernet.in)

Ajit Mishra**
Department of Economic Studies, University of Dundee, UK
(A.MISHRA@dundee.ac.uk)

We consider a model of constitutional (mechanism) design with separation of powers where different institutions are assigned different tasks. In this context, we define activism as an institution extending its mechanism of decision-making into domain of other institution's tasks. When members of the institutions are likely to be benevolent as well as non-benevolent, such activism in a limited form reduces the cost of achieving collusion-proofness and raises welfare. But as the fraction of non-benevolent member increases, such activism turns excessive and reduces welfare. It is argued that developing economies are likely to get caught in the excessive activism trap because of the high levels of corruption and bribery.

JEL Classification: D7; H5; K0;O12.
Keywords: Activism, Corruption, Incentives, Separation of Powers

1. Introduction

Separation of powers has been seen as a key feature of modern democratic governance. Most constitutions adhere to this doctrine in their designs of institutions (legislative, executive and judiciary). The same philosophy is also reflected in the design of many other organisations like regulatory and enforcement bodies, ministries and governmental departments.

Separation of powers can be analysed by exploring its structural as well as functional aspects. From a structural perspective, separation can be seen as a device against regulatory capture and rent seeking behaviour. Even though the general idea is not new[1], it is only recently that economic theorists have addressed this topic using agency theoretic framework. These institutions can be viewed as agencies entrusted with certain tasks. To perform these tasks, they are endowed with some power as well. If too many tasks are given to one agency, then the agency is likely to enjoy greater power also. That would encourage collusive and rent seeking behaviour. In a recent paper, Laffont and Meleu (2001) have modelled separation of powers as an instrument against corruption and have shown that the value of such separation is higher in developing countries. The characteristics of developing countries make separation of powers more desirable but at the same time more difficult to implement. We address the closely related issue of activism.

Our analysis of activism is based on a distinction between *tasks* and *privileges*. Members of an institution receive explicit incentive payments for their performance in the tasks, but similar incentive payments do not exist for privileges. However, in addition to their own tasks, institutions are granted privileges so that they can have access to information or decision making process of other institutions. In this context, we define *activism as an institution extending its mechanism of decision-making, on the grounds of privilege, into problems that are the forte of some other institution*. In many ways, such privileges act as checks and balances. As we shall see, activism can raise welfare by reducing the cost of collusion-proofness, but it can turn excessive and can lead to welfare reduction.

---

[1] Laffont (2000) contains a rich and scholarly treatment of these issues. See Moe (1986), Wilson (1980) for earlier contributions.

Modelling activism poses a unique problem- in the sense that we don't have a proper theory of power. In the standard mechanism design problem, an ideal constitution would specify all decisions to be taken (in all contingencies). Hence it does not matter who takes those decisions and power is irrelevant. One can depart from the paradigm in two ways. One would be to allow for information asymmetry and control over information by the agency. This way, information rent would be the source of power. The other approach would be to adopt an incomplete contract framework where institutions are given decision rights. We follow the former approach here. Following, Laffont and Meleu (2001) and Laffont and Martimort (1999), we analyse activism in a regulatory framework. We are interested in the positive as well as normative aspects of activism. We try to see when activism is more likely to surface and what its implications for social welfare are.

Our analysis is consistent with the functional interpretation also. The different decision-making bodies of the State (legislature, executive and judiciary) are endowed with specific powers and are required to carry out different tasks. These institutions differ in terms of operating principles, stipulated objectives and the nature of information processing. Hence different institutions are best equipped to solve different decision problems facing the state, depending on the information requirements and the cost of information processing[2]. For example, the legislature can be thought of as the body best suited to obtain information on the preferences of the population. Hence it is supposed to enact laws to suit the best interest of the population. On the other hand, for the judiciary, the population preference is not of paramount importance; rather it is supposed to gather judicial information from contesting parties and take decisions which are deemed to be fair[3]. At a different level, the executive can be thought to be in charge of gathering and processing technical, statistical information so as to implement the will of the legislature in the most efficient manner.

---

[2] This is very similar to the analyses in the law and economics literature of the different choices faced by the state in allocating resources (i.e. property rule vs. liability rule). See Calabresi and Melamed (1972); Kaplow and Shavell (1996).

[3] Some of these differences and their implications have been recently modelled by Maskin and Tirole (2001). They study the optimal allocation of power between accountable and non-accountable branches of the state.

Hence, according to this interpretation, we are likely to see separation of powers even when there is no rent seeking behaviour or collusion possibility. Activism is possible in such an environment but it is unlikely to be of a large magnitude and raise concerns. To study activism, we superimpose the possibility of collusive and corrupt behaviour on such a framework. We take the separation of power structure to be given and we do not seek to show it optimality; rather we try to analyse the optimality (or the opposite) of activism. This also makes our analysis more relevant to the developing economies where corruption has been rampant and has threatened the developmental process.

The next section has a brief discussion of judicial activism in India. This is not to suggest that there can not be any other form of activism. We can have a legislative as well as executive activism[4]. However, judicial activism has attracted maximum attention. Section 3 presents the basic model and section 4 contains the analysis of activism by a single institution. We show that limited activism (activism by benevolent supervisors) raises welfare. But as corruption level rises the non-benevolent supervisors also pursue activist policies and this can reduce welfare. Section 5 extends the analysis to discuss activism by more than one institution. Section 6 concludes with few brief remarks.

2. Judicial Activism in India[5]

Judicial Activism in India has been perceived in certain quarters as a success of constitutional governance, while others have sought to condemn it. There is a popular perception that institutions like the legislature and executive branches of the government have not performed efficiently due to the rise of corruption and nepotism. Hence the intervention and activist policy by the Supreme Court has been seen as a welcome relief to many. Our objective is not to debate the merit of such a policy on a case by case basis; we are interested in looking at the general process[6].

---

[4] Recently, members of the Parliament were given large sums of money for development of their constituencies. This can be seen as taking over the developmental and implementation role of the district or state administrations. Similarly, various loan waiver and other populist programmes can best be viewed as legislative activism.

[5] India is probably the only developing economy where judicial activism has received some attention. In the developed economies, judicial activism has been a debated issue in the legal and political spheres. See O'Connor (1997), Allan (1997), Lens (2001) among others.

[6] This section draws heavily from previous work by one of the authors; see Anant and Singh (2002).

 The appearance of judicial activism in India can be functionally correlated with the emergence of Public Interest Litigation (PIL) in the late 1970s. In a series of cases, the Supreme Court enlarged its reach and jurisdiction in two ways: one, by re-interpreting the constitution to expand the scope and content of various fundamental rights, and two, by moderating the ancient requirement of *locus standi* for access to judicial remedies and redress. As a consequence, procedural requirements were eased to enable individuals or organisations to approach the Supreme Court and High Courts on the behalf of those unable to do so themselves - "in the public interest". Typically these cases dealt with gross violation of rights - many of them involving women as victims in prisons and remand homes[7], abysmal work conditions faced by poor and bonded labour[8]. Hence PIL was intended to be a mechanism through which the grievances of those unable to participate in political, administrative and legal processes could be addressed. However, the advent of the PIL subsequently opened up the possibility of the courts relaxing procedural requirements in cases, which involved 'broad' public interest issues [9] involving environment, consumer affairs, property rights, the practices of municipal corporations, educational institutions, politicians and political parties. In many such instances, courts have sought to prescribe public policy outcomes. This widening of subject matter has caused Indian judicial activism to be viewed seriously by legal scholars[10]. While there is no denying the view that courts are supposed to give new meaning to existing provisions so as to suit the changing social or economic conditions, yet there is a general fear that "such activism can be positive as well as negative". Following Anant and Singh (2002), we shall describe judicial activism in three forms- *interpretational*, *legislative* and *executive* - each having distinct implications on allocation.

The constitution can be viewed as an incomplete contract; hence courts are often called upon to interpret the constitution. This in itself can be viewed as an act of activism

---

[7] Among many other cases see, for example, for under trail prisoners: Hussainara Khatoon v. Bihar 1979 SC 1360; prison inmates: Sunil Batra v. Delhi Administration AIR 1982 SC 1473; remand homes: Munna v. State of U.P AIR 1982 SC 806; women in protective custody: Dr. Upendra Baxi v. U.P (1983) 2 SCC 308.

[8] See for example Bandhua Mukti Morcha v. India (1984) 3 SCC 161 and Bandhua Mukti Morcha v. India AIR 1992 SC 38

[9] See Ahuja (1997).

[10] See Sathe (2002) for a detailed and scholarly analysis of judicial activism in India.

(created by design) to substitute a judicial outcome for the resolution of a problem through legislative enactment. In India, the constitution has given the Parliament the power to amend constitution without changing the 'basic structure'. This has often resulted in the Parliament taking recourse to an unfettered right to amend the constitution[11]. However, in a series of cases the Supreme Court has tried to give operational meaning to the 'basic structure' and has analysed (limited) the power of the Parliament to amend the constitution[12]. It is clear that such forms of activism are unavoidable and are an integral part of the constitutional design.

An example of legislative judicial activism is to be found in the famous judgment[13] of Vishaka v. State of Rajasthan. In this case the Supreme Court *specified* a model law to prevent sexual harassment. This was done to remedy the inadequacy of the existing legal system where the civil and penal law in India does not protect women from sexual harassment in the work place.

There have been many instances of executive judicial activism in the recent past. In the late 80s, the court admitted a PIL aimed at reducing vehicular pollution in Delhi. In response to this PIL, the Supreme Court proceeded to issue a number of wide ranging policy directives. These include restrictions on the plying of all old (more than 15 years) commercial vehicles; ban on supply of loose 2T oils at petrol stations and service garages; augmentation of public transport; elimination of leaded petrol from NCT of Delhi; replacement of all pre-1990 auto-rickshaws and taxis with new vehicles on clean fuels; steady conversion of the entire city bus fleet (DTC and private) to single fuel mode on CNG; new Inter State Bus Terminals to be built at entry points in the north and south-west to avoid pollution due to entry of inter-state buses; and even some specific restrictions on school buses.[14] It is clear that all these relate to the choice of technology, inputs of production, location of bus stations- decisions to be made by the executive

---

[11] For instance when the Supreme Court struck down the reservation of seats in medical and engineering colleges on a communal basis, (State of Madras v. Champakam Durairajan AIR 1951 SC 226) the executive and the legislature responded by amending the Constitution and adding Article 15(4) and 16(4) to enable the government to make communal reservations.

[12] See Keshavananda Bharathi v. State of Kerala (AIR 1973 SC 1461), State Of Bihar & Anr. Vs Bal Mukund Sah & Ors, 2000 4 SCC 640. For example, the Supreme Court held that the conditions for appointment of judges can not be amended even by constitutional amendments.

[13] (1997) 6 SCC 241

[14] Interim orders dated 28th July 1998 and 22nd Sept. 1998 on Writ Petition (Civil) No. 130295/1985 put in front of the Supreme Court by M.M. Mehta.

branch of the government after careful and detailed study of the economic consequences[15].

The previous discussion highlighted the trend and nature of judicial activism in India. It is not our intention to claim that all forms of activism are good (or bad); rather we are interested in analysing the process itself.

3. The Model

In this section, we consider a very simple and specialised model. The model is not designed to capture the richness of activism described in the previous section. However, we hope to show that it is not desirable to judge activism on a case by case basis. Some forms of activism in fact do lead to welfare increase but once activism becomes an institution itself the result could be excessive activism and abuse of privileges leading to welfare loss.

Suppose a public good is to be produced by a firm with private information about its cost and procured by the constitution (henceforth called the principal). The social benefit from this good is S and the cost of production is given by $C = \theta q$, where θ is the cost parameter and q is the quantity[16]. We shall normalise the total quantity, $q = 1$. Cost parameter is given by $\theta = \bar{\theta} - (\theta_1 + \theta_2)$, where $\theta_i \in \{0, \Delta\theta\}$, $i \in \{1,2\}$. Hence, depending on the realisation of θ_i, θ can take three values, $\bar{\theta}, \hat{\theta}$ or $\underline{\theta}$ where $\hat{\theta} = \bar{\theta} - \Delta\theta$ and $\underline{\theta} = \bar{\theta} - 2\Delta\theta$. The random variables θ_i, are drawn independently from the same distribution so that $Pr(\theta_i = \Delta\theta) = \upsilon$. We shall assume that the good is always desirable. The firm's utility function is given by $U(\theta) = t - C(\theta)$, where t is the transfer payment by the principal to the firm. The principal maximizes the following social welfare function subject to the firm's participation constraint being satisfied, $U(\theta) \geq 0$. Social welfare[17] is given by

(1) $SW = S - (1+\lambda)t$

where λ is the shadow cost of public funds. It is clear that in this simple case, the principal would simply minimise the total transfers.

---

[15] See Anant and Singh (2002) for a critique.

[16] This is a simpler and slightly modified version of Laffont and Martimort (1999), see Laffont (2000) and Tirole (1992) also.

[17] We have not included the utility of the firm in the welfare. But it can be done without any change to the results. $SW = S - (1+\lambda)t + U = S - (1+\lambda)(U+\theta q) + U = S - (1+\lambda)\theta q - \lambda U$.

The principal employs politicians/executive/judiciary (henceforth called supervisors) to supervise the firm and obtain information on θ. There is an independent supervision technology which generates hard information on θ_i. This technology generates signals σ_i with the following probabilities;

(2) $\Pr(\sigma_i = \Delta\theta| \theta_i = \Delta\theta) = \zeta$ and $\Pr(\sigma_i = \varphi| \theta_i = \Delta\theta) = 1\text{-}\zeta$,

$\Pr(\sigma_i = \Delta\theta) = \upsilon\zeta$ and $\Pr(\sigma_i = \varphi) = (1\text{-}\upsilon\zeta)$.

3.1 Supervisors

Only supervisors observe signals σ_i and they are supposed to report the signals to the principal. They derive their power from being able to manipulate this information. In our case, this ability is somewhat limited by the hard nature of this information. We shall assume that the supervisor can only hide information but is not able to distort it in any other way. Let r denote the report by the supervisor, $r \in \{\varphi, \Delta\theta\}$.

It is obvious that the supervisor's report will determine the principal's policy towards the firm. Consider a case where the supervisor(s) always report truthfully. Consider the state $\sigma_1 = \sigma_2 = \Delta\theta$; this is likely to happen with probability $(\upsilon\zeta)^2$. Then maximizing SW subject to the constraint $U = (\underline{\theta}\text{-}t) \geq 0$ would lead to the optimal policy of $t = \underline{\theta}$ and $U = 0$. With probability $2\upsilon\zeta(1\text{-}\upsilon\zeta)$, we have another state, $\sigma_i = \varphi$ and $\sigma_j = \Delta\theta$ where $i \neq j$, $i,j \in \{1,2\}$. Then the optimal policy[18] would be $t = \hat{\theta}$, $U(\hat{\theta}) = 0$ and $U(\underline{\theta}) = \Delta\theta$. With probability $(1\text{-}\upsilon\zeta)^2$, both the signals yield nothing, $\sigma_1 = \sigma_2 = \varphi$. Then the principal would choose $t = \overline{\theta}$, $U(\overline{\theta}) = 0$, $U(\hat{\theta}) = \Delta\theta$ and $U(\underline{\theta}) = 2\Delta\theta$. Whenever, the principal is not fully informed, the firm gets a rent with positive probability (depending on the type) and this is socially costly.

We have two types of supervisors- benevolent and non-benevolent. Benevolent supervisors have the same objective as the principal. Non-benevolent supervisors seek to maximize their own payoff. The principal does not know the type of the supervisor and we assume that there is no screening mechanism to separate the two types. The probability of a supervisor being benevolent is δ, $0 \leq \delta \leq 1$. As can be seen from the

---

[18] Given the reports, principal can revise beliefs about the firm's type but in our simple case that does not affect the optimal policy. Since the project is always desirable and q is fixed, the principal is not able to discriminate between different possible types.

previous paragraph, whenever $\sigma_i = \Delta\theta$ and the supervisor reports $r = \varphi$, the firm[19] gains $\Delta\theta$. Hence the supervisor and the firm can collude-firm bribing the supervisor for a null report. As is standard in the literature, we assume that the supervisor has all the bargaining power and can appropriate the entire rent. However, there is a transaction cost associated with bribery so that a bribe of $\Delta\theta$ is worth $k\Delta\theta$ to the supervisor, where $k < 1$. Hence the non-benevolent supervisor can get $k\Delta\theta$ by colluding with the firm. However, the principal can stipulate payments s to the supervisor based on the reports r so that collusion is prevented.

3.2 Separation of powers

In this paper we take separation of powers as given and we do not seek to prove its optimality[20]. As has been shown by Laffont (2000), separation of powers can be shown to be optimal in a variety of circumstances. Separation of powers implies that supervisor 1 (called S1) has access to information technology 1 which generates signal σ_1 about θ_1. Likewise, supervisor 2 (called S2) observes σ_2. The principal specifies transfers t and s as functions of the reports (r_1, r_2) by S1 and S2, $t = t(r_1, r_2)$ and $s_j = s_j(r_1, r_2)$, $j=1,2$.

The game proceeds as follows. (0) A constitution is set up; the principal announces the contract. (1) Nature determines the type of the firm (realisation of θ) and the type of the supervisor (benevolent or not). (2) The supervisors observe their respective signals. Firms also learn the type of the supervisor(s) and what they have observed. (3) The firm and the supervisor can collude on a side contract[21]. (4) The supervisors submit their reports to the principal and transfers are implemented according to the principal's contract.

Note that the principal is unable to condition transfers on the type of the supervisor. This means that if the principal stipulates a reward for reporting $\Delta\theta$, then it would be paid to

---

[19] The gains are additive. If one report is $\Delta\theta$ and the other is φ, the most efficient firm gains $\Delta\theta$. If both reports are φ, the firm gains $2\Delta\theta$. Strictly speaking we don't need this additive structure. A more plausible case would be when the gain from two null reports exceeds the sum of gains from null reports by 1 and 2. This formulation is for simplicity.

[20] One can assume that the joint observation technology is inefficient compared to separate observation technology. We shall be introducing a similar assumption later in the paper in the context of the activist technology.

[21] Given our simple model and the additive structure, the gain from collusion to supervisor 1 is always $k\Delta\theta$, where k is the inverse of the transaction cost. This holds, irrespective of the nature of interaction between the firm and supervisor 2.

the benevolent supervisor as well. Hence the first decision of the principal is whether to achieve collusion-proof outcome or not.

If δ is very high, it might be optimal to allow collusion between non-benevolent supervisor and the firm. Let us call it the collusion case and denote welfare by W^C. Similarly, W^{NC} is the welfare when no collusion is allowed.

Proposition 1: Under separation, the principal would choose a collusion-proof mechanism for low values of δ. The optimal transfers would be given by

$t(\varphi,\varphi) = \bar{\theta}$, $t(\varphi,\Delta\theta) = t(\Delta\theta,\varphi) = \hat{\theta}$, $t(\Delta\theta,\Delta\theta) = \underline{\theta}$, $s(\varphi) = 0$ and $s(\Delta\theta) = k\Delta\theta$.

Proof: First, as has been discussed earlier the transfers to the firm in different states are optimal given that the project is always desirable and the level of the public good (q) is fixed. Second, it can be checked that these transfers would lead to an outcome (Bayesian-Nash equilibrium) where the supervisors always report truthfully. Suppose, $\sigma_1 = \Delta\theta$. The benefit to the firm from colluding with S1 depends on several factors- firm's type, S2's type and S2's observation σ_2. Suppose the firm's type is $\underline{\theta}$ and $\sigma_2 = \varphi$. Truthful reporting by S1 would lead to the firm getting a rent of $\Delta\theta$, where as collusion would lead to a rent of $2\Delta\theta$. Hence gain from collusion with S1 is $\Delta\theta$. On the other hand, if the type is $\underline{\theta}$ and $\sigma_2 = \Delta\theta$ and if S2 will report truthfully (which it will, given the transfers), the gain from collusion is again $\Delta\theta$. Last, if the firm's type is $\hat{\theta}$, then again the gain from collusion is $\Delta\theta$. Hence, a reward of $k\Delta\theta$ would induce the supervisor to report truthfully. Hence welfare would be given by

(3) $W^{NC} = S - \{1+\lambda\} \{(\upsilon\zeta)^2(\underline{\theta} +2k\Delta\theta) + 2(\upsilon\zeta)(1-\upsilon\zeta)(\hat{\theta}+k\Delta\theta) + (1-\upsilon\zeta)^2 \bar{\theta} \}$

Consider the other case when collusion is allowed in equilibrium. It is clear that $s(\Delta\theta) = 0$, since the benevolent supervisors are going to report truthfully even in the absence of any payment. Suppose supervisors have been assigned to the different information technologies randomly. So the probability of S1 (S2) being benevolent is δ. First consider the state where both S1 and S2 are benevolent. This happens with probability δ^2. The corresponding welfare would be

(4) $S - \{1+\lambda\} \{(\upsilon\zeta)^2(\underline{\theta}) + 2(\upsilon\zeta)(1-\upsilon\zeta)(\hat{\theta}) + (1-\upsilon\zeta)^2 \bar{\theta} \}$.

Consider the sate where S1 is benevolent and S2 is non-benevolent. This occurs with probability $\delta(1-\delta)$. In this state, if $\sigma_1 = \sigma_2 = \Delta\theta$, then $t = \hat{\theta}$. We can also have $\sigma_1 = \Delta\theta$ and $\sigma_2 = \varphi$ with probability $\upsilon\zeta(1-\upsilon\zeta)$ leading to $t = \hat{\theta}$. But if $\sigma_1 = \varphi$ and $\sigma_2 = \Delta\theta$, then $t = \bar{\theta}$. Of course, with probability $(1-\upsilon\zeta)^2$ both observe nothing and it does not matter whether S1 or S2 is benevolent. The case of non-benevolent S1 and benevolent S2 is exactly similar. So the state with only one benevolent supervisor occurs with probability $2\delta(1-\delta)$ and welfare in this state would be

(5) $S - \{1+\lambda\}\{(\upsilon\zeta)^2(\hat{\theta}) + (\upsilon\zeta)(1-\upsilon\zeta)(\hat{\theta}+\bar{\theta}) + (1-\upsilon\zeta)^2\bar{\theta}\}$.

Lastly the state where both S1 and S2 are non-benevolent occurs with probability $(1-\delta)^2$. In this sate it does not matter whether the supervisors observe anything or not as the principal would always receive a report of φ and $t = \bar{\theta}$.

Hence welfare under collusion would be given by

(6) $W^C = S - [\delta^2\{1+\lambda\}\{(\upsilon\zeta)^2(\underline{\theta}) + 2(\upsilon\zeta)(1-\upsilon\zeta)(\hat{\theta}) + (1-\upsilon\zeta)^2\bar{\theta}\} + 2\delta(1-\delta)$

   $\{1+\lambda\}\{(\upsilon\zeta)^2(\hat{\theta}) + (\upsilon\zeta)(1-\upsilon\zeta)(\hat{\theta}+\bar{\theta}) + (1-\upsilon\zeta)^2\bar{\theta}\} + (1-\delta)^2\{1+\lambda\}\{\bar{\theta}\}$.

It can be verified that $W^{NC} \geqslant W^C$ if and only if the following condition is satisfied

(7) $2(\upsilon\zeta)^2\Delta\theta(1-\delta) + 2\upsilon\zeta(1-\upsilon\zeta)\Delta\theta(1-\delta) - 2\upsilon\zeta\Delta\theta k \geqslant 0$

The first two terms (in 7) are the losses to the principal when the signal is informative but collusion takes place between the firm and non-benevolent supervisor(s). The third term is the cost of preventing collusion. Note that it does not have any δ term because all supervisors receive the payment.

The above condition can be written as

(8) $\delta \leq 1-k$.

                                                                                    (QED)

As one would expect, it is always desirable to prevent collusion if benevolence level is low (δ low) and transaction cost associated with collusion is high (k low). This however ignores the (social) transaction costs associated with bribery. Moreover, with a more general welfare function it will depend on the shadow cost of public funds as well.

4. Activism

In general, activism can be defined as an institution extending its mechanism of decision-making into the domain of some other institution. This presupposes that the extension by the activist institution is indeed feasible. This feasibility depends on the *privileges* granted by the constitution. Here we make a distinction between privileges and *tasks*. An institution is assigned a task when the incentive mechanism for the institution depends solely on the task. Success or failure will be ascertained solely in reference to the task. Similar incentive considerations do not hold for privileges.

In the present model, reporting σ_1 is the sole task of S1 and incentive payments depend on the nature of report r_1. However, S1 can enjoy certain privileges in terms of overseeing σ_2 as well, though there will be no explicit provision of incentive payments. Suppose there is another information technology which enables S1 to observe a signal μ of σ_2, in addition to signal σ_1 of θ_1. For simplicity, we assume that the distribution of μ is conditional on $\sigma_2 = \Delta\theta$. This technology has the following property;

(9) $\Pr(\sigma_1 = \Delta\theta|\ \theta_1 = \Delta\theta) = \rho$ and $\Pr(\sigma_1 = \varphi|\ \theta_1 = \Delta\theta) = 1\text{-}\rho,$

    $\Pr(\mu = \Delta\theta|\ \sigma_2 = \Delta\theta) = \beta$ and $\Pr(\mu = \varphi|\ \sigma_2 = \Delta\theta) = 1\text{-}\beta.$

We shall denote this activist technology as ρ-technology and refer to the earlier technology as ζ-technology. We assume that this activist technology leads to some dilution in one's own task, so $\rho \le \zeta$[22]. In addition, we assume that S2 also observes the realization of μ. Supervisors choose the technology and their technology choice is not observable to the principal. This adds an additional stage to the game (described on page 8), where the supervisor chooses the technology prior to stage (2) but after stage (1). This means that different supervisors can choose different technologies and as will be shown below, this will be crucial to our analysis of activism.

4.1 Limited Activism

Recall that our constitution does not make any use of the benevolent supervisors. That can change in the light of this alternative technology. We can modify the earlier constitution along the following lines. Let S1 be endowed with this technology and it can

---

[22] This is consistent with the separation of powers argument. Moreover, it ties well with the functional separation. The nature of information gathering in the two different tasks is different and there is some benefit to specialisation.

report on μ in addition to its own task of reporting signal σ_1. We denote this activist report by z; $z \in \{\Delta\theta, \varphi\}$. Suppose transfer payments to S2 are as follows. Supervisor 2 gets $s_2 > 0$ only if $z = \varphi$ and $r_2 = \Delta\theta$; and $s_2 = 0$ otherwise. Transfer payment to S1 does not depend on z. This means that whenever $\sigma_2 = \Delta\theta$ and S1 reports z, with probability β, the principal does not have to pay a positive s_2 to S2. Hence preventing collusion can be less costly. This has been achieved by giving S1 the privilege[23] of overseeing S2. However, there is a trade off in the sense that θ_1 is observed with a smaller probability.

But will S1 be willing to choose the activist technology? Since $\rho \le \zeta$, the supervisor is going to get s_1 with a smaller probability. Moreover, a report of $z = \Delta\theta$ does not fetch anything to the supervisor. Hence a non-benevolent supervisor may not be interested in switching from the ζ-technology. For the benevolent supervisors, since their objective is aligned with that of the principal, they would choose the ρ-technology if there is an increase in welfare even though their own receipts might go down. We first consider the case where only the benevolent supervisors choose to be activist; and call this a case of *limited activism* and denote the corresponding welfare by W^{LA}.

We shall consider both symmetric and asymmetric cases. In the symmetric case, both supervisors (S1 and S2) have access to the activist technology and both have the (provision) privileges to report on the other's signal. So, S1 observes and reports z_2 (signal of σ_2) and similarly S2 reports z_1 (signal of σ_1)[24]. The transfers s_j depend on reports of both r_j and z_j, $j = 1,2$. We shall allow for the degree of benevolence (δ_1, δ_2) to be different between S1 and S2. However, whenever it does not matter, we shall take $\delta_1 = \delta_2 = \delta$. We shall consider the asymmetric case first. We have the following proposition.

Proposition 2: *Limited activism can be welfare increasing if the extent of information loss in the task (ζ-ρ) is not too large and the information gain from the activist policy (β) is not too small.*

Proof: Suppose, S1 has access to the ρ-technology. Alternatively, S2 has no provision (privilege) for such reports. It can be easily checked that the level of transfers remain the same for the firm, $t(\varphi,\varphi) = \bar{\theta}$, $t(\varphi,\Delta\theta) = t(\Delta\theta,\varphi) = \hat{\theta}$ and $t(\Delta\theta,\Delta\theta) = \underline{\theta}$. For the

---

[23] Suppose, s_2 does not depend on z , then it does not matter whether S1 has access to the ρ-technology or not.
[24] Notice that S1 reports r_1 and z_2- referring to θ_1 and signal μ_2 of θ_2. Similarly for S2.

supervisors, there is no change in transfers to S1, $s_1(\varphi) = 0$ and $s_1(\Delta\theta) = k\Delta\theta$. However, as discussed earlier, the second supervisor's transfer depends on S1's report of z_2 as well. Hence, $s_2(z_2 = \Delta\theta) = 0$ and $s_2(z_2 = \varphi, r_2 = \Delta\theta) = k\Delta\theta$. Clearly, the principal would reduce its cost by $\delta_1(\upsilon\zeta)\beta k\Delta\theta(1+\lambda)$.

But the ρ-technology is less informative about own signal θ_1 and that would lead to a welfare loss. Since only the benevolent supervisors are choosing the ρ-technology, the reduction in probability with which $\Delta\theta$ is observed is $\delta_1\upsilon(\zeta-\rho)$. Moreover, in our case the gain to the principal from information about θ is additive. If $r_2 = \Delta\theta$, and S1 also reports $\Delta\theta$, then $t = \underline{\theta}$, so the welfare gain will be $\Delta\theta(1-k)(1+\lambda)$. Similarly, when $r_2 = \varphi$, and $r_1 = \Delta\theta$, then $t = \hat{\theta}$ and welfare gain will be $\Delta\theta(1-k)(1+\lambda)$. Hence the loss in welfare due to the ρ-technology will be given by $\delta_1\upsilon(\zeta-\rho)\,\Delta\theta(1-k)(1+\lambda)$.

Hence overall welfare will go up, $W^{NC} \leqslant W^{LA}$, if and only if

(10) $\delta(\upsilon\zeta)\beta k\Delta\theta(1+\lambda) \geq \delta\upsilon(\zeta-\rho)\,\Delta\theta(1-k)(1+\lambda)$

or, $\zeta k\beta \geq (\zeta-\rho)(1-k)$.

Clearly this is satisfied if for a given k, $(\zeta-\rho)$ is low and β is high.

(QED)

It is clear that for extreme low values of k this above condition is unlikely to be satisfied and we are unlikely to see any activism. When k is close to 1, there is virtually no transaction cost associated with collusion; the cost of preventing collusion is very high and hence activism raises welfare by lowering this cost. *Hence we are likely to see more activism in a developing economy context where the transaction cost might be low*[25]. For later comparisons, consider the numerical example with $\zeta = 0.8$, $\rho = 0.7$, $\beta = 0.6$ and $k = \frac{1}{2}$. For these parameter values, condition (10) is satisfied and we shall see limited activism.

Note 1- The benevolent supervisors are choosing the ρ-technology because activism leads to greater welfare. Their own receipts go down by $\upsilon(\zeta-\rho)k\Delta\theta$. This can be justified by

---

[25] See Laffont and Meleu (2001) for a related argument concerning the value of separation of powers when transaction costs are low. However, in our case, if k is very high we might not have any collusion prevention and the relevant welfare is W^c.

many different types of objective function[26]. One such objective function would be an weighted average of own receipts and social welfare. It must be pointed out that these supervisors are not just honest but also *actively* care about social welfare. It is quite possible to have honest supervisors who would never collude with the firm but also would never choose a technology that gives them lower payoff. Since the benevolent supervisors care so much about welfare, one might wonder why don't they simply announce their type and refuse the transfer to begin with. Even though we have not explored this issue at length, preliminary analysis suggests that such a procedure would lead to the use of such announcement by the principal and it is unlikely that both types (benevolent and non-benevolent) can be fully separated in equilibrium.

Note 2- Even though welfare goes up, the firm is better off. Welfare goes up because transfers to both types (more importantly S2) go down. But the firm collects the rent with a greater probability.

4.2 Activism in the Collusion case

Activism can arise in the collusion case as well. Suppose the principal makes no incentive payments to the supervisors and allows some collusion to take place. It is clear that all the non-benevolent supervisors will collude with the firm and always report φ, whenever $\sigma = \Delta\theta$. The benevolent supervisors will always report truthfully. Now consider the case where S1 can choose the activist technology. In that case, the principal can condition its transfers to the firm on reports r_1, r_2 and z_2. More specifically, let $t(r_1, r_2, z_2)$ be given by

$$t(\varphi,\varphi,\varphi) = \bar{\theta} \ , \ t(\varphi,\Delta\theta,\varphi) = t(\Delta\theta,\varphi,\varphi) = t(\varphi,\varphi,\Delta\theta) = \hat{\theta} \ , \ t(\Delta\theta,\varphi,\Delta\theta) = t(\Delta\theta,\Delta\theta,\varphi) = \underline{\theta} \ .$$

This means that the non-benevolent S2 can collude with the firm less often. If S1 is benevolent and successfully observes $\mu = \Delta\theta$, then the firm does not gain anything by colluding and the principal does not have to leave excess rent to the firm ($\Delta\theta$). Since benevolent S2 will report truthfully in any case, activist reporting by S1 is valuable to the principal to the extent S2 is non-benevolent. Hence benevolent S1 will choose the activist technology only when δ_2 is low. We can state this as a corollary to Proposition 2.

---

[26] We can consider an intermediate case where report of $z = \Delta\theta$ would fetch some receipts but lower than $k\Delta\theta$. But that is not consistent with our interpretation of tasks and pure privileges.

Corollary 3: *Suppose the original constitution has no provision for incentive payments for prevention of collusion. Activism (by benevolent S1) is more likely if fraction of non-benevolent S2 is high.*

4.3 Excessive Activism

Even though we considered the asymmetric case with one supervisor having access to privileges and activist information technology, it is clear that an extension to the symmetric case is quite straightforward. In some sense, most constitutions will allow for some form limited activism of the kind we have discussed above. However, the key to the previous analysis is the fact that the non-benevolent supervisors continue to use the ζ-technology. This however need not be the case.

Suppose a non-benevolent S1 chooses the ρ-technology and $\mu_2 = \Delta\theta$. If S2 is benevolent, S1 receives no payment. However, if S2 is non-benevolent, then we have a situation where S1's observation can fetch some returns to S1. S2 can get $k\Delta\theta$ by reporting $r_2 = \Delta\theta$ only when S1 reports $z_2 = \varphi$. Hence there is scope for collusion between S1 and S2 in this case.

Earlier, we assumed that the parameter k was always less than 1 because of the presence of transaction cost associated with collusion between the firm and the supervisor. One possible explanation for this transaction cost relates to the probable detection of the firm's type at some stage. If θ_j were to be discovered, then the principal can investigate and find out that bribery took place between the firm and supervisor j. If we continue with this interpretation, then collusion between the two supervisors will have no such transaction cost when $z_2 = \varphi$ and $r_2 = \Delta\theta$. On the other hand, if there is a cost associated with any side transfer (transfers other than stipulated by the principal), then there will be a transaction cost associated with this collusion as well.

Before we discuss the possible outcomes, we can rule out certain other outcomes. Consider the state where both S1 and S2 are non-benevolent and $\sigma_2 = \mu_2 = \Delta\theta$. It will never be the case that both S1 and S2 will report truthfully and receive nothing. By colluding there is a gain of $k\Delta\theta$ to be shared. Similarly, it is not possible that only the firm and S2 will collude, because such collusion will not generate any gain for them if S1 reports $z_2 = \Delta\theta$. Following such a report, the principal would implement the optimal transfer to the firm based on $\theta_2 = \Delta\theta$. Hence the following two outcomes are possible.

Case 1: First, S1 receives a side transfer from S2 to report $z_2 = \phi$ and S2 reports $r_2 = \Delta\theta$. The principal receives the information and can implement the optimal transfer as in the case where only S2 could observe σ_2. Assuming equal bargaining powers and no transaction cost, both will receive $k\Delta\theta/2$. Hence there is no welfare loss as such in this state, except that overall welfare might go down because of the information loss about θ_1.

Case 2: However, this assumes that side transfers are possible between supervisors and the supervisors can collude leaving the firm out. Since firm has all the information about S1 and S2, such a case does not seem very plausible. There is always some scope for the firm to leak the information regarding the collusion between the two supervisors. Suppose the supervisors recognise this and discount their total gain from collusion by some parameter $k_s < 1$. In that case, we could have collusion between S1, S2 and the firm. Then, both supervisors will report ϕ and receive payments from the firm. For simplicity we assume that the supervisors still have all the bargaining power and they receive $\Delta\theta/2$ each[27]. In this case, there is welfare loss because the principal does not receive the information. Both cases are fine so far as our main result is concerned.

This raises the prospect of non-benevolent supervisors opting for the ρ-technology. We shall refer to it as *excessive activism* and denote welfare as W^A. We continue with the asymmetric case where only S1 has access to the activist technology.

Proposition 4: A rise in the proportion of non-benevolent supervisors (lowering of δ_2) would result in excessive activism. Welfare under excessive activism is lower than the welfare under complete separation and no collusion ($W^A < W^{NC}$).

Proof: The non-benevolent S1 gains in the state where $\sigma_2 = \Delta\theta$, $\mu_2 = \Delta\theta$ and S2 is non-benevolent. Such a state occurs with probability $(\upsilon\zeta)\beta(1-\delta_2)$. Given our assumption of equal split between the two supervisors, the gain to S1 will be $k\Delta\theta/2$ in this state. In any other state, there is no gain for S1 (compared to the ζ-technology). Rather S1 will loose an amount $\upsilon(\zeta-\rho)k\Delta\theta$ due to the reduced probability of observing θ_1. Hence the non-benevolent S1 will choose the ρ-technology if and only if

(11) $\upsilon(\zeta-\rho)k\Delta\theta \leq (\upsilon\zeta)\beta(1-\delta_2)k\Delta\theta/2$

---

[27] Alternatively we could assume that each receive one third of the total. Modelling the three-way collusion will take us beyond the scope of the present paper.

or, $\quad \delta_2 \leq 1 - \dfrac{2(\zeta - \rho)}{\beta\zeta} = \delta^A.$

Hence a non-benevolent supervisor S1 will find it optimal to choose the ρ-technology whenever it faces too many non-benevolent supervisors (S2)[28]. *This suggests that as corruption rises in one institution, it leads corrupt supervisors in the other institution to be activist to get a share in the rent.*

The welfare implications are easy to see. Recall that in our previous analysis of limited activism, benevolent S1's strategy did not depend on non-benevolent S1's strategy. We can continue to assume that condition (10) is satisfied and the benevolent S1 also chooses the activist technology[29]. For welfare comparisons, we only need to look at the welfare changes which follow from the non-benevolent supervisor's choice of the activist technology.

As in Proposition 2, S1 reports $\Delta\theta$ with smaller probability and the welfare loss due to this will be $\upsilon(\zeta-\rho) \Delta\theta(1-k)(1+\lambda)$. On the other hand, the gain depends on the nature of collusion between S1 and S2 (case 1 and 2).

Case 1: The principal does not gain anything from the activism of the non-benevolent S1 whenever S2 is also non-benevolent. However, when S2 is benevolent and S1 is non-benevolent, the principal saves on the transfer to S2 because there is no collusion between benevolent and non-benevolent supervisors. So the gain under excessive activism compared to the no activism case is given by

(12) $\quad \delta_1(\upsilon\zeta)\beta k\Delta\theta(1+\lambda) + \delta_2(1-\delta_1)(\upsilon\zeta)\beta k\Delta\theta(1+\lambda) < (\upsilon\zeta)\beta k\Delta\theta(1+\lambda)$

Hence welfare goes down compared to W^{NC} if and only if

(13) $\quad \upsilon(\zeta-\rho) \Delta\theta(1-k)(1+\lambda) > \delta_1(\upsilon\zeta)\beta k\Delta\theta(1+\lambda) + \delta_2(1-\delta_1)(\upsilon\zeta)\beta k\Delta\theta(1+\lambda)$

The above condition can be satisfied even if condition (10) holds, $(\upsilon\zeta)\beta k\Delta\theta(1+\lambda) \geq \upsilon(\zeta-\rho)$ $\Delta\theta(1-k)(1+\lambda)$. Recall that condition (10) implies that $W^{LA} > W^{NC}$; hence limited activism can raise welfare but excessive activism can lower it at the same time.

---

[28] Using the earlier example, $\delta^A = 0.58$. If at leaf half of S2 are non-benevolent, then excessive activism will arise.

[29] It is however possible that for very low values of δ_2 and low k, we can get a situation where benevolent S1 will not choose the activist technology but the non-benevolent one will. For example this is true for $\zeta = 0.8$, $\rho = 0.7$, $\beta = 0.6$, $k = 1/6$ and $\delta = \frac{1}{2}$. However, such a situation will not arise because the principal will never have the provision of privileges and hence there will be no scope for activism.

Case 2: In this case, non-benevolent S1 and S2 collude with the firm whenever $\mu_2 = \Delta\theta$ and $\sigma_2 = \Delta\theta$. This happens with probability $(1-\delta_1)(1-\delta_2)\beta(\upsilon\zeta)$. The loss to the principal in this state would be $\Delta\theta(1-k)$. Hence the gain to the principal is now smaller compared to case 1. The right hand side of inequality (13) will now be lower. Welfare is lower compared to W^{NC} if

(14) $\upsilon(\zeta-\rho) \Delta\theta(1-k)(1+\lambda)$

$> \delta_1(\upsilon\zeta)\beta k\Delta\theta(1+\lambda) + \delta_2(1-\delta_1)(\upsilon\zeta)\beta k\Delta\theta(1+\lambda) - (1-\delta_1)(1-\delta_2)\beta(\upsilon\zeta) \Delta\theta(1-k)$

Clearly, (14) and (10) and (11) can all be true simultaneously. That would mean that excessive activism is the outcome and it reduces welfare. This is despite the fact limited activism was welfare improving[30].

(QED)

Inequality (11) is likely to hold for low values of δ. This suggest that as corruption increases and there are more non-benevolent supervisors, *activism is no more limited to the benevolent and it is no more welfare improving*. In some sense the creation of privileges leads to its misuse and the benefit gets reversed.

5: Activism by Multiple Institutions

In this section, we shall consider the symmetric case with both S1 and S2 having access to the activist technology and privileges. Recall that S1 reports z_2 about σ_2 and S2 reports z_1 about σ_1. The transfer payments $t(r_1,r_2)$, $s_j(r_j,z_i)$ are same as before. For the firm, $t(\varphi,\varphi) = \bar{\theta}$, $t(\varphi,\Delta\theta) = t(\Delta\theta,\varphi) = \hat{\theta}$ and $t(\Delta\theta,\Delta\theta) = \underline{\theta}$. For the supervisors, $s_1(z_2 = \Delta\theta) = 0$, $s_1(z_2 = \varphi, r_1= \Delta\theta) = k\Delta\theta$ and $s_2(z_1 = \Delta\theta) = 0$, $s_2(z_1 = \varphi, r_2 = \Delta\theta) = k\Delta\theta$.

So far as limited activism is concerned, this does not alter the basic analysis too much. The net benefit of limited activism decreases if the other supervisor is also an activist[31]. If $(\zeta-\rho)$ is not very large, benevolent supervisors from both institutions (S1 and S2) will

---

[30] Since welfare goes down, will the benevolent supervisors choose the ρ-technology? The answer is yes, because their choice of ζ-technology would lead to a further reduction. The proposition will be reinforced if only the non-benevolent chooses the ρ-technology and the benevolents do not.

[31] The condition for benevolent S1 to choose activist technology when S2 (both benevolent and non-benevolent) chooses to be activist will be $\rho k\beta > (\zeta-\rho)(1-k)$ instead of (9).

choose to be activist and this raises welfare. However, excessive activism is more likely when both the institutions have access to activist technology and privileges.

Excessive activism can materialize even when condition (11) is not satisfied. Notice that condition (11) makes the choice of ρ-technology a dominant strategy for the non-benevolent supervisor (irrespective of what other supervisor does). In a symmetric case, where S2 also has access to such technology we can get excessive activism as a Nash equilibrium. To see this, suppose S2 chooses the ρ-technology. Consider the state where $\sigma_1 = \Delta\theta$; unlike the asymmetric case of the previous section, now S1 is not guaranteed $k\Delta\theta$. If S2 is non-benevolent S1 gets $k\Delta\theta$ with probability $(1-\beta)$ and $k\Delta\theta/2$ (assuming equal split) with probability β. If S2 is benevolent, S1 gets nothing with probability β. This means S1's expected income from its own task is now considerably lower because of S2's activism. Hence in switching from ζ- technology to ρ-technology, its loss is also lower. *Activism by one institution affects the incentives of other institutions as well; this can lead to the spread of activist policy.*

Consider first the case where only benevolent S2 is activist. It is clear that benevolent S1 is also an activist. For the non-benevolent S1, the loss from switching to an activist policy would be $\upsilon(\zeta-\rho)k\Delta\theta (1-\delta_2\beta)$. This is certainly less than the potential loss $(\upsilon(\zeta-\rho)k\Delta\theta)$ it faced when S2 was not an activist. On the other hand its gain from activism remains the same. The benefit from activism is realized only from the non-benevolent S2 who continues to choose the ζ-technology. Hence the non-benevolent S1 will choose to be an activist if and only if

(15) $\upsilon(\zeta-\rho)k\Delta\theta (1-\delta_2\beta) \leq (\upsilon\zeta)\beta(1-\delta_2)k\Delta\theta/2$

Since the r.h.s. of (15) is same as r.h.s of (11) and the l.h.s of (15) is smaller, this inequality (15) will be satisfied whenever (11) is satisfied but not vice versa. Hence we can have a situation where (15) holds but (11) does not hold.

In fact, the non-benevolent S1's incentive to choose the activist technology remains unchanged if the non-benevolent S2, in addition to the benevolent S2, also chooses the activist technology. Whenever, non-benevolent S2 discovers μ_1, non-benevolent S1 has to pay half of its transfer. Hence the expected income from own task, hence the loss from switching from ζ-technology to ρ-technology is reduced further. On the other hand the expected rent from activism also goes down if non-benevolent S2 choose the ρ-

technology. Recall that benefits of activism is always conditional on the realisation of σ. In fact its loss will be $\upsilon(\zeta-\rho)k\Delta\theta\ (1-\beta) + \upsilon(\zeta-\rho)(1-\delta_2)\beta k\Delta\theta/2$. On the other hand its gain is given by $(\upsilon\rho)\beta(1-\delta_2)k\Delta\theta/2$. Hence, given S2's choice ρ-technology, S1 will choose ρ-technology if and only if

(16) $\qquad \upsilon(\zeta-\rho)k\Delta\theta\ (1-\beta) + \upsilon(\zeta-\rho)(1-\delta_2)\beta k\Delta\theta/2 \le (\upsilon\rho)\beta(1-\delta_2)k\Delta\theta/2$

or, $\qquad \delta_2 \le 1- \dfrac{(1-\beta)(\zeta-\rho)}{\beta(\rho-\zeta/2)} = \delta^N$

Comparing with previous conditions, it is clear that (15) and (16) are equivalent and these are implied by (11).

For example, let $\zeta = 0.8$, $\rho = 0.7$, $\beta = 0.5$. A non-benevolent S1 chooses the activist technology even when S2 stays with the ζ-technology if $\delta_2 < 1/2$. When faced with a completely activist S2 or only benevolent activist S2, the non-benevolent S1 will choose activist technology if $\delta_2 < 2/3$. Whenever, $1/2 < \delta_2 < 2/3$, non-benevolent S1 will choose activist technology only when benevolent S2 also chooses to be activist. Since excessive activism can be welfare reducing, this introduces a trade off between *encouraging limited activism by more than one institutions and avoiding excessive activism*. We can summarise this in the following proposition.

Proposition 5: *When both the institutions are granted activist privileges, some form of excessive activism can arise. In such situations, the principal might prefer to withdraw the privileges of one institution. In addition, the institution with such activist privileges might be the one with fewer benevolent supervisors.*

Proof: Consider the previous example with $\zeta = 0.8$, $\rho = 0.7$, $\beta = 0.5$, $\delta_2 = 0.6$ and $k = 1/3$. Suppose both supervisors have access to the activist technology and both have the privilege to report on the other's signal. For this set of parameter values, the benevolent supervisors (both S1 and S2) will always choose the activist technology irrespective of whether other non-benevolent supervisors choose to be activist or not. Now consider the non-benevolent S1's choice of technology. Following the discussion of the previous paragraph, for $\delta_1 < 2/3$, non-benevolent S1 will also choose to be activist. Hence we have an excessive activism outcome. On the other hand, by withdrawing privileges for S2 (or

S1 if $\delta_1 > 1/2$), we have an outcome where only the benevolent S1 will choose the activist technology.

Suppose δ_1 is very low, say $\delta_1 = 0.4$. This means that in the symmetric privileges case, both S1 and S2 are completely activist. By withdrawing S2's privileges, activism is confined to only benevolent S1. The principal loses the benefit from benevolent S2's activism but gains in terms preventing ungainly activism by non-benevolent S1 and S2. While evaluating non-benevolent supervisor's activism, we assume that case 1 of proposition 3 holds. Let W^S and W^{AS} refer to the welfare under symmetric (complete excessive activism) and asymmetric (limited activism by benevolent S1) cases respectively. It can be shown that

$W^{AS} - W^S = \delta_1(\zeta-\rho)\upsilon\beta k\Delta\theta + \upsilon(\zeta-\rho)\Delta\theta(1-k) + (1-\delta_1)(\zeta-\rho)\upsilon\Delta\theta(1-k) - \upsilon\rho\beta k\Delta\theta(\delta_2+(1-\delta_2)\delta_1) - (1-\delta_1)\delta_2\upsilon\rho\beta k\Delta\theta$.

The last two terms refer to the benefits of activism by S2 and non-benevolent S1. The second and third terms refer to the cost of (in terms of information loss) activism by S2 and non-benevolent S1. The first term refers to the excess benefit to benevolent S1's activism because of the change in S2's technology. It is easy to check that for the parameter values and $\delta_1 = 0.4$, $W^{AS} > W^S$. Hence, the principal is better off withdrawing S2's privileges.

Note that, since $\delta_1 < 0.5$, the non-benevolent S2 will always choose to be activist irrespective of whether S1 is activist or not. Hence in this case if the principal has to grant privileges to only one of the institutions, it has to be S1. Granting privileges to S2 will lead to activism by non-benevolent S2 as well. Let W_1 and W_2 denote the welfare under privileges to S1 and S2 respectively. Essentially we are comparing the net benefits of limited activism by S1 and net benefits of excessive activism[32] by S2. Since the fraction of benevolent S1 is lower, the benefit of limited activism is also lower. On the other hand, benefit of limited activism by S2 is higher but it comes with activism by the non-benevolent S2, which reduces the net benefits. It can be checked[33] that for the parameter

---

[32] Note that this is not in conflict with proposition 3. Net benefits of excessive activism need not always be negative. Since δ_2 is high, excessive activism by S2 is worse than limited activism by S2 but it is better than no activism.

[33] $W_1 - W_2 = \delta_1\upsilon\Delta\theta(1+\lambda)\{\zeta\beta k - (\zeta-\rho)(1-k)\} - \upsilon\Delta\theta(1+\lambda)\{\delta_2\zeta\beta k + (1-\delta_2)\delta_1\zeta\beta k - (\zeta-\rho)(1-k)\} > 0$

values given in this example, $W_1 > W_2$. Hence the institution with fewer benevolent supervisors is granted the privileges.

[QED]

For very low values of δ $(\delta \leq \delta^A)$, excessive activism is the only equilibrium. Similarly, for relatively high values of δ $(\delta > \delta^N)$, limited activism is the only equilibrium. In the intermediate range (like the example in the proposition) a mixture is possible. In sum, we can conclude that as corruption rises and there are more non-benevolent supervisors, excessive activism seems more likely.

6. Conclusion

Our analysis shows that activism can be good but it can also spread itself and result in welfare loss. Given the specialised nature of our model, the propositions have to be viewed with some reservations. But the general message can be applied to various situations. In the light of our discussion (section 2) of judicial activism, it can be said that the failure of other institutions like the Parliament and the government machinery has led to activist policy by the judiciary. This would be in line with our Corollary 3. In that sense, the role of judiciary has been laudable. However, this has led to a general perception that judiciary is supposed to play such an active role on a regular basis. Rather than focusing on how to improve working of other institutions, focus has shifted how to enlarge the scope of judicial activism. This is a worrying trend and at some point will undermine the basic separation of powers. Moreover, there is no reason to believe that judiciary is and will be seeking to maxmise social welfare. As our model shows, when such benevolence is in short supply, the result will be excessive activism (Proposition 4). Judicial activism can encourage other institutions to be activist as well (Proposition 5). Political interference in the judicial process is a case such activism in this context.

We have considered the case where collusion prevention cost plays a crucial role. This presumes that benevolence level is not very high to begin with (Proposition 1). One could have the opposite situation where only a small fraction is non-benevolent and then there would be no need to have any incentive payment. In this case, activism is still possible but can never be excessive (since δ is very high). But this is precisely the situation where benefit of activism is not very high (Corollary 3). This suggests that issues related to

activism are likely to be of greater importance to developing economies where corruption levels are high.

It would be interesting to take a broader perspective and consider all kinds of activism. This would include study of activist groups, non-governmental organizations[34]. We hope to pursue this in future.

References:

Ahuja, Sangeeta (1997) *People, Law and Justice* Vols. I and II, New Delhi, Orient Longman

Allan, James (1997)'The Rise of Judicial Activism in New Zealand', *Agenda* 4, 465-74.

Anant, T.C.A and J. Singh, (2002) 'An Economic Analysis of Judicial Activism', mimeo, Delhi School of Economics, Delhi.

Baxi, Upendra (1985) 'Taking Suffering Seriously: Social Action Litigation in the Supreme Court of India' in Dhavan, Sudarshan, and Khursid (ed.) *Judges and Judicial Power* Bombay, Sweet and Maxwell - Tripathi

Besley, T. and M. Ghatak, (2001) 'Government versus Private Ownership of Public Goods' *Quarterly Journal of Economics,* 116, 1343-72.

Calabresi, Guido and Douglas A. Melamed (1972)'Property Rules, Liability Rules and Inalienability: One View of the Cathedral' 85 *Harvard Law Review* 1089-1128

Kaplow, Louis and Steven Shavell (1996)'Property Rules versus Liability Rules: An Economic Analysis' 109 *Harvard Law Review* 713-90

Laffont, Jean-Jacques (2000) *Incentives and Political Economy* Oxford, Oxford University Press

Laffont, Jean-Jacques and Mathieu Meleu (2001) 'Separation of Powers and Development' *Journal of Development Economics* 64,129-145

Laffont, J-J and D. Martimort (1999) 'Separation of regulators against collusive behaviour' *Rand Journal of Economics*, 30, 232-262.

Lens, V (2001) 'The Supreme Court, federalism, and Social Policy: The New Judicial Activism' *Social Service Review*, 75, 318-36.

---

[34] Besley and Ghatak (2001) have addressed the issue of NGOs in a recent work, though their focus is on the private-public nature of the relationship.

Maskin, E., and J. Tirole (2001) 'The Politician and the Judge: Accountability in Government', mimeo.

Mishra, Ajit (2002) 'Hierarchies, Incentives and Collusion' *Journal of Economic Behavior & Organization* 47, 165-178.

Pundir, B.P (2002) 'The CNG Vehicle Programme in Delhi' in 3i Network (ed.) *India Infrastructure Report 2002* New Delhi, Oxford University Press

Sathe, S.P. (2002) *Judicial Activism in India* New Delhi, Oxford University Press

Segal, Jeffrey A. (1996) 'Separation-of-powers Games in the Positive Theory of Congress and Courts' 91 *The American Political Science Review* 28-44

Tirole, Jean (1992) 'Collusion and the Theory of Organizations' *Advances in Economic Theory*, J.J. Laffont (ed.), Cambridge, Cambridge University Press.

.