Trust and the Growth of Government

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An important part of post–World War II economic history is the growth of government. In the United States, much of this growth has taken the form of an increased scope of federal involvement in the economy via income redistribution programs and in regulatory activity. However, it has been accompanied by a large decline in trust of government. Pew Research Center (2010) reports that respondents who indicate that they trust government "most of the time" or "just about always" fell from 76.6 percent in 1966 to 21.5 percent in 2010.[1] A good deal of anecdotal evidence is consistent with the simultaneous growth in and mistrust of government (e.g., see Lewis 2010, who discusses the decline of trust and civic life in Greece as government has grown).

The decline in the public's trust of government, given its increased importance in society, has caused great unease among many

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[1]Many more details are in Pew Research Center (2010). For other discussions of trends in measures of trust in government for the United States, see Nye, Zelikow, and King (1997) and Hunter and Bowman (1996).

commentators. A concern often raised is that trust is an important aspect of social capital and its decline may detract from the performance of government, as well as in the ease and efficacy of economic and social interactions. Moreover, the simultaneous growth in government and deterioration in trust in government presents something of a paradox: How does a mistrusted institution grow and become so large? This article develops a framework to understand this paradox as well as related issues.

To do so, we utilize key findings in the economics, psychology, and experimental literatures that illuminate the interrelationships among trust in government, productivity, rent seeking, and government growth. A good deal has been written about each of these phenomena separately—and the fundamentals that underlie them—and this has produced a number of important findings. We bring many of these findings together in a unifying framework regarding trust, reciprocity, and cooperation; social capital and productivity; and rent seeking and political economy/public choice to understand equilibria and interactions among them.

A basic outcome from our modeling is the mutual dependence of the public's mistrust in government and the extent of political/rent-seeking activity fostered by government. It seems straightforward that trust in government is a declining function of government actions that generate rent seeking and reward special interests—and indeed this is an aspect of our model. However, a less apparent implication is the feedback mechanism that generates greater rent seeking as the degree of mistrustfulness grows; essentially, the returns to rent seeking are relatively higher in a mistrustful environment. It is this feedback effect that leads to a situation where government growth and mistrust might perpetuate one another. Thus, an initial small change in government policy that encourages rent seeking can produce mistrust and multiply itself, leading to further growth in government activity and mounting mistrust. This may help provide an explanation of the historical comovement of government size and mistrust in government.

Good government activity also occurs and we incorporate it into our model. However, it is simply not plausible for government growth to be regarded as predominantly good while leading to less trust in government. Thus, much of our focus is on government action that fosters rent seeking/political activity and rewards interest groups.

Extensions of our basic model also contribute to models of Leviathan, i.e., how government growth may sustain itself and rarely reverse. Important frameworks in this regard are developed by Higgs (1987), Olson (1982), and Caplan (2003), but ours brings in the role of the public's trust in government. In particular, a version of our model has two equilibria—where one equilibrium is good, with high trust and low rent seeking, and another is bad, with the converse—in which an economy can become trapped in a big government/high rent-seeking/low trust equilibrium. Once policies are adopted that move the economy from the former to the latter equilibrium, moving back is difficult. A return to the original policies is insufficient; the economy remains in a bad equilibrium. There is a "trust trap" that impedes a reversal in the growth of rent-seeking government and the decline in trust.

The article begins with a review of the literature indicating the importance of citizen trust and cooperation with government in order that the latter may function effectively. Many functions of good government—such as property rights and contract enforcement, general law enforcement, and dealing with externalities—raise productivity, and a cooperative public enhances and enables this to occur. This relates to ideas regarding the importance of social capital. Another strand of the literature considers several key findings in the trust and reciprocity research. Generally speaking, individuals are more likely to be cooperative with other individuals or institutions if they are perceived to be acting in a fair manner and/or are a legitimate authority. Trust and cooperation decline with the extent of rent seeking that the government encourages.

Next, we present a model based on the above findings as well as on a political economy/public choice–style model of politicians. In particular, we model government/politicians as self-interested individuals who find it in their interests to reward rent seeking/lobbying activity. Formally, the approach is comparable to that of Grossman and Helpman (1994) regarding trade protection where special interest groups end up being disproportionately favored. Similar to that article, our framework has politicians that may offer favors in return for political support. This distorts citizen effort away from productive activity in the private sector toward political/rent-seeking activity. The latter results in welfare costs and generates mistrust and a growing government necessary to support the rent seeking. Mistrust, in turn, erodes cooperation and social capital, lowers productivity, and

induces a substitution away from productive activity and toward rent seeking. More welfare-reducing government activity ensues, followed by another round of erosion of trust. Thus, we have the mutual reinforcement of government growth and mistrust.

After formulating our basic model, we provide details regarding the subsequent rounds of declining trust and increased rent seeking. The mutual dependence of trust and political activity/rent seeking has similarities to other articles that model the codetermination of attitudes and economic outcomes.[2] Our framework, however, explicitly brings the behavioral/experimental literature into rent-seeking models to understand broad patterns of trust and government activity.

Next, we present a model with two equilibria and show how a "trust trap" can emerge where once the economy moves to the low trust, high rent-seeking equilibrium, it cannot easily move back. The final section offers some concluding thoughts.

Background and Supporting Literature

This section provides discussion of some general background literature, related models on the codetermination of trust and political activity, as well as literature specific to trust, reciprocity, and cooperation that are foundational to our model.

Some General Background

The ideas of trust and cooperation are closely linked to social capital, culture, and attitudes. There is large literature with many studies showing their importance to economic outcomes. For example, Knack and Keefer (1997) show that cross-country measures of trust are positively related to GDP growth and investment. Guiso, Sapienza, and Zingales (2006) show that differences in cultural attitudes translate into differences in entrepreneurship and savings. Greif (1994) contrasts the culture and practices of the Maghribi traders and the Genoese merchants, especially regarding contract enforcement, and suggests that these led to different growth rates. At a perhaps more fundamental level, Rosenberg and Birdzell (1986) maintain that the development of a moral system consistent with capitalism was an important ingredient to the growth of the

[2]See Clark and Lee (2001a, 2001b), Francois and Zabojnik (2005), Tabellini (2008), and Aghion et al. (2010).

Western world. McCloskey (2010, 2015) argues that favorable attitudes toward the bourgeoisie and civic virtue are much more important than previously thought.

Related Models

The mutual dependence of trust and political activity/rent seeking has similarities to other papers that model the codetermination of attitudes and economic outcomes. For example, Francois and Zabojnik (2005) discuss contract enforcement through kin and clan or through external methods (e.g., government). Tabellini (2008) is similar in this regard. In their models, parents "invest" in the honesty of their children based on expected success, where the degree of honesty in the populace and GDP are mutually dependent. Other notable papers that relate closely to our approach include Clark and Lee (2001a, 2001b). They emphasize that, while trust is important for government to function, the trust of the public is earned by good performance of the government, and they model this simultaneous relationship—that trust enables government action, but government action affects the degree of trust. This mutual relationship is evidently believed to be an important one and has been noted in the nonacademic literature. Galston and Kamarck (2008), in trying to revitalize progressive government, write, "Change you can believe in needs a government you can trust."

In another closely related paper, Aghion et al. (2010) consider cross-country correlations of trust in government with government regulation. They find that governments that have heavy regulation, are the least trusted. In their article, there are two equilibria: a good one is where most people become civic and vote for little regulation, and a bad one is where they are not civic and vote for heavy regulation. In their model, heavy regulation reduces productivity but it is better than light regulation of an uncivil populace. In a cross-country sample with a mix of good and bad equilibria, one will find more government regulation coinciding with less trust. While similar to our model in the sense that certain behaviors are mutually reinforcing, the approach and focus are different.

Good Government, Trust, and Productivity

There are a number of functions of government that most agree are value increasing. These include establishing and enforcing

property rights and other personal rights, maintaining good contract law, promoting competition, and dealing with public goods and externalities. While these may raise value for several reasons, one reason is that they raise productivity. Better courts, clear property rights, low contracting costs, and a better public infrastructure raise productivity by, for example, enabling less time and effort to be devoted to private contract enforcement and property protection.[3]

Related to this, there is work regarding the importance of public cooperation in enabling government initiatives to be effective. This work is part of a larger literature illustrating many interrelated aspects of trust and cooperation, as well as with trust in government and the perceived legitimacy of government. In broad terms, it shows that legitimacy engenders more trust which, in turn, tends to induce cooperation.

Scholars in economics, political science, and psychology have contributed to this literature in the past couple of decades. We do not attempt to summarize this literature. However, in this subsection (and the next), we review several of the central ideas that are pertinent to our article.

Numerous people have argued that the public's trust in government is important. Benjamin Franklin (1787) is quoted as saying, "Much of the strength and efficiency of any government in procuring and securing happiness to the people, depends, on opinion, on the general opinion of the goodness of our government, as well as the wisdom and integrity of its governors."[4] This view evidently is shared by many—the secular decline in measures of trust in numerous democratic governments around the world spawned a great deal of unease and study by political scientists.[5] Moreover, Brennan and Buchanan (1984, 1988) express concern that the approach to modeling government adopted in the public choice literature may be detrimental to having favorable views of government and may erode trust in it.

[3]Though these aspects of government are productivity enhancing, they may have other positive effects on utility.

[4]Also see a related quote by Abraham Lincoln (1858): "With public sentiment, nothing can fail; without it, nothing can succeed. Consequently he who molds public sentiment goes deeper than he who enacts statutes or pronounces decisions. He makes statutes and decisions possible or impossible to be executed."

[5]Some examples are Nye, Zelikow, and King (1997), Hunter and Bowman (1996), Warren (1999), Dalton (2004), Blind (2006), Hetherington (2005), and Pharr and Putnam (2000).

A variety of reasons are given for the importance of trust in and cooperation with government. Many have to do with cooperation and involvement in the political process and civic activities (e.g., jury service, voting, volunteering, involvement in political campaigns, membership in political groups, and willingness to work for the government). The argument is that cooperation of the above type helps government run more effectively. Other arguments suggest that trust in government is important to attain honest tax reporting and voluntary compliance with laws.[6] Governing is seen as being less costly and more effective with citizen cooperation.

An equivalent way to view this is to consider that trust in and cooperation with government enables and augments the productivity-enhancing effects of the functions of government noted above. Consider some examples of how this might work. Voluntary compliance with the known and accepted parameters of contract and property law limits disputes. This saves on transaction costs and enables resources to be utilized elsewhere. Similarly, cooperation with infrastructure projects, by refraining from challenging rights-of-way and engaging in other legal impediments, saves resources. Cooperation with police investigations makes it much easier to enforce laws and improves property rights. These cooperative attitudes enable government to work more easily and effectively and raise private-sector productivity.[7]

Why Is There Trust and Cooperation?

In the above context, trust in and cooperation with government is much like a public good, with the former raising aggregate social productivity. Thus, one might expect the consequent free-rider problem, so it is natural to ask how cooperative attitudes arise in this setting. A great deal of work has been done in experimental labs trying to understand issues of trust, reciprocity, and cooperation. It is repeatedly verified in a variety of laboratory settings that people engage in some degree of reciprocal behavior—for example, trusting and

[6]Many of these arguments are implicit in the works cited in the previous footnote. More specifics are offered in Nye (1997) and Dalton (2004).

[7]There is a related and broad literature on social capital that discusses norms that assist in social cooperation. These can raise value in the private sector, in both commercial and noncommercial settings, by reducing transactions costs and utilizing embedded knowledge. For a short summary, see Fukuyama (2000).

cooperation or withdrawal of trust and punishment. These results hold in one-shot prisoners' dilemma games where the dominant strategy, from the perspective of narrow self-interest, is to neither cooperate nor punish. Such findings strongly suggest that behavior is in part determined by perceived fairness, i.e., "fair" behavior by the other party is rewarded and "unfair" actions are punished.[8] Additionally, trust and cooperation are intertwined, with greater trust inducing more cooperation.

Fehr and Gachter (2000) suggest that the pattern of behavior shown in these experiments relates to how social norms might evolve or that the social norms in place affect the degree of cooperation. Regarding the latter, Henrich et al. (2001) report on findings from prisoners' dilemma games in various small societies. They find that that cross-societal variation in trust and reciprocity reflecting social norms helps explain the variation in cooperation. Similarly, Hayashi et al. (1999) indicate that "general trust" in the culture explains some of their experimental findings showing higher levels of cooperation in some societies.[9]

The experimental work deals with individual interactions, though many of these interactions are anonymous and so may help explain societal levels of trust and cooperation. The latter is the focus of the largely separate literature on trust in government discussed in the previous subsection. A subset of this separate literature discusses reasons for the decline in trust in government, both in the United States as well as other Western democracies. Various reasons are proposed, including the decline of the perceived effectiveness and legitimacy of government and affiliated public institutions.

For example, Blendon et al. (1997) note that the top four reasons given in a 1995 survey for mistrust of government are inefficiency/wasting money, spending on the wrong things, special interests being too influential, and the lack of integrity of politicians. Alesina and Warcziarg (2000) and Stevenson and Wolpers (2011)

[8]The literature on this topic is quite large. For a short and succinct summary of many of the issues and findings, see Fehr and Gachter (2000).

[9]Also, see Paldam (2009) for discussion and empirical work on the coevolution of economic development and generalized trust. Bjornskov (2006) also considers cross-country determinants of generalized trust.

find that better macroeconomic performance is associated with more trust in a country's government, presumably based on the idea that good government policy induces better economic performance. The former also suggest that greater welfare spending is associated with a polarized and dissatisfied electorate, especially by taxpayers and groups not favored by the programs. Pharr (2000) finds a negative relationship between misconduct by government officials and measures of trust in government in Japan. Likewise, Yamamura (2012) finds government size reduces trust among those likely to face the increased bureaucracy of larger government. These findings are also consistent with experimental studies on tax compliance. Andreoni, Erard, and Feinstein (1998) survey a number of studies that show participants are less tax compliant if they perceive tax dollars are wasted or believe that their taxes are unfair.

Psychologists have examined similar issues, and their literature has arrived at closely related findings. For example, Levi, Tyler, and Sacks (2008) consider why individuals comply with the law. They find cooperation is dependent on whether the state is viewed as an appropriate authority entitled to be obeyed. This, in turn, depends on whether the authority is judged to be competent, be fair, perform well, and be trustworthy.[10] In work extending these basic findings, Nadler's (2005) results show that noncompliance spreads beyond the perception of a particular law and also generates noncompliance regarding seemingly unrelated laws. Thus, perceived illegitimacy of one law reduces the willingness to comply with the law in general.[11]

Overall, these findings link to the idea of reciprocity and cooperation as a social norm and suggest that this norm is applied to government. If government is perceived to be effective, then this is reciprocated with trust and with cooperation. Conversely, if government is perceived to be ineffective, inefficient, or corrupt, this reciprocated with mistrust and noncooperation. The upshot is that individuals evidently gain utility through cooperation with persons or institutions that they judge as being worthy.

[10]Though this is a substantial literature, similar works in this vein are De Cremer and Tyler (2007) and Tyler (1990).

[11]Also see Mullen and Nadler (2008).

Rent Seeking, Trust and Cooperation, and Social Equilibrium

This section develops a model of trust, cooperation, and government that is built on the results of the foregoing literature, as well as on more traditional models of rent seeking. We begin with a basic model of rent seeking by individuals in order to gain government favors. We then augment it with consideration of good government and how the mix of good government and rent-seeking activity affects the perceived legitimacy of and cooperation with government. The social equilibrium of rent seeking, productivity, and cooperation is then shown.

Government Spending, Government Intervention, and the Market for Political Support

Governments have significant power in allocating resources and in providing favors and assistance to individuals and interest groups. These may be in the form of taxes and subsidies, spending programs, regulation, or other forms of intervention. Naturally, individuals and interest groups desire to obtain this government support. In our model, effort in providing political support is the mechanism by which interest groups obtain government assistance. Thus, we take a public choice–style approach where self-interested politicians may seek payment for provision of favors. In exchange for government funding and favors, members of interest groups supply effort in generating political support for the government officials and/or programs providing the funds and favors. In a broad sense, a wage is paid for units of political support provided. A related approach is that of Grossman and Helpman (1994) where interest groups bid for trade protection.

Political support comprises a whole set of things that help politicians get elected: campaign contributions and assistance in raising such funds; helping convince the public of the importance of particular government programs; promoting the "jobs generated" by the program and its help to the affected community, industry, and occupation; favorable mentions in the media; and general endorsements of programs and candidates.

Rent seeking and *lobbying* are terms related to this type of activity and can be interpreted in a similar light. For example, politicians may

be willing to protect an industry or occupation from competition, and interest groups engage in lobbying to obtain this protection. One of the ways they do so is to provide political support to the politician by, for example, suggesting compelling ways that can convince the public of the efficacy of the protection and/or disguise its harm. The lobbyists that do this most effectively are more likely to obtain government assistance. In this interpretation, rent seeking is not simply lobbying for favors; it is asking for favors with the quid pro quo of supplying political support.

The types of programs just described lower welfare and simply redistribute resources in inefficient ways. But not all government activities have negative welfare effects, nor are all recipients of government funding merely engaged in activities simply to make the program look good in the eyes of the voting public. Olson (2000) considers the conditions under which government has more "encompassing" interests and is less inclined to cater to special interests. Besley, Persson, and Sturm (2010) show that more politically competitive governments are more likely to follow policies that favor general interests. However, substantial amounts of government programs do fit the rent-seeking description and, in order for trust in government to fall as government grows, they must play a critical role. Thus, we model these vis-à-vis value-enhancing government spending.

Choice of Productive Work and Political Support

A building block of our complete model is a basic model of the representative individual who may supply effort toward productive activity or toward political support activity. While couched in terms of an individual, the unit of observation may be considered an organization or interest group with the same sort of decision to make: how much effort to devote to political support activity versus productive activity.

Let the following definitions hold:

h = effort in productive activity, e.g., hours of work
$(1-t)w$ = the after-tax return to productive activity, where t is the tax rate, though it may be an explicit or an implicit tax (e.g., unfavorable regulation)
s = effort in political support activity
r = the return to each unit of political support activity. This payoff may be in-kind returns and is assumed not to be subject to tax.

C (h, s) = the utility cost of effort. Assume that there is increasing marginal cost of each type of effort ($C_{ii} > 0$, I = h, s) and $C_{hs} > 0$.

In the basic model, let the individual's utility function be

$$(1)\quad U = (1-t)\,wh + rs - C(h, s)$$

so that total utility is simply after-tax income from work plus the payoff from political support effort less the utility cost of effort.[12]

The first-order conditions for the utility-maximizing choices of h and s are:

$$(2)\quad \partial U/\partial h = (1-t)\,w - C_h = 0$$

$$(3)\quad \partial U/\partial s = r - C_s = 0.$$

Each of these equations represents setting the marginal benefit of each type of effort equal to its marginal cost. As expected, when (1− t) w increases, h rises and s falls. Similarly, as r increases, s rises and h falls. An increase in the return to political support activity diverts effort toward that end and away from work effort. The converse holds for changes in the after-tax return to productive effort.

Aggregate political support is $S = \sum s_i$, where i indexes individuals. Total transfers due to political support activity are rS. As is well known, welfare is decreasing in this type of government activity since it generates only rent seeking and transfers of wealth.

Incorporating Good Government, Productivity, Trust and Cooperation

As noted above, there are a number of functions of government that most agree are value increasing, including establishing and enforcing property rights, maintaining good contract law, promoting competition, and dealing with public goods and externalities. Denote government spending and programs on these activities as G. In our framework, these are modeled as raising productivity. This is expressed in a simple way. Let w = w (G), with $w_G > 0$ (i.e., greater G raises the productivity of work effort).

[12]The terms in the utility function are analogous to the payoff function for any organization (i.e., there is an after-tax return to allocating resources to production), a return to allocating resources to political support, and a cost of each.

The literature reviewed previously indicates that citizen cooperation with government enhances the productivity-augmenting effect of G. To express this in our model, we consider a single representation of the aggregate level of trust of and cooperation with the government denoted by L. This aggregate cooperativeness is the summation of the cooperation of each individual ℓ_i so that $L = \sum \ell_i$. Let the effectiveness of the G in raising productivity be dependent on the aggregate level of trust and cooperativeness. This is expressed in the following way: $w = w(G, L)$, with $w_G > 0$, $w_L > 0$, and $w_{GL} > 0$. The latter cross-partial conveys that the marginal product of G is increased by L.

It is aggregate cooperation L that raises productivity, not individual cooperation ℓ_i. We noted above that standard models suggest that the free-rider problem entails a general lack of cooperation. This is because each individual's cooperation is infinitesimally small relative to that of the populace at large and has no effect on aggregate L. But the literature shows that notions of reciprocity and fairness indicate that individuals evidently gain utility through cooperation with persons or institutions that they judge as being worthy. This is incorporated into our model in the following way.

Assume that individuals attain utility from trust and cooperation from the single-peaked subutility function $\beta\ell_i - \varphi(\ell_i)$, where ℓ_i is individual trust in and cooperation with government, $\beta > 0$, and $\varphi' > 0$. The coefficient β determines the utility gain from cooperation, and $\varphi(\ell_i)$ is the utility cost of cooperation. Let $\beta = G/(G + rS)$, where G is good government and rS represents payments for political support. If all government programs are expenditure based, then this is simply the ratio of spending on good government to total government spending. If programs are not all expenditure based, then β represents the expenditure equivalent.

Trust and cooperation generate more utility if β is larger (i.e., for a government that devotes a larger share of its activities to G), and more cooperation is forthcoming. A high value of β—indicating more good government—is reciprocated with trust and cooperation. Governments that generate a larger share of political activity—lowering β—lower the utility from cooperation and are "punished" with reduced trust and cooperation.

Trust, Political Activity, and Social Equilibrium

Putting the foregoing together yields an individual's utility function as

$$(4)\quad U = (1-t)\,w\,(G, L)\,h + rS - C\,(h, s) + \beta\ell - \varphi\,(\ell).$$

The individual chooses h, s, and ℓ to maximize utility. The first-order conditions for the choices of h and s are as before. The choice of ℓ, assuming that each individual ℓ has an insignificantly small effect on aggregate L, is

$$(5)\quad \partial U/\partial\ell = \beta - \varphi'(\ell) = 0.$$

This implies that cooperation ℓ is an increasing function of β. Because the aggregate value of political support activity rS lowers β, cooperation declines with S (and increases with G).[13]

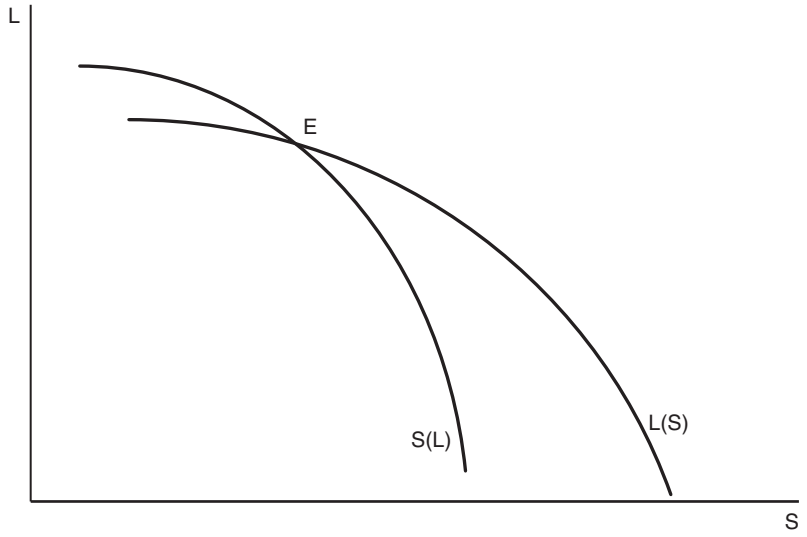
The results regarding the choices of h and s described above are hardly changed.[14] The only difference is that aggregate cooperation L affects h and s. The reason is that a higher L improves the effectiveness of G in raising productivity and a lower L does the opposite. A lower L means that private-sector activities are more costly to arrange and enforce, lowering the returns to productive effort. This induces less h and more s. This, along with the ℓ function, can be expressed as $h = h\,(L)$, $s = s\,(L)$, and $\ell = \ell\,(S)$, where $h' > 0$, $s' < 0$, and $\ell' < 0$, and where other arguments of the functions are suppressed.

In aggregate, $H = \sum h_i$, $S = \sum s_i$, and $L = \sum \ell_i$. This implies an aggregate mutual dependence between L and S, that is, $L = L\,(S)$ and $S = S\,(L)$. The total amount of cooperation is a negative function of political support activity, and political support activity is a negative function of aggregate trust and cooperation. The final equilibrium L and S require that these relationships hold simultaneously. This is illustrated in Figure 1. Point E in Figure 1 at the intersection of the L(S) and S(L) loci shows the social equilibrium. Stability of the equilibrium occurs when the relative slopes of the two loci are as shown.

[13]Consistent with the psychology literature, we assume that the individual chooses a level of cooperation that applies broadly and does not tailor his or her cooperation toward particular programs.

[14]The simplicity in this regard is due, in part, to the separable utility function used in the analysis.

FIGURE 1
The Equilibrium Levels of Cooperation and Political Activity



Government Behavior and Changing the Equilibrium: Growth in Government and Declining Trust

This section shows how the trust and rent-seeking equilibrium changes, resulting in a self-reinforcing cycle of greater rent seeking and less trust. We start by showing how greater powers for politicians to reward interest groups result in a higher return to rent-seeking activity. This, in turn, shifts the equilibrium.

The Politician's Choice of the Reward for Political Support

We suppose that an important motivation of politicians is that they seek to retain office, in part, for the benefits and perks of power.[15] Increasing the return to S to stimulate political support can be beneficial to the politician in this regard even though it is welfare reducing. This is because welfare-enhancing policies sometimes translate into votes in a muted way and political support often

[15]There may be other motivations as well (e.g., to "do good," to impose a viewpoint), but we implicitly hold these constant.

translates more strongly. There is no direct compensation to the politician for raising GDP, for example. It is likely that an effective way of retaining office is through generating other means of political support (e.g., favorable media mentions, endorsements, claims of job creation, and campaign contributions). Suppose that political support activity S generates benefits f(S) to the politician by increasing the chances of retaining office and consuming the perks of power.

Thus, let the politician's utility function be the following:

$$(6)\quad U^P = \theta f(S) + (1-\theta)\, U$$

where U is the typical citizen's or organization's utility and $0 < \theta < 1$. Thus, politician utility is a weighted average of the support generated from political activities and the support received by raising the utility of the average individual in the economy. The latter is affected by r as well as G. We assume that the political system determines the weight θ, that is, how political support activities translate into favorable outcomes for the politician vis-à-vis average citizen utility. A higher θ indicates that the politician can more readily transform S into his or her benefit. Thus, it is a proxy for the power and discretion held by the politician.

Politicians choose r and G to maximize U^P. They do so recognizing that S depends on r. There is also a balanced budget constraint. If all government programs are budgetary in nature, paying r for each unit of S is a part of government spending and must be paid for by tax revenue. Total spending on political support is rS and is G on good government. If tax revenue derives solely from the tax t on productivity, it sums to twH. Then the government budget constraint is $twH = G + rS$, where H and S (and L) are at the social equilibrium.

It is straightforward to show that the utility per person falls when the return to political support activity r rises. This occurs for familiar reasons. This increase necessitates a rise in government spending. Thus, there is a standard Harberger welfare loss; the increased spending requires a tax increase, which reduces work effort and production. Additionally, there is a Tullock loss. A higher r induces more resources to be devoted to political support activity, which produces nothing but simply transfers wealth.

If the rewards for political activity and/or the means to support it are off budget, then a balanced budget need not hold. For example,

a restriction on entry into a market aids the incumbent firms in the market and raises prices to consumers, just as a tax on consumers and cash payments to incumbents would, but there is no direct budgetary consequence. Of course, this means of increasing r also is value reducing.

An increase in G can be welfare enhancing. There is still the Harberger loss associated with the increased taxation to pay for G, but if G raises productivity by enough to offset this loss, then this type of spending can raise value.

The first-order condition for politician utility maximizing choice of r is given by

$$(7)\quad \partial U^{P}/\partial r = \theta f'(S)\,\partial S/\partial r + (1-\theta)\,\partial U/\partial r = 0.$$

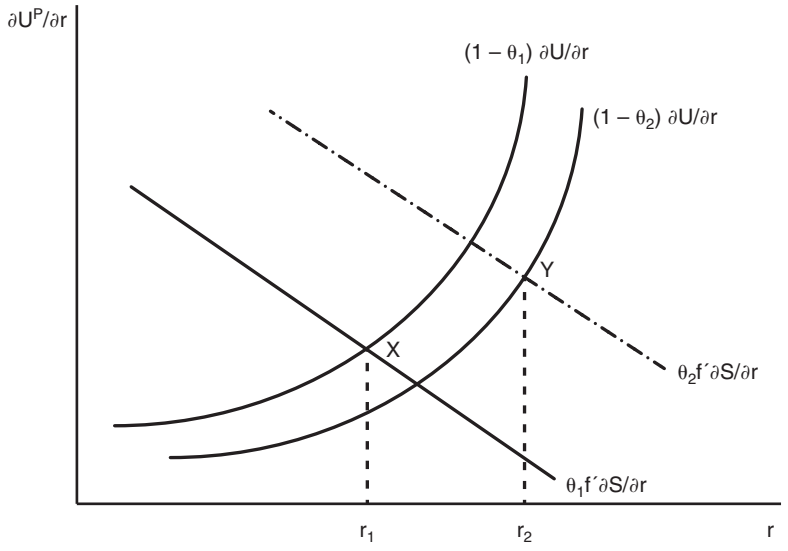
This is the usual marginal benefit equals marginal cost formulation. The marginal benefit of raising r is that it generates more political support, valued at $\theta f'$. The marginal cost is that it lowers citizen utility ($\partial U/\partial r < 0$), which carries the weight $1-\theta$.[16]

If politicians were somehow constrained to act only in the interests of the public, the weight $\theta = 0$ and no value-reducing government would ensue. However, in our framework, political power and rational ignorance are likely to generate rewards to the politician for using that power to retain office. This implies that $\theta > 0$ and the $f(\cdot)$ function matters. Increased powers in the hands of the government raise θ and increase these rewards as well as the ability to remunerate people who help sustain it.

Figure 2 illustrates the effect of an increase in θ. Suppose $\theta = \theta_1$. The curve labeled $\theta_1 f'\,\partial S/\partial r$ shows the marginal benefit of increasing r, and the locus $(1-\theta_1)\,\partial U/\partial r$ represents the marginal cost. Point X is the equilibrium. The politician selects the reward for political support activity at r_1. Suppose that θ rises to θ_2, shifting the marginal benefit function to $\theta_2 f'\,\partial S/\partial r$ and the marginal cost function to $(1-\theta_2)\,\partial U/\partial r$. With the higher θ, the politician pays more attention to political support and less to citizen welfare. The equilibrium moves to point Y, corresponding to $r = r_2$. Naturally, the higher value of r implies a higher value of rS, which manifests itself either in the form of greater political support spending or in intervention to reward political support.

[16]We assume that f(S) adds less to politician utility than S reduces individual utility, so there is a net loss of S.

FIGURE 2
Government Determination of the Reward for Political Support Activity

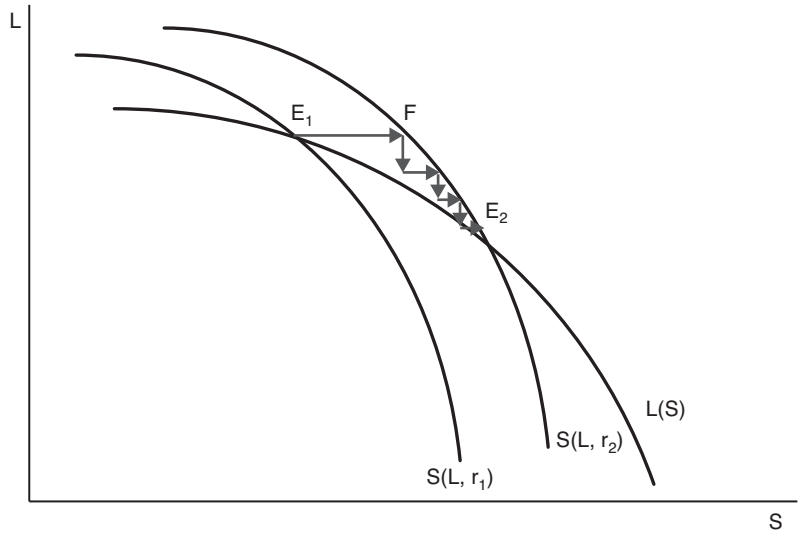


A Mistrusted But Bigger Government

We are now in a position to illustrate how a one-time increase in θ generates mistrust that leads to an even larger government. Note that our measure of government is G + rS. Increases in rS and in G may take the form of greater expenditures, but the former also can be in the form of greater intervention that transfers wealth.

As indicated above, an increase in θ raises the level of r selected by the politician as illustrated by the movement from X to Y in Figure 2. This, in turn, increases the amount of political support activity S, and the size of government rises and the value of β falls. Note that the value of G chosen by the politician also determines $\beta = G/(G + rS)$. An increase in θ raises the denominator by increasing rS. However, G may also change. The first-order condition for G is $\partial U^P/\partial G = (1 - \theta)\, \partial U/\partial G = 0$. Though this looks as if G is unaffected by an increase in θ, the higher rS can affect the level of G. The value of G may fall or rise, but the value of rS relative to G rises, β falls, and under plausible conditions, total government G + rS rises.

FIGURE 3
Increased Government and Less Trust



The new equilibrium is illustrated in Figure 3. It augments the loci of Figure 2. Suppose that the original level of r is r_1. This entails the original S function given by $S(L,r_1)$ as shown in Figure 3. The increased θ results in an $r = r_2 > r_1$. The direct effect of this is to shift the S function to $S(L,r_2)$ as shown, i.e., more political support activity for each level of L. This is shown by the arrow emanating from point E_1 toward F. If there were no effect on public cooperation, this is the end of the story. Citizen utility is reduced—any movement on the graph to the south, east, or southeast from the original equilibrium lowers utility—government is larger, but there is no change in the level of trust.

However, more government spending on political support activities lowers β and undermines trust in and cooperation with government. Thus, the society moves southeast on the L function. This, in turn, reduces the productivity-enhancing effects of G, lowers the return to productive effort, and—as illustrated by the arrows—generates further distortion of effort toward political activity. This causes further growth in rent-seeking government activity and reductions in trust. With the S and L loci as drawn, this spiral in government and mistrust eventually weakens and a new equilibrium is reached at point E_2.

This equilibrium is where the size of government has grown to a multiple of its initial increase, accompanied by a lower level of trust

in government. Growing government occurs with increased mistrust, leading to higher equilibrium levels of both. Thus, putting together some basic building blocks of rent seeking and the psychology of trust, reciprocity, and cooperation yields a straightforward framework to help understand the pattern of trust in government and the growth in government.

Several other aspects of the experimental economics literature buttress our approach and findings, as well as suggest related outcomes. For example, a robust finding in public goods games is that strong free-riding emerges more frequently after several rounds of play (see, e.g., Isaac, Walker, and Williams 1994), suggesting that more free-riding occurs as more is learned about the game and the play of others. In our context, this indicates that, as more rent seeking emerges from government growth, individuals learn that mistrust is the appropriate response. This suggests that the longer-run response (i.e., after learning) of trust to government-induced rent seeking is much larger. In Figure 3, this makes the long-run L(S) curve steeper, implying that the new equilibrium entails even lower levels of trust and more rent seeking than at point E_2. Thus, the long-run effects are more severe than the short run.

Related to this, public goods experiments find that free-riding is more likely to occur as the benefits of free-riding rise. See, for example, Smith and Walker (1993) and Isaac and Walker (1988). In the setting of our model, a continued growth of government increases the resources available for rent seekers. This heightens rent-seeking activity and magnifies the corresponding decline in trust. In Figure 3, these suggest a flatter S(L, r) function and a steeper L(S) locus. Both lead to lower trust and raise rent seeking more than depicted in Figure 3 in response to a shift in the S(L, r) function.

Additionally, the experimental literature shows that free-riding is more common when it is known that other players are free-riding (see, for example, Croson 2007; Fischbacher, Gachter, and Fehr 2001 on "conditional cooperators"; and the survey by Chaudhuri 2011). This effect is apparently stronger when "leaders" are free-riding (see Gachter and Renner 2014). This applies to our context in that if politicians are known to be encouraging rent seekers and lobbying, then the public will respond with a sharper reduction in trust as government grows. As before, this implies a steeper L(S) function in Figure 3 and an equilibrium with yet more lobbying and mistrust.

Another factor that could be brought into the model that reinforces and magnifies these results is investment in human capital. An increase in the return to political activity induces more activity in that regard, but also generates more human capital investment into political skills. This makes the response of S to an increase in r much larger and generates a larger shift in the $S(\cdot)$ function, forcing the new equilibrium to be at an even lower L, a higher S, a larger government, and lower citizen utility.

Multiple Equilibria and the Trust Trap

A number of frameworks have been proposed suggesting that there is a "ratchet effect" in the size of government where it grows much more readily than it shrinks. For example, Higgs (1987) argues that crises generate more government activity and this greater government involvement becomes accepted by the public, thereby limiting any reversal of government growth. Olson's (1982) analysis indicates that once distributional coalitions form, the complexity and level of government grows in certain ways that are not easily changed. In an agnostic framework, Caplan (2003) shows how bad government can be self-perpetuating.

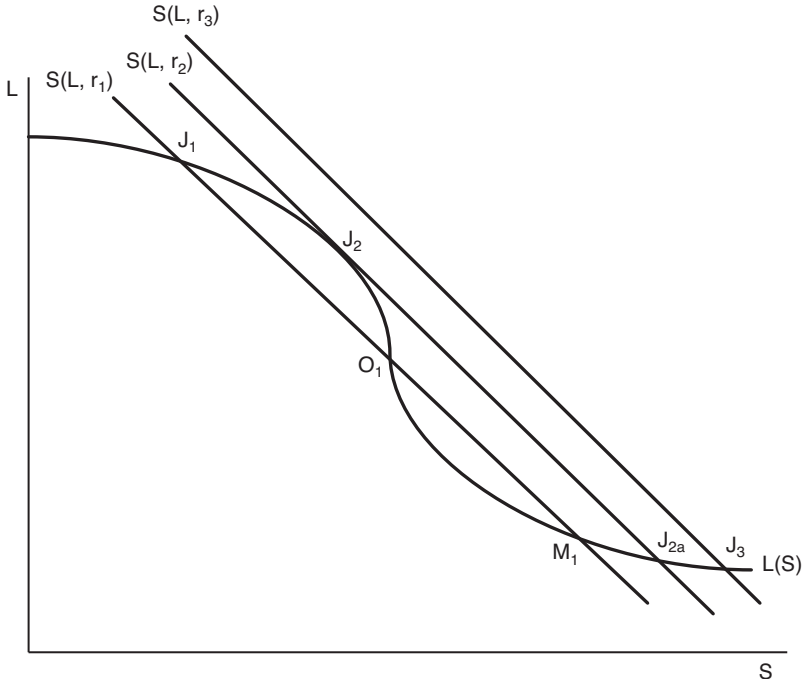
An extension of our model leads to a related outcome. We show how interactions of trust with rent seeking and government growth may lead to a low trust/high rent-seeking/big government equilibrium that is not readily reversed. This occurs when we have multiple equilibria, leading to discrete jumps in the equilibrium and a trust trap at a bad equilibrium.

Multiple Equilibria and Discrete Jumps

In the above figures, the curvatures of the two functions are such that the equilibria depicted are stable and unique. This situation does not necessarily have to occur. There are a number of possible other cases when the curvatures of the two loci differ and there are multiple equilibria, some of which are stable and some of which are not.

One that is of particular interest is where there is a movement from one stable equilibrium to another. Consider Figure 4 in this regard. This figure depicts equilibria in L-S space as in Figure 3, but with differently shaped functions. Assume that the L(S) and $S(L, r_1)$ functions represent the initial situation. There are three equilbria: points J_1, O_1, and M_1. Only points J_1 and M_1 are stable. The equilibrium at J_1 is a

FIGURE 4
Discrete Jumps in Equilibria

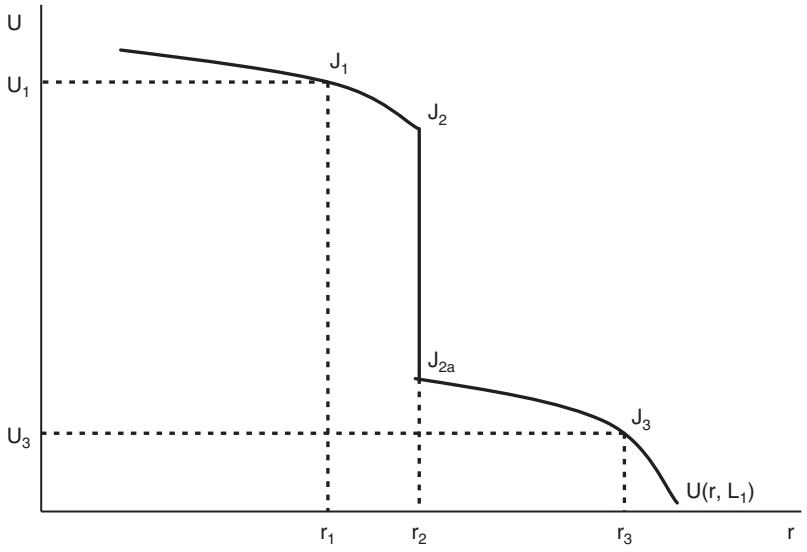


good one with high trust, low political activity, and high utility. Point M_1 represents a bad equilibrium with the converse.

Suppose that the initial equilibrium is at J_1. Now, as above, consider an increase in θ that raises r from r_1 to r_2. This shifts the locus $S(L, r_1)$ to $S(L, r_2)$, i.e., there is a higher level of S for each L. The new equilibrium moves to J_2, with a somewhat lower L and a slightly higher S, and lower welfare. An infinitesimally higher θ and r shift the $S(\cdot)$ function infinitesimally further to the right, and the equilibrium makes a discrete jump to J_{2a} with drastically different values of L, S, and utility—lower, higher, and lower, respectively. A minor change in policy that enables government to slightly increase the reward for rent seeking induces a big growth in government and a large drop in trust. Any further increase in r—say, to r_3, that shifts the $S(\cdot)$ function to $S(L, r_3)$—causes smaller changes.

Figure 5 illustrates this in a different way. This figure graphs utility per citizen U on the vertical axis and the return to political activity r on the horizontal axis. The initial equilibrium at J_1 in Figure 4 is

FIGURE 5
Utility and a Discrete Change in Equilibrium:
Off the Cliff



also denoted as J_1 in Figure 5, with $r = r_1$ and $U = U_1$. An increase in θ that raises r to r_2 moves the economy to J_2. An infinitesimally higher θ and r drop the economy "off a cliff" to J_{2a} with a drastically lower utility. Further increases in r lower utility, but not radically; e.g., a further increase of r to r_3 moves the economy to J_3 with a smaller reduction in U.

The Trust Trap

The transitional gains trap of Tullock (1975), and its variant in Clark and Lee (2003), indicates that government programs which generate investment in durable capital (human or otherwise) tied to those programs makes it especially difficult to undo those programs. Eliminating programs entails a loss to those who invested in the relevant capital specific to the program. These potential losers will suffer a capital loss and oppose any reform efforts. This issue can arise in the expanded version of our model that includes investment in human capital.[17]

[17]Full consideration of the transitional gains trap would have to consider a multi-period model.

However, another type of trap emerges in our model—a "trust trap." In the setting with two stable equilibria, as in Figure 4, once the economy has slipped from a good equilibrium like point J_1 to a bad equilibrium like point J_3, moving back to a good equilibrium is problematic. Simply undoing the policies that got the economy to the bad outcome is not sufficient. Returning to a good equilibrium entails lowering θ to a lower level than initially. If this does not occur, the economy is trapped in a bad equilibrium.

Companion Figures 6 and 7 illustrate this. These are expanded versions of Figures 4 and 5. In Figure 6, consider an economy where θ increases such that r rises from r_1 to r_3. This shifts the $S(\cdot)$ function from $S(L, r_1)$ to $S(L, r_3)$ and the equilibrium from J_1 to J_3—we move from a good to a bad equilibrium. In Figure 7, this also is denoted as a move from J_1 to J_3 in the graph in (U, r) space. The economy goes "off the cliff."

FIGURE 6
Moving from a Bad to a Good Equilibrium

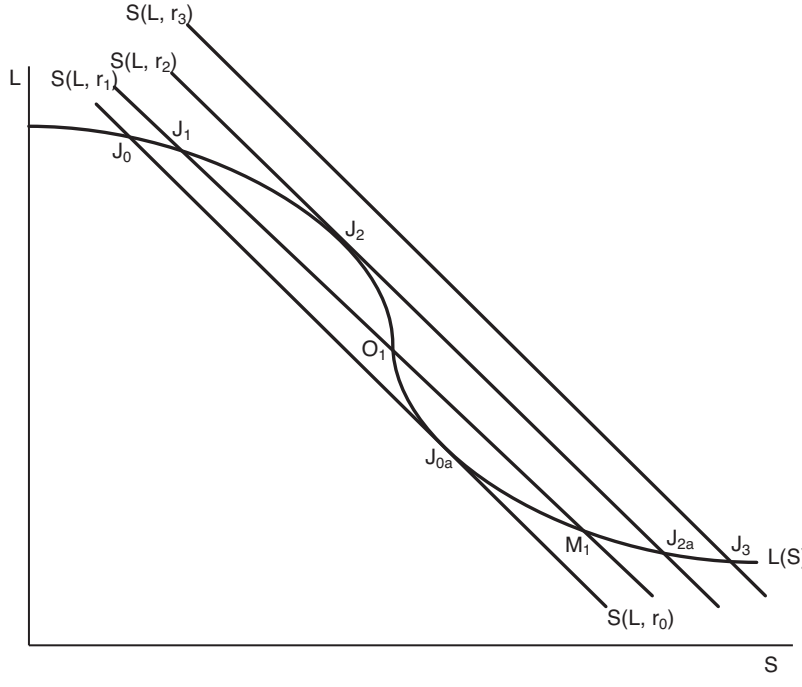
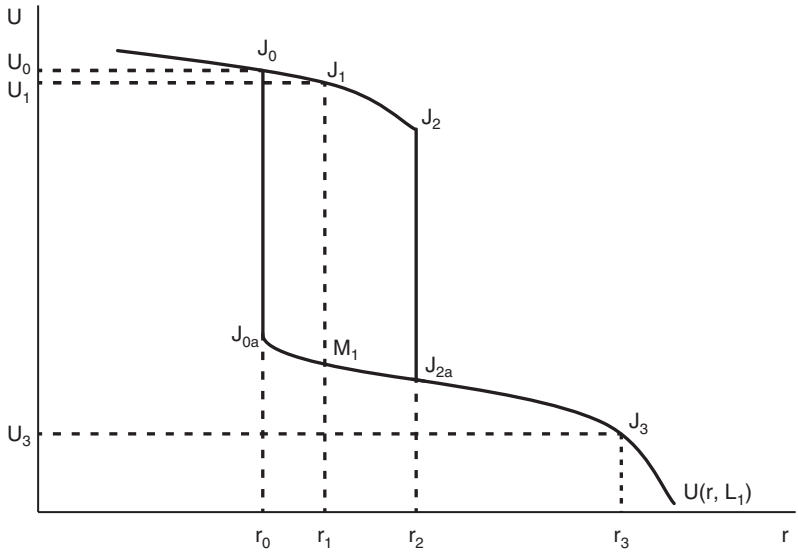


FIGURE 7
Restoring a Good Equilibrium



Now consider undoing this move. Assume that reform moves θ back to its original level so that r is moved back to r_1. The relevant S(·) function again is S(L, r_1), but the equilibrium does not return to J_1; it stays in the bad region at point M_1 in Figure 6. In Figure 7, this is also labeled M_1. There are only modest increases in trust and utility and a reduction in political activity.

In order to get back to the good region, the S(·) function has to shift in further. The value of r where utility moves discretely upward is (infinitesimally below) r_0, corresponding to the S(L, r_0) function where the equilibrium jumps discretely from point J_{0a} to J_0 in both Figures 6 and 7. If such a value of r is achieved, the equilibrium is at J_0, which is better than the original J_1, but it entails a more ambitious degree of reform than simply undoing what got the economy into the bad equilibrium in the first place.

There is an economic intuition to this. In Figures 4 and 6, the shape of the L(S) function is such that it is inelastic for low values of S, becomes elastic, then returns to inelastic for high values of S. Starting from a low S, the value of L initially changes very little as S rises, but then hits a threshold where the L(·) function becomes elastic and L

drops off rapidly. Once this threshold is crossed, trust and cooperation move to low levels and the economy is in a bad equilibrium. To return to a good equilibrium, S must fall by enough to go back across this threshold, entailing a big increase in trust and cooperation. Small reductions in S are not sufficient; L is locally inelastic and so trust is mired at low levels and the economy remains in a bad equilibrium.

The range of values of r between r_0 and r_2 are those relevant for the trust trap. If one begins in a bad equilibrium, these values of r leave one trapped in the bad equilibrium, represented by the segment $J_{0a}J_{2a}$ in Figure 7. This is despite the fact that the same values of r, when starting from a good equilibrium, leave one trapped at a good equilibrium (along the segment J_0J_2). Thus, there is a wide range of values of r that leave one with a good outcome, but once a threshold is crossed to move to a bad equilibrium, an overlapping range of values of r leaves one in a bad equilibrium.

An outcome like this relies on the shape of the L(S) function, i.e., the function that determines the relationship of trust and cooperation with authority. Though we do not bring empirical work to bear on this, this function having the requisite shape does not seem implausible. Such a shape simply says that, for authorities with a well-established (good or bad) reputation, some change in their behavior has little effect on citizen trust and cooperation. But once a tipping point is reached, citizen trust can change dramatically.

Research in the experimental economics literature speaks to the difficulties of getting out of a trust trap. For example, Gachter and Renner (2014) find that contributions in a public goods game are influenced by a "leader's" contribution as well as prior beliefs about other's contributions and the equilibrium of the game. If free-riding was common in past play, beliefs are strongly altered that lead to smaller contributions. Once these beliefs are established, it is difficult for a leader's behavior alone to improve cooperation. This reinforces our findings regarding the trust trap. Getting out of the trap would seem to take a very strong commitment by key leaders to refrain from cheating, perhaps coupled with a sanctions mechanism for those who continue to cheat.

Conclusion

The concept of social capital has become a noteworthy one in economics and has linked together ideas in economics, psychology,

political science, and sociology. Public attitudes—including the degree of trust and cooperativeness—are aspects of social capital that contribute to an economy's productivity. Thus, it is sensible that public policy analysts have paid considerable attention to them. Often lacking from their analysis, however, is the idea that the actions and nature of government are likely to be important in inducing cooperative attitudes and other aspects of social capital. A good deal of evidence suggests that this is the case. Building this into a model illustrates the mutually reinforcing nature of trust, government, and rent seeking—that is, bad government induces rent seeking that erodes trust and social capital, with the latter reducing the productivity of private enterprise relative to rent seeking, prompting further rounds of rent seeking and mistrust. Thus, we may observe the paradox of growth in both the size and mistrust of government.

Interestingly, our approach relates to the work of McCloskey (2010, 2015), who underscores the significance of maintaining or cultivating the appropriate attitudes/norms in a citizenry. While our model applies specifically to government and so has a different emphasis, both our approach and McCloskey's indicate the importance of respect for (and cooperation with) institutions that are competent and productive. In our framework, such attitudes are critical but do not evolve alone; rather they are determined simultaneously with government activity. We suggest the appropriate attitudes in this respect are cultivated by a refrain from certain government activities; in particular, government that encourages rent seeking erodes the kinds of attitudes that are important.

An important initial motivation of this article is the negative association of trust in and growth of government in the United States in the post–World War II period and the possibility of falling into the "trust trap." However, it seems that similar trends have occurred in developed countries worldwide. One may wonder why these phenomena seem to be relevant only after World War II. Outside the United States, a long-term mechanism at work may be the long, historical decline of monarchies and growth of democracies in the 19th and early 20th centuries. It may take a long period of adjustment for a populace and politicians to learn to "work the system" for political favors and rewards, so that these phenomena are relatively recent in appearing. Another possibility, for the United States and elsewhere, is that the Great Depression shook the public's

confidence in markets and World War II increased it in government. This implies that more power was ceded to government, raising the parameter θ in the model and starting a shift toward more rent seeking.

References

Aghion, P.; Algan, Y.; Cahuc, P.; and Shleifer, A. (2010) "Regulation and Distrust." *Quarterly Journal of Economics* 125 (3): 1015–49.

Alesina, A., and Warcziarg, R. (2000) "The Economics of Civic Trust." In S. J. Pharr and R. D. Putnam (eds.) *Disaffected Democracies: What's Troubling the Trilateral Countries*, 149–70. Princeton, N.J.: Princeton University Press.

Andreoni, J.; Erard, B.; and Feinstein, J. (1998) "Tax Compliance." *Journal of Economic Literature* 36 (2): 818–60.

Besley, T.; Persson, T.; and Sturm, D. (2010) "Political Competition, Policy and Growth: Theory and Evidence from the US." *Review of Economic Studies* 77: 1329–52.

Bjornskov, C. (2006) "Determinants of Generalized Trust: A Cross-Country Comparison." *Public Choice* 130: 1–21.

Blendon, R.; Benson, J.; Marin, R.; Altman, D.; Brodie, M.; Brossard, M.; and James, M. (1997) "Changing Attitudes in America." In J. S. Nye Jr., P. D. Zelikow, and D. C. King (eds.) *Why People Don't Trust Government*, 205–16. Cambridge, Mass.: Harvard University Press.

Blind, P. K. (2006) "Building Trust in Government in the Twenty-First Century: Review of Literature and Emerging Issues." UNDESA (November).

Brennan, G., and Buchanan, J. M. (1984) "Voter Choice: Evaluating Political Alternatives." *American Behavioral Scientist* 28 (November–December): 185–201.

_____ (1988) "Is Public Choice Immoral? The Case for the 'Nobel' Lie." *Virginia Law Review* 74 (2): 179–89.

Caplan, B. (2003) "The Idea Trap: The Political Economy of Growth Divergence." *European Journal of Political Economy* 19: 183–203.

Chaudhuri, A. (2011) "Sustaining Cooperation in Laboratory Public Goods Experiments: A Selective Survey of the Literature." *Experimental Economics* 14 (1): 47–83.

Clark, J. R., and Lee, D. R. (2001a) "Is Trust in Government Compatible with Trustworthy Government?" In W. F. Shughart II

and L. Razzolini (eds.) *The Elgar Companion to Public Choice*, 479–93. Northampton, Mass.: Edward Elgar Publishing.

_____ (2001b) "The Optimal Trust in Government." *Eastern Economic Journal* 27 (1): 19–34.

_____ (2003) "The Increasing Difficulty of Reversing Government Growth: A Prisoners' Dilemma that Gets Worse with Time." *Journal of Public Finance and Public Choice* 21 (2–3): 151–65.

Croson, R. T. A. (2007) "Theories of Commitment, Altruism and Reciprocity: Evidence from Linear Public Goods Games." *Economic Inquiry* 45 (2): 199–216.

Dalton, R. (2004) *Democratic Challenges, Democratic Choices: The Erosion of Political Support in Advanced Industrial Democracies.* Oxford: Oxford University Press.

De Cremer, D., and Tyler, T. (2007) "The Effects of Trust in Authority and Procedural Fairness on Cooperation." *Journal of Applied Psychology* 92 (3): 639–49.

Fehr, E., and Gachter, S. (2000) "Fairness and Retaliation: The Economics of Reciprocity." *Journal of Economic Perspectives* 14 (3): 159–81.

Fischbacher, U.; Gachter, S.; and Fehr, E. (2001) "Are People Conditionally Cooperative? Evidence from a Public Goods Experiment." *Economics Letters* 71 (3): 397–404.

Francois, P., and Zabojnik, J. (2005) "Trust, Social Capital and Economic Development." *Journal of the European Economic Association* 3 (1): 51–94.

Franklin, B. (1787) Speech on September 17. Available at www.usconstitution.net/franklin.html.

Fukuyama, F. (2000) "Social Capital and Civil Society." IMF Working Paper (April).

Gachter, S., and Renner, E. (2014) "Leaders as Role Models for the Voluntary Provision of Public Goods." Center for Decision Research and Experimental Economics, Discussion Paper No. 2014–11, University of Nottingham (October).

Galston, W., and Kamarck, E. (2008) "Change You Can Believe in Needs a Government You Can Trust." Third Way Economic Program (November). Available at http://content.thirdway.org/publications/133/Third_Way_Report-Trust_in_Government.pdf.

Greif, A. (1994) "Cultural Beliefs and the Organization of Society: A Historical and Theoretical Reflection on Collectivist and

Individualist Societies." *Journal of Political Economy* 102 (5): 912–50.

Grossman, G., and Helpman, E. (1994) "Protection for Sale." *American Economic Review* 84 (4): 833–50.

Guiso, L.; Sapienza, P.; and Zingales, L. (2006) "Does Culture Affect Economic Outcomes?" *Journal of Economic Perspectives* 20 (2): 23–49.

Hayashi, N.; Ostrom, E.; Walker, J.; and Yamagishi, T. (1999) "Reciprocity, Trust, and the Sense of Control: A Cross-Societal Study." *Rationality and Society* 11 (1): 27–46.

Henrich, J.; Boyd, R.; Bowles, S.; Camerer, C.; Fehr, E.; Gintis, H.; and McElreath, R. (2001) "In Search of Homo Economicus: Behavioral Experiments in 15 Small-Scale Societies." *American Economic Review* 91 (2): 73–8.

Hetherington, M. (2005) *Why Trust Matters: Declining Political Trust and the Demise of American Liberalism.* Princeton N.J.: Princeton University Press.

Higgs, R. (1987) *Crisis and Leviathan: Critical Episodes in the Growth of American Government.* New York: Oxford University Press.

Hunter, J. D., and Bowman, C. D. (1996) *The State of Disunion: 1996 Survey of American Political Culture Vol. 1. Summary Report.* Charlottesville, Va.: The Post-Modernity Project, University of Virginia.

Isaac, R. M., and Walker, J. M. (1988) "Group Size Effects in Public Goods Provision: The Voluntary Contributions Mechanism." *Quarterly Journal of Economics* 103 (1): 179–99.

Isaac, R. M.; Walker, J. M.; and Williams, A. M. (1994) "Group Size and the Voluntary Provision of Public Goods: Experimental Evidence Utilizing Large Groups. *Journal of Public Economics* 54 (1): 1–36.

Knack, S., and Keefer, P. (1997) "Does Social Capital Have an Economic Payoff? A Cross-Country Analysis." *Quarterly Journal of Economics* 112 (4): 1251–88.

Levi, M.; Tyler, T.; and Sacks, A. (2008) "The Reasons for Compliance with Law." Paper for Workshop on the Rule of Law, Yale University (March).

Lewis, M. (2010) "Beware of Greeks Bearing Bonds." *Vanity Fair* (October). Available at www.vanityfair.com/news/2010/10/greeks-bearing-bonds-201010.

Lincoln, A. (1858) First debate with S. Douglas (31 July). Available at www.bartleby.com/268/9/23.html.

McCloskey, D. (2010) *Bourgeois Dignity: Why Economics Can't Explain the Modern World*. Chicago: University of Chicago Press.

_____ (2015) "Two Cheers for Corruption." *Wall Street Journal* (27 February).

Mullen, E., and Nadler, J. (2008) "Moral Spillovers: The Effect of Moral Violations on Deviant Behavior." *Journal of Experimental Social Psychology* 44 (5): 1239–45.

Nadler, J. (2005) "Flouting the Law." *Texas Law Review* 83: 1399–1441.

Nye, J. S. Jr. (1997) "Introduction: The Decline of Confidence in Government." In J. S. Nye Jr., P. D. Zelikow, and D. C. King (eds.) *Why People Don't Trust Government*, 1–19. Cambridge, Mass.: Harvard University Press.

Nye, J. S. Jr.; Zelikow, P. D.; and. King, D. C. (eds.) (1997) *Why People Don't Trust Government.* Cambridge, Mass.: Harvard University Press.

Olson, M. (1982) *The Rise and Decline of Nations.* New Haven, Conn.: Yale University Press.

_____ (2000) *Power and Prosperity: Outgrowing Communist and Capitalist Dictatorships.* New York: Basic Books.

Paldam, M. (2009) "The Macro Perspective on Generalized Trust." In G. T. Svendsen and G. L. H. Svendsen (eds.) *Handbook of Social Capital*, 354–78. Northampton, Mass.: Edward Elgar.

Pew Research Center for the People & the Press (2010) "The People and Their Government: Distrust, Discontent, Anger and Partisan Rancor." Available at http://people-press.org/reports/pdf/606.pdf.

Pharr, S. J. (2000) "Officials' Misconduct and Public Distrust: Japan and the Trilateral Democracies." In S. J. Pharr and R. D. Putnam (eds.) *Disaffected Democracies: What's Troubling the Trilateral Countries,* 173–201. Princeton, N.J.: Princeton University Press.

Pharr, S. J. and Putnam, R. D. (eds.) (2000) *Disaffected Democracies: What's Troubling the Trilateral Countries.* Princeton, N.J.: Princeton University Press.

Rosenberg, N., and Birdzell, L. (1986) *How the West Grew Rich*. New York: Basic Books.

Smith, V. L. and Walker, J. M. (1993) "Monetary Rewards and Decision Cost in Experimental Economics." *Economic Inquiry* 31 (2): 245–61.

Stevenson, B. and Wolpers, J. (2011) "Trust in Public Institutions over the Business Cycle." *American Economic Review* 101 (3): 281–87.

Tabellini, G. (2008) "The Scope of Cooperation: Values and Incentives." *Quarterly Journal of Economics* 123 (3): 905–50.

Tullock, G. (1975) "The Transitional Gains Trap." *Bell Journal of Economics* 6: 671–78.

Tyler, T. R. (1990) *Why People Obey the Law*. New Haven, Conn.: Yale University Press.

Warren, M. E. (ed.) (1999) *Democracy and Trust.* Cambridge: Cambridge University Press.

Yamamura, E. (2012) "Government Size and Trust." *Review of Social Economy* 70 (1): 31–56.