

## LECTURE 6

# Government and Society

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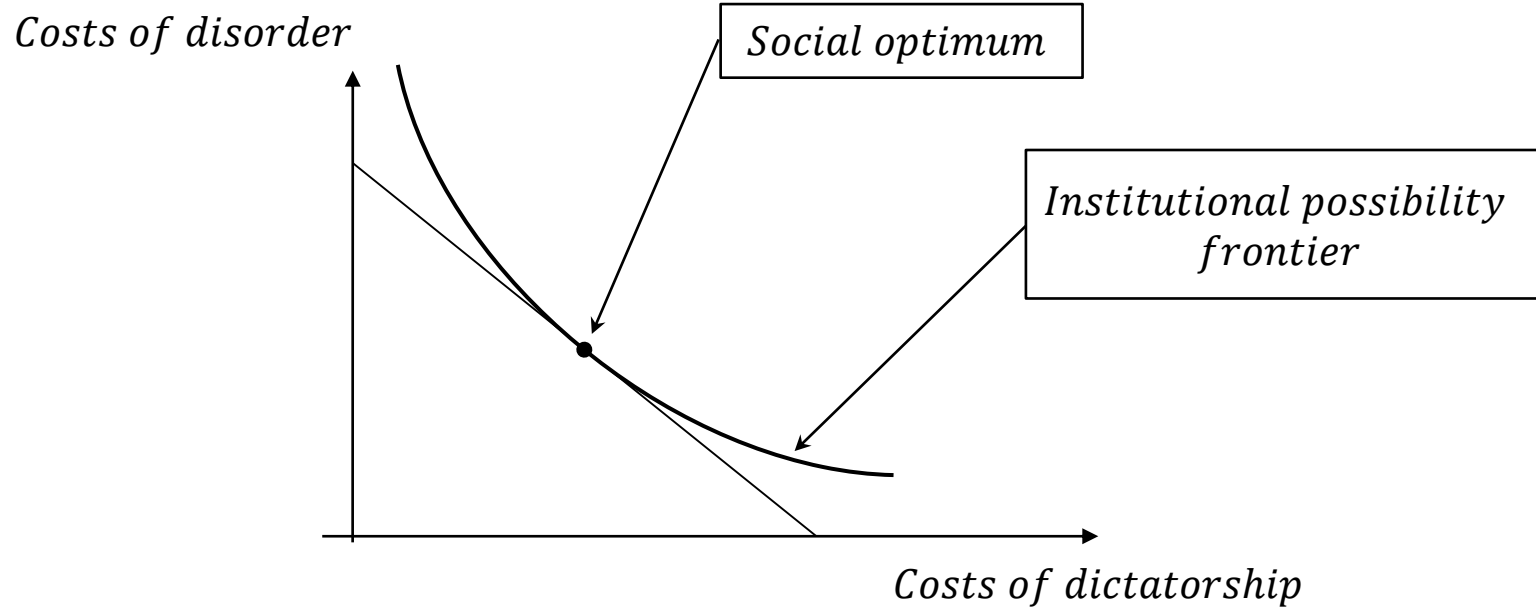
# Disorder vs. Dictatorship

Market failures due to a lack of coordination of private decisions cause *costs of disorder* in the economy and society (unchecked externalities, dearth of public goods etc.)

Government is an alternative to private solutions in economy and society, and its role is in controlling the costs of disorder. However governments impose their own *costs of dictatorship* due to suppression of market incentives, distortions of market signals, possible policy errors and abuse of power.

These two types of costs could be linked to each other in the dictatorship-disorder trade-off.

# Institutional Possibility Frontier (Djankov et al., 2003)



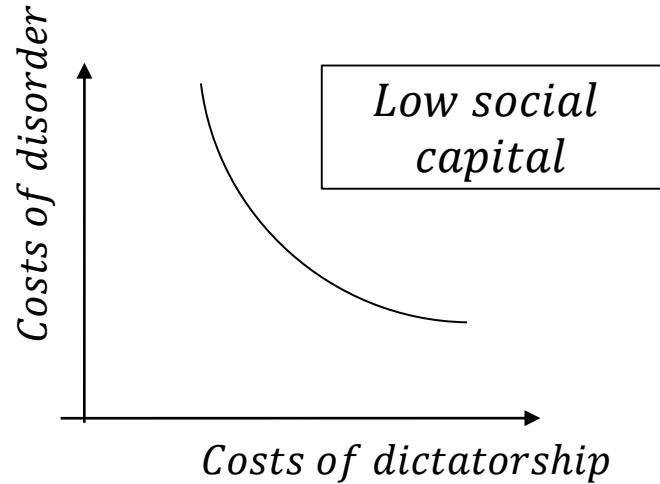
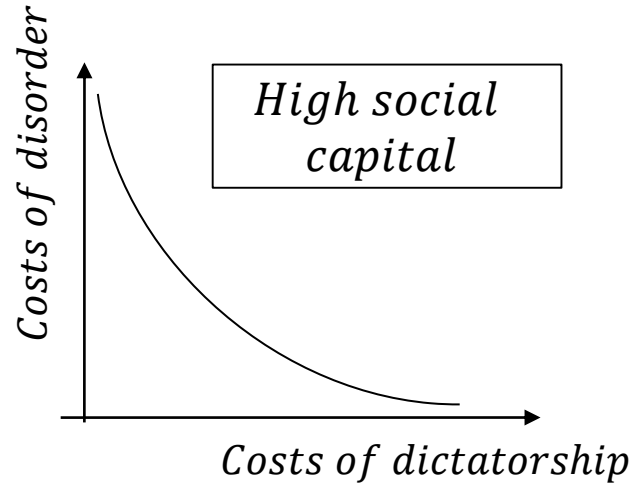
# Social Capital

The location of the institutional possibility frontier depends on social capital – the ability for collective action for a common cause.

High stock of social capital makes Coasean agreements more likely, and thus reduces the need for government involvement. This cuts the costs of disorder – *social capital and governments are substitutes*.

Social capital, and especially its particular stripe known as civic culture, facilitates political collective action and increases government accountability to society, thus cutting the costs of dictatorship – *social capital and governments are complements*.

# High and Low Stocks of Social Capital



# Philanthropy as Private Alternative to Government

Apart from public funds, public goods and services are funded by philanthropists, and observed patterns of charitable donations do not fit with standard “homo economicus” model.

If individual contributions towards provision of a public good are driven only by self-interest, then (i) only sufficiently wealthy individuals would be making such contributions, and (ii) public funding of public goods would be “crowding out” private donations. None of that finds support in data – poorer individuals contribute higher portion of their income to charity, and crowding out is not observed at the predicted level.

# Warm Glow

Charitable donations and other forms of (individually costly) pro-social behavior (voting, blood donations, volunteering, political participation etc.) are driven by pro-social preferences, whereby individuals draw utility (“feel good”) from socially beneficial activities irrespective of whether they personally gain from them.

# Warm Glow Model

Conventional utility function:  $U(x, G) = \alpha \ln x + \beta \ln G$

Non-participation constraint:  $\frac{\alpha}{w_i} > \frac{\beta}{G}$

“Warm glow” utility function:  $\tilde{U}(x, G, g) = \alpha \ln x + \beta \ln G + \gamma \ln g$ .

With “warm glow”, people make contributions irrespective of their income and crowding out by public funding is much weaker ( $x = w_i - g_i, G = g_i + G_{-i}$ ):

$$\frac{\alpha}{w_i - g_i} = \frac{\beta}{G} + \frac{\gamma}{g_i}$$



# **Social Capital and Public Regulation (Aghion et al., 2010)**

Uncivic individual as an entrepreneur would neglect public interests and cause massive negative externalities.

Uncivic individual as a public servant (regulator) would deal in corruption, but at least occasionally protect the public.

The latter is the less of two evils, and therefore a society with a lack of social capital rationally opts for stricter government control.

# Paradox of Social Capital

A society with a lack of trust and civic culture usually ends up with poor government performance due low morale of public servants and a lack of capacity to ensure good governance through political participation. However due to the very same reasons in such society people are distrustful of each other. Hence they express their disappointment at how their governments perform, and held governments to low esteem, and at the same time want more government in their lives. Such attitudes were observed inter alia in Southern Italy and the transition region.

# Political Collective Action

Effectiveness of democracy and the rule of law depend on the stock of civic culture. Enforcement of constitutional norms and protection of rights and freedoms poses a coordination problem (Weingast, 1997).

		<i>Protest</i>	<i>Acquiesce</i>
<i>Coordination game</i>	<i>Protest</i>	7,7,0	1,2,8
	<i>Acquiesce</i>	2,1,8	2,2,8

		<i>Protest</i>	<i>Acquiesce</i>
<i>Divide and rule</i>	<i>Protest</i>	7,7,0	1,9,4
	<i>Acquiesce</i>	2,8,4	2,9,4

# Civic Culture and Quality of Governance (Nannicini et al., 2013)

Civic voters base their support of government on the latter's overall performance, measured by social welfare  $W$ .

Uncivic voters base their support of government on their personal welfare.

The share of civic voters is  $\alpha$ ;

if  $\alpha > 1/2$ , the median voter is civic,

if  $\alpha < 1/2$  – uncivic.

# Model

There are  $N$  identical groups of voters (“electoral districts”), each of unity size. Voters have the same initial wealth  $w$  and utility functions  $U(x, G) = x + \varphi(G)$ , where  $x$  – private consumption, and  $G$  – public good. The government collects lump-sum tax  $\tau$  up to the maximum  $\bar{\tau}$ , and splits tax revenues  $\tau N$  to fund the public good  $G$ , provide transfers  $f_j$ , if any, to targeted groups, and keep the rest as rent  $R$ .

# Civic Majority

Social optimum:  $\max_G Nw - G + N\varphi(G); \varphi'(G^*) = 1/N$

Benchmark for civic voters:  $W \geq Nw - G^* + N\varphi(G^*)$

When civic voters form a majority, the public good is provided at the socially optimal level  $G^*$ , taxes  $\tau^* = \frac{G^*}{N} < \bar{\tau}$  are collected solely to fund such public good, there are no transfers and no rent.

# Uncivic Majority

When  $\alpha < 1/2$ , the government builds its political base from uncivic voters. It targets groups  $j = 1, \dots, M < N$  with transfers to meet the expectations of individual welfare of uncivic voters in these groups. The required number of groups is  $M \approx N/2(1 - \alpha)$ .

The government's problem:

$$\max_{\tau, G, f_j} N\tau - G - \sum_{j=1}^M f_j, \text{ s.t. } w - \tau + f_j + \varphi(G) \geq w_j, j = 1, \dots, M$$

Equivalent formulation:

$$\max_{\tau \leq \bar{\tau}, G} N\tau - G - M\tau + M\varphi(G)$$

Government's policies:

$$\tau = \bar{\tau}; G = G^0, \varphi'(G^*) = \frac{1}{M} = 2(1 - \alpha)\frac{1}{N} > \frac{1}{N}$$

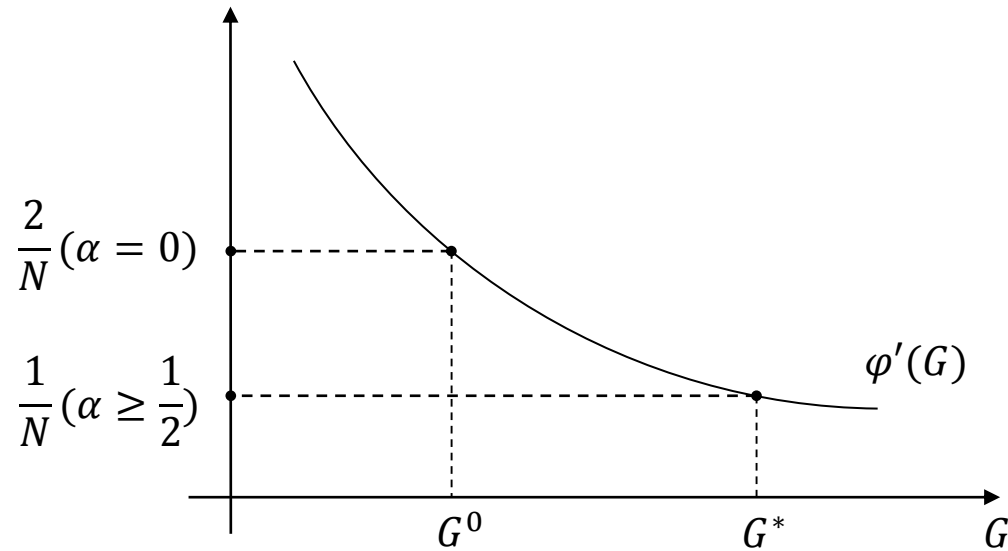
# Importance of Being Civic

Uncivic majority diminishes social welfare in comparison with civic one: taxes go up to the limit, whereas the supply of public good goes down. A government that caters to selected constituencies rather than to the society at large tends to undervalue (and hence undersupply) public goods and tax excessively to generate funds for transfers to its targeted electorate.

Even if civic voters form a minority, their share matters: when  $\alpha$  increases, so does the provision of the public good, which reaches the socially optimal level when  $\alpha \rightarrow 1/2$ .



# Civics and Public Goods



# Divide and Rule

Targeted voters get little relief from high taxes and undersupply public good: their transfers are not very high. Competition between groups for preferential treatment by government drives subsidies down to zero, and hence, ironically, the prevailing concern about individual welfare, rather than social one, leaves individualistic voters at very low welfare levels, while rendering the government effectively unaccountable to the society and free to enrich itself at the society's expense.

# Picking Up Where the Government Left Off

Civic culture ensures government's accountability to society and prevents abuse of power. Grassroots social capital enables local communities to pool resources to supply public goods and services missing due to government's negligence.

Two types of capacity for collective action have markedly different outcomes for the quality of governance and social welfare.

# Predation and Accommodation

Suppose that predatory government extracts  $D$  units of wealth from the society (by predatory taxation, diversion of public funds etc.). The loss to society is  $C_0(D) > D$ , where the difference  $C_0(D) - D$  is due to deadweight loss of taxation and other means of wealth extraction.

By grassroots collective action the society could reduce such losses from  $C_0(D)$  down to  $C_1(D)$ ; still  $C_1(D) \geq D$ . The share of losses thus saved is  $\omega \in [0,1]$ , which is a measure of grassroots social capital. The overall social welfare is

$$W = W_0 - \omega C_1(D) - (1 - \omega)C_0(D)$$

# Government's Action

The government maximizes a weighted sum of its own gains and social welfare, with the coefficient of the latter  $\alpha$  reflecting the stock of civic culture:

$$\max_D D + \alpha[W_0 - \omega C_1(D) - (1 - \omega)C_0(D)]$$

The amount of wealth extraction which is an inverse measure of the quality of governance is thus a function of two types of social capital:  
 $D = D(\alpha, \omega)$ .

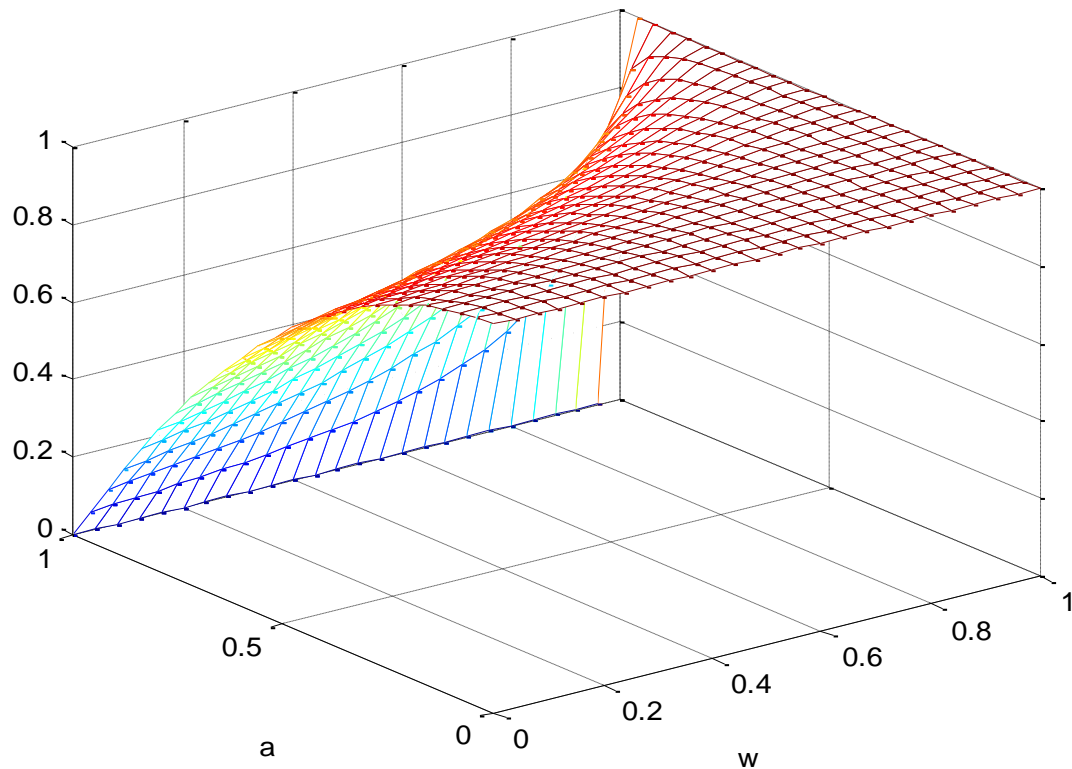
# Impact of Social Capital

	<i>Civic culture</i>	<i>Grassroots social capital</i>
<i>Quality of governance</i>	<i>positive</i>	<i>negative</i>
<i>Social welfare</i>	<i>positive</i>	<i>undetermined</i>

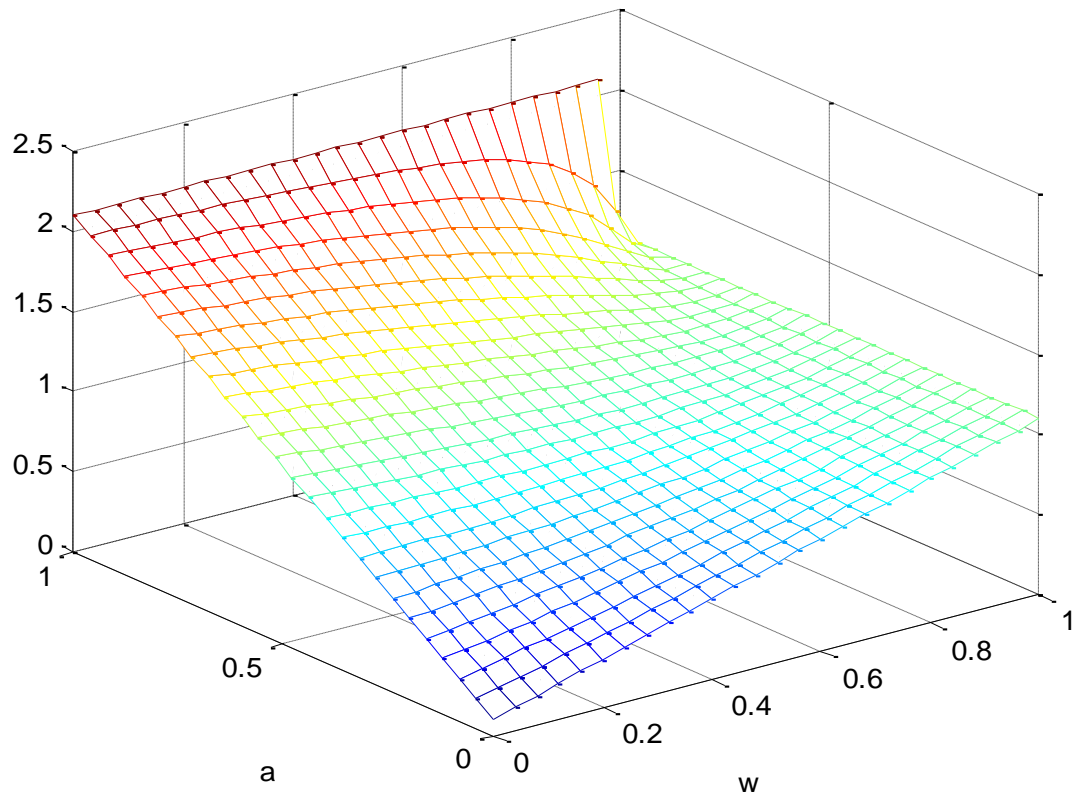
Grassroots social capital makes a positive contribution to social welfare by “picking up where government left off” (direct effect), but at the same time diminishes social welfare by further weakening incentives for government performance (“things will be taken care of anyway”).

The second effect of grassroots social capital dominates the first one at intermediate-to-high level of civic culture, where civic culture is “crowded out” by grassroots social capital.

# Impact of Social Capital for Abuse of Power



# Impact of Social Capital for Welfare



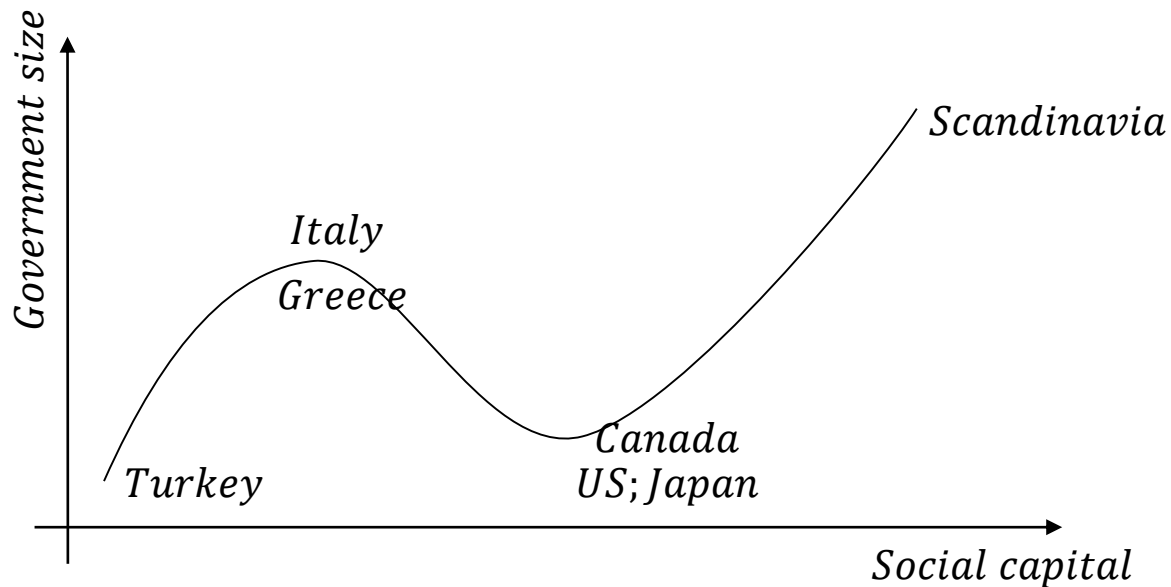


# **Social Capital and Welfare State**

## **(Algan, Cahuc, Sanguiner, 2011)**

One would expect the size of government (welfare state) would be inversely related to the stock of social capital which could reduce the need in government involvement (substitution hypothesis) and provides alternatives to government such as e.g. charity. In fact the association between the size of government (measured e.g. by the share of public expenditures in GDP) and social capital (measured by level of trust) is non-monotonic and exhibits two peaks at the medium and high social capital levels.

# Twin Peaks



# Preferences of Civic Agents

Share  $\alpha$  of a unit continuum of agents are civic – they never cheat on taxes, social service eligibility etc. The rest of agents are uncivic – they would evade taxes if there is a chance to do so with impunity; such opportunity avails itself with probability  $p$ . Trust in society is correlated with the share of civic individuals.

Assuming utility functions  $U(x, G) = x + \sqrt{G}$  and lump-sum tax  $t$ , the preferred level of taxation of a civic agent solves the following problem:

$$\max_t [-t + \sqrt{t[\alpha + (1 - p)(1 - \alpha)]}],$$

and hence the optimal level of taxation  $t_{civ}(\alpha)$  monotonically increases in  $\alpha$ .

# Preferences of Uncivic Agents

An uncivic agent's preferred tax solves the following problem:

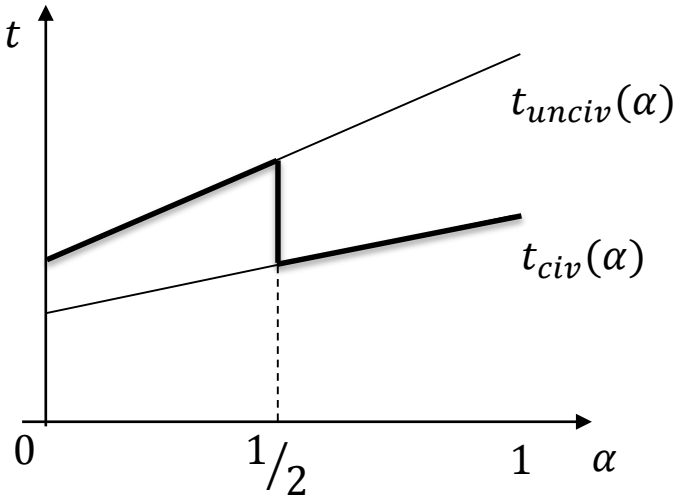
$$\max_t \left[ -t(1 - p) + \sqrt{t[\alpha + (1 - p)(1 - \alpha)]} \right]$$

and the optimal tax  $t_{unciv}(\alpha)$  also monotonically increases in  $\alpha$ .

Furthermore  $t_{unciv}(\alpha) > t_{civ}(\alpha)$ : uncivic agents, all else equal, prefer higher tax rates than civic ones, as they have the same access to public goods while evading taxes whenever possible.

# Explaining twin peaks

When uncivic agents form a majority ( $\alpha < 1/2$ ), their preferred tax rate  $t_{unciv}(\alpha)$  is implemented by the government and increases in  $\alpha$ ; once the share of civic agents exceeds  $1/2$ , such agents take over as a majority, and the tax rate drops from  $t_{unciv}(\alpha)$  to  $t_{civ}(\alpha)$ , and keeps rising in  $\alpha$ . This leads to twin peaks.



# **Making Full Use of Government**

Societies with high level of trust and civic culture can make full use of government services and opt for big and efficient welfare state.

Less civic, trustful and trustworthy societies either prudently keep their governments limited, or subject big governments to fraud, thus causing fiscal imbalances and undermining effectiveness of government programs.