Apolte, Thomas

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Abstract This paper provides a general framework for analyzing political (in)stability in comparative political systems. It distinguishes different subgroups of a society, some of which have a potential for pursuing a redistribution of wealth in its broadest sense via constitutional or non-constitutional government overturns. Political instability implies a cycle of overturns and redistributions with no stable equilibrium. It will be shown that individual incentives for participating in overturn attempts hinge not upon specific distributions of wealth but are rather dependent on the respective structure and credibility of promises and threats within and across the different subgroups of the society. What is more, without credible commitments of the incumbent governments to a carrot-and-stick policy there will be the danger of endless overturn and redistribution cycles, leading to failed states. For much the same reason, democratic constitutions contain effective measures against redistribution cycles. Stability within non-democracies, by contrast, can be explained by the fact that commitments among potential rebels cannot be backed by formal institutions, whereas incumbent governments can use their legal surrounding for developing institutions that, in turn, help them to embed potentially threatening societal groups into a system of carrot and stick.

Keywords Political economy, revolutions, credible commitments

JEL-Codes D72; D74; O15; P16

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Westfälische Wilhelms-Universität Münster
CIW – Centrum für Interdisziplinäre Wirtschaftsforschung
Scharnhorststraße 100
D-48151 Münster

Tel: +49-251/83-25329 (Sekretariat)
E-Mail: clementine.kessler@uni-muenster.de
Internet: www.wiwi.uni-muenster.de/ciw

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1. Introduction

In each society there is at least a potential for effective conflict over the distribution of its wealth; and in each society wealth is more or less unevenly distributed, so that there are rich and poor. The rich have an incentive to exclude the poor from their wealth by force, while the poor have an incentive to redistribute wealth away from the rich, and also by force. As far as the poor are successful in doing the latter, they become the rich and the hitherto rich become the poor and will then have an incentive to re-redistribute wealth to their favor.

Given these simple structures, how is it that most real-world societies experience long periods of political stability and, moreover, that instability is usually viewed as the exception rather than the rule? Specifically, how is it possible that some elites preserve their favorable wealth positions over years and decades, if not over generations, while the respective have-nots obviously accept a structure which leaves them with nothing while some others have it all? In short: Why do not all states fail? Why is it that subgroups of society accept distributions of wealth, power, income or, much broader, general authority structures of the society they live in which could, in principle, be much more favorable to them?

In social sciences it has a long tradition to hypothesize that people in a society accept distributions of wealth, income, and power as long as they consider them just according to some criteria. Should things structure themselves in a way that they give reason for grievances in some subgroups in society, and should these subgroups feel disadvantaged in terms of the distribution or even oppressed, then this gives rise to political unrest and, eventually, to public uprisings. Otherwise would things (tend to) be accepted the way they are.

Such a view, of course, may well be challenged on methodological grounds. From the point of view of methodological individualism, one would expect people to take political action that aims at changing political power structures only as far as the individual (risk-adjusted) expected utility of doing so is positive. On the other hand, one would not expect them to take action just because they find themselves treated unjustly. On the other hand, one would expect people to take political action even if they did not feel disadvantaged or treated unjustly but simply expected potentials for further improvements of their respective individual net wealth positions. In sum, feeling disadvantaged or treated unjustly cancels out of the list

of motivators for rationally acting persons that individually decide on taking, or participating in, political action. All that counts is individual risk-adjusted expected utility from the point of view of the respective individual.

Social scientists and political philosophers have by and large neglected this view on political rebellion. They have hence also discarded the public-goods character of successful government overturn. Rather, the "macro-view" on political rebellion as a public good dominated theorizing and, apart from the economics profession, it still does (see *Lichbach*, 1995: chap. 1). In 1970, *Gurr* (1970) published the seminal paper on the deprivation literature which seems, at first glance, methodologically related to economic approaches since it bases individual decisions on the participation in political action on an expected improvement of so far underprivileged subgroups of a society. Indeed, some papers from that tradition made it into journals like *Public Choice* (see *Bloch*, 1986), thus signaling methodological individualism. Nevertheless, deprivation theory turns out to be closer to *Marxist* and other more collectivist approaches upon a somewhat closer inspection. True, deprivation theory somehow bases decisions on individual participation in political action on an economic calculus that rests on the expected utility of that action for the respective group the individual belongs to. What nevertheless drives deprivation theory away from methodological individualism, however, is that it ignores the collective-action problem that each group faces.

While *Olson* (1965) and, with respect to political rebellion, *Tullock* (1971) have early pointed to public-goods problems of collective action, few scholars have rigorously applied this methodology to questions of political rebellion and the stability of societies.[1] Moreover, most of those who did have either been severely criticized by proponents of the macro view on rebellious action (see, for example, *Tilly*, 1978; *Gamson*, 1990) or simply been ignored with their view. Most of those who did not ignore the collective-action problem view *per se* nevertheless somehow bypassed it (*Zald/McCarthy*, 1990).

Since the turn of the century, a new series of papers and books from the recent political-economy literature have been published. Here, rebellious action has been underpinned by modern microeconomic models that shift the traditional theories of political unrest much closer to methodological individualism. Generally, the approaches aim at a game-theoretic foundation of the traditionally hypothesized relation between uneven distributions of income or wealth, on the one hand, and political unrest on the other. *Boix* (2003) predicts manifest political unrest in times of excessively uneven distribution since he assumes a lack of com-

[1] Some exceptions are: *Opp*, 1989; *Kuran*, 1989; *Lichbach*, 1995; *Kurrild-Klitgaard* 1997; 2004; *Hirshleifer* 2001.

mitment devices available to incumbent governments that are effective in credibly binding them to some promised redistribution schemes. As a result, the incumbents find themselves unable to hinder revolution-driven democratization tendencies of their societies. Slightly different from that, *Acemoglu* and *Robinson*[2] believe to have found an effective commitment device for the incumbents in a voluntary shift toward democratization. In doing so, the incumbents could bind themselves to the median voter's judgment who, given the initially uneven distribution, is always interested in redistribution.

Although these approaches are based on economic modeling they still discard the underlying collective-action problem. No matter whether unjust distributions supposedly induce only a threat of revolutions or indeed manifest political unrest, however, the relation between perceived injustice and collective action to become plausible requires the collective-action problem to be solved first. *Acemoglu* and *Robinson* (2006: 132) admit their bypassing of that problem, justifying themselves by referring to some other authors that proceed similarly.[3] The latter, of course, does not touch upon the methodological disputability of an explanation of political unrest that ignores fundamental collective-action problems (see *Apolte*, 2010, for a more extensive criticism).

A second issue with that literature is that the authors restrict their analyses to the comparison to two distributional states: an initial state of more or less gross inequalities and a final state that is usually oriented toward the median voter's distributional preferences. Hence, such a restriction leaves no scope for all sorts of initial distributions and, still more important, for all sorts of possible distributional outcomes from effective political unrest or some threats thereof.

This paper aims at filling the gap that the recent political-economy approaches to political unrest has left with respect to both, the public-goods problem of the associated political action as well as the scope of its possible distributional consequences. It provides a simple structure for explaining collective action that aims at (legally or illegally) overturning incumbent governments in order to change the distribution of wealth in a broadest possible sense. It also leaves it open as to whether such overturns result into new and stable distributions and/or governments or whether they may end in destabilizing redistribution cycles. It may thus serve as a framework for analyzing political stability or instability in comparative political systems.

The rest of the paper is organized as follows. In the second section, we set out the general framework of the model. In the third section, we distinguish constitutional from non-

[2] See *Acemoglu/Robinson*, 2000; 2000a; 2001; 2001a 2002; 2003; 2006.
[3] Namely *Roemer*, 1985; *Grossman*, 1991; 1994; *Wintrobe*, 1998; *Bueno de Mesquita* et al. 2003.

constitutional overturns and demonstrate under which conditions there are potentials for redistribution and thus for political unrest. We show that there is always a potential for redistributions whenever there is at least some wealth in a society and whenever there are certain structures of commitment devices between the subgroups of the society. For much the same reason, there is furthermore always a potential for destabilizing redistribution cycles in each society. Hence, whether a society remains stable or becomes subject to instability in the form of endless cycles of overturns and redistributions does not hinge upon a certain initial distribution but rather on the structure and credibility of commitments of the different subgroups to certain promises and threats. The latter is analyzed in section four. Section five concludes.

2. A Model Society

In setting up the framework for our analysis, we borrow from *Boix* (2003) as well as from *Acemoglu/Robinson* (2006). However, different from their approaches we distinguish more than just two groups in our model society (see *Apolte*, 2010). Furthermore, we derive the initial distribution of wealth from the respective group members' power positions instead of assuming it as a given historical fact. Our model society may, in principle, be either a democracy or a dictatorship or anything in between. We consider three types of government overturns (*Tullock*, 1987): the first are coups organized and processed within a narrow elite which may, but does not need to be, relatively close to the government; the second are revolutions, for which a more broad participation of the general public is constitutive; the third comes as rule-guided change. Coups and revolutions are usually associated with violence, while rule-guided change generally follows accepted procedures, especially elections that are based on limited or unlimited franchise. Note that revolutions or coups may well occur in a society that has rules stipulated for changes in government. When referring to those actors that launch a revolution or a coup, we will generally call them rebels.

We will refer to rule-guided change as constitutional overturns, while we refer to coups and revolutions as non-constitutional overturns. The latter may occur in societies that both do have or do not have rules for change.

Consider now three major groups. The first is a relatively small group which holds political power prior to an overturn and which decides on the distribution of wealth across the different groups. We call this group the "old elite" (*oe*). Secondly, there is a group of well-educated people who are not member of the old elite but who nevertheless hold somewhat higher-ranking positions in the military, the police, or the economy, or who are at least intellectually influential within the society. This group is again comparatively small, but to a cer-

tain extent internally networked and hence potentially well suited for solving collective-action problems within this group or between this group and other groups. This group is a potential organizer of a coup or a revolution, hence we call it the revolutionary elite (*re*) (*Apolte*, 2010). Finally, there is a third group, which is large and "latent" in *Mancur Olson's* sense (*Olson*, 1965). The number of people within this group is large, and no individual member of the group or any subgroup of it is influential enough in order to solve internal collective-action problems associated with mass events like a revolution. We call this the group of the "powerless" (*pl*).

Whenever there is a violent change in government with a more or less broad participation of the powerless, we call this a revolution rather than a coup. Accordingly, we denote the share of those powerless who actively engage in a violent change as γ, with $0 \leq \gamma \leq 1$. We have hence two further subgroups of the society, namely the "active powerless" $pa = \gamma \cdot pl$ and the "non-active powerless" $pn = (1 - \gamma) \cdot pl$. While all powerless decide as to whether they are, in principle, willing to actively participate in a violent change on the basis of their expected payoffs, it will be the organizers of a violent change from the revolutionary elite who finally decide how many of the powerless they will accept as participants. That is to say, the revolutionary elite first sets incentives for the powerless to participate and then they fix a share γ of those who are indeed invited to participate.[4]

The number of the respective group members as a share of the total population is denoted as r_i, with $i \epsilon (oe, re, pa, pn)$. For reasons of notational convenience we normalize the number of the total population to one, so that $\sum_i r_i = 1$ and the respective share in population equals the total number of group members.

To keep things simple, we define the capital stock or wealth as all kinds of fungible entitlements, e.g. to physical capital or foreign financial titles.[5] Hence, it could be that some groups have command over the entire domestic capital stock as defined here. We denote the total capital stock or wealth at a certain time as w^j with $j \epsilon (0,1)$ as two periods of time.

[4] This is not to say that the remaining powerless people were not welcomed to take part in some sort of public mass events like demonstrations against the incumbent regime and the like. It is just to say that the non-active powerless people are in no way included in any sort of planning and organization. Note, for an illustration, that revolutionary parties – communists and others alike – have typically kept access to even ordinary party membership somewhat exclusive. Party membership was frequently a peculiar mixture of a signal of honor and loyalty on the one hand and a precondition for all sorts of even minor official positions in post-revolution society on the other.

[5] In a somewhat broader sense, one could also think of "capital" as the right to influence political decision-making. In that sense, the respective groups may also represent opinions or ideologies, the latter of which enter public policy to the extent of the respective group's political capital stock.

Since total population is normalized to one, total wealth w^j is equal to average wealth $\bar{w}^j$. The respective groups' share in w^j is s_i^j with $\sum_i s_i^j = 1$. Hence, the wealth of an individual person belonging to group *i* at time *j* is:

$$w_i^j = \frac{s_i^j \cdot \bar{w}^j}{r_i}. \quad (1)$$

Overturns of incumbent governments, especially when they come violently, may be associated with considerable costs for both participants in an overturn and government officials. We consider three types of costs here, one of which will – at least potentially – be borne by all, and two of which are borne by only those who individually participate in overturn activities. As in *Acemoglu/Robinson* (2006), we model the first type of costs as a linear depreciation of the capital stock by a rate μ with $0 \leq \mu \leq 1$. Such a depreciation materializes when the incumbent government is challenged by an overturn attempt and the government tries to defeat the rebellion (see *Smith et al*. 2011). In such a case will the capital stock at time 1 be $w^1 = \mu \cdot w^0$. The depreciation of the capital stock reduces the amount of wealth which can, in principle, be confiscated from the old elite and redistributed to the other groups in the case of a successful overturn. In the case of a failed overturn, it reduces the wealth the incumbents may keep.

The second type of costs is related to the risk of being injured or killed during an overturn attempt. We denote the expected value of these costs per participant as δ>0. The third type of costs stems from punishments that participants have to fear in the case of a failed overturn attempt. We denote the expected value of these costs per participant as $\pi \cdot \rho$ with $\rho > 0$ and π as the probability that an overturn attempt fails. As will be seen later, it is useful for technical reasons to set an upper bound for the sum of the second and third type of costs without loss in generality of our results, such that: $\rho + \delta \leq \frac{\mu \cdot \bar{w}^0}{r_{re}}$. For the government officials, imposing a punishment does also come at a cost. This is so since punishments require efforts, for example since persons – especially those from the group *re* – are usually endowed with human capital and are hence better allocated into production processes rather than send into jail. Furthermore, operating political prisons and political prosecution bind resources, and finally, punishment activities may provoke new resistance. We denote the expected value of these costs as $\pi \cdot \sigma$ with $0 < \sigma < \rho$.

By assuming risk neutrality we can write indirect utility of those actors who participate in an overturn as:

$$V^0_{pa,re} = w^0_{pa,re} \qquad \text{prior to an overturn attempt; and} \qquad (2a)$$

$$V^1_{pa,re} = w^1_{pa,re} - (\pi \cdot \rho + \delta) \qquad \text{after an overturn attempt.} \qquad (2b)$$

For the members of the old elite it is:

$$V^0_{oe} = w^0_{oe} \qquad \text{prior to an overturn attempt; and} \qquad (3a)$$

$$V^1_{oe} = w^1_{oe} - \pi \cdot \sigma \qquad \text{after an overturn attempt.} \qquad (3b)$$

We assume that initially, the old elite has perfect command over the distribution of the capital stock. Furthermore, we assume for the moment that the old elite does not make use of any redistributive measures in order to keep any other group from revolting. Given these assumptions and given strict utility maximizing behavior of all individuals, the entire wealth in period 0 will be held by group oe alone. The initial distribution of wealth is thus, according to (1):

$$s^0_{oe} = 1 \quad \text{and} \quad s^0_{i \neq oe} = 0, \quad \text{and hence:} \qquad (4a)$$

$$w^0_{oe} = \frac{\bar{w}^0}{r_{oe}} \quad \text{and} \quad w^0_{i \neq oe} = 0. \qquad (4b)$$

3. Potential Instability: The Necessary Condition

Our society will be said to be potentially unstable if organizing an overturn raises the expected utility of a sufficiently large share of the non-oe part of the society. The share is sufficiently large if the share comprises as many persons as is necessary for processing an overturn attempt. Note that potential instability is a necessary but not a sufficient condition for an overturn. The sufficient condition holds whenever the sufficiently large share of the non-*oe* part of the society for which the expected utility of an overturn is positive is able to effectively organize itself. Specifically, it must be able to overcome all associated collective-action problems and to make sure that all mutual commitments between participating individuals, groups and subgroups are credible in its technical sense.

According to our assumptions, the old elite may undercut potential instability by threatening putative conspirators and opponents with punishments for the case of a failed

overturn attempt, and they may threaten to take measures for defeating rebellions. By contrast, however, they may as well appease potentially dangerous persons, groups, or subgroups by offering a redistribution of some share of wealth. With any of these measures, the old elite may relieve the potential instability, but again only potentially so. This is so because it is one thing to threaten groups with punishments or war or, for that matter, to conciliate them by way of promises conditional on some desired behavior. But credibly committing to these threats or promises is yet another thing.

Hence, in this section we discuss *potentials* and therefore necessary but not sufficient conditions of overturns as well as potentials for their prevention. We start our explorations with non-constitutional overturns in the following subsection and then compare these to constitutional overturns.

3.1. Non-Constitutional Overturns

The gain from an overturn for all groups except *oe* lies in a redistribution of wealth. As long as the wealth confiscated from the old elite is allotted independently of whether or not a person participated in the overturn attempt, the redistribution has the character of a public good to the general non-*oe* population. Since, on the other hand, there are personal costs to be borne by individual participants in the form of personal punishments, the overturn activities are plagued by collective-action problems (*Tullock*, 1971)[6].

Leaning on *Olson's* by-product theory we assume that there is, if any, only one group that may be exclusive and well enough organized for installing and maintaining a system of side payments to those and only to those who actively participate in a revolution: the revolutionary elite. More precisely, we assume that, as far as the revolutionary elite has the necessary capability, they promise to redistribute wealth from the old elite to all active revolutionaries, and only to them (*Apolte*, 2010).

For reasons of simplicity, we assume that the revolutionary elite either participates in an overturn in its entirety or not at all. We hence rule out overturns in which only a part of the revolutionary elite participates. As far as the revolutionary elite is large enough to process a violent overturn by its own capacity and without any support from the general public, a violent overturn will come as a coup, and the share γ of participants from the powerless will be zero. For the revolutionary elite, this has the advantage that, following a successful overturn, the confiscated wealth can be distributed among the members of the revolutionary elite alone. Also, under this condition, commitments for participation in costly activities during the over-

[6] See also *Lichbach*, 1998; *Kurrild-Klitgaard*, 1997.

turn as well as to schemes for sharing the capital stock are only necessary among the members of the revolutionary elite.

In all cases, though, in which an overturn is impossible without the support of the general public, the revolutionary elite is forced to extend its system of commitments to a share $\gamma > 0$ of the powerless and to form a more encompassing group of revolutionaries. The scope for per-capita allotments of confiscated wealth will then be $w^1/(pe + \gamma \cdot pl)$, which clearly declines in the number of active revolutionaries. Hence, the revolutionary elite has an incentive to keep the share γ of the group of the powerless as low as possible. Suppose that there is one minimum share γ^m of the powerless that the revolutionary elite needs for organizing the overturn. We assume that for any $\gamma < \gamma^m$, an overturn will not be possible for reasons of a sheer lack in mass, while for $\gamma \geq \gamma^m$ an overturn will succeed with probability 1-π.

Once an overturn of the government has been successfully realized, the revolutionary elite will take power and redistribute wealth. It directly follows from the assumption of utility maximization that they will set $s_{oe}^1 = s_{pn}^1 = 0$.

That means they will confiscate all wealth from the old elite, and they will not allot any of the confiscated wealth to the non-active powerless, i.e. to those members of the powerless who did not participate in the overturn (because they refused or they were not accepted). Prior to the overturn, the revolutionary elite promises to set s_{pa}^1 such that $s_{pa}^1 \cdot \overline{w}^1 - \pi \cdot \rho - \delta > 0$ in order to implement an incentive for the powerless to participate in the overturn. Denoting a successful overturn as *SO*, indirect utility at time 1 in the case of a successful overturn would be:

$$V_{oe}^1(SO)=0; \tag{5a}$$

$$V_{re}^1(SO) = \frac{\mu \cdot s_{re}^1 \cdot \overline{w}^0}{r_{re}} - \delta; \tag{5b}$$

$$V_{pa}^1(SO) = \frac{\mu \cdot (1-s_{re}^1) \cdot \overline{w}^0}{r_{pa}^m} - \delta = \frac{\mu \cdot (1-s_{re}^1) \cdot \overline{w}^0}{\gamma^m \cdot r_{pl}} - \delta; \tag{5c}$$

$$V_{pn}^1(SO)=0. \tag{5d}$$

By contrast, in the case of a defeated overturn attempt (*DO*) it would, as far as the old elite sticks with its punishment threats, be:

$$V_{oe}^1(DO) = \frac{\mu \cdot \overline{w}^0}{r_{oe}} - \sigma; \tag{6a}$$

$$V_{re}^{1}(DO) = -(\rho + \delta); \tag{6b}$$

$$V_{pa}^{1}(DO) = -(\rho + \delta); \tag{6c}$$

$$V_{pn}^{1}(DO)=0. \tag{6d}$$

We are now able to more precisely define the necessary and the sufficient condition for an overturn attempt:

1. The necessary condition holds whenever it is possible for the revolutionary elite to set a share in wealth s_{re}^{1} such that there is a positive expected utility for both *re* and *pa* at time 1 for the case of an overturn attempt.
2. The sufficient condition holds if all mutual commitments that are necessary for the collective-action problems to be solved within the revolutionary elite and between the revolutionary elite and the active powerless *pa* are credible.

If only the necessary condition holds, we will say that there is an "overturn potential". Generally, such an overturn potential is given if the after-overturn capital stock $\mu \cdot \bar{w}^{0}$ per participant in the overturn (i.e. $r_{re} + \gamma^{m} \cdot r_{pl}$), minus the expected value of costs of injury minus the expected value of punishment costs is positive:

$$\frac{\mu \cdot \bar{w}^{0}}{r_{re}+\gamma^{m} \cdot r_{pl}} - (\pi \cdot \rho + \delta) > 0. \tag{7}$$

If such an overturn potential exists, we will call the society potentially unstable. We can now define a „critical" share γ^{c} of participants in a revolution from the group of the powerless. This is the share of those participants that stem from the group of the powerless and for which the overturn potential is just zero. Substituting γ^{c} into (7) and setting the result equal to zero yields:

$$\frac{\mu \cdot \bar{w}^{0}}{r_{re}+\gamma^{c} \cdot r_{pl}} = \pi \cdot \rho + \delta, \quad \text{or, after solving for } \gamma^{c}, \tag{8}$$

$$\gamma^{c} = \frac{\mu \cdot \bar{w}^{0}}{(\pi \cdot \rho + \delta) \cdot r_{pl}} - \frac{r_{re}}{r_{pl}}. \tag{9}$$

It follows that if the minimum share of participants exceeds the critical share, or if $\gamma^{m} > \gamma^{c}$, an overturn will not be feasible and the society is potentially stable. The reason is that whenever more than γ^{c} participants from the powerless are necessary for an overturn, the

total net gain from the overturn will not be large enough in order to make each participant better off. By the same token, an overturn will be feasible, and the society will be potentially unstable, whenever $\gamma^m < \gamma^c$.

Look at figure 1 for an illustration. According to (8), the intersection of the line $\frac{\mu \cdot \bar{w}^0}{r_{re}+\gamma^c \cdot r_{pl}}$ with the $(\pi \cdot \rho + \delta)$-line marks the critical participation rate γ^c, that is the participation rate for which the net benefit from participation is just zero for each participant. If the minimum participation rate γ^m, that is the rate needed for an overturn, is to the right of that intersection, for example at γ_h^m, an overturn will not be feasible. There will then be no overturn potential and the society is potentially stable. By contrast, if the minimum participation rate is to the left of γ^c, for example at γ_l^m, then there will be an overturn potential. An overturn is feasible and the society is potentially unstable.

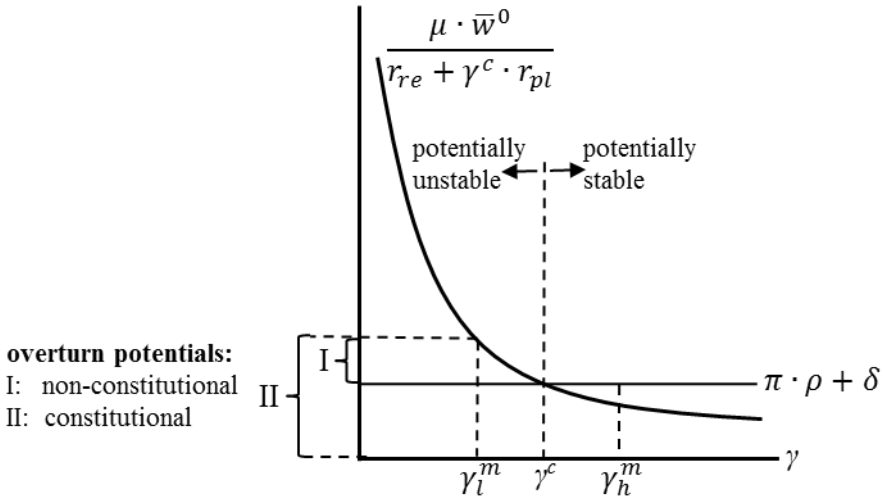

Figure 1: Stability and Potential Instability of a Society

According to equation 9, potential stability or instability depends on a number of variables, some of which the old elite has hardly any influence on, whereas others may be subject to manipulation. The former is true for initial wealth $\bar{w}^0$, the structural variables r_{re}, r_{pl}, and, at least in part, also π and δ. The latter is the case for ρ and for μ. Indeed, these are the variables that political leaders manipulate both preventively and in times of an actual danger of revolt: They threaten both the revolutionary elite and the powerless with punishments in the case of non-loyalty and they at least implicitly threaten with war-like responses to revolts. The latter implies some destruction of the society's wealth. Indeed, history gives examples of political leaders who intentionally pursued a broad destruction of their countries' infrastruc-

ture and capital stock, leaving behind scorched earth and hence nothing for being redistributed to the successors.

Another class of instruments the old elite may use for potentially reducing the overturn potential is a voluntary redistribution of a part of the wealth to either the revolutionary elite or the powerless, or to both. If the per-capita wealth redistributed to potential participants of an overturn exceeds the expected post-overturn wealth per participant, then there is a potential for undercutting the overturn potential by way of redistribution. In the limiting case, the old elite could give up all of its wealth in order to mobilize means for redistribution. Hence, if all potential participants are to be bought out, undercutting the overturn potential by redistribution is feasible whenever the following condition holds:

$$\frac{\bar{w}^0}{r_{oe}} > \frac{\mu \cdot \bar{w}^0}{r_{re}+\gamma \cdot r_{pl}} - (\pi \cdot \rho + \delta), \tag{10}$$

Remember, however, that it is both necessary and sufficient to buy out only the part of the non-*oe* population that is crucial for organizing an overturn. It might be a difficult task to choose only the powerless, at least when the group of the powerless is so large that the revolutionary elite can recruit new members of the powerless whenever some of potential active powerless have been subject to buy outs by the old elite. It is therefore more promising for the old elite to buy out the revolutionary elite. This is indeed what we usually observe, and for a number of reasons. One of these reasons is that potentially dangerous persons are more likely to be found in the *re*-group, and another reason is that the potentially dangerous persons are less numerous then a possibly large group of powerless, so that a buyout is less costly in that case.

It makes thus sense to focus on such a case where the old elite attempts to buy out the revolutionary elite. This does indeed seem to be empirically justifiable, because anecdotal evidence tells us that dictators usually do not care much about the wellbeing of the powerless. They even tend to be relatively lenient with respect to their attitude toward the government. *Stalin*, *Mao* and *Pol Pot*, for example, let millions of peasants starve to death, but the people whom they actively imprisoned or killed where mostly officials. At the same time, it was officials whom they equipped with more or less generous privileges.

Following these observations, *re*-members and only they need to be shifted to a wealth position of $\frac{\mu \cdot \bar{w}^0}{r_{re}} - (\pi \cdot \rho + \delta)$ or above in order to make them abstain from overturn at-

tempts.[7] The costs of such a buyout per member of the old elite would then be $(\frac{\mu \cdot \bar{w}^0}{r_{re}} - \pi \cdot \rho - \delta) \cdot \frac{r_{re}}{r_{oe}}$, and condition condition (11) would modify to:

$$\frac{(1-\mu)\,\bar{w}^0}{r_{re}} > -(\pi \cdot \rho + \delta). \tag{10a}$$

Note that this condition always holds, except for costless overturns, i.e. for $\mu = 1\ and\ \pi \cdot \rho + \delta = 0$. Assume that people from *re* abstain from an overturn attempt as soon as the old elite offers them just as much as the expected utility of a successful overturn, as defined by the right-hand side of (11a). Then, the combination of threatening potential opponents and promising wealth redistribution (carrot-and-stick policy *CS*) leads to the following indirect utility for the respective groups at time 1:

$$V_{oe}^1(CS) = (1-\mu)\frac{\bar{w}^0}{r_{oe}} + (\pi \cdot \rho + \delta) \cdot \frac{r_{re}}{r_{oe}};^8 \tag{11a}$$

$$V_{re}^1(CS) = \frac{\mu \cdot \bar{w}^0}{r_{re}} - (\pi \cdot \rho + \delta); \tag{11b}$$

$$V_{pa}^1(CS) = 0; \tag{11c}$$

$$V_{pn}^1(CS) = 0. \tag{11d}$$

According to (11b), the payments necessary for undercutting overturn attempts by the revolutionary elite rise with decreasing ρ and δ, and with increasing μ. That is, the more the incumbents threat with punishments and fights as well as with a destruction of wealth, the less they have to spend for a buyout. At the same time, the remaining wealth in the hand of the old elite rises, as (11a) shows. It bears noting, however, that buyouts alone will not do the job. Should the government abstain from threatening with any punishments and fights as well as from any destruction of wealth and hence move μ toward one and $\rho + \delta$ toward zero, then the compensations for loyalty will converge to the entire wealth, leaving nothing for the old elite. Hence, a government can never prevent non-constitutional overturns by way of buying out potential revolutionaries alone. It must always add the stick to the carrot.

[7] It is assumed here, that *re* does finally not share the benefits of the overturn with *pa*, which, as will be seen in the following section, turns out to be their best strategy. Otherwise, the old elite had to shift *re* to at least $\frac{\mu \cdot \bar{w}^0}{r_{re}+\gamma \cdot r_{pl}} - (\pi \cdot \rho + \delta)$. Assuming this, however, would not change any of our results.

[8] Since we defined $\rho + \delta \leq \frac{\mu \cdot \bar{w}^0}{r_{re}}$ above, the upper bound of (12a) is indeed $\frac{\bar{w}^0}{r_{oe}}$.

The most important aspect of our considerations, however, is this: All measures against coups and revolutions are bound to commitments into the future:

- Threats with punishments are a tool that needs to be applied prior to possible overturn attempts; the punishments themselves, however, must be applied afterwards, but that comes at a cost not only for the rebels but also for the old elite.
- Threats with war-like reactions to overturn attempts need to be applied prior to possible overturn attempts. Once such an attempt has been launched, it depends on the expected relative war power of both sides whether it makes sense for the old elite to surrender or to fight. In any case, though, fighting comes at a cost to both the incumbents as well as the rebels.
- Finally, buyouts have to be processed prior to any overturn attempts, too. However, as long as the old elite retains all political power there may be an incentive to revoke the buyout in the future. It thus once again depends on the expected relative strength of societal groups as to whether or not a buyout will be retained in the future or not.

Hence, as long as the threats and promises by the old elite are not made credible, they only give a potential for undercutting an overturn potential. On the other hand, the overturn potential alone is not sufficient for effectively launching an overturn attempt. Both, the overturn potential and the threats and buyouts define just potentials that become effective only as far as the underlying commitments are made credible.

Before analyzing the commitment structures and their respective credibility we will first contrast the results of our analysis of non-constitutional overturns to constitutional overturns.

3.2. Constitutional Overturns, Voting Cycles, and Revolution Cycles

We define a constitutional overturn as an act of removing an incumbent government from office against its will, but along the lines of previously stipulated procedures. Note that the existence of such rules does not imply universal suffrage as in full-fledged democratic systems (*Congleton*, 2011: 141 - 160). It may rather be that only few people have the right to vote for a head of a government, as has been the case in the *Holy Roman Empire*. There, the emperor was indeed appointed by elections for which but a narrow elite of nobles was enfranchised. Constitutional overturns may hence be the result of the casted votes of just some privileged persons, but it may as well follow from general elections on the basis of universal suffrage. On somewhat different dimensions, the rules may stipulate one-man-one-vote proce-

dures or otherwise; voting may be done openly or secretly, and so on. The only common feature is that whenever groups decide on the basis of whatever rule, then this will always be associated with some sort of voting.

There are two differences between constitutional and non-constitutional overturns which are of interest here:

- The number of persons that is necessary for an overturn is now identical to the quorum necessary for ousting the government, as stipulated by the respective constitutional rules. If, for example, there is universal suffrage and if the number of members of *re* falls short of a majority, outvoting the incumbent government requires a share of γ^m of the powerless in order to form a minimum winning coalition with *re*. This may again happen on the basis of a promise by *re*-people to share wealth with all $\gamma^m \cdot r_{pl}$ in the case of a successful overturn.
- There are no punishments and no wars associated with constitutional overturns. Participating in a constitutional overturn does hence come at practically no costs, at least as long as we ignore the way to the ballot box.

This has two implications. The first is that, with zero costs of voting, incumbents lose all power vis-à-vis the group of the enfranchised. One may well discover this as the very sense of democracy. The other implication is usually less welcome, however: The reduction in costs of participation in an overturn gives immediate rise to redistribution cycles. See figure 2 for an illustration. On the vertical axis the net wealth of a person from pa $(= \gamma \cdot pl)$ is depicted. On the horizontal axis we find the net wealth of a *re*-person. In point A, all wealth is concentrated with the old elite *oe*, in point B it is with *re*, and in point C it is with *pa*. Under the given assumptions all indifference curves of a *pa*-member are parallels to line AC, all indifference curves of a *re*-member are parallels to line AB, and all indifferent curves of an *oe*-member are parallels to CB. Note that, in the latter case, higher indirect-utility levels are indicated by indifference curves that are closer to the origin.

It immediately follows that any negotiation between the three groups has no core. With majority voting, there would be a core if there were points for which there is no direction to move which is associated with higher utility levels for two out of three groups. But such point does not exist. Look at point D, from which there are three directions for which utility of two groups rises, namely the directions into fields *a*, *b*, and *c*. From any point between A, B, and C (including these points), there is at least one such direction.

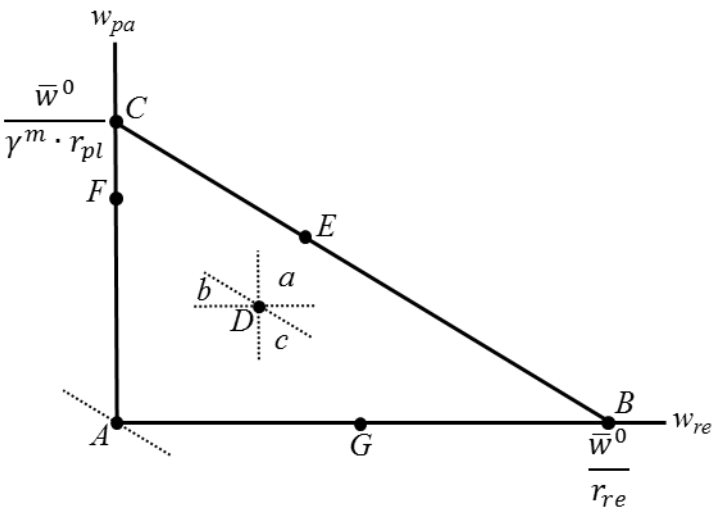

Figure 2: Voting Cycles

The lack of a core implies that no voting outcome can ever be stable. Consider A as a starting point where the old elite has all of the wealth. The *pa*-people and *re*-people could vote them out and redistribute wealth according to point *E*, where there is nothing left for *oe*. The *oe*-people could then offer point *F* to *pa*, making them still better off. But then, point G would be superior to both *oe* and *re*, and so on.

Democracies or any other constitutions which stipulate rules for changes in government are hence dependent on constitutional provisions which prevent such cycles. Moreover, there are usually limitations of the scope of what may be subject to majority voting at all. For example, there is hardly any democracy in which voters are enfranchised to confiscate and completely redistribute wealth across the population. Indeed, as *Usher* (1981) states in his seminal book, a prerequisite to democracy is that a great deal of resource allocation is processed by anonymous markets rather than by majority voting, since otherwise the democratic structures would fall victim to completely destabilizing voting cycles.

By contrast, there cannot be redistribution cycles in a more narrow sense in the case of non-constitutional overturns, simply because there is no voting. By the same principle, however, there may well be cycles, and we will call them revolution cycles (*Apolte*, 2010). One not so fundamental difference between voting and revolution cycles – at least with respect to our questions – is that voting cycles are caused by ever newly formed majorities, while revolution cycles are caused by ever newly formed coalitions of rebels. The other, for our questions much more fundamental difference is that voting is (almost) costless while revolutionizing is not. As a result, while devastating voting cycles in democracies are typically prevented through intricate constitutional provisions, revolution cycles in societies with no stable consti-

tutions need to be contained by way of discretionary "hand control" on the basis of carrot and stick, as analyzed in the previous subsection.

The latter, however, comes at a cost not only to rebels but to the population in general, because the very tool that enables a dictator to stabilize a society by "hand control" also enables him to oppress the population. In figure 3 the line BC indicates the potential wealth distribution between *re* and *pa* alone, at time 0. These distributions, however, are not immediately available to *re* and *pa*, since the incumbent government has first to be overturned by non-constitutional action. In doing so, a part (1-μ)$\overline{w}^0$ of total wealth will be depreciated, leaving only $\mu \cdot \overline{w}^0$ for being distributed among *re* and *ra*, as indicated by line ED. What is more, the rebels face costs of fighting to the extent of δ; and finally, they also face potential punishment costs prior to an overturn attempt with an expected value of $\pi \cdot \rho$. Taken together, only as long as there is a positive distance between points F and G will a non-constitutional overturn be feasible. In the depicted case it is indeed still feasible, which implies that the expected costs of an overturn are too low for bringing a revolution cycle to a halt by the incumbents. In principle, however, the incumbents could raise the costs of a revolution as much as is necessary for completely eroding the expected net value of an overturn. Technically, this lowers μ and raises $\rho + \delta$ until the distance between F and G has disappeared. Then, a non-constitutional overturn is not feasible anymore and the revolution cycle is stopped.

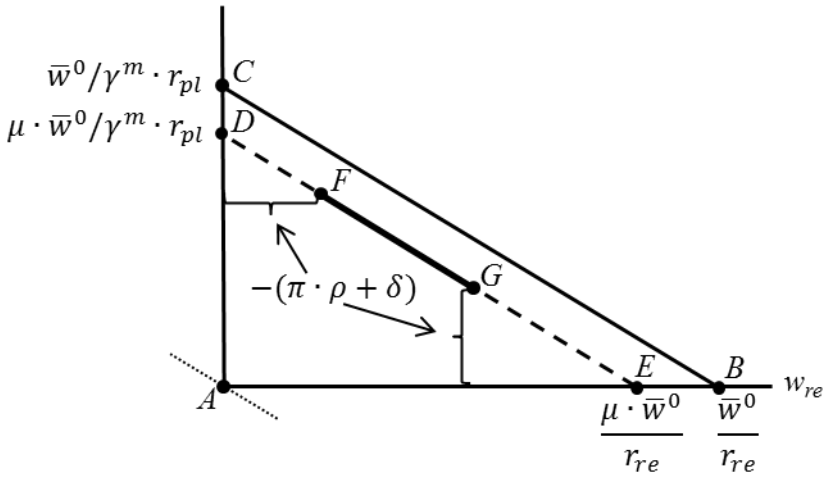

Figure 3: Stopping Revolution Cycles

Once again, however, this is only a potential option, since for becoming effective the incumbents' ability to credibly commit to the threats and promises prior to any overturn attempt is required. Without any such ability, there are no costs of an overturn to be expected, which implies that line ED shifts back to BC since the costs $\pi \cdot \rho + \delta$ disappear, and the revo-

lution cycles will go on. In this respect, there would then be no fundamental difference between revolution cycles and voting cycles. But in another respect, a fundamental difference remains: Since non-constitutional overturns are not limited with respect to the scope of policies to which new governments are legitimized, total wealth would be subject to unlimited redistribution and the society would be sucked into a swirl of endless revolution cycles. Fortunately, perhaps, this is for the most part not what we observe, although sometimes these things happen, leading into what is called failed states.

As a result, it is again the commitments that count, and not the potentials. In fact, overturn potentials always exist whenever there is any wealth that can in principle be redistributed, or simply whenever there is any positive wealth $w_0>0$ at all. However, depending on the structure of commitments between the different groups, these ever existing potentials may either lose effectiveness or eventually become effective. Since it does not make much sense to analyze the existence of something that does exist practically always and everywhere anyway, it makes all the more sense to analyze under which conditions the ever existing overturn potentials become effectively relevant. In sum, the necessary condition for instability, as it has been subject to the present section, does in principle always hold. When abstracting from commitment problems, we found that each and every society is always potentially unstable. It hence all hinges upon the sufficient condition, i.e. on the structure of commitments within and across the different groups in society.

Note that all this applies under any possible initial wealth distribution, even under full equality. Hence, by contrast to the deprivation theories and to the recent political-economy literature, the initial distribution of wealth in any broad sense cannot consistently be claimed to be causal for the stability or instability of a society, at least not within a framework of rational-choice models. In fact, we have hardly any indication that societies with a less equal distribution of wealth are any more prone to revolutions, at least when we control for the fact that most non-constitutional overturns happen in dictatorships and that dictatorships usually have a less equal distribution of income than democracies (*Möller*, 2011). Hence, in order to develop explanations for the stability or instability of societies we rather need to explore the structure of commitments between the various groups. This structure is decisive to the extent to which the ever existing overturn potentials either remain "passive" in the sense that potential rebels do not take any action, or become effective. This, therefore, is subject of the following section.

4. Effective Instability

In this section, we analyze non-constitutional overturns within a simple game-theoretic framework. Non-constitutional overturns come as coups or revolutions. In the case of revolutions we have $\gamma^m > 0$, which implies that the revolutionary elite needs a more broad participation of the group of the powerless. In the case of coups, we have $\gamma^m = 0$ and a participation of the powerless is not necessary. The case of revolutions is presented in figure 4. The game starts with the offer by the old elite to buy out the revolutionary elite. The revolutionary elite then decides as to whether it accepts the buyout and hence abstains from an overturn attempt or not. In the case that *re* accepts the buyout offer, the old elite has to decide whether they will keep the associated promise, which means that part of the wealth will be distributed to *re* and that the new distribution will henceforth be respected by the old elite.

In the case that *re* does not accept the buyout offer, the revolutionary elite will offer a part $\gamma^m \cdot pl = pa$ of the powerless to participate in an overturn attempt and eventually to share the ensuing benefit. If *pa* then decides to not participate there will be no overturn attempt and the old distribution of wealth as described by equations (4a) and (4b) remains in place. If, alternatively, *pa* decides to participate in the overturn attempt, then the old elite decides whether it fights or not, i.e. it tries to defeat the overturn attempt or surrenders. If the old elite surrenders, then the revolutionary elite decides as to whether it wants to keep its promise to share the confiscated wealth with *pa* or it wants to renege on its promise.[9]

If the old elite fights, then nature decides with probability π that the overturn attempt fails and with probability $1 - \pi$ that it succeeds. If the attempt succeeds, then the revolutionary elite once again decides whether to stick with its promise to share the benefits or to renege on the promise. Finally, if the overturn attempt fails, the old elite has to decide whether to punish the revolutionaries from *re* and *pa* or not.

[9] We do not advance on the question why there will be fights in the first place, as *Fearon* (1995) who asks why, with mutually compatible estimations on the relative strength one could better anticipate the expected result of the fights via negotiations. We thus implicitly assume imperfections in mutual expectations, as *Fearon* does.

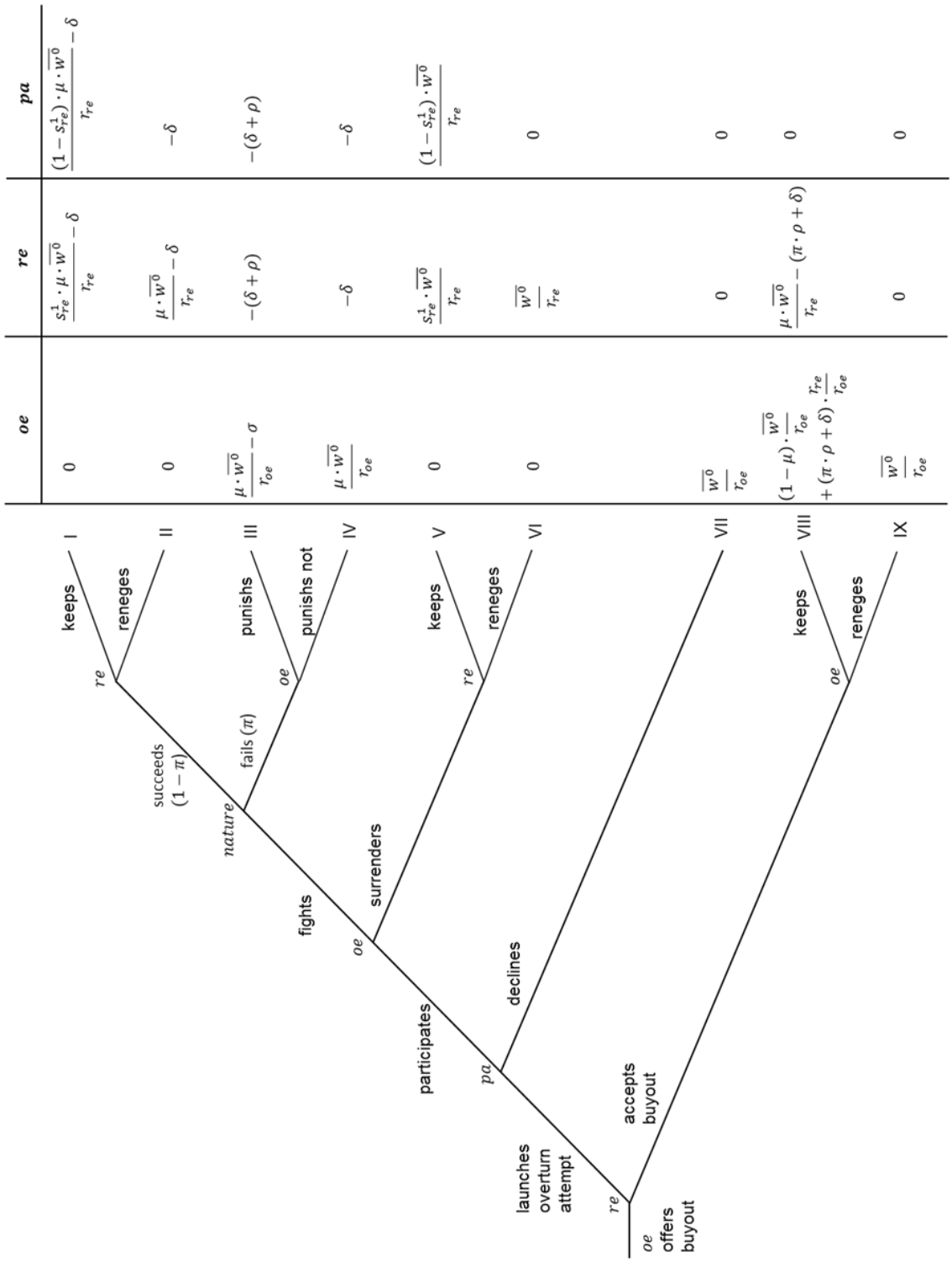

Figure 4: Revolution Game

The game has one respective subgame-perfect *Nash*-equilibrium for each of two different parameter levels; one is at end node VII and the other at end node IX. For a proof, consider that *re* accepted a buyout. In that case *oe* would renege on its promise to redistribute wealth, since it could keep the entire wealth whereas with a buyout it would realize just

$(1-\mu)\frac{\bar{w}^0}{r_{oe}} + (\pi \cdot \rho + \delta) \cdot \frac{r_{re}}{r_{oe}} < \frac{\bar{w}^0}{r_{oe}}$. As a result, *re* would end up with zero instead of the promised $\frac{\mu \cdot \bar{w}^0}{r_{re}} - (\pi \cdot \rho + \delta)$. If, alternatively, the revolutionary elite launched an overturn attempt, the expected utility for the *re* were:

- zero for the case that the powerless declined to participate in an overturn attempt;
- $\frac{\bar{w}^0}{r_{re}}$ in the case that the active powerless participated and the old elite surrendered; the latter is true since it is the best response to a surrender of the old elite to renege on the promise to share the confiscated wealth with the active powerless *pa*.
- $(1-\pi)\left(\frac{\mu \cdot \bar{w}^0}{r_{re}} - \delta\right) - \pi \cdot \delta = (1-\pi) \cdot \frac{\mu \cdot \bar{w}^0}{r_{re}} - \delta$ in the case that the active powerless participated and the old elite tried to defeat the revolutionaries.

Depending on the size of $\pi, \mu,$ and δ, $(1-\pi) \cdot \frac{\mu \cdot \bar{w}^0}{r_{re}} - \delta$ will be above, below, or equal to zero. As a result, in the case $(1-\pi) \cdot \frac{\mu \cdot \bar{w}^0}{r_{re}} - \delta < 0$ would the revolutionary elite accept the buyout offer, knowing that the old elite would then renege on its promise to redistribute wealth. Hence, the game would end at node IX in the case of $(1-\pi) \cdot \frac{\mu \cdot \bar{w}^0}{r_{re}} - \delta < 0$.

By contrast, in the case of $(1-\pi) \cdot \frac{\mu \cdot \bar{w}^0}{r_{re}} - \delta > 0$ would the revolutionary elite not accept the offer unless the old elite found some tool for committing itself to its promise to share wealth with the revolutionary elite. In this case, it is up to the active powerless to decide as to whether they want to participate in an overturn attempt or not. The expected utility for the case that they participated are as follows:

- zero in the case that the old elite surrendered, since in that case, the revolutionary elite would renege on its promise to share the confiscated wealth with the active powerless;
- $-\delta$ in the case that the old elite would fight. If the overturn attempt succeeded the revolutionary elite would again renege on its promise to share the confiscated wealth, so that the active powerless faced the risk of injury or death during revolutionary struggles without a credible perspective of being rewarded for their participation. Alternatively, if the overturn attempt failed the old elite would abstain from punishing the participants since it would come as a cost for them, too. As far as this is the case and as far as the old elite has no commitment devices for binding it-

self to the punishment, the active powerless again had to bear the risk of being injured or killed.

As the active powerless know that the old elite has an incentive to fight rather than to surrender and as they know that the revolutionary elite has an incentive to renege on their promise to share the confiscated wealth, it is their best strategy to decline participation.

As a result, the respective subgame-perfect Nash equilibrium would be at:

- node IX for $(1-\pi)\cdot\frac{\mu\cdot\bar{w}^0}{r_{re}}-\delta<0$; and
- node VII for $(1-\pi)\cdot\frac{\mu\cdot\bar{w}^0}{r_{re}}-\delta>0$.

Note that in both cases the old distribution of wealth would survive. In the first case would the revolutionary elite see no sufficiently high probability of a success of an overturn attempt. In the second case would the cooperation with the powerless fail due to a lack of credibility of the revolutionary elite´s promise to share the confiscated wealth.

The structure of the game is, of course, rather favorable to the old elite. As long as $\gamma^m>0$, meaning that the revolutionary elite is, in itself, not strong enough for running an overturn attempt without participation of a somewhat broader mass of the population, the old elite is safe and the society is effectively stable.

The result changes in the case $\gamma^m=0$ where the revolutionary elite is powerful enough for running an overturn attempt on its own. This is the case to which we turn now. The respective game is outlined in figure 5. In the case that the revolutionary elite launches an overturn attempt, the expected utility of the old elite for the time following the attempt is $\pi\cdot\frac{\mu\cdot\bar{w}^0}{r_{oe}}$>0 if they tried to defeat the attempt, or zero if not. They would hence again try to defeat the revolutionary elite. Hence, the revolutionary elite´s expected utility in the case of an overturn attempt would be: $(1-\pi)\frac{\mu\cdot\bar{w}^0}{r_{re}}-\delta$. Once again, depending on the size of the parameters $\mu,\pi,$ and δ, the expected utility were above, below, or equal to zero. Assuming that the revolutionary elite were able to solve all group-internal collective-action problems, a parameter configuration which implies $(1-\pi)\frac{\mu\cdot\bar{w}^0}{r_{re}}-\delta>0$ would lead to an overturn attempt. In this point, the findings for case $\gamma^m=0$ differ from the findings for case $\gamma^m>0$. Hence, our subgame-perfect Nash equilibria are, depending on the size of the parameters $\mu,\pi,$ and δ, at:

- node VI for $(1-\pi)\frac{\mu\cdot\bar{w}^0}{r_{re}}-\delta<0$; and

- node I or III for $(1-\pi)\frac{\mu\cdot\bar{w}^0}{r_{re}}-\delta>0$, depending on the realization of probability π.

Note that points II and V cannot be realized unless the old elite can credibly commit to the respective actions associated there. Again, depending on the size of the parameters $\mu, \pi,$ and δ, the distribution of wealth at time 1 is, in the case of $(1-\pi)\frac{\mu\cdot\bar{w}^0}{r_{re}}-\delta>0$

$$w_{oe}^1=\pi\cdot\frac{\mu\cdot\bar{w}^0}{r_{oe}}; \tag{12a}$$

$$w_{re}^1=(1-\pi)\cdot\frac{\mu\cdot\bar{w}^0}{r_{re}}-\delta; \tag{12b}$$

$$w_{pa}^1=0; \tag{12c}$$

$$w_{pn}^1=0. \tag{12d}$$

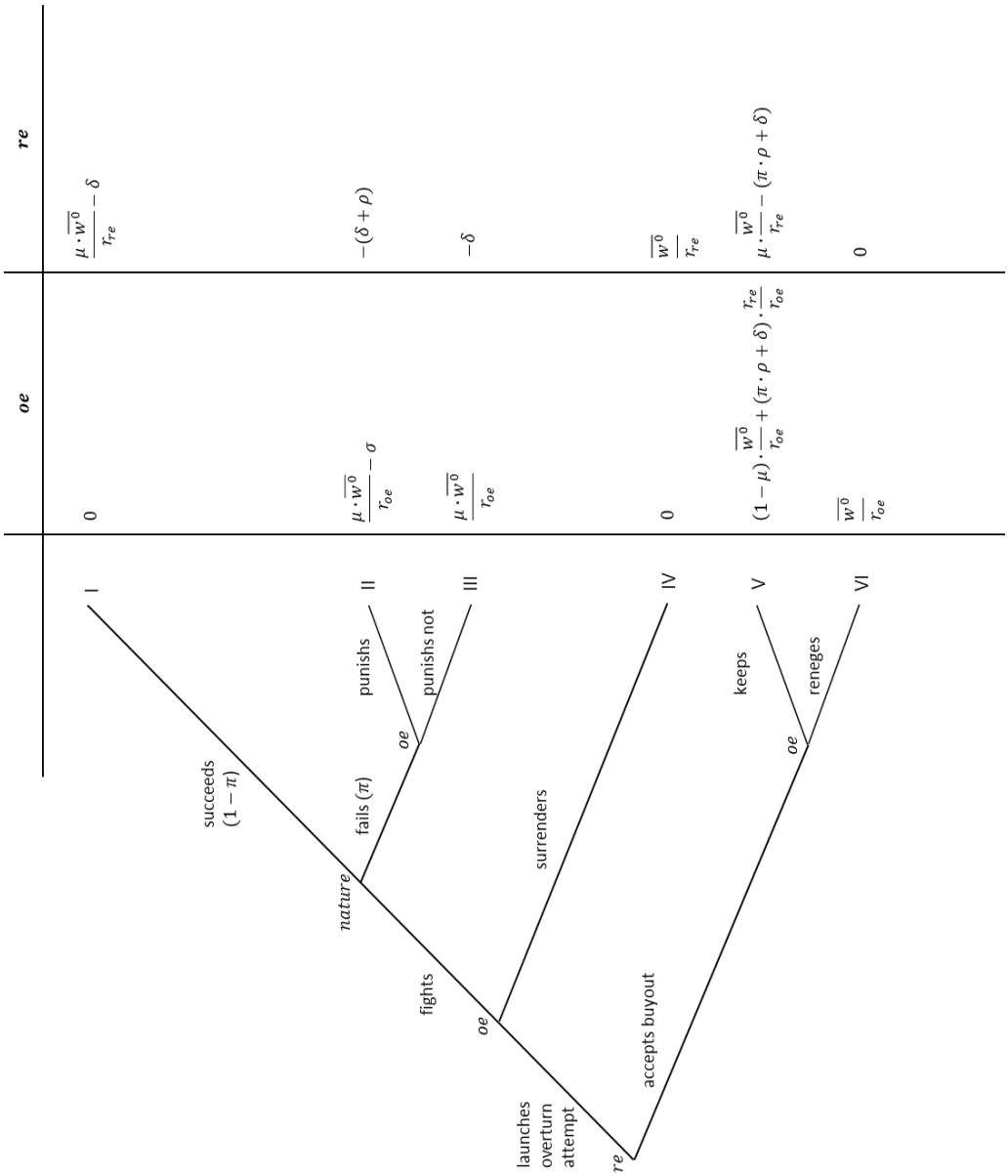

Figure 5: Coup Game

In the case of $(1-\pi)\frac{\mu \cdot \overline{w}^0}{r_{re}} - \delta < 0$ the distribution remains at it was at time zero where the old elite had all the wealth. As a result, case $\gamma^m = 0$ is by far more dangerous for the incumbent old elite than case $\gamma^m > 0$. Note, however, that we analyzed a world in which none of the groups has any commitment devices available, so that none of the promises and threats can be made credible.

5. The Evolution of Institutions

A natural step to be taken on the basis of what we found so far is to explore potentials for the development of institutions which may help the respective groups to install credible commitments. Here, it is first the revolutionary elite that is potentially interested in such institutions in order to make their promise to share wealth with the active powerless credible. Secondly, it is the old elite that has a potential interest in making both buyout offers and punishment threats credible.

The difference between the two is that the revolutionary elite would have to develop institutions within a surrounding of illegality. This leaves the revolutionary elite with only informal institutions and rules that are – at least *ex ante* – in no way legally enforceable. It is hence particularly difficult for the revolutionary elite to develop effective institutions and commitment devices. By contrast, the old elite operates in a surrounding of legality. It can thus develop formal institutions and, at least in principle, enforceable rules. The latter is certainly true for rules which the old elite wants to have obeyed by the rest of the society. This does, however, not yet solve the problem that they need their own rule-abidance to be enforced by formal institutions. From this it follows that it can indeed be disadvantageous for the old elite if it stands above the law and if it is not subject to any rule-of-law structure instead.

Were the old elite subject to the rule of law and were there an external agency that enforced certain promises given by the old elite, then this could give rise to credible commitments which the old elite needs in order to keep potentially threatening acitivities in check. For this to materialize, however, the old elite first has to surrender some of its power and to leave it to agencies which they then do not have control over anymore. In doing so, they may take a first step away from some sort of a monocentric power system and into a more intricate structure of checks and balances.

The need for doing so may become more urgent over time when a society becomes more complex and desires more and more well educated elites. The more such elites become irrevocable to the government, the more they develop into potential revolutionary elites. Punishing any corresponding activities and buying out the elite by attractive side payments on in-kind or in-cash bases are both appropriate measures for keeping them away from destabilizing activities. But as has been shown, both measures are plagued by credibility problems.

The first credibility problem is that of the punishments for persons which engage in certain forms of revolutionary activities. Solving this problem is particularly important since it does not only give rise to a direct disincentive to revolutionize but it also paves the way for

buyouts. As has been shown in equation (11a) in the previous section, buyouts are only feasible in a carrot-and-stick fashion, meaning that they have to be associated with credible threats with punishments for revolutionaries, since otherwise the buyout would converge into the entire wealth, leaving nothing for the old elite. Hence, making threats with punishments credible is crucial for the old elite whenever a revolutionary elite becomes effectively dangerous.

One institution that can help making punishment threats credible is the introduction of independent courts. If the old elite defines certain potentially destabilizing activities as unlawful but, at the same time, shifts the decision on punishments in particular cases to an independent judiciary over which they have no control anymore, then the threat with punishments becomes credible.

Independent courts alone, however, are not sufficient for making the buyout offers credible. In its broadest sense, a buyout implies a redistribution of wealth to the revolutionary elite. The problem here is that this needs to be imbedded into enforceable rights which the members of the revolutionary elite can then acquire. This requires the definition of such rights, for example in the form of some sort of a civil service law, including tenure positions, credible wage and income promises as well as old-age benefits. It also requires enforceable property rights of some sort and the like.[10] All these rights must not be retractable by way of simple governmental decree. Ideally, they would be self-enforcing (see *Weingast*, 1997; 2006; *Mittal/Weingast*, 2010)

The promises to the revolutionary elites can further be supported by certain rights of the members of the revolutionary elite to participate in government decisions. In that way, the evolution to an ever broader participation of certain subgroups could be explained, possibly within what *Congleton* (2011) calls a king-and-counsel template. Whereas pursuing such far-reaching explorations is beyond the scope of this paper, our approach may indeed enable us to explain the evolution of western-type democracies and the rule of law.

Such an evolution may be thought of in the following fashion: Firstly, commitments to certain rights may shift the revolutionary elite closer to the old elite and eventually merge the two into some commonly privileged elite, the internal relations of which are made credible via institutionalization; when then further groups in society happen to become potentially threatening to the institutionalized larger elite, then their relation to the elite may eventually become institutionalized in a similar fashion. As a result, both rights and political participa-

[10] Note that property rights and political rights in medieval times did not have the character of general and abstract rules which were enforceable by anybody, but that they have been highly discriminatory and usually reserved to certain groups, like the nobles (see *Congleton*, 2011: 141 – 160). These groups can easily be defined as the revolutionary elite of that time.

tion may step by step be extended to ever more groups. Note, however, that such an evolution is in no way deterministic. Things may evolve along such a path and certain common structures like those in the west within the last two or so centuries may have supported such an evolution. But the way to democracy and the rule of law is by no means predetermined.

6. Conclusions

We have developed a general framework for analyzing political (in)stability in comparative political systems. For that matter, we have distinguished different subgroups in society, based on their respective power position and their capability for overcoming group-internal as well as external commitment problems. Furthermore, we have distinguished constitutional overturns according to some *ex ante* defined rules from non-constitutional overturns, like revolutions or coups. Finally, we have defined both a necessary and a sufficient condition for overturn attempts by those subgroups of a society that may potentially benefit from government overturns. While the necessary condition is given whenever one or more groups that are large enough for launching an overturn attempt can potentially benefit from such an overturn, the sufficient condition requires all group-internal and mutual promises and threats to be made credible.

It is shown that whenever an incumbent government loses its ability to credibly threaten potential rebels with civil war, injuries, punishments and the like, it will also lose its ability to run a carrot-and-stick policy by simultaneously promising benefits to loyal followers. In such a case, the necessary condition for government overturns will always be met. This implies that the crucial condition for stability or instability in a society is never dependent on a certain distribution of income or wealth but always dependent on the underlying structure of credible or non-credible commitments between the several subgroups of a society. Whenever a society has defined constitutional rules for government overturns, this implies that any threat by the government against conspirators who operate within the constitutional rules lose their credibility. This, then, implies an entire loss in power of a government *vis-à-vis* the other subgroups, but also the danger of destabilizing cycles. Stable constitutions hence provide proper provisions to their prevention. In a likewise fashion, if governments lose their ability to maintain a credible structure of threats and promises to potential non-constitutional conspirators, then non-constitutional overturn cycles may ensue and turn a society into a failed state.

The supposedly most important reason that most societies are – perhaps astonishingly – stable is that credible commitments among conspiring subgroups are hard to achieve. The

potentially most dangerous subgroup stems from the military, economic, and intellectual elite (here named the revolutionary elite) which has the option to either accept the incumbents' carrot-and-stick policy or to launch an overturn attempt against the incumbents, if necessary in cooperation with the "powerless" masses of the population. The credibility of the necessary promises and threats within the revolutionary elite or in relation to the powerless, however, is hard to achieve since the conspirators operate in illegality and hence cannot develop formal institutions. By contrast, the incumbents have the advantage of operating within a legal framework in which they can develop formal institutions that help embedding the revolutionary elite into a structure of legal carrots and sticks.

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Herausgeber:
Westfälische Wilhelms-Universität Münster
CIW – Centrum für Interdisziplinäre Wirtschaftsforschung
Scharnhorststr. 100
D-48151 Münster

Tel: +49-251/83-25329
Fax: +49-251/83-28429

www.wiwi.uni-muenster.de/ciw