

Appendix

Contents

A	Partial Removal of Sanctions after Leadership Turnover	1
B	Rewards for Peace Deal	3
C	Limited versus Comprehensive Sanctions	5
D	Government's Relative Power and Foreign's Choice	8
E	Peaceful Transition of Power	9
	Additional References	13

A Partial Removal of Sanctions after Leadership Turnover

This section discusses how equilibrium changes if Foreign lowers the level of sanctions instead of removing them after Opposition comes into power. This happens when Opposition, although being more friendly to Foreign than Government is, fails to fully implement policies favorable to Foreign. For example, the United States helped overthrow the Allende government, which was democratically elected, in Chile to protect the interests of US firms (?). Allende was ousted by a military coup led by Pinochet in 1973, which ended a 46-year history of democratic rule in Chile ([Office of the Historian 2022](#)). Although initially pleased by the coup, the US government became increasingly concerned about the Pinochet regime's reported violations of human rights. As a result, the Congress forbade military sales to Chile in 1976, and "voted systematically against credits for Chile at the multilateral lending institutions (?, 185)." The Pinochet regime was not rewarded by the US for ousting a regime that hurt US interests.

If Foreign's value for imposing sanctions after Opposition assumes office only decrease instead of disappearing, its utility function will become

$$u_F(s) = a \underbrace{(B(s) - C(s))}_{\text{peace}} + (1 - a) \overbrace{[\omega \underbrace{(\lambda B(s) - C(s))}_{\text{R wins}} + (1 - \omega) \underbrace{(B(s) - C(s))}_{\text{G wins}}]}_{\text{violence}}$$

where $\lambda \in (0, 1)$ represents to what extent Foreign's value for imposing sanctions decreases after Government is replaced by Opposition. The smaller λ is, the less Foreign benefits from imposing sanctions on Opposition. $\lambda < 1$ suggests that compared to its predecessor, Opposition implements policies that are better aligned with Foreign's interests, while $\lambda > 0$ indicates that although being more friendly, Opposition still adopts policies that Foreign finds undesirable. If domestic actors reach a negotiated settlement, or if bargaining breaks down and Government prevails, Foreign will still impose $s = s^\dagger$. If civil violence occurs and Opposition comes into power, Foreign will choose an s_1^\dagger that solves

$$s_1^\dagger \in \operatorname{argmax}_{s \in [0,1]} \lambda B(s) - C(s) \quad (\text{A.1})$$

The first-order condition then becomes

$$\lambda B'(s) = C'(s) \quad (\text{A.2})$$

Foreign's optimal choice of sanction level, s_1^* , can be summarized as

$$s_1^*(a, \omega) = \begin{cases} s^\dagger & \text{if } a = 1, \text{ or } a = 0 \text{ and } \omega = 0 \\ s_1^\dagger & \text{if } a = 0 \text{ and } \omega = 1 \end{cases} \quad (\text{A.3})$$

Since s_1^\dagger solves Equation A.2, we have

$$\lambda B'(s_1^\dagger) - C'(s_1^\dagger) = B'(s^\dagger) - C'(s^\dagger) = 0 > \lambda B'(s^\dagger) - C'(s^\dagger)$$

Since $B(s)$ is concave and $C(s)$ is convex, we have $\lambda B'(s)$ decreasing in s and $C'(s)$ increases in s , i.e., $\lambda B''(s) < 0$ and $C''(s) > 0$. Therefore, $\lambda B'(s) - C'(s)$ is decreasing in s , and $\lambda B'(s_1^\dagger) - C'(s_1^\dagger) > \lambda B'(s^\dagger) - C'(s^\dagger)$ yields $s_1^\dagger < s^\dagger$.

Domestic actors' payoffs for negotiated settlement remain the same

$$\begin{aligned} u_G(a = 1) &= (1 - s^\dagger)\pi - x \\ u_R(a = 1) &= x \end{aligned}$$

and their expected payoffs for war become

$$\begin{aligned} u_G(a = 0) &= (1 - p)(1 - s^\dagger)\pi - c \\ u_R(a = 0) &= p(1 - s_1^\dagger)\pi - c \end{aligned}$$

The Depletion Mechanism works, i.e., Government cannot buy off Opposition even by making the largest possible offer, if

$$s^\dagger > 1 - p(1 - s_1^\dagger) + \frac{c}{\pi} \equiv s'_D \quad (\text{A.4})$$

Since $s_1^\dagger > 0$, we have $s'_D > s_D$, and Equation A.4 is harder to satisfy Equation 5. This indicates that the Depletion Mechanism becomes less likely to cause bargaining breakdowns if Foreign only partially lifts sanctions after Government is replaced by Opposition. Note that s'_D takes a valid value, i.e., $s'_D < 1$, only if $s_1^\dagger < 1 - \frac{c}{p\pi}$. That is, the Depletion Mechanism is valid only if the level of sanctions imposed by Foreign on Opposition is lower than a threshold.

What about the Instigation Mechanism? Given that Government is able to buy off Opposition, it prefers to go to war rather than appease Opposition if

$$s^\dagger > \frac{2c}{p\pi} + s_1^\dagger \equiv s'_I \quad (\text{A.5})$$

Again, since $s_1^\dagger > 0$, we have $s'_I > s_I$, and Equation A.5 is harder to satisfy than Equation 8. This suggests that civil violence becomes less likely to happen through the Instigation Mechanism as sanctions lower Opposition's reservation value. Similarly, s'_I takes a valid value, i.e., $s'_I < 1$, only if $s_1^\dagger < 1 - \frac{2c}{p\pi}$. That is, Opposition receives at least some benefits from the removal of sanctions. The core argument of this section is summarized in the following remark.

Remark A.1. *Violent political conflict becomes less likely to happen through both the Depletion*

and the Instigation Mechanisms if Foreign only partially removes sanctions after Opposition comes into power. That said, violent political conflict still happens through the two mechanisms with positive probability.

B Rewards for Peace Deal

This part discusses how the bargaining outcome changes if Foreign has a normative preference for peace over war. In this case, Foreign does not benefit from sanctions if Government reaches a negotiated settlement with Opposition as much as it does if Government eliminates Opposition. Foreign's payoff function then becomes

$$u_F(s) = a \underbrace{(\gamma B(s) - C(s))}_{\text{peace}} + (1-a) \overbrace{[\omega \underbrace{(-C(s))}_{\text{R wins}} + (1-\omega) \underbrace{(B(s) - C(s))}_{\text{G wins}}]}_{\text{violence}}$$

where $\gamma \in (0, 1)$ represents to what extent Foreign's benefit from sanctions shrinks if Government and Opposition reach a settlement. The smaller γ is, the more Foreign's benefit from sanctions shrinks, and the more Foreign values peace against violence. Foreign's expected payoff for violence remains the same, indicating that Foreign still imposes $s = s^\dagger$ if bargaining breaks down and Government prevails.

What is the optimal level of sanctions for Foreign if domestic actors reach a negotiated settlement? Foreign will choose an s_2^\dagger that solves

$$s_2^\dagger \in \operatorname{argmax}_{s \in [0,1]} \gamma B(s) - C(s) \quad (\text{A.6})$$

The first-order condition then becomes

$$\gamma B'(s) = C'(s) \quad (\text{A.7})$$

Foreign's optimal choice of sanction level, s_2^* , can be summarized as

$$s_2^*(a, \omega) = \begin{cases} s^\dagger & \text{if } a = 0 \text{ and } \omega = 0 \\ 0 & \text{if } a = 0 \text{ and } \omega = 1 \\ s_2^\dagger & \text{if } a = 1 \end{cases} \quad (\text{A.8})$$

Since s_2^\dagger solves Equation A.7, we have

$$\gamma B'(s_2^\dagger) - C'(s_2^\dagger) = B'(s^\dagger) - C'(s^\dagger) = 0 > \gamma B'(s^\dagger) - C'(s^\dagger)$$

Since $B(s)$ is concave and $C(s)$ is convex, we have $\gamma B'(s)$ decreasing in s and $C'(s)$ increasing in s , i.e., $\gamma B''(s) < 0$ and $C''(s) > 0$. Therefore, $\gamma B'(s) - C'(s)$ is decreasing in s , and $\gamma B'(s_2^\dagger) - C'(s_2^\dagger) > \gamma B'(s^\dagger) - C'(s^\dagger)$ yields $s_2^\dagger < s^\dagger$.

Domestic actors' payoffs for negotiated settlement then become

$$\begin{aligned} u_G(a = 1) &= (1 - s_2^\dagger)\pi - x \\ u_R(a = 1) &= x \end{aligned}$$

and their expected payoffs for war are

$$\begin{aligned} u_G(a = 0) &= (1 - p)(1 - s^\dagger)\pi - c \\ u_R(a = 0) &= p\pi - c \end{aligned}$$

The Depletion Mechanism works, i.e., Government cannot buy off Opposition even by making the largest possible offer, if

$$s_2^\dagger > 1 - p + \frac{c}{\pi} \equiv s_D$$

This condition is harder to satisfy than Equation 5 because $s_2^\dagger < s^\dagger$. Therefore, if Foreign sees lower value in imposing sanctions after domestic actors reach a negotiated settlement than after Government violently represses Opposition, the Depletion Mechanism becomes less likely to work in inciting regime change.

How about the Instigation Mechanism? Recall that in the original model presented in the main text, the Instigation Mechanism works if

$$p\pi s^\dagger > 2c \tag{A.9}$$

Consider the case where Government is rewarded by Foreign for sharing a proportion of pie with Opposition. Given that it is able to buy off Opposition, it prefers to go to war rather than appease opposition if

$$(ps^\dagger + s_2^\dagger - s^\dagger)\pi > 2c \tag{A.10}$$

Since $s_2^\dagger < s^\dagger$, the left-hand side of Equation A.10 is smaller than that of Equation A.9. With the right-hand side of the equations staying the same, Equation A.10 is harder to satisfy than Equation A.9, and civil violence less likely to happen through the Instigation Mechanism. Note that the Instigation Mechanism is valid only if $s_2^\dagger > (1 - p)s^\dagger$. That is, Foreign imposes at least some

sanctions on Government after domestic actors find a negotiated settlement. The core argument of this section is summarized in the following remark.

Remark A.2. *Violent political conflict becomes less likely to happen through both the Depletion and the Instigation Mechanisms if Foreign somewhat values peace and rewards Government for reaching a negotiated settlement with Opposition. That said, violent political conflict still happens through the two mechanisms with positive probability.*

C Limited versus Comprehensive Sanctions

In the main text, I assume that Government is the victim of sanctions, but what if the entire society (Opposition in the model) also suffers from sanctions? Does the relaxation of the assumption that sanctions target only Government change the result of the model?

This section discusses the comparison between limited sanctions, i.e., sanctions that harm only elites' wealth, and comprehensive sanctions, i.e., sanctions whose costs could be transferred to the society and populations. Consider a parameter β that proxies Opposition's suffering from sanctions. β captures the idea that even though Foreign does not impose sanctions if Opposition assumes office, Opposition's well-being is still influenced by sanctions. The larger β is, the more Opposition suffers from sanctions. Foreign's payoff for sanctions and its optimal choice over sanction level remain the same as in the main text. Domestic actors' payoffs for negotiated settlement are still

$$\begin{aligned} u_G(a = 1) &= (1 - s^\dagger)\pi - x \\ u_R(a = 1) &= x \end{aligned}$$

Their expected payoffs for war become

$$\begin{aligned} u_G(a = 0) &= (1 - p)(1 - s^\dagger)\pi - c \\ u_R(a = 0) &= p(1 - \beta s^\dagger)\pi - c \end{aligned}$$

When $\beta = 0$, Opposition does not lose anything from sanctions. This is the case that we discuss in the main text. when $\beta \in (0, 1)$, Opposition suffers from sanctions, but less than Government does; and when $\beta > 1$, Opposition appears to be the major victim of sanctions.

Opposition accepts any offer that satisfies

$$x \geq p(1 - \beta s^\dagger)\pi - c$$

And bargaining breaks down through the Depletion Mechanism if

$$p(1 - \beta s^\dagger)\pi - c > (1 - s^\dagger)\pi$$

Which could be rearranged to

$$s^\dagger \pi(1 - \beta p) > (1 - p)\pi + c \quad (\text{A.11})$$

When $\beta \geq \frac{1}{p}$, Equation A.11 never holds. When $\beta < \frac{1}{p}$, Equation A.11 could be rewritten as

$$s^\dagger > \frac{(1 - p)\pi + c}{(1 - \beta p)\pi} \equiv s''_D \quad (\text{A.12})$$

s''_D takes a valid value, i.e., $s''_D < 1$, if $\beta < 1 - \frac{c}{p\pi}$. This suggests that bargaining can possibly break down through the Depletion Mechanism only when Opposition suffers little from sanctions. When Opposition suffers much from sanctions, it has a low reservation value and can be easily appeased by Government. Note that $s''_D > s_D$, indicating that bargaining becomes less likely to fail through the Depletion Mechanism if sanctions impose costs on Opposition as well. Furthermore, s''_D increases in β , meaning that the more Opposition suffers from sanctions, the less likely it revolts because Government's offer cannot meet its reservation value.

How about the Instigation Mechanism? Recall that Opposition's reservation value is $p(1 - \beta s^\dagger)\pi - c$. Government prefers to go to war rather than buy off Opposition if

$$(1 - p)(1 - s^\dagger)\pi - c > [1 - p - s^\dagger(1 - \beta p)]\pi + c$$

Which could be rewritten as

$$s^\dagger(1 - \beta)p\pi > 2c \quad (\text{A.13})$$

When $\beta \geq 1$, Equation A.13 never holds. When $\beta < 1$, Equation A.13 could be rearranged to

$$s^\dagger > \frac{2c}{(1 - \beta)p\pi} \equiv s''_I \quad (\text{A.14})$$

s''_I takes a valid value, i.e., $s''_I < 1$, only if $\beta < 1 - \frac{2c}{p\pi}$. Again, the Instigation Mechanism is valid only if Opposition does not suffer too much from sanctions. Note that $s''_I > s_I$ and s''_I increases in β , suggesting that compared to the benchmark, bargaining becomes less likely to break down through the Instigation Mechanism as Opposition suffers from sanctions as well. In addition, the more Opposition suffers from sanctions, the lower its reservation value is, and the more likely that Government prefers to appease Opposition, which leads to negotiated settlement.

Remark A.3. *Violent political conflict becomes less likely to happen through both the Depletion and the Instigation Mechanisms if sanctions imposed by Foreign hurt not only Government but also Opposition. That said, violent political conflict still happens through the two mechanisms with positive probability.*

In sum, sanctions become less likely to incite regime change if not only elites, but also average populations have to absorb the cost of sanctions. This result is summarized in Remark A.3. This contradicts the existing argument that more intensive grievances make internal opposition more likely to revolt (Allen 2008; Blanchard and Ripsman 1999; Kaempfer and Lowenberg 1999; Wallensteen 2000; Weiss 1999). My theory demonstrates that Opposition’s bargaining leverage reduces as it bears higher costs of sanctions. Whether Opposition revolts depends on how much it could gain from the removal of sanctions. When Opposition does not suffer a lot from sanctions, i.e., β is small, Opposition will revolt despite the cost of sanctions because it can still gain from the removal of sanctions (although not as much as in the case where it does not suffer from sanctions at all): it still has a relatively high reservation value that Government is unable or unwilling to meet. When sanctions severely hurt Opposition’s post-conflict welfare, i.e., β is large, it has a low reservation value. As a result, Government will appease Opposition by making a small offer, knowing that Opposition will not be able to recover from the cost of existing sanctions even following successful revolt. This corresponds to the empirical argument that comprehensive sanctions, under which both rulers and the ruled suffer, are known to have negative influence on democratic freedoms (Peksen and Drury 2010).

D Government’s Relative Power and Foreign’s Choice

In the main text, I assume that Foreign’s benefit from punishing a rival government is independent of the government’s relative power. This section discusses the possibility that Foreign’s benefit from punishing Government strictly increases in Government’s relative power—the stronger the Government, the more Foreign benefits from one unit of sanctions imposed on it.

Domestic actors’ payoffs for both peace and war remain the same. Foreign’s payoff function becomes

$$u_F(s) = a \underbrace{\left(\frac{B(s)}{p} - C(s) \right)}_{\text{peace}} + (1-a) \overbrace{\left[\underbrace{\omega (-C(s))}_{\text{R wins}} + (1-\omega) \underbrace{\left(\frac{B(s)}{p} - C(s) \right)}_{\text{G wins}} \right]}_{\text{violence}}$$

Now, Foreign’s benefit from punishing a rival regime depends on the distribution of power, p . A strong opposition group weakens, while a weak opposition group strengthens the benefit of

sanctions. This setup captures the fact that the foreign actor finds sanctions more necessary when faced with a strong rival.

If Government manages to stay in power, Foreign will choose an $s^\dagger(p)$ that solves

$$s^\dagger(p) \in \operatorname{argmax}_{s \in [0,1]} \frac{B(s)}{p} - C(s) \quad (\text{A.15})$$

The first-order condition is

$$\frac{B'(s)}{p} = C'(s) \quad (\text{A.16})$$

Assume that $\frac{B'(1)}{C'(1)} < p < \frac{B'(0)}{C'(0)}$ to focus on interior solutions. Foreign's optimal choice, s_4^* , can be summarized as

$$s_4^*(a, \omega) = \begin{cases} s^\dagger(p) & \text{if } a = 1, \text{ or } a = 0 \text{ and } \omega = 0 \\ 0 & \text{if } a = 0 \text{ and } \omega = 1 \end{cases} \quad (\text{A.17})$$

The Implicit Function Theorem suggests that $s^\dagger(p)$ is strictly decreasing in p , indicating that all else equal, the stronger the rival government, the more sanctions the foreign actor tends to impose.

The Depletion Mechanism works if

$$s^\dagger(p) > 1 - p + \frac{c}{\pi} \equiv s_D \quad (\text{A.18})$$

In contrast to the main model, p now has an ambiguous effect on the credibility constraint. Recall that s_D is strictly decreasing in p , suggesting that increasing p makes the right-hand side of equation A.18 smaller, making the credibility constraint easier to satisfy. However, $s^\dagger(p)$ is also strictly decreasing in p , suggesting that increasing p also makes the left-hand side of equation A.18 smaller, making the credibility constraint harder to satisfy. Thus, p has an ambiguous effect on the credibility constraint.

The Instigation Mechanism works if

$$s^\dagger(p) > \frac{2c}{p\pi} \equiv s_I \quad (\text{A.19})$$

Similarly, increasing p makes both sides of equation A.19 smaller, so it is difficult to tell whether Foreign's credibility constraint becomes easier or harder to satisfy as p increases. This leads to the following result.

Remark A.4. *When Foreign's benefit from punishing a rival government increases in the government's relative power, the distribution of power between domestic actors, p , will have an ambiguous effect on Foreign's credibility constraint.*

As the opposition becomes stronger, on the one hand the credibility constraint becomes easier

to satisfy because lighter sanctions will be necessary to motivate the opposition to revolt; on the other hand, the credibility constraint becomes harder to satisfy because the level of sanctions that the foreign actor is willing to maintain against the government becomes lower.

E Peaceful Transition of Power

While instances of autocratic leaders peacefully stepping down in the face of mass protests and unrest are rare, there have been a few historical cases where leaders have voluntarily relinquished power without large-scale violence.¹² For example, former Tunisian President Zine al-Abidine Ben Ali was forced to step down and dismiss his government during the 2011 Tunisian revolution, leading to significant political change without widespread violence (?). As another example, in the 1986 People Power Revolution, then-President of the Philippines Ferdinand Marcos fled with his family to Hawaii to avoid what could have been a military confrontation between pro- and anti-Marcos forces, leading to a peaceful transition of power (?). In this section, I extend the model by giving Government the option of voluntarily stepping down to avoid violent conflict if its proposal is rejected by Opposition. The timing of the game is as follows:

1. Government makes an offer, x .
2. Opposition, after observing the offer, x , decides whether to accept the offer.
3. If Opposition rejects the offer, then Government decides whether to relinquish power or fight. If Government chooses to fight, it will be deposed by Opposition with probability p and will remain in power with probability $1 - p$.
4. After seeing how the domestic conflict unfolded, Foreign chooses s , the level of sanctions imposed on whoever holds power.

Government's decision on whether to voluntarily relinquish power is denoted by $r \in \{0, 1\}$, where $r = 1$ means that Government relinquishes power. If Government resigns, it gets $-k$ and Opposition gets the whole π (reduced by sanctions, if any). The parameter k , with $c > k > 0$, captures the cost of resignation. Voluntary resignation is not costless. Both Ben Ali and Ferdinand Marcos went into exile abroad after losing office. In addition, the interim government of Tunisia that succeeded Ben Ali issued an international arrest warrant charging Ben Ali with money laundering and drug trafficking (?). According to ?, the majority of leaders who lose power through popular protests, revolts, and coups, whether or not there is widespread violence, are faced with exile and/or imprisonment. That said, I assume that the costs of peaceful transition of power are lower than the costs

¹²Here, "voluntary" does not mean that Government is happy to give up power. Rather, it means that Government prefers to give up power peacefully rather than try to secure its power by force.

of violent conflict. The following specifies domestic actors' payoffs, which are determined by the level of sanctions, s , chosen by Foreign.

$$u_G(s) = a \underbrace{[(1-s)\pi - x]}_{\text{settlement}} + r(1-a) \underbrace{(-k)}_{\text{resignation}} + (1-a)(1-r) \underbrace{[(1-p)(1-s)\pi - c]}_{\text{violence}}$$

$$u_R(s) = a \underbrace{x}_{\text{settlement}} + r(1-a) \underbrace{(1-s)\pi}_{\text{resignation}} + (1-a)(1-r) \underbrace{[p(1-s)\pi - c]}_{\text{violence}}$$

Foreign chooses an s that maximizes the following payoff function:

$$u_F(s) = a \underbrace{(B(s) - C(s))}_{\text{settlement}} + r(1-a) \underbrace{(-C(s))}_{\text{resignation}} + (1-r)(1-a) \overbrace{[(1-\omega) \underbrace{(B(s) - C(s))}_{\text{G wins}} + \omega \underbrace{(-C(s))}_{\text{R wins}}]}_{\text{violence}}$$

which could be rearranged to

$$u_F(s) = [a + (1-a)(1-r)(1-\omega)]B(s) - C(s)$$

Foreign's optimal choice is characterized by

$$s_5^*(a, r, \omega) = \begin{cases} s^\dagger & \text{if } a = 1, \text{ or } a = r = \omega = 0 \\ 0 & \text{otherwise} \end{cases}$$

where s^\dagger solves

$$s^\dagger \in \underset{s \in [0,1]}{\operatorname{argmax}} B(s) - C(s)$$

In anticipation of Foreign's sanctions, Government will step down following Opposition's rejection rather than fight if and only if

$$-k \geq (1-p)(1-s)\pi - c$$

which can be rearranged to

$$s \geq 1 - \frac{c-k}{(1-p)\pi} \equiv s_R$$

That is, when the sanction level is above the threshold of s_R , Government will step down without fighting if Opposition rejects its proposal. Remember that the Depletion Mechanism works, i.e., Opposition will reject any offer made by Government, if and only if

$$s^\dagger > s_D \equiv 1 - p + \frac{c}{\pi}$$

Comparing s_D with s_R , we have $s_D \geq s_R$ if and only if

$$c \geq \frac{p(1-p)\pi + pk}{2-p} \equiv c^{**}$$

Consider the case in which $s_D \geq s_R$. When $s^\dagger \in [0, s_R)$, Government is able to buy off Opposition and Government will fight after Opposition rejects its proposal. Government's payoff for offering $x = p\pi - c$ is $(1 - s^\dagger - p)\pi + c$, while its payoff for fighting is $(1 - p)(1 - s^\dagger)\pi - c$. Some algebra shows that $(1 - s^\dagger - p)\pi + c > (1 - p)(1 - s^\dagger)\pi - c$ and Government prefers negotiated settlement when $c \geq c^{**}$ and $s^\dagger < s_R$. When $s^\dagger \in [s_R, s_D]$, Government is able to buy off Opposition and Government will step down after Opposition rejects its proposal. Government's payoff for offering $x = p\pi - c$ is $(1 - s^\dagger - p)\pi + c$, while its payoff for stepping down is $-k$. Some algebra shows that $(1 - s^\dagger - p)\pi + c > -k$ and Government prefers negotiated settlement when $c \geq c^{**}$ and $s^\dagger \leq s_D$. When $s^\dagger > s_D$, Government is unable to buy off Opposition and Opposition will reject any offer made by Government. Government will step down after being rejected. In sum, when $c \geq c^{**}$, the level of sanctions must be greater than s_D for regime change to occur, and regime change will be achieved peacefully, as Government will voluntarily give up power.

Next, consider the case in which $s_D < s_R$, which is equivalent to $c < c^{**}$. When $s^\dagger \in [0, s_D]$, Government is able to buy off Opposition and Government will fight after Opposition rejects its proposal. Government's payoff for offering $x = p\pi - c$ is $(1 - s^\dagger - p)\pi + c$, while its payoff for fighting is $(1 - p)(1 - s^\dagger)\pi - c$. Government prefers the former if and only if

$$(1 - s^\dagger - p)\pi + c \geq (1 - p)(1 - s^\dagger)\pi - c$$

which can be rearranged to

$$s^\dagger \leq \frac{2c}{p\pi} \equiv s_I$$

We have $s_I < s_D$ if and only if

$$c < \frac{p(1-p)\pi}{2-p} \equiv c^* < c^{**}$$

When $c < c^*$, the game will end in a negotiated settlement if $s^\dagger \in [0, s_I]$, and bargaining will break down through the Instigation Mechanism if $s^\dagger \in (s_I, s_D]$. When $c \in [c^*, c^{**})$, the game will end in a negotiated settlement for any $s^\dagger \in [0, s_D]$.

When $s^\dagger \in (s_D, s_R)$, Government is unable to buy off Opposition and Government will fight after Opposition rejects its proposal. When $s^\dagger \geq s_R$, Government is unable to buy off Opposition and Government will step down after Opposition rejects its proposal.

To summarize, when $c < c^*$, Foreign must impose more than s_I to bring about regime change.

Bargaining breaks down through the Instigation Mechanism if $s^\dagger \in (s_I, s_D]$ and through the Depletion Mechanism if $s^\dagger \in (s_D, s_R)$. Leadership turnover is achieved through voluntary resignation of Government if $s^\dagger \geq s_R$. When $c \in [c^*, c^{**})$, Foreign must impose more than s_D to bring about regime change. Bargaining breaks down through the Depletion Mechanism if $s^\dagger \in (s_D, s_R)$, and leadership turnover is achieved through voluntary resignation of Government if $s^\dagger \geq s_R$. When $c \geq c^{**}$, Foreign must impose more than s_D to bring about regime change. There will be no violence on the equilibrium path, and leadership turnover is achieved through voluntary resignation of Government.

Remark A.5. *When $c < c^*$, Foreign must impose more than s_I to bring about regime change. Violence occurs on the equilibrium path if $s^\dagger \in (s_I, s_R)$. When $c \in [c^*, c^{**})$, Foreign must impose more than s_D to bring about regime change. Violence occurs on the equilibrium path if $s^\dagger \in (s_D, s_R)$. When $c \geq c^{**}$, Foreign must impose more than s_D to bring about regime change. Violence does not occur on the equilibrium path.*

Remark A.5 suggests that when the cost of fighting is less than a certain threshold, i.e., $c < c^{**}$, violence will occur if the level of sanctions is intermediate, i.e., $s^\dagger \in (\min\{s_I, s_D\}, s_R)$. Intermediate sanctions are sufficient to create incentives for either Government or Opposition to reject a negotiated settlement, but are insufficient to force Government to step down without a fight.