

Instability, Intervention, and Inter-Power Politics

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Abstract

Domestic political and economic instability provides a window of opportunity for external military intervention. To examine the factors that underlie the strategic decisions to pursue military intervention in the presence of instability, I develop a game-theoretic model in which two external powers sequentially decide whether to intervene militarily in a third country. The level of domestic instability in the target country is modelled as a stochastic random walk process. In the model, powers with conflicting policy preferences have incentives to intervene preemptively in order to eliminate the possibility of future interventions by a rival power. Given this, I argue that major powers are most likely to intervene in their spheres of influence when there exists an external threat of intervention by another power. I support this claim with an historical analysis of the variation in U.S. intervention activities in the Caribbean Basin over time.

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1 Introduction

From ancient Greece to early twentieth century Latin America to the Third World during the Cold War, intervention¹ has played an important role in international relations throughout history. One scholar even claims that “the subject [of intervention] is practically the same as international politics in general from the beginning of time to the present” (Hoffman 1984, 7). However, despite the fact that Morgenthau (1967) argues that it is “as ancient and well-established an instrument of foreign policy as are diplomatic pressure, negotiations and war,” intervention has not received the same amount of scholarly attention in the international relations literature as have other foreign policy instruments. My research attempts ameliorate this problem by providing a rigorous theoretical framework to study the strategic dynamics that underlie intervention decisions. In this paper, I examine how strategic interaction between major powers affects decisions to intervene in less powerful states undergoing domestic instability. I find that when powers have conflicting policy preferences, at times they have incentives to intervene preemptively in order to eliminate the possibility of future interventions by a rival power. Given this, I argue that major powers are most likely to intervene in their spheres of influence when there exists an external threat from another power.

Perhaps one of the most active periods of intervention in modern history occurred during the first few decades of the twentieth century in the Caribbean region. At this time, leaders in the United States feared that European powers, especially Germany, would interfere in the affairs of states within the newly established U.S. sphere of influence in the Caribbean Basin.² They also believed that economic and political instability in the Caribbean states increased the possibility of foreign intervention. As Munro (1964, 5) explains,

Though it was not probable that any European government would deliberately set out to conquer a Caribbean state, it was always possible that the chronic disorder and

¹Intervention has been a difficult term for scholars to define. As Hoffman (1984, 8) notes, “in the widest sense, to be sure, every act of a state constitutes intervention.” Following the tradition of international legal publicists such as Oppenheim, Bull (1984, 1) defines intervention as “dictatorial or coercive interference, by an outside party or parties, in the sphere of jurisdiction of a sovereign state. Rosenau (1969) argues that the defining characteristics of intervention are that it is “convention-breaking” and “authority-oriented.” I follow Regan’s (2000a) definition of third-party intervention, which is “convention breaking military and economic activities in the internal affairs of a foreign country targeted at the authority structures of the government with the aim of affecting the balance of power between government and opposition forces” (p. 10).

²The term *Caribbean Basin*, or *circum-Caribbean*, refers to the islands in the Caribbean Sea as well as those parts of the American continent surrounding the Caribbean, including Central America.

financial irresponsibility that prevailed in some of the West Indian and Central American republics would offer the pretext, or at least the occasion, for an intervention that would jeopardize a country's independence.

A German and British blockade of the Venezuelan coast in 1902-3 to collect debts owed by the Venezuelan government only increased suspicions that instability in the region would lead to European intervention. When the Dominican Republic faced similar financial difficulties in 1904, U.S. President Theodore Roosevelt believed that he would have to take proactive measures if he wanted to prevent European interference. Therefore, his administration developed what has become known as the Roosevelt Corollary to the Monroe Doctrine. It stated that during times of instability in countries within the Caribbean region, the United States had the right to intervene itself in order to eliminate the opportunity for intervention by European powers. Following this policy, the United States actively engaged in military intervention in response to domestic troubles at least two dozen times in eight countries in the Caribbean region during the first three decades of the twentieth century (Collier 1993). This intervention activity was the chief method by which the United States consolidated its sphere of influence in the Caribbean Basin.

While the Roosevelt Corollary only remained U.S. policy until the early 1930s, I argue that strategic factors cited by the Roosevelt Administration in 1904 can help to explain the incentives behind many intervention decisions. In particular, I claim that decisions by major powers to intervene in the affairs of other states are often a function of external threats from other major powers and the level of domestic instability in the target states. In the analysis that follows, I first examine these factors in light of the existing literature on intervention. I then develop a game theoretic model in which two powers strategically decide whether to intervene in a third state in the presence of changing levels of domestic instability. Next, I discuss how the implications of this model can provide an explanation for the variation in U.S. policies toward the Caribbean Basin throughout the twentieth century. Finally, I discuss possible extensions of the model which will allow it to be applied to an even larger variety of strategic settings in international relations.

2 Background

2.1 Intervention and Inter-power Politics

I view intervention as an instrument of foreign policy used to achieve certain ends.³ Morgenthau (1967) argues that intervention is an “ancient and well-established” instrument of foreign policy that serves the political interest of certain nations. According to Rosenau (1969), the defining characteristic of intervention versus other instruments of foreign policy is that intervention is both convention-breaking and authority-oriented. Thus, states intervene in order to alter the domestic political environment of another state. Viewed in this light, intervention is a tool that states use to pursue their foreign policy goals. In particular, intervention is a coercive strategy aimed at the authority structures of the target state. Like war, then, intervention is the continuation of politics by other means. However, intervention—and military intervention in particular—is a costly strategy to pursue. Interveners generally face resistance (or at least the threat of resistance) in the target state. Thus, to be successful interveners must have access to a large amount of resources. Given this, scholars have argued that an asymmetry of power is a necessary condition for intervention (Krasner 1999, Dorman and Otte 1995, Bull 1984). For this reason, intervention is often a policy only pursued by major powers vis-à-vis smaller, less powerful states. However, even given a high asymmetry of power, intervention may not be an optimal strategy for major powers. Other factors, including the relative importance of the target state, the status quo state of the world, and the anticipated actions of other major powers, can influence the decision to pursue military intervention.

Krasner (1999) notes that inter-power strategic interaction is an important factor in the intervention decisions of states. He argues that powers will not pursue military intervention if they know that they will be challenged by another major power. Therefore, intervention will be most

³By viewing intervention as an instrument of foreign policy, I am explicitly considering it as a behavioral concept. In other words, intervention is a behavior that can be consistently observed and measured over time. This is opposed to viewing intervention as a normative concept, which can change over time. Weber (1995) argues that since the concept of sovereignty is itself a socially constructed concept, neither a behavioral nor a traditional normative framework is appropriate to study the concept of intervention, which is the antithesis of sovereignty. However, the goal of this paper is to examine the variation in the behavior of states. To do so in a positivist framework, one must develop a consistent conceptualization of the behavior to be explained. Therefore, I assume that intervention is an action that states always have the option to choose. Whether or not this action is viewed as legitimate or legal does not affect the *action* itself; even though it may affect the decisions of states to pursue that action. For a further discussion of the relative benefits of viewing intervention as a behavioral or legal concept, see Gent (2003).

likely when one power has a recognized sphere of influence or there is a condominium of great powers. One of the examples that he uses to support this claim is the prevalence of U.S. intervention in the Caribbean and Central America in the early twentieth century as compared to the lack thereof in the previous century. He argues that the key factor that explains this change in strategy is the establishment of a U.S. sphere of influence in the region. While this is certainly the case, it does not explain the variations in U.S. intervention policy during the twentieth century, since it can be argued that the U.S. maintained a sphere of influence throughout this period.⁴ Given the implications of the model developed later, I argue that there is a nonmonotonic relationship between the relative power of states and intervention. That is, given that one power has achieved a privileged status, such as the U.S. in the Caribbean region, the greater the disparity of power between it and other powers, the less likely the privileged state is to intervene *ceteris paribus*.

2.2 Instability and the Cost of Intervention

I assume that the cost of intervention decreases as the level of domestic political and economic instability in a target state increases. In other words, domestic instability creates a window of opportunity for military intervention. Unstable states are weaker and are thus less able to defend themselves. This makes military action less costly, allowing external powers to pursue intervention activities that might not otherwise be cost-effective. Instability can also provide legitimacy to intervention activities that might otherwise be perceived as being illegitimate. As noted earlier, there exists a norm of non-intervention in international law. However, if instability threatens an external power's interests in the beleaguered state or the surrounding region, as Hoffman (1984) argues, the power may appeal to the principle of self-help to justify military intervention. For example, states have often used the protection of their citizens living in an unstable country as justification for military intervention (Akehurst 1977). This legitimacy can make it easier for the external power to gain support the support of domestic and international actors for interventionist policies. Thus, instability can reduce the cost of intervention by providing both a weak opponent and legitimacy for a military intervention.

In recent years, there has been a resurgence of scholarship examining domestic instability and

⁴One should note that this does not contradict Krasner's (1999) claim that a sphere of influence or a major power condominium is a necessary condition for intervention. It only highlights the inability of a necessary condition to explain variation in behavior given that it is satisfied.

external intervention. Much of this empirical work has focused on external intervention in civil wars. Recent studies on civil war intervention include quantitative analyses of intervention decisions in general (Regan 2000a) and U.S. interventions in particular (Regan 2000b, Yoon 1997). Other studies have estimated the effect of external intervention on the duration of civil wars (Balch-Lindsay and Enterline 2000, Elbadawi and Sambanis 2000, Enterline and Balch-Lindsay 2001, Regan 2002). While there have been an increasing number of empirical studies on intervention, there is a paucity of formal-theoretic work on the subject. The few exceptions include Regan (2000a), who uses a decision-theoretic framework to model to motivate his study on interventions in civil wars, and Cetinyan (2002), who develops a game-theoretic model to analyze the effect of a potential external intervention on domestic bargaining between ethnic groups. In this paper, I contribute to this small but growing formal literature by developing a game theoretic model of intervention in the presence of fluctuating levels of domestic instability. In this stochastic game, two external powers alternately decide whether to intervene in the unstable state. By focusing on the the more general concept of domestic instability rather than civil wars in particular, I can analyze intervention decisions in a broader range of situations. Also, by incorporating more than one external power in the model, I am able to examine the effect of strategic interaction between powers on their decisions to pursue interventionist policies.⁵

3 Theoretical Model

3.1 Outline of the Game

In this section I outline a game-theoretic model in which two external powers (1 and 2) alternately decide whether or not to intervene in a third country (C). Let $X = [0, 1]$ be a one-dimensional policy space upon which 1 and 2 have opposing preferences. Let b_i represent the weight that power i places upon a policy in X . Then, assuming that players are risk neutral over policy, $u_1(x) = b_1x$ and $u_2(x) = b_2(1 - x)$ for all $x \in X$.⁶ Let $x_1 \in X$ be the status quo policy at the

⁵One should note that the model treats domestic politics in the target country as exogenous. However, one would expect that the strategic decisions of domestic actors are influenced by the intervention decisions of external powers, and vice versa (Cetinyan 2002). A more complete analysis of intervention decisions would take into account the strategies of domestic political actors in the target state.

⁶Alternatively, one could assume that X is some set of resources in C that is available for foreign consumption, where x ($1 - x$) is 1's (2's) share of the resources.

beginning of the game, and define $x_2 \equiv 1 - x_1$. In the game, players move in discrete time with a potentially infinite horizon and discount future payoffs with common discount factor, $\delta \in (0, 1)$. In each period $t = 0, 1, 2, \dots$, one power decides whether or not to intervene in C. I assume that 1 moves in even periods, while 2 moves in odd periods. Let i denote the player that moves in period t and let $j \neq i$. If i does not intervene in t , then i and j receive payoffs of $b_i x_i$ and $b_j x_j$ respectively and the game continues to period t . On the other hand, if i intervenes in period t , the game ends with i imposing its most preferred policy in period t and all future periods.⁷ Let $c_i > 0$ denote the cost of intervention for i . Then, if i intervenes in period t , she receives a payoff of $b_i/(1 - \delta) - c_i$, while j receives payoff of 0.

If the cost of intervention is constant, then the subgame perfect equilibrium of the game outlined above is straightforward. On the equilibrium path, either 1 intervenes in period 1, 2 intervenes in period 2, or neither state ever intervenes. However, I assume that c_i changes over time. In particular, as argued earlier, the cost of intervention decreases as the level of instability in C increases. Let $k \in K = \{\dots, -2, -1, 0, 1, 2, \dots\}$ be the level of instability in C, with higher values of k representing higher levels of instability. Then the cost of intervention can be represented as a function of k . I assume that there are increasing marginal costs as a state becomes more stable. Thus, $dc_i/dk < 0$ and $d^2c_i/dk^2 > 0$.⁸ In the game, instability is modelled as a simple homogenous random-walk process.⁹ This stochastic process is a Markov chain $\{K^t\}$ with state space K .¹⁰ Let $k^t \in K$ be a realization of K^t . Since this is a Markov process, the level of instability at $t + 1$ is only dependent upon the level of instability at t . In particular, I assume that in one period, instability can only increase or decrease one level. Let p be the probability that the level of instability increases and $1 - p$ be the probability that it decreases, where $p \in (0, 1)$. I assume that p is common knowledge and that both players observe k^t at the beginning of period t before making any intervention decision.

⁷That the game ends with the intervening power imposing its most-preferred policy is a simplifying assumption. One might argue that power j should have an opportunity to retaliate or “counter-intervene” after power i intervenes, leading to a conflict between the two powers. I examine the effect of relaxing this assumption later in the paper.

⁸I assume that $dc_1/dk = dc_2/dk$ and $d^2c_1/dk^2 = d^2c_2/dk^2$.

⁹For information on stochastic processes, see Grimmett and Stirzaker (1985) and Cox and Miller (1965).

¹⁰To avoid confusion, from this point forward I will only use the term *state* to refer to the level of instability (k), and not to the players of the game. Also, whenever possible, I follow the convention of using subscripts to refer to players and superscripts to refer to periods in time.

3.2 Equilibrium

Given that this is a stochastic game, the solution concept that I use is Markov perfect equilibrium (MPE) (Fudenberg and Tirole 1991). MPE is a refinement of subgame perfect equilibrium in which players only use Markov strategies. Markov strategies are strategies which are only functions of only payoff-relevant histories. Since the payoffs in the intervention game are solely a function of the level of instability, strategies in a MPE of the game will only be dependent upon k^t . In the context of the intervention game, a Markov strategy, σ_i , gives the probability that a player will intervene or not intervene in each state. For notational purposes, let $\sigma_i(k)$ represent the probability that i does *not* intervene given that the state is k .

I find a MPE of the intervention game in which the probability of intervention increases with the level of instability.¹¹ Let k_i^H be the minimum state at which player i will always prefer to intervene regardless of j 's strategy.¹² This value corresponds to the minimum state k at which i would intervene in a decision theoretic framework. Similarly, let k_i^L be the maximum state k at which i will always prefer to not intervene regardless of j 's strategy. Thus, in any equilibrium, player i will always intervene if $k^t \geq k_i^H$ and will never intervene if $k^t \leq k_i^L$. In equilibrium, both players play cutpoint strategies such that player i does not intervene if $k^t \leq k_i^*$ and intervenes if $k^t > k_i^*$, where $k_i^L \leq k_i^* < k_i^H$. Finally, for definitional purposes, let \tilde{k}_i be the maximum state k at which i will not intervene, given that j intervenes in all states $k > \tilde{k}_i$ and does not intervene otherwise. One can show that $k_i^L \leq \tilde{k}_i < k_i^H$. Given this, the following proposition describes the equilibrium of the game.

Proposition 1 *Define A and B such that $\tilde{k}_A < \tilde{k}_B$. The following constitutes a Markov perfect equilibrium of the intervention game: for $i = 1, 2$, $\sigma_i(k) = 1$ if $k_t \leq k_i^*$, and $\sigma_i(k) = 0$ otherwise, where*

1. If $k_A^H < k_B^L$, then $k_A^* = k_A^H - 1$ and $k_B^* = k_B^L$.
2. If $k_A^H \geq k_B^L$, then $k_A^* = k_B^* - 1$, where $k_A^* \leq k_A^H - 1$.¹³

Given Proposition 1, the power that has the greatest incentive to intervene (power A) will intervene on the equilibrium path of play.¹⁴ More precisely, the intervening power is the one

¹¹ A complete formal characterization of the equilibrium, along with existence proofs can be found in the appendix.

¹² I assume that players intervene if they are indifferent.

¹³ For a proof of this proposition, see Proposition 2 in the appendix.

¹⁴ This holds if one assumes that this player moves first or if $k^0 < \max\{\tilde{k}_1, \tilde{k}_2\}$.

who is more likely to intervene in the case in which it knows that its rival will intervene in the next period if the level of instability increases but will not otherwise. In equilibrium, Power A's decision calculus is to find the optimal time in which to intervene. The cutpoint state k_A^* is the highest state of instability in which the expected utility of intervening now is less than the expected utility of waiting one more period. In all states greater than k_A^* , A will prefer to intervene.

Proposition 1 states that there are two possible cases which can occur in equilibrium. In the first case, the highest state at which A would never intervene is less than the lowest state in which B would ever prefer to intervene. Given this, A's optimal time to intervene is the same as it would be in a decision-theoretic framework. In other words, the presence of B in the game does not affect A's intervention decision. In the second case, however, B's strategy does affect A's decision to intervene. Since B is willing to intervene in cases where A would not in a decision-theoretic setting, A's best response is to intervene at lower levels of instability. Thus, in equilibrium, A is willing to intervene in lower states than it otherwise would because A knows that if it does not intervene, then there is some probability that the level of instability will increase in the next period, and B will intervene. Thus, the threat of intervention by B leads A to intervene preemptively in order to eliminate the possibility of a future intervention by B. This threat increases as the cost of intervention to A increases and the cost of intervention to B decreases.

Now assume that there is some power that has achieved a status such that it has the greatest propensity to intervene under any level of instability. Then, given the predictions of the model, this power will be more likely to intervene when there exists a credible threat of future intervention in the target state by a rival power. Given this, I argue that a major power is more likely to pursue a policy of intervention in its sphere of influence the greater the potential threat of intervention in its sphere of influence. To support this claim, I examine the record of U.S. intervention in the Caribbean Basin over time. I find that once the U.S. achieved its status a major power, the most active periods of U.S. intervention in the Caribbean correspond to those period in which it faced the greatest threat of external intervention in the Caribbean by other rival powers.

4 United States and the Caribbean Basin

4.1 Banana Wars

The Caribbean Basin has always been a region of strategic importance to the United States.¹⁵ This is not surprising given the proximity of the region to the United States. Since independence, the United States has often feared that the region would be dominated by foreign powers, which would in turn threaten its own security. In 1823, President James Monroe declared the Monroe Doctrine, which proscribed further European intervention in the Western Hemisphere. However, at that time the United States lacked the resources to consistently defend the doctrine, and European powers—especially Britain and France—continued to dominate the Caribbean region throughout much of the nineteenth century. However, U.S. military intervention was not unheard of during this time period, especially in Panama (then part of Colombia) and Nicaragua, the two potential locations for an isthmian canal. Between 1850 and 1885, the United States sent troops to protect its interests during times of political unrest five times in Panama and twice in Nicaragua (Collier 1993).

By the last decade of the nineteenth century, though, the United States began to assert a more dominant position in the Caribbean region. During the Venezuelan crisis of 1895, U.S. Secretary of State Richard Olney stated in a note to the British government, “Today the United States is practically sovereign on this continent and its fiat is law upon the subjects to which it confines its interposition” (Langley 1976, 161). While it is not clear how seriously the British took Olney’s statement, after its victory in the Spanish-American War in 1898, the United States was able to signal its emergence as a major power in international politics and began to establish a sphere of influence in the Caribbean Basin. As a result of the war, the U.S. gained control of Puerto Rico and maintained a protectorate in Cuba. As Challener (1973) notes, during this time period, the United States began to develop a consistent foreign policy in the region, which consisted of two primary objectives. The first was to build a canal across the Isthmus of Panama, which was achieved when

¹⁵For the historical background in this section I rely a number of different secondary sources. Callcott (1942), Challener (1973), Healy (1988), Kane (1972), Langley (1989*b*), Maingot (1994), and Munro (1964) describe U.S. foreign policies in the Caribbean. Bemis (1943), Gilderhus (2000), Langley (1989*a*), and Smith (1996) address U.S.–Latin American relations. Other resources consulted include Perkins (1941) and Smith (1994), who provide histories of the development of the Monroe Doctrine, and Langley (1976), who chronicles U.S. and European involvement in the region in the nineteenth century.

the U.S. gained the rights to build and control an isthmian canal from the newly independent republic of Panama in 1903. The second objective was to “transform the Caribbean into an American ‘lake’ in which there would be neither European interference nor political instability in the countries of the Caribbean and Central America” (Challener 1973, 81).

The U.S. victory in the Spanish-American War sparked an increase in military activity in the region. As noted earlier, during this time period, leaders in the United States feared that European powers—in particular, Germany—would interfere in the affairs of states within the U.S. sphere of influence. An official opinion of the General Board of the Navy in 1906 stated,

Germany wants to expand her colonial possessions. Especially it is thought that she is desirous of obtaining a foothold in the Western Hemisphere, and many things indicate that she has her eyes on localities in the West Indies, on the shores of the Caribbean, and in parts of South America. It is believed in many quarters that she is planning to test the Monroe Doctrine by annexation or establishment of a protectorate over a portion of South America (Kane (1972, 41)).

Many U.S. officials felt that the chronic political and economic instability of the states in the region would create a window of opportunity for such intervention activities. A German and British blockade of the Venezuelan coast in 1902-3 to collect debts owed by the Venezuelan government only increased these suspicions. In this crisis, the U.S. was able to deter European powers from invading Venezuela, convincing the parties to submit the matter to the Hague Permanent Court of Arbitration.¹⁶ However, when the court ruled unanimously in favor of the blockading powers, it in effect increased the value of military intervention to collect debts. Thus, when the Dominican Republic faced similar financial difficulties in 1904, several European powers planned to intervene militarily, basing their actions on the Hague Court decision (Kane 1972). Given this, the Theodore Roosevelt Administration believed that the U.S. would have to take proactive measures if it wanted to prevent European intervention in the region. As Roosevelt stated in a letter read by former Secretary of War Elihu Root at a banquet honoring the second anniversary of Cuban

¹⁶There is debate among historians as to the role of the United States in the resolution of the Venezuela crisis. In a 1916 letter, Theodore Roosevelt claimed that he had given the Germans an ultimatum to accept arbitration of the dispute. If not, a fleet of the U.S. navy would be sent to Venezuela to “see that the German forces did not take possession of any territory” (quoted in Healy (1988, 104)). However, there is no documentation of Roosevelt’s ultimatum in any official files. Regardless of the authenticity of Roosevelt’s claim, diplomatic pressure from the United States did play a role in ending the crisis. On December 16, 1902, Secretary of State John Hay formally called upon the European powers to submit to arbitration and Roosevelt sent six naval ships to Trinidad and Curacao to display the U.S. naval force in the region. For a discussion of the controversy surrounding Roosevelt’s actions during the Venezuelan crisis, see Healy (1988, 103–106).

independence,

If a nation knows how to act with decency in industrial and political matters, if it keeps order and pays its obligations, then it need fear no interference from the United States. Brutal wrongdoing, or an impotence which results in a general loosening of the ties of civilized society may finally require intervention by some civilized nation, and in the Western Hemisphere the United States cannot ignore this duty (Morison 1951, 801).

This led to the development of the Roosevelt Corollary to the Monroe Doctrine, a policy that stated that the United States had the right to intervene in times of domestic instability in Caribbean states in order to eliminate the opportunity for intervention by European powers. Following this logic of preemption, the Roosevelt Administration found itself intervening in times of instability in the Dominican Republic, Panama, and Cuba.

The Roosevelt Corollary made intervention the official U.S. policy, which remained in effect throughout the first three decades of the twentieth century. During this time period, the United States launched more than two dozen militarily interventions in Cuba, the Dominican Republic, Guatemala, Haiti, Honduras, Mexico, Nicaragua, and Panama. After Roosevelt left the White House, fear of European influence in the region continued to remain a primary reason for U.S. intervention in the Caribbean region. Republican and Democratic administrations alike pursued preemptive interventionist policies. The “dollar diplomacy” of President William Howard Taft was pursued largely in response to fears of European economic influence in the region, while the foreign policy of his successor, Woodrow Wilson, was arguably the most interventionist in U.S. history. In a memo to Wilson in November of 1915, Secretary of State Robert Lansing argued,

Recently the financing of revolutions and corruption of governments of the smaller republics by European capitalists have frequently thrown the control of these governments in to the hands of a European power. To avoid this danger of European political control by this means which may be as great a menace to the national safety of this country as occupation or cession, the only method seems to be to establish a stable and honest government and to prevent the revenues of the republic from becoming the prize of revolution and of the foreigners who finance it. . . . Because of this state of affairs our national safety, in my opinion requires that the United States should intervene and aid in the establishment and maintenance of a stable and honest government, if no other way seems possible to attain that end” (Link 1980, 246).

These fears in particular led to the U.S. military interventions in Haiti and the Dominican Republic in 1915 and 1916, respectively, which resulted in long-term occupations of these countries. Other

interventions were short-lived and lasted only long enough to end the political instability. Regardless of the length, a justification for each of the interventions was the protection of the “American lake” from foreign intervention. The extra-regional European threat to the newly-formed sphere of influence of an emerging power, then, led to the interventionist foreign policy of the United States in the Caribbean during the early twentieth century.

4.2 Good Neighbor Policy

Throughout the first part of the twentieth century, the military power of the United States continued to increase. By the mid-1920s the United States had developed the largest navy in the world, surpassing that of Great Britain. As U.S. power increased, the threat of European intervention in the Caribbean decreased. Bemis (1943, 202) notes, “In 1922 the two oceans were safe. No danger of non-American intervention was in sight in the Caribbean and Central America.” This decrease in threat was followed by a decrease in U.S. military activity in the Caribbean region. The eight-year U.S. military occupation of the Dominican Republic ended in 1924, and the last major U.S. military intervention in the Caribbean during the first half of the twentieth century was the landing of marines in response to revolutionary activity in Nicaragua in 1926.

By the late 1920s, the United States government had begun to question whether the Roosevelt Corollary served the nation’s best interest. During the Hoover Administration, Under-Secretary of State J. Reuben Clark issued a memorandum which declared that the Roosevelt Corollary violated the Monroe Doctrine. The Clark memorandum signalled the eventual demise of the Caribbean policies of the Roosevelt Corollary under the administration of Franklin Roosevelt. The last U.S. troops withdrew from Nicaragua and Haiti in 1933 and 1934, respectively. At the Pan-American Conferences in Montevideo (1933) and Buenos Aires (1936), the United States agreed to a policy of non-intervention in Latin America. This “Good Neighbor Policy” stated that the United States would not actively intervene in the affairs of Latin American states. This change in policy, which had its roots in the 1920s, was not due to any normative belief about the sovereignty of states, but instead to a change in the strategic environment in which the United States found itself. By the 1930s, the United States had gained in strength vis-à-vis the European powers. Without an external threat from Europe, the United States no longer needed to engage in costly interventions in order to maintain its sphere of influence in the Caribbean.

At the end of the 1930s, an external threat to the Caribbean region yet again emerged from Germany. With the outbreak of World War II in Europe, the United States found itself in the situation of having to protect the Caribbean from any German threat. While the U.S. did not engage in any military interventions in the region during this time, this was largely due to the fact that there was little need to do so given the lack of domestic instability in the region and the general support for U.S. policies among the countries in the region. By the late 1930s many countries in the region were governed by long-lived dictatorships, including Cuba (Fulgencio Batista), the Dominican Republic (Rafael Trujillo), El Salvador (Maximiliano Hernández Martínez), Guatemala (Jorge Ubico), Honduras (Tiburcio Carías Andino), and Nicaragua (Anastasio Somoza). These dictators quelled the chronic political instability that had led to U.S. interventions in previous decades and were actively supported by the United States government. As the Peruvian reformist Víctor Raúl Haya de la Torre noted in 1938, Franklin Roosevelt had made himself “the Good Neighbor of Tyrants” (Smith 1996, 73).

Although the opportunity did not present itself, there is some evidence that if necessary the United States would have been more likely to intervene given the German threat. Langley (1989*b*) notes that before the fall of France in the war, two thirds of the American public supported direct military intervention in Latin America to forestall any German threat. More importantly, under the Act of Havana (1940), the U.S. did threaten preemptive military intervention if Germany attempted to take control of any European colonies in the Caribbean. While this act called for collective intervention on the part of the “American nations,” as Gaddis Smith (1994, 37) notes, “there was no doubt which American nation would do the occupying. It would not be Costa Rica.” Interestingly, it would be Costa Rica that would provide the United States with one of the first opportunities for military intervention after the end of World War II.

4.3 Cold War

Immediately following World War II, the Caribbean region and Latin America in general were generally viewed as of peripheral concern to U.S. foreign policy.¹⁷ While the United States did

¹⁷The lack of concern with Latin America in this time period is perhaps best illustrated in a 1948 global review of foreign policy by the State Department’s Policy Planning Staff. In it George Kennan notes, “This document should properly have included a chapter on Latin America. I have not included such a chapter because I am not familiar with the problems of the area, and the Staff has not yet studied them” (Smith (1994, 68).

work with Latin American states to develop a regional collective security system first with the Rio Pact in 1947 and then with the establishment of the organization of American States in 1948, U.S. foreign policy during this time period was generally focused toward facing the Soviet threat in Europe. When a civil war broke out in Costa Rica in 1948, the United States never seriously considered military intervention as an option.¹⁸ However, a change in the geopolitical situation would soon place the Caribbean in a much more prominent place in the U.S. foreign policy agenda, opening the door for a new era of U.S. interventionism in the region.

Roosevelt's Good Neighbor Policy slowly eroded as the United States entered the Cold War. During the early years of the Cold War, the Soviet Union did not possess the means to directly intervene in the Western Hemisphere and thus posed little threat to the U.S. sphere of influence in the Caribbean (Gilderhus 2000). However in the years immediately following the Costa Rican civil war, the Soviet development of an atomic bomb and the emergence of a communist China allied with the USSR signalled a shift in the balance of power favoring the Soviet Union. Given this increased threat, U.S. officials began to think of the Latin America solely in a Cold War context (Smith 1994). In what has become known as the Kennan Corollary to the Monroe Doctrine, George Kennan argued that to counter the communist threat from the Soviet Union in Latin America, the United States may have to resort to supporting "harsh governmental measures of repression." The articulation of the Kennan Corollary signalled a willingness to abandon the recent tradition of non-intervention in the region. Geopolitical security concerns trumped adherence to international norms of sovereignty. The United States soon adopted what Peter Smith (1996, 164) calls "a tacit but consistent policy of political intervention in Latin America." In fact, after the Costa Rican civil war, the United States would intervene militarily through direct or indirect means in every civil war in Central America and the Caribbean during the Cold War (Yoon 1997).

The 1954 U.S. intervention in Guatemala sounded the final death knell of the Good Neighbor Policy. In 1950, a center-left reformist, Colonel Jacobo Arbenz Guzmán was elected president of Guatemala. While not a communist himself, Arbenz did have ties to the communist party and pursued agrarian reform. Under his administration, Guatemala "brazenly followed a pro-Soviet

¹⁸Bell (1971) notes that U.S. troops were mobilized in the Panama Canal Zone during the war. He claims that Costa Rican President Teodoro Picado was informed that they were "on standby status ready to be transported to Costa Rica" (p. 150). However, according to Maingot (1994), the mobilization was instead in response to violence that broke out in Bogotá, Colombia, after the assassination of a Colombian politician. At the time diplomats, including U.S. Secretary of State George Marshall, were meeting in Bogotá to form the OAS.

line" in the United Nations (Langley 1989*b*), and a shipment of arms from Czechoslovakia to Guatemala only increased U.S. officials' fear of Soviet intrusion in the Central American nation. In response, the United States supported and supplied planes to a CIA-trained rebel army, which invaded the country from Honduras in May of 1954 and overthrew the Arbenz government. In support of U.S. actions in Guatemala, Secretary of State John Foster Dulles claimed, "This intrusion of Soviet despotism in Guatemala was, of course a direct challenge to our Monroe Doctrine, the first and most fundamental of our foreign policies" (Maingot 1994, 96).¹⁹ Thus, an external threat to its Caribbean sphere of influence led the United States to discard the Good Neighbor Policy and restate its right to unilateral action. Seven years after the Guatemalan intervention, the United States once again attempted to overthrow a leader of a Caribbean nation with ties to the Soviet Union. Fidel Castro's communist regime in Cuba once again increased fears of Soviet encroachment in the Caribbean. However, the attack by CIA trained troops at the Bay of Pigs in April 1961 was not as successful as the Guatemalan expedition, and Castro remained in power. Despite this failure, the United States continued to maintain its right to pursue interventionist activities in order to counter external threats to its sphere of influence. Echoing the words of George Kennan a decade before—and to some extent those of Theodore Roosevelt and Woodrow Wilson as well—President John F. Kennedy (1961, 459) warned that

our restraint is not inexhaustible. Should it ever appear that the inter-American doctrine of noninterference merely conceals or excuses a policy of nonaction—if the nations of this hemisphere should fail to meet their commitments against outside communist penetration—then I want it clearly understood that this Government will not hesitate in meeting its primary obligations, which are the security of our Nation.

While it had pursued more covert methods of intervention in Guatemala and Cuba, the United States soon returned to more direct forms of military intervention. In 1965, U.S. troops invaded the Dominican Republic in response to an armed revolt. Since the assassination of President Rafael Trujillo in 1961, the political situation in the Dominican Republic had been in flux. In 1963, the first democratically-elected Dominican president, Juan Bosch, was ousted in a military coup in 1963. In April of 1965, a pro-Bosch element of the military rose up against the government. fearful of communist leanings of the pro-Bosch force and determined to prevent "another Cuba,"

¹⁹Perhaps President Eisenhower made the point more bluntly when, at a reception for top CIA officials, he said, "Thanks to all of you. You've averted a Soviet beachhead in our hemisphere" (Smith 1996, 137).

President Johnson sent U.S. troops to the Dominican Republic to suppress the revolt and install a U.S.-friendly government. The Dominican intervention illustrated what has become known as the Johnson Doctrine: unilateral intervention to prevent a communist takeover. While U.S. interventionist activities in Latin America declined in the wake of the war in Vietnam and its aftermath, under the Reagan administration, the United States once again pursued a policy of intervention in the Caribbean Basin. Citing the threat of Soviet influence in the region, the United States actively intervened in Grenada, Nicaragua, and El Salvador. In 1983, in a situation quite similar to that in the Dominican Republic eighteen years earlier, the United States intervened militarily in Grenada during a time of civil unrest to prevent the continuation of a government friendly with the Soviet Union and Cuba. In Nicaragua, the United States trained and supported the *contra* forces which were battling the Sandinista government, while in El Salvador, the U.S. actively supported the efforts of the right-wing government in fighting against the Marxist-leaning guerrilla forces of the Farabundo Martí Liberation Front. In each case, the United States argued that the threat of Soviet interference in the region necessitated U.S. intervention in the region.

The pattern of United States intervention in the domestic affairs the nations in the Caribbean Basin supports the hypothesis derived from the model that the threat of intervention by a rival power increases the likelihood that a major power will intervene. Throughout the twentieth century, the United States maintained a sphere of influence in the Caribbean. However, the propensity of the United States to intervene in the region did not remain constant over time. The most active periods of U.S. intervention in the region were during the era of the Roosevelt Corollary in the first decades of the century and during the Cold War. In both cases, the U.S. feared that if it refrained from intervening in the region, outside powers would take advantage of the window of opportunity provided by domestic instability and intervene themselves. In the early twentieth century, as the United States emerged as a major power in international relations, U.S. intervention in the Caribbean Basin was spurred by a threat from European powers, especially Germany. In the 1920s and early 1930s, when there was little threat of external interference in the Caribbean, the United States was able to move toward a policy of non-intervention in the region. Then, during the Cold War, the threat of Soviet intervention in the Caribbean led the U.S. once again to intervene militarily in the region. Faced with a similar external threat, the rhetoric of Cold War leaders like Kennedy, Johnson, and Reagan, mirrored those of their early twentieth century prede-

cessors, Theodore Roosevelt and Woodrow Wilson. Twentieth century U.S. foreign policy in the Caribbean, therefore, was largely a product of the international strategic environment in which the United States found itself.

5 Extensions of the Model

The model presented here can be amended to incorporate a number of different strategic situations. First, one could allow a power the opportunity to counter-intervene after the other power intervenes. This counter-intervention would then lead to a conflict between the two powers. Credible threats of counter-intervention could deter powers from intervening. For example, it is often argued that a threat of U.S. counter-intervention ended the British-German intervention in Venezuela in 1902-3 and that the lack of a credible threat from the United States during the U.S. Civil War gave France the opportunity to intervene militarily in Mexico in the 1860s. Incorporating counter-intervention would not greatly affect the implications of the model with respect to U.S. intervention in the Caribbean region. First, consider the case where the United States has a credible counter-intervention threat. Assuming that the U.S. is the power that will intervene in equilibrium in any case, then a credible U.S. deterrent will never increase the likelihood that the U.S. will intervene in any given state since the other power will be less likely to intervene. Given that one would expect that the U.S. would be more likely to counter-intervene the greater its preponderance of power, then the model would still predict that, all else equal, the U.S. would be more likely to intervene the greater the external threat to its sphere of influence in the Caribbean. On the other hand, a credible counter-intervention threat from another power would decrease the likelihood that the U.S. would intervene. I would argue that perhaps the only case during the period in question in which an external power had a credible deterrent was the Soviet Union in Cuba. This would provide a plausible explanation for the unwillingness of the United States to intervene in Cuba during the Cold War after the Cuban Missile Crisis in 1962.

Second, one could vary the policy preferences of the powers. In the model presented here, I assume that powers have opposing preferences over policy. This assumption is valid in many different aspects of international relations, such as resource allocation and some ideological issues. However, other issues are not zero-sum by nature. For example, all powers could benefit from the

protection of property rights, the solution of a humanitarian crisis, the resolution of a civil war, or the removal of weapons of mass destruction from a rogue state. In these cases, the strategic environment that powers face would more closely resemble the provision of a public good. Since all states would gain the benefits from intervention while only the intervening state would bear the cost, each state would have an incentive to free ride. Intervention then becomes a collective action problem. Therefore, the predictions of such a model would differ from the one presented here. However, the analysis above continues to hold in cases where states have conflicting preferences over policy, which I argue includes most situations regarding the protection of the U.S. sphere of influence in the Caribbean Basin.²⁰

6 Conclusion

Despite the presence of a norm of nonintervention, states often intervene in the domestic affairs of other states. Perhaps the most extreme form of this interference is military intervention. The use of force is costly, and military intervention is generally a foreign policy option only available to the most powerful of states. However, even for major powers, military intervention may not always be a cost-effective policy choice. Domestic instability in target states can create a window of opportunity for intervention by decrease the cost. Therefore, the goal of potential interveners is to determine the optimal time to intervene. Moreover, since states do not act in a vacuum, they must take into account the anticipated actions of other states when making intervention decisions. Given the strategic nature of the problem, game theory provides an excellent framework in which to examine intervention decisions.

The game-theoretic model presented here aims to capture some of the strategic dynamics that underlie intervention decisions. In the equilibrium analysis of the model, I find that when states have conflicting policy preferences, they have an incentive to intervene preemptively in times of domestic instability in order to eliminate the possibility of future intervention by a rival power. Given this, I argue that a major power is more likely to intervene in its sphere of influence when there exists a threat of external intervention by another power. I find support for this implication of the model through an historical examination of the intervention decisions of the United States

²⁰For an examination of the effect of the policy preferences of major powers on intervention decisions, see Gent (2003).

in the Caribbean Basin. The two periods in which the U.S. most often intervened in the region—the era of the Banana Wars and the Cold War—corresponded to periods in which the U.S. faced a threat of external influence in the Caribbean. On the other hand, the decline of U.S. intervention in the 1920s and 1930s coincided with a decreased threat of European intervention.

Undoubtedly there are other factors, such as economic interests, that influenced U.S. intervention decisions in the Caribbean.²¹ However, inter-power politics have undoubtedly played an important role in U.S. intervention decisions. Presidents, both Democratic and Republican, from Roosevelt to Wilson to Reagan, have consistently cited threats from rival powers as justification for their intervention activities in the Caribbean Basin. In case after case, the United States was willing to sacrifice the sovereignty of smaller states when the security of its sphere of influence was threatened. The historical evidence, then, supports the implication developed from the game theoretic model that external threats provoke major powers to pursue preemptive strategies of intervention in their spheres of influence.

²¹Frieden (1989) provides a compelling argument that the change in the form of U.S. economic investment in the region was the driving force behind the change in the intervention behavior of the United States in the first half of the twentieth century. Frieden himself, however, acknowledges that his theory cannot account for U.S. intervention behavior in Grenada and Nicaragua in the 1980s.

A Appendix

A.1 Markov Transition Matrix

In the game, instability is modelled as a simple homogenous random-walk process. This stochastic process is a Markov chain $\{K^t\}$ with state space $K = \{\dots, -2, -1, 0, 1, 2, \dots\}$. Let $k^t \in K$ be a realization of K^t . Since this is a Markov process, k_{t+1} is only dependent upon k_t . I assume that $\Pr(K_{t+1} = k^t + 1 | K^t = k^t) = p$ and $\Pr(K_{t+1} = k^t - 1 | K^t = k^t) = 1 - p$ for all $k^t \in K$, where $p \in (0, 1)$. Given this, we can define the $|K| \times |K|$ Markov transition matrix $P = (p_{ij})$, where $p_{ij} = \Pr(K_{t+1} = j | K^t = i)$ and $i, j \in K$. Given the probabilities described above,

$$p_{ij} = \begin{cases} p & \text{if } j = i + 1 \\ 1 - p & \text{if } j = i - 1 \\ 0 & \text{otherwise} \end{cases}$$

A.2 Markov Perfect Equilibrium

Let $a_i \in A_i(k^t)$ be an action taken by player i , where $A_i(k^t)$ is the set of possible actions given k^t .²² Since the only two possible actions at every information set are to intervene or not intervene, let $A = \{Intervene, Not\ Intervene\}$. Then, $A_1(k^t) = A$ if t is even and $A_1(k^t) = \emptyset$ otherwise. $A_2(k^t)$ is defined similarly, except that 2 moves in odd periods. For notational purposes, let K_i be the set of all states such that $A_i \neq \emptyset$. Also, let \mathcal{A}_i be the set of mixed actions for i . Since the payoffs in the game are time-independent, a Markov strategy for player i is a function $\sigma_i : K_i \rightarrow \mathcal{A}_i$. In other words, a Markov strategy gives the probability that a player will intervene or not intervene in each state. For notational purposes, let $\sigma_i(k)$ represent the probability that i does *not* intervene given that the state is k .

A Markov perfect equilibrium is a profile of Markov strategies $\sigma^* = (\sigma_1^*, \sigma_2^*)$ which forms a Nash equilibrium in every subgame. Since the intervention game has a countable number of states and a finite number of actions, we are guaranteed existence of a Markov perfect equilibrium (Fudenberg and Tirole 1991). To find the players' equilibrium strategies, we must determine their

²²Formally, action spaces are a function of the entire history of the game, h^t . However, in a stochastic game, A_i is measurable with respect to the state. Since we are only concerned with Markov strategies, it is notationally convenient to make the action space a function of the state. See Fudenberg and Tirole (1991, 503-504).

optimal actions in each state. Let $y_i(k) = b_i/(1 - \delta) - c_i(k)$ be the payoff of intervening in state k , and let $z_i = b_i x_i$ be the one-period payoff of non-intervention. Given a pair of equilibrium strategies (σ_1^*, σ_2^*) , let $v_i(k^t)$ be i 's continuation value in periods in which i moves, and let $w_i(k^t)$ be i 's continuation value in periods in which she does not move. In other words, $v_i(k^t)$ is the present discounted value of player 1's payoff given that the current state is k^t , t is even, and both players play optimally from this point forward. On the other hand, $w_i(k^t)$ is the present discounted value of 1's payoff if t is odd. Player 2's continuation values are defined similarly. Let $v_i = (v_i(0), v_i(1), \dots)'$ and $w_i = (w_i(0), w_i(1), \dots)'$. Then, $v_i(k) = \max\{y_i(k), x_i + \delta P_i w_i\}$ and $w_i(k) = \sigma_j^*(z_i + \delta P_k v_i)$, where $j \neq i$ and P_k be the k th row of P .

Let $k_i^L = \max\{k \in K_i : y_i(k) < z_i\}$ be the highest state in which i strictly prefers the one-period status quo payoff to intervention payoff. Then, i will always prefer to not intervene in all states $k \leq k_i^L$. Thus, in any Markov perfect equilibrium, $\sigma_i^*(k) = 1$ for all $k \leq k_i^L$. In other words, there is a lower bound on the states in which a player will intervene in equilibrium. Since the lower bound of K is negative infinity and c_i is strictly decreasing in k , k_i^L always exists. Let "monotone strategy" to refer to any (Markov) strategy such that $\sigma_i(k) \geq \sigma_i(k')$ for $k < k'$. That is, if a player plays a monotone strategy, then the probability that she intervenes weakly increases as the level of instability increases. Lemma 1 states that the best response to a monotone strategy is a monotone strategy.

Lemma 1 *Suppose player j is playing a Markov strategy σ_j such that $\sigma_j(k) \geq \sigma_j(k')$ for $k < k'$. For $i \neq j$, for all $\sigma_i \in r_i(\sigma_j)$, $\sigma_i(k) \geq \sigma_i(k')$ for $k < k'$, where r_i is the best response correspondence for player i .*

Assume that j is playing a strategy such that she does not intervene in every state. Since this is a monotone strategy, given Lemma 1, we know that i 's best response is to play a monotone strategy. Consider i 's decision at state k . If she intervenes at state k in some period τ , then $v_i(k) = y_i(k)$. Given that i will intervene in all $k > k'$ and not intervene in all $k'' < k$, if i does not intervene at τ , then $v_i(k) = z_i + \delta z_i + \delta^2[p^2 y_i(k' + 2) + p(1 - p)v_i(k') + (1 - p)^2 v_i(k' - 2)]$. Let f_{kt}^- be the probability that the first time that the state returns to k after τ is t and $k^{t-1} = k - 1$. Let $f_{k\tau}^- = 0$

and $F_{kt}^- = \sum_{t=\tau}^{\infty} f_{kt}^-$. Then the expected value for not intervening at τ is

$$\bar{v}_i = \bar{\alpha}_i z_i + \bar{\beta}_i y_i(k+2) \quad (1)$$

where

$$\bar{\alpha}_i = \frac{1 + \delta + \sum_{t=\tau+2}^{\infty} \delta^{t-\tau} (1-p - F_{kt}^-)}{1 - \delta^2 p(1-p) - \sum_{t=\tau}^{\infty} \delta^{t-\tau} f_{kt}^-} > 1 \quad (2)$$

and

$$\bar{\beta}_i = \frac{\delta^2 p^2}{1 - \delta^2 p(1-p) - \sum_{t=\tau}^{\infty} \delta^{t-\tau} f_{kt}^-} < 1. \quad (3)$$

Let $k_i^H = \min\{k \in K_i : y_i(k) \geq \bar{v}_i\}$. Then if $k^t \geq k_i^H$, i will prefer intervening to not intervening. Thus, in any Markov perfect equilibrium, $\sigma_i^*(k) = 0$ for all $k \geq k_i^H$.

Now consider i 's decision at state k if j is playing a monotone strategy such that j intervenes in all $k' > k$ and does not intervene in all $k' < k$. As before, if i intervenes in state k at time τ , then $v_i(k) = y_i(k)$. If she does not intervene, then $v_i(k) = z_i + \delta(1-p)z_i + \delta^2[p(1-p)v_i(k) + (1-p)^2 v_i(k-2)]$. Using the notation from above, the expected value of not intervening at τ is

$$\tilde{v}_i = \tilde{\alpha}_i z_i, \quad (4)$$

where

$$\tilde{\alpha}_i = \frac{1 + \sum_{t=\tau+1}^{\infty} \delta^{t-\tau} (1-p - F_{kt}^-)}{1 - \sum_{t=\tau}^{\infty} \delta^{t-\tau} f_{kt}^-} > 1. \quad (5)$$

Let $\tilde{k}_i = \max\{k \in K : y_i(k) < \tilde{v}_i\}$. Since $p > 0$, $\tilde{v}_i < \bar{v}_i$. Given this, and the fact that $\tilde{\alpha} > 1$, it follows that $k_i^L \leq \tilde{k}_i \leq k_i^H$. We can now state the following proposition concerning the Markov perfect equilibrium of the game.

Proposition 2 Define A and B such that $\tilde{k}_A < \tilde{k}_B$. The following constitutes a Markov perfect equilibrium of the intervention game: For $i = 1, 2$, $\sigma_i^*(k) = 1$ if $k \leq k_i^*$ and $\sigma_i^*(k) = 0$ otherwise, where

1. If $k_A^H < k_B^L$, then $k_A^* = k_A^H - 2$ and $k_B^* = k_B^L$.

2. Let $K^* = \{k', \dots, k''\}$, where $k' = \max\{k_B^L - 1, \tilde{k}_A\}$ and $k'' = \min\{k_A^H - 2, \tilde{k}_B - 1\}$. If $k_A^H \geq k_B^L$, then $k_A^* \in K^* \cap K_A$ and $k_B^* = k_A^* + 1$.

Proof

1. Given Lemma 1, it suffices to show that, for $i = A, B$ and $j \neq i$, $\sigma_i(k_i^* + 2) = 0$ and $\sigma_i(k_i^*) = 1$ are best responses to σ_j^* given σ_i^* . Consider A's strategy. It has been shown that $\sigma_A^*(k) = 0$ for all $k \geq k_A^H$. Since $k_A^* + 2 = k_A^H$, it follows that $\sigma_A(k_A^* + 2) = 0$ is a best response. Consider A's decision at k_A^* . Since $k_A^* < k_A^H$, $\bar{v}_A(k_A^*) > y_A(k_A^*)$. Thus, given that $\sigma_A(k) = 0$ for $k > k_A^*$, $\sigma_A(k) = 1$ for $k < k_A^*$, and $\sigma_B(k) = 1$ for $k \leq k_A^* + 1$, A prefers to not intervene at k_A^* . Now consider B's strategy. It has been shown that $\sigma_B(k) = 1$ for $k \leq k_B^L$. Since $k_B^* = k_B^L$, $\sigma_B(k_B^*) = 1$ is a best response. Consider B's decision at $k_B^* + 2$. Since $k_B^* + 2 > k_B^L$, $y_B(k_B^* + 2) \geq z_i$. Thus, given that $\sigma_A(k) = 0$ for $k \geq k_B^* - 1$, B prefers to intervene at $k_B^* + 2$.
2. As above, it suffices to show that, for $i = A, B$ and $j \neq i$, $\sigma_i(k_i^* + 2) = 0$ and $\sigma_i(k_i^*) = 1$ are best responses. First consider A's strategy. Since $k_A^* + 2 > \tilde{k}_A$, $y_A(k_A^*) \geq \tilde{v}_A$. Thus, given that $\sigma_A(k) = 1$ and $\sigma_B(k) = 1$ for $k < k_A^* + 2$ and $\sigma_B(k_A^* + 3) = 0$, A prefers to intervene at $k_A^* + 2$. Now consider A's decision at k_A^* . Since $k_A^* < k_A^H$, $\bar{v}_A(k_A^*) > y_A(k_A^*)$. Thus, given that $\sigma_A(k) = 0$ for $k > k_A^*$, $\sigma_A(k) = 1$ for $k < k_A^*$, and $\sigma_B(k) = 1$ for $k \leq k_A^* + 1$, A prefers to not intervene at k_A^* . Now consider B's strategy. Finally, consider B's decision at $k_B + 2$. Since $k_B^* \leq \tilde{k}_A$, $y_B(k_B^*) < \tilde{v}_B$. Thus, given that $\sigma_A(k) = 1$ and $\sigma_B(k) = 1$ for $k < k_B^*$ and $\sigma_A(k_B^* + 1) = 0$, B prefers to not intervene at k_B^* . Finally, consider B's decision at $k_B^* + 2$. Since $k_B^* + 2 > k_B^L$, $y_B(k_B^* + 2) \geq z_i$. Thus, given that $\sigma_A(k) = 0$ for $k \geq k_B^* - 1$, B prefers to intervene at $k_B^* + 2$.

Q.E.D.

References

- Akehurst, Michael. 1977. "The Use of Force to Protect Nationals Abroad." *International Relations* 5:3–23.
- Balch-Lindsay, Dylan and Andrew J. Enterline. 2000. "Killing Time: The World Politics of Civil War Duration, 1820-1992." *International Studies Quarterly* 44:615–642.
- Bell, John Patrick. 1971. *Crisis in Costa Rica: The 1948 Revolution*. Austin: Tex.
- Bemis, Samuel Flagg. 1943. *The Latin American Policy of the United States: An Historical Interpretation*. New York: Harcourt, Brace and Company.
- Bull, Hedley, ed. 1984. *Intervention in World Politics*. Oxford: Clarendon Press.
- Callcott, Wilfrid Hardy. 1942. *The Caribbean Policy of the United States, 1890–1920*. Baltimore: Johns Hopkins University Press.
- Cetinyan, Rupen. 2002. "Ethnic Bargaining in the Shadow of Third-Party Intervention." *International Organization* 56(3):645–677.
- Challener, Richard D. 1973. *Admirals, Generals, and American Foreign Policy, 1898–1914*. Princeton: Princeton University Press.
- Collier, Ellen C. 1993. "Instances of Use of United States Forces Abroad, 1798–1993." Washington DC: Congressional Research Service.
- Cox, D. R. and H. D. Miller. 1965. *The Theory of Stochastic Processes*. New York: John Wiley and Sons.
- Dorman, Andrew M. and Thomas G. Otte, eds. 1995. *Military Intervention: From Gunboat Diplomacy to Humanitarian Intervention*. Aldershot: Dartmouth.
- Elbadawi, Ibrahim A. and Nicholas Sambanis. 2000. "External Interventions and the Duration of Civil Wars." Paper presented at the World Bank DECRG conference on "The Economics and Politics of Civil Conflicts," Princeton University, March 18-19.
- Enterline, Andrew J. and Dylan Balch-Lindsay. 2001. "By Sword or By Signature? A competing Risks Approach to the Civil War Process, 1820-1992." Mimeo, University of North Texas.
- Frieden, Jeffrey A. 1989. "The Economics of Intervention: American Overseas Investments and Relations with Underdeveloped Areas, 1890–1950." *Comparative Studies in Society and History* 31(1):55–80.
- Fudenberg, Drew and Jean Tirole. 1991. *Game Theory*. Cambridge: MIT Press.

- Gent, Stephen E. 2003. "Powers, Preferences, and the Decision to Intervene." Mimeo, University of Rochester.
- Gilderhus, Mark T. 2000. *The Second Century: U.S.–Latin American Relations Since 1889*. Wilmington, DE: Scholarly Resources.
- Grimmett, Geoffrey and David Stirzaker. 1985. *Probability and Random Processes*. Oxford: Clarendon Press.
- Healy, David. 1988. *Drive to Hegemony: The United States in the Caribbean, 1898–1917*. Madison: University of Wisconsin Press.
- Hoffman, Stanley. 1984. "The Problem of Intervention." In *Intervention in World Politics*, ed. Hedley Bull. Oxford: Clarendon Press. Pp. 7–28.
- Kane, William Everett. 1972. *Civil Strife in Latin America: A Legal History of U.S. Involvement*. Baltimore: Johns Hopkins University Press.
- Kennedy, John F. 1961. "The Lesson of Cuba." *Department of State Bulletin* 44(1141):459–461.
- Krasner, Stephen D. 1999. *Sovereignty: Organized Hypocrisy*. Princeton: Princeton University Press.
- Langley, Lester D. 1976. *Struggle for the American Mediterranean: United States–European Rivalry in the Gulf-Caribbean, 1776–1904*. Athens: University of Georgia Press.
- Langley, Lester D. 1989a. *America and the Americas: The United States in the Western Hemisphere*. Athens: The University of Georgia Press.
- Langley, Lester D. 1989b. *The United States and the Caribbean in the Twentieth Century*. 4th ed. Athens: University of Georgia Press.
- Link, Arthur S., ed. 1980. *The Papers of Woodrow Wilson*. Vol. 35. Princeton: Princeton University Press.
- Maingot, Anthony P. 1994. *The United States and the Caribbean: Challenges of an Asymmetrical Relationship*. Boulder, CO: Westview Press.
- Morgenthau, Hans J. 1967. "To Intervene or Not to Intervene." *Foreign Affairs* 45:425–436.
- Morison, Elting E., ed. 1951. *The Letters of Theodore Roosevelt*. Vol. 4. Cambridge: Harvard University Press.
- Munro, Dana G. 1964. *Intervention and Dollar Diplomacy in the Caribbean, 1900–1921*. Princeton: Princeton University Press.
- Perkins, Dexter. 1941. *Hands Off: A History of the Monroe Doctrine*. Boston: Little, Brown, and Company.

- Regan, Patrick M. 2000a. *Civil Wars and Foreign Powers: Outside Intervention in Intrastate Conflict*. Ann Arbor: University of Michigan Press.
- Regan, Patrick M. 2000b. "Substituting Policies during U.S. Interventions in Internal Conflicts." *Journal of Conflict Resolution* 46(1):55–73.
- Regan, Patrick M. 2002. "Third-Party Interventions and the Duration of Intrastate Conflicts." *Journal of Conflict Resolution* 46(1):55–73.
- Rosenau, James N. 1969. "Intervention as a Scientific Concept." *Journal of Conflict Resolution* 13(2):149–171.
- Smith, Gaddis. 1994. *The Last Years of the Monroe Doctrine, 1945–1993*. New York: Hill and Wang.
- Smith, Peter H. 1996. *Talons of the Eagle: Dynamics of U.S.–Latin American Relations*. Oxford: Oxford University Press.
- Weber, Cynthia. 1995. *Simulating Sovereignty: Intervention, the State and Symbolic Exchange*. New York: Cambridge University Press.
- Yoon, Mi Yung. 1997. "Explaining U.S. Intervention in Third World Internal Wars, 1945–1989." *Journal of Conflict Resolution* 41(4):580–602.