JOURNAL OF ECONOMIC AND BUSINESS

Vol. XVI No. 2

December 1997

RESEARCH INSTITUTE FOR ECONOMICS

AND BUSINESS ADMINISTRATION

HANKUK UNIVERSITY OF FOREIGN STUDIES

SEOUL, KOREA

A MICROECONOMIC APPROACH TO FOREIGN POLICY CRISIS BEHAVIOUR

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I. Introduction

This essay is an extension of Kenneth Waltz's Theory of International Politics to the study of foreign policy behaviour. Waltz employs a theoretical line of reasoning which analyzes world politics through analogy with microeconomic market theory. He argues that the behaviour of states in the international system can be explained by drawing parallels with the behaviour of firms in the market of decentralized economies. According to Waltz, states in the international political system are like firms in an oligopolistic industry. As in an oligopoly, a few nations control most of the system's capability. It is by relative capability alone that Waltz differentiates states. Waltz employs his structural theory to analyze coalitional patterns, economic interdependence, military relationships, and the role of great powers in maintaining world order. (Waltz, 1979) Since Waltz relies on the theory of the market - which explains aggregate patterns of behaviour in the market-place - his analysis is conducted at the systemic level. He is unwilling to predict the foreign policy of any specific state. (Waltz, 1979: pp. 121-122)

This essay will test the efficacy of the theory of the firm - the corollary of market theory at the unit level - in predicting the behaviour of states in foreign policy crisis situations. The first part of this essay will define crisis and discuss its relationship to two related classes of events : conflict and war. Second, this essay will outline the theory of the firm (and the assumptions underlying it) and relate it to the behaviour of states in the international system. Next, the assumptions underpinning this study will be set forth and several hypotheses (based on microeconomic theory) that are to be tested will be delineated. Evidence supporting or

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disconfirming the hypotheses will also be presented. Finally, other conclusions and implications of the findings will be briefly discussed.

II. Conflict, Crisis and War

"Crisis" as a field of study is closely related to two other concepts which are central to understanding world politics, namely, conflict and war. Patrick James defines an international conflict as "any interaction delimited in time and space, involving two or more international entities (whether states or transnational actors) which possess non-identical preference orderings over one or more sets of alternative choices."(James, 1988: p. 5) James lists three advantages to this definition. First, it is unbiased, that is, it does not entail a state-centered view of international relations nor interdependence. Second, it treats conflict as a mixed-motive interaction where there is considerable room for agreement among parties requiring only disagreement over at least one set of alternatives. Third, it is consistent with the literature on international conflict.(James, 1988: pp. 5-6) Thus, James' definition will be utilized in this study.

A foreign policy crisis is not synonymous with international conflict. The classic definition of a foreign policy crisis is that of Charles F. Hermann: "A crisis is a situation that (1) threatens high-priority goals of the decision-making unit, (2) restricts the amount of time available for response before the decision is transformed, and (3) surprises the members of the decision-making unit by its occurrence.... Underlying the proposed definition is the hypothesis that if all three traits are present then the decision process will be substantially different than if only one or two of the characteristics appear."(Hermann, 1969: p. 414) Michael Brecher modified this to: "a crisis is a situation with three necessary and sufficient conditions, deriving from a change in its (the state's) external or internal environment. All three conditions are perceptions held by the highest level decision-makers: (1) threat to basic values, with a simultaneous or subsequent (2) high probability of involvement in military hostilities, and the awareness of (3) finite time for response to the external value threat."(Brecher and Ben Yehuda, 1980: p. 1)

Brecher's modification has been accepted in large part by Hermann. The latter has more recently defined crisis as occurring when: "policy-makers in a country ... perceive a severe threat to the basic values of their political system from sources that are at least partially outside their polity; when they believe there is relatively short time before the situation (if unaltered) will evolve in ways unfavorable to them; and when they have an increased expectation that in the near future there will be an outbreak of military hostilities or a sharp escalation of already existing hostilities." (Hermann, 1988: p. 122) The only significant difference between the latter two definitions is Brecher's use of "finite time" in comparison to Hermann's "short time." The lack of a universal short time condition is demonstrated by the 1961 Berlin Crisis and the 1971 Bangla Desh Crisis. Thus, Brecher is probably correct when he states: "It was not the perceived brevity of time that influenced decision-making behavior, but rather the awareness of the finiteness of time for choice. A response could not be delayed indefinitely; that is, whether there was a week, a month, or many months, there was a realization that decisions for or against war had to be made within some time frame." (Brecher and Ben Yehuda, 1980: p.4) For this reason, Brecher's definition will underpin this study.

Just as a foreign policy crisis is related to international crisis, so too is it related to interstate war. David J. Singer and Melvin Small operationalized the concept of international war to mean : "Conflict involving at least one member of (the) interstate system on each side of the war, resulting in a total of 1000 or more battle deaths." (Singer and Small, 1972: p. 381) This is consistent with implicit (and explicit) definitions of war used in other literature and case studies. (James, 1988: p. 6) It is also compatible with the definitions of conflict and crisis delineated above.

What then is the relationship between conflict, crisis, and war? Brecher sums up the relationship between conflict and crisis in the following way: "Conspicuously absent (in conflict) is higher-than-normal tension, often accompanied by violence. Periods of high tension often generate crises." (Brecher and Wilkenfeld, (Eds.), 1989: p. 3) In the same way, the relationship between crisis and war can be seen as one of escalating violence until a threshold in the number of battle fatalities is crossed. In other words, conflict, crisis, and war can be viewed as being on a continuum of escalating tension and violence. Crisis can be viewed as a subset of conflict that has surpassed a certain level of tension. War can be viewed as a subset

of both conflict and crisis that has passed a certain level of violence. (based on James, 1988 : pp. 7-9) This relationship between conflict, crisis, and war will inform the development of the hypotheses that are generated below.

III. Microeconomic Theory and Foreign Policy Crisis Behaviour

Before delineating the hypotheses, it is necessary to briefly discuss the theory of the firm and relate it to foreign policy crisis behaviour. Microeconomic theory starts with three central assumptions about firms: first, and foremost, that firms make decisions with one goal, namely, the maximization of profit; second, that each firm behaves as a unitary actor; thus, the question of how a particular decision is reached is ignored; and, third, that firms make rational and consistent decisions; that is, firms have preference orderings for the decisions they make. Economists acknowledge that these assumptions might not accurately explain the way some firms behave in the real world, but they are considered a very good approximation of reality. (Lipsey et al., 1985: p. 232; Miller and Meiners, 1986: p. 234; and, McCloskey, 1982: pp. 237-242)

At present, there is no complete theory to explain the behaviour of firms in an oligopoly. (Lipsey et al., 1985: p. 236; Miller and Meiners: 1986: p. 460; and, McCloskey, 1982: p. 410) There are, however, three rules of behaviour for these firms. Each of these rules will be looked at in turn.

The first rule is that the price and output decisions of a firm are influenced by how it thinks its competitors will react to those decisions. (Lipsey et al., 1985: p. 236; Miller and Meiners, 1986: p. 460; and, McCloskey, 1982: p. 410) In terms of a foreign policy crisis, this is the equivalent of stating that decisions made by a state are influenced by the perceptions its leaders hold of the reaction those decisions are likely to bring about in other states.

The second rule is that a firm for which total revenue does not equal or exceed total variable cost should not produce. The total cost of a product is made up of its total fixed cost and its total variable cost. For example, if a firm produces armaments, the cost of the plant is the total fixed cost. This does not change with the quantity being produced. If the firm wanted to double

its production by increasing the operating hours of the plant, the total variable cost would increase because of the cost of using more labour, material, electricity, etc.. The total amount received by the firm is its total revenue. As long as the total revenue is greater than the total variable cost, the firm is seen as being profitable. The total fixed cost is seen as a sunk cost that cannot be used for other purposes. (Lipsey et al., 1985: pp. 146-150, 160, 185, 188; Miller and Meiners, 1986: pp. 319-322; and, McCloskey, 1982: pp. 156-157)

In an oligopoly, which means that there are at least two firms in competition with each other, Rule 2 can be restated as follows: any firm for which total revenue does not equal or exceed total variable cost should withdraw from the competition. All countries in crises, regardless of whether they have positive or negative power discrepancy, or even if all sides have equal capability, will expect to bear some physical, human and social costs if war breaks out. However, states with greater capability than their adversaries are more likely to expect terms of settlement that are favourable to them (the expected "total revenue" in microeconomic terms) at the end of the war than states with relatively lesser capability.

The third rule is that a firm should produce at the level where marginal revenue equals marginal cost - assuming it is worthwhile to produce at all. Marginal revenue is the increase in a firm's total revenue due to an increase in sales by one unit. Marginal cost is the increase in total cost due to an increase in the rate of production by one unit. (Lipsey et al., 1986: p. 185; Miller and Meiners, 1985: pp. 322-325; and, McCloskey, 1982: pp. 242-244) As applied to termination of foreign policy crises, Rule 3 is the equivalent stating: i) if a state's decision-makers perceive that the expected cost (the expected "marginal cost" in microeconomic terms) of going to war outweighs the expected benefit (the expected "marginal revenue" in microeconomic terms), then that state will try to defuse the crisis by attempting to withdraw from the competition or, if that is not possible, try to maintain or restore the political, territorial, and economic status quo ante; and, ii) if a state's decision-makers perceive the expected benefits of going to war outweigh the expected costs, then that state will try to change the international system through political, economic, and/or territorial expansion until the expected costs of further change are equal to or greater than the expected benefits (based on Gilpin, 1981: pp. 106-110)

IV. Hypotheses and Evidence

Rules 1 to 3 will be used to develop hypotheses that will be examined in this essay. This will be done later. At this point, the assumptions on which this study and each hypothesis are based will be clearly delineated.

There are three central assumptions in this study. The first is that states behave as unitary actors. In reality, as with firms, states are not unitary actors. This essay takes the position that this assumption, and the ones that follow, are useful in building theory and their legitimacy should be judged by that alone. (Waltz, 1979: pp. 117-118; and Bueno de Mesquita, 1981: pp. 27-29)

The second assumption of this study is that states act to maximize "national interests." This is different from "maximizing power." The maximizing of national interests, unlike "maximizing power," is consistent with Rule 1 (a firm's decisions in an oligopoly are affected by how it thinks its competitors will react to those decisions). Interests in a crisis can range from preserving to strengthening the state. The primary aim of the state is to maintain its own position in the system. Only after this goal is achieved can a state pursue other objectives. (Waltz, 1979: pp. 117-118; and, Russett, (Ed.), 1968: pp. 261-262) The possibility of the use of force and a state's own relative capability will determine which policies best serve a state's interests.

The third assumption is that states make rational and consistent decisions. This assumption is, of course, not descriptively accurate. It is used as a baseline (which can be tested against actual facts) thereby making a theory of international politics possible. (Morgenthau, 1973: p. 5)

Three hypotheses, one from each rule, have been developed from microeconomic theory. The link between state behaviour and system structure is forged by the latter two assumptions. By holding the maximization of national interests and the rationality assumption as constants, it is possible to develop testable hypotheses which attribute variations in state behaviour to variations in the international system. This work focuses on changes in state behaviour due to variations in relative capability (a systemic feature; this can be differentiated from capability alone which is a unit feature); that is, the differences in the decisions made between those actors with a negative power discrepancy and those with a positive power discrepancy are

studied.

Before delineating the hypotheses, a <u>caveat</u> is necessary. Theories in the social sciences cannot be definitively proven. Different methods of testing might yield different results. Even well-supported theories might not last over an extended period of time. Experimental results are permanent but theories come and go.(Hermann <u>et al.</u>, (Eds.), 1987: p. 40; and, Singer, 1990: Chap. 12)

This is especially so when human perceptions are involved. The lack of reliable information and knowledge is an important factor in almost all real-life decision-making. Wherever such uncertainties are present, there is an enhanced opportunity for unconscious, or only partly conscious, wishes and drives to influence policy. Decision-makers are, at best, rational in terms of what they are aware of, and they can be aware of only small, disjointed facets of reality. (Simon, 1985: p. 302) Thus, this study should not be regarded as an attempt to prove microeconomic theory. Rather, it has the more modest aim of searching for general patterns in foreign policy crisis behaviour of states based on their relative capability.

The first hypothesis to be tested, derived from Rule 1, examines crisis management technique. HYPOTHESIS 1 is that: The predominant crisis management technique of a country with negative power discrepancy is more likely to be pacific than a country with positive power discrepancy. Evidence from the International Crisis Behavior (I.C.B.) Project, which examined 627 foreign policy crises between 1929 and 1979, was utilized to test this theory. Support for Hypothesis 1 is weak at best as can be seen from the I.C.B. results:

Power Discr.	Negotiation	Other Pacific	Non-viol.	Mil.Viol.
High Positive	29%	12.5%	12.5%	46%
Low Positive	24%	15%	21%	40%
None	15%	16%	10%	59%
Low Negative	31%	20%	14%	35%
High Negative	32%	16%	12%	40%

(Source: Brecher et al., 1988: p. 71)

Although there does seem to be a very slight trend toward greater pacifity on the part of countries with negative discrepancy, they are almost indistinguishable in their behaviour from

states with positive discrepancy. The most striking feature of the above results is that actors with no power discrepancy were least likely to negotiate and most likely to employ violence as their principal crisis management technique. This seems to indicate, in the words of Brecher: "when in doubt about crisis outcome in a system of anarchy, rely on violence; certainly do not yield voluntarily." (Brecher et al., 1988: p. 65)

The second hypothesis to be tested, derived from Rule 2, concerns the initiation of war. HYPOTHESIS 2 is that: Most wars will be initiated by countries with positive power discrepancy. This hypothesis is tested by using James' study Crisis and War which examined 132 international crises between 1948 and 1975. James tested expected utility theory. After expected utility theory was revised, to overcome conceptual problems as originally formulated, it invariably reflected relative capability. That is, those states with positive expected utility also held greater relative capability in the vast majority of instances; and those states with negative utility possessed lesser capability in almost all cases. James found that 71.4% of wars were initiated by states with positive expected utility; and 21.5% were initiated by countries with zero expected utility. Thus, 92.9% of wars were initiated by states with non-negative expected utility. (James, 1988: pp. 39-71) Thus, James' study lends support to Hypothesis 2.

The third hypothesis, derived from Rule 3, is concerned with foreign policy crisis termination. HYPOTHESIS 3 is that: States with negative power discrepancy, even where they initiate a foreign policy crisis, are more likely to accept a return to the status quo ante without a war than states with positive power discrepancy which are likely to expand politically, economically and/or territorially until the costs of further expansion outweigh the costs. The James study indicates some support for this hypothesis insofar as the behaviour of countries with negative discrepancy is concerned. According to James, a state which challenges the status quo normally follows a very aggressive policy until its behaviour is reciprocated by its opponent(s). At this point, the perception of the likelihood of war increases significantly for the challenger. In 94.1% of crises initiated by a state with zero or negative expected utility, there was no war. This result, according to James, is due to the fact that the challenger recognizes that it is not likely to prevail in a war and, therefore, starts to act in a more conciliatory manner (behaviour which is reciprocated by its opponent(s) in almost all cases) and there is invariably an eventual return to the status quo ante.(James, 1988: pp. 69-71).

The finding that behaviour is reciprocated in foreign policy crises might explain why the support for Hypothesis 1 is weak. Although most states with a negative power discrepancy might prefer to be conciliatory, the behaviour of their adversary(ies) forces them to utilize a less pacific principal crisis management technique. Nevertheless, most of these states, despite military manouverings and/or border clashes of various sorts, do manage to avoid full-scale war.

Operationalizing the variables to determine the point at which the costs of further expansion outweigh the benefits for countries with positive power discrepancy is an extremely complex task. Such a study would require detailed information on a case-by-case basis because determining the cost/benefit analysis of states is not easily amenable to data-base analysis. Thus, although this is an interesting and important question, it is beyond the scope of this essay to study it in detail. It does seem likely, nevertheless, that countries do stop further expansion when their leaders perceive that costs outweigh benefits. The behaviour of Israel toward the Egyptian Third Army during the Yom Kippur War and the behaviour of India toward seizing West Pakistani territory during the Bangla Desh War lend support to this part of the hypothesis. As noted, however, much more detailed analysis will be required before a generalization of this sort can be made.

V. Conclusion

There are four broad conclusions that can be drawn from this study. First, the theory of the firm is an extremely valuable, <u>albeit</u> not perfect, guide to foreign policy crisis behaviour. Support for Hypothesis 1 is weak. However, the data does generally support Hypotheses 2 and 3.

Second, systemic constraints influence foreign policy only when decision-makers perceive them to have sufficient effect. This is demonstrated by the behaviour of countries with zero or hegative expected utility which initiate crises. Usually, these countries pursue an aggressive policy until their adversary(ies) react. It is only at this point that decision-makers perceive sufficiently powerful systemic constraints on their behaviour. These states usually do not

become conciliatory before this point. The perceived cost of becoming involved in a war has a dramatic effect on actions. The implication of this is that individual- and unit-level influences can affect foreign policy decisions when the costs are not determined to be so high. Thus, the implicit and explicit assumptions that Waltz makes in Theory of International Politics about systemic influences on state behaviour might not be consistent with actual facts much of the time.

Third, since systemic influences can influence countries toward becoming more conciliatory, it might be useful to implement the guidelines of the United Nations Charter concerning the creation of an international peace-keeping force. Of course, only the ending of the Cold War has made its use likely. An international peace-keeping force might be able to bring an end to fighting in certain parts of the world. It would probably be most effective if it was used in conjunction with U.N. pressure to bring about a negotiated political settlement among the warring parties. The effectiveness of such a force would, however, be contingent on the will of donor countries to keep supplying troops even if they are being killed.

Fourth, and finally, the proliferation of nuclear weapons might lead to a more peaceful world. A nuclear force means that an adversary(ies) no longer has to be defeated on the battlefield for devastating costs to be inflicted on its (or their) territory or populace and vice-versa. Thus, if decision-makers perceive the potential costs of going to war might be too high, they might be more willing to live in harmony with neighbors that they have quarrelled with in the past. Over time, self-interest might even push former enemies to build harmonious relationships. As noted, in the contemporary era, the Cold War is over and the United States and Russia are taking tentative steps to improve their relationship with each other. It is not totally out of the realm of possibility that such a pattern might repeat itself in other parts of the world.

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「經濟經營研究」論文 執筆依賴 投稿規定 및 原稿作成要領

본 연구소에서는 「경제경영연구」 제16권 제 1,2호의 발간에 뒤이어 제 17권 제 1호를 발간할 예정이오니 투고하실 연구원께서는 논문제목을 1998년 7월 30일까지 통보해 주시기 주시기 바랍니다.

原稿規定

- 1. 투고논문은 본 연구소의 상임연구원과 초빙연구원 및 타대학 전임교수의 단독 또는 공동논문에 한 하며, 창의성이 있는 것으로서 국내외 학술지에 발표되지 않은 것이어야 한다.
- 2. 투고논문은 본 연구소 편집위원의 심사과정을 거친 후에 게재된다.
- 3. 투고논문은 반드시 워드프로세서(호글 96)로 작성하여야 하고 출력분 1부와 디스켓을 제출하되 다음의 양식에 맞추어야 한다.
 - (1) 글자모양: 국한문과 영문 모두 신명조체로 하는 것을 원칙으로 하며 본문의 글자크기는 10으로 한다.
 - (2) 문단모양: 줄간격을 문단크기는 180%로 한다.
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- 4. 투고논문의 분량은 국문의 경우 A4용지 30매 이내로, 영문의 경우 25매 이내로 제한한다.
- 5. 투고논문의 영문은 국문, 국문은 영문 Abstract를 반드시 작성해 제출한다.

投稿 作成要領

- 1. 원고의 제1면에 한글과 영문으로 제목, 투고자의 성명 및 소속 등을 명기하고 학회나 연구비수혜를 받은 경우에는 지원기관명을 표기한다. 논문제목은 국한문과 영문으로 기록한다.
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- 3. 학술용어는 국문으로 표기하는 것을 원칙으로 하되 번역이 곤란한 경우에는 원어로 발음나는대로 표기 하고 용어의 이해를 위해 원어부서를 [다양성 선호(Love of Variery)]와 같이 붙일 수 있다.
- 4. 인용논문의 표기는 설명이 추가되거나 해당면수가 명시되지 않는 경우에 각주(footnote)로 처리하지 않고 본문중에서 직접 처리하되 제목을 쓰지 않고 저자명과 발표년도를 [Helpman and Krugman(1985), 변형윤(1970)]과 같이 쓰는 것을 원칙으로 한다.
- 5. 麥考文獻은 한글, 기타 동양어, 영어, 기타 서양어문헌 순으로 배치하며 배열의 순서는 동양어는 가나다 순으로 하고 서양문헌은 알파벳 순으로 하되 배열순서대로 일련번호를 매긴다(동일한 저자의 여러 문헌은 연도순으로 배치). 참고문헌의 구체적인 표시는 아래에 제시된 형식에 따라 작성한다.
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- 6. 논문제목의 외국어표기는 주요단어의 첫글자를 대문자로 하며 전치사, 관사는 소문자로 표기한다.