NESTED RIVALRIES: SUPERPOWER COMPETITION, ARMS TRANSFERS, AND REGIONAL CONFLICT, 1950-1990

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Interstate rivalries in the Third World cannot be fully understood apart from the global context in which they evolve and endure. This study examines the link between the superpowers' Cold War competition and regional rivalry by focusing specifically on arms-transfer relationships. Poisson regression analysis highlights the interrelationships between superpower competition, arms transfers, and regional rivalry in the Middle East, Persian Gulf, South Asia, and the Horn of Africa from 1950 to 1990. Many of the observed patterns are consistent with a realist explanation of interstate alignment and conflict, but a more holistic theory is required to detail the mechanisms by which Third World rivalries are nested in great power competition.

As scholars and policymakers grapple with the dynamics of post-Cold War international relations, there is a tendency to shun investigations that are not concerned explicitly with the new world order. Partly this reflects the widespread belief that we cannot afford to expend our energies on "Cold War studies" when much more pressing issues loom. Partly, perhaps, it reflects some feeling of embarrassment that we really did not know much about the Cold War—certainly not enough to predict its ends—along with the conclusion that we should therefore cut our losses and move ahead. Indeed, political scientists were chastised by one historian who observed that "[t]he efforts theorists have made to create a 'science' of politics that would forecast the future course of world events have produced strikingly unimpressive results: none... came anywhere close to anticipating how the Cold War would end" (Gaddis, 1992/93, p. 53). Leaving aside the inclination to hold forecasting to standards more appropriate for fortune telling, this more general indictment of international relations theory—or, more to the point, the pretentious goals theorists set for themselves—is not without considerable merit.[1]

Whether or not our understanding of Cold War dynamics is reasonable, all things considered, it most assuredly is not sufficient. If we are to forecast, predict, or even divine the future course of world politics, we are ill-advised to neglect the Cold War legacy. While

acknowledging the marked progress toward peace in some regions (e.g., the Middle East), those who study Third World security have noticed few major breaks in the violent continuity of interstate relations with the end of the Cold War (David, 1992/93). Did the Cold War affect interstate relations in the Third World? If so, now that the Cold War has ended, when might we observe changes in these relations, if ever? Answers to such questions continue to depend on our understanding of Cold War dynamics, and especially the extent to which they penetrated the Third World.

It has been suggested that conflict in the Third World was in part an externalization of the superpower competition to "safer" arenas. That is the subject of this study. The notion that Third World rivalries were somehow nested in the larger superpower competition is difficult to investigate empirically in any general sense. But arms flows provide a useful empirical referent since they have been identified as the primary mechanism through which the Cold War penetrated regional security complexes (Buzan, 1991; Ayoob, 1995). This study examines the coupling of superpower competition and four enduring Third World rivalries: those between the Arab states and Israel, Iran and Iraq, India and Pakistan, and Ethiopia and Somalia. The states involved in each of these rivalries imported substantial numbers of weapons, and during some of the most intense periods of diplomatic or military conflict, the bulk of this weaponry was transferred from the Soviet Union and the United States to opposing sides. Egypt and Syria, Iraq, India, Somalia, and then Ethiopia were supplied by the Soviet Union; Israel, Iran, Pakistan, Ethiopia, and then Somalia by the United States. The superpowers were by no means sole, or even consistent, suppliers in all of these cases, but the pattern is rather apparent.

Previous empirical research has demonstrated some of the linkages between superpower competition and Third World rivalries. Mintz (1986a, 1986b), for example, shows that worldwide arms exports by the United States and Soviet Union (along with their allies) displayed characteristics of an action-reaction process, and that similar dynamics drove aggregate arms imports by rival states in the Middle East. More specifically, Kinsella (1994) finds action-reaction dynamics in bilateral arms flows between the superpowers and their clients in the Middle East, as well as evidence that these arms flows had an impact on the course of regional conflict (see also Kinsella and Tillema, 1995). But while these studies offer empirical support for the competitive dimension of superpower arms-transfer policies during the Cold War, they do not investigate the degree to which those policies functioned as a nexus between the larger superpower conflict and enduring interstate conflicts in the Third World. The present study extends this line of inquiry by explicitly examining the relationship—direct, and as mediated through arms transfers—between the Soviet-American rivalry and four Third World rivalries.

SUPERPOWER RIVALRY AND ARMS TRANSFERS

The extent to which American and Soviet strategies in the Third World were mutually reactive varied both by region and by period. Arms transfers in particular constituted a fundamental component of the Third World strategies of both the United States and the Soviet Union. In a pathbreaking study of the arms trade with the Third World, researchers at the Stockholm International Peace Research Institute identified three patterns of weapons supply. The "hegemonic" pattern was epitomized by the superpowers and typically involved the use of arms transfers "to support a particular group in power, or to prevent the

emergence of an alternative group which might be willing to accept the dominance of another country" (SIPRI, 1971, p. 17). That is, political and strategic consideration motivate the arms supply policies of hegemonic suppliers. This is not the case for "industrial" patterns of supply, where exporting states are concerned primarily with maintaining the economic viability of their own defense industries, or for "restrictive" patterns of supply, where producing states seek to minimize their involvement in local conflicts by refusing to equip actual or potential belligerents.

The competition inherent in the superpowers' hegemonic arms supply patterns is relevant to both domestic and interstate relations in the Third World. The SIPRI definition applies explicitly to superpower arms transfers intended to secure the status of an established regime against some internal threat, especially when the source of that threat derived political and/or material support from the rival superpower. In their analysis of American military assistance and arms sales to the Third World over the 1951-1979 period, McKinlay and Mughan (1984) refer to the strategy which drove this particular pattern of supply as *mutual veto,* since it was directed at stalemating Soviet-backed domestic challenges, or "communist associations." It takes no great leap of logic to attribute an analogous strategy to Soviet transfers.

More relevant for my purposes is the interstate variant of the mutual veto strategy, whereby arms transfers were designed to secure the recipient from rival superpower-backed challenges emanating from neighboring states.[2] In an expected-utility model of superpower arms-transfers decisionmaking, Sanjian (1988) represents such considerations as the "import environment" for particular Third World recipients. There are two dimensions to this environment: it is "conflictual" when the recipient's relations with any of its neighbors are hostile; it is "competitive" when the region is contested by both superpowers.[3] The model's superior predictive performance compared to others that are less attentive to the superpowers' relations with states in the region is suggestive of the existence of a competitive arms supply calculus.[4] And Sanjian's model applies equally well to both American and Soviet decisionmaking:

> These are countries that embrace different principles, that find themselves supporting altogether different movements, and that recruit different kinds of Third World states as clients; they pursue, in short, different global political objectives. Moreover, they clash frequently over their differences, enough perhaps for one to expect some variation in the way they pursue their goals. But this is not the case, at least not as far as arms transfers are concerned. On each of the many indicators of comparison, the two countries demonstrate, time and again, that they make arms transfer decisions in essentially the same fashion. (Sanjian, 1988, p. 98)

This observation is noteworthy, for it implies that superpower penetration of local security complexes through the transfer of weaponry had structural roots. That is, the divisive political *issues* which helped to define the superpower rivalry played a minor role in their intrusive policies.

Two hypothesis can be derived from the foregoing discussion of the role of arms transfers in the superpower rivalry:

Hypothesis 1: Superpower conflict provoked the arming of rival client states in contested regions of the Third World.

Hypothesis 2: Each superpower reacted to the other's arming of a client state by arming that client state's rival.

These hypotheses are difficult to disentangle if we view arms transfers *as part* o/the superpower rivalry. Nonetheless, the first distinguishes analytically between directed behavior (conflict) and indirect competition (arms transfers), and therefore allows for asymmetric responses. The second hypothesis posits symmetric responses in the competitive arming of client states.

THIRD WORLD RIVALRY AND ARMS TRANSFERS

States, when they feel threatened, seek security by acquiring military strength; when they cannot produce the needed weaponry, they import it. Of the various factors affecting the demand for weapons, a state's involvement in an ongoing or recent conflict is surely a good predictor of arms imports. The United States and the Soviet Union were inclined to interpret events in the Third World (publicly, if not privately) in terms of the East-West competition. The extent to which the superpowers "pushed" arms transfers as a solution to the security concerns of Third World states varied over time and by region. But the "pull" was unmistakable. What characterizes the most prominent arms-import regions was the high demand for weaponry inhering in conflictual local security environments in conjunction with the propensity of the superpowers to derive from local conflict implications for their own rivalry, and a tendency therefore to be forthcoming in their arms supplies.

Superpower arms transfers, by definition, contributed to the militarization of the Third World. They may have also promoted Third World militarism—i.e., the tendency of state leaders to seek military solutions to interstate disputes, by expanding the military options available to them, and by enhancing the authority of the military within the state (Ross, 1987). By contrast, arms transfers may have led not to militarism, but rather to military restraint by bolstering the state's actual and perceived security environment. Arms imports improve the recipient's position vis-à-vis its rival in the overall military balance, and thereby help deter external attack. Of course, perceived intentions matter, and in the context of an enduring rivalry, mutual suspicion is endemic. A regional security dilemma, which may well exist quite apart from superpower penetration of the local security complex, nonetheless becomes sharpened by it. Regional rivals

> move on to a qualitative race in arms imports and then to an alignment race, in which regional powers competitively acquire the support of global powers.... In short, regional rivals make themselves worse off as each produces higher and higher levels of military capability in an ultimately futile search for stability. (McGinnis, 1990, p. 128)

The question remains as to whether or not such racing exacerbates regional rivalry. To say that competitive arms exporting/importing sharpens regional security dilemmas is one thing; but to say that the process further affects interstate behavior is quite another. Smith (1988) does report evidence that unstable (exponentially trended) arms races have been associated with the subsequent outbreak of war, and even though she examines military expenditures, we might expect similar patterns when arms imports are taken into account. On the other hand, conflicting results are rampant in the literature on arms races and war—some races led to war, other did not—and reflect a "tendency to look at arms races in

isolation from the other relevant conditions for war" (Siverson and Diehl, 1989, pp. 216-217).

What are those other relevant conditions which interact with arms acquisition to produce regional conflict? Realist theory emphasizes the degree to which states' are satisfied with the existing order of things. Put very simply, revisionist states seek to overturn the distribution of values (e.g., territory, status), while status-quo states seek to defend it. Some analysts predict overt challenges to the status quo when the distribution of power begins to favor revisionist states, or when there are transitions in that direction (Organski and Kugler, 1980). Others predict preemptive action by defenders of the status quo (Gilpin, 1981; Levy, 1987). In either case, the outcome is war. Applying such insights about great power behavior to Third World states, the impact of arms transfers on regional conflict can be hypothesized as follows:

> *Hypothesis 2':* Third World states reacted to their rivals' arms acquisitions from one superpower by acquiring arms from the other superpower.

> *Hypothesis 3:* By enhancing their regional power positions and by signalling commitment to their foreign-policy preferences, arms transfers to revisionist states have exacerbated regional rivalry.

> *Hypothesis 4*: By enhancing their regional power positions and by signalling commitment to their foreign-policy preferences, arms transfers to status-quo states have dampened regional rivalry.

Arms transfers represent behavior on the part of both supplier and recipient, so hypothesis 2' simply restates hypothesis 2 above from the regional as opposed to the superpower standpoint. Hypotheses 3 and 4 do not go so far as to posit aggressive behavior on the part of revisionist states and defensive behavior on the part of status-quo states. A status-quo state may display preemptive tendencies in response to an enhancement of its rival's regional position; a revisionist state may be deterred.

Successful prediction hinges both on observing arms flows and on classifying recipients as revisionist or status quo in outlook. In their study of general deterrence from 1948 to 1982, Huth and Russett (1993, p. 63) designate challengers and defenders based on "competing claims to national (but not colonial) territory or claims in which one party rejects the other's claim to sovereignty."[5] Their list of enduring interstate rivalries includes the four Third World rivalries examined here. According to their criteria, Egypt and Syria, Pakistan, and Somalia were challengers; Israel, India, and Ethiopia were defenders. Until the ·Algiers Agreement in 1975 which redefined the international border along the Shatt al-Arab, Iran was the challenger and Iraq the defender. After that, their orientations towards the territorial "status quo" were reversed.[6]

In considering the impact of arms flows on the regional power positions of Third World rivals, we should not lose sight of the "political content" of superpower arms transfers. Arms-transfer relationships implied that the foreign policy pursued by the recipient was in accordance with the preferences of the supplier. This is not to say that Third World rivals were nothing more than pawns in the global competition between the superpowers. Regional rivals acquired weaponry on the basis of their own security calculations. Still, during the Cold War, these states tended to receive their weapons from the like-minded superpower, itself engaged in a competition of global scope.[7] The "causal"

mechanisms at work are therefore likely to be found in arms transfers as a locally per-
ceived superpower commitment to the state's security (McGinnis, 1990, p. 120; SIPRI,
1971, p. 79). I will return to this point.

For each of the superpowers, arms transfers to the Third World represented essentially
strategic *choices* in their conduct of Cold War rivalry. B ut for the Third World, superpow-
er competition was more a structural *context* within which regional actors conducted
their local rivalries.[8] Ayoob (1995) has noted this fundamental asymmetry, suggesting
that although the superpower's policies had a major impact on the course of regional ri-
valry in the Third World, their own rivalry was largely unaffected by regional develop-
ments. So, in the course of testing the hypotheses posed above, we would like to confirm
whether arms transfers allowed for "the exportation of the developed world's conflicts to
the Third World, while effectively insulating the 'core' of the international system from
the conflicts and instabilities prevalent in the Third World" (Ayoob, 1991, p. 273).

DATA ANALYSIS

Measurement

I examine the dynamics of nested rivalry via statistical analysis. Time series were com-
piled for each of four Third World rivalries plus the superpower rivalry, and include indi-
cators of the overall level of interstate rivalry, overt military conflict, and arms transfer
programs. The overall level of interstate rivalry is based on conflictual events drawn
from the Conflict and Peace Data Bank (COPDAB) and an updated version of the World/
Event Interaction Survey (WEIS). Events were weighted according to their severity and
summed annually.[9] Regional military conflict is represented as the number of combat-
ready military operations undertaken by a state in the territory of its rival. These annual
time series were compiled from Tillema's (1991) Overt Military Intervention dataset.

My indicator of arms flows is based on the number of arms-transfer programs in effect
per year. Given the limitations of dollar-value and other complex measures of arms-
transfer activity (see Brzoska, 1982), some have opted for this relatively parsimonious
alternative (e.g., Schrodt, 1983; Kinsella and Tillema, 1995). It is unencumbered by in-
formation as to the market value, performance characteristics, or military effectiveness
of particular weapon systems, and is therefore perhaps the best indicator of the political
dimension of an arms-transfer relationship. Arms-transfer program counts come from
SIPRI's *Arms Trade Registers* (1975), Brzoska and Ohlson's *Arms Transfers to the Third
World 1971-85* (1987), and subsequent issues of SIPRI's *World Armaments and Disar-
mament* (annual). Soviet programs were tallied for Egypt and Syria, Iraq, India, Somalia,
and Ethiopia; American programs for Israel, Iran, Pakistan, Ethiopia, and Somalia.[10]

Estimation

On the basis of my previous discussion, I propose a very parsimonious model of nested
rivalry. The systematic elements of the process can be represented formally as follows:

$$SovArm = fi_{10} + fi_n SupRiv + fi_{12}AmArm + fl_{13}MilCon$$

$$AmArm = /3_{20} + fl_n SupRiv +• fivSovArm + \boldsymbol{\beta_{23}MilCon}$$

$$RegRiv = yS_{30} + fi_{3i}SovArm + /5_{32}AmArm$$

$$SupRiv = /3_{4O} + p_{Al}SovArm + f]_{42}AmArm + f]_n MUCon$$

(1)

Hypothesis 1 states that Soviet and American arms transfers to regional rivals *(SovArm* and *AmArm)* were an outgrowth of the Cold War competition *(SupRiv),* and is therefore tested by estimating parameters/?n and/?2l- Hypothesis 2 states that superpower arms transfers were mutually reactive, and is tested by estimating/?^ and/322- Of course, arms supply is driven by demand, so we also expect that superpower transfers were a function of regional military Conflict *(MilCon).* Hypotheses 3 and 4 are posed as conditional alternatives—i.e., that the impact of arms transfers on regional rivalry *(RegRiv)* depends on the recipient's orientation toward the regional status quo—and are tested by estimating *fo* and/S32. Although it was not formulated as a hypothesis, the more speculative notion that the superpower rivalry was largely unaffected by conflict in the Third World is falsified by nonzero estimates of/J43. If superpower conflict was affected not so much by regional military conflict, but rather by the superpowers' own regional arms-transfer policies, this will be apparent from estimates of/J41 and /S42.

Since my empirical indicators of interstate rivalry, military conflict, and arms transfers are counts with no theoretical upper bound, I employ the Poisson regression model proposed by King (1989a, 1989b):

$$E(Y.) \ e \ X, = \exp(X_{,}/S)$$

(2)

where the number of events, *Y,* (conflictual actions, arms-transfer programs), generated by a continuous underlying process, Xj (interstate rivalry, patron-client relations), is modeled as an exponential function of a vector of explanatory variables, *x,,* and a corresponding vector of influence parameters, /?. The parameters and standard errors are estimated by maximizing the following log-likelihood function:

$$\ln L \ (fify) = J \ \backslash yfrfi) \sim \exp(xj8)]$$

$$\scriptstyle t=1$$

(3)

As with least squares regression, the ratio of the parameter estimate to its standard error is used to assess statistical significance.

Since the explanatory variables in model (1) are endogenous to the process of nested rivalry, I cannot assume the direction of causality from estimates of contemporaneous association. Instead, I assume causality on the basis of temporal order. As explanatory variables, therefore, interstate rivalry and military conflict are measured as counts of events occurring during the previous year.[11] Arms transfers are counts of programs ongoing from the previous year or years. As dependent variables, the counts represent those events or transfer programs initiated during the current year.

Findings

I estimate the model for each of the four regional rivalries. Tables 1 and 2 report estimates for the first two equations, i.e., the forces driving Soviet and Armerican arms transfers to

TABLE 1

Poisson Regression Estimates for Effects on Soviet Arms Transfers, 1950-1990

	Egypt/Syria Israel	Iran Iraq	India Pakistan	Ethiopia Somalia
Superpower Rivalry	0.0001*	0.0001	0.0002*	-0.0003*
	(0.0001)	(0.0001)	(0.0001)	(0.0002)
American Arms	0.023	0.039**	0.037	0.024
	(0.020)	(0.018)	(0.044)	(0.139)
Military Conflict	0.163**	0.272**	-0.385**	0.090
	(0.073)	(0.154)	(0.188)	(0.260)
Constant	1.281**	0.397	0.994**	1.378**
	(0.343)	(0.365)	(0.285)	(0.581)
Log-likelihood	289.7	26.5	43.8	2.1
N	41	41	41	30

Note: **Numbers in parentheses are heteroskedastic-consistent standard errors. The time period for the Ethiopia-Somalia estimates is 1961-1990.**

** .03 significance   * .10 significance

Third World rivals. Only the Soviet Union reacted to the intensification of superpower rivalry by expanding its arms transfer programs (as hypothesis 1 predicts), in this case to the Arab states and India. New American transfer programs with Israel were actually curtailed in the face of mounting superpower conflict. New programs with Ethiopia and Somalia also tended to be curtailed, by both superpowers.

The action-reaction process in superpower arms flows (hypothesis 2) was strongest in the Persian Gulf, where Soviet and American transfer programs were mutually reactive. In the Middle East and South Asia, however, the dynamic was one-sided, with the United States reacting to Soviet transfers, but not vice versa. Interestingly, the level of overt military conflict in these regions is not as strong a predictor of superpower arms flows as we might expect. The initiation of American arms transfer programs in all four regions was independent of prior regional conflict, while Soviet transfer activity with India actually tended to be scaled back in such circumstances.

Table 3 shows estimates of the impact of superpower transfers on the level of regional rivalry. If Egypt, Syria, and Iraq are accurately characterized as having been revisionist states (at least while recipients of Soviet arms), then hypothesis 3 receives some support from these results. Soviet transfer activity with these states appear to have exacerbated the level of regional rivalry, either by encouraging aggression on the part of Soviet clients or by prompting preemption on the part of their rivals. The impact of the American arms-transfer relationship with Iran was the suppression of regional rivalry, and thereby seems to lend support to hypothesis 4. Although we can be fairly certain that this result derives from the warfare which followed the abrupt severance of patron-client relations after the

TABLE 2

Poisson Regression Estimates for Effects on American Arms Transfers, 1950-1990

	Egypt/Syria Israel	Iran Iraq	India Pakistan	Ethiopia Somalia
Superpower Rivalry	-0.0003**	-0.0003	0.0000	-O.0003*
	(0.0001)	(0.0003)	(0.0001)	(0.0002)
Soviet Arms	0.029**	0.072**	0.018*	-0.012
	(0.011)	(0.034)	(0.012)	(0.076)
Military Conflict	-0.089	-0.220	0.062	0.066
	(0.129)	(0.240)	(0.163)	(0.436)
Constant	1.277**	0.719**	0.485**	0.415
	(0.263)	(0.412)	(0.242)	(0.551)
Log-likelihood	53.0	-15.8	-5.8	-28.6
N	41	41	41	30

Note. **Numbers in parentheses are heteroskedastic-consistent standard errors. The time period for the Ethiopia-Somalia estimates is 1961-1990.**

** .05 significance   *. 10 significance

Iranian revolution, it also supports the view that American transfers during the shah's reign served to deter Iraqi adventurism.

The "feedback" effects of Soviets and American arms transfers on superpower rivalry are reported in Table 4. Soviet transfers to Iraq and American transfers to Pakistan sharpened the superpower rivalry itself. The results also indicate that American transfer relationships with Israel, Iran, and the Horn states actually prompted reductions in the level of superpower conflict. Lastly, it seems that the superpower rivalry was not wholly insulated from regional armed conflict. It was in fact exacerbated by armed conflict in the Horn. But at the same time, the superpowers tended to exercise restraint in their bilateral relations during periods of overt warfare in the Middle East.

When viewed on a region-by-region basis, the mixed support for hypotheses 1 and 2 is perhaps not surprising. After all, the global scope of the Cold War competition meant that the superpowers were not geographically constrained in reacting to each other's behavior. Table 5 reports parameter estimates for model (1), minus the regional-rivalry equation, when the data are aggregated across all four regions.[12] The results suggest that the intensification of the superpower rivalry prompted an increase in the overall level of Soviet arms-transfer activity with its client states in the four regions, which is consistent with hypothesis 1. The impact n American transfers was exactly the opposite. Hypothesis 2 receives unequivocal support from a multi-regional perspective. There was an action-reaction dynamic driving superpower arms-transfer policies across the four regions. Finally, although the superpower rivalry was heightened by Soviet arms transfers to its client states, it was dampened by American transfer activity. It was not, however, affected by the

TABLE3

Poisson Regression Estimates for Effects on Regional Rivalry, 1950-1990

	Egypt/Syria Israel	Iran Iraq	India Pakistan	Ethiopia Somalia
Soviet Arms	0.032**	0.132**	-0.006	0.035
	(0.009)	(0.039)	(0.013)	(0.062)
American Arms	0.003	-0.467**	-O.068	0.0001
	(0.023)	(0.149)	(0.062)	(0.0967)
Constant	7.686**	7.865**	7.360**	5.989**
	(0.332)	(0.485)	(0.511)	(0.430)
Log-likelihood	1.4×10^6	1.0x104	2.7×10^5	7.1×10^4
N	41	41	41	31

Note: **Numbers in parentheses are heteroskedastic-consistent standard errors. The time period for the Ethiopia-Somalia estimates is 1960-1990.**

**** .05 significance   * .10 significance**

level of military conflict in the four regions. While these results directly contradict few of the region-specific findings, they do set in sharper relief the operation of superpower competition in multiple theaters.

INTERPRETATION

Three patterns which emerge from this analysis can be summarized as follows. First, the superpower rivalry was manifest in both Soviet and American arms-transfer policies. This arms-transfer competition operated at the aggregate level, where all four regions are considered together, but was also manifest within particular regions. It was sharpest in the Persian Gulf, where an action-reaction dynamic drove both superpowers' arms supplies. It was one-sided in the Middle East and South Asia, where the United States did most of the reacting. An intensification in the pitch of superpower rivalry provoked increased Soviet arms transfers to client states generally, and, more specifically, to the Arab states and India. This was not true for American transfers.[13]

Second, superpower arms flows had an impact on the course of regional rivalry. Soviet transfers exacerbated the interstate rivalries in the Middle East and Persian Gulf. American transfers to Israel had an opposite effect on rivalry in the Middle East. Third, the superpower rivalry was generally unaffected by regional military conflict (the exception being conflict in the Horn), but it was not insulated from the superpowers' regional arms competition. Superpower conflict was exacerbated by Soviet arms-transfer policy overall, and by increased transfers to Iraq in particular. American arms supplies, in sharp contrast, were associated with subsequent reductions in the level of superpower conflict. The pattern appears to have been for the Soviet Union to externalize direct superpower competition by

TABLE 4

Poisson Regression Estimates for Effects on Superpower Rivalry, 1950-1990

	Egypt/Syria Israel	Iran Iraq	India Pakistan	Ethiopia Somalia
Soviet Arms	0.007	0.047**	0.008	-0.042
	(0.007)	(0.016)	(0.008)	(0.038)
American Arms	-0.0.16*	-0.047**	0.031*	-0.123*
	(0.013)	(0.011)	(0.021)	(0.090)
Military Conflict	-0.166**	0.021	-0.075	0.179*
	(0.072)	(0.095)	(0.126)	(0.138)
Constant	7.621**	7.284**	7.188**	7.547**
	(0.153)	(0.153)	(0.131)	(0.136)
Log-likelihood	4.4×10^5	4.4×10^5	4.4×10^5	3.3×10^5
N	41	41	41	31

Note: **Numbers in parentheses are heteroskedastic-consistent standard errors. The time period for the Ethiopia-Somalia estimates is 1960-1990.**

•• .05 significance   * .10 significance

establishing arms-transfer relationships with regional client states, but to strike a less conflictual posture in bilateral relations when the United States reacted with escalatory behavior and its own arms transfers.[14]

Analysts who have examined great power competition over long sweeps of history, either from a neorealist perspective (e.g., Gilpin, 1981) or from a long-cycle perspective (e.g., Modelski., 1987; Thompson, 1988), see much familiar in the Cold War competition. The United States emerged after World War II as the leading defender of the political-economic status quo. The primary challenge to the existing global order came from the Soviet Union. The patterns of superpower behavior highlighted in this study fit rather neatly into this dichotomy, crude as it is. The sort of probing arms-transfer policy exhibited by the Soviet Union and the reactive dimension of American transfer activity is what we might expect from revisionist and status-quo powers, respectively. As regards bilateral superpower relations, if I am correctly interpreting my findings as driven by escalatory American behavior in response to Soviet arms transfers and deescalatory Soviet behavior in response to American transfers, then this pattern too is suggestive. Again, it implies a somewhat timid adventurism on the part of the revisionist power and defensiveness on the part of the status-quo power.[15]

Neorealists generally argue that the value which states place on survival ensures that they will engage in balancing behavior. But Schweller (1994) has observed a good deal more "bandwagoning for profit" than neorealism predicts:

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TABLES

Poisson Regression Estimates for Effects on Superpower Rivalry and Arms Transfers,
1950-1990

	dependent variable		
	Soviet Arms	**American Arms**	**Superpower Rivalry**
Superpower Rivalry	0.0002**	-0.0002**	
	(0.001)	(0.0001)	
Soviet Arms		0.008**	0.009**
		(0.003)	(0.005)
American Arms	0.040**		-0.022**
	(0.009)		(0.010)
Regional Conflict	0.014	0.068*	-0.049
	(0.056)	(0.049)	(0.047)
Constant	1.543**	1.824**	7.625**
	(0.357)	(0.198)	(0.163)
Log-likelihood	1164.2	457.5	4.4×10^5
N	41	41	41

Note: **Numbers in parentheses are heteroskedastic-consistent standard errors.**

•• .05 significance   *** .10 significance**

> the most important determinant of alignment decisions is the compatibility of political goals, not imbalances of power or threat. Satisfied powers will join the status-quo coalition, even when it is the stronger side; dissatisfied powers, motivated by profit more than security, will bandwagon with an ascending revisionist state, (p. 88)[16]

Dissatisfaction among Third World states typically revolves around outstanding territorial disputes. So in large measure, congruent foreign-policy predilections go a long way in explaining the arms-transfer relationships that developed between the Soviet Union and Egypt, Syria, Iraq, and Somalia. They also explain the American arms-transfer relationships with Israel, Iran, and Ethiopia. This analysis indicates that in two of these three regions, the Middle East and Persian Gulf, superpower arms transfers had a significant impact on the level of regional rivalry. Soviet transfer programs with revisionist client states exacerbated rivalry in both regions, either by encouraging more assertive behavior on the part of recipients or by provoking preemption on the part of their rivals. American transfer programs with status-quo states deterred escalatory behavior by regional rivals, at least in the Persian Gulf.[17]

Although my analysis does not explicitly address the issue, I suspect that the observed impact of superpower arms transfers does not reduce to the impact of changes in military capability. Because this investigation is more concerned with the political dimension of arms-transfer relationships than with transferred military capacity, it operationalizes those relationships as transfer activity (i.e., programs), not in some other way which purports to measure the military effectiveness of supplied weaponry. Further research should attempt to distinguish the two dimensions of arms transfers by representing both in a single model of interstate rivalry. Their behavioral effects may well occur in tandem, but isolating them analytically and empirically is a worthwhile challenge for political scientists.[18] The restructuring of the international arms market currently underway obviously involves changing patterns of political alignment. Implications for the global diffusion of military capability are perhaps less clear. Both processes are significant, but distinct.

CONCLUSION

Realist theory explains, fairly efficiently, the dynamics of both interstate conflict and interstate alignment revealed by this study. It does not explain the nexus between great power competition and regional rivalry in the Third World, however. Such a theory of nested rivalry must adopt a holistic perspective, perhaps analogous to the dependency or world-systems approaches to international political economy. It might, for example, tell the following story of the Cold War: The United States and Soviet Union (the core) competed with one another in order to maximize their influence over the global order. This drive for the accumulation of influence (capital) led to the recruitment of Third World states (periphery) into the competitive Cold War system. The resulting alignments, like arms-transfer relationships, were exploitative in the sense that the costs of Cold War competition (production) were borne disproportionately by the Third World in the process of enduring, and often violent, regional rivalries. While remaining safely insulated from regional violence, outcomes nonetheless reflected favorably on one or both superpowers (surplus value)—based on the performance of their client states, their transferred weaponry, or their peace negotiators—thereby allowing for the further expansion of influence. At the same time, superpower penetration of regional security complexes prevented the resolution of interstate disputes (underdevelopment), even if occasionally suppressing them.

This is, of course, a highly stylized portrait of the Cold War. My analysis has shed some light on only a few dynamics in only a few regions, and through the use of one particular methodology. Other dynamics and other regions warrant examination, and other methodologies might be brought to bear. We should not, however, be deterred from studying the Cold War simply because it is "over." Post-Cold War international relations will surely involve a new set of great power relations. But it is doubtful that the security of Third World states will be unaffected by them. And in an era of rapid military-technological advance and diffusion, it is also doubtful that the great powers will be unaffected by Third World insecurity.

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NOTES

1. For a critical assessment of the ability of international relations theory to explain the end of the cold war, see also Grunberg and Risse-Kappen (1992) and Lebow (1994).

2. This variant of the strategy is still consistent with a hegemonic pattern of arms supply identified by the SIPRI group, since it is clear from their subsequent discussion that the local threats which motivate super-power arms transfer to a Third World client are not exclusively internal. See SIPRI (1971, pp. 20ff).

3. Sanjian's formal model *assumes* that the extent and nature of rival superpower activity in the region is a factor in arms-transfer decisionmaking, so his analysis is not actually a test of that proposition.

4. See also Peleg (1977, p. 102) who has argued that "when there is a self-supporting regional conflict, superpower competition, and even a moderate level of techno-economic development, the predicted military assistance pattern will be that of an *arms race.*"

5. In his survey of the evidence, Vasquez (1993, p. 293) has found that "issues involving territory, especially territorial contiguity, are the main ones prone to collective violence." See also Goertz and Diehl (1992). One variant of "prospect theory," though less parsimonious than realism's rational choice framework, leads to similar predictions about the behavior of challengers that have suffered territorial losses in the context of an enduring rivalry. Actors are typically risk-averse when faced with alternatives framed as opportunities to achieve gains. But when alternatives are framed as opportunities to recover prior territorial losses, challengers are more likely to be risk-acceptant. The counterpart to this "break-even effect" is the "instant endowment effect" whereby defenders quickly renormalize their reference points around recent territorial gains, and become risk-acceptant in fending off challenges to the new status quo. See Levy (1994) for a review of prospect theory and its applicability to international relations.

6. By classifying suppliers and recipients according to their foreign-policy outlooks, I do not mean to suggest the relative moral ground occupied by either the status quo or the revisionist challenge to it. E.H. Carr (1939) shattered the credibility of such endeavors *some* time ago. My hypotheses, and any empirical evidence I muster in support of them, might be subsumed under alternative ideological frameworks. For some, little or nothing is valued more than international peace. For others, peace is of small comfort if it serves to perpetuate an unjust international order. The value loadings on the terms "status quo" and "revisionist" are in the eyes of the beholder.

7. In this sample, the obvious exceptions to this "supplier-recipient congruence" are the alignments in South Asia and in the Horn of Africa beginning in the late 1970s. Using outstanding territorial disputes as the litmus test, it would seem that the Soviet arm relationships were with status quo states, and American relationships with revisionist states. But as a leading state in the nonaligned movement, there was an anti-Western (and thus revisionist) dimension to Indian foreign policy quite apart from any unresolved territorial issues with Pakistan. Ethiopia's increasingly Marxist policy orientation after the overthrow of Selassie in 1974 made realignment with the Soviet Union almost "natural"." The Soviets would have preferred not to abandon Somalia, but that was pretty much dictated by the local rivalry.

8. McGinnis (1990) represents both strategic calculations and structural factors in his expected-utility model of regional rivalry. One of the constraints on a local state's military capability are the global powers' arms access policies. The arms access functions are specified so as to demonstrate how "the exogenous policies of the global powers set the context within which regional rivals compete" (McGinnis, 1990, p. 121). For a discussion of different conceptions of "context" in international relations research, see Goertz (1994).

9. The updated WEIS data were provided by Rodney Tomlinson and are described in Tomlinson (1993). For the weighting scheme, see Aazar and Sloan (1976) on COPDAB and Goldstein (1991) on WEIS. For each rivalry, dyadic events are weighted and summed without regard to which state was the actor and which was the target. The COPDAB and WEIS series are concatenated at 1979, with the latter re-scaled on the basis of least squares regressions of COPDAB on WEIS for 1966-1978, the period in which the datasets overlap. For those years, the two time series were correlated as follows: US-USSR, $r=.63$; Egypt/Syria-Israel, $r=.83$; Iran-Iraq, $r=.90$; India-Pakistan, $r=.99$; Ethiopia-Somalia, $r=.97$.

10. This procedure results in Egypt dropping out of the Arab total with the severance of the Soviet-Egyptian arms-transfer relationship in 1976. It also captures the "client swap" which occurred in the mid- to late 1970s when Ethiopia realigned with the Soviet Union and Somalia ultimately turned to the United States.

11. The one exception to this procedure is in the inclusion of regional military conflict as an explanatory variable for superpower rivalry. Here causal inference would seem rather straightforward. While superpower rivalry may be affected by regional conflict, regional conflict is not likely to be affected *directly* by bilateral US-Soviet relations—only indirectly, through their arms-transfer policies. For this reason, and in order to capture the immediate impact of regional military conflict on superpower relations, the current-year count of military interventions serves as an explanatory variable for superpower rivalry.

12. Since the behavior of Third World states rarely extended beyond their local security complexes, an attempt to model the aggregate level of these four regional rivalries might be interesting, but it would not yield any additional insights as to the forces driving them.

13. I should admit to some confusion over the substantive interpretation of those results which indicate that the superpower rivalry had a *negative* impact on superpower arms transfers: namely American transfers to Israel and both superpowers' transfers to the Horn of Africa. They certainly contradict hypothesis 2, and I can offer no persuasive post hoc explanation.

14. Here I am inferring the "directed" behavior underlying changes in the level of superpower rivalry. However, this interpretation is supported by preliminary analyses in which separate time series are constructed from Soviet-to-American events and American-to-Soviet events. The analyses are preliminary because the correlations are quite low between the directed-dyad series from COPDAB and WEIS, so concatenating them would seem less appropriate (see note 9).

15. Such asymmetrical responses are consistent with some of the action-reaction dynamics revealed by Ward and Rajmaira (1992) in their analysis of reciprocity in US-Soviet relations. For recent examinations of the multiple-theater dimension of superpower interaction during the Cold War, see Kim (1994) and Fischer-keller(1994).

16. Even Walt (1987, pp. 182-203), who finds that local alliance formation is determined mostly by balance-of-threat considerations, notes that the compatibility of political goals, or "ideological affinity," did have some impact on the way states in the Middle East aligned with the two superpowers.

17. See also Kinsella (1994). Kinsella and Tillema (1995) report evidence that American arms transfers to Israel served to deter overt military conflict in the Middle East as well.

18. One approach might be to examine the time elapsing before changes in state behavior are observed. As a symbol of the supplier's political support and commitment, the impact of arms agreements and deliveries should be relatively immediate. Since it may take two to three years for many major weapons systems to be fully integrated into the recipient's military forces, the impact of transferred military capability should be somewhat delayed.

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