
Crisis as Shirking: An Agency Theory Explanation of the Souring of American Civil-Military Relations

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It is tempting to blame the alleged crisis in American civil-military relations simply on personalities.¹ The peccadillos and personal endowments of key individuals loom large: President Clinton's avoidance of the draft, the late-Secretary Aspin's rumpled management style, General Powell's extraordinary popular appeal, and so on. On the other hand, the coincidence of the collapse of the Cold War order also seems very suspicious. Surely it is no accident that concerns about the stability of civilian control in the United States accompanied the strategic confusion caused by the inability to discern clearly the exigencies of the new security environment?

I do not deny that these factors are important. I argue, however, that the alleged crisis is best explained by grounding it in a general theory of civil-military relations rather than in an ad hoc exegesis of recent events.² Such a theory should provide the micro-foundational logic to explain the causal mechanisms whereby factors like the end of the Cold War or the popularity of the president produce changes in the civil-military relationship. In this article I give such an explanation based on a game-theoretic approach to agency and civil-military relations.³ According to my theory, the current friction in American civil-military relations reflects the kind of conflict one would expect from a certain combination of civilian choices and military responses. Civil-military relations are best understood as a game of strategic interaction. The civilian decides how to monitor the

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military, based on expectations of how the military might respond in the presence or absence of intrusive monitoring. Given the monitoring environment, the military decides whether to "work" or "shirk" based on its expectation that its behavior might be punished. Conflict results when civilians have incentives to monitor intrusively and the military has incentives to shirk.

The article proceeds by outlining briefly the general claims of the theory, identifying the equilibrium conditions associated with different patterns of civil-military interaction. I then apply the model to recent events, identifying the values for key parameters in the post-Cold War setting. The article argues that the factors most discussed in the crisis literature—the changes in civilian and military elites, President Clinton's personal history, General Powell's popularity, and so on—have had a profound effect on the quality of civil-military relations, but in a way most conventional treatments miss. These factors have reduced the costs of monitoring as perceived by civilians, reduced the expectation of punishment as perceived by the military, and increased the gap between what civilians ask the military to do and what the military would prefer to do.

An Agency Model of Civil-Military Relations

Traditional civil-military relations theory, as embodied in the Huntingtonian and Janowitzian schools, explains changes in the civil-military relationship in terms of changes in broad exogenous factors such as the external threat, the nature of prevailing ideology within civilian society, and the extent of integration between the civilian and military elites. Thus, for Huntington, friction in the relationship rises and falls directly with a rising or falling external threat, given civilian society's liberal ideology.⁴ For Janowitz, friction increases when the external threat dictates that the military should take on a constabulary role or when the civilian and military elites are not well integrated.⁵ What is not well specified in traditional theory is an account of the microfoundations of the relationship, by which I mean an account of the logic of the civil-military relationship itself through which any exogenous factor would have its predicted effect.

Agency theory provides such a microfoundation, treating civil-military relations as comprised of an ongoing series of strategic interactions. Civil-military relations begin with civilians seeking to trade off the advantages of specialization against the disadvantages of agency. The advantages are that the military function can be performed by experts, free-

ing the time and energy of civilian masters for other tasks. The disadvantages are the ones inherent in any political relationship: will my representative truly serve my best interests or will he exploit his position to pursue selfish goals? In a democracy like the United States, this is a classic principal-agent relationship in which the civilian-principal seeks ways to assure appropriate behavior from his military-agent. Interactions like this can be profitably analyzed using a simple game theoretic model.

The game begins with the civilian deciding how to monitor the military given that there are costs associated with intrusive monitoring.⁶ Monitoring intrusively may be thought of as conducting many regular congressional investigations, having large numbers of civilian staff in the Office of the Secretary of Defense (OSD) to micromanage defense policy, and so on. Some of the costs involve time and effort that could be devoted to other things the civilian leaders care about (for instance, reelection); other costs might be called policy costs that arise from micromanagement, i.e., the mistakes caused by civilian meddling in areas outside their expertise. Deciding not to monitor intrusively does not mean that the civilian is unconcerned with military behavior and, importantly, it does not mean that the civilian has given up hope of learning of any military misbehavior some other way. Indeed, deciding not to monitor intrusively means relying on other means to observe military behavior. In the American civil-military context, one of the important other means is an active free press that functions as a watchdog.⁷

Once the civilian has chosen his mix of monitoring mechanisms, it is the military's turn to act. The military chooses between working (W) or shirking (S), between doing what the civilian wants exactly or violating civilian orders. The colloquial meanings of work and shirk are misleading; the problem in civil-military relations is not a lazy military, or at least this is neither the only nor the most important problem. As I use the terms, working, and hence its opposite, shirking, are multidimensional because civilian desiderata are themselves multidimensional. As I have discussed elsewhere, civilians want protection from external enemies *and* civilians want to remain in political control over their destiny.⁸ The first goal may be called *functional*, the second may be termed *relational*, and both components are reflected in the work/shirk typology. The agent is said to work perfectly when he does what the civilian has asked for, how the civilian has asked for it, with due diligence and skill, and in such a way as to reinforce the civilian's superior role in making the decisions and drawing the lines of any delegation. The agent is said to shirk when the military, whether through laziness, insolence, or preventable incompetence, does not do what the civilian has requested, or not in the way the

civilian wanted, or in such a way as to undermine the ability of the civilian to make future decisions.⁹

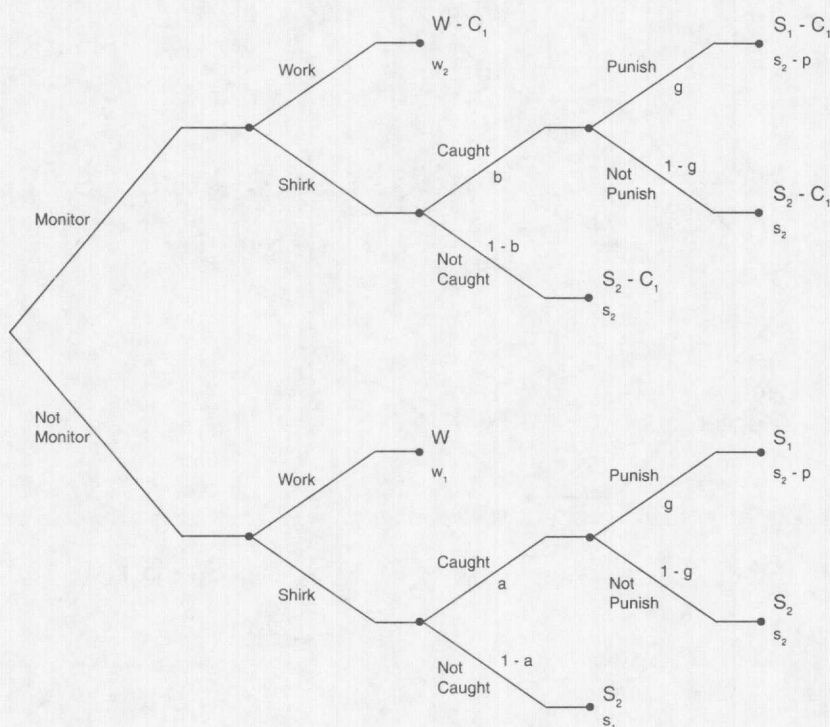
Given this understanding, at least two considerations go into the military's choice. First, the difference between *W* and *S*, between what the civilian is asking and what the military would like to do anyway, will affect the propensity to shirk; other things equal, the smaller the difference, the lesser the incentive the military has to shirk. The second consideration has to do with the rest of the game, specifically how the civilian principal responds to shirking.

After the military has moved, nature has a move: will the shirking be caught or not? Not all shirking will be detected; indeed, this is the essence of the agency problem. The probability of being caught is a function of the monitoring system: the more intrusively the civilian monitors, the greater the likelihood that military shirking will be detected. If shirking is detected, the civilian has a move: whether to punish (*p*) or not to punish. Punishment is not a foregone conclusion. While the principal-agent focus assumes that the civilians have the ability to punish, it does not assume that they will always do so.¹⁰ MacArthur evidently did not think it was certain that Truman would punish him. In addition to the uncertainty over whether the behavior will be discovered, there is uncertainty over how the alleged shirking behavior will be interpreted by the civilian principal. What is excessive force in combat? How much candor can senior military display in their testimony before Congress when they disagree with administration policy? Civilian principals have the right and the ability to set the boundary of appropriate behavior and to interpret ambiguous behavior as they see fit. In the simple agency model presented here, I treat the probability of punishment as exogenously given, deriving from the relative strength of the civilian and military players, which itself is a function of other exogenous factors such as the salience of the issue, the popularity of the offending military agent, and so on.

Figures 1 and 2 show the extensive form of the game. In Figure 2, the game has been simplified by grouping the branches under the shirking node together algebraically. Given the uncertainty over whether shirking will be detected and whether it will be punished if detected, the payoff for shirking can be viewed as the expected value of shirking without getting punished minus the expected value of shirking and getting punished.

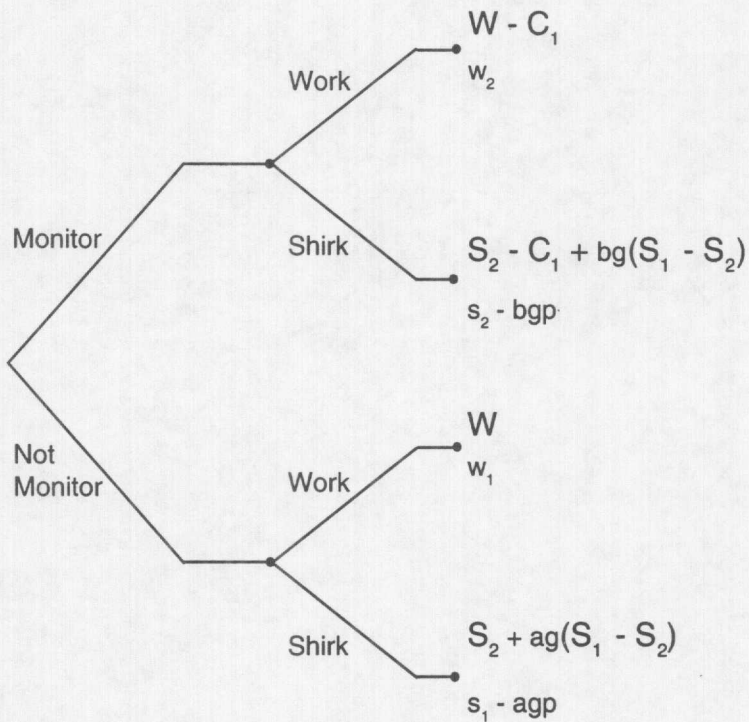
As demonstrated in Appendix A, the game yields several equilibria—several pairs of civilian and military patterned behaviors that represent the rational responses each side would make given expectations of the other behavior. Each equilibrium is governed by associated inequalities expressed in terms of parameters such as the probability of punishment or

Figure 1



Notes: W: Civilian payoff of work done as the civilian principal wanted it. S: Civilian payoff of military agent shirking. C_1 : Civilian costs of monitoring (time/effort costs and the policy costs of inexpert meddling). S_1 : The civilian payoff of military shirking if civilian punishes. S_2 : The civilian payoff of military shirking if civilian does not punish. p : Costs to military of punishment (makes shirking less valuable to the military). w_1 : The military payoff of working with no monitoring. w_2 : The military payoff of working with intrusive monitoring. s_1 : The military payoff of shirking with no monitoring. s_2 : The military payoff of shirking with intrusive monitoring. a : The probability of detecting shirking if no monitoring. b : The probability of detecting shirking if there is intrusive monitoring. g : The probability of punishing shirking.

Figure 2



Notes: W: Civilian payoff of work done as the civilian principal wanted it.

S: Civilian payoff of military agent shirking.

C_1 : Civilian costs of monitoring (time/effort costs and the policy costs of inexpert meddling).

S_1 : The civilian payoff of military shirking if civilian punishes.

S_2 : The civilian payoff of military shirking if civilian does not punish.

p: Costs to military of punishment (makes shirking less valuable to the military).

w_1 : The military payoff of working with no monitoring.

w_2 : The military payoff of working with intrusive monitoring.

s_1 : The military payoff of shirking with no monitoring.

s_2 : The military payoff of shirking with intrusive monitoring.

a: The probability of detecting shirking if no monitoring.

b: The probability of detecting shirking if there is intrusive monitoring.

g: The probability of punishing shirking.

Table 1**Agency Model Outcomes and Their Associated Equilibrium Conditions**

Monitoring and Working Outcome	Strategy Pairs that would Produce this Outcome	Equilibrium Conditions Associated with that Strategy Pair
Monitoring/working	Civilians monitor and the military works if monitored but shirks if not monitored	$C1 < W - S2 - ag(S1 - S2)$ and $w2 > s2 - bgp$ and $w1 < s1 - agp$
Monitoring/shirking	Civilians monitor and military always shirks	$C1 < (bg - ag)(S1 - S2)$ and $w1 < s1 - agp$ and $w2 < s2 - bgp$
No monitoring/working	Civilians do not monitor and the military always works	$C1 > 0$ and $w1 > s1 - agp$ and $w2 > s2 - bgp$
No monitoring/shirking	(1) Civilians do not monitor and the military always shirks (2) Civilians do not monitor and the military works if monitored but shirks if not monitored	(1) $C1 > (bg - ag)(S1 - S2)$ and $w1 < s1 - agp$ and $w2 < s2 - bgp$ (2) $C1 > W - S2 - ag(S1 - S2)$ and $w2 > s2 - bgp$ and $w1 < s1 - agp$

the civilian's subjective utility from working. The more these inequalities hold in the real world, the more we would expect this path to be the one civilian and military actors take; the more these inequalities are violated in the real world, the less we would expect that associated equilibrium to be the one adopted. These conditions are summarized in Table 1. By analyzing these inequalities and comparing them with post-Cold War developments it is possible to get a first order explanation of post-Cold War civil-military behavior.

While each of these equilibria represents "best" outcomes in a rational choice sense, they are not equivalent in a public policy sense. Of particular importance in understanding the current friction, one would not expect the same amount of civil-military conflict in each case. Intrusive monitoring introduces conflict because the military, like all bureaucracies, prefers autonomy. Shirking likewise produces conflict. When shirking is punished, the conflict is obvious. Even when shirking is not punished, however, it can still introduce conflict because it deviates from the "per-

fect" civil-military relationship idealized in democratic theory. The agency model explanation of the current controversy, in fact, is precisely that exogenous factors have conspired to move the relationship from a more felicitous equilibrium to an equilibrium that is characterized by just this sort of friction.

Predicting Friction

Friction will be greatest when the civilian has strong incentives to monitor intrusively and the military has strong incentives to shirk. As summarized above in Table 1, this condition obtains when the following three inequalities hold simultaneously:

- (1) $C1 < (bg - ag)(S1 - S2)$;
- (2) $w1 < s1 - agp$; and
- (3) $w2 < s2 - bgp$.

The first inequality holds when "C1" is small, or when "g" is great, or when the difference between "b" and "a" is great, or when the difference between "S1" and "S2" is great. In plain English, the inequality holds when any of the following propositions are true: the costs of monitoring (C1) are low; the probability of punishment (g) is relatively high; intrusive monitoring is needed to detect shirking because the other means (e.g., the press) are unreliable (b is much greater than a); or the civilian payoff of military shirking if the civilian punishes (S1) is much higher than the civilian payoff of military shirking if the civilian does not punish (S2). In other words, the civilian is likely to monitor intrusively when the costs of monitoring are perceived to be low or when the reliability of other control measures is perceived to be relatively low. Note that not all of these propositions have to hold at the same time, but if one of the propositions does not hold, it should be counterbalanced by extreme values in the other related parameters. For instance, for equilibrium to be maintained, if the probability of punishment is in fact relatively low, we would expect the costs of monitoring also to be very low (or some extreme value for the reliability of nonintrusive monitoring and so on).

The second two inequalities hold when "w1" and "w2" are small, or when "s1" and "s2" are great, or when "a," "b," "g," or "p" are small. In plain English again, this refers to any of the following propositions: the military payoff of working with no monitoring (w1) and the military payoff of working with intrusive monitoring (w2) are both low; or the probability that shirking will be detected (a and b) is low; or the probability that shirking will be punished if detected (g) is low; or if the subjective

costs to military of punishment (p) are low. In other words, these inequalities simply reflect the idea that the military is more likely to shirk when the military's preference strongly diverges from the civilians' and/or the military has reason to believe that it is not likely to face punishment.

While it is impossible to measure each of these parameters precisely, it is possible to gain rough approximations of whether the parameters are relatively high or low. Significantly, the current period seems to be characterized by extreme values in several parameters, especially those pertaining to the military decision to shirk.

The evidence is somewhat ambiguous with respect to the parameters associated with the civilian decision to monitor intrusively. For instance, there does not seem to be any reason to expect a significant change in the civilian payoff of military shirking if the civilian punishes ($S1$) relative to the civilian payoff of military shirking if civilian does not punish ($S2$). At the same time, the probability of punishing (g) has if anything moved in a direction opposite to the one implied by the first equilibrium condition; the probability has likely *not* increased but rather decreased in the post-Cold War era (on which more below). As for the relative reliability of direct monitoring rather than relying on third parties such as the media (b vs. a), this is hard to assess with confidence. On the one hand, by the end of the Cold War there was a large and vigorous permanent watchdog community in the form of the national media and numerous independent defense analytic groups such as the Defense Budget Project, the Natural Resources Defense Council, defense intellectuals, and so on that "monitored" the military establishment in a myriad of ways. Indeed, more than any other country, the United States should have some confidence in the ability of nongovernmental groups to report on military misbehavior. On the other hand, the sensational reports of sexual shenanigans first in connection with the Navy Tailhook Association and later within the Army training camp system did seem to indicate that problems could persist for a fairly long time before they would be discovered by these third-party monitoring mechanisms.

The remaining parameter, the costs of monitoring, is perhaps easier to access. The costs of monitoring include the distraction of time and effort that could be profitably used in the service of other goals the civilian is pursuing. The costs of monitoring also include policy costs, referring to the disutility associated with micromanagement. It is plausible that changes in the external threat have a contradictory effect on these two components. When threat is high, there is a large electoral payoff for devoting attention to defense policy; consequently, when the

threat is low, there is a premium on concentrating on domestic policy.¹¹ Hence, candidate Clinton's oft-repeated promise to focus like a laser beam on the economy in the first post-Cold War election. Thus, the electoral costs of monitoring vary indirectly with external threat. On the other hand, the policy costs of monitoring probably vary directly with threat. When the external threat is low, policy decisions appear less consequential and so policy costs are lower—what does it matter if civilian interference has disastrous side-effects when there is no Soviet menace to capitalize on the error? Moreover, since at least some of the intrusive monitoring consists of institutional arrangements, for instance the presence of a large civilian bureaucracy dedicated to the monitoring function, it is reasonable to expect something of a lag in the effect with a decline in threat. By this logic, one could argue that the costs of monitoring intrusively were very low in the immediate aftermath of the end of the Cold War. The negative consequences of monitoring intrusively immediately decreased while the large Cold War monitoring edifice lingered.

While the equilibria parameters are hard to pin down, the evidence of the behavior associated with the equilibria conditions, civilian intrusive monitoring, is more conspicuous. Several measures would indicate that civilian control was relatively intrusive, at least in the immediate post-Cold War period. For instance, there was a striking change in the relative size of the civilian secretariat vis-à-vis the uniformed military. In FY 84 total uniformed military personnel strength was 2,229,000, but in FY 94 it had dropped to 1,610,500, a *decline* of about 28 percent. During the same period, the size of the Office of the Secretary of Defense civilian staff went from 3,719 to 4,988, about a 34 percent *increase*. While the uniformed military were shrinking to adjust to the new post-Cold War environment, the civilian staff at the highest policy level was increasing—and the contrary movement was large enough that the ratio of civilian OSD personnel to uniformed military almost doubled.¹² Another indicator of intrusive monitoring is the number of requests for information that the civilian principals send to the military, for instance, the number of formal requests sent by the White House, Congress, and the Department of State to the Department of Defense. From 1980 to 1984, the average yearly number was 10,114; from 1990 to 1994, the average yearly number was 12,988, reflecting a roughly 28 percent increase.¹³ The data are not entirely unambiguous. For instance, during the first several years of the Clinton's first term, many senior political posts in the Department of Defense went unfilled and the administration enjoyed the dubious distinction of having more mid- to senior-level vacancies than in any of the three previous administrations.¹⁴ While this fact cuts against the net intrusive-

ness of the monitoring, I would argue that its greatest effect would be on the expectation of punishment, on which more below. On balance, the evidence points to relatively intrusive monitoring. Interestingly, these indicators of intrusive monitoring seem to have peaked and may be declining. For instance, the Pentagon considered reducing the size of the OSD as part of the Quadrennial Defense Review.¹⁵ Likewise, the number of requests for information sent to the Department of Defense from the White House, Congress, and the State Department dropped off in 1995 and 1996 to 9,288 and 8,264 respectively. This would correspond to a gradual easing of tension in the civil-military relationship after the particularly stormy first half of the decade.

The argument is even more compelling in connection with the parameters that govern the military's incentives for shirking, i.e., the remaining two inequalities associated with the equilibrium. The inequalities represent the idea that the military's incentives to shirk increase when the gap between what the military would prefer to do and what civilians have asked it to do is great (i.e., when the difference between "s" and "w" is large) and/or when the expectation of punishment is small (i.e., when "a," "b," "g," or "p" are small). In the post-Cold War era we have seen large movements in both of those sets of parameters.

The gap between civilian and military preferences arguably has widened in the past decade. The divergence is happening in spite of, rather than because of, the decrease in external threat. Arguably, the divergence in preferences should *increase* as the threat increases and narrow as the threat decreases. Traditional Huntingtonian theory assumed that preferences diverged as external threat increased. The conservative realist military would desire to respond to the increased threat while the liberal civilian polity would resist, hence Huntington's "crisis" in the 1950s.¹⁶ However, the last decade has coincided with a remarkable change in the sociological makeup of the two sets of political elites, civilian and military.¹⁷ Fewer members of the civilian political elite have experience interacting with military officers, let alone military experience of their own. The military is itself becoming more ideologically homogenous and markedly more politically and socially conservative than the general public.¹⁸ The military itself has drawn attention to the apparently growing gap between civilian and military values, and some have even warned darkly about a role for the military in the country's culture wars.¹⁹

Moreover, the issues at stake that have given rise to the most civil-military conflict are precisely the kinds of issues on which civilian and military preferences are most likely to diverge widely—that is, where the military payoff for "working" is very low and its payoff for "shirking"

is very high. Whereas traditional explanations would highlight resource issues (size of budget, force structure, and so on), my model would expect the most contentious issues to be those having to do with the monitoring connection itself (operational control questions, constraints on the kinds of force to be used) because they represent a renegotiation of the basic terms of relationship. Resource issues have come into play with the post-Cold War downsizing—the Quadrennial Review has stirred up interservice rivalry, for instance—but they have generated more partisan or intramilitary troubles than civil-military friction. On the contrary, the civil-military crisis arose over two issues largely unrelated to budgets: the ban on gays serving openly in the military and the use and constraints on use of force in Somalia, Haiti, and Bosnia.

The gay issue essentially defined the first 100 days of the Clinton Administration.²⁰ Regardless of the merits of the proposed Clinton reforms, the way they were introduced and then managed were an example of what one former senior Clinton administration official described as the West Wing staff's "tin ear" on civil-military matters.²¹ The gay issue proved so contentious partly because it appeared to confirm a caricature of President Clinton—out of touch with the military and insensitive to their interests—and partly because it involved a radical assertion of civilian policymaking into a hitherto off-limits area of military prerogative, determining the kinds of behaviors the military could deem "prejudicial to good order and discipline and small-unit cohesion."

Use of force issues provided ongoing friction long after President Clinton had conceded the homosexual issue to the military. Although it has played out in different geographic venues, the basic issues have been the same: will the military be used for second-order security concerns, and, if so, will they be deployed in a gradual fashion or will civilian leaders expend the political capital necessary to justify a force large enough to execute the mission according to Powell's "overwhelming force" doctrine? The debate began over Bosnia in the Bush Administration, and has been repeated since over Somalia, Haiti, and then Bosnia again.²² In Somalia, the issue was whether civilian restrictions on weapons availability contributed to the failure of the Ranger mission—and the issue resulted in the public sacking of Secretary of Defense Les Aspin.²³ In Haiti, the issue was whether U.S. forces could deploy in a zero-casualties mode, which involved maximum footprint (requiring maximum political capital invested) and extremely restrictive mission goals (ensuring minimum political objectives accomplished).²⁴ Bosnia only became "doable" because President Clinton gave the military a "silver bullet"—permissive rules of engagement in the conduct of operations—which has granted them con-

siderably more autonomy over operations than they enjoyed in Somalia.²⁵ In each case, the monitoring issue was at the forefront, precisely as expected.

Likewise, the expectation of punishment parameter has also undergone significant changes in recent years.²⁶ Arguably, the military had reason to believe that the probability of punishment (g) had dropped after the Cold War, declining still further with the arrival of the Clinton administration. The probability of punishment is a function of the relative strength of the civilian vis-à-vis the military. This strength is itself a function of a variety of factors. For instance, President Clinton's failure to fill the senior civilian slots in the Department of Defense in a timely manner contributed to a vacuum at the top of the chain of command.²⁷ The relative strength may also vary with the popularity of the officer in question. Early in the Bush tenure, Secretary Cheney very prominently flexed the civilian's punishment prerogative by firing General Dugan.²⁸ But in the midst of the 1992 campaign, Bush's willingness to punish was demonstrably lower, at least insofar as the more popular General Powell was concerned. Consider the example of General Powell's efforts to head off any political decision to use limited air strikes against the Serbs in 1992. In the context of the agency framework, Powell's behavior might be coded as shirking, but President Bush chose not to perceive the behavior as shirking, for obvious reasons: General Powell was very popular and Bush was in the middle of a desperate campaign for reelection; moreover, Bush himself was perhaps uncertain about the wisdom of the lift-and-strike option in Bosnia.²⁹ Consequently, General Powell was not punished, at least not observably so.

Surely personal characteristics of the commander-in-chief loom large in any estimation of the probability of punishing. President Clinton's lack of war record led to widespread speculation about his weakness vis-à-vis the military.³⁰ Further fumbling of the relationship early in the Administration—notably, the famous story of disrespect shown to a senior military officer by a junior White House aide—led to a situation in which the president appeared to be courting the military, not vice-versa.³¹ The situation culminated in the spectacle of White House aides fretting over whether they dared punish a senior Air Force general who had publicly referred to the president as a “gay-loving, pot-smoking, draft-dodging, and womanizing” commander-in-chief.³² This is not to say that punishment has been absent in the post-Cold War era. Indeed, the military has complained about widespread and apparently capricious punishment levied in the wake of the Tailhook scandal.³³ The problem is, rather, that the military's ability to predict with confidence what behaviors will produce punishment

and what will be excused has been eroded by relatively sudden changes in the civilian climate concerning political correctness coupled with a dramatic change in the relative prestige of the president³⁴ The result is a curious combination of concern for a "zero defect" military simultaneous with remarkable manifestations of public contempt for the commander-in-chief. In this regard, it is striking that the military figure most singled out by the crisis school for behavior that approximated shirking was General Powell, the military figure who enjoyed the most independent political power vis-à-vis President Clinton and hence the lowest expectation of being punished by the president.

The strong and consistent effect predicted by the values of the parameters has been reflected in an apparently high incidence of military shirking. Michael Desch has argued that military noncompliance (shirking) increased markedly in the post-Cold War era.³⁵ The military's reluctance to embrace the Somalia, Bosnia, and Haiti missions has been well-documented.³⁶ The resistance to President Clinton's decision to allow homosexual persons to serve openly in the military has also been widely discussed. Less well known, at least outside of the defense expert community, but nonetheless further evidence of shirking were similar efforts to resist the dramatic changes in the allocation of service roles and missions contemplated by Senator Nunn and then-candidate Clinton.³⁷ Indeed, the crisis literature largely consists of claims that the military has been engaging in behavior that the agency model would call shirking: failure to do what civilians asked for or compliance in a way that undermines the relational privileges of civilian principals.

Concluding Remarks

In short, the alleged "crisis in civilian control" is best characterized as the concurrence of civilian intrusive monitoring with military shirking. Such a concurrence is one of the predicted outcomes of the agency model and, consistent with the model, there are demonstrably strong values on several of the parameters the model identifies as important in producing the monitoring/shirking outcome. The agency model, thus, provides a systematic causal mechanism for linking dramatic exogenous developments—especially the end of the Cold War, the divergence between civilian and military elites, President Clinton's personal history, the rise of the chairman of the Joint Chiefs of Staff—to changes in patterns of civil-military relations. The model suggests that these factors have had a profound effect in reducing the perceived costs of monitoring, in reducing

the perceived expectation of punishment, and in increasing the gap between what civilians ask for and what the military would prefer to do.

The argument developed here is generalizable to other countries, but the principal-agent approach assumes a superior-subordinate relationship that may not obtain in nondemocracies.³⁸ The principal-agent framework does not require that the military always obey, but it does assume that the military conceives of itself as a servant of the government, rather than a servant of a disembodied state or society (or, indeed, not a servant at all but the principal). In some countries, notably Latin America, until very recently, the question, "of whom is the military an agent?" is unsettled. In those cases the principal-agent approach is of less utility. The model works best in democracies which, by definition, identify the government as the rightful principal with the authority to delegate (and *not* to delegate) responsibility.

A measure of a theory's utility is its ability to illuminate issues outside its explicit domain. Agency theory seeks first and foremost to provide a micro-foundational account of civil-military relations: to explain the factors that shape civilian monitoring decisions and the factors that shape military responses to those civilian decisions. As I have shown, it can also shed light on another question: why are U.S. civil-military relations so stormy of late? Its answer does not speak to the normative question of whether the friction is cause for alarm, but it does identify the factors that continue to make civil-military relations so interesting in recent times.

Notes

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1. By crisis I refer to the civil-military problems outlined, among other places, in Richard Kohn, "Out of Control," *National Interest* (Spring 1994): 3-17; and Russell F. Weigley, "The American Military and the Principle of Civilian Control from McClellan to Powell," *The Journal of Military History* 57, 5 (October 1993): 27-58.
2. Certainly, it would be possible to give a richer *description* of the crisis than the one given by my model. But describing a particular civil-military situation is different from accounting for that situation in terms of a more generalizable model of civil-military relations—the latter is a more profitable exercise for the purposes of theory building.

3. The model is explained more fully in Peter D. Feaver, *Agency, Oversight, and Civil-Military Relations* (in preparation). The argument also builds on an earlier decision-theoretic version of the agency model developed in Peter D. Feaver, "Delegation, Monitoring, and Civilian Control of the Military: Agency Theory and American Civil-Military Relations," Olin Institute Working Paper No. 4, May 1996.
4. Samuel P. Huntington, *The Soldier and the State* (Cambridge: Harvard University Press, 1957), 155–156, and 345–346. See also Samuel P. Huntington, "The Soldier and the State in the 1970s," in Andrew J. Goodpaster and Samuel P. Huntington, *Civil-Military Relations* (Washington, D.C.: American Enterprise Institute, 1977), 5–28.
5. Morris Janowitz, *The Professional Soldier: A Social and Political Portrait* (New York: The Free Press, 1971), 435.
6. The game makes several simplifying assumptions. I assume that the actors adhere to some minimal standard of instrumental rationality and that both the civilian and the military conceive of themselves as principals and agents. I also assume as a point of departure that the civilian and military actors can be represented as only two players. In fact, I recognize that there are multiple principals (the president, Congress, the secretary of defense, etc.) and multiple agents (four services, a quasi-autonomous Joint Staff, more-or-less independent combatant commands, the National Guard, and so on), and I explore more fully the consequences of relaxing these assumptions in *Agency, Oversight, and Civil-Military Relations*.
7. The various techniques of monitoring are discussed in greater detail in Feaver, "Delegation, Monitoring, and Civilian Control of the Military."
8. Peter D. Feaver, "The Civil-Military Problematique: Huntington, Janowitz, and the Question of Civilian Control," *Armed Forces & Society* 23, 2 (Winter 1996): 149–178.
9. Pure working, however, does not necessarily mean that the outcomes of military action will please the civilian. This is so because the functional goal, security, is itself in relation to another actor not in the principal-agent relationship: the enemy. Indeed, some of the things the civilian wants done may in fact work against the overall goal of providing security for the state. But if civilians ask for it, then not to provide it is shirking because civilians have a right to be wrong in a democracy. Moreover, in fulfilling the principal's functional directions, things can go wrong simply due to Murphy's Law or Clausewitzian "friction." Both the civilian and the military can share the goal of national security (and in the U.S. case, one can even stipulate this as largely true), but *both the civilian and the military are imperfect judges of what is needed for national security*. The principal-agent problem arises when there is disagreement over what is needed or appropriate for national security, whether or not one side is "correct" about what is in fact needed. This can be represented graphically as three points in a multidimensional space, in which each dimension represents a critical component of national security policy (e.g., force structure, grand strategy, operational plan). One point represents the policy mix that would produce true optimal security; this is what the civilian and the military ultimately want. Another point represents the civilian's desired policy mix, which is the civilian's best estimation of what is needed for security; this is what the civilian asks for. The third point repre-

sents the military's desired policy mix; this is what the military asks for. The work-shirk continuum concerns only the nearness of behavior to the civilian or military desired point, and does not directly address whether the output approximates theoretically optimal security.

10. The agency model addresses civil-military relations in a democracy, where the military conceives of itself as the agent of the civilian; crucial to that conception is a recognition of the civilian's right to sanction, and hence an explicit commitment to submit to sanctions. Such an assumption is reasonable in the U.S. case. There is ample evidence that civilians are able to punish the military, if they so choose. Civilians have the ability to fire even hugely popular military officers, as Truman's dismissal of MacArthur makes clear. Many senior military officers have been sacked before and since for a wide range of offenses that can be grouped collectively under the heading of shirking.
11. Of course, some defense policy issues will have a larger electoral payoff than others, regardless of whether the threat is high or low. For instance, the decision about whether to close a base in a home district will almost always be electorally more significant than a decision about whether to base a strategy on preparing to fight two or just one and one-half small wars nearly simultaneously.
12. The data suggest that the locus of civilian monitoring shifted from the service departments to the OSD because the civilian secretariat within the service departments actually experienced deeper personnel cuts than their military counterparts during the same period. See data from *Annual Report to the President and the Congress by the United States Department of Defense, February 1993*, Table B-1; *Annual Report to the President and the Congress by the United States Department of Defense, February 1994*, Table C-1; *Department of Defense, Civilian Manpower Statistics, June 1984*, Table 4; and *Department of Defense, Civilian Manpower Statistics, June 1994*, Table 3.
13. Data from Larry Curry, Director of Correspondence and Directives, Office of the Executive Secretary, Department of Defense, 10 March 1997.
14. By the end of July 1993, for instance, nearly half of the senior DoD jobs (23) remained empty. "Clinton's Picks Faster than Bush's, Lag Reagan's," *Washington Post*, 25 July 1993, A8; Ann Reilly Dowd, "Hello, Washington, Anybody There?" *Fortune*, 26 July 1993, 18; Stephen C. LeSueur, "Women Find Easy Acceptance in DoD Male Bastion," *Defense News*, 6 December 1993, 14.
15. See "Services to Do Own Study of Potential Cuts to OSD, Defense Agencies," *Inside the Pentagon* 13 March 1997, 12.
16. This logic is examined in greater detail in *Agency, Oversight and Civil-Military Relations*.
17. See Thomas E. Ricks, "On American Soil: The Widening Gap between the U.S. Military and U.S. Society," Olin Institute Working Paper No. 3, May 1996; and Ole R. Holsti, "A Widening Gap between the Military and Civilian Society? Some Evidence, 1976-1996," Olin Institute Working Paper No. 13, October 1997.
18. Charles L. Cochran and Eloise F. Malone, "A Comparison of Naval Academy Plebes

and College Freshmen over Twenty Years Using the Ace's Student Information Form." Paper presented at the 1995 Inter-University Seminar on the Armed Forces & Society, Baltimore, MD, 20-22 October 1995.

19. William Lind, Maj. John Schmitt, and Col. Gary Wilson, "Fourth Generation Warfare: Another Look," *Marine Corps Gazette* (December 1994), 34-37.
20. For more see: John Lancaster, "Clinton and the Military: Is Gay Policy just the Opening Skirmish?" *Washington Post*, 1 February 1993, A10; "The Military and the Commander-in-Chief," transcript of *ABC News Nightline*, 30 March 1992; John Lancaster and Ann Dewey, "Storming the Pentagon," *Washington Post*, 9 April 1993, A1; Helen Thomas, "Clinton Seeks Improved Image with Military," *United Press International*, 7 May 1993.
21. Not-for-attribution interview with the author, 3 June 1994.
22. The original Powell debate is found in Michael R. Gordon, "Powell Delivers a Resounding No on Using Limited Force in Bosnia," *New York Times*, 28 September 1992, A1, A5; "Our 'No Can Do' Military," *New York Times*, 4 October 1992, D12; and Colin L. Powell, "Why Generals Get Nervous," *New York Times*, 8 October 1992, A35.
23. For a telling account of how Aspin's successor William Perry understood the Somalia lesson, see Bill Gertz, "Perry Talks of Somalia Lessons: Says Peacekeepers Must be Well Armed," *Washington Times*, 4 October 1995.
24. See Michael R. Gordon, "Pentagon's Haiti Policy Focuses on Casualties," *New York Times*, 6 October 1994, A5.
25. R. Jeffrey Smith and Dana Priest, "Troops Given Wide Range of Authority," *Washington Post*, 23 November 1995, 1; Eric Schmitt, "Commanders Say U.S. Plan for Bosnia Will Work," *New York Times*, 27 November 1995, 1; and Dana Priest, "1,400 U.S. Troops Part of Advance Group," *Washington Post*, 28 November 1995, 9.
26. The developments I describe in the text may be part of a broader trend towards greater uncertainty in how the military will be punished. Civilian standards of due process have increasingly encroached on the military judicial system with a corresponding dramatic decrease in the number of formal courts-martial and a greater reliance by senior commanders on nonjudicial punishment. Louis Ephraim Hicks, *The Effect of Technology on Social Control in U.S. Military Organizations: Trends in Court-Martial Rates From 1917-1991* (Ph.D. diss. University of Virginia, 1994, 155), and James B. Jacobs, "Legal Change within the United States Armed Forces Since World War II," *Armed Forces & Society* 4, 3 (May 1978): 391-421.
27. As one editorial opined, "administration policies on key issues—ranging from changes in force structures to women in combat—run into unnecessary trouble because civilians whose jobs it would be to implement them were not in place," "The Pentagon's Missing Civilians," *The Washington Post*, 27 June 1993, C6.
28. Bob Woodward, *The Commanders* (New York: Simon & Schuster, 1991), 290-96.
29. Powell himself, of course, claimed he was merely fulfilling his statutory responsibilities as advisor-in-chief and, had civilian principals made a decision to bomb, he

would have carried out the orders unequivocally. Thus, if we code this as shirking we must recognize that it is a far cry from the most egregious forms of shirking imaginable in a civil-military context. See "Exchange on Civil-Military Relations" with Colin Powell, John Lehman, William Odom, Samuel Huntington and Richard Kohn, *National Interest* 36 (Summer 1994): 23-31.

30. "Who's in Charge of the Military," *New York Times*, 26 January 1993, A18.
31. "Clinton's Quick Steps to Better Relations; After Summit Jog, General Snubbed at White House; Has Warm Words for President," *Washington Post*, 6 April 1993, A7.
32. Maj. Gen. Harold N. Campbell reportedly made the comments at an official Air Force banquet in the Netherlands. Initially, the White House seemed skittish in dealing with this gross violation of military protocol; one staff member complained, "What should we do? Fire someone with a Silver Star?" The chain of command rallied, however, and General Campbell resigned in disgrace. John Lancaster, "Accused of Ridiculing Clinton, General Faces Air Force Probe," *Washington Post*, 8 June 1993, A1; John Lancaster, "Air Force General Sets Retirement," *Washington Post*, 19 June 1993, A1.
33. James Webb, "The War on Military Culture," *The Weekly Standard* 2, 18, 20 January 1997, 17-22.
34. The existence of confusion is all too easy to document. See, for example, the confusion surrounding whether and whom to punish for the terrorist bombing of the Air Force base in Dhara; see John Kifner, "In Saudi Base Bombing, Debate on Placing Blame," *New York Times*, 6 December 1996, 1; and Eric Schmitt, "Air Force Reviewing Exoneration of General in Attack," *New York Times*, 18 February 1997, 1. See also the treatment of Admiral Macke, who was summarily fired for making insensitive remarks in the 1995 Okinawa rape case. "U.S. Seeks to Defuse Controversy Over Admiral's Remarks," *Reuters*, 19 November 1995. See also the turmoil following Admiral Boorda's suicide. Roger Charles, "It's a War for Soul of U.S. Military," *Baltimore Sun*, 2 June 1996, 1; John Lehman, "The Navy's Enemies," *Wall Street Journal*, 21 May 1996, 22. Nowhere is the problem more evident than in the military's desperate attempts to adjust to the presence of women in the ranks and changing social mores. The presence of women has intensified the military's effort to regulate sex between consenting adults and this has undoubtedly exacerbated confusion over what sorts of behavior will result in punishment. Tamara Jones, "U.S. Military Takes Aim at Adultery: In the Wake of Sex Scandals, Services Met Out Harsh Penalties for Illicit Romance," *Washington Post* 28 April 1997, 1; and Tamara Jones, "The Pilot's Cloudy Future," *The Washington Post*, 29 April 1997, D1.
35. See Michael Desch, this issue.
36. While I disagree with her interpretation of the cases, Deborah Avant convincingly documents the civil-military conflict in Deborah D. Avant, "U.S. Military Reluctance to Respond to Post-Cold War Low-Level Threats," *Security Studies* 6, 2 (Winter 1996/97): 51-90.
37. Michael R. Gordon, "Report by Powell Challenges Calls to Revise Military," *New York Times*, 31 December 1992, A1 and A10; and Eric Schmitt, "The Top Solider is Torn between 2 Loyalties," *New York Times*, 6 February 1993, A1 and A12.

38. The model does not assume away the possibility of a coup, although the probability that a coup would be endogenously generated by the relationship as modeled is remote. Perhaps extreme values predicting high levels of shirking combined with either extremely low monitoring (so as to approximate a *de facto* coup) or extremely intrusive monitoring (so as to exacerbate the agent's frustration) could create the conditions for a coup. In any case, the dependent variable is *not* coup/no-coup, and my argument about the alleged American crisis explicitly links the current troubles to friction in the relationship, rather than to the presence or absence of a coup.
39. As a first cut at the problem, I am considering only pure strategies. One could extend the analysis by examining mixed strategies, in which the military randomizes its response, say, working 75 percent of the time and shirking 25 percent of the time.

Appendix A

Analyzing the Formal Civil-Military Game

Suppose there are two players, Civ and Mil. The game begins with Civ deciding how to monitor the delegation given to Mil. Once the monitoring is set, Mil decides whether to shirk or not followed by Civ's response either to punish or not. In such a game, there are six possible outcomes. I will use upper case to denote the payoffs to civilians and lower case to denote payoffs to the military. Note, therefore, that S2, the civilian payoff of military shirking if civilian does not punish is entirely different from s2, the military payoff of shirking with intrusive monitoring.

Players

Civ (who decides how to monitor and then punishes or not) and Mil (who decides whether to work or shirk)

Game sequences

1. Civ decides whether to monitor intrusively or not.
2. Mil decides whether to work or shirk.
3. Nature decides whether shirking is detected.
4. Civ punishes or not.

Lexicon

- W: Work done as the civilian principal wanted it.
 S: Work done as the military agent wanted it (shirking).
 C1: Civilian costs of monitoring (time/effort costs and the policy costs of inexpert meddling).
 S1: The civilian payoff of military shirking if civilian punishes.
 S2: The civilian payoff of military shirking if civilian does not punish.
 p: Costs to military of punishment (makes shirking less valuable to the military).
 w1: The military payoff of working with no monitoring.
 w2: The military payoff of working with intrusive monitoring.
 s1: The military payoff of shirking with no monitoring.
 s2: The military payoff of shirking with intrusive monitoring.
 a: The probability of detecting shirking if no monitoring.

- b: The probability of detecting shirking if there is intrusive monitoring.
- g: The probability of punishing shirking.

Outcomes

1. Civ monitors intrusively, Mil works. $[W-C1, w2]$
2. Civ monitors intrusively, Mil shirks; Civ punishes. $[S1-C1, s2-p]$
3. Civ monitors intrusively, Mil shirks, Civ does not punish. $[S2-C1, s2]$
4. Civ does not monitor intrusively, and Mil works. $[W, w1]$
5. Civ does not monitor intrusively, Mil shirks, Civ punishes. $[S1, s1-p]$
6. Civ does not monitor intrusively, Mil shirks, Civ does not punish. $[S2, s1]$

Restrictions

- $b > a$, the probability that shirking will be detected is greater if the civilian monitors intrusively.
- $C1 > 0$, there is some finite cost to monitoring.
- $p > 0$, the military perceives some finite disutility to receiving punishment.

Assumptions

- g, the probability of punishing shirking, is exogenously determined as discussed in the text.
- $s1 > s2$, and $w1 > w2$, the military payoff of shirking with no monitoring, is greater than the military payoff of shirking with monitoring, independent of any punishment. This expresses, in formal terms, the common claim of organization theory that the military organizations do not like intrusive monitoring.

How will Civ and Mil rank their preferences over these six outcomes? The rankings for Civ are straightforward, based on the notion of the civilian as sensitive to costs. The civilian would prefer to have the work done with the least amount of delegation and monitoring costs. If the civilian is going to invest the time and effort to monitor, he would prefer to in fact detect any shirking and, consequently, to punish it if detected, although his ability to do so may be limited, for instance if the military is very popular. Thus, Civ would first prefer the work outcomes in descending order of cost, W and $W-C1$. Civ's preference ranking for the four shirking outcomes reflects his desire to punish shirking and his

desire not to have to spend the effort monitoring intrusively, $S1$, $S1-C1$, $S2$, and $S2-C1$.

Mil has a rank ordering of preferences different from Civ. Indeed, if they had the same preferences the agency problem would all but disappear. Consequently, the military would prefer to do it their way, especially if they did not get punished for it, and they always prefer less intrusive monitoring; thus their first two preferences are $s1$ and $s2$. The rest of the ordering is debatable. Punishment is a negative value in that it reduces the utility of the shirking outcome from the point of view of the military; if they are going to shirk they do not want to get punished. But whether or not it reduces the value of shirking below the value of working depends on the military's cardinal values on the three parameters working (w), shirking (s), and punishment (p), and it is not feasible to measure the cardinal values with any confidence. In societies where the military has reason to believe that p is always negligible—for instance, in Guatemala for most of its history—there is nothing to reduce the shirking outcome relative to the working outcome. In this instance, the military may rank all forms of shirking ahead of working. However, given the empirical domain of my study—a democracy, and the American democracy to boot—it seems more plausible to assume that the military prefers working to shirking with punishment. In the U.S. case, of course, when the military thinks punishment is going to be very unlikely, the military may still shirk—but here it prefers shirking without punishment and simply expects that that is what it will get. Thus, the remaining ranking is: $w1$, $w2$, $s1-p$, $s2-p$. Table 2 summarizes the preference order.

It is now possible to analyze the game for equilibria, for instance to see the conditions under which we would expect the military work or shirk. By the rationalist assumption, the military will work when it expects a better payoff from that course of action.³⁹ If the military finds itself in a world of intrusive monitoring, the payoff from working will be greater than the payoff from shirking if the following inequality is true:

$$w2 > s2 - bgp$$

If the military finds itself in a world of no intrusive monitoring, the payoff from working will be greater than the payoff from shirking if the following inequality is true:

$$w1 > s1 - agp$$

By assumption we know that the military prefers shirking to working, $s2 > w2$ and $s1 > w1$. Thus, the military will work only if the punishment is great enough to reduce the net gain of shirking below that of working. If the punishment (p) is too light, the military may shirk regardless of how likely they believe it will be levied against them (i.e., how great a , b , or g

Table 2
Preferences of the Players

Civ Preferences	Mil Preferences
(1) W	s1
(2) W-C1	s2
(3) S1	w1
(4) S1-C1	w2
(5) S2	s1-p
(6) S2-C1	s2-p

are); intuitively, even if an agent is certain it will receive punishment, that may not be an effective deterrent if the punishment is trivial. The probability parameters are distributed between 0 and 1, while the punishment parameter is effectively without a maximum. Thus, it is possible to identify $p(\min)$, the minimum punishment necessary to affect the agent's decision. This parameter, $p(\min)$, is a function of the gap between w and s , the difference between the military's subjective value for working, and the military's subjective value for shirking; specifically,

$$p(\min) = s - w$$

When the punishment involves pain less than the value the military sees from shirking (i.e., when $p < p(\min)$), then the likelihoods of receiving such punishment do not matter anymore. When p is greater than $p(\min)$, then the probability of receiving punishment can decisively influence the military's calculation.

If traditional organization theory's claim that the military dislikes intrusive monitoring is not true, then the payoffs for the game would be different: specifically, $s2$ would equal $s1$ and $w2$ would equal $w1$. In this special case and with other things equal, the decision whether to work or shirk depends only on the probability of getting caught. And since the probability of getting caught with monitoring (b) is greater than the probability without monitoring (a), then the military agent would always be more likely to shirk under nonintrusive monitoring than under intrusive monitoring.

Since monitoring is a continuum, ranging from very intrusive to very unintrusive, the probabilities of getting caught are likewise continuous. At the limit, the probability of getting caught under nonintrusive monitoring can approach the probability of getting caught under intrusive monitoring (a can approach b), for instance if the issue area is such that intrusive monitoring is not very reliable and/or nonintrusive monitoring like relying on the media *is* very reliable. In such a case, the difference in the net

Table 3
Military Strategies and their Associated Conditions

Military Responses	Payoff conditions under which the military would have such a response
Always work	$w1 > s1 - agp$ and $w2 > s2 - bgp$
Always shirk	$w1 < s1 - agp$ and $w2 < s2 - bgp$
Work if monitored, shirk if not monitored	$w2 > s2 - bgp$ and $w1 < s1 - agp$
Shirk if monitored, work if not monitored	$w2 < s2 - bgp$ and $w1 > s1 - agp$

payoff of working/shirking under monitoring and under no monitoring may disappear altogether.

Turning to the civilian, under what conditions would we expect the civilian not to monitor intrusively? The civilian must consider four possible agent responses: that the agent always works, that the agent always shirks, that the agent works if monitored but shirks if not monitored, and finally, that the agent shirks if monitored and works if not monitored. Table 3 describes the conditions under which each of these four responses holds.

What would be the civilian's best response in each of these cases? The easiest case is if the military always works. The conditions for such a military strategy are straightforward: the military will pursue such a strategy in a world in which their intrinsic payoff from shirking is small relative to working (their policy preference is not that different from civilians) and/or they have a relatively high expectation of punishment if they shirk. In such a world, the civilian is comparing payoffs W and $W - C1$ —payoffs for not monitoring and monitoring, respectively. So long as there are some costs to monitoring ($C1 > 0$), then given a cost-sensitive civilian, he will most prefer W , the payoff for not monitoring. If the military always works, the civilian's best choice is not to monitor—in other words, the civilian never monitors.

Turning to the case in which the military always shirks, the civilian makes the following comparison: $S2 + ag(S1 - S2)$ versus $S2 - C1 + bg(S1 - S2)$. This is the case when the military's expected payoff to shirking always exceeds its expected payoff to working, because its policy prefer-

ences sharply diverge from civilians' and/or because it has a low expectation of receiving serious punishment. The civilian's best choice is to monitor intrusively when:

$$S2 - C1 + bg(S1-S2) > S2 + ag(S1-S2)$$

Grouping terms together simplifies the inequality somewhat:

$$bg(S1-S2) > ag(S1-S2) + C1$$

Now, by assumption, the probability of being caught if there is no monitoring is less than the probability of being caught if there is monitoring, that is $a < b$. Thus, $bg(S1-S2)$ will always be greater than $ag(S1-S2)$. If, however, the costs of monitoring are very great ($C1$ is very large), then the inequality is less likely to be true. How great must $C1$ be for the civilian to decide not to monitor intrusively? By solving the inequality for $C1$, we get the following:

$$C1 < bg(S1-S2) - ag(S1-S2) \text{ or,}$$

$$C1 < (bg-ag)(S1-S2)$$

The inequality says that the costs of monitoring must be very large to get the civilian not to monitor if one or both of the following conditions are true: first, if b is much bigger than a , meaning that the reliability boost from intrusive monitoring is very high; second, if $S1$ is much bigger than $S2$, meaning that the civilian's value from shirking with punishment is much higher than the civilian value from letting shirking go unpunished. In plain English, in the case where the military always shirks, then the civilian will monitor intrusively if the costs of monitoring are not great, or if monitoring intrusively will significantly increase his chance of detecting shirking, or if he is very concerned about letting some shirking go unpunished.

The third case is that of when the military will work if monitored and will shirk if not monitored. In this case, the civilian compares $W - C1$ and $S2 + ag(S1-S2)$. The civilian will monitor if:

$$W - C1 > S2 + ag(S1-S2)$$

Grouping the terms in another way yields the following equivalent expression:

$$W - S2 > C1 + ag(S1-S2)$$

When the civilian payoff from working less any payoff civilians would receive from shirking is greater than the costs of monitoring plus the expected value of the shirking with punishment minus the shirking without punishment, then we would expect the civilians to monitor intrusively. Solving for $C1$ tells us how low the costs of monitoring have to be to satisfy this condition: $C1 < W - S2 - ag(S1-S2)$.

Finally, the civilian considers the case in which the military will shirk if monitored and work if not monitored. This is a counterintuitive case, a

fact reflected in the special combination of military payoff conditions for this case to obtain. For the military to pursue such a strategy, it would have to be true that it prefers working when there is no monitoring and shirking when there is monitoring. In formal terms, it must be simultaneously true that $w_2 < s_2 - bgp$ **and** that $w_1 > s_1 - agp$. Given the assumptions and restrictions of the model, and given a reasonable additional inference, these conditions cannot be met simultaneously.

By restriction $b > a$, the probability of being caught is greater with intrusive monitoring than with no intrusive monitoring. Therefore, $bgp > agp$. By assumption, $w_1 > w_2$ and $s_1 > s_2$; consistent with traditional organization theory, the military intrinsically does not like intrusive monitoring; thus if the military is going to work it prefers working without monitoring and the same holds for shirking. It also seems plausible that the *amount* of this military preference for no intrusive monitoring is the same whether it is considering working or shirking; when the military thinks about the four options, namely the monitoring vs. no monitoring possibilities for both working and shirking, it prefers the no monitoring outcome by the same amount, regardless of whether it will work or shirk. In formal terms, this would be: $s_1 - s_2 = w_1 - w_2$. This expression is equivalent to: $w_2 - s_2 = w_1 - s_1$.

Given this auxiliary assumption, it is possible to show algebraically that the inequality conditions cannot hold:

$w_1 > s_1 - agp$ **and** $w_2 < s_2 - bgp$ thus,

$w_1 - s_1 + agp > 0$ **and** $w_2 - s_2 + bgp < 0$ thus,

$w_1 - s_1 + agp > w_2 - s_2 + bgp$, since $w_1 - s_1 = w_2 - s_2$ we can substitute and get

$w_1 - s_1 + agp > w_1 - s_1 + bgp$, or,

$agp > bgp$

But by assumption, $bgp > agp$, therefore the inequality conditions cannot hold. *QED*.

Note that this is true only because we have made the reasonable assumption that traditional theory's claim that organizations do not like intrusion will produce the same amount of intrinsic disutility whether the military contemplates working or shirking. If this assumption is not true and, on the contrary, the presence of intrusive monitoring changes the relative intrinsic utility difference between shirking versus working, then the military might indeed consider working if not monitored and shirking if monitored. In such a case, the civilian would have to consider this fourth military strategy producing a fourth set of conditions, as follows.

The civilian compares $S_2 + bg(S_1 - S_2) - C_1$ with W . In this case, the civilian will monitor intrusively if the following inequality holds:

$$W < S2 + bg(S1-S2) - C1$$

Regrouping the terms yields:

$$W - S2 < bg(S1-S2) - C1$$

Given the ordinal payoff structure for civilians, $W-S2$ is always greater than $S1-S2$. Also, bg is always less than or equal to 1; $C1$ is always at least greater than 0. Therefore, this inequality never holds, and in this instance the model yields a trivial result: if the military shirks if monitored and works if not monitored, it never makes sense for the civilian to monitor intrusively.