

Defense Capability Levels and U.S. Strategy Choices

This appendix describes how figure 5-4 in chapter 5 was generated from the definitions of defense levels shown in table E-1 and the requirements to support the suggested strategies as listed below. In general, the requirements to underwrite or support any of the suggested strategies—retaliation-only, countervailing, prevailing, or assured survival—are as follows:

- . If we can absorb a Soviet first strike and inflict great damage on them, then we can have a retaliation only strategy.
 - If we can absorb a first strike, inflict damage on the Soviets beyond the value of whatever they might hope to accomplish and deny them their goals, then we can have either a countervailing strategy or a retaliation-only strategy.
 - . If we can defeat the Soviets while keeping our losses at a “tolerable” level, then we can adopt either a prevailing strategy, a countervailing strategy, or a retaliation-only strategy
 - . If we can survive a Soviet first strike, then we can have an assured survival strategy.
- Retaliating requires that some number of re-entry vehicles (RVs) survive a Soviet first strike

and penetrate to their targets. There are different views on how many RVs must survive and penetrate to support a credible retaliation-only strategy. Countervailing generally requires that more RVs survive and penetrate, and that we be able to use those RVs for more than just punishment attacks. Prevailing would require that still more RVs be able to survive and penetrate, and that we be able to use them to attack a variety of important selected targets. Additionally, prevailing, unlike either retaliation-only or countervailing, generates requirements for U.S. defenses to limit damage to the United States.⁷ Assured survival requires even more U.S. defenses than prevailing does, but it has little or no requirement for RVs to survive and penetrate.

Each of these strategy choices implies either limits on Soviet defenses, requirements for U.S. defenses, or both. These can be put in terms of the four defense levels.

⁷In the absence of Soviet defense, countervailing and retaliation-only do not require defenses, but do not exclude them either. If the Soviets have defense, countervailing may require defense.

Table E.1 .- Levels of Defense Capability

Region	Level	Description
Offense-dominated	0 no defense	
	1 “some ICBMs”*	A defense capable of ensuring the survival of a useful fraction of the ICBMs, but not capable of protecting cities
Transition	2 “either/or”	A defense (including BMD) that can ensure the survival of most ICBMs or a high degree of urban survival against a follow-on (or simultaneous) attack, but not both
Defense-dominated	3 “most ICBMs/some cities”	A defense that ensures a high level of survival of military targets. Massive damage can only be obtained by concentrating the entire offense against cities
	4 “extremely capable”	Ensures a high level of urban survival against a full attack. The attacker cannot have high confidence that any cities can be destroyed

*Terms in quotes are a shorthand used to identify the levels,

NOTE: For simplicity the chapter often divides targets into ICBMs and cities. There are, of course, many other types of targets that might be attacked, but discussing them all in each case would greatly expand the text. ICBMs are representative of strategic military targets (although by no means an accurate model of them all). “Cities” is typically used as a short hand for people, economic assets, and social structure. A level 1 defense, for example, might be used to defend the C³ system rather than the ICBMs,

The requirements for assured survival are the simplest to specify. We would need a level 4 defense regardless of what defense the Soviets built. Furthermore, if we had a level 4 defense that supported an assured survival strategy, no Soviet defense could undermine that strategy.

Prevailing would require either a level 4 defense, or, if we were to plan to strike first to reduce the Soviet offensive forces, a level 3 defense.² However, this U.S. defense alone would not assure an option to prevail. If the Soviet defense were sufficiently capable, it could keep us from having enough RVs surviving and penetrating to support a prevailing strategy. Level 4 Soviet defenses would certainly keep us from having a prevailing strategy. Very few U.S. RVs would reach their targets. A level 3 Soviet defense would keep us from attacking military targets, which would prevent us from satisfying the definition of prevailing. However, if the Soviets had level 3 and we had level 4, we would have a large, possibly exploitable, advantage. This might be called an opportunity to prevail despite not being able to destroy military targets. What we would call our strategy would not be as significant as the large advantage.

If we had a level 3 defense we could strike first against a range of targets and defend against the ragged retaliation, thereby limiting damage to ourselves, perhaps enough to prevail. However, if the Soviets had a level 2 defense, they might prevent us from destroying enough of their forces to keep our losses to their retaliation "tolerable. There-

²If we had level 2 and the Soviets had no defense, we might attempt to prevail by striking first. In order to defend our cities, we would have to leave military targets undefended against a Soviet retaliation.

fore, if we had level 3 and they had level 2, prevailing might not be a practical option. We could, however, countervails since they could not destroy our retaliatory forces in a first strike.

With the exceptions noted above, a Soviet defense at level 3 or above would limit our strategy choice to retaliation-only, unless we had a level 4 defense that would support an assured survival strategy. The only targets we could expect to destroy would be cities. A Soviet level 4 defense would call into question our ability to retaliate. We could not be certain that we could inflict great damage on their cities. Therefore, if they had a level 4 defense and we did not have assured survival, our only option would be a retaliation-only strategy, but it might not have much prospect of being successful. Of course, if we also had a level 4 defense, neither side could be certain of its ability to damage the other, and the Soviets would have no advantage over us.

Currently, we have a countervailing strategy. If we add defense and the Soviets have none, we could certainly continue to have this option. If the Soviets add a level 1 defense while the United States has no defense, they could use it to deny us the ability to retaliate against some military targets, although we could still attack their cities. We might no longer be able to countervails, although we could certainly retaliate. A U.S. level 1 defense would restore our ability to countervails by ensuring the survival of RVs to replace the ones the Soviet defense might destroy. Higher levels of Soviet defense, however, could deny us the option to countervails by protecting a range of military and civilian targets.