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Publisher Routledge

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## Security Studies

Publication details, including instructions for authors and subscription information:

<http://www.informaworld.com/smpp/title-content=t713636712>

## Reflections on Producing Security

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Online Publication Date: 01 October 2007

**To cite this Article** Brooks, Stephen G.(2007)'Reflections on Producing Security',Security Studies,16:4,637 — 678

**To link to this Article:** DOI: 10.1080/09636410701755245

**URL:** <http://dx.doi.org/10.1080/09636410701755245>

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## Reflections on *Producing Security*

STEPHEN G. BROOKS

*This symposium has provided a priceless opportunity to advance debate on how global commerce influences international security. Of particular importance is that these articles help clarify exactly how the globalization of production affects great power security relations. My article comprises four parts, the first of which outlines the current state of the debate on how the globalization of production influences security and discusses why further research on this topic is needed. Section two examines Jonathan Kirshner's article, which helpfully shows why my conclusion that the globalization of production is stabilizing ultimately pertains to the severity of great power war, not its initiation. Section three discusses Jonathan Caverley's article and demonstrates how almost all the critical issues raised by Caverley are consistent with *Producing Security*. Section four turns to Eugene Gholtz's contribution, which explores the boundary conditions of some of my arguments and usefully underscores that the globalization of production does not influence the benefits of conquest in advanced countries nearly as strongly in the short-term as it does in the long-term.*

The first sentence of *Producing Security* notes that scholars and statesmen have debated the influence of international commerce on war and peace for thousands of years.<sup>1</sup> The book's core premise is that the most significant and historically unprecedented feature over global commerce—the geographic dispersion of production by multinational corporations (MNCs)—has been inappropriately left out of this long-standing debate. My goal is not simply to introduce this key independent variable but to systematically delineate and analyze all the ways by which it might influence international security. My book presents a total of twenty-five different findings about the influence of the globalization of production on world politics. I am not at all surprised

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The author would like to thank Daryl Press, Ben Valentino, and Bill Wohlforth for their helpful comments. The author is also grateful to Matt Ailey for his research assistance.

<sup>1</sup> Stephen G. Brooks, *Producing Security: Multinational Corporations, Globalization, and the Changing Calculus of Conflict* (Princeton: Princeton University Press, 2005).

that some of these findings have been questioned in the preceding articles; given how long scholars have been arguing about the influence of commerce on war and peace, I would never expect that my effort to inject the globalization of production into this debate would be fully persuasive. I am also a firm believer in the *social* element of social science: knowledge can only truly progress when many different scholars examine and debate important findings. Accordingly, I am grateful that three talented scholars took the time to write articles on my book; the scholarly understanding of how the global economy influences security will undoubtedly be advanced by this symposium.

My response comprises four parts, the first of which outlines the current state of the debate on how the globalization of production influences security and discusses why further research on this topic is needed. Section two examines Jonathan Kirshner's article, which is devoted not to directly challenging my findings but to exploring their implications for great power relations. His article clarifies a key issue: the extent to which the globalization of production reduces the likelihood of a great power war. As I will stress, by greatly reducing the severity of the gravest threat in the system—serial conquest by a great power—the globalization of production remains highly significant. I also underscore that my analysis has important repercussions not just for the serial conquest scenario but for great power security relations in general.

Section three discusses Jonathan Caverley's article and demonstrates how almost all the critical issues raised by Caverley are consistent with *Producing Security*. The core point of disagreement between us that he highlights in great detail—why the United States promoted the globalization of U.S. weapons production starting from the 1970s onward—pertains to just one of the four findings I present in Chapter 4. While Caverley has a plausible theory on this issue, I emphasize that he lacks evidence to support it. Indeed, evidence from the Cold War period presented in *Producing Security* runs contrary to Caverley's assertion. Nevertheless, Caverley's article insightfully argues that the United States has an additional interest for pursuing globalization in defense production beyond the standard one that all states face: improving the quality and reducing the cost of weaponry. Caverley's argument that the United States gains political leverage from its pursuit of weapons globalization is important, since it suggests that the already substantial extent of globalization of U.S. weaponry could be significantly augmented and also that the globalization of weapons production promotes great power stability to an even greater extent than I indicate.

Section four turns to Eugene Gholz's contribution. Gholz's analysis helpfully explores the boundary conditions of some of my arguments and presents a compelling criticism concerning the influence of the globalization of production on the short-term benefits of conquest. His theoretical critique of my central argument on how the globalization of production reduces the

long-term benefits of conquest is undermined, however, by its reliance on an utterly implausible alternative conquest scenario. The second part of Gholz's article is devoted to analyzing my empirical findings on U.S. weapons globalization during the last two decades of the Cold War, but his critiques run afoul of overwhelming contrary evidence that is consistent with my underlying conclusions about weapons globalization.

#### THE STATE OF THE DEBATE ON THE SECURITY EFFECTS OF THE GLOBALIZATION OF PRODUCTION

Books in international relations commonly focus on a particular dependent variable and seek to provide leverage on it. The dependent variable might be a case like World War I or the Cold War, a behavior like ethnic killing or arms races, a strategy like economic statecraft or aerial bombing, a concept like reputation or identity, a specific class of events like great power wars or nuclear rivalries, or a general class of events like interstate wars or civil wars. *Producing Security* does not have this common dependent variable setup; rather, it is an independent-variable-focused book. My aim is to isolate the globalization of production and examine how it could influence security affairs. In adopting this focus, my goal was not to make the case that this independent variable is the strongest influence on security relations; I began this project with an open mind about how powerful an effect it might have. I also began with no preconceived notion of whether the globalization of production is a beneficial development for security relations around the world; my book was not initiated as an effort to argue for a commercial peace.

Because my analysis focuses on an independent variable, there was no need for me to restrict myself to examining a specific dependent variable. I investigate and discuss *all* potential links I could think of by which the globalization of production could influence security behavior, which means following this independent variable wherever it led. Put another way, the goal of my book is to raise as many questions as possible about the influence of the globalization of production and derive the best possible answers to all of them. My answers are sometimes lengthy but other times much briefer, either because the underlying puzzle at issue was easier to resolve or because there were less data available to address it.

Given the broad focus of my book, it is perhaps not surprising that very little of what the book puts on the table for debate is critiqued extensively and much of what it forwards is not critiqued at all. Table 1 shows that out of the twenty-five findings I delineate in the book, four are scrutinized at length in the previous articles while seven more are quickly discussed. My point here is that this symposium is just the start of the debate over how the globalization of production influences security; many of the book's findings require greater scrutiny. Moreover, this table also clearly reveals that

**TABLE 1** Areas of Criticisms of *Producing Security*

	Kirshner	Caverley	Gholz
Chapter 1: Security scholars have neglected globalization of production			
Chapter 2: Finding 1: globalization of production is more significant than trade			
Finding 2: globalization of production is historically unprecedented			
Chapter 3: Theory 1, part a: benefits of conquest and links to globalization of production			Focus
Theory 1, part b: benefits of conquest and production dispersion			Focus
Theory 1, part c: benefits of conquest and knowledge-based economies			
Theory 2: regional economic integration and globalization of production			
Theory 3: weapons development and globalization of production		Discuss	Discuss
Finding 1: Gilpin dynamic (FDI flows undermine the leading state) not operative			
Finding 2: globalization of production does not undermine security role of states			
Chapter 4: Finding 1: U.S. weaponry becomes significantly globalized in last two decades of Cold War			Focus
Finding 2: shift to globalization of U.S. weapons improves quality and reduces costs		Discuss	Discuss
Finding 3: U.S. policy makers recognize need to pursue weapons globalization to enhance quality and reduce costs		Focus	
Finding 4: Soviet economic isolation reduces Soviet weapons competitiveness vis-à-vis United States	Discuss		Focus
Finding 5: U.S. and Soviet cases reveal that the scales have decisively shifted against going it alone in defense production			Discuss
Chapter 5: Finding 1: competition for FDI spurs Mercosur's early consolidation			
Finding 2: Mercosur's consolidation helps promote Argentina-Brazil stability	Discuss		
Finding 3: Mercosur case reveals the globalization of production has the potential to promote stability in the developing world by acting as a force for regional integration	Discuss		
Chapter 6: Finding 1: Soviet imperial control constrains Hungary's ability to access globalization			
Finding 2: economic centralization in Eastern Europe helpful for maintaining Soviet control			
Finding 3: Soviets do not reap imperial gains from Eastern Europe in last decades of Cold War			
Finding 4: Soviet case reveals that the globalization of production lowers the economic benefits of conquest	Discuss		

*(Continued on next page)*

**TABLE 1** Areas of Criticisms of *Producing Security* (Continued)

	Kirshner	Caverley	Gholz
Chapter 7:			
Finding 1: globalization of production promotes great power stability	Focus		Focus
Finding 2: globalization of production mixed for great power/developing country relations			
Finding 3: globalization of production negative for developing country relations		Discuss	
Finding 4: FDI is not a strong contributor to WMD proliferation	Discuss		
Finding 5: globalization of production not eroding U.S. military technological lead			
Chapter 8:			
Finding 1: threats to FDI no longer act as a spur for great power military interventions			
Finding 2: FDI flows are not a constraint on conflict among developing countries			
Finding 3: strong FDI links do not exacerbate conflicts among advanced countries			
Finding 4: terrorist threat not intensified by globalization of production			

## LEGEND:

Discuss: all (or majority) of one paragraph to three paragraphs

Focus: three paragraphs plus

the globalization of production can influence security in a wide variety of ways, thus there may well be other significant links between this variable and security affairs that my book does not discuss but which need analysis. Although the globalization of production is more significant than trade in the global economy, the latter has received massive attention from security scholars while the former has been neglected. This symposium is hopefully just the beginning of a process by which the field's focus of attention on how commerce influences security achieves a more appropriate balance.

### JONATHAN KIRSHNER'S CRITIQUE

Jonathan Kirshner's analysis does not extensively focus on my empirical findings but rather concentrates on "the breadth of their applicability and significance" for great power security relations.<sup>2</sup> (He does not discuss whether

<sup>2</sup> Jonathan Kirshner, "The Changing Calculus of Conflict?" *Security Studies* 16, no. 4 (October–November 2007). Kirshner does very briefly mention that my empirical analysis of the benefits of conquest in the Soviet empire may not be generalizable to all potential kinds of conquerors. Kirshner does not explore this point, but Eugene Gholz devotes a large portion of his article to a directly related argument that I will examine later in this article. Eugene Gholz, "Globalization, Systems Integration, and the Future of Great Power War," *Security Studies* 16, no. 4 (October–November 2007).

he disagrees with my assessment of how the globalization of production influences relations among developing countries or great power/developing country relations.) The core theme of his critique is that the globalization of production only has limited applicability to great power security relations. This is incorrect.

### General Mechanisms That Widely Apply

Recall that my analysis is not one that starts with a particular dependent variable and works backward to explain it. In my analysis, I highlight that the globalization of production can influence great power relations principally via two general mechanisms. First, I conclude that “if a state does not pursue significant internationalization in defense-related production, it will be unable to remain on the cutting edge in military technology.”<sup>3</sup> The implication is straightforward: if a state is subject to an extensive supply cutoff, it will be unable to produce competitive military weaponry. This applies all the time: every state now lives in the shadow of the fact that being subject to an extensive supply cutoff will have a decisive negative effect on its military competitiveness. This is a fundamental change from the historical norm in which states could effectively get by in defense production through reliance on their domestic companies alone.

Of course, not all aggressive actions will lead to such a supply cutoff, but consider the range of scenarios in which this happened in the twentieth century:

1. A state is merely threatening to other states. An example is what occurred during the Cold War. Essentially all the world’s major economic players decided to initiate a supply cutoff on the Soviet Union because it appeared poised to conquer Western Europe.
2. A state undertakes an isolated act of aggression. An example is the comprehensive economic isolation of Iraq after its conquest of Kuwait.
3. A state successfully engages in serial conquest, using one instance of conquest as a springboard for conquering the next located nearby and so on. The extensive supply cutoff the Allied powers put in place on Japan and the Nazis in World War II are examples here.

I very carefully and explicitly frame my discussion in probabilistic terms. To say that the supply cutoff mechanism has applied across all three kinds of scenarios in the past does not mean that it is equally likely to apply to each of them in the future. I argue that an extensive supply cutoff is only highly likely to occur in response to the running-the-tables scenario, in which

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<sup>3</sup> Brooks, *Producing Security*, 80.

a great power successfully engages in serial conquest; but I also stress that the changed parameters of weapons development make *any* possible cutoff in external supplies much more potent than in the past.<sup>4</sup> So, although I do not judge it likely that, for example, China will be subject to an extensive supply cutoff if it were to invade Taiwan, this might happen; and if it does, then China's military capacity will be undermined to an extent unimaginable in previous eras in which supply cutoffs were ineffectual. Moreover, China's vulnerability in this regard may make Chinese leaders more cautious than they would otherwise be. Because he fails to come to grips with the probabilistic nature of my argument, Kirshner interprets my analysis of weapons globalization as *only* having relevance regarding the running-the-tables scenario, missing the more general implications.<sup>5</sup>

The second general mechanism I highlight with implications for great power relations is that "the globalization of production has led to shifts in the structures of the most advanced states that would prevent a conqueror from effectively extracting economic gains from vanquished territory."<sup>6</sup> The weapons mechanism discussed above has applicability not just for the great powers but for all states, since any state could conceivably undertake actions which trigger an extensive supply cutoff. In contrast, the benefits of conquest mechanism only applies to those states that have the capacity to take over a state whose production is significantly globalized and knowledge-based. Although all the great powers have this capacity, most states do not—either because they lack the ability to project power, or because they are too geographically removed from these highly advanced states, or both. Yet I note there is every reason to expect that the number of globalized, knowledge-based countries will increase over time (I used mid-1990s data to delineate nineteen such countries, and there are undoubtedly more states that meet these criteria now). As the geographic spread of these states increases, the number of countries that will be in a position to take one of them over will also increase, thereby further increasing the scope of applicability of the benefits of conquest mechanism.

Although I focus my attention on how these two mechanisms influence great power security relations, seven other findings in the book have relevance for great power security policies. Specifically, the globalization of

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<sup>4</sup> *Ibid.*, 213.

<sup>5</sup> Kirshner's oversight here is a common problem. In one article, William Wohlforth and I show that qualitative researchers in security studies typically fail to present their empirical findings in probabilistic terms and often misinterpret the conclusions of those researchers who do frame their conclusions in probabilistic terms. See Stephen Brooks and William Wohlforth, "From Old Thinking to New Thinking in Qualitative Research," *International Security* 26, no. 4 (Spring 2002): 93–111. In a second article, I stress that the most prominent theory within security studies—realism—was misinterpreted for decades because scholars had failed to recognize that the theory is divided on the basis of implicit assumptions concerning whether statesmen are conditioned by the probability, and not the possibility, of war. See Stephen Brooks, "Dueling Realisms," *International Organization* 51, no. 3 (Summer 1997): 445–77.

<sup>6</sup> Brooks, *Producing Security*, 161.

production will not contribute to a U.S.-China power transition in the foreseeable future (ibid., 55–56); is not undermining the security role of states (ibid., 50–51); is not a strong contributor to WMD proliferation (ibid., 227–31, 240–43); is not eroding the U.S. lead in conventional weaponry (ibid., 234–40); is not acting as spur for great powers military interventions in developing countries (ibid., 247–53); does not cause an exacerbation of security conflicts among advanced countries due to strong foreign direct investment (FDI) linkages (ibid., 257–61); and is not intensifying the terrorist threat (ibid., 261–65).

### The Globalization of Production and Great Power Security Relations

Although my analysis has implications for great power security relations in general, I decided to focus just on one particular scenario: a great power conqueror that seeks to “run the tables”—that is, to use one instance of conquest as a springboard for the next” (ibid., 214). I adopted this focus on serial great power conquerors for three reasons, all of which I set forth in the first chapter of my book. First, great powers that engage in serial conquest (as compared to temporally or geographically isolated acts of conquest) and attempt to extract wealth from the societies they conquer (as compared to those who engage in conquest but who do not undertake extraction) are simply the most dangerous states of all. Second, I was following a common practice in the literature: “a massive amount of literature within international relations is devoted to examining the most dangerous potential outcome in the system: a great power that attempts to fundamentally alter the territorial status quo and is successful in doing so because the gains of military conquest are cumulative” (ibid., 8). Third, the biggest hole in the literature on global commerce and war concerns how great power serial conquerors are influenced by globalization.

Let me expand on this third point. Realist scholars emphasize that great power serial conquerors are precisely the kind of state that is *not* influenced by global commerce. They stress that commerce might influence small states or small conflicts and rivalries, but when push comes to shove, the global economy has no real influence on the most dangerous states and the most consequential of international conflicts. World War I has been held out again and again over many decades as a counter-example by realists to buttress their claim in this regard. It is important to recognize that my analysis examines one part of global commerce and complements a huge existing literature on how the other part, trade, influences conflict. The trade-focused literature has compellingly shown that higher levels of trade reduce the *overall* likelihood of conflict, but it has always had trouble dealing with the realist counterargument—grounded in the World War I example—that this overall finding does not apply, or does not apply strongly enough, to the most dangerous states in the system. A key goal of my book is to address this realist

counterargument head on and demonstrate that it is invalid.<sup>7</sup> And to show why this realist counterargument was invalid, I needed to direct my attention specifically to the issue of how the globalization of production influences great power serial conquerors.

In reacting to this realist counterargument, I could have argued that the globalization of production has a strong potential to lower the likelihood of a great power war being initiated. I do not do so, for two primary reasons. First, I stress that many “other great power stabilizers currently exist besides the globalization of production, in particular the democratic peace, nuclear weapons, international institutions, and public norms against war among advanced countries. Moreover, these stabilizers existed before the globalization of production arrived on the scene.”<sup>8</sup> Second, the globalization of production can only have an influence on great power conflict if leaders are rational. This is something reasonable to assume, but I wanted to develop an argument for how this global production change can influence great power security relations *even if* leaders are not rational (in part because of my focus on serial great power conquerors, some of whom—such as Adolf Hitler—may not be well captured, if at all, by standard conceptions of rationality).

For these two reasons, I focus not on how the globalization of production changes the likelihood of a great power war being initiated but on how it creates “negative feedback” on great powers that undertake serial conquest. As Robert Jervis underscores: “Feedbacks are central to the ways systems behave . . . . Feedback is positive or self-amplifying (and destabilizing) when a change in one direction sets in motion reinforcing pressures that produce further change in the same direction; negative or dampening (and stabilizing) when the change triggers forces that counteract the initial change and return the system to something like its original position.”<sup>9</sup> I show that the globalization of production creates negative feedback on serial conquerors in two ways, directly and indirectly.<sup>10</sup> Indirectly, the globalization of production lends great strength to history’s most prominent form of negative feedback: the balance of power. Historically, great power serial conquerors have generally been met by a blocking coalition that has moved to cut off supplies from reaching the conqueror. These previous supply cutoffs have been ineffectual, however, which is a key reason why beating serial great power conquerors has generally taken so long and been so bloody. My analysis shows the kind of supply cutoffs imposed in the past would now have a far

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<sup>7</sup> One indication of the great importance I place on this task is that the final page of my book closes by discussing this specific point.

<sup>8</sup> Brooks, *Producing Security*, 215–16.

<sup>9</sup> Robert Jervis, *System Effects: Complexity in Political and Social Life* (Princeton: Princeton University Press, 1997), 125.

<sup>10</sup> Brooks, *Producing Security*, 209–17.

stronger constraining effect due to the globalization of production, thereby making the system more stable.

Jervis stresses that although the balance of power is the most prominent form of negative feedback, it is not the only one: the international system exhibits “other forms of negative feedback that resemble balance of power in making ambitious behavior self-limiting if not self-defeating and turning strength into weakness.”<sup>11</sup> Directly, the globalization of production creates negative feedback through its influence on the benefits of conquest. Throughout most history, conquest was cumulative: a great power attempting to run the tables was in a position to expand geographically while easily adding to its long-term stock of power resources that could be used to defend and acquire territory. By reducing the long-term benefits of conquest, the globalization of production makes the system more stable. The smaller the benefits of conquest, the more vulnerable a great power revisionist will be and the more difficulty it will face as it geographically expands the territory under its control.

In sum, my key claim is that the globalization of production creates negative feedback on serial great power conquerors, thereby making the system more stable: “When the economic benefits of conquest are low and great powers cannot effectively go it alone in defense production, it will be structurally harder for a great power to ‘run the tables.’”<sup>12</sup> Nothing in Kirshner’s article affects my confidence in that claim. Kirshner forcefully argues that if the prospects for great power war are already low due to factors such as the democratic peace and shared norms on the use of force, then I am incorrect to claim that the addition of the globalization of production is “changing the calculus of conflict.” In developing his argument, however, Kirshner restricts his focus just to the *initiation of great power war*: he questions whether the globalization of production has “inhibited states from going to war” and whether “wars are less likely now than they would be in the absence of the globalization of production.”<sup>13</sup> Kirshner does not recognize that my core claim is that the globalization of production reduces the *severity of great power war*; nothing he has to say has any real bearing on my argument on this front. Yet his overall point regarding the initiation of great power does have significant merit and suggests that my already weak claim about how the globalization of production influences the initiation of great power war should be diluted yet further.

This hardly warrants the conclusion that the globalization of production has no bearing on our confidence that the great powers will remain at peace. As I note, many prominent realists, such as John Mearsheimer and Kenneth Waltz, are pessimistic about great power security relations; they stress that

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<sup>11</sup> Jervis, *System Effects*, 139.

<sup>12</sup> Brooks, *Producing Security*, 214.

<sup>13</sup> Jonathan Kirshner, “The Changing Calculus of Conflict?”

many of the factors which have long worked for great power peace are fading away.<sup>14</sup> I strongly agree with Kirshner that a series of variables like democratic institutions, norms, and international institutions have dramatically reduced the likelihood of great power war, but the point is that not all scholars share this assessment. Many realists explicitly reject the notion that non-power variables can ever act as meaningful constraints on great power war. In my book, I take on this pessimistic realist argument on its own theoretical terms. My analysis stresses that even in a case where a great power leader emerged who ignored or circumvented the constraints of international institutions, democratic institutions, and norms, then waiting in reserve would be the globalization of production—a variable which cannot be ignored or circumvented and which necessarily makes it hard for a great power revisionist to successfully overturn the system through force no matter what preferences it has. Put another way, I argue that core realist pessimism—the only kind concerning great power relations that exists today in the IR field—is undermined even if we accept all of the arguments these scholars make about the insignificance of non-power variables as being true. Now, this may not be “changing the calculus of conflict” in the way Kirshner has in mind, but it does matter: our confidence that the great powers will remain peaceful is enhanced if the only real argument for why they may not is undermined. My book does this.

### The Scope and Significance of My Core Finding

In addition to his argument that the globalization of production does not reduce the likelihood of great power war, Kirshner also develops a second line of critique: that my argument has relevance for only a very narrow scope of possible wars. The particular arguments that Kirshner develops in this regard are not valid.<sup>15</sup> Nevertheless, the underlying thrust behind this line

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<sup>14</sup> John Mearsheimer, *The Tragedy of Great Power Politics* (New York: Norton, 2001); Kenneth Waltz, “Globalization and American Power,” *National Interest* 59 (Spring 2000).

<sup>15</sup> Kirshner actually develops two such arguments. His first argument is that my analysis has repercussions just to wars of “global military conquest,” which is something he never defines but is presumably an extreme form of the scenario I do focus on: serial conquest by a great power. Here, Kirshner simply misinterprets my decision to focus on a particular scenario that has great import—both for the literature and for international relations generally—to mean that this is the only scenario my analysis applies to. His second argument is that “*Producing Security* is limited in its applicability for wars that have each of the following three characteristics: (1) wars of conquest, (2) wars of conquest for economic gain, (3) wars between certain types of states” whose production is knowledge-based and globalized. Kirshner, “The Changing Calculus of Conflict?” This second argument is also not correct. The first part of his argument—that my analysis is limited to wars of conquest—is only partly valid. The serial great power conqueror scenario I concentrate on is a war of conquest, but my findings have implications for great power relations generally, as stressed above. The second part of his argument—that my analysis is limited only to wars of economic gain—is incorrect. This is true even with respect to the serial great power conqueror scenario I concentrate on. As I stress, “It is important to recognize that the economic benefits of conquest will influence the prospects for great power stability even if states are completely insensitive to economic

of critique does strongly indicate he would doubt the significance of my finding that the globalization of production creates negative feedback on great powers engaging in serial conquest. Does this finding of mine matter? Yes it does, for three reasons.

First, it matters greatly that the globalization of production creates negative feedback on great power serial conquerors, since it is hard to think of a more significant event that can occur within international relations. I highlight the example of World War II to underscore this point:

Had the globalization of production existed at the time of WWII, Germany would have been much less successful since it would not have been able to effectively seize resources from the societies it conquered while also being able to produce competitive technologies under a cutoff of supplies. Given the tremendous costs and stakes associated with great power revisionism—in World War II, 50 million were killed, and the Axis powers almost succeeded in overturning the fundamental nature of the system—having the globalization of production around as reserve stabilizer is now very beneficial indeed.<sup>16</sup>

Second, it is not simply the attempt by a great power to undertake serial conquest that is significant; the mere existence of a threat of this kind can have great consequences. Consider the Cold War: the Soviet Union never actually attempted to conquer Western Europe, but “the U.S. effort to contain the Soviet threat to the system during the Cold War was incredibly expensive in economic terms (for decades American committed 5 to 14 percent of its GDP to defense spending), and U.S. presidents repeatedly engaged in brinkmanship that ran the risk of escalation to global thermonuclear destruction” (ibid., 8). It matters greatly that the globalization now makes threats of this kind less severe: “Had the globalization of production been significant throughout the entire Cold War, the Soviet challenge to the system would have been significantly less acute, resulting in a less costly and less dangerous geopolitical competition” (ibid., 217).

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motivations concerning conflict. When a state seizes substantial territory beyond its borders, it will be prone to become more vulnerable to attack for a variety of reasons: supply lines are extended; more territory must be defended; military resources are dissipated across a wider geographic area; and so on. Of course, a heightened degree of vulnerability might be offset by the ability of the conqueror to extract significant economic resources from the vanquished territory. This is exactly what happened in the early phases of World War II . . . [which] was a key reason it was so difficult for the Allied coalition to beat back the German challenge to the status quo. *Ceteris paribus*, the smaller the economic benefits of conquest, the more vulnerable the aggressor will be as it extends the territory under its control.” Brooks, *Producing Security*, 209–10. Finally, the third part of his argument—that my analysis is limited just to conflicts among the fifteen knowledge-based, globalized countries I delineate—is also not valid (ibid., 208–10). Again, this is true even with respect to the serial great power conqueror scenario in particular; in underscoring my line of argument regarding this scenario extends beyond the fifteen states themselves, I focus on Russia and China. “While China and Russia are not yet globalized, knowledge-based societies, the globalization of production nevertheless restrains their ability to run the tables” (ibid., 219).

<sup>16</sup> Brooks, *Producing Security*, 217.

Of course, Kirshner would likely respond: "This is true, but how likely is it that a great power will pose a threat of this kind?" Such a threat does not seem at all likely today, to be sure. But will this always be true? Kirshner sometimes seems to treat my analysis as if the subtitle of my book is "Multinational Corporations, Globalization, and the *Changed* Calculus of Conflict" and not, as I have it, "Multinational Corporations, Globalization, the *Changing* Calculus of Conflict" (emphasis added). The globalization of production did not meaningfully exist before the 1970s, as he acknowledges. It is also a powerful force that is growing in substantive significance and is expanding in geographic scope over time, bringing more countries into its orbit. And there is every reason to think that both its substantive significance and geographic scope will continue to expand. All of this is important, since it applies directly to the issue of how the great power system will accommodate a rising China, India, and a rejuvenated Russia. Right now, those powers are simply too weak to pose a military challenge to U.S. leadership; they are regional powers, not global powers that can cause trouble in their region on a limited basis. What I was trying to say, and should have said even more clearly, is that the globalization of production gives us confidence that when these states grow in power, they will not be in the same kind of position to challenge the status quo as Germany, Japan, and the Soviet Union were during the twentieth century (ibid., 218–19). Either Russia, China, and India will remain weak, in which case they will be materially unable to challenge, or they will grow and join the orbit of "Denmark-like" countries, in which case my stabilization argument will apply to them in full force.<sup>17</sup>

Finally, reducing the severity of events that have huge downsides clearly does matter, even if the event in question is unlikely to occur. To give an example, consider smallpox. There is an extremely low likelihood of terrorists initiating a smallpox attack on the United States; but if such an attack had occurred a few years ago, it could have been devastating because there was an insufficient supply of smallpox vaccine. Now, in contrast, the United States has enough smallpox vaccine to use on every American in event of a smallpox attack, thereby ensuring that if such an attack were to happen, it would not be devastating. This change matters; would Kirshner claim otherwise?

### Kirshner's Minor Critiques

Although Kirshner focuses his attention on what my analysis has to say about great power relations, he also outlines three more limited critiques of specific parts of my analysis. Kirshner does not directly confront my finding in Chapter 4 that isolation from globalization reduced the Soviet Union's weapons

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<sup>17</sup> As stressed at the end of note 15, my stabilization argument already partially applies to these states even though they are not yet knowledge-based, globalized societies.

competitiveness vis-à-vis the United States, but he does raise a related issue: to what extent were the Soviets actually in a position to successfully take advantage of globalization in order to restore their military technological competitiveness? Kirshner doubts that undertaking globalization alone could “have salvaged the sinking Soviet economy,” but this is a point I readily agree with.<sup>18</sup> My conclusion (both in my book and in my work on the end of the Cold War with William Wohlforth) is that the Soviet Union had two crosses to bear: an inefficient command economy and lack of access to globalization. Kirshner more specifically wonders “how much better off the Soviet Union would have been if it had better production integration with its military allies,” none of which, he notes, were important suppliers of the kind of key defense-related technologies the United States was drawing upon from foreign sources to bolster its weapons competitiveness.<sup>19</sup> He is right that pursuing globalization within the Soviets’ Eastern bloc offered little gains, but this is exactly what I report; the Soviets tried to do this, but very soon found that their “efforts to duplicate on a reduced scale the international production linkages in the West by expanding specialization and production linkages within COMECON would bear little fruit.”<sup>20</sup> Nothing in my analysis implies an argument that it would have been easy for the Soviets to duplicate what the Americans were doing in terms of pursuing weapons globalization, which is what Kirshner seems to have in mind; regardless, the fact is that Soviets were not doing this, and this was harming them. “Soviets’ isolation from the globalization of production had an independent, negative effect on their competitiveness in key dual-use industries and defense-related technologies during the final phase of the Cold War” (ibid., 125).

Second, Kirshner outlines some criticisms of the regional integration mechanism I explore in Chapter 5. He first notes that it has limited applicability—just to Mercosur—which is a point I readily concede and discuss extensively (ibid., 222–23). But why is the limited applicability of this mechanism a problem? To reiterate, my goal is to put the globalization of production on the table and examine all the potential ways by which it could affect security; if a particular mechanism has limited influence, then that is not a problem for an independent-variable-driven book such as mine. This regional integration mechanism was also not chosen randomly; it is the most plausible and best developed one that can be derived from constructivist theory; in part for this reason, it was reasonable to see what strength it might have (ibid., 51). It should also be noted that the current *lack* of applicability of this mechanism actually does matter in a concrete way. As I stress, policy makers in the developing world have often expressed a desire to use regional integration as a means for promoting better security relations, and what my

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<sup>18</sup> Kirshner, “The Changing Calculus of Conflict?”

<sup>19</sup> Ibid.

<sup>20</sup> Brooks, *Producing Security*, 114–15, 115.

analysis shows is that the globalization of production—a new, powerful force in world politics, as Kirshner admits—does not presently offer any reason for changing our assessment that this will be possible (*ibid.*, 222). Finally, that this mechanism currently has little applicability does not mean that this will always be the case; as I note, India is one prominent country that might eventually use regional integration as a means of attracting FDI (*ibid.*, 223).

Kirshner also argues that we should downplay the contribution the globalization of production made to improving security relations between Argentina and Brazil. He highlights that the countries had not gone to war with each other for 140 years prior to Mercosur's consolidation. Regardless of whether Mercosur's consolidation was greatly propelled by the globalization of production (which I show was the case, a finding Kirshner does not challenge), it would thus seem apparent that Mercosur played little role in fostering stability in the Southern Cone. But Kirshner does not mention that Argentina and Brazil took a dangerous turn toward nuclear rivalry starting in the 1970s. It is not the case that Mercosur was the sole, or decisive, factor allowing Argentina and Brazil to put their nuclear rivalry behind them, but it did help somewhat on this score. This matters. If Argentina and Brazil had alternatively followed a path of escalating their nuclear rivalry and each had developed a nuclear arsenal, then they may still have remained at peace—the only metric Kirshner discusses—but this scenario obviously would have been fundamentally more dangerous than the one that actually occurred. “No war” does not mean “no danger.” I also do not see it as a problem that Mercosur was only helpful, but not decisive, in promoting stability. Mercosur's lack of decisiveness on this front would only be a problem were I trying to defend the argument that the globalization of production (or economics more generally) is the, or the key, driver of international behavior.

Third and finally, Kirshner portrays me as claiming that the globalization of production has not made it easier for states to develop WMD. He notes:

Brooks . . . counters that a state like North Korea developed nuclear technology in complete isolation from the international economy. The point is well taken, but certainly the globalized production networks has made it easier for states like Iran and Iraq in their efforts to develop weapons of mass destruction, and, more broadly, the permissive economic and regulatory environment that must accompany globalized production afforded the environment that allowed states even as isolated as North Korea to tap into illicit gray and black market networks in forbidden products.<sup>21</sup>

I have three points to make in reply. First, North Korea is not a lone outlier. I show that “none of the key WMD suppliers and developers are strong participants in the geographic dispersion of production.”<sup>22</sup> Second, I agree

<sup>21</sup> Kirshner, “The Changing Calculus of Conflict?”

<sup>22</sup> Brooks, *Producing Security*, 229.

that participation in the globalization of production can help countries develop WMD; my point is that it does not help decisively. As I note:

Although the benefits of participation in the globalization of production for developing WMD are consequential, they are smaller than for conventional weaponry. The key reason is that while much of what is needed to produce advanced conventional weaponry is dual-use—and therefore controlled largely by private companies—this is less true for biological and, especially, nuclear weapons. At present, it is the personnel, information, and materials located in universities, research institutes, and government facilities that constitute the core proliferation threat with respect to nuclear and biological weapons (*ibid.*, 228–29).

Third, I disagree with Kirshner's claim that a permissive economic and regulatory environment must accompany globalized production. Iraq was decisively closed off from globalization through a concerted regulatory effort, and it is hard to see how the globalization of production was in any way slowed as a result. I believe North Korea, Iran, and other states now pursuing WMD could similarly be isolated from the global economy without any consequential adverse effect on the globalization of production.<sup>23</sup>

#### JONATHAN CAVERLEY'S CRITIQUE

Jonathan Caverley's article concentrates on my analysis in Chapter 4 and makes a number of useful points. My overall assessment is that we are actually in agreement on most of the critical issues.

Most important from my perspective is that Caverley concurs with the main point I made in Chapter 4. The purpose of this chapter is to evaluate whether "the scales had shifted so far against an autarkic defense production strategy that significant internationalization in defense-related production is a necessity for any great power that wishes to be on the leading edge in military technology" (*ibid.*, 76). Based on my analysis in Chapter 4, I conclude that the answer is yes. At the very outset of his article, Caverley agrees with me on this fundamental point: "The book accurately describes the bewildering complexity of the international supply chain to produce the most important elements of a modern military . . . . Brooks correctly claims that the characteristics of modern weaponry demand globalized production."<sup>24</sup> In short, Caverley here is ratifying my core claim.

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<sup>23</sup> In fact, I expressly recommend imposing "coordinated restrictions on FDI into those developing countries that are now understood to be strongly pursuing WMD development" (*ibid.*, 233).

<sup>24</sup> Jonathan Caverley, "United States Hegemony and the New Economics of Defense," *Security Studies* 16, no. 4 (October–November 2007).

Why does Caverley not appropriately recognize that we ultimately agree on the fundamental issue this chapter addresses? It may be because we approach similar material from a very different vantage point. He aims to explain the nature of U.S. defense production and derives a U.S.-specific theory for doing so. Starting with a focus on the United States and working backward to explain its decisions about weapons production, he eventually ends up with a focus on how globalization can enhance U.S. political influence. In contrast, I start with an independent variable—the geographic dispersion of MNC production—and derive a theory of how it can shape the weapons decisions of *all* states through its influence on the quality and cost of weaponry. Chapter 4 then analyzes U.S. weapons production during the final phase of the Cold War because this was the best means for evaluating my underlying hypothesis; for a variety of reasons, the United States during this period was the hardest test case for my argument.<sup>25</sup> In short, I never aimed to fully explain all relevant decisions about U.S. weapons production. I sought to uncover whether it had been strongly influenced by the geographic dispersion of MNC production in order to test a general theory.

Turning things around, I happen to agree with the key substantive argument that Caverley makes. Just after agreeing with me that “the characteristics of modern weaponry demand globalized production,” he goes on to argue that “these same properties, combined with U.S. market power and its comparative advantage in the defense industry, result in a distribution of production that enhances American international influence.”<sup>26</sup> In other words, Caverley argues that the general shift I document—that no state can effectively go it alone in defense production any longer—is relatively most beneficial for the United States. I fundamentally agree with this conclusion of Caverley’s: I argue the globalization of production does not meaningfully restrict U.S. foreign policy autonomy and is likely to enhance U.S. military dominance.<sup>27</sup> Let me now explain this conclusion of mine further.

I conclude that “the geographic dispersion of production is very unlikely to reduce the American edge in military technology over developing countries; instead, we should expect it to enhance U.S. dominance” (ibid., 235). It is only because of the way the book is organized that this particular section in Chapter 7 is targeted to examine the military technology gap between the United States and developing countries; it is very important to recognize that the reasons I identify for why the globalization of production is likely to enhance, not erode, U.S. military dominance *apply generally*. As I stress, the United States is offered great advantages in weapons production through globalization because of its immense economic size and because it has a

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<sup>25</sup> For further discussion, see Brooks, *Producing Security*, 80–81.

<sup>26</sup> Caverley, “United States Hegemony.”

<sup>27</sup> See the discussion in Brooks, *Producing Security*, 211–14, 234–39.

far greater store of knowledge, experience, and skill in producing weapons than any other country. Because no country is close to being equal on either of these two dimensions—not even Japan or China, as I stress—no country is as well positioned to tap into globalization in defense production as is America.

Although the United States might well gain more from pursuing globalization in weapons production than any other state, this would not necessarily be a positive development if it came with a high price in terms of lost autonomy. However, I argue that this is not likely; barring an attempt to run the tables, there is little reason to expect that the United States has lost much autonomy in the security realm due to the globalization of weapons production.<sup>28</sup> Caverley nevertheless consistently positions me as arguing that the United States has, in fact, lost substantial autonomy due to weapons globalization.

Let me highlight one final key area where Caverley and I agree: government decisions matter greatly for defense production. Caverley is intent on showing that U.S. government decisions are crucial for defense production, and he paints me as being someone who says this is not the case, perhaps because he places me in a theoretical box where I do not belong.<sup>29</sup> For example, Caverley at one point argues, “Brooks concludes that states face a structural imperative to globalize in order to remain on weapons technology’s cutting edge, but this begs the question by assuming the need for these weapons in the first place. Neither arms racing nor technological development occurs in a vacuum; a political impetus behind weapons production must exist.”<sup>30</sup> I agree that it is up to a state, and its politics, as to whether it tries to remain on the cutting edge in weapons; my point is that if a state does, as is the case for the United States, then it must pursue globalization. More generally, I also agree that politics and government decisions matter for U.S. defense production. Regarding the globalization of defense production in particular, I make it clear that at the top prime contractor level, forms of internationalization occur—licensed coproduction, coproduction programs, and codevelopment programs—that are driven by the political decisions of the United States.<sup>31</sup>

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<sup>28</sup> Ibid., 211–14. William Wohlforth and I explain in much greater detail why exposure to economic globalization does not constrain American security policy. Stephen Brooks and William Wohlforth, *World out of Balance: International Relations and the Challenge of American Primacy* (Princeton: Princeton University Press, 2008), chap. 4.

<sup>29</sup> Some scholars do assume that firms and other interest groups drive policy decisions, not states, but that is not my position. Brooks, *Producing Security*, 50–51. I also do not believe that economic factors determine state decisions.

<sup>30</sup> Caverley, “United States Hegemony.”

<sup>31</sup> Brooks, *Producing Security*, 82–83.

## The Core Disagreement

Notwithstanding these wide areas of agreement, there is one core point of contention that is directly relevant to the analysis in my book.<sup>32</sup> Our key point of divergence concerns why the United States has enthusiastically pursued weapons globalization in recent decades. Who is right? Before proceeding, it is important to clarify what is at stake. To reiterate, I have a general focus while Caverley's is specific. I argue that all states wanting to remain on the cutting edge in weaponry must globalize, whereas Caverley's critique, and his theory, is completely specific to the United States. What this means is that nothing Caverley has to say in any way undercuts the applicability of my argument to other states. Even if it were the case that the United States pursues weapons globalization for the reason he stresses, this does not mean my theory fails to explain how globalization influences the defense production of other states.

On the specific question at hand, the main problem with Caverley's analysis is that he advances a theory for why the United States pursues weapons globalization but lacks direct evidence to support it. If Caverley's theory were valid, we would expect to find evidence from the Cold War period of a set of decisions in which a forward-thinking DoD saw that it should strongly push defense globalization in order to increase U.S. influence and took proactive steps to do so. Instead, as my book stresses, what we instead find is the following pattern of evidence:

1. There remained a long-standing DoD preference during the final phase of the Cold War to continue doing what the United States had always done—not rely on globalization for defense production—if such a course was feasible.
2. Due to the simultaneous increased complexity of U.S. weapons and the acceleration of the globalization of production, U.S. production became much more globalized beginning in the 1970s, particularly in the lower tiers of U.S. weapons production that were largely outside the purview of DoD officials.
3. During the 1980s, studies emerged—many of them commissioned by the DoD—confirming the supposition that U.S. defense production was indeed shifting toward globalization, particularly in the lower tiers of production.
4. Upon reflection, DoD officials recognized that any attempt to shut down or curtail this ongoing shift toward weapons globalization would be costly in terms of the quality and cost of U.S. weapons. As a result, DoD officials

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<sup>32</sup> Although it does not bear on my analysis, one point that I cannot help but noting concerns the complexity of Caverley's theory. Caverley develops a very elaborate theory to explain why the United States spends so much money on defense R&D and invests so much in weapons production. I think this behavior can be explained much more simply: the United States wants to be without challenge in the military realm.

decided to strongly push back against all efforts by Congress to restrict the ability of U.S. defense companies to use foreign-sourced items.

In outlining this chain of events, I draw on a wide range of evidence, including DoD documents and reports, actions the DoD took, and interviews with DoD officials from the last phase of the Cold War. Caverley does not directly contest this evidence of mine, nor he does present data of this kind for his own alternative understanding of the DoD's approach to weapons globalization. He does not cite any interviews, documents, or reports from the Cold War that provide support for his view of how the DoD approached weapons globalization nor does he highlight any actions the DoD specifically took during this period that directly correspond with his interpretation. I will not review all of the relevant evidence I present, but let me highlight a 1992 interview with then defense secretary Dick Cheney, since it is telling both because he is clearly an individual who greatly prizes gaining influence over other states (the mechanism behind U.S. weapons globalization Caverley stresses) and because he is clear in emphasizing that the United States would have preferred to avoid pursuing weapons globalization but could not do so because the costs were too high in terms of reduced quality and higher cost (the mechanism I stress). Cheney stressed that buying exclusively from U.S.-based companies "would be nice if it were possible to do that" but noted that taking this course "raises questions about my spending money on things that I could get cheaper elsewhere, and it raises the specter of having to rely upon less than first-rate technologies." Cheney further underscored that it would be impractical for a defense firm to "only buy from American suppliers, if by going to the international market they can acquire capability or quality or price that they can't get here at home."<sup>33</sup>

To conclude that U.S. weapons globalization during last two decades of the Cold War was not influenced by policy makers would be a mistake. However, in the lower tiers of production—which, I argue, is where the globalization of U.S. weapons occurred to the greatest and most consequential extent—these decisions largely took the form of not putting the brakes on a process that was happening naturally due to decisions taken by firms.

To be clear about my conclusion, it is important to remember that the production of weaponry is complex. For simplicity, we can separate two kinds of firms that participate in it: prime contractors and subcontractors. As just noted above, my book reviews that internationalization did occur at the U.S. prime contractor level during Cold War in the form licensed coproduction, coproduction programs, and codevelopment programs. I do not spend much time on these globalization efforts that occurred at the prime contractor level simply because they were not consequential in terms of

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<sup>33</sup> Dick Cheney, quoted in *Aerospace Daily*, 23 January 1992.

increasing the quality or reducing the cost of U.S. weapons.<sup>34</sup> And it is the quality and cost of U.S. weapons that I directly focus on in light of my underlying hypothesis, which concerns weapons competitiveness: “If a state does not pursue significant internationalization in defense-related production, it will be unable to remain on the cutting-edge in military technology” (ibid., 78). Caverley does not really contest my assessment that the U.S. pursuit of weapons globalization in the lower tiers of production was significant and greatly enhanced the quality and cost of U.S. weaponry; what he instead stresses is that there is also a different, political advantage of the U.S. pursuing weapons globalization—increased leverage over other states—that is even more important and is achieved via globalization at the prime contractor level.<sup>35</sup> Caverley may well be right but even if so, then this would not mean that my analysis is wrong concerning the scope—or substantive importance—of the U.S. pursuing weapons globalization at the subcontractor level. Caverley’s attention is simply different than mine; his hypothesis is not about how globalization generally influences weapons competitiveness but instead is essentially this: “If the United States pursues weapons globalization at the prime contractor level, then its political influence will increase.”

In the end, I think Caverley mistakenly portrays his argument about why the United States is enthusiastic about weapons globalization as being competitive with the one I advance. He concludes starkly that “political rather than economic reasons explain U.S. enthusiasm for defense globalization,” which implies a claim that his theory explains all of the variance, while

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<sup>34</sup> For further discussion, see Brooks, *Producing Security*, 82–83.

<sup>35</sup> At one point, Caverley does briefly question the overall significance of my finding about globalization in the lower tiers of U.S. defense production, noting, “As defense products require increasing numbers of subcomponents supplied by many firms, the influence of the prime contractors, the companies at the top tier of weapons production has actually grown. . . . Prime contractors control the most important link in the armaments supply chain through their ability to assemble subcomponents into a lethal whole.” Caverley, “United States Hegemony.” I am careful not to overemphasize the importance of lower tiers of production; my view is that pursuing globalization at the lower tiers only leads to a dramatic enhancement of weapons competitiveness when overseen by prime contractors who have great skill and experience at producing weapons. For this discussion, see Brooks, *Producing Security*, 234–39. At the same time, it is a mistake to underemphasize the significance of lower tier producers relative to prime contractors just because the supply chain is complex. Consider this analogy. U.S. presidents once managed a large percentage of government decisions and did so with the help of just a small number of advisers. Similarly, U.S. weapons prime contractors once managed a large share of defense production and did so with the assistance of a relatively small number of suppliers. As the tasks of government became ever more complex, U.S. presidents created a huge bureaucracy and staff to whom they delegated important responsibilities. Similarly, as the complexity of weapons systems greatly increased, U.S. prime contractors set up ever larger chains of suppliers to assist them. It is clear that having a president who can skillfully and effectively delegate to, and manage, a large staff and bureaucracy has become even more significant than in previous years, just as it is clear that having a company that can skillfully manage, and delegate to, a large supply chain is more significant than before. Yet in some respects, U.S. presidents have less control than in days when information and decision making was heavily concentrated in their hands and that of their intimate advisers; similarly, it is clear that in some ways U.S. prime contractors have less control than in the days of when production was more concentrated under their direct purview and a small number of suppliers.

mine explain none.<sup>36</sup> I believe seeing our analyses of the motivations for U.S. weapons globalization as potentially being complementary is much more productive. Caverley focuses on political influence and sees it as being enhanced by the U.S. pursuit globalization at the prime contractor level, while I focus on weapons competitiveness and see it as being augmented by the U.S. pursuit of globalization at the subcontractor level. The United States could very well benefit from weapons globalization in these two ways at the same time.

Although there is no reason the dynamics we respectively point to could not simultaneously operate, I do believe my explanation of U.S. weapons globalization is strong with respect to the Cold War period, while I do not see evidence for Caverley's during this period. Caverley does not make clear whether his analysis is directed at both the Cold War and post-Cold War era to an equal extent or whether the primary focus is on the latter period. In the post-Cold War period, compelling evidence may well emerge for his position. Policy makers certainly have had at their disposal far more knowledge of weapons globalization than they did during the Cold War, and it is therefore more plausible that they may have been actively managing weapons globalization during this later period partly for the reason Caverley suggests. Yet although Caverley's explanation of U.S. weapons globalization may turn out to be valid for the post-Cold War period, there is no reason to expect that the dynamic I point to would drop out; rather, there is every reason to expect a continued U.S. effort to accrue the kind of quality and cost gains achieved through weapons globalization during the Cold War. Caverley's analysis deserves attention and further examination since it is indeed possible that the added political benefit of weapons globalization for the United States he highlights has been ascending in importance, leading the already high level of U.S. weapons globalization to be even further enhanced. Moreover, more research is needed on exactly how the United States can best take advantage of the political leverage it gains from weapons globalization and on the extent to which this enhanced American leverage has a stabilizing influence on great power security relations. These are very important issues that are not addressed in my book.

### EUGENE GHOLZ'S CRITIQUE

Like Kirshner, Eugene Gholz's ultimate interest is with my conclusion about how the globalization of production influences great power security relations.<sup>37</sup> As noted, Kirshner essentially accepts my findings about how the

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<sup>36</sup> Caverley, "United States Hegemony."

<sup>37</sup> As with Kirshner, Gholz does not say whether he disagrees with my assessment of how the globalization of production influences developing countries' security relations or great power/developing country relations.

globalization of production influences the benefits of conquest and the parameters of weapons development, but he questions their substantive importance for our understanding of great power war. Kirshner's core argument—that the globalization of production does not meaningfully alter the likelihood of a great power war being initiated—is also briefly mentioned in Gholz's article. I have already discussed this argument and, at any rate, this is not where Gholz concentrates his analytical firepower. Instead, Gholz's article focuses on critiquing my theoretical analysis of the benefits of conquest and my empirical analysis of U.S. weapons globalization. Gholz's analysis has a number of persuasive points, particularly concerning the short-term benefits of conquest; however, it leaves unscathed my core conclusions.

### Gholz's Analysis of the Benefits of Conquest

Gholz presents a theoretical critique of two of my three hypotheses on the benefits of conquest but does not discuss my associated empirical findings. The focus of his argument is that there are three alternative kinds of conquerors to the one I discuss, and hence that “modern great powers are likely to view aggression as worthwhile *sometimes* rather than never.”<sup>38</sup> Do any of Gholz's alternative conquest scenarios present a challenge to my underlying conclusions about the benefits of conquest?

#### ANALYZING GHOLZ'S ALTERNATIVE CONQUEST SCENARIOS

A fundamental problem with Gholz's theoretical critique is that he misinterprets the chief objective of my analysis and thus develops a number of arguments that are unrelated to it. My analysis is not directed toward examining whether the globalization of production eliminates all incentives for great power aggression. What I specifically focus on is whether *extractive* conquerors can effectively exploit advanced economies *in the long term*. To be clear, by extractive conquerors I mean those who try to seize economic resources from the countries they vanquish. And my focus on the long-term benefits of conquest is reflected in my hypotheses in Chapter 3 (two of which pertain exclusively to the long term, while the third is strongest regarding the long term) and in my empirical analysis in Chapter 6 (which examines the long-term benefits of conquest in the Soviet empire). Most of the alternative conquest scenarios Gholz sketches, however, do not concern extractive conquerors who seek to exploit the vanquished country in the long term: they concern conquerors who do not care about extraction (because their goal is to weaken a country) or do not aim to undertake extraction in the long term (because they simply want to realize a one-time gain from seizing resources).

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<sup>38</sup> Gholz, “Globalization, Systems Integration.”

There is, however, one remaining alternative conquest scenario that Gholz highlights—the “velvet conqueror” scenario, as I will term it—in which extraction is attempted over the long term. What does it entail? It is important to understand that a conqueror can seek to extract resources in three ways:

1. Seizure: It can seize the vanquished country’s existing assets and production inputs (factories, technologies, natural resources, machines, gold reserves, weaponry, people, etc.) and bring these assets back to its homeland.
2. Skimming: It can alter the economy of the vanquished country (reshape what firms make, initiate enhanced natural resource extraction, etc.) to make its long-term economic output (coal, trucks, computers, etc.) of greater use to the conqueror and then send some of this output back to its homeland; and/or it can put in place new forms of revenue extraction (payments for occupation, tribute fees, etc.) that must be paid by the vanquished population/firms to the conqueror over the long-term.
3. Business as usual: It can refrain from seizing output or putting in place new forms of revenue extraction in the conquered state and instead leave taxes the same and simply profit from the existing tax base in the vanquished country.

Gholz’s velvet conqueror scenario is one in which *only* the “business as usual” strategy is employed. He stresses that if a conqueror keeps taxes the same, then my arguments about how the globalization of production reduces the economic benefits of conquest will be undermined: MNCs will continue their business within, and with, the conquered state just as before conquest.

Gholz’s velvet conqueror scenario does not impugn my analysis. His argument has four premises, each of which is problematic: (1) tax revenue is what conquerors want, (2) seizing tax revenues is an effective, available strategy for extracting wealth from conquered advanced societies, (3) a conqueror can control a vanquished advanced society without causing it to change significantly in ways that undermine efforts to extract wealth, and (4) maintaining the same tax rate is sufficient to reassure MNCs.

First, Gholz assumes the potential existence of great power conquerors that will leave taxes the same and simply profit from the existing tax base. In an exhaustive historical review of all instances of conquest of economically advanced societies, Peter Liberman failed to find a single example consistent with Gholz’s scenario: no conqueror has pursued the business as usual strategy.<sup>39</sup>

Second, the absence of any examples of velvet great power conquerors is likely due to the fact that following the strategy Gholz suggests will

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<sup>39</sup> Peter Liberman, *Does Conquest Pay? The Exploitation of Industrial Societies* (Princeton: Princeton University Press, 1996).

rarely, if ever, be a lucrative means of extracting wealth from vanquished advanced countries. Let us assume that a conqueror of an advanced country can somehow run a society without needing to raise new taxes—no new money is needed for fixing infrastructure damaged during the war, for hiring new police, etc. Although some governments in the developing world do tax their citizens and keep a significant portion of this revenue for themselves, advanced country governments are not getting rich from tax receipts. In advanced societies, there is not a large pool of available tax receipts for a conqueror to seize since the money that comes in from tax receipts is spent by these governments on services and programs. And virtually all advanced country governments do not consistently have sufficient tax revenue to meet these spending priorities, but instead are prone to run budget deficits. In the 28 Organization for Economic Cooperation and Development (OECD) countries, the accumulation of public debt resulting from this tendency to run deficits is substantial—an average 76.5 percent of GDP in 2008—and interest payments to finance this debt averages 1.8 percent of GDP in 2008.<sup>40</sup> For a typical OECD country, Gholz's leaving taxes alone strategy would thus be completely ineffectual as a wealth extraction strategy. Instead of being in a position to pocket a large pool of unused tax receipts, the conqueror would instead be stuck with the need to finance the country's debt! The only way a conqueror could free up large pools of tax revenue that they could seize would be to cut spending on programs and services, and thereby run a large government surplus. However, significant, unpredictable changes in government policies will also make it hard for the conquered country to maintain links to globalization for the reasons I describe. And needless to say, cutting government spending will anger the local population—a point to which I will now turn.<sup>41</sup>

Third, Gholz believes that if a conqueror simply leaves taxes the same, it can control a vanquished advanced society without causing it to change in ways that undermine efforts to extract wealth. This would be true if taxes were all that mattered. But Gholz forgets about nationalism, a key factor that my theoretical analysis incorporates. Nationalism is a powerful force in today's world. It is hard to think that a great power conqueror that pursues extraction in an advanced country will be able to escape organized resistance.

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<sup>40</sup> Data available at [www.oecd.org/statistics/](http://www.oecd.org/statistics/)

<sup>41</sup> Gholz might point to military spending as a spending priority that can be cut in the vanquished country following conquest. However, most advanced countries spend very little on the military. Moreover, cutting spending on the military in the vanquished country may not be very easy, as the recent Iraq case shows. The United States famously disbanded the Iraqi army, a step analysts see as fueling the strength of the Iraqi insurgency. The Iraq experience also shows that if a conqueror does disband the armed forces, it would be wise to invest in a substantial policing force drawn from the conqueror's forces—which is expensive—and/or continue payments to those in the military rather than simply have them join the ranks of the unemployed. Either way, this vitiates the argument that there is additional revenue to be accrued without raising taxes.

The United States did avoid resistance in Japan and Germany, but it did not pursue extraction; in fact, the United States did the exact opposite: *American* economic resources were transferred to Japan and Germany. More recently, even when extraction has not been pursued, such as the United States in Iraq, conquest has met with stiff resistance. While it is hard to overthrow conquerors, it is now easy to make their lives difficult: a very small number of skilled, well-placed computer hackers could do great damage to a knowledge-based economy, and the Iraq experience shows that a very small number of insurgents (through 2006, there were less 20,000 insurgents) can create enough chaos to literally bring a country to its knees.<sup>42</sup> For obvious reasons, resistance efforts make effective extraction after conquest difficult, which is why Liberman concludes from his analysis that the *only* way effective extraction can possibly occur is if a conqueror is ruthless in suppressing popular resistance. My book shows that precisely the kinds of strategies a conqueror will need to put in place to ruthlessly suppress resistance—monitoring the output of workers, having a large secret police presence, ensuring economic resources are not used to support resistance efforts, and so on—are fundamentally contrary to the functioning of a knowledge-based, globalized society. Liberman may be right that clamping down on advanced societies can suppress rebellion, but the kinds of firms and workers that now exist in these societies will react to these tactics in ways that prevent effective wealth extraction. Analysts of the Soviet empire routinely stress that the Soviets faced an inescapable trade-off between “cohesion and viability”—efforts to enhance cohesion (that is, to reduce the chances of rebellion in Eastern Europe) could only come at the expense of viability (that is, reduced East European economic capacity and competitiveness). My argument is that nationalism and the globalization of production mix in such a way that this cohesion versus viability trade-off observed in the Soviet case is now far more acute for a potential great power conqueror of an advanced state.

Fourth and finally, Gholtz’s velvet conqueror scenario is based on the notion that if a conqueror does not raise taxes, then MNCs will be completely reassured. My theoretical arguments draw on the literature developed by scholars such as Douglass North, Mancur Olson, and Barry Weingast that examines the influence of credible limits on the exercise of state power.<sup>43</sup>

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<sup>42</sup> The Brookings Institution, “Iraq Index: Tracking Variables of Reconstruction and Security in Post-Saddam Iraq,” 13 September 2007, 26–27, 41. Available at <http://www.brookings.edu/fp/saban/iraq/index.pdf>.

<sup>43</sup> See, for example, Douglass North, “Institutions and Credible Commitments,” *Journal of Institutional and Theoretical Economics* 149, no. 1 (1993): 11–23; Mancur Olson, “Dictatorship, Democracy, and Development,” *American Political Science Review* 87 no.3 (1993): 567–76; Douglass North and Barry Weingast, “Constitutions and Commitment: The Evolution of Institutions Governing Public Choice in Seventeenth-Century England,” *Journal of Economic History* 49, no. 4 (1989): 803–32; and Barry Weingast, “Constitutions as Governance Structures: The Political Foundations of Secure Markets,” *Journal of Institutional and Theoretical Economics* 149, no. 1 (1993): 286–311.

This literature firmly establishes that the governing authority must not simply establish property rights and avoid excessive extraction of wealth, but must make a credible commitment to maintain these policies. I emphasize that “even if the ‘correct’ policies were initiated that might attract MNCs to a conquered territory, such policies would not be credible over the long term. An extractive conqueror will not be able to assure foreign investors that it will abide by these policies and will not seize the assets of MNCs, extract excessive rents from them, or generally shift policies in ways that reduce the cost-effectiveness of their investments.”<sup>44</sup> By presuming that the only economic policy that matters to MNCs is the tax rate, Gholz truncates my theoretical argument; the reality is that conquerors will have to refrain from self-serving behavior regarding *all* economic policies that might influence the cost-effectiveness of MNC investments. And he also misinterprets my theoretical argument by presuming that if a conqueror has a chance to engage in “good behavior,” then that will be sufficient to overcome the credibility problem I emphasize. Here Gholz neglects what is probably the most important argument from the literature I draw upon: institutional or electoral constraints on power are necessary for establishing a credible commitment to maintain economic policies. No matter how good the economic policies of a conqueror, it will always have its credibility constrained by the fact that it lacks institutional or electoral constraints on its rule in the conquered territory.

#### THE SHORT-TERM BENEFITS CONQUEST

Gholz’s velvet conqueror scenario—the only one that engages my analysis on long-term extraction by a conqueror—thus does not undermine my argument. What about the short-term benefits of conquest? I do not concentrate on this issue, largely because it is less significant: the distribution of power can only be significantly changed through conquest if a vanquished country is “milked” year after year and not just in a single instance. As noted, two of my hypotheses are only relevant regarding the long-term benefits of conquest. Although my third hypothesis is strongest regarding the long term, it does have potential relevance for the short term as well: “In the most advanced states, the ability of a conqueror to extract economic resources is likely to be much lower than in the past because production and technological development are now less concentrated geographically” (*ibid.*, 70). Gholz’s discussion of the short-term application of this hypothesis is the most convincing section of his article.<sup>45</sup> That being said, Gholz’s critique is not nearly

<sup>44</sup> Brooks, *Producing Security*, 59.

<sup>45</sup> Gholz does not directly acknowledge that this hypothesis is strongest regarding the long-term benefits of conquest and that his critique is ultimately directed at the short-term application of it. As I

as compelling as he portrays it to be; while it does reduce the strength of the short-term application of this hypothesis, it does so only slightly.

Gholz's critique is weaker than he believes for three reasons. First, Gholz misinterprets my underlying claim. I do not say that the foreign affiliates of MNCs that exist in a conquered country have *no* economic value to the conqueror. I stress that these captured affiliates "though still valuable, will be proportionately less valuable than if the conqueror were able to take over the full value-added chain" as was routinely the case in prior eras (*ibid.*, 62).

Second, Gholz neglects that my theoretical argument pertains not just to foreign affiliates, but also inter-firm alliances (*ibid.*, 64). Whether his critique applies, or applies equally, to inter-firm alliances is very unclear given that these agreements are very easy to dissolve (that they can be easily jettisoned is, in fact, one of the reasons that MNCs value them so much).

Third, Gholz's logic is most compelling with respect to an isolated act of conquest. In the situation where a great power conqueror engages in serial conquest of advanced states, MNCs will be especially prone to cease reliance on their foreign affiliate located in the vanquished country as soon as it is practical to do so: the conqueror's credibility regarding the protection of property rights will be especially low and the political, physical, and economic risks of remaining in the vanquished country will be especially high.<sup>46</sup>

#### OVERALL ASSESSMENT

My theoretical argument about the benefits of conquest contains *three* elements, which work *together* to reduce the economic benefits of conquest in the most advanced countries *in the long term*. I place these words in italics, because Gholz does not: (a) address all of the elements of my argument, (b) assess my argument as a package, and (c) specify whether he is focused on the short term or the long term. In the end, Gholz's analysis does not provide a justification for adjusting my underlying claim about how the globalization of production influences the long-term benefits of conquest. Although his analysis of my hypothesis on MNC production dispersion and conquest is

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stressed, to the extent that a conqueror can derive economic benefits from the foreign affiliate in the short term (which will occur in those circumstances when an MNC cannot easily find an alternative supplier) these gains were "likely to be temporally restricted to a significant degree" for a variety of reasons. See Brooks, *Producing Security*, 63.

<sup>46</sup> These various risks are delineated at Brooks, *Producing Security*, 63. Furthermore, consider that the great powers are the leading sources of FDI. If one great power were to engage in an isolated act of conquest, then the other great powers will likely say: "This does not affect me." But if one great power initiates an effort to run the tables, then the other great powers will likely say: "This could be us; we might be next." In the former scenario, great powers are unlikely to care if their MNCs engage in FDI in the conquered territory; in the latter scenario, they would be irrational not to care: FDI from their MNCs sent to the conquered territory would provide material assistance that aids the aggressor's ongoing effort at running the tables.

quite compelling, his critique is ultimately directed at the short-term application of it and only somewhat weakens the strength of my argument even on this point.

### Gholz's Analysis of U.S. Weapons Globalization

Cavarley agrees with my general finding from Chapter 4 that the scales have shifted against going it alone in defense production. Kirshner similarly validates this finding. Gholz does not directly address this finding: he focuses on the U.S. case without acknowledging that the United States was a test for my general hypothesis. He presents two different critiques concerning my analysis in Chapter 4: the first concerns the role of systems integration in the Cold War, and the second pertains to the significance of U.S. weapons globalization.

#### EXPLAINING THE AMERICAN COLD WAR VICTORY

Gholz forwards a very bold argument: “systems integration is the key source of American Cold War victory.”<sup>47</sup> In developing this argument, Gholz contrasts his position against a straw man: he paints my argument about how the globalization of production influenced this event as being a uni-variable, deterministic one. He notes that I “attribute the Soviet collapse to a lack of access to globalization” and, more specifically, that “Brooks argues that the Soviet Union’s inability to access global markets . . . doomed the USSR in the Cold War competition.”<sup>48</sup>

Chapter 4 of my book is not directed at explaining how the Cold War ended.<sup>49</sup> I have, in fact, written a great deal with William Wohlforth on why the Cold War ended—three articles and a book chapter—and these analyses painstakingly make clear that the Soviet failure to access globalization is not the only cause of the Cold War ending.<sup>50</sup> We argue that economic constraints *in general* provide a powerful, but hardly complete, explanation of this event: the relative inefficiency of the Soviet economy and the lack of Soviet access

<sup>47</sup> Gholz, “Globalization, Systems Integration.”

<sup>48</sup> *Ibid.*

<sup>49</sup> I analyzed the United States during the latter Cold War period because this was the hardest case for evaluating my hypothesis. See Brooks, *Producing Security*, 80–81. I then contrasted the U.S. experience with the Soviet Union because doing so provided additional leverage on my underlying hypothesis; the two superpowers were quite similar in a number of important respects, although hardly identical as I stressed. See *ibid.*, 102–3.

<sup>50</sup> Stephen Brooks and William Wohlforth, “Power, Globalization and the End of the Cold War: Reevaluating a Landmark Case for Ideas,” *International Security* 25, no. 3 (2000/01): 5–53; “New Versus Old Thinking in Qualitative Research,” *International Security* 26, no. 4 (2002): 93–111; “Clarifying the End of Cold War Debate,” *Cold War History*, Vol. 7, no. 3 (August 2007), 447–54, and “Economic Constraints and the End of the Cold War,” in William C. Wohlforth, ed., *Cold War Endgame: Oral History, Analysis, Debates* (University Park, PA: Pennsylvania State University Press, 2002).

to globalization *in tandem* made it progressively harder for the Soviets to keep up in the Cold War competition. I expressed this underlying conclusion clearly in my book:

Before the 1980s, the Soviets were already running up hill in the arms race because of their inefficient command economy. The rapid acceleration of the globalization of production, and Soviet isolation from it, made the incline steeper and would have done so to a progressively greater extent had the Cold War continued.<sup>51</sup>

In this article and several other publications, Gholz helpfully underscores that how a nation goes about creating weapons systems is very important. I actually agree with him that systems integration has great significance. As I noted, “It is one thing to have the tools necessary for production; it is quite another thing to possess the necessary production experience, knowledge of systems integration, and design skills to be able to use these tools effectively” (*ibid.*, 235).<sup>52</sup> However, Gholz pushes his argument about systems integration much too far. In terms of explaining the American Cold War victory, Gholz would like to move away from the general assertion Wohlforth and I make—the U.S. was stronger technologically and economically than the Soviet Union—and replace it with a very specific one—the U.S. was stronger than the Soviet Union because it had expert systems integration while the Soviets did not. But surely the system integrators that Gholz highlights are not responsible for the United States having all of the advantages that it had over the Soviet Union—including the world’s largest economy, a large network of rich allies with great technological strength, and the world’s best system of higher education. Although we would never want to forget that having skill in creating weapons is important, it is also a mistake to make excessively strong claims for its significance.<sup>53</sup>

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<sup>51</sup> Brooks, *Producing Security*, 125.

<sup>52</sup> Although I make only this limited explicit reference to systems integration in my book, it is important to note that pages 235–38 develop a detailed argument that the United States is much better at producing weapons than any other country—which is directly compatible with the basic thrust of Gholz’s argument. I also briefly mention the U.S. weapons procurement system on pages 102–3 and 124 of my book, noting just that it is centralized (and thus that the U.S. and Soviet defense production systems were somewhat similar in this dimension as compared to the Soviet and U.S. economies as a whole, which were night and day different—decentralized for the latter, and centralized for the former). In noting that the U.S. weapons procurement system is centralized, I do not mean to imply that it is bad.

<sup>53</sup> In addition to making an overly strong claim for his preferred independent variable, Gholz also miscodes the key dependent variable of interest: U.S. military technological competitiveness. Gholz notes “U.S. military innovation clearly thrived in the 1950s, well before the modern phase of globalization . . . . The fastest rate of increase in the gap between Soviet and military technology may well date to the pre-globalization period.” See Gholz, “Globalization, Systems Integration.” In support of his view, Gholz highlights a small, very select group of defense systems where the United States made gains in the 1950s relative to the Soviets. Yet during the 1950s, the Soviet Union also made advances in many areas (for example, ballistic missiles). Up until the final phase of the Cold War, each side had advantages in weapons

## EVIDENCE ON THE EXTENT OF U.S. WEAPONS GLOBALIZATION

Gholz's second critique of Chapter 4 concerns the extent of U.S. weapons globalization. Prior to the 1970s, I agree with Gholz that there was little globalization of U.S. defense production. After this time, I maintain that U.S. defense production strongly shifted toward globalization. In the end, Gholz's critique does not provide a basis for altering my specific conclusions about U.S. weapons globalization. Before discussing Gholz's argument, let me begin by quickly reviewing the four patterns of evidence that support my position, the first three of which are presented in my book.

(1) Findings from U.S. Government Studies: The U.S. government was intensely interested during the final phase of the Cold War in discovering the degree to which the United States relied on globalization in defense production and devoted untold amounts of money and personnel to researching this question. In total, the U.S. government produced sixteen different studies during the mid-1980s and early 1990s that gauged the extent of U.S. weapons globalization (one by the Commerce Department, one by the GAO, three by the Office of Technology Assessment (OTA), and eleven by the DoD). As I review in my book, all of these sixteen U.S. government studies reach the same conclusion: the globalization of U.S. weapons production was extensive in the final phase of the Cold War.<sup>54</sup>

(2) Assessments of Benefits of Globalization by DoD and U.S. Defense Firms. In my response to Cavarley, I have already noted that interviews with DoD officials and DoD documents clearly indicate an overall DoD assessment that the globalization of U.S. weapons production was beneficial in terms of the quality and cost of U.S. weapons. U.S. defense firms share the same assessment; this is the finding that emerges from several studies (*ibid.*, 93) and, most tellingly, a survey of defense contractors by the Commerce Department devoted to assessing why U.S. defense contractors engage in foreign sourcing in defense production (*ibid.*, 95–96). As I stress in my book, DoD and U.S. defense contractors also *act* on the basis of these assessments—most notably,

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development that essentially cancelled each other out. See the discussion in Brooks, *Producing Security*, 102–3. As I report in *Producing Security* and in my analyses with William Wohlforth, it was only in the 1980s that the United States began to significantly move ahead of the Soviet Union in a very wide range of military technologies—precisely the era in which the globalization of production became so salient. See Brooks, *Producing Security*, 105–12; Brooks and Wohlforth, “Power, Globalization”; Brooks and Wohlforth, “Economic Constraints,” in Wohlforth, ed., *Cold War Endgame*.

<sup>54</sup> Brooks, *Producing Security*, 86–92. It should be noted that I do not directly cite all eleven DoD studies in my book. I cite and quote from a 1988 study and also provide a lengthy quote from a 1986 study which is devoted to analyzing the results of ten prior DoD studies (the quote summarizes the overall finding from these ten studies). I also cite two non-government studies, the first of which found significant internationalization in U.S. defense production while the second did not. The second study centered on prime contractors, however, and it is in the lower tiers of production where the globalization of U.S. defense production is most significant.

for decades they have lobbied strongly against enhancing the scope of Buy American restrictions.<sup>55</sup>

(3) Production by MNCs is Globalized to the Greatest Extent in Key Dual-Use Sectors. Modern U.S. weapons systems have extraordinarily complex production chains (ibid., 90–91) and greatly rely on “dual-use” technologies like computers and microelectronics that have potential applications both for commercial production and defense production (ibid., 84–85, 90–91). As it turns out, the list of sectors in which production by MNCs became globalized to the greatest extent from the 1970s onward reads like a “who’s who” of the dual-use technologies featured in modern U.S. weapons systems. Specifically, inter-firm alliances are concentrated in the following sectors: microelectronics, new materials technology, telecommunications, chemicals, computer technology, computer software, and industrial automation (ibid., 33–34, 85–86). And MNCs have geographically dispersed production to the greatest extent in the following sectors: computers, machinery, chemicals, electronic components, electrical equipment, transportation equipment, and electronic products (ibid., 28–29). Given that the globalization of production advanced to the greatest extent in precisely those dual-use sectors that form the core foundation of modern weaponry, it thus only stretches things slightly to say that the terms “globalization of production” and “globalization of defense-related production” are synonymous. And when it comes to the globalization of production, the United States has been at the forefront for decades. It has always had by far the largest number of MNCs that vigorously participate in the globalization of production and has also long been the most favored location for FDI by MNCs from other countries.

(4) Interviews with U.S. Defense Contractors. For four methodological reasons, the test of my underlying hypothesis specifically focuses on the globalization of U.S. weaponry during the last two decades of the Cold War.<sup>56</sup> I do not examine or discuss the post-Cold War era.<sup>57</sup> To provide a contemporary supplement to the evidence in my book, interviews were conducted this summer with officials from Lockheed Martin and Boeing (respectively, the first and second largest U.S. defense contractors) who agreed to provide information as long as they were not identified by name. These interviews were very enlightening on three important points:

1. As in the Cold War period, a huge number of foreign companies contribute to U.S. weapons production—a Boeing official estimated that Boeing’s

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<sup>55</sup> See my discussion of these lobbying efforts in Brooks, *Producing Security*, 100–2, 127–28. DoD also lobbies for, and extensively uses, a wide range of waivers, exceptions, and other means to very effectively skirt those Buy American restrictions that exist now. For a discussion, see ibid., 101–2.

<sup>56</sup> These reasons are delineated in Brooks, *Producing Security*, 80–81.

<sup>57</sup> In a single sentence, I did refer to a 2003 estimate by Michael Wynne (the undersecretary of defense for acquisition) that “about 40 percent of machine tools used on U.S. weapons systems come from foreign suppliers.” Ibid., 126.

- supply chain for a weapons system could include up to 2,000 foreign subcontractors (why this is only an estimate is discussed below).
2. A Lockheed Martin official stressed the U.S. government, and even defense contractors themselves, do not presently have anywhere close to full knowledge of the foreign suppliers that contribute to U.S. weapons systems.
  3. In the judgment of officials from both Lockheed Martin and Boeing, it would be “impossible” for any U.S. defense contractor to provide a full list of foreign subcontractors used in a weapons system if ever requested to do so by the U.S. government because weapon supply chains are so complex and contain so many foreign suppliers.

#### GHOLZ’S CRITIQUE OF THE EVIDENCE ON U.S. WEAPONS GLOBALIZATION

The four sets of evidence reviewed above all point in the same direction: the globalization of U.S. weapons production is extensive, a dramatic shift from the “remarkable degree of autarky” the United States achieved in defense production before the mid-1970s.<sup>58</sup> Gholz confronts only a small fraction of this evidence and does so ineffectively. He of course cannot address the defense contractor interviews just discussed, since these were not included in my book. But he was in a position to address the other three patterns of evidence. What does he have to say about them?

Regarding evidence pattern 1 (findings from U.S. government studies), Gholz ignores all but one of the sixteen government studies of U.S. weapons globalization discussed in my book. The lone government study that he does mention—the 1992 Commerce study—is admittedly the best one, but its conclusions are also powerful because they match up with those from the other fifteen government studies that Gholz does not mention.

Regarding evidence pattern 2 (assessments of benefits of globalization by DoD and U.S. defense firms), Gholz has nothing direct to say.<sup>59</sup> Nor does he himself point to any U.S. defense firms or DoD officials who assess that the United States does *not* greatly benefit from pursuing weapons globalization.

It is regarding evidence pattern 3 (production by MNCs is globalized to the greatest extent in key dual-use sectors) that Gholz focuses his analytical attention. Although he does not use the term, Gholz’s argument is essentially that this part of my analysis suffers from the ecological fallacy. He agrees with me that “during the Cold War and especially starting in the 1960s, high-tech

<sup>58</sup> Ethan Kapstein, *The Political Economy of National Security* (New York: McGraw Hill, 1992), 180.

<sup>59</sup> The only thing Gholz can potentially point to in this regard is the fact that some members of Congress occasionally argue for scaling back the extent of U.S. weapons globalization. But members of Congress have many motivations; we cannot infer that those in Congress who call for ramping up Buy American policies do, in fact, believe that pursuing weapons globalization is not helpful on quality and cost grounds (to be clear, Gholz does not himself make this inference).

military systems relied on advanced electronics, information technology, and specialty materials for their cutting-edge performance—and during that same time period, the electronics, information technology, and chemical industries led the process of globalization.”<sup>60</sup> But he stresses that knowing that the globalization of production was generally extensive in these key dual-use sectors does not specifically tell us that U.S. defense contractors actually relied on foreign sourcing “rather than products made by the dozens or hundreds of purely domestic firms.”<sup>61</sup>

This argument of Gholz’s alone would be enough to raise a question about my third pattern of evidence. But Gholz goes beyond this to develop a second argument, suggesting that there are actually strong reasons why U.S. weapons producers are likely to act very differently from the high-tech commercial firms whose production so clearly became globalized during the final phase of the Cold War. Specifically, Gholz argues that U.S. weapons producers will be prone to shy away from pursuing globalization because they fear Congressional interference and, unlike commercial firms, do not care much about costs.

How do I respond to this line of criticism? It is certainly true in principle that we cannot conclude that U.S. weapons producers pursued globalization just because we observe widespread globalization in dual-use sectors like computers and microelectronics that are known to be extensively employed in U.S. weapons. Luckily, however, we have three pieces of powerful evidence—two of which are presented in my book—which show that U.S. *defense firms themselves specifically pursue globalization*.

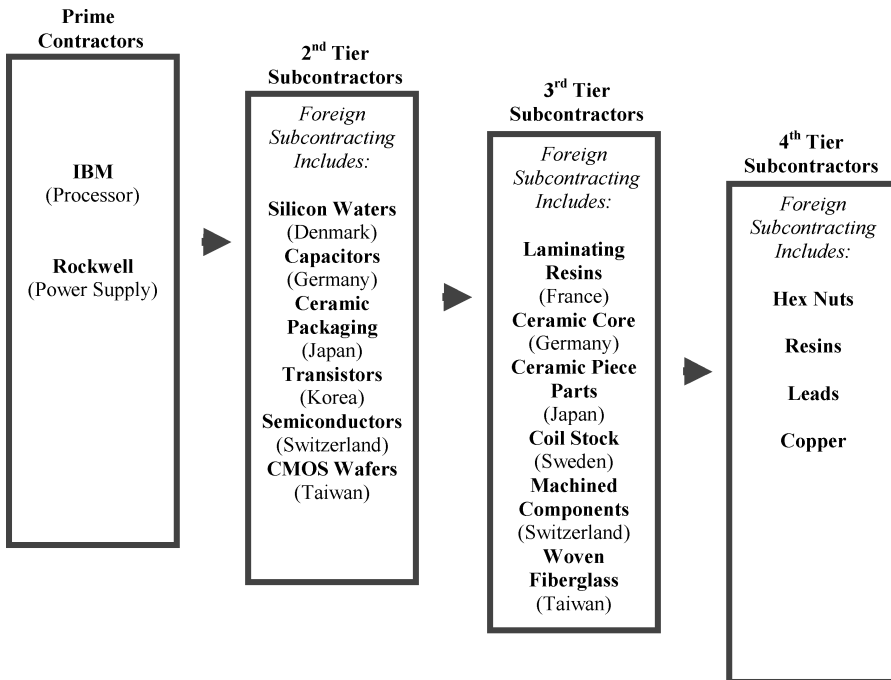
First, as noted above, sixteen out of sixteen U.S. government studies from the 1980s conclude that U.S. defense firms themselves pursued internationalization extensively. Second, the very best of these studies—a 1992 Commerce Department study—showed in meticulous detail the precise manner in which U.S. defense contractors expansively pursued globalization during the 1980s. The Commerce study undertook an exhaustive examination of the supply chain for three representative U.S. Navy weapons systems (the HARM missile, the Mark-48 ADCAP torpedo, and the Verdin communication system) and found that the use of foreign subcontracting was extensive.<sup>62</sup> The genius (and difficulty) of the Commerce study is that it did not merely identify the second-tier subcontractors, but also sought to determine whom the second-tier subcontractors turned to as subcontractors in the third tier and, in turn, whom the third-tier subcontractors employed in the fourth tier of subcontracting. Figure 1 below shows a select number of the foreign suppliers that were identified in the various subcontracting tiers of the Verdin (in total, 163 foreign suppliers were identified from 26 countries). Significantly, the

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<sup>60</sup> Gholz, “Globalization, Systems Integration.”

<sup>61</sup> Ibid.

<sup>62</sup> For a detailed discussion of this study see Brooks, *Producing Security*, 89–92.



**FIGURE 1** Supply chain for Verdin communications system.

Commerce study determined that forty percent of second-tier subcontractor procurements in the Verdin went to foreign subcontractors.<sup>63</sup>

Of course, the finding from the Commerce study that U.S. defense contractors pursued extensive globalization regarding these three weapons systems might not be generalizable. Yet these three weapons systems were specifically chosen as representative weapons used by the U.S. Navy and, moreover, it is significant that the findings of the Commerce study match up with the other fifteen government studies of U.S. weapons globalization from this period. There is also a third piece of evidence that validates the general finding from these government studies: recent interviews with defense contractors reveal that widespread internationalization occurs in their supply chains. As noted, an official from Boeing stressed that its supply chain for a weapons system could include up to 2,000 foreign suppliers, while an official from

<sup>63</sup> It should be noted that despite devoting large amounts of personnel time and money and having the weight of the U.S. government to pry open the books of defense contractors, even the Commerce Study was only able to incompletely measure foreign sourcing in a way that underestimates the contribution of globalization. This is because the “trail” of foreign subcontracting stopped with the first identified foreign firm in the production chain—that is, the Commerce study determined which foreign companies were directly subcontracted to, but it did not ask whom the foreign subcontractors themselves used as subcontractors (and foreign firms, as the Commerce study stresses, likely had a strong tendency to employ foreign subcontractors).

Lockheed Martin noted that use of foreign subcontracting is so extensive that there is no way to identify all of the foreign suppliers it uses.

The accumulated evidence showing that U.S. defense firms themselves strongly pursue globalization is thus very substantial. According to Gholz, there is one unpublished study by Ken Flamm that reaches a divergent finding. This is not the case. What the Flamm study specifically finds is that foreign sourcing in U.S. weapons is not *increasing* very much. I advance no claim about U.S. weapons globalization continually increasing. The core conclusion from my analysis is simply that U.S. weapons production had long been autarkic but strongly moved toward the pursuit of globalization in the final phase of the Cold War. Relatedly, Gholz does not appreciate the nuanced nature of my finding about what particular aspect of U.S. weapons production has undergone a significant shift toward globalization. As I stress, my analysis does not mean

that U.S. weapons systems now have, or are likely to have in the future, high levels of internationalization at all tiers of production. At the defense prime contractor level, where much weapons production is still military-specific, U.S. defense companies are still the key drivers of weapons production for a variety of political and economic reasons, and will probably remain so. It is at the lower tiers of defense production, where dual-use items are key, that U.S. weaponry is now heavily internationalized.<sup>64</sup>

Flamm's study uses DoD data, but this cannot be used to assess the extent of U.S. weapons globalization for a simple reason: the DoD does not collect data on the lower tiers of subcontractors, *exactly where globalization is most significant in U.S. defense production*.<sup>65</sup> In the end, the Flamm study does not provide a basis for challenging my analysis of U.S. weapons globalization. The Flamm study does, however, pose problems for Cavarley's examination, given that he expects U.S. weapons globalization will increase over time and that extensive internationalization will occur specifically at the top tier of U.S. defense production.

To sum up, if my only evidence was that electronics, computers, new materials, and other dual-use sectors became highly globalized in the final

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<sup>64</sup> Brooks, *Producing Security*, 126.

<sup>65</sup> The lack of data on the lower tiers of subcontracting is a significant enough omission, but it should be noted that DoD data on foreign subcontracting actually suffers from a whole series of important limitations. A 2006 GAO report on defense trade data sums up as follows: "DoD foreign subcontractor data was not used in our analysis as it only captures a segment of foreign subcontracts and is of limited use as an indicator of aggregate defense trade. It does not capture: subcontracts beyond the second tier; subcontracts worth under \$500,000; subcontracts where under \$100,000 of work is performed abroad; subcontracts let alone prime contracts where (1) the principal place of performance is abroad and (2) foreign place of performance is indicated in the contractor's offer. In addition, GAO has previously identified contractor compliance problems with the requirements to report foreign subcontracts to DoD." General Accounting Office, "Defense Trade Data: GAO Report Number GAO-06-319R," 27 January 2006. Available at [www.gao.gov/new.items/d06319r.pdf](http://www.gao.gov/new.items/d06319r.pdf).

phase of the Cold War, then Gholz would be right to raise the ecological fallacy critique and it would be powerful. But as just discussed, defense firms themselves specifically pursue globalization; indeed, they seem just about as eager to undertake globalization as non-defense firms.

WHY IS U.S. WEAPONS GLOBALIZATION SO MUCH MORE EXTENSIVE THAN GHOLZ EXPECTS?

Why U.S. weapons production is so much more globalized than Gholz expects becomes clear when you consider his second argument about why he believes defense firms should be relatively disinclined to pursue globalization. In comparison to commercial high-tech firms, Gholz suggests two reasons why defense firms will be averse to pursuing globalization. The first is political interference. As Gholz explains: “The firms could choose to use foreign parts, but what would they gain for their trouble? The likely answer is that they would gain Congressional scrutiny and an increase in political risk to their contract. Even when DoD officials ask to reform the Buy American laws, Congress has never been receptive to their pleas—and in fact periodically considers making the laws more stringent.”<sup>66</sup> But defense firms do not, in fact, have reason to fear Congressional scrutiny. For decades some in Congress have periodically *talked* about significantly increasing the scope of Buy American restrictions, but such efforts have always been ineffectual.<sup>67</sup> And Congress would first have to decide to collect much better information on U.S. weapons globalization—and be effective in doing so—before it could even be in a position to strongly clamp down on it. As noted previously, the U.S. government has only very partial information on the foreign suppliers that contribute to U.S. weapons systems.<sup>68</sup> In turn, defense contractors

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<sup>66</sup> Gholz, “Globalization, Systems Integration.”

<sup>67</sup> Significantly, the focus of Congress is typically restricted to securing better DoD compliance with the *old* Buy American restrictions, which are limited in scope. The most notable recent example of this dynamic occurred in 2006, when the Department of Defense was told that it had to pursue more aggressive enforcement of the Berry Amendment. The Berry Amendment was established in 1941 with the purpose of ensuring that U.S. troops used military uniforms made in the United States and were fed with U.S. grown food; some additional industries were added later, notably specialty metals in 1973. Prior to 2006, the companies providing screws, bolts, nuts, rivets, metals, etc. for electronics used in U.S. weapons systems had not even been tracked. DoD was told in 2006 that it had to start tracking these sources and initiate a switch to American suppliers. After this enhanced enforcement effort of the Berry Amendment was initiated, DoD was unable to take delivery on a variety of crucial items: companies stopped delivering computers because they could not certify that certain metals (that is, the solder that connects the circuits) were in compliance with regulations. As it became clear that DoD could not accept delivery of essential defense systems, defense contractors and the DoD undertook a legislative push—which was successful—to exempt a number of items from the law’s provision, principally fasteners (screws, nuts, bolts, etc.) and circuit card assemblies. (Most of the information in this footnote was drawn from an interview with an official at the Information Technology Association of America).

<sup>68</sup> As part of an effort to comply with various U.S. regulations, U.S. defense contractors maintain a database listing the names of the foreign subcontractors they use who contribute repairable parts to U.S. weapons systems. However, U.S. defense contractors are not required to list in the database the foreign

emphasize that they are unable to gather more complete information on foreign sourcing.<sup>69</sup>

The second reason Gholz expects defense firms to be relatively reluctant to pursue globalization is because, in his view, they have different goals than commercial firms. He argues that commercial firms “turned to the globalization of production to cope with the growing cost of developing and producing complex, high-tech equipment,” but achieving lower costs is not something that defense producers regard as very significant: “performance was by far the most important factor in weapons acquisitions decisions.”<sup>70</sup> Gholz may well be correct that some defense prime contractors are somewhat different from commercial firms. However, whether defense firms are slightly different or not, they avidly pursue globalization in their production and do so for reasons other than just reducing costs. This is revealed in a survey conducted by the Commerce Department that gauged why defense contractors turn to foreign sourcing (the only survey of its kind of which I am aware). As I review in my book, the most important three reasons why defense contractors turn to foreign subcontracting are: (1) the *foreign supplier was the only option* since no domestic supplier was available—cited by 53 percent of respondents, (2) the *foreign supplier produced a higher quality item* than available from domestic suppliers—cited by 33 percent of respondents, and (3) the *foreign supplier offered a lower cost item* than available domestically—cited by 23 percent of respondents.<sup>71</sup> Reducing costs is a

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companies that contribute the individual *components* that are used to make these parts. In an interview, a Lockheed Martin official illustrated the extent of the information gap on foreign subcontractors using the example of a computer circuitry system. If Lockheed Martin decided to subcontract to a foreign company (say Toshiba) to produce a computer circuitry system, then Lockheed would be required to list Toshiba in the database. However, there are many parts in a computer circuitry system—possibly more than 50. If there did happen to be 50 such parts in the computer circuitry and they all happened to be supplied by individual foreign suppliers, then not one of these 50 foreign companies would be listed in Lockheed Martin’s database: only Toshiba would be listed.

<sup>69</sup> Gholz also very briefly mentions a second political interference argument: he maintains when defense firms lack domestic technology, “the natural reaction is not to seek foreign suppliers with better technology; instead the industry gets an R&D contract to develop the new item to catch up to the foreign supplier.” But defense contractors fail to act the way Gholz says they will—literally hundreds of times per weapons system. The Commerce study showed that for a portion of a single munition—the HARM missile—712 foreign subcontractors were used (the Commerce study examined the extent of foreign sourcing in the missile itself, but not the launch computer and associated software). How can Gholz explain these 712 cases in which government assistance was not sought? Even if U.S. defense firms did decide to act as Gholz says they will, it is extremely doubtful that sufficient government assistance would be available to effectively replace foreign suppliers in a comprehensive manner. And if enough money was available, spending it to systematically replace foreign suppliers would be very problematic over the long-term: as I stress, “the U.S. government would need to consistently make the right choices in terms of which dual-use items to invest in for future Pentagon use; no longer would the United States have the luxury, as it does now, of waiting to choose the best of many different dual-use technologies that emerge from a global competition among firms from dozens of countries.” Brooks, *Producing Security*, 127.

<sup>70</sup> Gholz, “Globalization, Systems Integration.”

<sup>71</sup> Brooks, *Producing Security*, 95–96.

reason why pursuing globalization is beneficial for U.S. defense firms, but it is hardly *the* reason.

In the end, Gholz does not appropriately recognize that the firms involved in defense production have a very different makeup now than in the early decades of the Cold War. U.S. defense production is no longer limited to “pure defense firms” like Lockheed Martin that specialize in producing weaponry and that are likely to be prime contractors. There are two other kinds of firms that have been of crucial importance for the past few decades: “mixed firms,” like General Electric, which are primarily commercially-oriented firms that sometimes serve as prime contractors but are most likely to be used as subcontractors, and “commercial firms,” like Intel, that produce some dual-use items that are of use for weapons production and are only likely to be used as subcontractors. Although pure defense firms dominate the top tier of U.S. weapons production, they rely upon a massive number of mixed and commercial firms at the subcontractor level (both foreign and U.S.) who produce dual-use items. And as Chapter 2 of my book makes clear, commercially-oriented high-technology firms aggressively pursue the globalization of production to reduce costs and improve the quality of their products in order to gain an advantage over their competitors.

To flesh out this point further, it is important to understand that firms involved in defense-related production have four strategies by which they can pursue globalization to enhance the competitiveness of their products: (1) using foreign companies as subcontractors, (2) forming inter-firm alliances with foreign companies to develop products or technologies, (3) using their foreign affiliates located abroad to produce part or all of the product in question or to assist with technological development, and (4) drawing on their research centers located abroad for the development of technology. Because Gholz narrowly focuses his attention on pure defense firms, he consistently portrays defense industry globalization as *only* involving “military buyers [buying] foreign components.”<sup>72</sup> Gholz is right that pure defense firms like Lockheed Martin are very much *American* companies and their pursuit of globalization is limited in large part to the first strategy: foreign subcontracting. What he neglects is that pure defense firms now rely greatly on commercially-oriented subcontractors who extensively pursue *all four globalization strategies*.

The example of the Verdin communication system shows concretely how Gholz’s portrayal of U.S. weapons globalization as merely consisting of foreign subcontracting by pure defense firms is inappropriate. IBM is one of the two firms at the top of the Verdin production chain depicted in Figure 1. When IBM seeks to develop a product or technology, it draws upon:

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<sup>72</sup> Gholz, “Globalization, Systems Integration.”

1. Its network of overseas affiliates (IBM now has a total of 64 foreign affiliates)<sup>73</sup>
2. Its overseas research centers (6 of IBM's 10 research current centers are located abroad, namely in Delhi and Bangalore in India, Yamato in Japan, Beijing in China, Haifa in Israel, and Rueschlikon in Switzerland)<sup>74</sup>
3. Its vast network of inter-firm alliances (as of the early 1990s, IBM had hundreds of inter-firm alliances, an untold number of which were with foreign companies)<sup>75</sup>

IBM also employs foreign subcontracting. It has a deep network of foreign subcontractors that number in the thousands and, as Figure 1 shows clearly, it used subcontracting extensively in the Verdin system. But to focus on IBM's use of foreign subcontracting in the Verdin as if it was the only way in which globalization facilitated its production would obviously make no sense. Yet this is exactly the conceptual move that Gholz makes in his article.<sup>76</sup> In reality, when IBM decided to pursue subcontracting for the Verdin, this really was a case of an already globalized company deciding to undertake even more globalization.

#### THE SUBSTANTIVE SIGNIFICANCE OF U.S. WEAPONS GLOBALIZATION

Gholz does very briefly mention one final issue of relevance, which concerns not the overall extent of U.S. weapons globalization but rather its substantive importance. I conclude that if the United States attempted to move toward a go-it-alone approach in defense production, the adjustment costs would be massive.<sup>77</sup> Gholz does not say that this assessment of mine is wrong, but does suggest one potential reason for thinking otherwise: "given Congressional fears about a wartime supply cutoff—and given that industry pays a lot of attention to Congress because it controls the purse strings—smart system integrators should try hard to avoid importing any component that would leave the overall system vulnerable. Outsourcing is likely to be biased towards the most innocuous components of military systems."<sup>78</sup>

Does this argument of his provide any basis for concluding that it would be relatively easy for the United States to move away from globalization in

<sup>73</sup> UNCTAD, "Top TNCs Present in 40 Host Countries on Average," UNCTAD Investment Brief Number 5, 2006. Available at [www.unctad.org/Templates/Download.asp?docid=7936&lang=1&intItemID=3336](http://www.unctad.org/Templates/Download.asp?docid=7936&lang=1&intItemID=3336).

<sup>74</sup> See <http://researchweb.watson.ibm.com/worldwide/>

<sup>75</sup> John Markoff, "IBM Aims to Cut 25,000 More Jobs; Sees Record Loss, Shifting Role in Technology," *New York Times*, 16 December 1992.

<sup>76</sup> Of course, IBM will not always be a prime contractor as it was in the Verdin case, but instead will typically be a subcontractor. Notwithstanding the globalized nature of IBM's operations, in the hypothetical scenario where an American defense firm like Lockheed Martin used IBM as its sole subcontractor, Gholz would not view any globalization of U.S. weapons production as occurring given that IBM is an American company.

<sup>77</sup> Brooks, *Producing Security*, 127.

<sup>78</sup> Gholz, "Globalization, Systems Integration."

defense production? No. A key reason why was just stressed above: Gholz portrays the globalization of U.S. weapons production as only having one element—foreign subcontracting by U.S. defense contractors—and misses all of the other ways that firms who contribute to U.S. weapons production are pursuing globalization. It is only once you fully appreciate how deeply the tentacles of globalization reach into U.S. weapons production that you can fully appreciate why it would be so hard to cut them off. Most of these tentacles are simply not on Gholz's radar screen.

Even with respect to the specific issue of foreign subcontracting by defense contractors, Gholz does not make a strong case for why the adjustment costs of replacing the foreign suppliers would be low. In developing his argument, Gholz makes three heroic assumptions about system integrators; all of them must hold for Gholz's critique to be effective, and yet none of them is plausible.

First, Gholz is assuming that system integrators can monitor, manage, and control the decisions by the countless thousands of companies that contribute to U.S. weapons systems. It suffices to say that systems integrators do not yet have access to the kind of information needed to accurately monitor the full extent of foreign subcontracting in defense production; and they cannot manage or control something they cannot monitor.

Second, Gholz is assuming that system integrators have strong incentives to generally prevent U.S. companies involved in defense production from pursuing globalization. Gholz points to fears of wartime cutoffs as the only possible reason for why system integrators should strive to do this. Yet as I stressed in my response to Caverley, an extensive supply cutoff is only likely if the United States attempts to run the tables.<sup>79</sup>

Third, Gholz is assuming that system integrators could easily and effectively replace the foreign subcontractors employed by U.S. defense contractors on a mass scale. Yet it is hard to imagine that this would not be extremely difficult. Gholz's line of argument would be more plausible if defense firms really did act the way he expects them to—that is, as if they are striving to avoid foreign sourcing. But that is not what U.S. defense firms are doing. They have instead become very accustomed to pursuing globalization, and cutting it off would be not be easy. On this front, when asked in an interview about what would happen in a hypothetical scenario in which Congress moved to greatly strengthen Buy American restrictions, an engineer from Lockheed Martin stressed this would be “incredibly inconvenient for a few products and completely impossible for others.”

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<sup>79</sup> As is the case with Kirshner, Gholz misinterprets the probabilistic nature of my claim in this regard.

## CONCLUSION

This symposium has provided a priceless opportunity to advance debate on how global commerce influences international security. Of particular importance is that these articles help clarify exactly how the globalization of production affects great power security relations. Kirshner's article helpfully shows why my conclusion that the globalization of production is stabilizing ultimately pertains to the severity of great power war, not its initiation. Cavarley's article demonstrates that I may well have underestimated the degree to which the globalization of weapons production fosters great power stability because I neglect how it gives the United States enhanced political leverage over other states. And Gholz's article further underscores that my argument about how the globalization of production influences the benefits of conquest in advanced countries does not apply nearly as strongly to the short-term as it does to the long-term. As useful and important as these observations are, they do not alter my fundamental conclusion: the globalization of production has a stabilizing influence on great power security relations.

More generally, this symposium has reinforced a point David Baldwin emphasized a quarter century ago: "the advancement of knowledge . . . depends on the ability of scholars to communicate with each other; and clear concepts seem to help."<sup>80</sup> I thought I was clear in defining my conclusion about great power relations, but some of Kirshner's and Gholz's arguments suggest otherwise. And Kirshner and Gholz are not the only ones who have misread my book's argument about great power relations as being one that focuses on the initiation of great power war. I have now come to appreciate that IR scholars, perhaps particularly those who focus on security affairs, are most inclined to focus on the initiation of events and not their severity. The fact that the Cold War never became hot is perhaps responsible for this focus with respect to great power relations in recent decades: scholars naturally focused on the question of why neither side initiated war during this long peace. Regardless of why scholarly attention is drawn to the initiation of war, a key lesson to take away from this exchange is that anyone advancing an argument about the severity of war needs to be very explicit in using this term (or another similar one) to avoid misinterpretation.

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<sup>80</sup> David Baldwin, "Interdependence and Power: A Conceptual Analysis," *International Organization* 34, no. 4 (Autumn 1980): 472.