Excerpts from the U.S.-China Security Review Commission Hearings

Charles Wolf, Jr.

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So I welcome our first panel: Professor Richard Cooper, Professor of Economics at Harvard University; Mr. Barry Anderson, well-known to our Commission as Deputy Director of the Congressional Budget Office; Mr. Cheng Xiaonong, lecturer, Departments of Political Science and History at Princeton University; and, last but not least, someone who is well-known to everyone in this field, Dr. Charles Wolf, Senior Economic Advisor and Corporate Chair, International Economics, at the Rand Corporation, who comes to us with a "first" today and looks successful now—our videoconference. And we know it is very early in California, Dr. Wolf, and thank you very much for getting up so early to meet with us and talk with us.

What I would like to do is start off by asking Dr. Wolf to begin and give his presentation, and then we'll go down the line with Professor Cooper, Mr. Anderson, and Mr. Cheng, for about 10 minutes each, and then we would like to open it up to the Commission for questions back and forth.

Dr. Wolf, please go ahead.

PANEL I: PRC BUDGET ISSUES: PROCESS/STRUCTURE

STATEMENT OF CHARLES WOLF, JR., SENIOR ECONOMIC ADVISOR AND CORPORATE CHAIR, INTERNATIONAL ECONOMICS, RAND (VIDEOCONFERENCE)¹

MR. WOLF: Thank you, Mr. Chairman, and lady and gentlemen commissioners. It is a pleasure for me to be with you there, but from here, and I want to express my appreciation for these arrangements which I think can be classified as, or what we would call this in the analytical business is "pure dominance." It saves my time and your budget. So I really appreciate those arrangements.

I also want to express a disclaimer at the outset. The views and points that I am going to express are my own. They are not necessarily those of Rand or of its various clients.

There are three points that I want to touch on, and I think you have a list of those points and some supporting data related to the first of the three. Two of the three, I think, are directly germane to the Commission's purpose and charter, and one is a little bit tangential to those purposes.

The first relates to forecasts or estimates that we made in a publication last year on China's gross domestic product, its per capita GDP, its military spending and its military investment. There are two aspects to this which should be highlighted.

¹ The opinions and conclusions expressed in this testimony are the author’s alone and should not be interpreted as representing those of RAND or any of the sponsors of its research.
One is that it makes a big difference in the dollar conversion what conversion rates are used, and the other is it makes a big difference what the growth trajectory scenario one assumes for China's growth.

On the first of those two differences, whether one uses nominal exchange rates—that is the 8.2 renminbi per dollar, or the purchasing power parity rate (about 1.7 RMB per dollar) for converting local currency, to dollars makes a big difference. It makes a difference of fivefold for the macro estimate GDP and GDP per capita, and it makes a difference of 3 to 3.5 for the estimates of military investment.

The reason for that discrepancy is that in estimating military investment and its accumulation over time—that is, annual military investment less depreciation of the previous year's accumulated military capital stock—we have used the purchasing power parity for investment goods, that is, for heavy equipment, machine-building and earth-moving equipment—not for consumer goods.

The data that you have are summarized in the two tables that relate to Scenario A, a sustained growth scenario with an annualized average growth of about 5 percent per year, or a disrupted growth scenario which is about 2 to 3 percent annual growth, over the next 15 years.

This, I should emphasize, is a controversial set of issues. Both the conversion rate and the scenarios are subjects of a lot of study and a lot of controversy.

The question of which conversion rate is the right one or best one to use depends on the purposes for which one wants to use the estimates. If one is concerned with consumption, with levels of living of the populace in China, apart from major discrepancies between the center and Western provinces and the coastal provinces, probably the preferable exchange rate to use is the purchasing power parity rate.

If one is concerned with evaluating China's imports of equipment and other products, clearly, the correct rate to use is the nominal exchange rate.

If one is concerned with estimating military investment, that is, procurement and R and D—

[Video connection temporarily lost.]

CHAIRMAN D'AMATO: We're back. We can hear you. Please continue. We're all set.

MR. WOLF: As I was saying, this is a controversial matter. The question I was addressing was the conversion rate, and with respect to military procurement, I think it's fair to say that the prevailing view, which I dissent from, is that the preferable rate to use is the nominal exchange rate.

The reason I dissent from that—I should say that although I feel rather strongly about it, this is a minority view—is that the PLA and the other cognizant ministries whose budgets are charged with
expenditures for military end-items purchase advanced equipment from state-owned enterprises that produce SU-27s, SU-30s, surface-to-surface missiles, DF-15s and DF-11s, from the defense industries in China at prices that we don't know precisely. This is one of the opacities that the chairman referred to in his opening remarks.

It is probably the case that the purchasing power for investment goods, which is what we use in the estimate shown as "PI" if you look at the table; is a better approximation of the prices at which these procurements occur than would be the nominal exchange rates, which are shown as XR on the tables.

So that is shown in the lowest of the four tiers of each of the tables, Table 7 and Table 8. These Tables which show the accumulation of military capital converted at "XR"—that is nominal exchange rate—or at purchasing power for investment goods, which is the "PI" designated row of the tables.

And as I said secondly, although the conversion rate that one uses makes a big difference, it is a matter of controversy. My view is a minority view. I think there are strong reasons for that position which we can talk about later in the Q and A.

The second factor that makes a difference is which of the two scenarios—A and B, the high growth and the disrupted growth scenarios, respectively—one posits for China's trajectory over the next 15 years.

The second of the three points relates to trade surpluses, current account surpluses, and their relationship to China's military spending. China's bilateral surpluses with the U.S. are devoted to either of two purposes—either to defray deficits that China has with other trading partners, the European Union, Japan, and Taiwan in particular; or to add to China's foreign exchange reserves, or a combination of both of these.

China’s accumulation of the second-largest global holdings of foreign exchange reserves second to Japan is due to its persistent current account surpluses, that is, excesses, of its foreign exchange earnings over its foreign exchange payments for imports and other services.

In fact the surpluses do not add to resources that are immediately available. They reduce those resources. The view that trade surpluses and current account surpluses provide more resources is mistaken. In fact, if you just think of it in terms of exporting to the rest of the world goods and services versus importing goods and services in a specified accounting period, the more that is exported, the less is available at home. So, in terms of resource availabilities, current account surpluses reduce rather than add to resources available for the military.

But I think the bottom line of this point is that it is really unlikely that trade surpluses or current account surpluses affect military
allocations, total military spending, or military investment, procurement and R and D, appreciably if at all, because the priority that is afforded to those allocations is sufficiently high that it is not perturbed by current account surpluses or deficits.

The third point, which is the one I referred to in my opening comment about being somewhat tangential to the Commission's central concerns, relates to U.S.-China military-to-military contacts.

It is my understanding that the administration's assessment of recent years' experience with military-to-military contacts has been that those contacts have been distinctly one-sided and that the benefits have accrued to the PRC rather than to the U.S. This is because of the plethora of briefings and visits to U.S. defense installations and defense industries that the Chinese military, have received from us, in comparison with the corresponding briefings and visits to defense installations provided by our Chinese hosts in China.

So the result, in my understanding, is that the administration’s position is to scrutinize on a case-by-case basis whether military-to-military contacts are a good thing or a bad thing in order to avoid this one-sided bias that has been characteristic of the exchanges in the past 8 or 10 years.

I think this is an important matter to reconsider so that instead of discouraging those contacts, they should be strongly encouraged, subject to one strict condition. That condition is that military-to-military exchanges should be conducted on the basis of a strict quid pro quo arrangement so that for every briefing that an American military person provides to a Chinese counterpart, there should be an equivalent one provided by the Chinese to us; for every visit to a defense installation or defense industry, there should be an equivalent one by the Chinese.

I think this would be beneficial in terms of its indication of respect by us for what the Chinese have or potentially have to provide to us, and would also be beneficial in terms of the more equitable parity between what we give and what we get.

I would cite briefly, but would be glad to go into this in more detail, experience that we have had at Rand over the past four years in conducting annual meetings on—

[Video connection temporarily lost.]

CHAIRMAN D'AMATO: I think he was almost finished. If we can't get him back, we'll move right on, but I think he was on his last bullet.

Why don't we move on, because he had just read the last bullet, and we understand what he was saying on exchanges.
[The statement follows:]
PREPARED STATEMENT OF DR. CHARLES WOLF, JR.

First: China’s GDP, military spending, military investment, military capital, (Table 7, Table 8, Figure 9, Figure 10, Figure 11, Figure 12, from “Asian Economic Trends and Their Security Implications,” Rand, MR-1143, 2000)
—estimating method, results, and dollar conversions are controversial
—use of nominal exchange rates (XR), or purchasing power parities (PPP and PI), makes large difference in estimates (5-fold for military spending, 3-fold for military capital)
—what does each conversion rate mean?
—which is preferable?
—alternative growth rates (Scenarios A and B) also make big difference

Table 7—China Trends, 1995–2015: Stable-Growth Scenario (A)

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<tr>
<td>GDP (billions of 98$)</td>
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<tr>
<td>XR</td>
<td>910</td>
<td>1,206</td>
<td>1,532</td>
<td>1,937</td>
<td>2,508</td>
</tr>
<tr>
<td>PPP</td>
<td>4,513</td>
<td>5,983</td>
<td>7,599</td>
<td>9,607</td>
<td>12,437</td>
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<tr>
<td>Average annual growth rate (%)</td>
<td>5.8</td>
<td>4.9</td>
<td>4.8</td>
<td>5.3</td>
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| Per-capita GDP (thousands of 98$) | 0.7   | 0.9   | 1.1   | 1.4   | 1.7   |
| XR | 3.7   | 4.6   | 5.7   | 6.9   | 8.7   |
| PPP|

| XR | 90    | 120–180 | 152–228 | 192–288 | 249–373 |
| PPP|

| Military capital (billions of 98$) | 63    | 69–78 | 84–106 | 106–138 | 135–182 |
| PI |

NOTES: See Appendix B; parameters: $\tau = 1–1.5%/\text{yr}$, $\alpha = 0.6$, $\gamma = 2–3\%$, $\pi = 25–32\%$, $\delta = 8–10\%/\text{yr}$, $\text{LdotL} = 1–1.2\%/\text{yr}$, $\text{KdotK} = 8–9\%/\text{yr}$.  
### Table 8—China Trends, 1995–2015: Disrupted-Growth Scenario (B)

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<tr>
<td><strong>GDP (billions of 98$)</strong></td>
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<tr>
<td>XR</td>
<td>910</td>
<td>1,156</td>
<td>1,373</td>
<td>1,553</td>
<td>1,723</td>
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<tr>
<td>PPP</td>
<td>4,513</td>
<td>5,732</td>
<td>6,808</td>
<td>7,763</td>
<td>8,547</td>
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<tr>
<td>Average annual growth rate (%)</td>
<td>4.9</td>
<td>3.5</td>
<td>2.5</td>
<td>2.1</td>
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<td><strong>Per-capita GDP (thousands of 98$)</strong></td>
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</tr>
<tr>
<td>XR</td>
<td>0.7</td>
<td>0.9</td>
<td>1</td>
<td>1.2</td>
<td>1.3</td>
</tr>
<tr>
<td>PPP</td>
<td>3.7</td>
<td>4.4</td>
<td>5.1</td>
<td>5.5</td>
<td>6</td>
</tr>
<tr>
<td><strong>Military spending (billions of 98$)</strong></td>
<td></td>
<td></td>
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<td></td>
<td></td>
</tr>
<tr>
<td>XR</td>
<td>18</td>
<td>23</td>
<td>27</td>
<td>31</td>
<td>35</td>
</tr>
<tr>
<td>PPP</td>
<td>90</td>
<td>115</td>
<td>136</td>
<td>155</td>
<td>171</td>
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<tr>
<td><strong>Military capital (billions of 98$)</strong></td>
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<tr>
<td>XR</td>
<td>63</td>
<td>69</td>
<td>82</td>
<td>97</td>
<td>113</td>
</tr>
<tr>
<td>PI</td>
<td>217</td>
<td>238</td>
<td>281</td>
<td>333</td>
<td>386</td>
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</table>

**NOTES:** See Appendix B; parameters: \( \tau = 0-1\%, \alpha = 0.6, \gamma = 2\%, \pi = 25-32\%, \delta = 8-10\%/yr, LdotL = 0.8-1.1\%/yr, KdotK = 4-8\%/yr. \)

### Figure 9—China Trends, 1995–2015: GDP (Scenario A)
Figure 10—China Trends, 1995–2015: GDP Per Capita (Scenario A)

Figure 11—China Trends, 1995–2015: Military Spending (Scenario A)

NOTE: The cross-hatching reflects an assumed range of annual military spending varying between 2 percent and 3 percent of GDP.
NOTE: The cross-hatching indicates the effects on military investment and military capital of varying the GDP share of military spending between 2 percent and 3 percent annually.

Second: Trade surpluses, current account surpluses, and China’s military spending
—China’s bilateral surpluses with U.S. either (a) defray deficits with other trading partners, or (b) add to China’s holdings of foreign assets/reserves (mainly U.S. Treasuries), or (c) both
—cumulative current account surpluses have built up China’s reserves to 2nd largest in world (nearly $200 billion)
—contrary to conventional view, trade and CA surpluses reduce rather than add to resources available for domestic allocation to defense or other uses
—bottom line: unlikely that trade/CA surpluses affect military allocations either up or down, because of ample priority accorded to them.

Third: U.S.-Chinese military-to-military contacts
—assessment of recent years’ contacts and exchanges is that benefits have been one-sided: U.S. has given much more than has received (e.g. briefings, visits to defense industries and military installations, etc.)
—result is case-by-case scrutiny, general inclination to discourage M-to-M contacts and exchanges
—suggest reconsideration of this stance and its replacement by: (a) encouragement of contacts, subject to (b) strict application of “quid-pro-quo” principle in conduct of exchanges and contacts
—RAND’s experience in 4-years of annual conferences/exchanges with China Reform Forum, alternating between Beijing and Santa Monica, with PLA/CICIR participation, as well as CIA and U.S. military analysts.
MR. WOLF: Thank you. I am sorry for the interruption.

The concluding point was that in the experience that we have had with the China Reform Forum, which is a think-tank creature of the Central Party Academy that is headed by Hu Jintao, a prospective successor to Jiang Zemin, which, as the fourth bullet in the last point indicates, the meetings have alternated between Beijing and Santa Monica. In fact, we concluded the fourth meeting on Friday of last week. And we have had at these meetings—we and they have had—both military and intelligence folks. On our side, we have had people from the CIA and the Pentagon community. And the exchanges, although sometimes, I wouldn't say "heated," but "warm," have been symmetric and reciprocal, and we have gotten at least as much out of them as the Chinese have gotten out of those contacts.

So I would suggest that that process and how it is conducted and the relevant gains on both sides might well be reassessed by the Commission, and my recommendation would be that those contacts, subject to that condition, should be strongly encouraged.

Thank you.

CHAIRMAN D'AMATO: Thank you very much, Dr. Wolf. I know that will be a subject of interest to many of us here.

PANEL I DISCUSSION AND QUESTIONS AND ANSWERS

CHAIRMAN D'AMATO: I would like to lead off with one quick question for Dr. Wolf on the matter you finished up with, on the military-to-military exchanges and your recent experience. Of course, there is a debate right now being led from the Pentagon around the value of these things. CINCPAC is involved in it.

In your experience and your discussions with the Chinese who have visited you, do you believe that it is realistic to think that the Chinese will agree to some sort of architecture of quid pro quo and reciprocity in this area?

I think back to when Secretary Cohen was Secretary of Defense and wanted to visit the Chinese Pentagon and was told that there was no Chinese Pentagon. And it took quite a long time for the Chinese to admit they had a Pentagon—and then they said, yes, they did have a Pentagon, but it was too small to meet in.

So there is kind of a steep climb here, and I just wonder if your recent experience indicates that there would be a way to move into a more fruitful area of reciprocity in this exchange issue.

MR. WOLF: My answer, Mr. Chairman, is an unequivocal yes. They don't have a Pentagon, because their military department doesn't have five sides! However, I met in some of the military offices, and the Chinese have had military folks, as I said, in our annual meetings. We had a colonel from the PLA here at our recent Rand conference on Thursday and Friday of last week, and at least one of the six-or
seven-people in their delegation was from their intelligence community.

So, I think not only will they respond, but I think that is the respectful way to conduct relations with their military, respectful by us to them.

My impression of the prior legacy is that the push came from our side rather than from their side and paradoxically that we were responsible for the one-sided character.

COMMISSIONER LEWIS: I’d like to thank the panelists for giving us some very interesting information.

Dr. Wolf, I have a question for you. You said this was the fourth meeting that you had had with the group in China. Could you please tell us how that occurred, how the first one occurred, and what was the process used in starting the exchanges?

MR. WOLF: Surely. The process began in 1997 when we had a visit from one of China’s most productive economists, a professor Hu Angang, a professor at Qinghua University and a member of the Chinese Academy of Sciences. He gave a seminar at Rand, and I reciprocated and gave a seminar to the China Reform Forum about three or four months later in Beijing—

COMMISSIONER LEWIS: Was his first meeting with you at his request or your request?

MR. WOLF: Interesting—his first meeting with me and others at Rand was at his request through a Chinese graduate of the Rand Graduate School who received his Ph.D. from the Rand Graduate School about 15 years ago and has been a businessman brokering deals between Chinese and American investors and businesses in the intervening decade.

COMMISSIONER LEWIS: Thank you.

I’d like to ask you one other question. You said that you don’t think the current account surplus affects military allocations. Do you think that the Chinese access to capital markets in the United States affects their military allocations?

MR. WOLF: I think their access to global capital markets—they have floated securities in Europe as well—expands the resources that are available in the economy, but usually—I think the foreign direct investment that flows to China now at the rate of about $30 or $40 billion a year is pretty well targeted on projects that—

COMMISSIONER LEWIS: No, I don’t mean foreign direct investment. I mean access to countries by Chinese companies and equity markets and bond markets.

MR. WOLF: Portfolio investment does add to resources, but it goes into the companies and the securities that the investors are targeting—

COMMISSIONER LEWIS: Some of which may have military applications.
MR. WOLF: Yes. But, if there is a combination of technology and management along with the—that's more in the FDI domain than in the portfolio domain, so I doubt that there is much spillover from portfolio investment by foreign capital. I think there is more spillover from FDI than there is from portfolio.