GOVERNMENT CONTRACTING

Selected Review of Defense Contractor Profitability
The Honorable William V. Roth, Jr.
United States Senate

Dear Senator Roth:

On February 24, 1987, you asked us to follow up on selected aspects of our report entitled Government Contracting: Assessment of the Study of Defense Contractor Profitability (GAO/NSIAD-87-50, Dec. 23, 1986), in which we reported on the results of the Defense Financial and Investment Review and showed that defense contractor profitability was higher than comparable durable goods manufacturers from 1970 to 1983. We also reported that defense contractors were "35 percent more profitable than commercial manufacturers during 1970-79 and 120 percent more profitable during 1980-83." This conclusion differed from that in the Defense Financial and Investment Review which basically stated that defense contractors' profitability was very similar to that of comparable durable goods manufacturers for the years 1970 through 1979; but during 1981 to 1983 defense profits were higher overall. The primary difference centers on methodology used in computing return on assets (ROA). Our report also discussed the potential impact of the Department of Defense's (DOD's) interim profit policy and the likelihood of it causing overall negotiated defense profits to be reduced. We recommended that the Congress consider establishing a Profitability Reporting Program.

After consulting with your office, we agreed to

-- provide data on the profitability of specific product categories within the defense industry compared with the overall profitability of durable goods manufacturers;

-- assess whether DOD's interim profit policy could, under the certain conditions, accomplish its intended objective of reducing overall negotiated profit objectives by 1 percent and examine whether this will be enough to achieve DOD's goal; and

-- assess whether our proposal for a Profitability Reporting Program is consistent in concept with title IV of S. 940 introduced in the 99th Congress.
METHODOLOGY USED TO CALCULATE DEFENSE CONTRACTOR PROFITABILITY

In 1976, DOD studied and then amended its profit policy with the goal of strengthening the defense industrial base. This study, commonly referred to as Profit '76, used Return on Total Assets Less Progress Payments and Advance Payments to measure return on investment. The 1976 study reported that progress payments represent an investment of the government, not the contractor, and therefore, the contractors' assets were reduced by progress payments to compute ROA.

In 1985, DOD again studied its profit policy. However, DOD's method for calculating ROA in its 1985 study was different from its 1976 approach. DOD's 1985 study made two significant changes in its ROA calculation. One, it included progress payments in the contractor's asset base and two, it calculated a unique definition of "economic profit" by subtracting the following items from commercial and defense figures: allowable costs, unallowable costs other than interest, imputed interest on fixed assets, and imputed interest on working capital.

In December 1986, we reported that DOD's method of asset valuation and profit calculation was not consistent with conventional accounting and finance methods. By including in a contractor's asset base the amount of inventory considered to belong to the government through progress payments when calculating ROA, DOD underestimates the apparent profitability of defense contracts by obscuring the impact of contract financing. Using conventional methodology and the data gathered during the Defense Financial and Investment Review, we found that the ROA for defense contracting and commercial manufacturing was 19.4 percent and 14.4 percent, respectively, from 1970 to 1979 and 23.3 percent and 10.6 percent, respectively, from 1980 to 1983. Using the ROA methodology in the Defense Financial and Investment Review, the ROA for defense contracting and commercial manufacturing would be 6.52 percent and 5.76 percent, respectively, from 1970 to 1979 and 4.73 percent and -3.65 percent, respectively, from 1980 to 1983.
Based on our analysis of data furnished by the 76 contractors for the Defense Financial and Investment Review, the overall average ROA before taxes for defense manufacturers was 22.6 percent from 1975 to 1983. The overall average profitability for durable goods manufacturers from 1975 to 1983 was 12.9 percent.

Comparing defense contractor profitability to that of durable goods manufacturers is valid primarily because these producers represent that portion of the commercial industry which produces similar goods with similar technologies. Durable goods include such items as fabricated metal products, machinery, electrical and electronic equipment, motor vehicles and equipment, aircraft and parts.

This approach of comparing the profitability of defense contractors to the profitability of durable goods manufacturers was taken in earlier studies on defense contractor profitability. For example, in 1969 the Logistics Management Institute conducted a study for DOD and stated that durable goods manufacturers represent an appropriate comparison because the business of these commercial companies is comparable to that of defense industry companies. DOD's 1985 study refined the durable goods manufacturers' data to eliminate those industry groups that were the least similar to defense contractors (i.e., stone, clay, and glass products, and primary metal industries).

Table 1 illustrates the profitability of defense contractors by six major product categories from 1975 to 1979 and from 1980 to 1983. More current data for similar product categories are not available.

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1 This calculation was based on segment level data from 1975 to 1983 which was submitted voluntarily by 76 contractors. To update this data at the firm level, we obtained financial data through 1985 from COMPUSTAT (a data base containing audited financial reports). This updated data showed that the rate of return for defense firms continues to result in profits greater than comparable commercial firms.
Table 1: Profitability (ROA) of Defense Contracting By Selected Product Category

<table>
<thead>
<tr>
<th>Product Category</th>
<th>1975-79</th>
<th>1980-83</th>
</tr>
</thead>
<tbody>
<tr>
<td>Aircraft &amp; aircraft engines</td>
<td>28</td>
<td>28</td>
</tr>
<tr>
<td>Missile &amp; space systems</td>
<td>24</td>
<td>24</td>
</tr>
<tr>
<td>Vehicles, weapons, &amp; ammunition</td>
<td>29</td>
<td>23</td>
</tr>
<tr>
<td>Electronics</td>
<td>17</td>
<td>20</td>
</tr>
<tr>
<td>Other equipment</td>
<td>18</td>
<td>10</td>
</tr>
<tr>
<td>Services</td>
<td>29</td>
<td>28</td>
</tr>
</tbody>
</table>


By comparison, the overall average profitability for durable goods manufacturers was 15.82 percent from 1975 to 1979 and 10.55 percent from 1980 to 1983.

DOD's interim profit policy rule could have reduced overall negotiated profit objectives by 1 percent but this may not be enough to achieve DOD's goal of approaching comparability.

Subsequent to the Defense Financial and Investment Review, DOD established an interim profit policy. One of the major goals of the interim profit policy was to reduce the overall profit negotiated on defense contracts by 1 percent. In establishing this goal, DOD examined data showing actual profit received on defense contracts and found that defense contractors' ROA was greater than comparable durable goods manufacturers' ROA from 1980 to 1983. As a result, DOD's aim...
to reduce overall negotiated profit objectives is based on an assumption that a reduction in negotiated profit objectives will have a corresponding downward effect on reducing actual profits received on defense contracts.

We found that the interim policy may come close to reducing profit objectives by 1 percent. However, our calculations indicate that a 1-percent reduction in profit objectives sought by the Defense Financial and Investment Review would not be enough to achieve DOD's goal of approaching comparability with durable goods manufacturers because DOD, using what we believe is incorrect methodology, is understating the ROA of defense contractors.

In addition to the question of the methodology used to determine ROA for defense contractors is the question of the validity of 12.3 percent which DOD used as the base from which to reduce negotiated profits. Using the latest DOD data available, we examined whether the average negotiated profit objective of 12.3 percent is a valid benchmark from which to obtain the 1-percent reduction. We found that the overall weighted average profit objectives on negotiated defense contracts in 1985 had grown to 13 percent of costs. Therefore, a 1-percent reduction would result in profits based on contract costs of about 12 percent—not the intended 11.3 percent.

Furthermore, DOD's goal of a 1-percent reduction in negotiated profit objectives is contingent on some assumptions about various elements of the profit policy. For example, DOD's estimate of the profit element dealing with contractors' working capital will have a major impact on whether a 1-percent reduction in overall negotiated profits will be achieved.

DOD's interim profit policy rule recognized contractor working capital financing needs

DOD's estimate of defense contractors' investment in working capital, a significant element of the interim profit policy, will have a major impact on whether a 1-percent reduction in overall negotiated profits will be achieved.

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3DOD Form 1499 data system (Report of Individual Contract Profit Plan).
DOD's approach to performing a profit analysis takes into account such things as: the amount of contract effort financed by the contractor, DOD contract financing policies in terms of progress payment rates, payment policy in general, and interest rates. A profit adjustment is made on all fixed-price contracts to consider contractor working capital needs. The working capital adjustment factor takes into account the amount of contract effort financed by the contractor, interest rate, and length of contract.

In structuring this element of profit to achieve a 1-percent reduction, DOD assumed that the average contract length for negotiated contracts was approximately 40 months. If the overall contract length were found to be greater or less than 40 months, then the overall profit rate could also increase or decrease. We are currently reviewing DOD's new policy and its consideration of defense contractors' working capital financing needs. In that review, we evaluated a limited number of large defense contracts. Our limited sample showed that the average contract length exceeded 40 months. If the average contract length is beyond 40 months, DOD will be less capable of achieving its goal of reducing profits by 1 percent. Because of our limited sample, we cannot yet conclude that the overall average contract length is significantly greater than 40 months. However, because the profits negotiated are so sensitive to this assumption, we will continue to study this matter.

The timing of government payments is a variable that also greatly influences the levels of contractor financing. Our ongoing review is considering such differences among the services to determine their extent and whether they represent a significant cost to the government.

Upon completion of our review of defense contractors' working capital, we will forward a copy of that report to you.

S.940 INTRODUCED IN THE 99TH CONGRESS AND OUR PROPOSAL FOR A PROFITABILITY REPORTING PROGRAM ARE CONCEPTUALLY CONSISTENT

Our proposal which calls for a program to study the profitability of government contracts is designed to

-- provide reliable data to monitor contractor profits and investments;
-- provide a basis for comparative studies, both historical and interindustry; and

-- establish a reliable basis for modifying profit policy as required.

This proposal is consistent with Title IV of S. 940 entitled Contractor Profit Studies which you introduced in the 99th Congress. Title IV directed the Secretary of Defense to carry out studies of profits made by defense contractors on a "regular basis." This concept of consistent and recurring profit policy evaluations is similar to our proposal for a Profitability Reporting Program. Some of the specifics of S. 940 differ from our proposal. For example, your bill would have required that a study be conducted at least once every 4 years, whereas our proposal would require a study on the profitability and investment of companies every 3 years. Also, our proposal which is more detailed than S. 940, is for a government-wide program whereas your bill was restricted to DOD. However, the overall intent of both, we believe, is the same--namely a contractor profitability reporting program.

To conduct our audit work we (1) reviewed the data collected for the Defense Financial and Investment Review, (2) collected and analyzed data from the DOD Form 1499 data system (Report of Individual Contract Profit Plan), (3) analyzed selected financial data from the COMPUSTAT data base, and (4) discussed the new profit policy with DOD officials. Our work was performed in accordance with generally accepted government auditing standards from March 1987 to July 1987.

As arranged with your office, unless you publicly announce its contents earlier, we plan no further distribution of this report until 10 days from the date of issue. At that time, we will send copies to cognizant congressional committees and other interested parties and make copies available to others upon request.
If you would like to discuss the contents of this report, please contact me or Mr. Paul F. Math on 275-8400.

Sincerely yours,

[Signature]
Frank C. Conahan
Assistant Comptroller General
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