



June 2019

# CONTRACT FINANCING

DOD Should  
Comprehensively  
Assess How Its  
Policies Affect the  
Defense Industry

# GAO Highlights

Highlights of [GAO-19-406](#), a report to congressional committees

## Why GAO Did This Study

Each year, DOD provides contractors with billions of dollars in contract financing on fixed-price contracts for major weapons systems and other long-term efforts. Contract financing helps contractors manage expenses until they begin delivering the contracted items to DOD. Contract financing can take several forms, including

- progress payments based on the cost incurred by the contractor, and
- performance-based payments, in which the government pays the contractor an agreed-to amount for achieving certain milestones.

DOD last performed a comprehensive assessment of its contract financing policies in 1985.

The Conference Report accompanying the Fiscal Year 2019 National Defense and Authorization Act included a provision for GAO to analyze the level of financing currently provided to contractors, among other things. This report (1) describes changes in DOD contract financing policy since 1985 and (2) assesses the extent to which DOD has analyzed the effect of its contract financing policies on the defense industry. GAO assessed relevant legislation and DOD regulations; obtained data on DOD's use of progress and performance-based payments from fiscal years 2010 through 2018; and interviewed cognizant DOD and industry officials.

## What GAO Recommends

GAO recommends that DOD ensure it conducts a comprehensive assessment of the effect that its contract financing and profit policies have on the defense industry and update that assessment on a recurring basis. DOD concurred with the recommendation.

View [GAO-19-406](#). For more information, contact Timothy J. DiNapoli at (202) 512-3665 or [dinapolit@gao.gov](mailto:dinapolit@gao.gov)

June 2019

## CONTRACT FINANCING

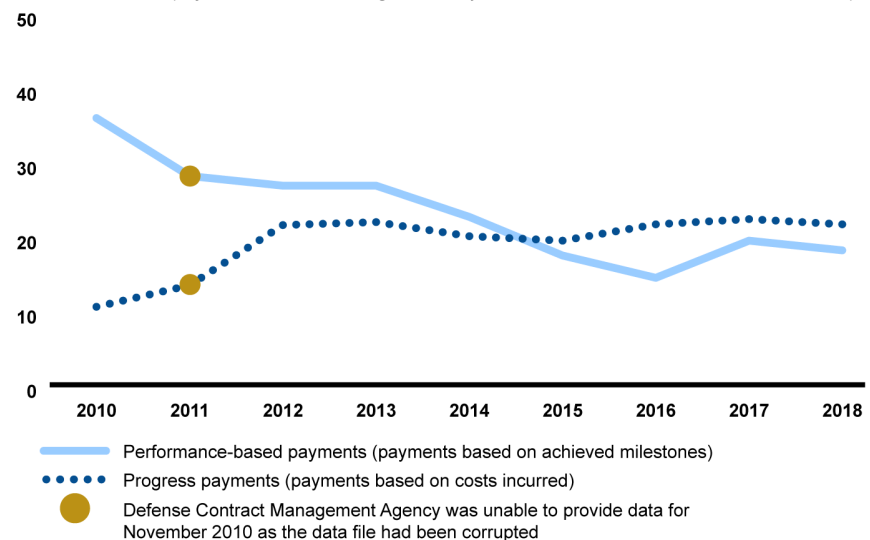
### DOD Should Comprehensively Assess How Its Policies Affect the Defense Industry

#### What GAO Found

Congress and the Department of Defense (DOD) have changed the contract financing legislative and regulatory framework since DOD last performed a comprehensive assessment, including eliminating a requirement that contracting officers justify a need for contract financing and establishing a preference for performance-based payments. However, Defense Contract Management Agency data indicates that the amount of performance-based payments it administered fell from 2010 to 2016 (see figure).

#### Defense Contract Management Agency Progress and Performance-Based Payments Data, Fiscal Years 2010 through 2018 (in fiscal year 2018 dollars)

Dollars in billions (adjusted for inflation using the fiscal year 2018 Gross Domestic Product Price Index)



Source: DOD data from Mechanization of Contract Administration Services (MOCAS). | GAO-19-406

DOD officials acknowledged that DOD has not comprehensively analyzed how its policies affect the defense industry since 1985. Industry and economic conditions, however, have since changed, including lower interest rates and the emergence of contractors who do not typically work with DOD. In August 2018, DOD proposed introducing performance-based elements into its process for setting progress payment rates. DOD officials stated that since the proposed rule focused on incentivizing contractors' performance, they did not assess how it would affect defense contractor profitability or whether other financing or profit policies changes would be needed. DOD withdrew the proposed rule in October 2018. GAO's *Standards for Internal Control in the Federal Government* call for organizations to monitor the effectiveness of their policies on a recurring basis. In December 2018, DOD officials acknowledged the need to do so. Until DOD conducts a comprehensive assessment and ensures they are done on a recurring basis, it will not be in a position to understand whether current or future contract financing policies are achieving their intended objectives.

---

# Contents

---

Letter		1
	Background	3
	Changes to the Legislative and Regulatory Framework Governing Contract Financing since 1985	9
	DOD Has Not Comprehensively Assessed the Impact of Its Contract Financing and Profit Policy on the Defense Industry Since 1985	17
	Conclusions	22
	Recommendation for Executive Action	23
	Agency Comments and Our Evaluation	23
Appendix I	Comments from the Department of Defense	25
Appendix II	Legal Chronology of Select Contract Financing Changes	26
Appendix III	GAO Contacts and Staff Acknowledgments	27
Tables		
	Table 1: Department of Defense (DOD) Contract Financing Payment Types and Conditions for Use	5
	Table 2: August 2018 Proposed Rule Criteria for Progress Payment Rate	16
	Table 3: Changes in Customary Progress Payment Rates since 1985	18
	Table 4: Legal Chronology of Select Contract Financing Changes	26
Figures		
	Figure 1: How Progress Payment Rate Impacts Contractor Profit and Internal Rate of Return under a Hypothetical, 40-month, Fixed Price Contract	7
	Figure 2: Timeline of Contract Financing Changes	10
	Figure 3: Defense Contract Management Agency Progress and Performance-Based Payments Data, Fiscal Years 2010 through 2018 (fiscal year 2018 dollars)	15

---

Figure 4: Number of Unfinalized Contract Actions and Unpriced Change Orders Reported by the Department of Defense between March 2014 and September 2018	20
Figure 5: Changes in Short-Term Interest Rates and Inflation since 1980	21

---

### Abbreviations

DCMA	Defense Contract Management Agency
DFAIR	Defense Financial and Investment Review
DFARS	Defense Federal Acquisition Regulation Supplement
DFAS	Defense Finance and Accounting Service
DOD	Department of Defense
DPC	Office of Defense Pricing and Contracting
FAR	Federal Acquisition Regulation
FASA	Federal Acquisition Streamlining Act
IRR	Internal rate of return
MOCAS	Mechanization of Contract Administration Services
UCA	Unfinalized Contract Action

This is a work of the U.S. government and is not subject to copyright protection in the United States. The published product may be reproduced and distributed in its entirety without further permission from GAO. However, because this work may contain copyrighted images or other material, permission from the copyright holder may be necessary if you wish to reproduce this material separately.



June 27, 2019

Congressional Committees

Contract financing provides contractors with billions of dollars in financing payments on contracts for major weapon systems and other products that may take years to produce. In the absence of such payments, contractors would need to borrow funds from commercial sources or use their own funds to pay for the costs to produce these systems. As early as the 1950s, the Department of Defense (DOD) recognized benefits in providing contract financing. Contract financing can take several forms, including

- **progress payments** based on the cost incurred by the contractor and
- **performance-based payments**, in which the government pays the contractor an agreed-to amount for achieving certain contractual milestones.<sup>1</sup>

DOD last performed a comprehensive assessment of its contract financing policies in 1985. This study, called the Defense Financial and Investment Review (DFAIR), assessed DOD’s contract pricing, financing, and profit policies in effect at that time. The review assessed the impact of contract financing on the cost of weapon systems and the health and profitability of the defense industry, among other things.<sup>2</sup> More recently, several defense industry associations expressed concerns about DOD’s current contract financing policies including the impact these policies had on the defense industry. DOD has stated that a healthy defense industrial base supports economic prosperity and global competitiveness, and arms the military with capabilities to defend the nation.

The Conference Report accompanying the John S. McCain National Defense Authorization Act for Fiscal Year 2019 contained a provision for GAO to analyze the level of financing currently provided to contractors

---

<sup>1</sup>For purposes of this report, we use the term “contract financing” to refer to progress and performance-based contract financing payments. See Federal Acquisition Regulation (FAR) Subparts 32.5 (Progress Payments Based on Costs) and 32.10 (Performance-Based Payments). Unless stated otherwise, all references to “progress payments” in this report refer to “customary progress payments.”

<sup>2</sup>Department of Defense, *Defense Financial and Investment Review*, (Washington, D.C.: June 1985).

---

among other things. This report (1) describes the changes in DOD contract financing policy since 1985 and (2) assesses the extent to which DOD has analyzed the effect of current contract financing policies on the defense industry.

To describe the changes in DOD contract financing policy since 1985, we reviewed relevant changes to legislation, the Federal Acquisition Regulation (FAR), the Defense Federal Acquisition Regulations Supplement (DFARS), and DOD guidance governing contract financing. We assessed DOD contract financing policies to determine the rationale behind these changes. We also interviewed officials from the Defense Contract Management Agency (DCMA), Under Secretary of Defense (Comptroller), and Defense Finance and Accounting Service (DFAS). We analyzed progress and performance-based payment data provided by DCMA from DOD's Mechanization of Contract Administration Services (MOCAS), the system of record for processing contract financing payments for DCMA administered contracts.<sup>3</sup> We used these data to determine how much DOD made in contract financing payments between fiscal years 2010 and 2018, the types of contractors that received these payments, and how the mix of performance-based and progress payments changed as policies changed. We adjusted the numbers for inflation, using the fiscal year 2018 Gross Domestic Product Price Index. We determined these data to be reliable for purposes of our objectives by interviewing DCMA officials who maintain the MOCAS system and reviewing documentation provided by DCMA.

To assess the extent to which DOD has analyzed the effect of its contract financing policies on the defense industry, we assessed prior and current DOD studies on contract financing. Specifically, we assessed DOD's 1985 DFAIR study, studies prepared by the Institute for Defense Analyses and RAND, and DOD regulations and supplementary information related to DOD contract financing policies. We also interviewed representatives within the Office of Defense Pricing and Contracting (DPC) about the department's approach to assessing the effect of contract financing policy on contractor profitability and operations. We also obtained views on DOD's current contract financing policy from industry groups including associations that publicly

---

<sup>3</sup>MOCAS is the payment system of record for contracts delegated to DCMA. According to DCMA officials, MOCAS does not contain contract finance payment data for contracts not delegated to DCMA for administration, such as construction contractors and Navy shipbuilding contracts.

---

commented on DOD's August 2018 proposed rule on contract financing. These groups included the Aerospace Industries Association, National Defense Industrial Association, and the Professional Services Council. We also met with Financial Executives International. We also reviewed our prior work on contract financing, profit, and profitability.<sup>4</sup> Specifically, we assessed DOD's studies and policies against our *Standards for Internal Controls in the Federal Government* to determine the extent to which DOD was conducting ongoing monitoring and assessments of its contract financing policies.<sup>5</sup>

We conducted this performance audit from August 2018 to June 2019 in accordance with generally accepted government auditing standards. Those standards require that we plan and perform the audit to obtain sufficient, appropriate evidence to provide a reasonable basis for our findings and conclusions based on our audit objectives. We believe that the evidence obtained provides a reasonable basis for our findings and conclusions based on our audit objectives.

---

## Background

DOD has long recognized that the contracts for items like weapon systems are capital intensive in nature and take a long time to produce. Contract financing assists the defense contractor in managing expenses, such as material, labor, and overhead. In such cases, DOD can agree to help finance these expenses as the work progresses through various types of contract financing payments, including progress payments and performance-based payments.<sup>6</sup>

- **Progress payments** based on cost are determined as a percentage of the costs incurred by the contractor as work progresses. Currently, DOD pays 80 percent of incurred costs of large business concerns

---

<sup>4</sup>See, for example, GAO, *Defense Industry Profit Study*, [B-159896](#) (Washington, D.C.: March 17, 1971); *Recent Changes in the Defense Department's Profit Policy – Intended Results Not Achieved*, [PSAD-79-38](#) (Washington, D.C.: March 8, 1979); and *Government Contracting: Assessment of the Study of Defense Contractor Profitability*, [GAO/NSAID-87-50](#) (Washington, D.C.: Dec. 23, 1986).

<sup>5</sup>GAO, *Standards for Internal Control in the Federal Government*, [GAO-14-704G](#) (Washington, D.C.: Sept. 10, 2014).

<sup>6</sup>Other types of contract financing include progress payments based on percentage or stage of completion; advance payments; and unusual forms of contract financing. These latter two financing approaches are lower in order of preference in the FAR.

---

and 90 percent of incurred costs of small business concerns.<sup>7</sup> To receive progress payments on the basis of cost, contractors are required to have an accounting system and controls that are adequate for proper administration of progress payments. The cognizant contract administration office is to maintain surveillance of the contractor's accounting system as appropriate, and the Defense Contract Audit Agency is to audit the accounting system.<sup>8</sup> DOD provides contract financing on fixed-price type contracts for non-commercial items.

- **Performance-based payments** enable the contractor to be paid for achieving certain contractual milestones, such as delivery of a major subcontracted component. DOD can pay up to 90 percent of either the contract's price or the price of a deliverable item using performance-based payments. DOD's performance-based payments guide states that these payments should not be structured such that they amount to advance payments, which in general terms are payments made before work is complete on a contract regardless of what performance milestones are met.<sup>9</sup> Unlike progress payments, however, performance-based payments do not require that the contractor have an adequate accounting system.

Lastly, contract financing can also be used when the terms and conditions of a contract are not yet "definitized," a term that generally means finalized. These actions, which are termed undefinitized contract actions (UCAs) at DOD, are to be used only when the negotiation of a definitive contract action is not possible in sufficient time to meet DOD's requirements and the department's interest demands that the contractor be given a binding commitment so that contract performance can begin immediately.<sup>10</sup> The government may incur unnecessary costs if

---

<sup>7</sup>In this report we refer to "small business concern" as "small business" and "other than small business concern" as "large business." See FAR § 2.101. DOD's progress payment rate for small businesses is 5% higher than the rate in the FAR. See FAR § 32.501-1.

<sup>8</sup>For more information on contractor business systems, see GAO, *Contractor Business Systems: DOD Needs Better Information to Monitor and Assess Review Process*, [GAO-19-212](#) (Washington, D.C.: Feb. 7, 2019).

<sup>9</sup>Department of Defense, Defense Procurement and Acquisition Policy, *Performance-Based Payments Guide* (2014).

<sup>10</sup>See FAR § 16.603 and DFARS §§ 216.603, 217.7400. Undefinitized contract action means any contract action including letter contracts, orders under basic ordering agreements, and provisioned item orders for which the contract terms, specifications, or price are not agreed upon before performance is begun under the action.



requirements change before the contract is definitized. Defense acquisition regulations generally require UCAs to be definitized within 180 days of the UCA date or before more than 50 percent of the estimated contract price is obligated, whichever occurs first.<sup>11</sup> During this period, progress payments are limited to 80 percent of work accomplished. DOD's 2014 performance-based payments guide recommends that a UCA be awarded using progress payments first; performance-based payments should then be considered during the definitization process.

Table 1 summarizes the conditions and rates applicable to progress payments based on costs and performance-based payments.

**Table 1: Department of Defense (DOD) Contract Financing Payment Types and Conditions for Use<sup>a</sup>**

Type of Financing	Conditions for Use
Progress payments based on cost <sup>b</sup>	<ul style="list-style-type: none"> <li>Contractor needs to have an adequate cost accounting system</li> <li>Used on fixed-price contracts and suitable for use on undefinitized contract actions (UCAs)</li> <li>Contract must be valued at \$2.5 million or more for other than small business concerns</li> <li>Used by DOD to finance a certain percentage of a contractor's work-in-process on fixed-price contracts through reimbursements of allowable costs incurred</li> <li>Made at not greater than the current progress payment rate based on contractor cost incurred for work completed. Currently, the progress payment rate is set at 80 percent of total costs of performing contract for other than small businesses and 90 percent of costs for small businesses.</li> </ul>
Performance-based payments	<ul style="list-style-type: none"> <li>Contractor does not need an adequate cost accounting system</li> <li>Used on fixed-price contracts; not typically provided on UCAs</li> <li>Contract must be valued at \$2.5 million or more for other than small business concerns</li> <li>May be made on the basis of performance measured by objective, quantifiable methods, accomplishment of defined events, or other quantifiable measures of results</li> <li>Can be made on whole contract or deliverable item basis</li> <li>Cannot exceed 90 percent of contract or deliverable item price</li> <li>Paid no more frequently than monthly</li> <li>Must not be structured in such a way as to become the equivalent of advance payments</li> </ul>

Source: GAO analysis of Federal Acquisition Regulation and Defense Federal Acquisition Regulations Supplement, and associated guidance. | GAO-19-406

<sup>a</sup>See Appendix II for the legal citations used to develop this table.

<sup>b</sup>In this table "progress payments" refer to "customary progress payments."

Several offices and agencies within DOD have a role in managing contract financing.

<sup>11</sup>See DFARS §217.7404-3. For additional information on UCAs, see GAO, *Defense Contracting: Observations on Air Force Use of Undefinitized Contract Actions*, GAO-15-496R, (Washington, D.C.: May 18, 2015).

- 
- The office of DPC, within DOD's Office of the Under Secretary of Defense for Acquisition and Sustainment, is responsible for all pricing, contracting, and procurement policy matters. This office formulates and oversees DOD-wide pricing policies and strategies supporting the procurement of major defense programs, including programs that use progress and performance-based payments.
  - DCMA and other contract administration offices monitor contractors' performance and management systems to ensure that cost, product, and performance are in compliance with the contract terms. DCMA generally maintains contract financing payment data for DOD progress and performance-based payments for contracts DCMA administers. Within DCMA, the Cost and Pricing Center supports DOD-wide analysis of contract data to support DOD-wide decision making, among other things.

---

## Relationship of Contract Financing to Contract Profit and Contractor Profitability

Contract financing has an impact on the price of negotiated contracts and, more generally, on the health and profitability of the defense contractor. On negotiated contracts, DOD requires contracting officers to use weighted guidelines, a structured approach used to develop profit objectives for individual defense contracts. DOD implements its profit policy through the weighted guidelines. As part of their efforts to determine the government's negotiating position, including how much profit the contractor should receive under the contract, contracting officers are to consider various factors, including the degree to which the government is providing contract financing.<sup>12</sup> Assuming other factors are held constant, the weighted guidelines suggest that the negotiated profit rate of a fixed-price defense contract might be 1 to 2 percentage points lower when the government provides contract financing. The contracting officer may vary the amount to consider other risk elements when establishing the government's negotiating position.

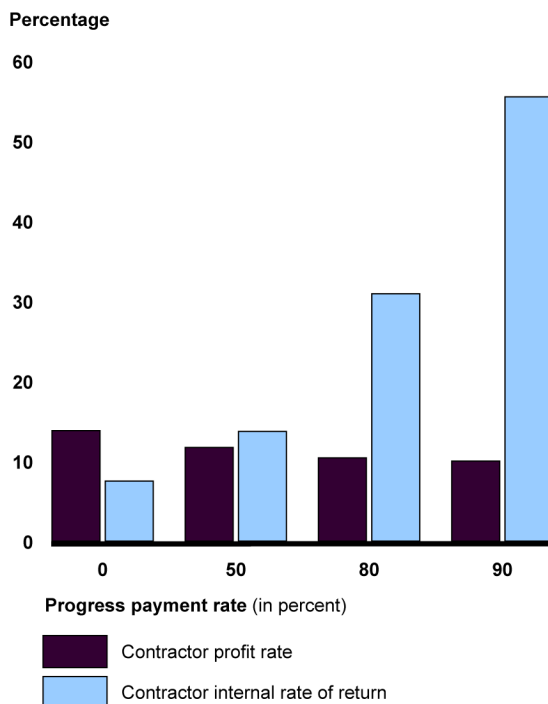
DOD-provided contract financing can also provide contractors higher rates of return on the amount of corporate funds contractors invest on that same contract. One measure of this benefit is "internal rate of return"

---

<sup>12</sup>Whether the government is providing contract financing is considered under one of the four profit factors covered by the weighted guidelines, namely the contract type risk. The other three profit factors that are to be considered include performance risk, facilities capital employed and cost efficiency. The facilities capital employed factor focuses on encouraging and rewarding capital investment in facilities that benefit DOD. When added together, these four profit factors can help develop the government's negotiation position. See DFARS § 215.404-71.

(IRR), a tool that can be used to assess the impact of contract financing on overall contractor profitability. DOD's 2001 Incentives Guidebook notes that IRR is one of the basic tools used by industry to determine where to invest its funds and assess the risks and potential rewards involved in contracting with the government or commercial entities.<sup>13</sup> IRR is a measure that integrates both the contractor's investment to produce the product and the profit earned on that product. In contrast to contracts in which the contractors must either self-finance or borrow from commercial lenders, when contractors receive financing on a contract from the government the contractor's IRR can be significantly higher. Figure 1 provides a hypothetical example of how changes in the progress payment rate on a 40-month, fixed-priced contract affects the expected contract profit rate and the contractor's IRR.

**Figure 1: How Progress Payment Rate Impacts Contractor Profit and Internal Rate of Return under a Hypothetical, 40-month, Fixed Price Contract**



Source: GAO analysis of DOD studies, guidebooks, regulations, and other contract financing studies. | GAO-19-406

<sup>13</sup>Department of Defense, Office of the Under Secretary of Defense for Acquisition and Technology memorandum, *Incentive Strategies for Defense Acquisitions* (Washington, D.C.: Jan. 5, 2001).

---

As illustrated above, providing contract financing (in this case, progress payments) has a significant impact on the contractor's IRR and a lesser impact on the actual profit that DOD expects the contractor to make. For example, if DOD provided no contract financing, the weighted guidelines would suggest a profit rate on this hypothetical contract of 13.8 percent, which would provide an internal rate of return to the contractor of 7.5 percent. If DOD provided progress payments at the customary rate of 80 percent, the weighted guidelines would suggest a profit rate on this hypothetical contract of 10.4 percent, or 3.4 percentage points lower than if no financing was provided. However, even though the contractor's expected profit is lower, the IRR for the contract would increase to 30.9 percent, or a little more than four times what would be realized if the contractor had to finance the effort on its own.

---

## Prior Studies of Contract Financing and Contract Profitability

Several studies conducted by DOD, nonprofit organizations and GAO have assessed the impact of contract financing on contract profit or contractor profitability. These studies have generally found that, depending on the measure used, the defense industry generates high returns on investment. For example,

- In 1976, DOD's Profit '76 study examined earnings' relationship to capital investment and increased productivity.<sup>14</sup> The Profit '76 study group concluded that government contractors were able to maintain higher profits by keeping investment low partly because DOD did not have profit policies in place to encourage investment in items such as facilities. As a result of the Profit '76 study, DOD made a number of changes to its profit policy to encourage corporate investment in facilities, among other things.
- In 1991, GAO suggested that using return on assets to measure profitability of defense contractors is beneficial because it recognizes how government financing can affect contractors' levels of profitability.<sup>15</sup>
- In 2008, the Institute for Defense Analyses reported that defense contractors generated high returns with low operating margins, in part

---

<sup>14</sup>Department of Defense, *Profit '76, Report of the Profit Study Group*. (Washington, D.C.: Dec. 7, 1976).

<sup>15</sup>GAO, *Government Contracting: Using Cost of Capital to Assess Profitability*, [GAO/NSIAD-91-163](#) (Washington, D.C.: Aug. 16, 1991).

---

because government-provided contract financing helped fund the contractors' long, asset-intensive product cycles.<sup>16</sup>

According to DPC officials, however, the most comprehensive study of contract financing and profit policies was conducted by the DFAIR commission in 1985. We discuss this study in more detail below.

---

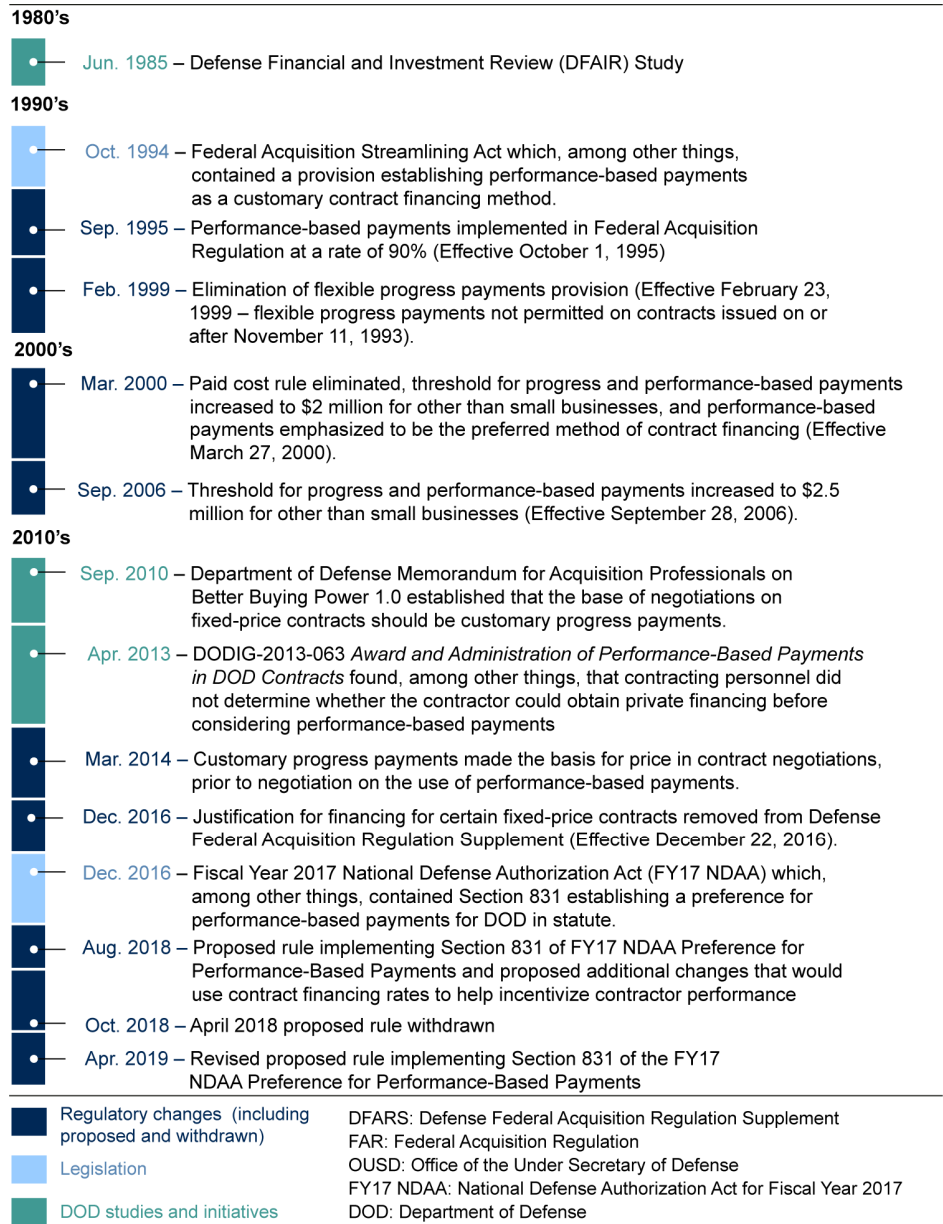
## Changes to the Legislative and Regulatory Framework Governing Contract Financing since 1985

Since the DFAIR commission issued its report in 1985, Congress and DOD have made a number of changes to the statutory and regulatory framework intended to (1) reduce the administrative burden associated with contract financing and (2) encourage the use of performance-based payments (see figure 2). Our review found that DOD paid less in performance-based payments after making some changes to contract financing policies, but started increasing these payments again in 2016.

---

<sup>16</sup>Institute of Defense Analyses, *Can Profit Policy and Contract Incentives Improve Defense Contract Outcomes?* (Alexandria, VA: October 2008).

**Figure 2: Timeline of Contract Financing Changes**



Source: GAO analysis of DOD documents, plans and legislation. | GAO-19-406

Note: See Appendix II for the legal citations consulted in preparing this timeline.

---

## DFAIR Commission's 1985 Study Considered to Be the Last Comprehensive Study of DOD's Contract Financing and Profit Policies

According to DPC officials, the most comprehensive study of contract financing and profit policies was conducted by the DFAIR commission in 1985. The DFAIR commission assessed, among other issues,

- whether DOD contract financing policies were equitable in maintaining the defense industrial base and cost-effective for DOD,
- the effectiveness of DOD contract financing policies as a means of encouraging contractor cost efficiencies,
- the profitability of defense work and its reasonableness in comparison with the profitability of the non-defense sector, and
- the interrelationship of DOD's contract finance and profit policies.

In evaluating contractor financing costs, DFAIR developed a model of a typical contract to use in calculating contractors' contract financing costs, the amount of interest a contractor would have to pay if it were required to bear all those costs, and the effect of payment delays on contractor financing costs.

The DFAIR commission reached a number of conclusions about DOD's contract financing and profit policy in effect at that time. The study concluded that:

- The progress payment rate was appropriate for the time period studied but should be revised based on changes in short-term interest rates.
- DOD's profit policy as reflected in the weighted guidelines at the time of the study did not explicitly take into account the cost of working capital (the difference between a contractor's assets and liabilities).
- The profitability of individual defense contracts the commission reviewed had been consistently lower than the profit levels reported to have been negotiated by government contracting officers.
- DOD's profit policy needed to be simplified and better integrated with contract financing policy.

The study also concluded that there was a need to make DOD contract financing more responsive to economic conditions and that profit policy, contract financing, and contractor investment are related. We agreed with the conclusion that profit policy, contract financing, and contractor investment are related. We also highlighted the need for recurring DOD

---

contract profitability studies using a generally accepted methodology in our 1986 report.<sup>17</sup>

---

## DOD Efforts to Reduce the Administrative Costs

Our work found that since the DFAIR study was issued, DOD made several changes to reduce the administrative burden associated with contract financing requirements. These changes included

- **Elimination of flexible progress payments (1999)** – DOD introduced flexible progress payments in 1981 as a new approach to contract financing. Under flexible progress payments, DOD contracting officers were to use the DOD Cash Flow Computer Model to develop an applicable progress payment rate for that contract. Under this approach, DOD specified the minimum percentage the contractor was required to invest and DOD would provide the remainder. The amount of contractor investment required by DOD varied from 5 to 25 percent, depending upon the year. Flexible progress payments were not allowed on contracts issued after November 11, 1993; the references were eliminated completely from the DFARS in 1999.
- **Elimination of “paid cost rule” (2000)** – The paid cost rule required large businesses to pay subcontractors before billing the government for payment. After DOD eliminated this rule in March 2000, large businesses were generally able to include subcontract costs incurred but not yet actually paid on progress payment requests to the government.
- **Elimination of “financial need requirement” (2016)** – Since 2000, one of the ways contractors could receive progress or performance-based payments under the FAR was on the basis of financial need or the unavailability of private financing.<sup>18</sup> In that regard, an April 2013 DOD Inspector General report found that contracting personnel did not properly negotiate and verify contractors’ need for contract financing before authorizing performance-based payments.<sup>19</sup> The Inspector General recommended that contracting personnel determine whether private financing is available to a contractor before

---

<sup>17</sup>[GAO/NSIAD-87-50](#).

<sup>18</sup>65 Fed. Reg. 16276-01 (Mar. 27, 2000) (FAR § 32.104).

<sup>19</sup>DOD Office of Inspector General, *Award and Administration of Performance-Based Payments in DOD Contracts*, DODIG-2013-063 (Alexandria, VA.: April 2013).



---

authorizing performance-based payments. While DOD concurred with the recommendation, it subsequently amended the DFARS in 2016 to eliminate the requirement for DOD personnel to justify the use of contract financing for certain fixed-price contracts. In doing so, DOD stated it was in DOD's best interests.

---

## Efforts to Encourage the Use of Performance-Based Payments

Congress enacted the Federal Acquisition Streamlining Act (FASA) in 1994 to provide the executive branch with requirements to improve the process for acquiring goods and services. FASA, among other things, established performance-based payments "wherever practicable" as a form of contract financing.<sup>20</sup> In 1995, the FAR Council amended the FAR to enable the use of performance-based payments up to a maximum amount of 90 percent of the contract's price. In 2000, DOD issued a rule amending the DFARS to emphasize that performance-based payments were the preferred method of financing. The rule required contracting officers to consider and deem performance-based payments impracticable before deciding to provide progress payments. This rule was part of a larger effort by DOD to make contract financing procedures easier to understand and to simplify related provisions. DOD subsequently issued a user's guide in 2001 to help its contracting personnel and contractors in using performance-based payments.

Despite the provisions to encourage the use of performance-based payments when appropriate, DOD subsequently initiated department-specific actions that, according to industry officials, decreased the frequency with which they received performance-based payments on defense contracts. For example, the Under Secretary of Defense for Acquisition, Technology and Logistics' September 2010 Better Buying Power memorandum instructed contracting officers to use progress payments as the basis for price negotiations.<sup>21</sup> After the contractor and DOD contracting officer agreed on price using progress payments, contractors could propose using an alternate financing arrangement,

---

<sup>20</sup>Federal Acquisition Streamlining Act of 1994, Pub. L. No. 103-355, § 2051 (Oct. 13, 1994). FASA is codified in various sections of Title 10 of the U.S. Code for military agencies and Title 41 of the U.S. Code for civilian agencies.

<sup>21</sup>The National Defense Authorization Act for Fiscal Year 2017 eliminated the position of Under Secretary of Defense (Acquisition, Technology, and Logistics). In its place the act created the positions of the Under Secretary of Defense (Acquisition and Sustainment) and the Under Secretary of Defense (Research and Engineering). This change was effective February 1, 2018. See National Defense Authorization Act for Fiscal Year 2017, Pub. L. No. 114-328, § 133b (Dec. 23, 2016); 10 U.S.C. § 133b (effective Feb. 1, 2018).

---

including performance-based payments.<sup>22</sup> The memorandum indicated that the rationale for this change was to provide increased incentives for contractor performance. In April 2011, the Director of Defense Procurement and Acquisition Policy (now known as DPC) issued a memorandum that focused on the “practicality” of performance-based payments, stating they “are not practical for use on all fixed-price contracts and require considerable effort between the contractor and Government.” The memorandum noted that if contractors wanted to use performance-based payments, then the contractor should submit a proposed schedule to include all performance-based payment events, completion criteria, and event values, along with the contractor’s expected expenditure profile.

To implement its April 2011 performance-based payment policy, DOD issued a proposed rule to amend the DFARS in January 2012. This rule was finalized in March 2014.<sup>23</sup> The 2014 version of the DOD performance-based payments user’s guide noted that performance-based payments are the preferred method only when they are deemed practical by the contracting officer. However, industry officials told us that they frequently cannot reach agreement with DOD regarding performance milestones, and therefore agree to the use of progress payments instead.

The impact of DOD’s changes on the relative use of progress versus performance-based payments is uncertain. Between fiscal years 2010 and 2018, DCMA data indicates that DOD provided between \$36 billion and \$49 billion a year in contract financing on contracts DCMA administered. We found that nearly 98 percent of those contract financing payments were paid to medium and large defense contractors. We also found that the amount DOD paid out in performance-based payments on those contracts fell between 2010 and 2016 before increasing in 2017. In December 2016, Congress enacted Section 831 of the Fiscal Year 2017 NDAA to establish performance-based payments as the preferred type of contract financing for DOD in statute.<sup>24</sup> Section 831 also directed the Secretary of Defense to ensure that nontraditional defense contractors and other private sector companies are eligible for performance-based

---

<sup>22</sup>Better Buying Power was an initiative by DOD to improve the way the department does business, which, among other things, made progress payments the basis for contract price negotiations.

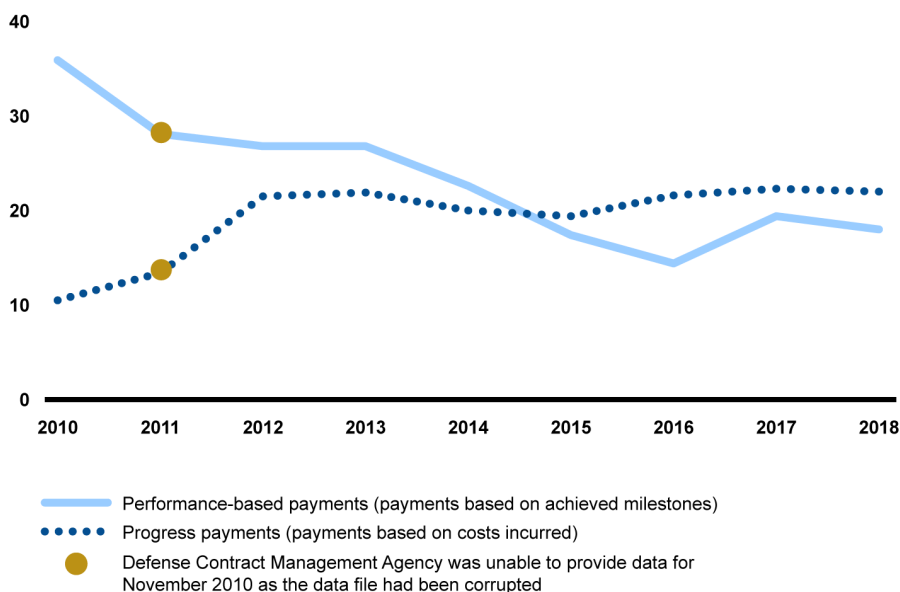
<sup>23</sup>See DFARS § 232.1004 (effective Mar. 31, 2014).

<sup>24</sup>See Pub. L. No. 114-328, § 831 (2016).

payments, in line with best commercial practices. Figure 3 shows the differences in DOD’s progress and performance-based payments between fiscal years 2010 and 2018 for contracts administered by DCMA.

**Figure 3: Defense Contract Management Agency Progress and Performance-Based Payments Data, Fiscal Years 2010 through 2018 (fiscal year 2018 dollars)**

Dollars in billions (adjusted for inflation using the fiscal year 2018 Gross Domestic Product Price Index)



Source: DOD data from Mechanization of Contract Administration Services (MOCAS). | GAO-19-406

In August 2018, DOD introduced a proposed rule that was intended to use contract financing rates to help incentivize contractor performance and to implement Section 831. The proposed rule would have set a base progress payment rate for large businesses (specifically, for other than small businesses) at 50 percent and small businesses at 90 percent. At the same time, however, the proposed rule provided opportunities to increase the rate if the contractor achieved certain enterprise-wide priorities such as meeting contract delivery dates. The proposed rule also eliminated some of the administrative requirements associated with performance-based payments to encourage their use. According to DPC officials, the rates would be subject to an annual adjustment based on the performance criteria provided in the rule. Table 2 summarizes key aspects of the proposed rule.

**Table 2: August 2018 Proposed Rule Criteria for Progress Payment Rate**

Criteria	Other than small businesses	Small businesses
Base progress payment rate <sup>a</sup>	50 percent	90 percent
<b>Additional criteria for increasing progress payment rate</b>		
Met the contract delivery dates at least 95 percent of the time during the preceding government fiscal year (October 1 through September 30)	10 percent	2 percent
Does not have open level III or IV corrective action requests <sup>b</sup>	10 percent	2 percent
All applicable contractor business systems are acceptable, without significant deficiencies	10 percent	1 percent
At least 95 percent of the time during the preceding government fiscal year, when responding to solicitations that required submission of certified cost or pricing data, met the due date in the request for proposal and complied with the proposal adequacy checklist	7.5 percent	Not applicable
Has met its small business subcontracting goals during the preceding government fiscal year	5 percent	Not applicable
Has provided subcontracting opportunities for AbilityOne <sup>c</sup>	2.5 percent	Not applicable
<b>Maximum achievable progress payment rate</b>	<b>95 percent</b>	<b>95 percent</b>

Source: GAO analysis of DOD's proposed rule | GAO-19-406

<sup>a</sup>In cases where the contractor or any principal had been convicted of or had a civil judgment rendered against it for fraud or criminal offense in the previous fiscal year in connection with obtaining, attempting to obtain, or performing a public contract or subcontract, the applicable rate would have been reduced to 25 percent.

<sup>b</sup>A corrective action request is sent to a supplier when an item or process does not conform to the contract terms and a remedy is required. Level III calls attention to serious contract nonconformity. Level IV is issued when a Level III has not been effective or the contractual nonconformity is so serious that it warrants contractual remedies such as suspension of progress payments or product acceptance activities.

<sup>c</sup>The AbilityOne program is among the nation's largest sources of employment for people who are blind or have significant disabilities.

DOD officials acknowledged that if implemented, contractors would initially receive a lower level of contract financing, but believe with improvements in their overall performance contractors would eventually receive much higher levels of financing than currently provided.

Industry officials voiced a number of concerns about the proposed rule at the January and February 2019 public meetings held after the rule was proposed, as well as in our interviews with them. For example, these officials noted that the proposed rule would change the intent of contract financing from a means of assisting contractors to help meet short-term expenses to a mechanism for ensuring compliance with contract terms and conditions on an enterprise-wide basis. Industry officials said they believe compliance with contract terms and conditions should be

---

addressed on a contract-by-contract basis. Further, industry officials stated that the changes suggested in the proposed rule could negatively impact the health, competitiveness, and resiliency of the defense industrial base and introduce significant uncertainty as to how much contract financing DOD would provide. Additionally, industry officials noted that the rule did not contain specific implementation details in such areas as whether the incentives would be applied on an enterprise-wide basis and how to ensure the data were reliable. DOD withdrew this rule in October 2018, citing the need to conduct additional outreach with industry regarding contract financing methods.

Subsequently, DPC held three public meetings in January and February 2019 to obtain public comments on revising policies and procedures for contract financing, performance incentives, and associated regulations prior to proposing a new rule. DPC provided no timeframes for doing so.

DOD officials issued the proposed rule in April 2019 to implement Section 831's statutory preference for performance-based payments for public comment. The proposed rule notes that performance-based payments are the preferred method of contract financing at DOD whenever practicable. The period for public comments ends on July 1, 2019. DOD officials indicated that they hope to issue a final rule in early 2020.<sup>25</sup>

---

## **DOD Has Not Comprehensively Assessed the Impact of Its Contract Financing and Profit Policy on the Defense Industry Since 1985**

### **Defense Industry and Market Conditions Have Changed since 1985**

DOD has not conducted a comprehensive assessment of the impact of its contract financing and profit policies on the defense industry since the DFAIR study was completed in 1985. In the intervening time, there have been significant changes in the composition of the defense industry, business practices, and economic conditions. In December 2018, DPC officials acknowledged the need to assess contract financing policies against market and economic conditions on an ongoing basis and determine the effect these policies have on the defense industry, but did not provide a timeframe for doing so.

DOD officials acknowledged that the department has not done a comprehensive assessment of how its contract financing policies affect the defense industry since the DFAIR study was issued in 1985. DOD had previously stated its intent to do such an assessment on a regular

---

<sup>25</sup>See 84 Fed. Reg. 18221 (Apr. 30, 2019).

basis. Specifically, in 1991 DOD noted that it would issue progress payment rates each February.<sup>26</sup> DOD also noted that it would use the methodology from the DFAIR study to determine the progress payment rate based on short-term commercial interest rates. However, DOD removed the DFARS provision related to flexible progress payments in 1999.

Overall, we found that DOD has adjusted the progress payment rate five times since the DFAIR study was completed, but only adjusted the progress payment rate twice since 1991 when DOD indicated its intent to assess the rate annually. DOD last changed the progress payment rate in 2001 (see table 3).

**Table 3: Changes in Customary Progress Payment Rates since 1985**

Date Rate Was Changed	Progress Payment Rate	
	Other than Small Business	Small Businesses
May 1, 1985	80 percent	90 percent
November 5, 1987	75 percent	80 percent
October 1, 1988	80 percent	85 percent
July 1, 1991	85 percent	90 percent <sup>a</sup>
November 11, 1993	75 percent	90 percent
October 1, 2001	80 percent	90 percent

Source: GAO analysis of DOD regulations. | GAO-19-406

<sup>a</sup>The rate for small disadvantaged businesses is 95 percent.

Since the DFAIR study was conducted and DOD last assessed progress payment rates, DOD and industry officials noted that the composition of the defense industry has changed, as we have noted in our prior work. For example, in 1997, we reported that the end of the Cold War and the subsequent declines in DOD budgets resulted in, among other changes,

<sup>26</sup>DOD amended the DFARS to continue the use of flexible progress payments in 1991 and revise the customary uniform progress payment rate for contracts awarded on or after July 1, 1991, to 85 percent for large businesses, 90 percent for small businesses, and 95 percent for small disadvantaged businesses.

---

a reduction in the number of defense contractors through various mergers and acquisitions.<sup>27</sup>

In our current work, DPC officials pointed to a changing proportion of subcontractors relative to prime contractors. Industry officials also identified the emergence of contractors who do not typically work with DOD and technology companies into the defense sector as an issue that should be considered when looking at contract financing and profit policies. According to industry officials, the industrial base has moved away from heavy industrial manufacturing toward technology and more sophisticated industry partners, including contractors who do not typically work with DOD. These officials noted that these contractors may not be eligible for contract financing because they may not have an approved cost accounting system needed to receive progress payments. In that regard, in July 2017, we reported that one company conducted a study that determined it would take at least 15 to 18 months and millions to establish a government-unique cost accounting system.<sup>28</sup> Industry officials also noted that the emergence of high-technology companies may pose a challenge to traditional defense contractors in terms of attracting financing and investment from commercial and private investors at competitive rates.

Industry officials also identified changing business practices, including the increased use of UCAs, which affect their ability to use performance-based payments. Industry officials stated that it is more difficult to negotiate performance-based payments on UCAs, noting that DOD's guidance suggests that performance-based payments should not be provided for UCAs until definitization occurs. Our review of DOD's semi-annual reports to Congress on the use of UCAs found that the number of UCAs and unpriced change orders reported by DOD has varied between March 2014 and September 2018 (see figure 4).<sup>29</sup>

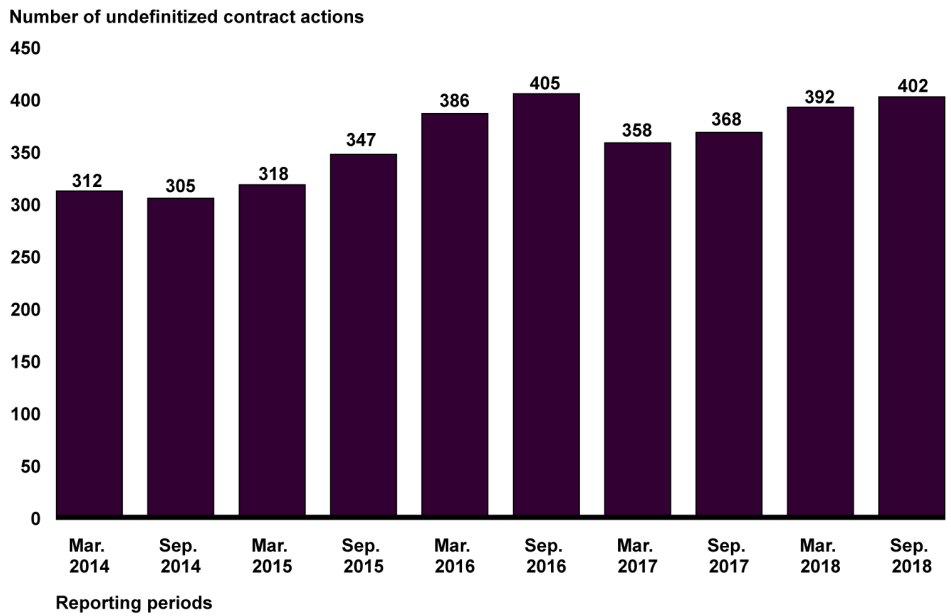
---

<sup>27</sup>GAO, *Defense Industry: Trends in DOD Spending, Industrial Productivity and Competition*, [GAO/PEMD-97-3](#) (Washington, D.C.: January 31, 1997).

<sup>28</sup>For additional information, see GAO, *Military Acquisitions: DOD Is Taking Steps to Address Challenges Faced by Certain Companies*, [GAO-17-644](#) (Washington, D.C.: July 20, 2017).

<sup>29</sup>An unpriced change order is a unilateral, within scope order on which the parties have not yet reached agreement on an equitable adjustment. According to DOD officials, it includes change orders, administrative changes, funding modifications, or any other contract modifications that are within the scope and under the terms of the contract, for example engineering change proposals, and value engineering change proposals.

**Figure 4: Number of Undefined Contract Actions and Unpriced Change Orders Reported by the Department of Defense between March 2014 and September 2018**



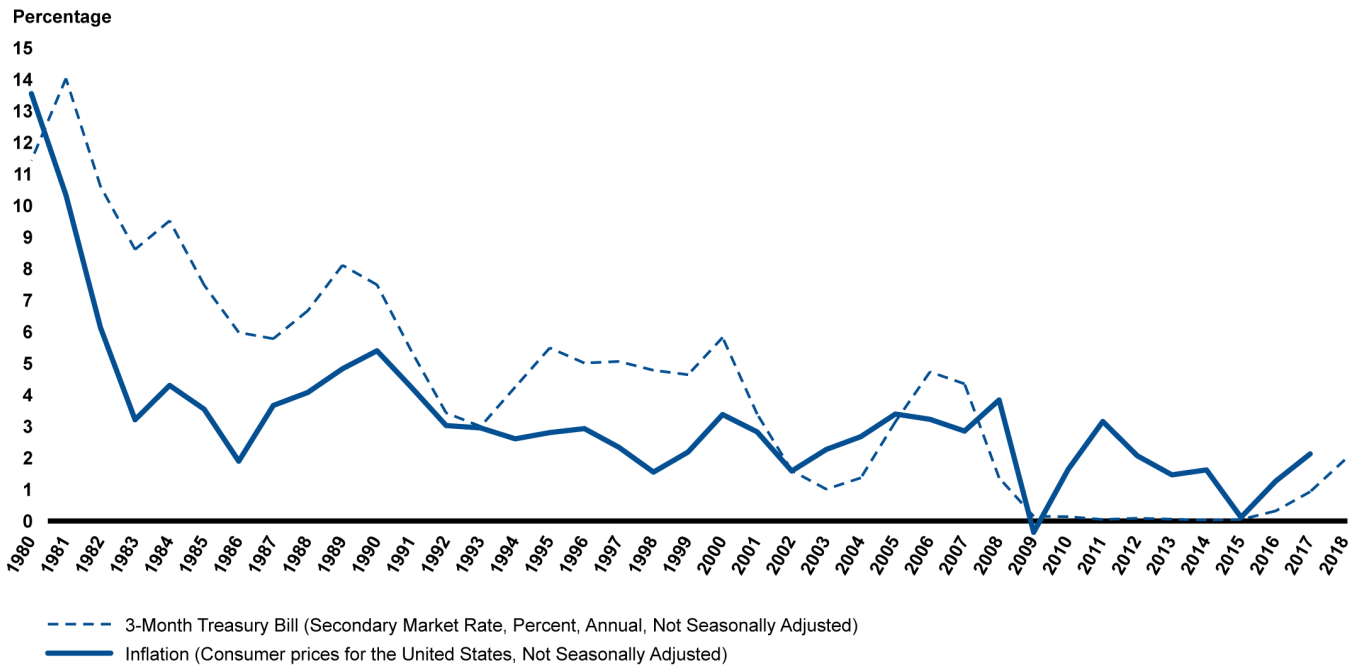
Source: Department of Defense's Office of the Under Secretary of Defense for Acquisition and Sustainment Quarterly Report to Congress. | GAO-19-406

DOD reported that the total not-to-exceed dollar value of all UCAs and unpriced change orders was approximately \$76 billion as of September 2018.

Finally, market and economic conditions have changed since the DFAIR study. For example, at the time of the DFAIR study, short-term interest rates were around 8 percent, whereas the short-term interest rate in 2018 was 2 percent. Figure 5 shows the changes in short-term interest rates and inflation since 1980.



**Figure 5: Changes in Short-Term Interest Rates and Inflation since 1980**



Source: Federal Reserve economic data. | GAO-19-406

Industry officials noted, however, that a comprehensive economic assessment of defense industry returns and the cost of contract financing policies should be conducted. For example, they noted that a reduction to progress payment rates in times of higher interest rates would increase their cost of working on complex contracts. Industry officials acknowledged that while interest rates have been low, they anticipate rates increasing in the near future.

### DOD’s August 2018 Proposed Rule Did Not Consider Impact on the Defense Industry

DPC officials acknowledged that DOD’s August 2018 proposed rule did not assess the proposed rule’s impact on the health and profitability of the defense industry. DPC officials noted that since the proposed rule was focused on incentivizing contractor performance, DOD’s supporting analysis did not include an assessment of how the proposed rule would impact the overall profitability of defense contractors (such as assessing the impacts to a contractor’s internal rate of return) or of the profitability of defense work relative to non-defense industry opportunities. Rather, DOD’s analysis estimated the total financial impact the rule would have on large and small contractors primarily based on interest costs.

---

Further, DOD stated in its supplementary material that it did not consider the extent to which the contract profit policy (in the form of weighted guidelines) would need to be adjusted given the proposed rule changes. DPC officials explained that changes to the weighted guidelines would need to consider how such changes would support the intent of providing higher rates of contract financing for higher levels of contractor performance. If DOD were to only propose a change to the progress payment rate, DPC officials acknowledged that such an assessment should consider what changes, if any, would need to be made to the weighted guidelines. DPC officials said they conducted an informal analysis that assessed contractor profitability, but this analysis was not made publicly available.

In December 2018, DPC officials acknowledged the need to assess contract financing policies against market conditions on an ongoing basis and determine the effect these policies have on the defense industry. GAO's *Standards for Internal Control in the Federal Government* call for monitoring the effectiveness of systems and policies throughout an organization on a recurring basis.<sup>30</sup> Until DOD conducts a comprehensive assessment and updates that assessment on a recurring basis, it will not be in a position to understand whether current or future contract financing policies are achieving their intended objectives.

---

## Conclusions

DOD and industry officials have acknowledged that the defense industry, economic and market conditions, legislative and regulatory requirements, and business practices have all changed since the issuance of the DFAIR study in 1985. Despite this recognition, DOD has not conducted a comprehensive assessment of how its contract financing policies affect the defense industry in more than 30 years. Without assessing the collective impact of these changes, DOD may be assuming too much financial risk or providing contractors with levels of working capital that are not commensurate with what is needed to help finance long-term projects, and affecting its ability to attract new entrants into the defense market. That assessment, however, should not be a one-time effort. A prior DOD study, our work, and the department have acknowledged the need to do so on a regular and recurring basis. Without a comprehensive and systemic assessment, conducted on a recurring basis, of DOD's contract financing policy's effect on the defense industry, DOD will not be

---

<sup>30</sup>[GAO-14-704G](#).

---

in a position to understand whether current or future policies are achieving their intended objectives.

---

## Recommendation for Executive Action

We recommend that the Acting Secretary of Defense direct the Under Secretary for Acquisition and Sustainment to ensure it conducts a comprehensive assessment of the effect that its contract financing and profit policies have on the defense industry and update that assessment on a recurring basis. (Recommendation 1)

---

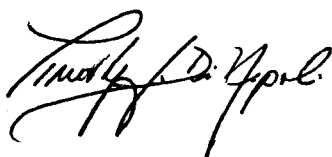
## Agency Comments and Our Evaluation

We provided a draft of this report to DOD for review and comment. DOD provided written comments, which are reprinted in appendix I, and concurred with our recommendation. In concurring with our recommendation, DOD stated it would seek fiscal year 2020 funds to contract a study on DOD contract financing policies and their effect on the defense industry. DOD also provided technical comments, which we incorporated as appropriate.

---

We are sending copies of the report to the Acting Secretary of Defense; the Principal Acting Director, Defense Pricing and Contracting; the Director, Defense Contract Management and Agency; the Director, Office of Management and Budget; the Administrator for Federal Procurement Policy, and appropriate congressional committees. In addition, the report will be available at no charge on GAO's website at <http://www.gao.gov>.

If you or your staff have any questions about this report, please contact me at (202) 512-3665 or [dinapolit@gao.gov](mailto:dinapolit@gao.gov). Contact points for our Offices of Congressional Relations and Public Affairs may be found on the last page of this report. GAO staff who made major contributions to this report are listed in appendix III.



Timothy J. DiNapoli  
Director, Contracting and National Security Acquisitions

---

*List of Congressional Committees*

The Honorable James M. Inhofe  
Chairman

The Honorable Jack Reed  
Ranking Member  
Committee on Armed Services  
United States Senate

The Honorable Richard Shelby  
Chairman

The Honorable Richard Durbin  
Ranking Member  
Subcommittee on Defense  
Committee on Appropriations  
United States Senate

The Honorable Adam Smith  
Chairman

The Honorable Mac Thornberry  
Ranking Member  
Committee on Armed Services  
House of Representatives

The Honorable Peter Visclosky  
Chairman

The Honorable Ken Calvert  
Ranking Member  
Subcommittee on Defense  
Committee on Appropriations  
House of Representatives

# Appendix I: Comments from the Department of Defense



ACQUISITION  
AND SUSTAINMENT

THE UNDER SECRETARY OF DEFENSE  
3010 DEFENSE PENTAGON  
WASHINGTON, DC 20301-3010

MAY 30 2019

Mr. Timothy J. DiNapoli  
Director, Contracting and National Security Acquisitions  
U.S. Government Accountability Office  
441 G Street, NW  
Washington DC 20548

Dear Mr. DiNapoli:

This is the Department of Defense (DoD) response to the Government Accountability Office (GAO) Draft Report GAO-19-406, "Contract Financing: DoD Should Comprehensively Assess How its Policies Affect the Defense Industry" dated April 30, 2019 (GAO Code 102990).

DoD concurs with the draft report's recommendation that "the Acting Secretary of Defense direct the Under Secretary for Acquisition and Sustainment to ensure it conducts a comprehensive assessment of the effect that its contract financing and profit policies have on the defense industry and update that assessment on a recurring basis." Defense Pricing and Contracting will seek Fiscal Year 2020 funds with which to contract for a study of the effect that DoD contract financing and profit policies have on the defense industry.

My point of contact is Mr. Michael Pelkey who can be reached at [Michael.f.pelkey.civ@mail.mil](mailto:Michael.f.pelkey.civ@mail.mil) or 703-614-1253.

Sincerely,

Kim Herrington  
Acting Principal Director,  
Defense Pricing and Contracting

# Appendix II: Legal Chronology of Select Contract Financing Changes

**Table 4: Legal Chronology of Select Contract Financing Changes**

Year	Authority	Action
1981	47 Fed. Reg. 9399 (effective Oct. 30, 1981).	Flexible progress payments introduced in defense acquisition regulations.
1985	50 Fed. Reg. 18666 (effective May 1, 1985).	Customary progress payment rate reduced to 80 percent for other than small businesses in the Defense Federal Acquisition Regulation Supplement (DFARS).
1987	53 Fed. Reg. 38185 (effective Nov. 5, 1987).	Customary progress payment rate reduced to 75 percent for other than small businesses in the DFARS.
1988	53 Fed. Reg. 35511 (effective Oct. 1, 1988).	Customary progress payment rate increased to 80 percent for other than small businesses in the DFARS.
1991	56 Fed. Reg. 31341 (effective July 1, 1991).	Customary progress payment rate increased to 85 percent for other than small businesses in the DFARS.
1993	58 Fed. Reg. 62045 (effective Nov. 11, 1993).	Customary progress payment rate reduced to 75 percent for other than small businesses and flexible progress payments precluded from use on contracts issued on or after effective date in the DFARS.
1994	Federal Acquisition Streamlining Act, Pub. L. No. 103-355, §§ 2001, 2051 (Oct. 13, 1994).	Established performance-based payments as a contract financing method.
1995	60 Fed. Reg. 49707 (effective Oct. 1, 1995).	Implemented performance-based payments in the FAR at a rate of 90 percent.
1999	64 Fed. Reg. 8731 (effective Feb. 23, 1999).	Elimination of flexible progress payment references from the DFARS.
2000	65 Fed. Reg. 16276 (effective Mar. 27, 2000).	“Paid cost rule” eliminated, threshold for customary progress and performance-based payments increased to \$2 million for other than small businesses, and performance-based payments emphasized to be the preferred form of contract financing in the FAR.
2001	66 Fed. Reg. 49864 (effective Oct. 1, 2001).	Customary progress payment rate increased to 80 percent for other than small businesses in the DFARS.
2006	71 Fed. Reg. 57363 (effective Sep. 28, 2006).	Threshold for customary progress and performance-based payments increased to \$2.5 million for other than small businesses in the FAR.
2014	79 Fed. Reg. 17931 (effective Mar. 31, 2014).	Customary progress payments made the basis for price in contract negotiations, prior to negotiation on the use of performance-based payments in the DFARS.
2016	81 Fed. Reg. 93841 (effective Dec. 22, 2016).	Justification for financing for certain fixed-price contracts removed from DFARS.
2016	National Defense Authorization Act for Fiscal Year 2017, Pub. L. No. 114-328, § 831 (Dec. 23, 2016).	Established a preference for performance-based payments for DOD in statute.
2018	83 Fed. Reg. 42831 (Aug. 24, 2018).	Proposed rule implementing Section 831 of Pub. L. No. 114-328 (Preference for Performance-Based Payments), and proposing additional changes that would use contract financing rates to help incentivize contractor performance.
2018	83 Fed. Reg. 50052 (Oct. 4, 2018)	Proposed rule implementing Section 831 and proposing additional changes withdrawn.

Source: GAO review of select regulations and statutes. | GAO-19-406

---

# Appendix III: GAO Contacts and Staff Acknowledgments

---

## GAO Contact

Timothy J. DiNapoli, (202) 512-3665, or [dinapolit@gao.gov](mailto:dinapolit@gao.gov)

---

## Staff Acknowledgements

In addition to the contact named above, Bruce H. Thomas, Assistant Director; Lorraine Ettaro, Elizabeth Field, Gina Flacco, Stephanie Gustafson, Kristen Kociolek, John Lopez, Beth Reed Fritts, Miranda Riemer, Anne Stevens, Megan Stewart, Anne Louise Taylor, Alyssa Weir, Robin Wilson, and Alex Winograd made key contributions to this report.

---

---

## GAO's Mission

The Government Accountability Office, the audit, evaluation, and investigative arm of Congress, exists to support Congress in meeting its constitutional responsibilities and to help improve the performance and accountability of the federal government for the American people. GAO examines the use of public funds; evaluates federal programs and policies; and provides analyses, recommendations, and other assistance to help Congress make informed oversight, policy, and funding decisions. GAO's commitment to good government is reflected in its core values of accountability, integrity, and reliability.

---

## Obtaining Copies of GAO Reports and Testimony

The fastest and easiest way to obtain copies of GAO documents at no cost is through GAO's website (<https://www.gao.gov>). Each weekday afternoon, GAO posts on its website newly released reports, testimony, and correspondence. To have GAO e-mail you a list of newly posted products, go to <https://www.gao.gov> and select "E-mail Updates."

---

## Order by Phone

The price of each GAO publication reflects GAO's actual cost of production and distribution and depends on the number of pages in the publication and whether the publication is printed in color or black and white. Pricing and ordering information is posted on GAO's website, <https://www.gao.gov/ordering.htm>.

Place orders by calling (202) 512-6000, toll free (866) 801-7077, or TDD (202) 512-2537.

Orders may be paid for using American Express, Discover Card, MasterCard, Visa, check, or money order. Call for additional information.

---

## Connect with GAO

Connect with GAO on [Facebook](#), [Flickr](#), [Twitter](#), and [YouTube](#).  
Subscribe to our [RSS Feeds](#) or [E-mail Updates](#). Listen to our [Podcasts](#).  
Visit GAO on the web at <https://www.gao.gov>.

---

## To Report Fraud, Waste, and Abuse in Federal Programs

Contact FraudNet:

Website: <https://www.gao.gov/fraudnet/fraudnet.htm>

Automated answering system: (800) 424-5454 or (202) 512-7700

---

## Congressional Relations

Orice Williams Brown, Managing Director, [WilliamsO@gao.gov](mailto:WilliamsO@gao.gov), (202) 512-4400, U.S. Government Accountability Office, 441 G Street NW, Room 7125, Washington, DC 20548

---

## Public Affairs

Chuck Young, Managing Director, [youngc1@gao.gov](mailto:youngc1@gao.gov), (202) 512-4800 U.S. Government Accountability Office, 441 G Street NW, Room 7149 Washington, DC 20548

---

## Strategic Planning and External Liaison

James-Christian Blockwood, Managing Director, [spel@gao.gov](mailto:spel@gao.gov), (202) 512-4707 U.S. Government Accountability Office, 441 G Street NW, Room 7814, Washington, DC 20548



Please Print on Recycled Paper.