

The Impact of Contract Bundling on Small Business FY 1992–FY 2001

by

**Eagle Eye Publishers, Inc.
Fairfax, Virginia**

for



under contract number SBAHQ-01-M-0352

Release Date: October 2002

The opinions and recommendations of the authors of this study do not necessarily reflect official positions of the SBA or other agencies of the U.S. government.

Table of Contents

1. <i>Executive Summary</i>	4
Overall Assessment.....	4
Annual Figures.....	4
Other Factors Driving Bundling.....	5
Official Government Bundling Measure.....	5
2. <i>Introduction</i>	7
3. <i>Methodology</i>	9
A. The Data Source	9
B. Definitions	10
Bundled Contract.....	10
Eagle Eye’s Explicitly Bundled Contracts (EBC).....	10
Markets.....	11
Large Contracts.....	12
C. Key Analytical Procedures	12
Determination of Explicit Bundling for the 10-Year Study Period.....	12
Explicit Bundling in the Analysis of One Fiscal Year at a Time.....	12
New Federal Government Measure of Bundling.....	14
Markets in the Analysis of One Fiscal Year at a Time.....	15
Large Contracts in the Analysis of One Fiscal Year at a Time.....	16
New Contractors.....	16
Type of Contractor.....	16
4. <i>Overall Analysis</i>	17
A. All Contracts	17
B. Bundling by Contract Size	17
C. Bundling by Number of Actions	18
D. Type of Business Analysis	19
Bundled Contract and Dollar Totals by Business Type.....	19
Average Values for Bundled and Unbundled Contracts.....	21
Contract Shares by Type of Business.....	22
E. DoD vs. Civilian Awards	25
F. Market Analysis	26
G. Kind of Contract Totals	26
5. <i>Section 4: Year-By-Year Analysis</i>	28
A. Introduction	28
B. Overall Numbers	28
C. Large vs. Small Contract Bundling Share	30
D. Bundled Spending by Market	30

E.	Agency Analysis	32
F.	Analysis of Overall and Bundled Dollar Shares by Major Business Category	35
G.	Type of Business Deciles Analysis	37
H.	FY 2001 Parent Company Rank	38
I.	Parent Company Count.....	39
J.	Large and Small Bundled and Unbundled Contracts	40
K.	Bundling by Kind of Contract	41
L.	Regression Analysis	44
	Contract Analysis	44
	Dollar Analysis	46
	Regression Analysis Summary	48
6.	<i>Conclusion</i>	<i>49</i>
	10-Year Trend	49
	Key Factors Fueling Bundling	49
	Cost to Small Business.....	50
	Official Government Bundling Measure	50
7.	<i>Appendix A: Detailed Methodology for Bundled Contract Identification</i>	<i>51</i>
	A. The Data Source	51
	B. Definitions	52
	Bundled Contract	52
	Previous Definitions of Bundled Contracts	52
	Explicitly Bundled Contracts	55
	Markets.....	57
	Large Contracts.....	57
	Bundled Contract Rating.....	57
	Regression Analysis	58
	C. Procedures	58
	Determination of Explicit Bundling for the Entire Period	58
	Explicit Bundling in the Analysis of One Fiscal Year at a Time.....	58
	Markets in the Analysis of One Fiscal Year at a Time	59
	Large Contracts in the Analysis of One Fiscal Year at a Time	59
	New Contractors	60
	Type of Contractor.....	60

1. Executive Summary

The number and size of bundled contracts issued by federal agencies has reached record levels, and small businesses are receiving disproportionately small shares of the work on bundled contracts. Most bundling is occurring as a result of the accretion of dissimilar tasks on existing task and delivery-order type contracts. This trend is favoring large firms.

Overall Assessment

Between FY 1992 and FY 2001 federal agencies reporting to the U.S. General Services Administration's (GSA's) Federal Procurement Data Center (FPDC) issued a combined 1.24 million prime contracts worth a total \$1.89 trillion. Eagle Eye's measure of bundling has determined that 106,387 or 8.6 percent of these contracts were bundled and that they accounted for \$840.3 billion, or 44.5 percent, of reported prime contract dollars during this period.

Over this same 10-year period 8(a) Minority- and Woman-Owned Businesses, Small Disadvantaged Businesses (SDBs) and Other Small Businesses (OSBs) won a combined 60.7 percent of the 1.24 million prime contracts, however their share of bundled contracts was 48 percent, nearly 13 percentage points lower. Similarly, the small firm dollar share of all prime contracts was 18.1 percent, dropping to 13 percent of all bundled dollars. By contrast, large firms won 27 percent of all prime contracts and 37 percent of the bundled contracts. This translated into large firms winning 67 percent of all prime contract dollars and 75 percent of all bundled dollars.

Annual Figures

In FY 2001 both the number of bundled contracts and the amount of bundled contract dollars were the highest in 10 years. The annual bundled contract count of 28,916 was up 8 percent from FY 2000 and up 19 percent since 1992. In FY 2001 bundled contracts accounted for 16.4 percent of the reported 177,000 prime contracts and 51 percent of all reported prime contract spending.

During FY 2001, agencies awarded 105,000 out of 177,000 prime contracts to small businesses, or 59.3 percent. However, the small business share of bundled contracts was 52.7 and the small business share of all bundled dollars was just 16.7 percent. Overall, the government reported awarding 20 percent of all prime contract dollars to small business in FY 2001.

Between FY 1992 and FY 2001 prime contracts grew annually in size, breadth of work required and in numbers of locations where work was performed. The average size of a prime contract grew 32.5 percent, from \$915,000 in FY 1992 to \$1.2 million in FY 2001. Average bundled contract size grew from \$3.3 to \$3.8 million, or 13.8 percent. By FY 2001, an average bundled contract was over three times larger than an average contract and over five times larger than an average unbundled contract.

The larger number of tasks required for fulfilling bundled contracts and the consequent increase in dollar size of these contracts favors large businesses and larger small businesses while inhibiting the ability of small or new firms to bid for and win federal contracts.

A regression showed that for every increase of 100 bundled contracts there was a decrease of 60 contracts to small business; and for every additional \$100 awarded on bundled contracts there was a decrease of \$12 to small business. At a level of \$109 billion in FY 2001, bundled contracts cost small businesses \$13 billion annually. This is making it increasingly difficult for small businesses to compete and survive in the federal marketplace.

The distribution of bundled dollars is skewed toward the largest firms. A deciles analysis shows that the largest 10 percent of all firms that won bundled contracts in FY 2001 received 92 percent of the bundled dollars. Of the 1,484 firms in the top 10 percent, 703 were small businesses. These 703 small businesses, representing just 7.3 percent of all small firms that were awarded bundled contracts in FY 2001, accounted for 67 percent of all small firm bundled dollars.

Other Factors Driving Bundling

Bundling is rooted in the Defense sector, where 10 percent of the contracts and 55 percent of the \$1.2 trillion spent on defense contracts were bundled between FY 1992 and FY 2001. Although dollar totals and rates of bundled contracts are as high or higher in some branches of the General Services Administration (GSA), Health and Human Services (HHS), Social Security and Treasury the combined, high level of spending by the Army, Navy, Air Force and the Office of the Defense Secretary focus attention on defense contracts as the primary source of bundling.

Bundling is being driven by the growth in bundled contracts in the Other Services sector. Just over one-half of the Manufacturing sector's \$695 billion in awards came on bundled contracts during the FY 1992 – FY 2001 period even though only 6.4 percent of the sector's contracts officially were classified as bundled. Bundled contracts accounted for 46 percent of the \$271 billion in obligations made for Research and Development and 43 percent of the obligations for Other Services.

The Construction sector, which showed a 157 percent growth in the share of bundled contract dollars between FY 1992 and FY 2001, also showed a significant 10 percent decline in small business participation. Both sectors showing overall declines in bundled dollar shares, R&D and Manufacturing, showed moderate, sustained growth in small business participation. Other Services grew significantly in bundled dollar share and in the share of small business market participation

The most frequently used contract vehicles for bundling are GSA Schedules, Multiple Award Contracts, Basic Ordering Agreements (BOAs) and Indefinite Delivery / Indefinite Quantity (IDIQ) Contracts. Over the FY 1992 – FY 2001 study period, 59 percent of all GSA Schedule contracts were bundled, accounting for 97 percent of the dollars awarded on Schedules. Sixty-four percent of the dollars on BOAs, 60 percent of the dollars on IDIQs, 57 percent of the dollars on Multiple Award Contracts and 47 percent of the dollars on Modifications to all of the non-Schedule contracts were obligated on bundled contracts.

Official Government Bundling Measure

The new, official federal bundled contract indicator, collected as part of the FPDC's SF-279 and DD-350 data collection process, masks the harm to small business caused by contract bundling. It shows only \$2 billion in bundled, prime contract dollars awarded in FY 2001, or just 1 percent of

total reported federal prime contract dollars. According to this indicator, small businesses received \$240 million, or 11.8 percent of the bundled contract dollars.¹

This new indicator is based on a narrow definition of bundled contracts adopted as part of the 1999 Small Business Re-authorization Act. This definition focuses exclusively on the bundling of historical requirements and fails to address the phenomenon of “accretive bundling.” Accretive bundling occurs when contract officers add new tasks to existing GSA Schedule, Indefinite Delivery/Indefinite Quantity (IDIQ), Government Wide Acquisition Contracts (GWACS) and other multiple award-type contracts. Accretive bundling has become the more widely practiced form of bundling since the procurement reforms of the mid-1990s, and bundling has risen significantly since these reforms were implemented.

¹ FY 2001 was the first year agencies submitted the new bundled contract indicator. Part of the reason why the numbers may be low is that acquisition staff do not fully understand the statutory definition of a bundled contract. To help their staff understand reporting requirements better, the DoD issued its own cost-benefit guidebook last year.

2. Introduction

This study updates Eagle Eye's 1999 bundled contract analysis with new information and refined statistics in an effort to show whether or not the practice of combining diverse work requirements into consolidated procurements poses significant risks to small business vendors in the federal marketplace.

Procurement reforms instituted in the mid-1990s continue to drive agencies to adopt streamlining measures in an ongoing effort to do more acquisition work with fewer resources. The accelerating use of e-commerce combined with purchases off of multiple award, IDIQ, GWAC and GSA Schedule contracts rewards large firms with big technical and marketing staffs.

Large, million-dollar purchases are now routinely added onto existing omnibus contract vehicles in order for agencies to avoid the time and cost involved in issuing separate bids. While this can appear to make the process of purchasing more efficient, the long-term costs associated with reduced competition and limited choice loom on the horizon.

Contract bundling has been hotly debated because of its reported negative impacts on small business participation in procurement. The requirements of larger, multi-faceted contracts can easily outstrip the financial or administrative capabilities of a small business, precluding them from competing.

Evidence of the negative impact of contract bundling on small business was first presented in the U.S. Small Business Administration's 1993 report.² The study relied mainly on a survey of small business owners and others involved in the federal procurement process (that is, agency Offices of Small and Disadvantaged Business Utilization, contract officers, etc.). The study recommended more systematic and detailed analysis of prime contracts data to substantiate or disprove the claims of small business owners that umbrella contracts were harming their companies.

This led to the 1997 Eagle Eye study that developed new analytical techniques in an effort to fulfill the mandate of the SBA study and to analyze the impacts of bundled contracts.³ This study found that "The practice of consolidating small requirements into larger, bundled contracts is gradually increasing and causing harm to many small businesses. The evidence of consolidation is contained in overall measures of contract size, numbers of bundled contracts, actions per contract, counts and shares of large versus small contracts and in the striking changes to annual small business revenues."

The present study extends the analysis of bundling to year-end FY 2001. We also have updated and refined certain aspects of the previous study's methodology. For example, we provide justification for switching from SIC to PSCs in order to measure changes in the nature of work performed on contracts

² U.S. Small Business Administration, *Study of the Impact of Contract Bundling on Small Business Concerns and Practical Recommendations* (Report to the Committee on Small Business of the United States Senate and the Committee on Small Business of the United States House of Representatives, 14 May 1993) 77 pages.

³ Eagle Eye Publishers, Inc., *Bundled Contract Study FY 1991-FY 1995*, prepared for the U.S. Small Business Administration, Office of Advocacy.

over time. Along with PSCs, Place of Performance (PoP) and Type of Contract Codes continue to serve as the other primary indicators of contract consolidation.

We continue to employ a three-year look-back period as the best statistical method for measuring annual bundled contract shares. By limiting our year-by-year analysis of bundled contracts to those showing bundling in the current year or in the three immediately prior years we can measure trends from fiscal year to fiscal year on an equal basis.

As a result of the discontinuation of the use of SIC codes in contract transaction data at the end of FY 2000, Eagle Eye has adopted the PSCs exclusively to define market categories for the new bundling study. Taken as a whole, the combination of methodological and analytical improvements in this new study almost certainly generates a more conservative, stable and reliable estimate of bundling than has been available to date.

3. Methodology

This analysis builds upon previous bundling studies for the SBA's Office of Advocacy and adapts current measurements of bundling to changing government data collection procedures.

As in previous Eagle Eye studies, this definition of bundling is based upon the notion of "dissimilar tasks," or the idea that contracts showing certain differences from obligation to obligation represent bundled requirements. We therefore begin our discussion of Methodology with a brief description of our data source. We then compare the key elements of our new analysis with the key elements of our old study, describing which concepts and data measures we have retained, updated and abandoned. Finally we explain the specific analytical procedures used in the current analysis. A full, detailed discussion of this study's methodology is presented in Appendix A.

A. The Data Source

The database used for this study is an enhanced version of the Form DD-350 (defense) and Form 279 (civilian) Individual Contract Action Report (ICAR) prime contracts data collected and compiled by the Federal Procurement Data Center (FPDC), a branch of the U.S. General Services Administration (GSA). The core data elements collected in this database describe various characteristics of contractual obligations made between the federal government and prime contractors. Neither subcontract nor budget data are part of the prime contracts database.

A prime contract obligation is a legally binding agreement between the government and a contractor that commits the government to acquire products or services at an agreed price. Obligated dollars are moved by the authorizing agency to a contractor's account at the federal buying activity responsible for the purchase. These obligated funds are then used by purchasing personnel to make payments to the contractor on an agreed payment schedule. Obligations are therefore linked to, but do not necessarily match, contractor progress.

Every time the government makes an obligation on a contract of at least \$25,000 a purchasing officer must fill out either a DD-350 form (for defense agencies) or an SF-279 form (for civilian agencies). These forms describe the financial, competitive, statutory and other characteristics of the obligation. Smaller initial obligations can be made on an SF-279 or reported in bulk form on an SF-281.

Over the entire course of a contract's duration, a purchasing officer might fill out numerous DD-350 or SF-279 forms for a single contract. This is because the dollars contained in a single obligation may not represent the total value of a contract. In fact, there are about 500,000 annual contract obligations in the FPDC database spread over 170,000 - 200,000 contracts. This means there are on average about 2.7 obligations per contract per year. Some small contracts have only one obligation, but some large contracts can have over 100.

Each DD-350 or SF-279 report forms the basis of a separate record in the ICAR contracts database. A purchasing officer will fill out a separate procurement form every time there is an action, that is, a new obligation on the contract or a de-obligation. Each action shows a unique combination of the following data elements: reporting agency, contract number, contract modification number, contracting office

order number, contracting office code, action date, and amount of obligation (or de-obligation). Each time a new form is filled out a separate task has been documented.

Because the core database for this study describes each individual task on a contract, over time contracts with more than one obligation can display different codes for the same field of data. As contract requirements change or evolve, many contracts display different PSC, PoP and Type of Contract codes. These differences flag a contract as bundled for the purposes of this analysis.

B. Definitions

It is important to carefully define each variable of interest in terms of the available data. First and foremost, of course, is the definition of a bundled contract.

Bundled Contract

Section 411 of the Small Business Reauthorization Act of 1997, which became Public Law 105-135 on 2 December 1997, sets forth the government's official definition of bundled contracts:

"The term 'bundling of contract requirements' means consolidating two or more procurement requirements for goods or services previously provided or performed under separate smaller contracts into a solicitation of offers for a single contract that is likely to be unsuitable for award to a small-business concern due to (A) the diversity, size, or specialized nature of the elements of the performance specified; (B) the aggregate dollar value of the anticipated award; (C) the geographical dispersion of the contract performance sites; or (D) any combination of the factors described in subparagraphs (A), (B), and (C)."

PL 105-135 goes on to state:

"The term 'separate smaller contract', with respect to a bundling of contract requirements, means a contract that has been performed by one or more small business concerns or was suitable for award to one or more small business concerns."

Under this definition, a bundled contract may combine dissimilar activities or it may represent a consolidation of similar requirements. Past definitions used by the federal government have characterized bundled contracts as being requirements that have become too large in size or scope to be suitable for small business competition. As we will see, small businesses do indeed win what Eagle Eye defines as bundled contracts, but not at similar rates to their large business counterparts or to the small business share of federal contracting as a whole.

Eagle Eye's Explicitly Bundled Contracts (EBC)

In order not to confuse this definition with official government definitions and with the initial Eagle Eye analysis of bundled contracts, we use the notion of an Explicitly Bundled Contract (EBC). An EBC is a contract that displays dissimilar PSCs, PoPs or Types of Contract over any three-year look back period for contracts active during FY 1992 – FY 2001.

Eagle Eye was forced to switch to PSCs in its measure of bundling because the Federal Procurement Data System (FPDS) stopped collecting the Standard Industrial Classification (SIC) code in FY 2001

and substituted the North American Industrial Classification System (NAICS) code. The PSC offers the only consistent market classification system over the period of the study. Analysis of the PSCs shows that prior inconsistencies resulting from government PSC re-coding efforts have been eliminated and PSC coding inconsistencies are rare. Analysis of the data shows that while the use of PSCs as the market indicator raises the bundled contract share somewhat over what it was using SIC codes, differences are not significant in the overall bundled contract measure.

We recognize that EBCs may include some contracts that are in reality unbundled. But it should also be recognized that EBCs exclude a considerably larger number of contracts that are actually bundled, such as large, consolidated contracts displaying the same PSC, POP and Type of Contract codes. In terms of data, an error in data entry for PSC code, PoP, or contract type that is not consistently wrong for the entire contract may result in “bundling” where bundling would not otherwise be indicated. On the other hand, since we are only including the portions of contracts during FY 1992 – FY 2001, bundling outside this period on the same contracts may not be reflected in bundling during the period.

Where does this leave us? By any reasonable definition of bundling, a contract of more than a billion dollars should be per se bundled. But as indicated below, over the 10-year period only 57 percent of contracts involving more than a billion dollars are classified as EBCs and only 62 percent of the dollars in contracts involving more than a billion dollars are awarded on EBCs. This indicates that this study uses an essentially conservative measure of bundling.

Markets

With the discontinuation of the use of SIC codes in FY 2001, Eagle Eye switched to the use of the PSCs to define markets over the most recent 10-year period. In several respects PSCs are more appropriate than SICs because they are the government’s traditional procurement code and this is a study of procurement, not an analysis of business activity in the economy at large. Historical inconsistencies in the application of PSCs appear to have been eliminated over time with the issuance of correction and change records to the raw data.

PSCs also provide a convenient way to define general market categories. Lettered codes represent services; numbered codes represent manufacturing. Within services, codes beginning with “A” represent Research and Development (R&D). Codes beginning with the letters “B” through “X” are grouped into an Other Services category that includes diverse markets such as Architecture and Engineering, ADP Services and Facilities Management. Codes beginning with “Y” and “Z” are together called Construction.

The size of a market is defined as the sum of the dollar values of all actions in selected PSCs during the period in question. If a contract includes actions during that period in more than one PSC or market, only the actions in the market in question are included. Thus, contracts may be counted in more than one market, but dollar values are not. Contract counts for a market that encompasses other, more specifically defined markets do not have double counting, nor do contract counts for procurement as a whole.

Large Contracts

A bundled contract is by definition larger than the contracts it replaced. Conversely, large contracts in general are more likely to be bundled. The original study used a dollar threshold of \$100 thousand to define a large contract. In the present study, the dollar threshold has been changed to \$1 million. Even though \$100 thousand is the limit on small purchases, contracts between \$100 thousand and \$1 million are much less likely to be bundled than contracts over \$1 million. The figure of \$1 million is generally the threshold for the requirement of a subcontracting plan, and the existence of subcontracting means that a contract's work can feasibly be split up and made more accessible to small firms.

C. Key Analytical Procedures

This study incorporates several specific analytical procedures, including:

Determination of Explicit Bundling for the 10-Year Study Period

To determine explicit bundling for the FY 1992 - FY 2001 period, we group all prime contract obligations by contract number, PSC, PoP and Contract Type. We further aggregate contracts in four-year groups to determine variations in any of the key bundling indicators (PSC, PoP or Contract Type) in the four years leading up to and including the most current year selected. We create 10 such four-year groups of contracts (FY 1992 – FY 2001) and identify those with variations in the key indicator fields over each new four-year period. This tells us which contracts show initial signs of bundling as each new fiscal year begins. We then flag all actions on these bundled contracts through the remainder of their lives in the FY 1992 – 2001 period. These become the core actions for our overall and annual bundled contract measures.

Explicit Bundling in the Analysis of One Fiscal Year at a Time

This study continues the refinement and use of the three-year look-back period in the year-by-year analysis of bundled contract activity. In the 1999 study we instituted a procedure that identified a contract as being bundled in any given year only if the three, key bundling indicators (PSC, PoP and Type of Contract codes) showed differences during the four-year period leading up to and including the year in which bundling was being measured. Once a contract became bundled, it remained bundled for the remainder of the study period. For example, to determine if a contract that was active in FY 1992 was explicitly bundled for the analysis of that year, all actions placed against that contract from FY 1989 up through the end of FY 1992 were analyzed for variations in the PSC, PoP and Type of Contract codes. Similarly, to determine if a contract active in FY 2000 was explicitly bundled, all actions placed against that contract starting in FY 1997 were studied.

This methodological refinement eliminates the artificial inflation of bundled contract counts in the later years of the study and lowers measures of bundling in the earlier years. Overall, the measure of year-to-year bundling trends remains relatively conservative.

A contract's bundled status is not retroactive. If a contract that began in FY 1995 didn't show initial signs of bundling until FY 1998, the contract was flagged as bundled from only FY 1998 onward until it closed out. During the years FY 1995 – FY 1997 the contract remained unbundled. This eliminates

a bias toward bundling that would otherwise tend to inflate the numbers of bundled contracts in the earlier years of this analysis.

We selected a four-year period (three-year look back) in order to capture a good portion of bundling and still have ten years (FY 1992-FY 2001) to compare with each other. While this captures a good deal of bundling, it by no means captures all bundling. This is illustrated by an analysis of how bundling occurs as contracts age. This analysis looked at the 1,155,741 contracts that began⁴ during the period FY 1992 - FY 2001, or 94.7 percent of the 1,240,756 contracts acted upon during this period.

Of the 136,947 contracts that began during FY 1992, 3,920 contracts (2.86 percent) were bundled during the same year. By the end of FY 1990, another 3,360 contracts had been bundled, for a total of 7,280 contracts bundled (5.31 percent). By the end of FY 2001, a total of 9,511 contracts that began in FY 1992 had been bundled by the tenth year, or 6.9 percent. Similar calculations were done for contracts that began in FY 1993, but the bundling could only be followed for nine years instead of ten. As we looked at bundling that occurred on contracts that began later and later, the bundling histories that we could observe became shorter and shorter, until for contracts that began in FY 2001 we could only look at bundling that occurred during the same year. Thus we had 10 observations on bundling that occurred during the same year as the beginning of a contract, nine observations on bundling that occurs within the year after that, and so on. We calculated the percentages of contracts that were bundled, and the averages of these percentages by the corresponding years in the life of the contract. These averages are shown in Table 2.1 (below).

The percentage of contracts that are bundled rises steadily as contracts age, reaching 7.1 percent of all contracts in the 10th year that these contracts existed. The percentage of dollars that are bundled rises steadily through FY 1998 to an annual peak of 8.2% in FY 1998, then tapers off as a result of the shortened look back period on newly issued contracts FY 1999 – FY 2001. Note that in Table 2.1, the Cumulative Share of Bundled Contracts figures show that by the third year of a contract's life, over 90% of contracts are flagged as bundled that eventually become bundled, suggesting only a relatively small amount of bundling that ultimately occurs is missed by this measure.

Because large contracts are more likely to be bundled, the percentage of dollars bundled in each year is much greater than the percentage of contracts bundled. The ratio of these percentages also increases with age from four to six. (As contracts get older, not only are more contracts bundled, but also more dollars are put into the contracts already bundled). By the third year of a contract's life, over 87% of the dollars that eventually become bundled are already bundled, suggesting a three-year look back period captures most of the bundled dollars in our overall measure of bundling.

⁴ Defined as showing initial contract obligation records during the FY 1992 – FY 2001 period.

Table 2.1: Annual Extent of Contract Bundling During Active Life of Contracts Starting FY 1992 - FY 2001

Fiscal Year of Start	Bundled Year 1	Bundled Year 2	Bundled Year 3	Bundled Year 4	Bundled Year 5	Bundled Year 6	Bundled Year 7	Bundled Year 8	Bundled Year 9	Bundled Year 10
2001	3,687	0	0	0	0	0	0	0	0	0
2000	3,365	4,153	0	0	0	0	0	0	0	0
1999	3,272	3,550	1,716	0	0	0	0	0	0	0
1998	3,287	3,061	1,586	846	0	0	0	0	0	0
1997	3,282	3,086	1,193	747	367	0	0	0	0	0
1996	3,400	3,241	1,385	575	322	163	0	0	0	0
1995	3,427	3,129	1,472	704	304	169	67	0	0	0
1994	3,203	3,013	1,152	549	283	136	55	30	0	0
1993	3,378	2,752	1,230	541	312	210	50	30	21	0
1992	3,920	3,360	1,129	573	233	128	79	62	19	8
Sum	34,221	29,345	10,863	4,535	1,821	806	251	122	40	8
Share	41.7%	35.78%	13.25%	5.53%	2.22%	0.98%	0.31%	0.15%	0.05%	0.01%
Cum. Share Bund Conts	41.7%	77.51%	90.75%	96.28%	98.50%	99.49%	99.79%	99.94%	99.99%	100.00%
Cum Shr of All Conts	3.0%	5.50%	6.44%	6.83%	6.99%	7.06%	7.08%	7.09%	7.10%	7.10%
Bundled Contracts Starting FY92 – FY01:	82,012									
All Contracts Starting FY 92 - FY01:	1,155,741									

Table 2.2: Annual Extent of Dollar Bundling During Active Life of Contracts Starting FY 1992 - FY 2001

(All dollars in thousands \$000)

Fiscal Year of Start	Bundled Year 1	Bundled Year 2	Bundled Year 3	Bundled Year 4	Bundled Year 5	Bundled Year 6	Bundled Year 7	Bundled Year 8	Bundled Year 9	Bundled Year 10
2001	13,328,420	0	0	0	0	0	0	0	0	0
2000	19,831,196	16,861,642	0	0	0	0	0	0	0	0
1999	32,398,328	17,909,795	8,494,893	0	0	0	0	0	0	0
1998	39,083,753	24,279,267	7,676,177	8,480,112	0	0	0	0	0	0
1997	48,680,612	26,989,862	11,981,107	6,229,794	3,197,400	0	0	0	0	0
1996	47,124,973	36,260,065	10,709,078	5,361,093	3,425,164	2,741,981	0	0	0	0
1995	38,212,641	25,943,572	11,287,944	7,148,622	5,984,697	1,988,906	3,154,999	0	0	0
1994	32,263,283	38,370,116	13,896,698	5,783,322	4,984,569	1,277,789	9,790,180	357,685	0	0
1993	46,038,422	23,620,889	9,721,352	6,916,746	3,643,248	2,671,724	1,237,670	529,908	1,137,437	0
1992	43,020,722	28,864,443	9,708,040	4,034,381	2,670,764	1,558,731	715,092	528,429	411,156	139,730
Sum	359,982,350	239,099,651	83,475,289	43,954,070	23,905,842	10,239,131	14,897,941	1,416,022	1,548,593	139,730
Share	46.2%	30.7%	10.7%	5.6%	3.1%	1.3%	1.9%	0.2%	0.2%	0.0%
Cum. Share Bun Dollars	46.2%	76.94%	87.66%	93.30%	96.37%	97.69%	99.60%	99.78%	99.98%	100.00%
Cum Shr of All Dollars	24.6%	41.02%	46.73%	49.74%	51.38%	52.08%	53.10%	53.20%	53.30%	53.31%
Bund Contract Dollars FY92 – FY01:	778,658,619									
All Contract \$ Starting FY 92-FY 01:	1,460,552,367									

New Federal Government Measure of Bundling

Beginning with FY 2001 data, the FPDS reports a Yes/No bundling indicator for prime contracts tracked on DD-250 and SF-279 forms. During FY 2001, the government officially categorized 1,520 contracts as bundled. These contracts were worth a total of \$2.038 billion in FY 2001.

Twenty three percent of these officially bundled contracts (320) and thirty-two percent of these dollars (\$648 million) are considered bundled by the Eagle Eye bundled contract definition.

The official bundled contract designation is based on the government's strict definition of bundling. This definition, which considers only historical spending, covers only those contracts where separate, identifiable, prior-year requirements are combined into a single contract going forward.

Eagle Eye considers this definition self-limiting and unreasonably small. Most bundling that occurs now is accretive, which the official definition largely overlooks. Since the initiation of procurement reforms in the mid-1990s, most large, multi-faceted GSA Schedule, Indefinite Delivery/Indefinite Quantity (IDIQ), Multiple Award Schedule (MAS) and Government Wide Acquisition Contracts (GWACS) permit the addition of diverse product and service requirements onto existing contract vehicles in order to streamline the procurement process and save the government money. The effect of modifications to these contracts is the same as bundling.

Furthermore, once the government officially flags a contract as bundled it is unlikely to be bundled again in subsequent fiscal years. We would therefore expect the number of officially designated bundled contracts to remain static and decline over time. There are just so many contracts that can be combined.

If we are to continually assess the impact of bundling on small business we need a dynamic definition of bundling that looks forward, not just backward, and considers the many different ways agencies bundle their diverse requirements onto single contracts. The Eagle Eye definition of bundling fits these measurement imperatives.

Markets in the Analysis of One Fiscal Year at a Time

For a given fiscal year, we first select all actions that have a PSC in the market being analyzed. The sum of the obligations and de-obligations in these actions is the dollar size of the market in the given fiscal year. Note that this excludes actions on contracts acted upon during this year that had a PSC in this market in an earlier year but not in the year being analyzed.

These actions in the given market are then grouped by contract number. The result is the number of contracts acted upon by actions in this market during this fiscal year. (The ratio of actions to contracts includes just the actions in the market and year being analyzed but not in other markets as well if they are actions upon the same contracts.) We then count the number of contracts that are flagged. The result is the number of explicitly bundled contracts acted upon by actions in this market during this fiscal year.

The original study at this point excluded contracts with negative or zero net dollar values in total actions in the fiscal year being analyzed, on the grounds that any bundling here may have actually been unbundling. But the size of the market is thus increased and is then greater than the size of the market in various tabulations of others. Keeping such contracts would facilitate cleaner comparisons with other studies. And a de-obligation in this case will still represent action upon a bundled contract.

Large Contracts in the Analysis of One Fiscal Year at a Time

The original study defined large contracts to be contracts acted upon in the fiscal year and market being analyzed that had a total value of actions in that year in that market (but not in another market) in excess of a dollar threshold. This excluded contracts that were large in a prior year but were acted upon in the current year in an aggregate amount less than the dollar threshold. It also excluded contracts that were large in another market but not in the market being analyzed. Since the indicator of bundling in this study can occur in a different market and/or an earlier year, the small and large breakdown should be on the comparable basis. Contract size is therefore defined to include the dollar value of all actions in any market during the period used to determine bundling.

New Contractors

In the original study, a “new” contractor was defined as an establishment that had not received an award during any previous year. In the present study, we use instead a file that Eagle Eye has constructed linking establishments to their parent companies. A “new” contractor is defined as a parent company that had not previously received an award in the period used to determine bundling.

Type of Contractor

In this study companies are grouped into the following categories: Small, Disadvantaged Businesses (SDBs), Other Small Businesses (OSBs), Large Businesses (LBs), and All Other. The latter category consists of sheltered workshops, other nonprofits, other state/local government institutions, foreign contractors, domestic contractors performing outside the U.S., historically black colleges/universities or minority institutions,⁵ and unknown. Actions that do not have a code for type of contractor are not attributed to large business even though they mostly consist of DoD firms performing work specified by a foreign government or by an international organization. A further, significant percentage of companies with no Type of Business specified are mostly DOD firms working on special programs. Counts of contractors by type will sometimes add to a total that is greater than the total for all performers if actions awarded to the same performer have been coded with more than one type of contractor on separate actions.

⁵ Contracts with historically black colleges/universities or minority institutions are undercounted in the overall (FY 1989 - FY 1999) tabulations because they were not indicated on the data form before May 1996.

4. Overall Analysis

A. All Contracts

During the FY 1992 – FY 2001 period covered by this study, federal agencies reporting contract awards to the U.S. General Services Administration's Federal Procurement Data Center (FPDC) reported awards on 1.24 million prime contracts worth a total of \$1.89 trillion. According to Eagle Eye's methodology for assessing bundled contracts, developed and newly revised for the U.S. Small Business Administration's (SBA's) ongoing analysis of contract bundling, 106,387 of these contracts were bundled. This number, representing 8.5 percent of all active contracts, accounted for \$840 billion, or 44.5 percent, of all prime contract dollars. The average size of a bundled contract during this period was \$7.9 million.

Of all the contracts active between FY 1992 and FY 2001 a total of 1,155,741 began in FY 1992 or later. These contracts were worth a total of \$1.46 trillion. Their average value was \$1.26 million. This means that this study captures data on the latter portions 85,015 contracts that began prior to FY 1992.

We include in this study only those portions of open contracts acted upon during the FY 1992 – FY 2001 period. Because such a large portion of these active contracts were awarded prior to the study period, the measured value of these contracts, and those that continue beyond the end of the study period, understate the extent of contract spending and of bundling. This makes estimates of the extent of bundling in this study more conservative.

Contract dollars are further understated by the fact that the number of agencies reporting prime contracts to the GSA shrank since the last bundling study in 1999. The Federal Aviation Administration (FAA) and the Tennessee Valley Authority (TVA) no longer report SF-279 prime contract reports to the Federal Procurement Data System. These agencies, which accounted for about \$5 billion in awards, were part of both earlier Eagle Eye studies.

B. Bundling by Contract Size

Not surprisingly, the bulk of bundled contracts and bundled contract dollars appear on large contracts worth \$1 million or more. As described in Table 3.1, the share of bundled contracts jumps 2.5 times to 33% when we pass the \$1 million threshold and continues to rise to a peak of 72 percent among contracts worth over \$100 million. Somewhat surprisingly, the share of bundled contracts captured by Eagle Eye's methodology that are valued over \$1 billion falls to 57 percent. Since most would agree that \$1 billion contracts are bundled by definition, this confirms the essentially conservative nature of this study's estimates.

The share of dollars bundled for each contract size threshold is lower than the corresponding share of bundled contracts, particularly among contracts in the thresholds valued \$100 million and up. The 28 percent bundled dollar share among contracts worth between \$1 million and \$10 million is closest to the corresponding share of bundled contracts, suggesting a shift from the previous study to increasingly frequent bundling at the lower dollar range of large contracts.

The 2,896 bundled contracts with a net negative value of minus \$3.1 billion are likely de-obligations made against large contracts. The fact that there are over 2,800 of these contracts suggests they represent modifications to legitimate contracts and are not simply data errors.

**Table 3.1: Contracts Bundled by Size of Contract
FY 1992 – FY 2001**

Contract Size (Dollars)	All Contracts	Bundled Contracts	Percent Bundled	Unbundled Contracts
<1K	18,156	2,896	16.0%	15,260
1K-100K	767,538	14,640	1.9%	752,898
100K-1M	332,422	43,559	13.1%	288,863
1M-10M	101,901	33,388	32.8%	68,513
10M-100M	18,398	10,249	55.7%	8,149
100M-1B	2,176	1,561	71.7%	615
>1B	165	94	57.0%	71
TOTAL	1,240,756	106,387	8.6%	1,134,369

**Table 3.2: Dollars Bundled by Size of Contract
FY 1992 - FY 2001**

Contract Size (Dollars)	Dollars in All Contracts (\$000)	Bundled Contracts (\$000)	Percent of \$ Bundled
<1K	-7,571,211	-3,134,236	41.4%
1K-100K	31,113,283	547,276	1.8%
100K-1M	111,274,840	12,177,191	10.9%
1M-10M	305,574,094	86,488,241	28.3%
10M-100M	501,496,919	238,814,719	47.6%
100M-1B	529,503,623	317,881,623	60.0%
>1B	418,963,363	187,516,996	44.8%
TOTAL	1,890,354,911	840,291,810	44.5%

C. Bundling by Number of Actions

Tables 3.3 and 3.4 demonstrate the acceleration of rates of bundling as the number of actions per contract grows. The more actions that occur on a contract, the more likely a contract is to be bundled. When the number of contract actions reaches 21 and above, 61 percent of the contracts falling within this threshold are bundled, accounting for 55 percent of the contract dollars.

The unusual circumstance of having bundled contracts showing only one action occurs exclusively in the first one or two years of the study period. During FY 1992 – 93, bundled contracts active during the three-year look-back period prior to FY 1992 had one action that, in combination with earlier actions, fulfilled Eagle Eye’s definition of a bundled contract.

**Table 3.3: Contracts Bundled By
Number of Contract Actions FY 1992-01**

Number of Actions	All Contracts	Bundled Contracts	Percent Bundled
1	852,439	5,145	0.6%
2	134,668	17,534	13.0%
3	61,084	11,966	19.6%
4	40,188	9,065	22.6%
5	25,125	6,740	26.8%
6 – 10	57,822	19,124	33.1%
11-20	34,596	15,279	44.2%
21+	34,834	21,534	61.8%
Total	1,240,756	106,387	8.6%

**Table 3.4: Dollars Bundled by Number of
Contract Actions FY 1992 - FY 2001**

Number of Actions	All Dollars (\$000)	Bundled Dollars (\$000)	Percent Bundled
1	160,287,793	5,023,119	3.13%
2	67,174,630	9,153,583	13.6%
3	49,380,828	10,624,416	21.5%
4	44,848,291	10,086,639	22.5%
5	42,035,476	10,739,286	25.5%
6 – 10	151,465,173	50,938,984	33.6%
11-20	207,963,141	92,000,913	44.2%
21+	1,167,199,579	651,724,870	55.8%
Total	1,890,354,911	840,291,810	44.45%

D. Type of Business Analysis

Bundled Contract and Dollar Totals by Business Type

Tables 3.5 and 3.6 describe the disproportionate benefits that accrue to Large Businesses (LBs) when bundling occurs. Between FY 1992 and FY 2001, Small Disadvantaged Businesses (SDBs) and Other Small Businesses (OSBs) together accounted for just 7.4 percent of all bundled contracts, 43 percent fewer than the 12.9 percent large business bundled contract share. SDBs and OSBs account for 32.6 percent of all bundled contract dollars, over 17 percentage points less than the 49.7 percent LB share.

Note that small business contract counts in these tables are greater than in previous totals. This can happen when a contractor changes from small to large status during the course of a contract, or when the Type of Business code is misapplied.

Analysis reveals that the Not Reported business type classification consists mainly of large domestic and foreign-based businesses. Many times these firms prove to be defense contractors working on contracts where a foreign government is the ultimate client. Furthermore, virtually all of the Domestic Contractor Performing Outside the US classification consists of large businesses like Dyncorp, Shell and Raytheon. These data tendencies make bundled contract differences between the large and small firms even more pronounced.

Given that the LB bundled contract share was 74 percent greater than the SB bundled share over the FY 1992 – FY 2001 period, we can say that a bundled contract is 74 percent more likely to go to a large firm (as opposed to a small firm) as a contract in general. Furthermore, when we compare the ratios of bundled to unbundled contracts between large and small firms we find that a bundled contract is 86 percent more likely to go to a large firm (as opposed to a small firm) as an unbundled contract. In other words, compared to small firms, large firms are nearly twice as likely to receive a bundled contract and nearly twice as likely to receive an explicitly bundled contract as opposed to unbundled contracts.

Table 3.5: Overall Count of Bundled Contracts by Type of Business FY 1992 - FY 2001

Type of Business	All Contracts	Unbundled	Bundled	% Bundled
Not Reported / Not Available	26,608	20,178	6,430	24.2%
Total Small Business (SDB + Other)	801,962	742,706	59,256	7.4%
8(a)/Small Disadvantaged Business	145,038	127,924	17,114	11.8%
Other Small Business	656,924	614,782	42,142	6.4%
Large Business	353,776	307,988	45,788	12.9%
JWOD Nonprofit Agency	8,626	7,810	816	9.5%
Nonprofit Educational Organization	16,257	14,571	1,686	10.4%
Nonprofit Hospital	2,331	2,121	210	9.0%
Other Nonprofit Organization	14,490	12,712	1,778	12.3%
State/Local Government Educational	4,203	3,930	273	6.5%
State/Local Government Hospital	1,418	1,327	91	6.4%
Other State/Local Government	14,907	13,962	945	6.3%
Foreign Contractor	66,264	61,024	5,240	7.9%
Domestic Contractor Performing Outside US	8,670	7,244	1,426	16.4%
Historically Black Colleges & Universities	660	549	111	16.8%

Bundled dollar comparisons between business types are somewhat simpler given that even if a contractor type code changes from one action to another on the same contract, the total number of dollars on the contract remains the same.

Comparing dollars by business type we find records without a Business Type code, classified under the Not Reported category, account for a sizeable \$49.7 billion in bundled contracts, or 57 percent of the category's total over the most recent 10 fiscal years. As previously mentioned, we know from our analysis of the data that most of the firms lacking a Business Type code are large. Among firms explicitly coded as large, 50 percent of their contract dollars were bundled. Forty-six percent of the dollars awarded to Domestic Contractors Performing Outside the US were also bundled.

The 50 percent bundled share of LB dollars is 52.5 percent greater than the 32.6 percent small firm bundled dollar share. This means that a bundled contract dollar is 52.5 percent more likely to be awarded to a large firm (as opposed to a small firm) as a contract dollar in general. Comparing bundled to unbundled dollar ratios in large and small business categories, we find that a bundled contract dollar is over twice as likely to go to a large firm (as opposed to a small firm) as an unbundled dollar. In other words, large firms are over 50 percent as likely to have their contract dollars explicitly bundled and over twice as likely to receive explicitly bundled contract dollars as opposed to unbundled contract dollars.

Table 3.6: Overall Sum of Bundled Dollars by Type of Business FY 1992 - FY 2001

Type of Business	All Contracts (\$000)	Unbundled (\$000)	Bundled (\$000)	% Bundled
Not Reported / Not Available	86,977,874	37,301,701	49,676,173	57.1%
Total Small Business (SDB + Other)	343,215,662	231,314,198	111,901,464	32.6%
8(a)/Small Disadvantaged Business	111,422,973	72,048,903	39,374,070	35.3%
Other Small Business	231,792,689	159,265,295	72,527,394	31.3%
Large Business	1,267,794,979	637,553,684	630,241,295	49.7%
JWOD Nonprofit Agency	6,023,924	5,053,957	969,967	16.1%
Nonprofit Educational Organization	39,491,161	29,497,269	9,993,892	25.3%
Nonprofit Hospital	3,312,465	1,744,096	1,568,369	47.3%
Other Nonprofit Organization	47,103,624	34,372,951	12,730,673	27.0%
State/Local Government Educational	26,023,351	25,874,264	149,087	0.6%
State/Local Government Hospital	486,034	410,578	75,456	15.5%
Other State/Local Government	6,812,257	6,330,163	482,094	7.1%
Foreign Contractor	45,093,855	30,832,047	14,261,808	31.6%
Dom Contractor Perform Outside US	17,558,852	9,415,729	8,143,123	46.4%
Historically Black Colleges & Univ	460,873	362,464	98,409	21.4%

Average Values for Bundled and Unbundled Contracts

Overall, between FY 1992 and FY 2001 an average federal prime contract's true value was \$1.524 million. This is slightly higher than the \$1.431 average value calculated using the sum of all contracts aggregated by Business Type in Table 3.7 because the assignment of multiple Business Type codes on the same contract raises the number of contracts artificially.

The State and Local Government – Educational category issued contracts worth \$6.2 million, the highest average value of any business category. Large Businesses followed with contracts worth \$3.5

million on average, while the Not Reported category, which consists largely of LBs, followed closely with contracts averaging \$3.3 million.

Note that the size of an average LB contract, \$3.6 million, was 8.4 times the size of an average small business contract. This gap has closed slightly from the 9.1 LB/SB contract size ratio in the 1999 study. This is further confirmation that the size of an average small firm contract is steadily growing as bundling becomes more common at the low end of the large contract (> \$1 million) range.

Table 3.7: Average Value of Bundled Contracts by Type of Business FY 1992 - FY 2001

Type of Business	All Contracts (\$000)	Unbundled (\$000)	Bundled (\$000)	Bund/Unbund Size Ratio
Not Reported / Not Available	3,269	1,849	7,726	4.2
Total Small Business (SDB + Other)	428	311	1,888	6.1
8(a)/Small Disadvantaged Business	768	563	2,301	4.1
Other Small Business	353	259	1,721	6.6
Large Business	3,584	2,070	13,764	6.6
JWOD Nonprofit Agency	698	647	1,189	1.8
Nonprofit Educational Organization	2,429	2,024	5,928	2.9
Nonprofit Hospital	1,421	822	7,468	9.1
Other Nonprofit Organization	3,251	2,704	7,160	2.6
State/Local Government Educational	6,192	6,584	546	0.1
State/Local Government Hospital	343	309	829	2.7
Other State/Local Government	457	453	510	1.1
Foreign Contractor	681	505	2,722	5.4
Dom Contractor Perform Outside US	2,025	1,300	5,710	4.4
Historically Black Colleges & Univ	698	660	887	1.3

For all of procurement, the average bundled contract was 8.9 times the size of an average unbundled contract. Among individual types of business, Nonprofit Hospitals had the highest bundled/unbundled contract ratio, 9.1. Large and Other Small Businesses displayed identical ratios of 6.6, larger than the 4.1 ratio for SDBs. On the whole, small firms showed a 6.1 dollar ratio of average bundled to average unbundled contracts. Large firms clearly have a numeric advantage in both the number and size of bundled contracts.

Contract Shares by Type of Business

Studying overall bundling by contract share provides additional, important perspectives on the harm caused to small firms. According to the data displayed in Table 3.8, between FY 1992 and FY 2001 small firms received 61 percent of all contracts but only 48 percent of bundled contracts. Large firms, by contrast, received 27 percent of all contracts and 37 percent of all bundled contracts.

In terms of dollars, the differences are more pronounced. Small firms received 18 percent of all prime contract dollars, 62 percent of all unbundled dollars but only 13 percent of bundled dollars. Large firms, on the other hand, were awarded 67 percent of all dollars, 26 percent of all unbundled dollars and 75

percent of all bundled dollars. Note the 15 percentage point difference between the large firm share of bundled dollars and their 60 percent share of unbundled dollars.

Table 3.8: Contract Count Share by Type of Contractor, FY 1992 - FY 2001

Type of Business	Percentage Share of Contracts			Ratio of Bund/Unbund
	All Contracts	Unbundled	Bundled	
Not Reported / Not Available	2.02%	1.69%	5.18%	3.07
Total Small Business (SDB + Other)	60.75%	62.09%	47.77%	0.77
8(a)/Small Disadvantaged Business	10.99%	10.69%	13.80%	1.29
Other Small Business	49.76%	51.40%	33.97%	0.66
Large Business	26.80%	25.75%	36.91%	1.43
JWOD Nonprofit Agency	0.65%	0.65%	0.66%	1.01
Nonprofit Educational Organization	1.23%	1.22%	1.36%	1.12
Nonprofit Hospital	0.18%	0.18%	0.17%	0.95
Other Nonprofit Organization	1.10%	1.06%	1.43%	1.35
State/Local Government Educational	0.32%	0.33%	0.22%	0.67
State/Local Government Hospital	0.11%	0.11%	0.07%	0.66
Other State/Local Government	1.13%	1.17%	0.76%	0.65
Foreign Contractor	5.02%	5.10%	4.22%	0.83
Domestic Contractor Performing Outside US	0.66%	0.61%	1.15%	1.90
Historically Black Colleges & Universities	0.05%	0.05%	0.09%	1.95

Further confirmation of the LB/SB bundled contract discrepancy is shown in the dollar share ratios in Table 3.9. The small business bundled/unbundled contract dollar ratio is .60, meaning that on average small business bundled contracts were on average only two thirds the value of unbundled contracts. On the other hand, the corresponding LB ratio is nearly doubled, at 1.24. Large firm bundled contracts were on average worth 25 percent more than unbundled contracts. The Not Reported category, consisting mainly of large firms, displays the largest dollar share ratio, 1.66. In other words, Table 3.9 confirms that a bundled dollar is more likely to go to a large firm an unbundled dollar, while the reverse is true for small firms.

The ratios displayed in Table 3.10 provide one more confirmation of the differences between large and small firms receiving bundled contracts. The .30 small business ratio of overall dollar share to overall contract share says that small firms are winning dollars at one third the rate they are winning contracts. The ratios for both unbundled and bundled contracts are quite close to this figure.

By contrast, the 2.5 large business ratio of dollar share to contract share indicates that large firms are winning dollars at two and one-half time the rate they are winning contracts. The corresponding ratios for unbundled and bundled contracts show large firms are winning both unbundled and bundled dollars at over twice the rate they are winning contracts. Quite simply, large firms are seeing far more success than small firms in winning unbundled and bundled contracts.

Table 3.9: Contract Dollar Share by Type of Contractor, FY 1992 - FY 2001⁶

Type of Business	Percentage Share of Dollars			Ratio of
	All Contracts	Unbundled	Bundled	Bund/Unbund
Not Reported / Not Available	4.60%	3.55%	5.91%	1.66
Total Small Business (SDB + Other)	18.16%	22.03%	13.32%	0.60
8(a)/Small Disadvantaged Business	5.89%	6.86%	4.69%	0.68
Other Small Business	12.26%	15.17%	8.63%	0.57
Large Business	67.07%	60.72%	75.00%	1.24
JWOD Nonprofit Agency	0.32%	0.48%	0.12%	0.24
Nonprofit Educational Organization	2.09%	2.81%	1.19%	0.42
Nonprofit Hospital	0.18%	0.17%	0.19%	1.12
Other Nonprofit Organization	2.49%	3.27%	1.52%	0.46
State/Local Government Educational	1.38%	2.46%	0.02%	0.01
State/Local Government Hospital	0.03%	0.04%	0.01%	0.23
Other State/Local Government	0.36%	0.60%	0.06%	0.10
Foreign Contractor	2.39%	2.94%	1.70%	0.58
Domestic Contractor Performing Outside US	0.93%	0.90%	0.97%	1.08
Historically Black Colleges & Universities	0.02%	0.03%	0.01%	0.34

Table 3.10: Dollar Share vs. Contract Share by Type of Contractor, FY 1992 - FY 2001

Type of Business	Ratio of % of Dollars to % of Contracts			Ratio of
	All Contracts	Unbundled	Bundled	Bund/Unbund
Not Reported / Not Available	2.28	2.11	1.14	0.54
Total Small Business (SDB + Other)	0.30	0.35	0.28	0.79
8(a)/Small Disadvantaged Business	0.54	0.64	0.34	0.53
Other Small Business	0.25	0.30	0.25	0.86
Large Business	2.50	2.36	2.03	0.86
JWOD Nonprofit Agency	0.49	0.74	0.18	0.24
Nonprofit Educational Organization	1.70	2.31	0.88	0.38
Nonprofit Hospital	0.99	0.94	1.10	1.18
Other Nonprofit Organization	2.27	3.08	1.06	0.34
State/Local Government Educational	4.32	7.50	0.08	0.01
State/Local Government Hospital	0.24	0.35	0.12	0.35
Other State/Local Government	0.32	0.52	0.08	0.15
Foreign Contractor	0.48	0.58	0.40	0.70
Domestic Contractor Performing Outside US	1.41	1.48	0.84	0.57
Historically Black Colleges & Universities	0.49	0.75	0.13	0.17

⁶ The small business share of federal prime contracts shown here represents the SB share of all federal prime contracting dollars without the exclusions the SBA imposes in the goaling process.

E. DoD vs. Civilian Awards

Bundling is centered in the defense sector. Tables 3.11 and 3.12 demonstrate that the Department of Defense (DoD) accounts for 65.6 percent of all bundled contracts active between FY 1992 and FY 2001. Note that the sum of bundled defense and civilian contracts adds up to 113,550, more than the true bundled total of 106,387. This means that 7,163 bundled contracts showed spending activity by both defense and civilian agencies during the 10 year study period.

The DoD's 65.6 bundled contract share translates into an 80.8 percent bundled dollar share. In other words, two out of every three bundled contracts and four out of every five bundled contract dollars were awarded by a branch of the DoD.

Table 3.11: Numbers of Bundled Contracts by Defense and Civilian Agencies FY 1992 - FY 2001

Agcy	Unbundled	Bundled	Total	% Bundled
CIV	509,379	39,006	548,385	7.1%
DOD	676,515	74,544	751,059	9.9%

Table 3.12 Sum of Dollars on Bundled Contracts by Defense and Civilian Agencies FY 1992 - FY 2001

Agcy	Unbundled	Bundled	Total	% Bundled
CIV	488,593,148	160,896,583	649,489,731	24.8%
DOD	561,469,953	679,395,227	1,240,865,180	54.8%

Table 3.13: Top 10 Agency and Bureau Ranking By FY 1992 - FY 2001 Bundled Dollar Total

Agency/Bureau	Unbundled (\$000)	Bundled (\$000)	Total (\$000)	% Bundled
Air Force	151,986,403	225,154,148	377,140,551	59.7%
Navy	170,048,061	214,932,888	384,980,949	55.8%
Army	135,511,555	166,432,291	301,943,846	55.1%
Energy	151,008,974	19,010,088	170,019,062	11.2%
Defense Logistics Agency	63,448,979	16,686,671	80,135,650	20.8%
NASA	96,859,649	15,909,762	112,769,411	14.1%
Veterans Affairs	15,347,060	13,723,797	29,070,857	47.2%
GSA Public Building Service	27,320,925	11,090,689	38,411,614	28.9%
Army Corps of Engineers	16,213,267	9,783,616	25,996,883	37.6%
All Other	222,318,228	147,567,860	369,886,088	39.9%

A DoD / Civilian Agency and Bureau breakdown confirms the DoD's dominant bundling role. The Air Force led all agencies and bureaus in both its bundled dollar total and overall bundled dollar share. Three out of every five Air Force contract dollars was awarded on a bundled contract. Four out of the next 10 largest bureaus issuing bundled contracts come from DoD. The Air Force is followed closely by the Navy and more distantly by the Army, the Department of Energy and the Defense Logistics Agency.

Among the Top 10 agencies and bureaus issuing bundled contracts, the Department of Veterans Affairs, at 47 percent, had the highest bundled dollar share outside of the DoD.

F. Market Analysis

The share of bundled contracts is highest in Other Services but the Manufacturing and R&D sectors surpass Other Services in shares of bundled dollars. As detailed below in Tables 3.14 and 3.15, the share of bundled contracts in Manufacturing is less than one-half the bundled share of contracts in Other Services and R&D, yet Manufacturing shows the highest bundled dollar share and the highest absolute bundled dollar total. This is undoubtedly reflective of the size and complexity of large DoD and NASA hardware purchases.

The number of bundled contracts in Other Services is over 24,000 higher than the next nearest market sector. The share of bundled contracts in Construction is less than one-half the bundled dollar share of the other three market sectors and Construction's bundled dollar total is one-tenth the bundled dollar total in Manufacturing.

**Table 3.14: Numbers of Bundled Contracts by Market
FY 1992 – FY 2001**

Market	Unbundled	Bundled	Total	% Bundled
Construction	259,918	15,673	275,591	5.7%
Manufacturing	510,072	35,125	545,197	6.4%
Other Services	347,480	59,649	407,129	14.7%
Research & Development	68,343	10,748	79,091	13.6%

**Table 3.15: Sum of Bundled Contract Dollars by Market
FY 1992 – FY 2001**

Market	Unbundled	Bundled	Total	% Bundled
Construction	123,343,559	34,201,883	157,545,442	21.7%
Manufacturing	346,089,188	348,803,553	694,892,741	50.2%
Other Services	434,701,299	332,277,159	766,978,458	43.3%
Research & Development	145,927,848	125,008,923	270,936,771	46.1%

G. Kind of Contract Totals

In terms of contracts, bundling is being driven by Indefinite Delivery/Indefinite Quantity Contracts (IDIQs), modifications on these contracts, and by GSA Schedules. These three kinds of contracts accounted for 75 percent of all bundled contracts between FY 1992 and FY 2001. Note that counting

contracts by Kind of Contract category adds nearly 50% more contracts to the true bundled contract count for the period. This is a result of agencies assigning multiple Kind of Contract codes to the same contract over its life. Nonetheless, the relative bundled shares of each category shed considerable light into how bundling occurs.

Use of IDIQs, Schedules and other multiple award-type contracts have greatly increased since the passage of federal procurement reforms in the mid-1990s. The relative ease with which a depleted acquisition workforce can now issue diverse tasks and delivery orders on existing contracts has led to the phenomenon of “accretive bundling.” As the size and complexity of existing contracts grows, small businesses inevitably get squeezed out.

Ninety-seven percent of the dollars awarded under GSA Federal Schedule contracts were made on bundled contracts. Nearly two-thirds of the dollars on IDIQs and Basic Ordering Agreements (BOAs) was bundled. Together, bundled dollars on IDIQs and Modifications (to IDIQs and Schedules) accounted for 61 percent of all bundled dollars.

Table 3.16: Numbers of Bundled Contracts by Kind of Contract FY 1992 - FY 2001

Kind of Contract Description	Unbundled	Bundled	Total	% Bundled
INITIAL LETTER CONTRACT	10,190	945	11,135	8.5%
DEFINITIVE CONTRACT SUPERSEDING LETTER CONTRACT	3,303	612	3,915	15.6%
NEW DEFINITIVE CONTRACT	516,021	15,932	531,953	3.0%
SMALL PURCHASE PROCEDURE	415,578	4,592	420,170	1.1%
ORDER UNDER INDEFINITE DELIVERY CONTRACT (IDC)	143,898	39,934	183,832	21.7%
ORDER UNDER BASIC ORDERING AGREEMENT (BOA)	20,762	6,873	27,635	24.9%
ORDER/MODIFICATION UNDER FEDERAL SCHEDULE	7,111	10,128	17,239	58.8%
MODIFICATION	248,951	66,704	315,655	21.1%
TERMINATION FOR DEFAULT	1,685	300	1,985	15.1%
TERMINATION FOR CONVENIENCE	7,002	3,102	10,104	30.7%
ORDER UNDER MULTIPLE AWARD CONTRACT	10,227	7,268	17,495	41.5%

Table 3.17: Dollars Summed on Bundled Contracts by Kind of Contract FY 1992 - FY 2001

Kind of Contract Description	Unbundled	Bundled	Total	% Bundled
INITIAL LETTER CONTRACT	20,194,265	9,401,933	29,596,198	31.8%
DEFINITIVE CONTRACT SUPERSEDING LETTER CONTRACT	14,544,724	7,330,350	21,875,074	33.5%
NEW DEFINITIVE CONTRACT	309,304,266	63,446,730	372,750,996	17.0%
SMALL PURCHASE PROCEDURE	19,299,562	1,895,403	21,194,965	8.9%
ORDER UNDER INDEFINITE DELIVERY CONTRACT (IDC)	101,070,785	154,021,612	255,092,397	60.4%
ORDER UNDER BASIC ORDERING AGREEMENT (BOA)	22,264,028	40,548,943	62,812,971	64.6%
ORDER/MODIFICATION UNDER FEDERAL SCHEDULE	1,347,969	50,437,986	51,785,955	97.4%
MODIFICATION	539,401,332	482,377,757	1,021,779,089	47.2%
TERMINATION FOR DEFAULT	-716,551	-263,338	-979,889	26.9%
TERMINATION FOR CONVENIENCE	-1,744,203	-1,728,146	-3,472,349	49.8%
ORDER UNDER MULTIPLE AWARD CONTRACT	25,096,924	32,822,580	57,919,504	56.7%

5. Section 4: Year-By-Year Analysis

A. Introduction

The year-by-year analysis of bundling measures contract actions and dollars occurring during the indicated fiscal year. For a contract to be considered bundled it must show evidence of bundling during the four-year period leading up to and including the fiscal year being analyzed. For instance, to determine if a contract that was active in FY 1992 was explicitly bundled for the analysis of that year, all actions placed against that contract from FY 1989 up through the end of FY 1992 are analyzed for dissimilar PSCs, type of contract and PoP codes. Since only four years are used as the basis for determining bundling annually, the bundling measured will in general be less than the bundling measured for the eleven-year period as a whole.

Adding the number of bundled contracts in each year of the study we get a total of 238,878 bundled “contracts” during the ten-year period FY 1992 – FY 2001, as indicated in Table 4.1 below. This is more than twice the true number of 106,387 unique contracts measured as part of the overall analysis in Section 3. Again, the reason for this is that when contracts extend over several years they are counted in each year they show activity. The double counting of contracts means that the contract totals of all the years in this analysis should be regarded as check totals. Dollars, on the other hand, include only the dollar values of the actions in the year in question, so annual dollar totals can be meaningfully added.

The classification of contracts as small or large in this analysis is based on the total value of the contract during the study period.

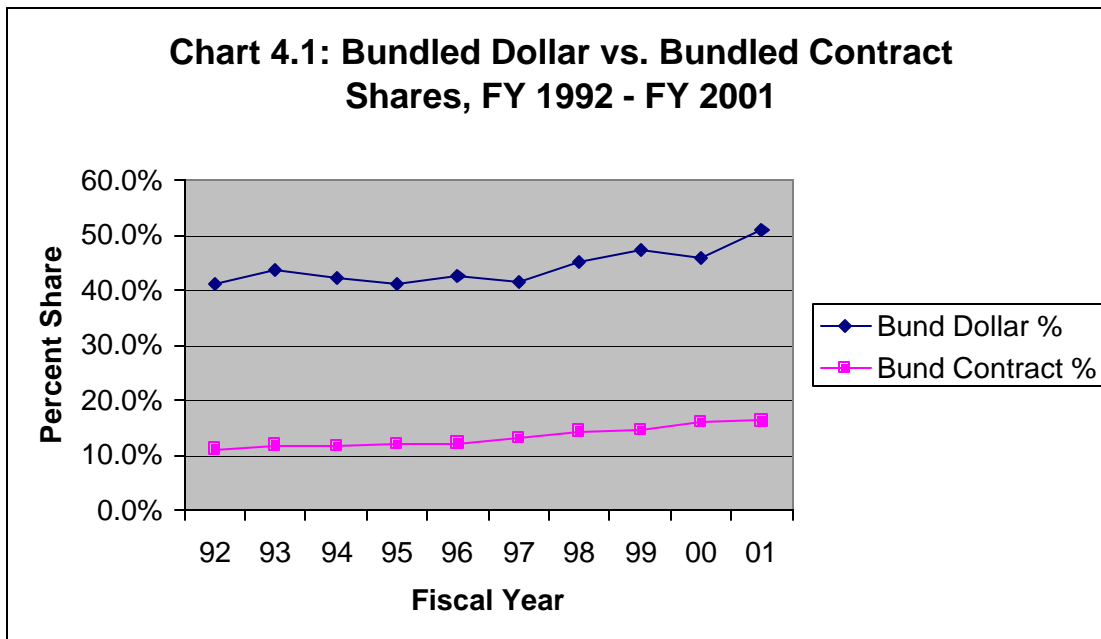
B. Overall Numbers

The annual statistics contained in Table 4.1 show that the amount and bundled share of overall dollars, the number and share of bundled contracts and the average value of a bundled contract now stand at all-time highs. Bundling reached a peak of \$110 billion in FY 2001 when 51 percent of total contract dollars and 16 percent of all reported prime contracts were bundled. Since FY 1997, the average value of a bundled contract has grown steadily, from \$3.208 million to \$3.794 million. The annual bundled dollar share is consistently three to four times higher than the bundled share of contracts. The value of a contract, including bundled and unbundled awards, fell slightly in FY 2001 as the value of a bundled contract continued to rise. This indicates that the value of an average unbundled contract declined.

Table 4.1: Bundling by Fiscal Year, FY 1992 – FY 2001

FY	All \$000	All Bundled \$000	Bundled Dollar %	Contract Count	Bundled Contracts	Bundled Contract %	Avg Contract Value \$000	Avg Bund Cont Val \$000
1992	\$183,081,207	\$75,397,366	41.2%	200,198	22,562	11.3%	915	\$3,342
1993	\$184,426,948	\$80,882,188	43.9%	190,118	22,689	11.9%	970	\$3,565
1994	\$181,500,339	\$76,930,230	42.4%	180,479	21,335	11.8%	1,006	\$3,606
1995	\$185,119,992	\$76,651,045	41.4%	176,083	21,667	12.3%	1,051	\$3,538
1996	\$183,489,567	\$78,448,175	42.8%	177,742	21,930	12.3%	1,032	\$3,577
1997	\$179,223,693	\$74,595,976	41.6%	173,551	23,255	13.4%	1,033	\$3,208
1998	\$184,227,639	\$83,519,053	45.3%	169,311	24,624	14.5%	1,088	\$3,392
1999	\$188,609,927	\$89,592,305	47.5%	169,478	25,129	14.8%	1,113	\$3,565
2000	\$206,422,269	\$94,580,341	45.8%	165,715	26,771	16.2%	1,246	\$3,533
2001	\$214,253,330	\$109,695,131	51.2%	176,729	28,916	16.4%	1,212	\$3,794

The annual bundled contract share leveled off in the mid-1990s, just before a series of government procurement reforms were implemented that made contracting on large task and delivery order-type contracts far easier. After holding steady at 12.3 percent between FY 1995 and FY 1996, the bundled contract share jumped 18 percent to 14.5 percent by FY 1998, leveled off and then spurted again to 16.2 percent in FY 2000 before coming to rest at 16.4 percent in FY 2001.



Between FY 1997 and FY 2001, an average bundled contract rose 18.3 percent in value while an average contract rose 17.3 percent. This appears to be caused mainly by better data reporting from the FPDC. Note the large increase in reported contracts from FY 1999 to FY 2001 during a relatively flat budget period. This tended to moderate the value of an average contract. Even though the number of bundled contracts jumped by over 2,000, the dollars associated with these contracts grew at an even higher rate. This caused the average value of a bundled contract to grow.

C. Large vs. Small Contract Bundling Share

Both the contract count and dollar totals in Table 4.2 confirm that the growth in bundling centers on large contracts valued at greater than \$1 million. The bundled share of large contracts grew from 29 percent to 47 percent between FY 1992 and FY 2001 while the bundled share of small contracts held steady at 8.5 percent. Although the bundled share of small contract dollars essentially doubled over 10 years, small contract bundled dollars still represent 1.8 percent of the large contract bundled total, which grew 45 percent from \$74.3 to \$107.7 billion over the last 10 years.

The size of an average large bundled contract declined significantly over 10 years as the size of an average small bundled contract grew. Between FY 1992 and FY 2001 the value of a large, bundled contract fell 33 percent to \$6.3 million, while an average small, bundled contract more than doubled in size. This indicates that as the number of contracts grows the practice of bundling is shifting from “big ticket” procurements to smaller contracts valued between \$1 million and \$10 million. This observation is supported by the fact that the large contract share of all contracts declined from 87 percent to 80 percent over the course of the study period. Although small contracts have grown in size, the bundled share of these contracts hasn’t changed

Table 4.2: Bundling of Large and Small Contracts, FY 1992 and FY 2001

Contract Size	FY 1992 Contract Counts			FY 2001 Contract Counts		
	All	Bundled	Bundled %	All	Bundled	Bundled %
Large (> \$1 mil)	26,836	7,889	29.4%	35,888	16,997	47.4%
Small (< \$1 mil)	173,362	14,673	8.5%	140,841	11,919	8.5%
Total	200,198	22,562		176,729	28,916	16.4%

Contract Size	FY 1992 Contract Sums (\$000)			FY 2001 Contract Sums (\$000)		
	All	Bundled	Bundled %	All	Bundled	Bundled %
Large (> \$1 mil)	167,625,228	74,342,867	44.4%	198,502,423	107,709,384	54.3%
Small (< \$1 mil)	15,455,979	1,054,499	6.8%	15,750,907	1,985,747	12.6%
Total	183,081,207	75,397,366		214,253,330	109,695,131	51.2%

Contract Size	FY 1992 Average Contract Size (\$000)			FY 2001 Average Contract Size (\$000)		
	All	Bundled	Bundled %	All	Bundled	Bundled %
Large (> \$1 mil)	6,246	9,424	150.9%	5,531	6,337	114.6%
Small (< \$1 mil)	89	72	80.6%	112	167	149.0%
Total	915	3,342	365.4%	1,212	3,794	312.9%

D. Bundled Spending by Market

Bundling is being driven by the growth in bundled dollars awarded in Other Services. Table 4.3 shows that the Other Services share of all bundled dollars surpassed the bundled share of Manufacturing dollars in FY 1997 and now accounts for 43.4 percent of all bundled dollars. At \$47.7 billion in FY 2001,

bundled Other Services dollars total \$4 billion more than Manufacturing bundled dollars, nearly four times more than bundled R&D dollars and over five times more than bundled Construction dollars. Bundling in the Other Services sector has risen 49 percent in 10 years, from a 35 percent share in FY 1992 to its current 52.1 percent share in FY 2001.

Although Manufacturing's share of bundled dollars has fallen 10 percentage points over 10 years, it nonetheless accounts for the second largest bundled dollar total and the second largest bundled dollar share. Together, Other Services and Manufacturing accounted for 83 percent of all bundled dollars awarded in FY 2001.

Table 4.3: Overall and Bundled Spending by Market, FY 1992 – FY 2001

Millions of \$	FY 92	FY 93	FY 94	FY 95	FY 96	FY 97	FY 98	FY 99	FY 00	FY 01
Overall Spending										
Total	183,081	184,427	181,500	185,120	183,490	179,224	184,228	188,610	206,422	214,252
R & D	29,473	29,861	27,861	28,478	28,336	26,106	25,758	24,613	23,813	26,638
Other Services	67,319	67,516	72,987	72,951	74,295	72,990	77,418	81,151	88,990	91,360
Construction	13,043	13,580	16,434	17,082	16,008	16,269	15,692	16,917	16,155	16,366
Manufacturing	73,246	73,470	64,218	66,609	64,850	63,858	65,360	65,929	77,464	79,888
Bundled Total	75,397	80,882	76,930	76,651	78,448	74,596	83,519	89,592	94,580	109,695
Bundled Share	41.2%	43.9%	42.4%	41.4%	42.8%	41.6%	45.3%	47.5%	45.8%	51.2%
R & D	13,283	15,142	13,515	13,329	12,434	10,484	10,933	10,944	11,477	13,467
Other Services	23,591	24,553	27,668	29,019	29,357	30,719	37,442	38,549	43,738	47,643
Construction	1,440	1,692	2,185	2,932	3,357	3,722	4,091	4,240	5,137	5,405
Manufacturing	37,083	39,496	33,562	31,371	33,299	29,672	31,053	35,860	34,228	43,179
Market Share of Bundled Total										
R & D	17.6%	18.7%	17.6%	17.4%	15.9%	14.1%	13.1%	12.2%	12.1%	12.3%
Other Services	31.3%	30.4%	36.0%	37.9%	37.4%	41.2%	44.8%	43.0%	46.2%	43.4%
Construction	1.9%	2.1%	2.8%	3.8%	4.3%	5.0%	4.9%	4.7%	5.4%	4.9%
Manufacturing	49.2%	48.8%	43.6%	40.9%	42.4%	39.8%	37.2%	40.0%	36.2%	39.4%
Bundled Share of Overall Market										
R & D	45.1%	50.7%	48.5%	46.8%	43.9%	40.2%	42.4%	44.5%	48.2%	50.6%
Other Services	35.0%	36.4%	37.9%	39.8%	39.5%	42.1%	48.4%	47.5%	49.1%	52.1%
Construction	11.0%	12.5%	13.3%	17.2%	21.0%	22.9%	26.1%	25.1%	31.8%	33.0%
Manufacturing	50.6%	53.8%	52.3%	47.1%	51.3%	46.5%	47.5%	54.4%	44.2%	54.0%

The Construction sector showed the largest increase in bundled dollar share. Between FY 1992 and FY 2001, the share of bundled Construction dollars rose 158 percent, from 1.9 percent to 4.9 percent. This far surpassed the growth of bundling in Other Services, which rose 39 percent.

Curiously, each of these sectors shows a trend reversal between FY 2000 and FY 2001. Shares of bundled contracts in Manufacturing and R&D went up while the share of bundled contracts in Other Services and Construction went down in the last year of the study period. It remains to be seen whether these changes are temporary or permanent.

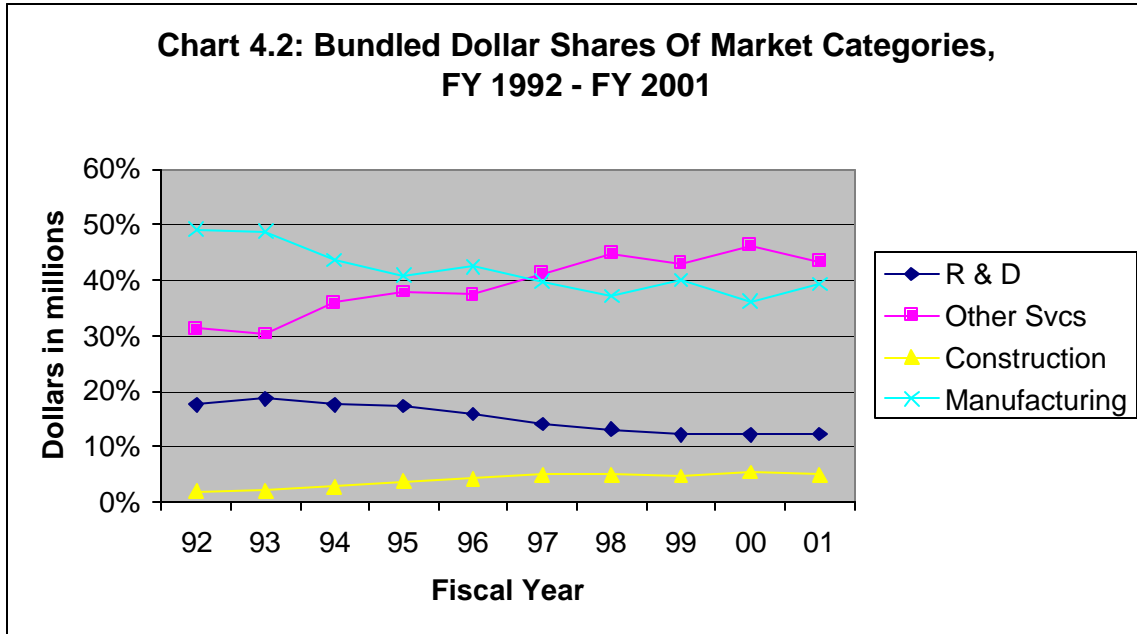


Table 4.4 below takes the same four major market categories and shows trends in large and small business participation in these markets over the last 10 years. Significantly, the market with the largest growth in bundled dollar share, Construction, also shows a significant, 10 percent decline small business participation over the FY 1992 – FY 2001 period. The two markets where bundling declined overall, R&D and Manufacturing, show moderate, sustained growth in small business participation.

The Other Services market, which shows strong bundled dollar share growth, also displays steady growth in small business participation since FY 1996. It appears that the use of PSCs to define dissimilar markets for the purposes of identifying bundled contract activity has captured more bundled contracts held by the larger small firms in the Other Services sector. More inclusive FPDC reporting of smaller contracts in the last two fiscal years bolsters this trend.

E. Agency Analysis

Although branches of the Department of Defense continue to dominate the awarding of bundled contracts, the share of bundled DoD dollars has fallen since FY 1992 as civilian agency use of bundled contracts has intensified.

As Table 4.5 demonstrates below, the DoD share of bundled contract dollars fell 8.8 percent over the study period from an 84.8 percent share 77.3 percent. Civilian agencies’ bundled dollar share grew correspondingly by 49.3 percent, from 15.2 percent to 22.7 percent. There was a slight, 1.1 percentage point drop in the Civilian bundled dollar share from FY 2000 to FY 2001 and a corresponding increase in the DoD bundled dollar share.

In Table 4.6, the Office of Personnel Management (OPM) stands out with 6,483 percent bundled dollar growth in the last 10 years. Yet the real drivers of bundling in the civilian sector are those large agencies that have significantly grown their multi-billion dollar annual bundled expenditures. Ten years of bundled dollar growth at the Department of Education (4,300 percent), the Department of Energy (644 percent),

the GSA (376 percent), Department of Veterans Affairs (DVA, 300 percent) and the Department of Justice (DOJ, 272 percent) forms the core of bundling in the civilian sector. The GSA in particular has risen rapidly because of the widespread adoption of GSA Schedule contracts since the mid-1990s.

Table 4.4: Count of Large and Small Firms by Major Market Category, FY 1992 - FY 2001

	FY 92	FY 93	FY 94	FY 95	FY 96	FY 97	FY 98	FY 99	FY 00	FY 01
Type of Business										
	R&D									
Large	1,577	1,659	1,433	1,497	1,702	1,454	1,295	1,211	1,144	1,185
SDB	505	564	597	701	776	677	634	606	575	582
Other Small	2,504	2,691	2,692	2,890	3,304	2,972	2,798	2,869	2,784	2,797
Other	1,131	1,179	1,079	1,226	1,342	1,148	1,054	999	893	906
Total	5,717	6,093	5,801	6,314	7,124	6,251	5,781	5,685	5,396	5,470
SB Sector Share	52.6%	53.4%	56.7%	56.9%	57.3%	58.4%	59.4%	61.1%	62.2%	61.8%
	Other Services									
Large	10,547	11,482	10,913	11,516	12,911	11,318	11,188	10,935	11,209	11,524
SDB	3,661	3,924	3,932	4,482	5,085	4,268	4,427	4,737	4,872	4,831
Other Small	20,609	18,827	17,260	17,942	19,154	17,692	18,191	18,792	19,368	21,266
Other	6,651	6,948	6,591	7,090	7,138	6,614	6,493	6,571	6,049	6,434
Total	41,468	41,181	38,696	41,030	44,288	39,892	40,299	41,035	41,498	44,055
SB Sector Share	58.5%	55.2%	54.8%	54.7%	54.7%	55.0%	56.1%	57.3%	58.4%	59.2%
	Construction									
Large	2,045	2,415	2,243	2,311	2,550	2,159	2,106	2,082	1,879	1,746
SDB	2,754	3,244	3,151	3,084	3,118	2,514	2,309	2,287	2,071	2,193
Other Small	16,809	17,369	15,929	13,244	13,072	10,616	9,480	8,829	7,232	7,108
Other	1,079	984	955	959	1,167	1,049	943	1,040	935	958
Total	22,687	24,012	22,278	19,598	19,907	16,338	14,838	14,238	12,117	12,005
SB Sector Share	86.2%	85.8%	85.6%	83.3%	81.3%	80.4%	79.5%	78.1%	76.8%	77.5%
	Manufacturing									
Large	9,508	9,214	8,240	8,728	10,193	8,598	8,335	8,399	8,336	8,043
SDB	1,588	1,661	1,577	1,853	2,257	2,070	2,071	2,125	2,209	2,094
Other Small	15,005	13,742	12,501	13,244	16,490	15,297	14,434	14,743	14,407	15,674
Other	2,001	2,025	1,793	1,972	2,433	2,708	2,449	2,709	2,419	2,576
Total	28,102	26,642	24,111	25,797	31,373	28,673	27,289	27,976	27,371	28,387
SB Sector Share	59.0%	57.8%	58.4%	58.5%	59.8%	60.6%	60.5%	60.3%	60.7%	62.6%

**Table 4.5: Total and Bundled Prime Contract Spending With
Defense vs. Civilian Bundled Dollar Breakout FY 1992 - FY 2001**

(All dollars in millions)

	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001
Total Dollars	183081	184427	181500	185120	183490	179224	184228	188610	206422	214253
All Bundled	75,397	80,882	76,930	76,651	78,448	74,596	83,519	89,592	94,580	109,695
DoD Bundled Total	63,968	68,935	64,364	63,042	64,989	5,867	65,475	71,874	72,101	84,779
DoD Bundled Share	84.8%	85.2%	83.7%	82.2%	82.8%	80.3%	78.4%	80.2%	76.2%	77.3%
Civilian Bundled Total	11430	11947	12566	13609	13459	14729	18044	17718	22479	24916
Civilian Bundled Share	15.2%	14.8%	16.3%	17.8%	17.2%	19.7%	21.6%	19.8%	23.8%	22.7%

**Table 4.6: Top 30 Civilian Agencies Ranked By
Bundled Contract Dollar Growth FY 1992 - FY 2001**

(All dollars in millions)

	FY 92	FY 93	FY 94	FY 95	FY 96	FY 97	FY 98	FY 99	FY 00	FY 01	Growth
OPM	3.1	0.3	0.2	1.1	5.4	22.6	86.4	82.2	129.2	201.7	6482.6%
DED	13.1	17.7	355.9	66.3	99.9	165.2	486.8	433.3	569.5	577.4	4300.3%
FCC	0.4	0.0	0.3	0.2	1.3	0.0	0.0	0.0	2.4	8.7	2137.7%
EEOC	0.6	3.6	1.4	2.4	5.6	6.0	5.3	14.5	4.4	8.2	1255.4%
FEMA	9.6	7.6	7.0	11.2	109.5	133.5	86.7	131.9	59.6	99.1	933.3%
SMITH	1.0	0.9	7.4	1.1	3.5	6.9	5.8	6.7	9.0	9.6	902.0%
SBA	2.1	15.5	8.0	7.7	13.7	24.2	15.1	17.1	17.4	17.9	748.1%
CFTC	0.4	0.8	1.2	0.5	3.3	1.4	1.7	0.0	0.0	3.4	725.3%
DOE	506.0	683.3	702.6	2031.9	1963.6	2010.6	2437.3	2551.3	2469.7	3765.3	644.1%
DOC	86.0	72.9	207.8	136.0	213.3	201.9	389.1	481.7	662.5	610.1	609.3%
CPSC	0.5	1.7	0.7	1.0	0.6	1.2	1.9	1.3	1.3	2.6	387.5%
GSA	1360.6	1620.2	3164.2	1416.6	2079.5	2940.2	4370.1	3870.9	6012.8	6476.9	376.0%
NARA	6.0	7.6	5.3	8.1	3.2	2.9	16.8	12.5	13.9	25.3	322.7%
FTC	1.1	2.2	3.0	4.5	3.6	3.1	4.3	9.8	7.6	4.6	316.9%
DVA	714.8	825.2	589.9	1010.9	1071.1	1468.2	1361.6	1387.0	2431.3	2863.9	300.7%
HUD	118.0	120.0	95.2	115.0	145.3	189.2	39.9	392.7	551.4	464.1	293.3%
FMC	0.0	0.2	0.2	0.1	0.0	0.0	0.0	0.0	0.0	0.1	276.9%
DOJ	511.2	428.3	586.4	933.7	1221.7	1220.0	1367.4	1427.4	1401.9	1906.0	272.8%
NRC	9.9	5.5	4.3	28.6	29.9	20.7	45.1	32.5	31.1	35.8	260.3%
USDA	151.0	132.1	155.0	113.8	240.0	216.4	292.5	396.9	392.3	535.7	254.8%
RRB	1.4	2.0	1.6	1.8	2.9	2.2	2.9	3.1	2.2	5.0	251.8%
ITC	0.6	0.6	0.5	0.5	0.0	1.4	1.0	1.4	1.9	1.9	230.6%
STATE	298.9	320.8	306.1	362.4	216.0	289.5	316.1	511.0	523.9	957.5	220.3%
SSA	0.0	0.1	0.0	107.2	136.8	256.1	341.7	292.3	286.6	328.8	206.8%
HHS	298.7	330.8	184.5	430.5	254.1	312.0	386.0	526.7	764.6	889.6	197.8%
TREAS	700.9	843.1	708.8	654.3	731.1	916.7	1516.9	1809.2	1289.5	1600.0	128.3%
DOI	424.6	408.5	394.5	483.1	256.4	240.8	296.3	465.1	417.2	946.0	122.8%
NLRA	2.5	1.5	3.1	2.4	2.6	2.6	2.5	4.4	2.6	5.0	105.0%
PEACE	1.4	1.9	3.3	0.3	2.3	5.5	8.0	10.0	2.7	2.6	86.0%
EOP	11.0	4.9	7.9	6.3	8.1	17.0	20.4	19.8	20.6	18.6	68.9%

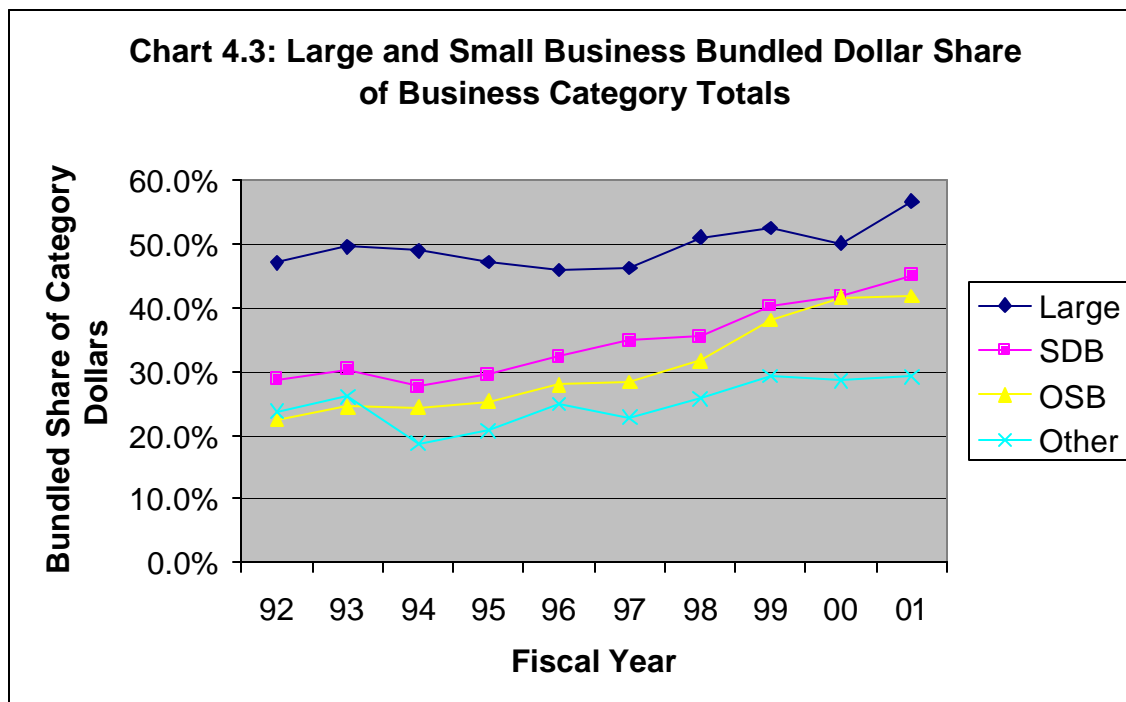
At the Department of Defense the Navy does most of the contract bundling based on total contract dollars spent, however the Secretary’s office and the Defense Logistics Agency show the most significant growth. As detailed in Table 4.7, after starting well behind the other two major defense bureaus in FY 1992, the Army’s 30.8 percent bundled dollar growth has almost brought the bureau nearly even with total bundled dollars spent by the Air Force and the Navy in FY 2001. At current rates of growth, the Army, Navy and Air Force will be spending comparable amounts on bundled contracts within three years.

Table 4.7: Top Defense Bureaus Ranked By Bundled Contract Dollar Growth FY 1992 - FY 2001
(All dollars in millions)

	FY 92	FY 93	FY 94	FY 95	FY 96	FY 97	FY 98	FY 99	FY 00	FY 01	92-01 Growth
OSD	5990.7	6104.2	5240.7	5793.2	6245.1	6818.3	8183.3	9155.2	6669.2	10467.4	74.7%
DLA	6833.8	7878.7	7708.3	6612.9	7227.1	7934.8	7271.0	7722.8	9506.3	11439.7	67.4%
ARMY	28277.7	28716.6	26956.8	27221.2	29478.9	28814.1	28388.2	30695.1	36415.9	36979.6	30.8%
ACE	2542.7	2249.5	2382.6	2532.1	2353.6	2459.3	2637.5	2972.0	2730.4	3137.3	23.4%
AF	37855.5	40144.1	39827.1	37942.6	39912.4	34882.6	33692.4	35451.2	37864.2	39568.5	4.5%
NAVY	39934.6	37970.5	36665.3	39011.9	36843.4	36271.4	37927.1	39315.2	40196.5	40845.1	2.3%

F. Analysis of Overall and Bundled Dollar Shares by Major Business Category

Large firms continue to dominate federal contracting overall as well as bundled contracting in particular. In FY 2001, LBs collected two out of three prime contract dollars and nearly four out every five bundled contract dollars. Both LB shares are down modestly from their peaks in FY 1992 primarily because small firms have grown their shares of bundled dollars.



Small firms have nearly doubled their dependence on bundled contracts. As Table 4.8 shows, in FY 1992 the bundled shares of SDB and OSB dollars were 29 percent and 22 percent respectively. By FY 2001, these bundled dollar sector shares had grown to 45 and 42 percent. Concurrently, LBs grew their dependence on bundled contract dollars from 47 percent in FY 1992 to 57 percent in FY 2001. More than one out of every two dollars awarded to a large firm is now connected to a bundled contract, on average.

Note the 10-year growth in bundled dollars awarded in the “Other” category. Two of the largest components of this category, Domestic Contractors Performing Outside the US and company records with blank business codes, consist mainly of large businesses. This means the apparent decline in the large business bundled dollar share is smaller than it appears.

Table 4.8: Total Dollars, Bundled Dollars and Shares Broken Out by Major Business Category, FY 1992 - FY 2001
(All dollars in millions)

Size	FY 1992	FY 1993	FY 1994	FY 1995	FY 1996	FY 1997	FY 1998	FY 1999	FY 2000	FY 2001
Overall Dollars	183,081	184,427	181,500	185,120	183,490	179,224	184,228	188,610	206,422	214,253
Large	128,341	124,786	124,238	122,975	117,543	118,757	125,346	125,553	137,431	142,823
SDB	8,305	9,525	10,051	11,366	10,944	10,810	11,456	11,907	12,711	14,347
OSB	21,219	21,024	20,267	22,558	22,825	22,428	22,841	23,901	26,334	28,397
Other	25,217	29,092	26,944	28,221	32,178	27,228	24,584	27,248	29,947	28,686
Bundled Dollars	75,397	80,882	76,930	76,651	78,448	74,596	83,519	89,592	94,580	109,695
Large	60,406	61,907	60,962	58,070	53,973	54,934	64,080	65,903	68,951	81,056
SDB	2,393	2,892	2,776	3,352	3,541	3,765	4,062	4,797	5,325	6,471
OSB	4,745	5,151	4,943	5,712	6,383	6,372	7,257	9,101	10,982	11,881
Other	7,853	10,931	8,249	9,517	14,552	9,526	8,120	9,791	9,323	10,287
Sector Share of Overall Dollars										
Large	70.10%	67.66%	68.45%	66.43%	64.06%	66.26%	68.04%	66.57%	66.58%	66.66%
SDB	4.54%	5.16%	5.54%	6.14%	5.96%	6.03%	6.22%	6.31%	6.16%	6.70%
OSB	11.59%	11.40%	11.17%	12.19%	12.44%	12.51%	12.40%	12.67%	12.76%	13.25%
Other	13.77%	15.77%	14.85%	15.24%	17.54%	15.19%	13.34%	14.45%	14.51%	13.39%
Bundled Share of All Bundled Dollars										
Large	80.12%	76.54%	79.24%	75.76%	68.80%	73.64%	76.73%	73.56%	72.90%	73.89%
SDB	3.17%	3.58%	3.61%	4.37%	4.51%	5.05%	4.86%	5.35%	5.63%	5.90%
OSB	6.29%	6.37%	6.43%	7.45%	8.14%	8.54%	8.69%	10.16%	11.61%	10.83%
Other	10.42%	13.52%	10.72%	12.42%	18.55%	12.77%	9.72%	10.93%	9.86%	9.38%
Bundled Share of Sector Dollars										
Large	47.07%	49.61%	49.07%	47.22%	45.92%	46.26%	51.12%	52.49%	50.17%	56.75%
SDB	28.81%	30.37%	27.62%	29.49%	32.35%	34.83%	35.46%	40.29%	41.89%	45.11%
OSB	22.36%	24.50%	24.39%	25.32%	27.96%	28.41%	31.77%	38.08%	41.70%	41.84%
Other	31.14%	37.58%	30.62%	33.72%	45.22%	34.98%	33.03%	35.93%	31.13%	35.86%

G. Type of Business Deciles Analysis

Bundling has exacerbated tendencies toward business stratification in the federal marketplace. The deciles analysis in Table 4.9 shows that as small firms overall have grown their bundled dollars and bundled dollar shares, large businesses and the largest small firms are still the primary beneficiaries.

Although on the whole small businesses have become more dependent upon bundled contracts, relatively few small businesses benefit. The 1,638 small businesses in the first two dollar deciles received 82.5 percent of all the small business bundled dollars in FY 2001. In other words, just 17 percent of all small, bundled dollar recipients received 4.1 out of every five small business bundled dollars.⁷

**Table 4.9: FY 2001 Bundled Contract Dollar and Company Deciles Analysis
(All dollars in thousands)**

Business Type	Decile 1		Decile 2		Decile 3		Decile 4		Decile 5	
	Bund \$	Firms	Bund \$	Firms	Bund \$	Firms	Bund \$	Firms	Bund \$	Firms
Large	83,554,046	655	1,327,882	412	437,473	356	228,088	365	119,200	341
Small/Disadv	4,483,368	275	1,074,525	346	366,116	297	182,396	292	81,335	229
Other Small	7,826,500	428	1,762,868	589	850,857	691	428,425	691	261,779	759
Other	5,429,769	135	449,221	147	183,930	150	91,647	146	55,892	165
Total	101,293,683	1,493	4,614,496	1,494	1,838,376	1,494	930,556	1,494	518,206	1,494

Business Type	Decile 6		Decile 7		Decile 8		Decile 9		Decile 10	
	Bund \$	Firms	Bund \$	Firms	Bund \$	Firms	Bund \$	Firms	Bund \$	Firms
Large	63,911	312	41,332	349	23,036	330	13,535	362	-41,242	324
Small/Disadv	43,133	213	16,749	139	10,594	149	5,682	149	-19,475	191
Other Small	163,995	814	102,056	857	59,845	866	30,691	815	-55,505	864
Other	31,652	155	17,492	149	10,005	149	6,272	168	-23,944	108
Total	302,691	1,494	177,629	1,494	103,480	1,494	56,180	1,494	-140,166	1,487

A further illustration of this stratification is the fact that only four small businesses are among the top 100 recipients of bundled contracts during FY 2001, yet these small businesses received \$885 million, or 13 percent of all small business bundled awards. The four small businesses include: GTSI (\$386 million); Chugach Alaska Corp. (\$171 million); World Wide Technology (\$144 million); and Signal Corp. (\$137 million).⁸ For a ranked list of the Top 100 bundled contract recipients in FY 2001, see Table 4.10, below.

⁷ Note that for the deciles analysis Eagle Eye corrected for companies that had multiple Type of Business Codes by assigning a single Business Category to a Parent Company based on which Business Category held the majority of a company's bundled dollars. This was done to correct for the fact that numerous large businesses had divisions coded as small businesses.

⁸ Some large businesses get coded as small businesses in the FPDS contracts database. The reasons for this vary. In some instances small firms have been acquired by large firms and the agency hasn't updated their Type of Business code assignment. Some entries are errors and still other codes may have been assigned based on the original categorization of a small business contract opportunity.

H. FY 2001 Parent Company Rank

The FY 2001 Top 100 bundled contractor ranking confirms the consolidation of bundled contracts in the hands of large contractors. Table 4.10 shows that the Top 100 firms received a total of \$74 billion in bundled prime contract dollars, 67 percent of the FY 2001 bundled contract total. Just four companies in the Top 100 are officially classified as small businesses category by GSA: GTSI, ranked 39th; Chugach Alaska Corp., ranked 81st; World Wide Technology, ranked 90th; and Signal Corp., ranked 93rd.

Table 4.10: Top 100 Bundled Contract Recipients, FY 2001

Rank	Parent Company	Bund \$000	Rank	Parent Company	Bund \$000
1	LOCKHEED MARTIN CORP	10,966,469	51	CONSOLIDATED FREIGHTWAYS	295,082
2	BOEING CO.	7,054,674	52	KPMG PEAT MARWICK	290,260
3	NEWPORT NEWS SHIPBUILDING	5,679,329	53	IBM CORP.	284,919
4	RAYTHEON CO.	4,217,156	54	JACOBS ENGINEERING GROUP INC	277,484
5	GENERAL DYNAMICS CORP.	3,490,558	55	ROLLS ROYCE P.L.C.	267,741
6	NORTHROP GRUMMAN CORP.	3,347,380	56	L-3 COMMUNICATIONS CORP	259,797
7	UNITED TECHNOLOGIES CORP.	2,454,771	57	JOHNS HOPKINS UNIVERSITY	258,669
8	SCIENCE APPLICATIONS INTL CORP	1,992,553	58	ITC	258,290
9	TRW, INC.	1,752,117	59	PARSONS CORPORATION	255,045
10	GENERAL ELECTRIC COMPANY	1,733,047	60	ARINC, INC.	254,346
11	AMERISOURCE DISTRIBUTION CORP	1,536,591	61	WASHINGTON GROUP INTERNATIONAL	252,035
12	DYNCORP	1,180,551	62	ANTHEM, INC.	246,844
13	COMPUTER SCIENCES CORP.	1,149,984	63	ACCENTURE	245,062
14	OCCUPATIONAL HEALTH SERVICES	942,091	64	HEWLETT-PACKARD CO.	221,459
15	MC DERMOTT, INC.	889,863	65	MANTECH INTERNATIONAL CORP	221,184
16	GM GDLS DEFENSE GROUP LLC, JOI	839,737	66	HENSEL PHELPS CONSTRUCTION CO	220,841
17	CARLYLE GROUP	708,872	67	CH2M HILL COMPANIES LTD	218,751
18	BAE SYSTEMS	623,930	68	FEDERAL EXPRESS CORP.	217,280
19	BATTELLE MEMORIAL INSTITUTE	616,679	69	WALLENIUS HOLDINGS, INC.	203,663
20	TRIWEST HEALTHCARE ALLIANCE CO	554,322	70	ORACLE CORP.	201,403
21	ITT INDUSTRIES	548,854	71	CLASSIFIED DOMESTIC CONTRACTOR	200,259
22	IT GROUP, INC.	544,849	72	URS CORP.	194,557
23	OSHKOSH TRUCK CORP.	543,371	73	SRA INTERNATIONAL, INC.	186,590
24	BOOZ ALLEN & HAMILTON, INC.	533,307	74	U.S. MARINE REPAIR, INC.	182,195
25	ELECTRONIC DATA SYSTEMS CORP.	502,673	75	FOSTER WHEELER CORP.	177,484
26	UNISYS	499,726	76	BINDLEY WESTERN INDUSTRIES	176,758
27	UNIVERSITY OF CHICAGO	498,384	77	FORD MOTOR CO.	175,351
28	DELL COMPUTER CORPORATION	481,125	78	GENERAL MOTORS CORP.	174,729
29	A C S	480,641	79	VERIZON COMMUNICATIONS	174,476
30	MITRE CORP.	463,413	80	AMS	171,716
31	AZIMUTH TECHNOLOGIES, INC.	450,409	81	CHUGACH ALASKA CORPORATION	171,489
32	HALLIBURTON CO.	448,738	82	TYCO INTERNATIONAL LTD	170,171
33	STEWART & STEVENSON SERVICES	441,346	83	TETRA TECH, INC.	167,664
34	TEXTRON, INC.	428,635	84	JOHNSON CONTROLS, INC.	167,441
35	LOCKHEED-NORTHROP GRUMMAN JV	415,244	85	PRICEWATERHOUSECOOPERS LLP	166,314
36	HUMANA, INC.	400,707	86	US INVESTIGATIONS SERVICES	166,044
37	MCI WORLDCOM	396,999	87	KUWAIT NATIONAL PETROLEUM CO.	149,047
38	MOTOROLA, INC.	392,622	88	SPRINT CORP.	147,489

39	GTSI	385,766	89	LEO BURNETT USA, INC	145,275
40	EQUILON ENTERPRISES LLC	383,441	90	WORLD WIDE TECHNOLOGY, INC.	144,235
41	DAIMLER-CHRYSLER	381,625	91	RESOURCE CONSULTANTS, INC.	143,646
42	ALLIANT TECHSYSTEMS, INC.	364,969	92	XEROX CORP.	137,560
43	MASSACHUSETTS INST OF TECH	345,183	93	SIGNAL CORP	137,349
44	TITAN CORP.	340,842	94	CHARLES STARK DRAPER LABS	135,422
45	AT&T	339,513	95	BECHTEL GROUP, INC.	133,180
46	RAYTHEON/MARTIN JAVELIN JV	324,620	96	COMPUTER ASSOCIATES INTL	125,383
47	CACI INTERNATIONAL INC	311,022	97	ABB SUSA/A ARENSON (A JOINT	124,241
48	ROCKWELL AUTOMATION	310,041	98	DATATRAC INFORMATION SERVICES	122,269
49	HARRIS CORP.	306,367	99	HOLLY CORP.	121,831
50	PHILIPP HOLZMANN AG	299,426	100	BRAINTREE MARITIME CORP	120,139

I. Parent Company Count

There have been relatively insignificant changes in overall numbers of parent companies in major government markets over the last five fiscal years, but noticeable jumps and declines in certain business categories and market sectors.

The biggest small business declines have occurred in the Construction sector. In both the SDB and OSB categories, numbers of small construction companies fell dramatically. As shown in Table 4.11 below, the number of SDB construction companies fell 14.1 percent, from 1,939 to 1,665, between FY 1997 and FY 2001. The number of OSB construction firms fell an even more dramatic 35.7 percent over the same period. At the same time, the number of OSBs grew 21.6 percent in the Other Services Sector, indicating a rapid flight out of Construction and into Other Services.

Table 4.3 above showed that between FY 1997 and FY 2001, bundled Construction dollars rose 45.2 percent. It is significant to note that increased bundling in the Construction sector mirrors a sharp decline in the sector's rate of small business participation. Other major market sectors also showed bundled dollar share growth, however patterns in firm participation remained relatively stable and even rose slightly over the most recent five years.

OSB participation in Other Services has grown along with bundling in that market, but there is a wide disparity between the amount of dollar growth and the increase in the number of small firms in this sector. Bundled OS dollars grew 55 percent between FY 1997 and FY 2001, from 30.7 billion to \$47.6 billion. Table 4.11 shows that the number of SDBs in OS increased by 11.8 percent, while OSBs grew 21.6 percent. Large firms grew by 7.13 percent. This serves to confirm the findings of the deciles analysis – with bundled dollars growing faster than the number of firms, bundling must be benefiting the larger incumbents.

**Table 4.11: Count of Parent Companies by
Fiscal Year, Business Type and Market
FY 1997 - FY 2001**

Business Type	FY 97	FY 98	FY 99	FY 00	FY 01
SDB Total	6,452	6,401	6,492	6,467	6,474
R&D	316	312	306	286	291
Other Services	3,001	3,092	3,250	3,447	3,355
Construction	1,939	1,783	1,751	1,553	1,665
Manufacturing	1,196	1,214	1,185	1,181	1,163
Other Small Total	38,192	36,754	36,839	35,334	38,041
R&D	2,318	2,149	2,261	2,159	2,151
Other Services	14,315	14,782	15,224	15,772	17,413
Construction	9,473	8,372	7,694	6,219	6,090
Manufacturing	12,086	11,451	11,660	11,184	12,387
Large Total	10,195	10,109	10,044	10,277	10,275
R&D	322	268	264	240	260
Other Services	5,119	5,173	5,048	5,407	5,494
Construction	1,342	1,305	1,270	1,145	1,043
Manufacturing	3,412	3,363	3,462	3,485	3,478
Other Total	7,578	7,388	7,862	6,972	7,491
R&D	580	524	496	432	476
Other Services	4,484	4,486	4,614	4,163	4,433
Construction	797	740	792	714	743
Manufacturing	1,717	1,638	1,960	1,663	1,839
Blank Total	579	499	468	569	575
R&D	23	16	16	19	29
Other Services	141	123	124	156	213
Construction	41	25	30	29	44
Manufacturing	374	335	298	365	289

J. Large and Small Bundled and Unbundled Contracts

Table 4.12 below confirms that dollars are concentrating in larger contract vehicles and that contract bundling is accelerating this trend.

The count of all large contracts has fallen in the last five fiscal years as the sum of all large contract dollars has grown. The average large contract has grown in value from \$4.0 million in FY 1997 to \$5.5 million in FY 2001. At the same time, the count of large bundled contracts has grown steadily to the point where in FY 2001 47.4 percent of all large contracts and 54.3 percent of all large contract dollars were bundled. The mean the average, large bundled contract grew in value from \$5.0 million to \$6.3 million. Over this period, the number of large, unbundled contracts fell 30 percent.

The growth in the number of small contracts was outpaced by the growth and value of small, bundled contracts. The result was a doubling in the size of a small, bundled contract from FY 1997 to FY 2001, from \$84,000 to \$167,000.

**Table 4.12: Large and Small Bundled and Unbundled Contracts
With Annual Counts and Average Contract Size
Large = Greater Than \$1 Million. All Dollars in thousands.**

	FY 97	FY 98	FY 99	FY 00	FY 01
Count of All Contracts					
Large Contracts	41,529	42,399	41,866	39,952	35,888
Small Contracts	132,022	126,912	127,612	125,763	140,841
Count of Bundled Contracts					
Large Contracts	14,665	15,877	16,622	17,249	16,997
Small Contracts	8,590	8,747	8,507	9,522	11,919
Count of Unbundled Contracts					
Large Contracts	26,864	26,522	25,244	22,703	18,891
Small Contracts	123,432	118,165	119,105	116,241	128,922
Sum of All Contracts					
Large Contracts	166,996,627	172,108,877	177,030,014	192,881,679	198,502,423
Small Contracts	12,227,066	12,118,762	11,579,913	13,540,590	15,750,907
Sum of Bundled Contracts					
Large Contracts	73,878,290	82,638,882	88,618,623	93,269,506	107,709,384
Small Contracts	717,686	880,171	973,682	1,310,835	1,985,747
Sum Of Unbundled Contracts					
Large Contracts	93,118,337	89,469,995	88,411,391	99,612,173	90,793,039
Small Contracts	11,509,380	11,238,591	10,606,231	12,229,755	13,765,160
Avg of All Contracts					
Large Contracts	4021	4059	4228	4828	5531
Small Contracts	93	95	91	108	112
Avg of All Bundled Contracts					
Large Contracts	5038	5205	5331	5407	6337
Small Contracts	84	101	114	138	167
Avg of All Unbundled Contracts					
Large Contracts	3466	3373	3502	4388	4806
Small Contracts	93	95	89	105	107

K. Bundling by Kind of Contract

Bundling is expanding on just those kinds of contracts -- GSA Schedule, IDIQs, BOAs, Modifications and especially Small Purchases – that featured prominently in the federal government’s procurement reforms of the mid-1990s. Table 4.13 summarizes growth of bundled contract counts and Table 4.14 on bundled contract dollars.

Emphasizing streamlining and efficiency in the procurement process, Congress enacted a series of procurement reforms in the mid-1990s, including the Federal Acquisition Streamlining Act (FASA) in 1994 and the Clinger-Cohen Act of 1996 that simplified procurement procedures and reduced reporting requirements, encouraging the increased use of multiple award-type contracts. As envisioned, these

contracts would be open for most agencies to use as a cost-effective alternative to running separate and redundant procurements. As agency acquisition workforces were reduced to save money, buying officers began adding tasks to existing GSA Schedule and multiple award-type contracts to save the time and money required to managing individual agency contracts.

As a result, the shares of bundled GSA Schedules, IDIQs, and other multiple award-type contracts have grown even as overall numbers of contracts in several of these categories have fallen. Table 4.13 below shows bundled GSA Schedule contracts are up 83 percent and Table 4.14 shows bundled dollars on these contracts have risen 601 percent since FY 1992. The statistics below show that growth of these contracts has accelerated, particularly in the last three years.

Table 4.13: Counts of Bundled Contracts by Kind of Contract Classification, FY 1992 - FY 2001

Description	Bund	FY 92	FY 93	FY 94	FY 95	FY 96	FY 97	FY 98	FY 99	FY 00	FY 01	92-01
												Growth
Initial Letter Contract	N	1,240	1,101	1,060	1,505	950	1,060	958	953	940	962	-22.4%
	Y	117	108	107	97	88	150	123	85	128	85	-27.4%
	Total	1,357	1,209	1,167	1,602	1,038	1,210	1,081	1,038	1,068	1,047	-22.8%
Definitive Contract	N	576	565	485	461	407	163	164	154	281	164	-71.5%
	Y	98	89	83	91	93	50	62	32	37	33	-66.3%
	Total	674	654	568	552	500	213	226	186	318	197	-70.8%
New Definitive Contract	N	79,647	75,957	70,020	68,366	51,897	42,489	37,460	35,869	33,583	32,619	-59.0%
	Y	2,022	2,208	1,868	1,760	1,769	2,377	2,084	1,801	1,808	1,577	-22.0%
	Total	81,669	78,165	71,888	70,126	53,666	44,866	39,544	37,670	35,391	34,196	-58.1%
Small Purchase Procedure	N	28,031	22,890	22,286	19,817	44,348	52,241	53,229	56,445	55,919	66,669	137.8%
	Y	122	66	53	116	254	461	542	687	1,211	2,077	1602.5%
	Total	28,153	22,956	22,339	19,933	44,602	52,702	53,771	57,132	57,130	68,746	144.2%
Order Under Indefinite Delivery Contract (IDC)	N	24,890	26,574	26,648	25,999	21,625	17,999	17,560	17,360	16,769	17,217	-30.8%
	Y	6,754	7,117	7,453	8,171	8,571	8,100	8,339	8,850	9,337	9,963	47.5%
	Total	31,644	33,691	34,101	34,170	30,196	26,099	25,899	26,210	26,106	27,180	-14.1%
Basic Ordering Agreement (BOA)	N	7,139	3,526	3,532	3,655	3,697	4,244	4,206	3,690	4,660	5,771	-19.2%
	Y	1,601	1,395	1,310	1,423	1,476	1,615	2,000	2,022	2,111	2,204	37.7%
	Total	8,740	4,921	4,842	5,078	5,173	5,859	6,206	5,712	6,771	7,975	-8.8%
Order/Mod on GSA Schedule	N	1,013	722	695	745	677	629	751	871	916	999	-1.4%
	Y	2,171	2,174	2,169	2,277	2,312	2,324	2,676	3,162	3,501	3,979	83.3%
	Total	3,184	2,896	2,864	3,022	2,989	2,953	3,427	4,033	4,417	4,978	56.3%
Modification	N	46,793	48,547	46,232	45,657	43,122	40,228	38,247	36,378	32,836	31,405	-32.9%
	Y	14,325	14,444	13,213	12,962	12,794	13,269	13,743	13,502	14,116	15,188	6.0%
	Total	61,118	62,991	59,445	58,619	55,916	53,497	51,990	49,880	46,952	46,593	-23.8%
Termination for Default	N	348	385	256	173	152	133	74	80	53	62	-82.2%
	Y	42	55	44	41	32	21	18	24	13	20	-52.4%
	Total	390	440	300	214	184	154	92	104	66	82	-79.0%
Termination for Convenience	N	1,226	1,450	1,206	1,091	672	531	408	352	244	217	-82.3%
	Y	466	532	419	434	345	397	354	300	270	356	-23.6%
	Total	1,692	1,982	1,625	1,525	1,017	928	762	652	514	573	-66.1%
Order Under Multiple Award Contract	N	0	3	4	7	80	2,229	2,529	2,830	3,074	2,714	
	Y	0	0	0	2	52	1,875	2,195	2,454	2,998	3,058	
	Total	0	3	4	9	132	4,104	4,724	5,284	6,072	5,772	

IDIQ contract numbers are up 47 percent and bundled dollars on these contracts are up 87 percent over the course of the study period. Bundled modifications (to existing contracts) are up 12 percent and bundled dollars orders on Basic Ordering Agreements (BOAs) are up 10 percent. Small Purchase Procedure dollars are up 61,000 percent, which seems astounding until you realize the dollar totals involved are very small.

It is the bundling occurring on these multiple award-type contracts that the government’s current bundled contract indicator particularly fails to capture. Eagle Eye refers to this kind of bundling as “accretive bundling,” where diverse, but related, tasks are added to existing contracts. Accretive bundling tends to grow a contract’s average size and complexity, making it harder for small firms to meet wide-ranging requirements and stricter accounting rules.

Other reforms make it easier for buying officers to place orders with desired companies. For instance, the “rule of three” enables a contract officer to place an order on a GSA Schedule contract after consulting just three company prices. The assumption is that since GSA Schedule prices already represent a competitive, negotiated price an agency need not engage in further price discussions before deciding what represents “best value” for the agency. Often, though, there is no advance indication an agency is about to make a Schedule purchase. This means that small businesses face the additional problem of anticipating agency requirements. Many small firms with small marketing staffs complain that they only find out about requirements after an order has already been placed on an existing, bundled contract.

Table 4.14: Sums of Bundled Contract Dollars by Kind of Contract Classification, FY 1992 - FY 2001

Description												92-01
												Growth
Initial Letter Contract	N	2,145	1,731	1,718	1,973	2,097	1,612	1,515	884	3,350	3,170	47.8%
	Y	749	928	451	608	366	1,291	3,779	454	551	226	-69.8%
	Total		2,894	2,659	2,170	2,580	2,462	2,903	5,294	1,338	3,901	3,396
Definitive Contract	N	748	1,748	754	2,356	2,920	1,180	917	312	2,038	1,572	110.0%
Superseding Letter Contract	Y	933	1,072	2,065	679	776	330	828	171	79	397	-57.4%
	Total	1,681	2,820	2,819	3,035	3,697	1,510	1,745	482	2,117	1,969	17.1%
New Definitive Contract	N	36,016	34,420	36,437	36,265	30,828	31,419	25,415	25,913	28,942	23,650	-34.3%
	Y	5,479	8,119	3,421	6,892	7,821	7,660	6,559	5,366	9,441	2,689	-50.9%
	Total	41,495	42,539	39,858	43,157	38,649	39,079	31,974	31,278	38,383	26,339	-36.5%
Small Purchase Procedure	N	153	143	133	268	2,428	2,366	2,921	3,268	3,602	4,018	2530.9%
	Y	1	1	0	21	58	100	226	332	524	633	60714.3%
	Total	154	143	133	289	2,487	2,466	3,147	3,600	4,126	4,651	2924.9%
Order Under Indefinite	N	8,057	8,731	9,329	12,967	11,161	8,220	8,758	9,922	10,171	13,753	70.7%
Delivery Contract (IDC)	Y	11,336	12,378	16,150	14,936	16,335	13,486	14,722	15,828	17,578	21,273	87.7%
	Total	19,393	21,109	25,479	27,903	27,496	21,707	23,480	25,750	27,750	35,026	80.6%
Basic Ordering Agreement (BOA)	N	1,898	1,855	1,972	2,268	2,600	2,220	1,975	1,593	2,700	3,183	67.7%
	Y	4,333	3,745	3,167	3,545	3,252	3,550	4,620	5,024	4,539	4,774	10.2%
	Total	6,232	5,599	5,139	5,813	5,853	5,770	6,595	6,617	7,239	7,957	27.7%
Order/Mod on GSA	N	64	55	74	80	125	73	138	224	239	276	330.8%
Schedule	Y	1,769	1,549	1,669	2,314	2,732	3,847	5,538	8,360	10,259	12,402	601.0%
	Total	1,833	1,604	1,743	2,394	2,857	3,919	5,677	8,583	10,498	12,678	591.6%
Modification	N	59,030	55,196	54,456	52,594	53,120	53,965	51,771	54,718	54,446	50,105	-15.1%

	Y	51,233	53,623	50,196	47,752	47,230	40,394	42,636	48,041	43,834	57,439	12.1%
	Total	110,263	108,819	104,652	100,346	100,350	94,359	94,408	102,758	98,280	107,544	-2.5%
Termination for Default	N	-150	-113	-49	-55	-84	-38	-35	-18	-44	-130	-12.8%
	Y	-81	-12	-23	-11	-31	-31	-7	-21	-24	-22	-72.5%
	Total	-231	-125	-72	-65	-115	-69	-42	-39	-69	-153	-33.8%
Termination for Convenience	N	-279	-222	-259	-248	-190	-169	-147	-69	-85	-76	-72.7%
	Y	-354	-519	-165	-85	-100	8	-127	-143	-128	-115	-67.6%
	Total	-633	-741	-425	-334	-290	-161	-274	-212	-213	-191	-69.9%
Order Under Multiple Award Contract	N	0	2	6	1	35	3,782	7,479	2,271	6,482	5,038	
	Y	0	0	0	0	9	3,961	4,745	6,182	7,927	9,999	
	Total	0	2	6	1	44	7,742	12,224	8,453	14,410	15,037	

L. Regression Analysis

A standard regression analysis of bundled contract statistics reveals that bundling is harming small business. The analysis confirms observed trends that as bundled contracts increase in number and size, small business contract and dollar shares decline.

Specifically, our analysis shows that if the number of bundled contracts increases by 100:

- The number of total small business contracts decreases by 60,
- The number of small disadvantaged business contracts increases by 70,
- The number of other small business contracts decreases by 131,
- The number of large business contracts increases by 32,
- The number of contracts to other performers increases by 27, and
- The number of contracts to unknown performers is increases by 1.

Our analysis also shows that if the amount of bundled dollars increases by 100:

- The number of total small business dollars decreases by 12,
- The number of small disadvantaged business dollars increases by 16,
- The number of other small business dollars decreases by 27,
- The number of large business dollars decreases by 1,
- The number of dollars to other performers increases by 14, and
- The number of dollars to unknown performers decreases by 1.

Contract Analysis

For each general market and fiscal year, Table 4.15 gives the percentage of contracts going to each performer, as well as the percentage of contracts that are bundled.

Table 4.15: Percent of Contracts By Performer, by General Market and Fiscal Year

	FY	SDB	OSB	TSB	LB	OTHER	BLANK	BUND.
R&D	1992	6.05	34.20	40.25	36.00	23.15	0.60	17.95
	1993	6.76	36.29	43.05	34.79	21.67	0.49	17.62
	1994	7.56	38.11	45.67	32.81	20.92	0.60	17.78
	1995	8.26	39.08	47.34	30.23	21.73	0.70	17.03
	1996	8.59	40.76	49.35	29.59	20.47	0.59	16.23
	1997	8.47	42.19	50.66	28.82	19.70	0.81	16.21
	1998	8.35	43.41	51.76	27.99	19.54	0.71	16.78
	1999	8.26	44.84	53.10	26.77	19.35	0.78	17.46
	2000	7.78	45.94	53.72	26.21	19.35	0.72	17.88
	2001	7.33	46.24	53.57	26.21	19.32	0.91	17.89
CONST	1992	14.16	73.29	87.45	7.71	4.55	0.29	5.71
	1993	15.96	70.97	86.94	8.45	4.37	0.24	5.08
	1994	16.96	69.02	85.97	9.15	4.68	0.20	4.76
	1995	19.86	63.96	83.82	10.44	5.49	0.26	5.57
	1996	18.55	63.01	81.57	11.10	7.01	0.33	6.20
	1997	19.61	59.75	79.36	12.92	7.41	0.31	8.28
	1998	21.13	56.65	77.77	13.97	7.96	0.30	10.74
	1999	22.18	53.51	75.69	14.16	9.78	0.37	11.87
	2000	25.53	48.68	74.21	14.73	10.65	0.42	15.40
	2001	28.84	46.83	75.66	13.34	10.73	0.27	16.99
OS	1992	11.18	41.66	52.84	29.30	16.82	1.04	17.30
	1993	12.42	38.17	50.59	30.96	17.40	1.06	18.35
	1994	13.02	37.43	50.44	31.67	16.88	1.01	18.32
	1995	14.27	36.47	50.74	31.51	16.71	1.04	18.57
	1996	14.17	36.74	50.92	31.86	16.11	1.11	19.16
	1997	14.18	37.09	51.27	31.65	16.05	1.03	20.85
	1998	14.60	37.50	52.10	31.71	15.20	0.98	22.46
	1999	15.24	38.05	53.29	30.63	15.11	0.97	22.80
	2000	15.15	38.32	53.47	31.10	14.46	0.97	24.98
	2001	14.24	39.74	53.99	30.14	14.93	0.95	25.96
MFG	1992	5.07	47.16	52.23	40.44	4.41	2.93	11.65
	1993	6.11	42.76	48.87	43.10	5.00	3.02	13.24
	1994	6.44	42.89	49.33	41.39	4.77	4.51	13.39
	1995	6.72	44.55	51.27	38.75	4.79	5.20	13.49
	1996	6.63	48.93	55.56	33.85	5.59	5.00	12.60
	1997	6.24	49.50	55.74	33.57	6.37	4.33	12.96
	1998	6.52	48.07	54.59	34.74	6.23	4.44	13.25
	1999	6.80	46.76	53.56	35.48	7.07	3.88	13.79
	2000	7.05	47.97	55.02	35.84	6.25	2.89	13.76
	2001	6.72	50.60	57.32	33.31	6.25	3.12	12.71

Table 4.16 shows the results of regressions of each performer's share vs. the overall bundling share. In performing these regressions it was necessary to take into account that the e.g. small business share by general market is influenced not only by bundling but also by the general market itself. For example, in FY 2001 the lowest small disadvantaged business share was in manufacturing, as was the smallest bundling share. Now it may be that the low small disadvantaged business share is the result of the low bundling share, but it may also be that there is something about manufacturing procurement that does not lend itself to small disadvantaged business but at the same time is (independently) not conducive to bundling. (For example, a large business contract might also be less likely to be bundled if it is in manufacturing.)

We have dealt with this by introducing three dummy variables: one for construction, one for other services, and one for manufacturing. (Having a dummy variable for R&D would be redundant.) The

results are as follows: If the number of bundled contracts increases by 100, the number of small disadvantaged business contracts increases by 70, the number of other small business contracts decreases by 131, the number of total small business contracts decreases by 60, the number of large business contracts increases by 32, the number of contracts to other performers increases by 27, and the number of contracts to unknown performers increases by 1. R-squared varies from 87 percent to 96 percent.

Table 4.16: Regression Results

	SDB	OSB	TSB	LB	OTHER	BLANK
R Squared	0.95	0.87	0.94	0.93	0.96	0.92
Constant	(4.41)	63.67	59.26	24.37	15.77	0.60
Coefficient:						
Bundled	0.70	(1.31)	(0.60)	0.32	0.27	0.01
CONST	18.32	8.72	27.04	(15.70)	(11.00)	(0.35)
OS	3.58	1.70	5.28	(0.05)	(5.54)	0.30
MFG	1.64	0.33	1.97	8.46	(13.69)	3.26
t-stats:						
Bundled	8.47	(5.50)	(2.89)	1.93	3.27	0.19
CONST	19.99	3.33	11.76	(8.52)	(11.85)	(1.15)
OS	5.26	0.87	3.09	(0.03)	(8.05)	1.34
MFG	2.33	0.16	1.12	5.98	(19.22)	13.92

Dollar Analysis

For each general market and fiscal year, Table 4.17 gives the percentage of dollars going to each performer, as well as the percentage of dollars that are bundled.

Table 4.17: Percent of Dollars By Performer, by General Market and Fiscal Year

	FY	SDB	OSB	TSB	LB	OTHER	BLANK	BUND.
R&D	1992	2.23	6.34	8.56	70.30	19.69	1.45	45.07
	1993	2.34	7.25	9.59	69.79	18.44	2.18	50.71
	1994	2.14	8.11	10.25	74.33	14.11	1.31	48.51
	1995	2.60	8.74	11.34	71.56	15.84	1.26	46.80
	1996	2.70	9.55	12.25	71.64	15.09	1.02	43.88
	1997	2.86	10.35	13.21	67.47	17.14	2.18	40.16
	1998	2.52	9.76	12.28	69.83	16.25	1.65	42.44
	1999	2.57	11.77	14.34	67.18	17.66	0.83	44.46
	2000	2.66	12.45	15.11	66.86	17.28	0.74	48.20
	2001	3.03	11.74	14.77	68.13	16.09	1.00	50.56
CONST	1992	12.55	35.87	48.42	45.99	3.85	1.74	11.04
	1993	15.34	33.23	48.57	45.13	4.79	1.51	12.46
	1994	16.11	27.69	43.80	50.77	4.47	0.96	13.30
	1995	16.68	27.07	43.74	50.15	5.41	0.70	17.16
	1996	15.25	28.80	44.05	48.48	6.54	0.94	20.97
	1997	15.96	23.77	39.73	51.85	7.05	1.36	22.88
	1998	17.00	25.06	42.06	50.52	6.90	0.53	26.07
	1999	15.99	21.76	37.75	52.58	8.61	1.06	25.06
	2000	19.88	21.50	41.37	47.44	10.66	0.53	31.80
	2001	21.13	20.82	41.95	46.92	9.20	1.93	33.03
OS	1992	6.61	11.19	17.80	66.08	14.25	1.88	35.04
	1993	7.11	10.63	17.75	66.09	14.28	1.88	36.37
	1994	6.83	9.21	16.04	66.98	14.84	2.14	37.91

	1995	7.91	10.57	18.48	64.97	14.54	2.01	39.78
	1996	7.50	10.71	18.22	64.56	14.98	2.25	39.51
	1997	7.82	10.62	18.44	64.82	14.16	2.58	42.09
	1998	7.85	10.40	18.25	65.54	13.99	2.23	48.36
	1999	8.34	11.47	19.81	62.66	15.18	2.35	47.50
	2000	7.87	11.94	19.81	63.51	14.28	2.40	49.15
	2001	8.85	12.51	21.36	62.29	15.05	1.30	52.15
MFG	1992	2.13	9.75	11.88	78.01	3.02	7.08	50.63
	1993	2.64	9.76	12.40	72.41	4.08	11.11	53.76
	1994	2.83	10.49	13.33	72.10	3.42	11.15	52.26
	1995	3.01	11.61	14.62	70.01	3.02	12.35	47.10
	1996	3.33	11.64	14.97	64.02	3.61	17.39	51.35
	1997	2.75	12.70	15.45	71.09	3.94	9.52	46.46
	1998	3.16	12.77	15.93	74.51	3.11	6.46	47.51
	1999	2.73	12.16	14.89	74.74	4.02	6.35	54.39
	2000	2.41	11.97	14.37	74.01	3.44	8.18	44.19
	2001	2.50	13.05	15.55	75.22	3.48	5.75	54.05

Table 4.18 shows the results of regressions of each performer's share vs. the overall bundling share. In performing these regressions it was necessary to again take into account that the e.g. small business share by general market is influenced not only by bundling but also by the general market itself. For example, in FY 2001 the highest small firm share was in construction, as was the smallest bundling share. It may be that the high small business share is the result of the low bundling share, but it may also be that there is something about construction that lends itself to small business but at the same time is (independently) not conducive to bundling. (For example, a large business contract might also be less likely to be bundled if it is in construction.)

We have again dealt with this by introducing three dummy variables: one for construction, one for other services, and one for manufacturing. (Having a dummy variable for R&D would be redundant.) The results are as follows: If the number of bundled dollars increases by 100, the number of small disadvantaged business dollars increases by 16, the number of other small business dollars decreases by 27, the number of total small business dollars decreases by 12, the number of large business dollars decreases by 1, the number of dollars to other performers increases by 14, and the number of dollars to unknown performers decreases by 1. R-squared varies from 80 percent to 98 percent.

Table 4.18: Regression Results

	SDB	OSB	TSB	LB	OTHER	BLANK
R Squared	0.98	0.91	0.97	0.93	0.96	0.80
Constant	(4.64)	22.15	17.51	70.28	10.25	1.96
Coefficient:						
Bundled	0.16	(0.27)	(0.12)	(0.01)	0.14	(0.01)
CONST	17.88	10.23	28.11	(21.03)	(6.52)	(0.56)
OS	5.62	0.42	6.04	(5.00)	(1.74)	0.70
MFG	(0.45)	3.10	2.64	2.95	(13.82)	8.22
t-stats:						
Bundled	5.51	(3.74)	(1.74)	(0.15)	3.96	(0.23)
CONST	21.86	4.87	14.65	(8.90)	(6.35)	(0.34)
OS	13.01	0.38	5.96	(4.01)	(3.20)	0.82
MFG	(1.04)	2.76	2.58	2.34	(25.14)	9.49

Regression Analysis Summary

To summarize the above estimates: the contract effect of bundling on small business is substantial in that an increase of 100 bundling contracts is associated with a net decrease of 60 small business contracts. But an increase of 100 bundled dollars is associated with a net decrease of 12 small business dollars. The reason for the difference in the effects is that the bundled contracts won by small business are larger than the contracts they replaced that were previously going to small business. In short, the contract effect of bundling on small business is less than one-for-one but substantial; the dollar effect is one-for-eight. At \$109 billion in FY 2001, the current level of bundled contracts may be costing small business \$13 billion annually. But no matter how one looks at it, the net effects of bundling are detrimental and substantial.

6. Conclusion

Through the end of the ten-year period ending in FY 2001, bundled contracts continued to grow dramatically in size and number. Agencies awarded these contracts increasingly to large firms and a relative handful of the largest small firms. Most bundling is the result of requirements accretion – the addition of diverse tasks to existing multiple award-type contracts. The growth in the size and complexity of these contracts reduces small firm competitiveness and drives an inevitable shift away from awards to small firms.

10-Year Trend

In FY 2001 both the number of bundled contracts and the amount of bundled contract dollars were the highest in 10 years. The annual bundled contract count of 28,916 was up 8 percent from FY 2000 and up 19 percent since 1992. In FY 2001 bundled contracts accounted for 16.4 percent of the reported 177,000 prime contracts and 51 percent of all reported prime contract spending. (Table 4.1)

During FY 2001, agencies awarded 105,000 out of 177,000 prime contracts to small businesses, or 59.3 percent. However, the small business share of bundled contracts was 52.7 and the small business share of all bundled dollars was just 16.7 percent. Overall, the government reported awarding 20 percent of all prime contract dollars to small business in FY 2001. (Table 4.1)

Between FY 1992 and FY 2001 prime contracts grew annually in size, breadth of work required and in numbers of locations where work was performed. The average size of a prime contract grew 32.5 percent, from \$915,000 in FY 1992 to \$1.2 million in FY 2001. Average bundled contract size grew from \$3.3 to \$3.8 million, or 13.8 percent. By FY 2001, an average bundled contract was over three times larger than an average contract and over five times larger than an average unbundled contract. (Table 4.1)

The new, official federal bundled contract indicator, collected as part of the FPDC's SF-279 and DD-350 data collection process, masks the harm to small business caused by contract bundling. It shows only \$2 billion in bundled, prime contract dollars awarded in FY 2001, or just 1 percent of total reported federal prime contract dollars. According to this indicator, small businesses received \$240 million, or 11.8 percent of the bundled contract dollars. (Page 14)

Key Factors Fueling Bundling

The key factors fueling bundling include:

- **Greater reliance by agency acquisition staff on multiple award-type contracts.** Agency streamlining has led to greater use of multiple award-type contracts to meet agency requirements. Table 4.13 shows that the number of active, bundled GSA Schedule contracts grew 83 percent and IDIQs grew 48 percent between FY 1992 and FY 2001. Dollars associated with bundled GSA Schedule contracts grew 601 percent. Dollars associated with bundled IDIQs grew 88 percent.
- **Big-ticket defense procurements.** Ten percent of the contracts and 55 percent of the reported \$1.2 trillion defense prime contract dollars were bundled between FY 1992 and FY 2001. The DoD accounts for four out of every five bundled dollars spent. Although dollar totals and rates of bundled contracts are as high or higher in some civilian agencies, the combined, high level

of spending by the Army, Navy, Air Force and the Office of the Defense Secretary focus attention on defense manufacturing contracts as the primary source of bundling. (Tables 4.5-4.7)

- **Continued growth in spending for Other Services and Construction.** These are market sectors that are experiencing sharp declines in small business participation as they increasingly rely on bundled contracts to meet agency requirements. (Table 4.4)

Cost to Small Business

Bundling is costly for small businesses. A regression shows that for every increase of 100 bundled contracts there was a decrease of 60 contracts to small business; and for every additional \$100 awarded on bundled contracts there was a decrease of \$12 to small business. At a level of \$109 billion in FY 2001, we estimate that bundled federal contracts cost small businesses \$13 billion annually.

Official Government Bundling Measure

The new, official contract bundling indicator is based on a narrow definition of bundling adopted as part of the 1997 Small Business Re-authorization Act. This definition focuses exclusively on the bundling of historical requirements and fails to address the phenomenon of accretive bundling. When applied to the FY 2001 data, the new bundling flag identifies only 2 percent of reported prime contract dollars as being awarded on bundled contracts. By contrast, Eagle Eye estimates that 51 percent of all FY 2001 prime contract dollars were issued on bundled contracts.

7. Appendix A: Detailed Methodology for Bundled Contract Identification

The main challenge in performing bundled contract analysis is that the government does not track data that specifically distinguish bundled contracts from unbundled contracts. Before any data processing can begin, it is first necessary to identify bundled contracts and related trends using available data. This requires making certain judgments about the contracts database that serves as the core of this analysis.

A. The Data Source

The database used for this study is an enhanced version of data issued by the Federal Procurement Data Center (FPDC), a branch of the U.S. General Services Administration (GSA). The FPDC is responsible for collecting, editing and disseminating prime contracts data to Congress, the executive branch and the private sector so that government officials and the general public can monitor the government's dealings with contractors. With this data the federal government measures the impact of federal procurement on the nation's economy, monitors the distribution of contracts to large, small and small disadvantaged businesses, and periodically assesses the effectiveness of federal procurement policies.

The core data elements collected in this database describe various characteristics of contractual obligations made between the federal government and prime contractors doing business directly with a federal agency. Neither subcontract nor budget data are part of the prime contracts database.

A prime contract obligation is a legally binding agreement between the government and a contractor that commits the government to acquire products or services at an agreed price. Obligated dollars are moved by the authorizing agency to a contractor's account at the federal buying activity responsible for the purchase. These obligated funds are then used by the purchasing personnel to make payments to the contractor on an agreed payment schedule. Obligations are therefore linked to, but do not necessarily match, contractor progress.

Every time the government makes an obligation on a contract of at least \$25,000 a purchasing officer must fill out either a DD-350 form (for defense agencies) or an SF-279 form (for civilian agencies). These forms describe the financial, competitive, statutory and other characteristics of the obligation. Smaller initial obligations can be made on an SF-279 or reported in bulk form on an SF-279. Only the SF-279 data are used in this study because only this form has indicators of bundling.

Over the entire course of a contract's duration, a purchasing officer might fill out numerous DD-350 or SF-279 forms for a single contract. This is because the dollars contained in a single obligation may not represent the total value of a contract. In fact, there are about 500,000 annual contract obligations in FPDC involving approximately 170,000-200,000 contracts. This means there are on average about 2.7 obligations per contract per year. Some small contracts have only one obligation, but some large contracts can have over 100.

Each DD-350 or SF-279 report forms the basis of a separate record in the FPDC contracts database. A purchasing officer will fill out a separate procurement form every time there is an action, that is, a new obligation on the contract or a de-obligation. Each action shows a unique combination of the

following data elements: reporting agency, contract number, contract modification number, contracting office order number, contracting office code, action date, and amount of obligation (or de-obligation). Each time a new form is filled out, a separate task has been documented.

B. Definitions

It is important to carefully define each variable of interest in terms of the available data. First and foremost, of course, is the definition of a bundled contract.

Bundled Contract

A bundled contract is a contract that, originally or by modification, incorporates dissimilar activities. While it is possible that the overall costs to the contractor may have been reduced, a majority of the savings from such combination may only be in general and administrative (G&A) costs, that is, the costs of administering the contract. The government's administrative costs may also be less.

This does not mean that the total cost to the government is less, for bundling increases contract size and may lessen competition for the contract, which may in turn increase the size of the winning bid, even though the cost to the contractor may be less. However, the government may be forced into contract bundling if procurement personnel are too few to let contracts in more economically efficient amounts.

Previous Definitions of Bundled Contracts

The earliest definition of contract bundling that we are aware of can be found in Section 208 of the SBA Reauthorization and Amendments Act of 1990, which became Public Law 101-574 on 15 November 1990: "If a proposed procurement includes in its statement of work goods or services currently being performed by a small business, and if the proposed procurement is in a quantity or estimated dollar value the magnitude of which renders small business prime contract participation unlikely, or if a proposed procurement for construction seeks to package or consolidate discrete construction projects..."⁹ This definition is codified as 15 USC 644(a) and is incorporated in Section 19.202-1(e) of the Federal Acquisition Regulation (FAR), with the addition that the construction consolidation as a trigger of bundling is also restricted that "the magnitude of this consolidation makes it unlikely that small businesses can compete for the prime contract".

In addition to being awkwardly stated, the 1990 statutory definition has at least two deficiencies. The first is that bundling, presumably a characteristic of a contract, also includes the impact of that characteristic, namely that the bundling has caused small business participation to be "unlikely". The second deficiency is that it ignores a contract that had not previously been performed by a small business even though it could have been performed by a small business. In addition to being a compound definition mixing "apples and oranges", each deficiency makes the definition unduly restrictive as a description of contracts. As far as construction is concerned, we are not sure what is meant by "discrete" projects. But the idea of dissimilar requirements is one that we pursue below in the definition we develop for this study.

⁹ Quoted in U.S. General Accounting Office National Security and International Affairs Division, "Extent and Impact of Contract Bundling is Unknown", Letter Report of 14 April 1994, page 11.

The next definition was in Section 321 of the Small Business Credit and Business Opportunity Act of 1992, which became Public Law 102-366 on 4 September 1992: “For the purpose of this section, the term ‘contracting bundling’ or ‘bundling of contract requirements’ refers to the practice of consolidating into a single large contract solicitation multiple procurement requirements that were previously solicited and awarded as separate smaller contracts, generally resulting in a contract opportunity unsuitable for award to a small business concern due to the diversity and size of the elements of performance specified and the aggregate dollar value of the anticipated award.”³

This was the definition used in the SBA study of contract bundling. This 1992 definition properly ignores who had the contracts before bundling, but still retains the idea that a bundled contract is generally unsuitable for award to a small business concern. This definition imposes an additional restriction on what has happened to the contract: in addition to the contract growing in size, there is also a greater “diversity” of the “elements of performance”. While it is possible for the idea of bundling to include a simple increase in the size of a contract, it may not be possible to measure such an occurrence in any meaningful way. Indeed, we pursue the idea of diverse requirements in the definition we develop for this study. All in all, this definition is superior to the one of 1990.

A third definition was in Section 847 of the National Defense Authorization Act for Fiscal Year 1994, which became Public Law 103-160 on 30 November 1993: “For the purposes of this section, the terms ‘contract bundling’ and ‘bundling of contract requirements’ means the practice of consolidating two or more procurement requirements of the type that were previously solicited and awarded as separate smaller contracts into a single large contract solicitation likely to be unsuitable for award to a small business concern due to: (1) the diversity and size of the elements of performance specified; (2) the aggregate dollar value of the anticipated award; (3) the geographical dispersion of the contract performance sites; or (4) any combination of the factors described in paragraphs (1), (2), and (3).”¹⁰

This 1993 definition retains the idea that a bundled contract is “likely to be unsuitable for award to a small business concern”. It has an important difference, however, from the definition of 1992. The 1993 definition introduces the possibility that “dispersion of the contract performance sites” can constitute bundling, an idea that we developed in the definition we developed for this study.

A fourth definition was adopted in an SBA Procedural Notice (Control Number 6000-582) on 9 July 1993: “Bundling is the consolidation of two or more requirements, descriptions, specifications, line items or statements of work; which individually were or could be performed by small business; resulting in a contract opportunity for supplies, services or construction which may be unsuitable for award to a small business concern due to the diversity and size of the performance elements, and/or the aggregate dollar value of the anticipated award, and/or the geographical dispersion of the contract performance sites.”¹¹

This definition has two differences from the statutory definition of 1993: it broadens the concept of bundling by only requiring that the bundled contract “may be unsuitable for award to a small business concern” instead of “likely to be unsuitable for award to a small business concern”. However, it is

¹⁰ *ibid*, p. 11

¹¹ *ibid*, p. 11

more limiting in that it adds the restriction that the original contracts “individually were or could be performed by small business”, which on the other hand is broader than the restriction in the 1990 statutory definition that the original contracts were for “goods or services currently being performed by a small business”. Our comments on these features have already been made.

A fifth definition was adopted in a subsequent SBA Procedural Notice in April 1996: "Bundling is the consolidation of two or more requirements which individually were or could be performed by small business, for supplies, services or construction that is of a quantity, estimated dollar value or magnitude which makes it unlikely that small business can compete for the prime contract."¹²

This definition is considerably more restricted than the previous SBA Procedural Notice definition. Two of the three causes of bundling, diversity of performance elements and geographical dispersion of performance sites, have been dropped, leaving only the size of the contract as a cause of bundling. In addition, "may be unsuitable for award to a small business concern" has been replaced by "makes it unlikely that small business can compete", which is somewhat more restrictive. SBA's 1993 definition of bundling included more contracts than its 1996 definition.

A sixth and last definition was in Section 411 of the Small Business Reauthorization Act of 1997, which became Public Law 105-135 on 2 December 1997: "The term 'bundling of contract requirements' means consolidating two or more procurement requirements for goods or services previously provided or performed under separate smaller contracts into a solicitation of offers for a single contract that is likely to be unsuitable for award to a small-business concern due to (A) the diversity, size, or specialized nature of the elements of the performance specified; (B) the aggregate dollar value of the anticipated award; (C) the geographical dispersion of the contract performance sites; or (D) any combination of the factors described in subparagraphs (A), (B), and (C)." PL 105-135 goes on to state that "The term 'separate smaller contract', with respect to a bundling of contract requirements, means a contract that has been performed by one or more small business concerns or was suitable for award to one or more small business concerns."

This definition, which was repeated in SBA's interim rule of October 1999, embodies two changes from the 1993 statute. It broadens the definition of bundling by adding the specialized nature of performance elements as a form of bundling, which is a sensible change in the context of this definition. But it unfortunately restricts the definition of bundling by adding an unnecessary definition of "separate smaller contract". By defining such a contract as one that had been performed by or was suitable for award to one or more small businesses, and by defining bundling (as before) as the consolidation of two or more separate smaller contracts, it unintentionally allows the possibility that a small business contract could be combined with a large business contract that had been unsuitable for small business, with the resulting consolidated contract not a bundled contract because it was not a consolidation of two separate smaller contracts, as defined in the statute.

This definition has three essential parts: (1) a bundled contract replaces separate contracts, (2) a bundled contract has performance elements that make it more difficult for small business to perform,

¹² Statement of Richard L. Hayes, Associate Deputy Administrator for Government Contracting and Minority Enterprise Development, U.S. Small Business Administration, before the Committee on Small Business, U.S. House of Representatives, August 4, 1999, page

and (3) there is consequently a reduced likelihood that small business can perform the contract. A definition like this is an operational definition in the sense that it is geared to doing something about bundling on a case-by-case basis. With severely limited personnel facing a massive problem, why worry about contracts that are likely to go to small business anyway? Why worry about contracts that have always been consolidated and have never been awarded to small business? Why even worry about new large contracts that are consolidated in such a way that small business cannot perform them, when it is easier to justify the criticism of a contract that was previously separate contracts? In other words, the statutory definition of bundling focuses on the most obvious and easiest targets.

But contracts that have never been awarded to small business because of the above kinds of performance elements are also a cause for concern. So are contracts that have always been consolidated with these kinds of performance elements. So are new contracts with similar characteristics. Thus we focus instead on contract characteristics rather than contracting history or contract outcomes, with the result that in this study small businesses win some of the bundled contracts. There is another equally compelling reason for zeroing on contractor characteristics: it would be impossible with any reasonable amount of resources to do a government-wide study and to either (1) construct a genealogy of contracts so that contracts that were previously separate could be identified, or (2) make judgmental evaluations of contracts to identify all the contracts that had become unsuitable for small business.

In short, the statutory definition of bundling is restricted to those contracts that are the most promising candidates for a limited number of Procurement Center Representatives to address. This is neither a possible nor a desirable definition for a government-wide study like ours, because it is our job to determine the size of the problem, not just that part of the problem that is easiest to mitigate.

Explicitly Bundled Contracts

Building on Eagle Eye’s 1999 study, we adapted the definition of Explicitly Bundled Contracts to recent changes in the data by substituting the PSC for the SIC Code in our definition of the key factors that indicate bundling. The government stopped collecting SIC Codes in FY 2000 and began instead to collect the NAICS code as a second market indicator. This made the PSC the only consistently reported market classification over the entire study period.

PSCs provide a reasonable substitute for the SIC code. A scan of Eagle Eye’s historical data revealed that problems with the recurring use of discontinued PSCs had been cleaned up and that using PSCs did not add unreasonable numbers of additional bundled contracts. Tables A.1 and A.2 update and summarize contract counts and dollar sums for contracts exhibiting differences in PSCs, Places of Performance and Types of Contract codes.

Table A.1: Indicators of Contract Bundling FY 1989 - FY 2001
 Numbers of Contracts With Different, Key Data Elements

	PSC Codes	Places of Performance	Contract Types
Different PSC Codes	79,376	118,012	95,248
Places of Perf	118,012	73,078	91,227
Contract Types	95,248	91,227	29,217

The diagonal entries in the table are the numbers of contracts with differences when the indicators of bundling are taken one at a time. For example, there were 79,376 contracts with changes in the PSC code from one action to another, 73,078 with differences in the PoP, and 29,217 with differences in the Type of Contract. The off-diagonal elements are the numbers of contracts with differences when the indicators of bundling are taken two at a time. For example, the second number in the first row indicates there were 118,012 contracts showing differences in both the PSC code and the PoP. Note that this number also is the first number of the second row, since the number of contracts with a difference in the PoP and also a difference in the PSC code is the same as the number of contracts with a difference in the PSC code and also a difference in the PoP code. The same holds true for the other indicators; that is, the table is symmetric.

Table A.2 indicates the thousands of dollars in contracts that had actions during FY 1989 – FY 2001 and that had differences from one action to another in PSC code, PoP, or Contract Type.¹³ The diagonal entries in the table are the thousands of dollars in contracts with differences when the indicators of bundling are taken one at a time.

For example, there were \$953 billion in contracts with changes in the PSC code from one action to another, \$650 billion with differences in the PoP, and \$826 billion with differences in the Type of Contract. The off-diagonal elements are the thousands of dollars in contracts with differences when the indicators of bundling are taken two at a time. For example, the second number in the first row indicates there was \$1.1 trillion in contracts showing differences in both the PSC code and the PoP. Note that this number also is the first number of the second row, since the thousands of dollars in contracts with a difference in the PoP and also a difference in the PSC code are the same as the thousands of dollars in contracts with a difference in the PSC code and also a difference in the PoP code. The same holds true for the other indicators; that is, the table is symmetric.

Of the 1.24 million active contracts during FY 1992 – FY 2001, 106,387 of them showed differences in PSC, PoP or Type of Contract code. This number, representing 8.5 percent of all active contracts, accounted for \$840 billion, or 44.5 percent, of all prime contract dollars. The average size of a bundled contract during this period was \$7.9 million.

Table A.2: Indicators of Dollar Bundling FY 1989 – FY 2001
Sums of Dollars on Contracts With Different, Key Data Elements

Different	PSC Codes	Places of Performance	Contract Types
PSC Codes	953,404,959	1,154,898,512	1,211,075,299
Places of Perf	1,154,898,512	649,998,349	1,119,855,548
Contract Types	1,211,075,299	1,119,855,548	825,948,158

In the original study, the only evidence of bundling used was that which occurred in the year being analyzed. In this study we broaden that considerably. In the overall tables (which are for the entire period FY 1992 through FY 2001) we include any evidence of bundling during the 10 years. In the analysis of one fiscal year at a time, we include any evidence of bundling during a “look back” period. In order not to confuse this study with the previous one, and in order to be explicit, we use here the notion of an “explicitly” bundled contract (EBC), which is a contract that has an action showing a

PSC, PoP or Type of Contract code different from codes for another action on the same contract, during the period of analysis.

We recognize that “explicitly bundled contracts” may include some contracts that are in reality unbundled. But it should also be recognized that “explicitly bundled contracts” exclude a considerably larger number of contracts that are actually bundled, such as large contracts with the same PSC code. Also excluded are contracts bundled before the look-back period and bundled contracts that have not been modified in any way or that have only one action (we only capture bundled contracts showing modifications). In terms of data, an error in data entry for PSC, PoP, or Type of Contract that is not consistently wrong for the entire contract may result in “bundling” where bundling would not otherwise be indicated. On the other hand, since we are only including the portions of contracts during FY 1992 – FY 2001, bundling outside this period on the same contracts may not be reflected in bundling during the period.

Where does this leave us? By any reasonable definition of bundling, a contract of more than a billion dollars should be per se bundled. But as indicated in the analysis of large and small contracts, only 57 percent of contracts involving more than a billion dollars are explicitly bundled and only 45 percent of the dollars in contracts involving more than a billion dollars are explicitly bundled. This demonstrates that we are using an essentially conservative measure of bundling.

Markets

Markets are defined in terms of PSCs rather than SIC codes because this is a study of procurement rather than of the economy. As such, we need to break down procurement with a procurement classification rather than an economic one. The size of a market is defined as the sum of the dollar values of all actions in that market during the period in question. If a contract includes actions during that period in more than one market, only the actions in the market in question are included. Thus, contracts may be counted in more than one market, but dollar values are not. However, contract counts for a market that includes other markets do not have double counting, nor do contract counts for procurement as a whole.

Large Contracts

A bundled contract is by definition larger than the contracts it replaces. Conversely, large contracts in general are more likely to be bundled. The original study used a dollar threshold of \$100 thousand to define a large contract. In the present study, the dollar threshold has been changed to \$1 million. Even though \$100 thousand is the limit on small purchases, contracts between \$100 thousand and \$1 million are much less likely to be bundled than contracts over \$1 million. The figure of \$1 million is generally the threshold for the requirement of a subcontracting plan, and subcontracting means that the work can feasibly be split up; that is, the requirements may have been bundled.

Bundled Contract Rating

The original study had a “Bundled Contract Rating”, which was the sum of four such ratings, which were the subjective estimates of the importance of a particular value of each of a number of indicators

in each market studied. In this study, the percentage of contracts that are explicitly bundled will in effect be the bundled contract rating. Actions per contract will continue to be calculated but will serve as an indicator of the underlying situation, rather than as an additional indicator of bundling. (Certain kinds of actions are already included in the definition of explicitly bundled contracts.)

The share of large contracts in procurement will continue to be calculated but will serve as an indicator of the underlying situation, rather than as an additional indicator of bundling. Also, small business contracts that are large will no longer be used as an indicator of bundling, although they will continue to be calculated. The thinking behind their use as an indicator of bundling was that bundling would result in larger contracts to small business as well as large. But small businesses with large contracts could also be an indicator of success independent of bundling.

Regression Analysis

The statistical analysis is taken one step further in the current study by calculating the changes (in percentage points) in the small business shares of contracts (and dollars) in each market versus the changes (in percentage points) in explicitly bundled contracts (and dollars) as shares of each market. The two variables are related in a cross section regression for the four sectors of Research and Development, Construction, Other Services and Supplies and Equipment.

C. Procedures

The results of this study are affected by a number of specific procedures.

Determination of Explicit Bundling for the Entire Period

For the period FY 1992 – FY 2001, group all actions by contract number. The result is all contracts acted upon during these 10 years. Flag all contracts that have a difference among actions (which may include the original contract) in the PSC code and/or the contract type and/or the PoP, regardless of the year in which the difference occurred. The result is all explicitly bundled contracts that were acted upon during these eleven years.

Explicit Bundling in the Analysis of One Fiscal Year at a Time

In the analysis of one fiscal year at a time, we could have simply looked at the number of contracts acted upon during a given fiscal year, and then looked at how many of these contracts were ever bundled. But such an approach would have two biases in the data: actions in earlier years would be more likely to be on contracts that were later bundled, and actions in later years would be more likely to be on contracts that were bundled earlier. Since these two biases would in all probability not be perfectly offsetting, we decided that it was necessary to systematically remove each of the two biases in the following manner.

Actions in later years would be more likely to be on bundled contracts because the contracts would, on average, have longer histories; a few of them might go back to the first year in our data base, FY 1989. Therefore, in the analysis of one fiscal year at a time, a contract is counted as explicitly bundled only if the evidence of bundling occurs during an historical four-year period up to and including the fiscal year being analyzed. For instance, to determine if a contract that was active in FY 1992 was explicitly

bundled for the analysis of that year, all actions placed against that contract from FY 1989 up through the end of FY 1992 are analyzed for variations in the PSC, PoP and Type of Contract codes. Similarly, to determine if a contract active in FY 1999 was explicitly bundled, all actions placed against that contract starting in FY 1996 are studied.

Also note that even though a contract's bundled status may change from unbundled to bundled over the life of the contract, indications of bundling are not retroactive in the year-by-year analysis. If a contract is bundled only after the year being analyzed, it should not be and is not counted as bundled for that year. For instance, a contract initially awarded in FY 1992 that showed no signs of bundling in FY 1994 or FY 1995 could have become a bundled contract in FY 1996. Such a contract would be considered bundled in FY 1996 and thereafter, until it is closed out. The contract would not be counted as bundled in FY 1994 and FY 1995. This eliminates any bias toward bundling that would otherwise tend to inflate the numbers of bundled contracts in the earlier years of this analysis.

For further details of Eagle Eye's methodology for determining rates of bundling year-by-year, see pages 12-14.

Markets in the Analysis of One Fiscal Year at a Time

For a given fiscal year, we first select all actions that have a PSC in the market being analyzed. The sum of the obligations and de-obligations in these actions is the dollar size of the market in the given fiscal year. Note that this excludes actions on contracts acted upon during this year that had a PSC in this market in an earlier year but not in the year being analyzed.

These actions in the given market are then grouped by contract number. The result is the number of contracts acted upon by actions in this market during this fiscal year. (The ratio of actions to contracts includes just the actions in the market and year being analyzed but not in other markets as well if they are actions upon the same contracts.) We then count the number of contracts that are flagged. The result is the number of explicitly bundled contracts acted upon by actions in this market during this fiscal year.

The original study at this point excluded contracts with negative or zero net dollar values in total actions in the fiscal year being analyzed, on the grounds that any bundling here may have actually been unbundling. But the size of the market is thus increased and is then greater than the size of the market in various tabulations of others. Keeping such contracts would facilitate cleaner comparisons with other studies. And a de-obligation in this case will still represent action upon a bundled contract.

Large Contracts in the Analysis of One Fiscal Year at a Time

The original study defined large contracts to be contracts acted upon in the fiscal year and market being analyzed that had a total value of actions in that year in that market (but not in another market) in excess of a dollar threshold. This excluded contracts that were large in a prior year but were acted upon in the current year in an aggregate amount less than the dollar threshold. It also excluded contracts that were large in another market but not in the market being analyzed. Since the indicator of bundling in this study can occur in a different market and/or an earlier year, the small and large breakdown should be on the comparable basis. Contract size is therefore defined to include the dollar value of all actions in any market during the period used to determine bundling.

New Contractors

In the original study, a “new” contractor was defined as an establishment that had not received an award during any previous year. In the present study, we use instead a file that Eagle Eye has constructed linking establishments to their parent companies. A “new” contractor is defined as a parent company that had not previously received an award in the period used to determine bundling.

Type of Contractor

For the purposes of this study, contractors are grouped into the following categories: small disadvantaged business, other small business, large business, and other (which consists of sheltered workshops, other nonprofits, other state/local government institutions, foreign contractors, domestic contractors performing outside the U.S., historically black colleges/universities or minority institutions,¹⁴ and unknown). Actions that do not have a code for type of contractor are not attributed to large business even though they are almost exclusively DoD actions with a firm specified by a foreign government or by an international organization, or DOD actions in some other special program. Counts of contractors by type will sometimes add to a total that is greater than the total for all performers if actions awarded to the same performer have been coded with more than one type of contractor on separate action.

¹⁴ Contracts with historically black colleges/universities or minority institutions are undercounted in the overall FY 1992 - FY 2001 tabulations because they were not indicated on the data form before May 1996.