

November 1990

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# TREASURY ADP PROCUREMENT

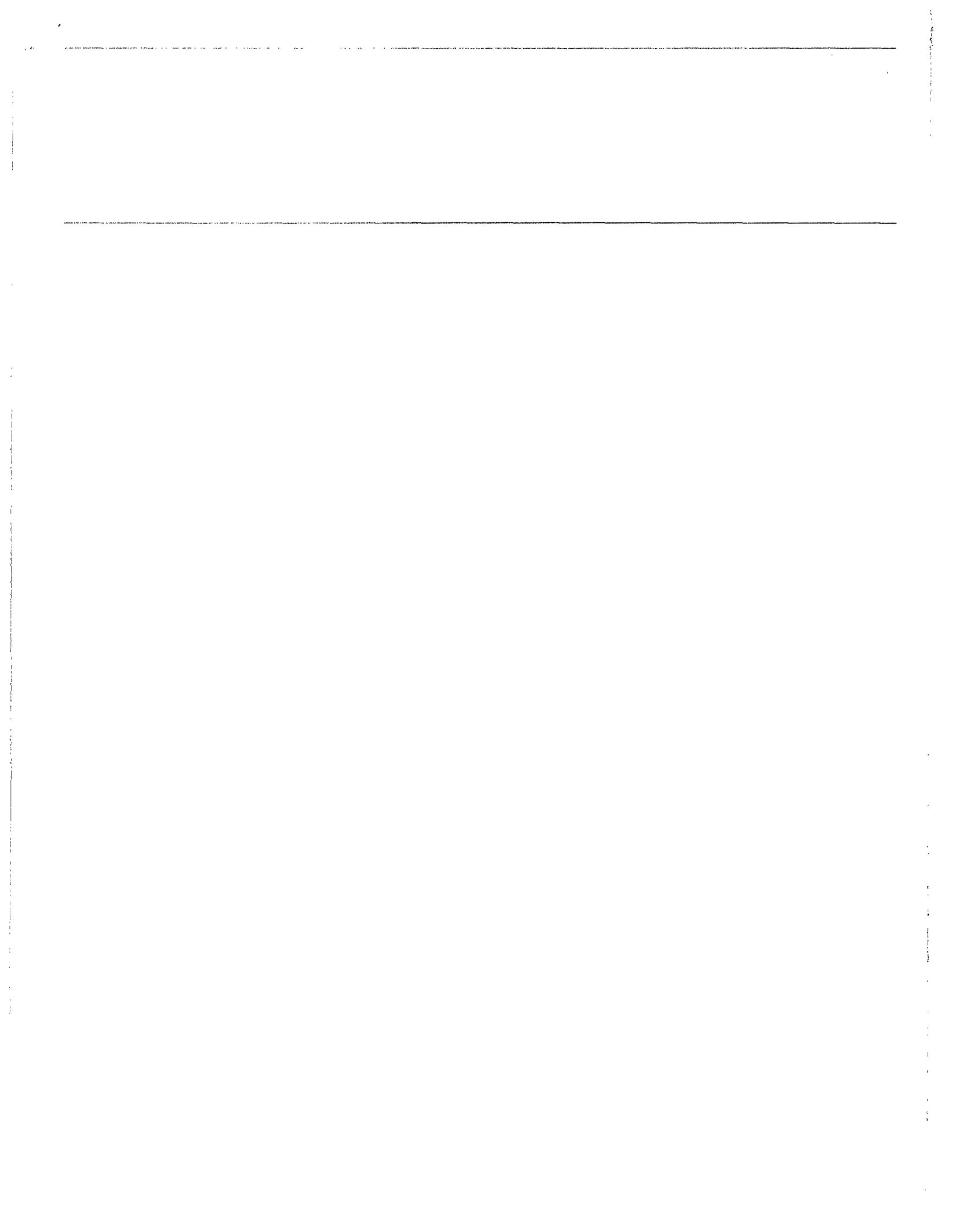
## Contracting and Market Share Information



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**Information Management and  
Technology Division**

B-240778

November 13, 1990

The Honorable John Conyers, Jr.  
Chairman, Committee on Government  
Operations  
House of Representatives

The Honorable Frank Horton  
Ranking Minority Member, Committee  
on Government Operations  
House of Representatives

This report responds to your February 1989 request for a review of federal agencies' compatible computer procurements.<sup>1</sup> In your initial request and in subsequent discussions with your offices, we were asked to answer several specific questions about agencies' procurements of mainframe computers and mainframe peripheral equipment. Your questions focused on identifying the extent to which agencies' procurements of mainframe computers and mainframe peripherals required compatibility with International Business Machines (IBM) or any other computer manufacturer. You were also interested in knowing details such as the identification of manufacturers whose equipment was acquired by each agency and the procurement methods used to obtain equipment.

This report focuses on the Department of the Treasury. The information we obtained from Treasury shows that during the 3-1/2 fiscal years ending in March 1989, Treasury had a total of 323 procurements for mainframes and mainframe peripherals and that 85 percent of these (275) required some type of compatibility. Treasury required IBM compatibility 68 percent of the time (188 of its 275 compatible procurements). Treasury also required that 73 procurements have Unisys compatibility and that 7 have Honeywell-Bull compatibility. The remaining 7 small procurements had various other compatible requirements. When Treasury's procurements required IBM compatibility, IBM

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<sup>1</sup> A compatible procurement requires hardware or software that functions like specified or existing hardware or software, with little or no modification. Competition in such procurements may occur between manufacturers and marketers—such as system developers and system integrators—to supply equipment that meets the compatible requirements. Since there is the potential for competition between manufacturers and marketers, a compatible procurement does not necessarily result in the award of a sole source contract.

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equipment was supplied 62 percent of the time (116 of the 188 IBM-compatible procurements).<sup>2</sup>

Treasury obligated \$270.9 million for the 323 mainframe and mainframe peripheral procurements. When we used dollars for comparison—as opposed to the number of procurements—we found that overall Treasury obligated more dollars (72 percent of the total) for IBM equipment than for any other manufacturer's equipment (\$195.2 million for IBM versus \$75.7 million for all others), including both compatible and other procurements where no compatibility was required. For the 275 compatible procurements, with total obligations of \$105.4 million, we found that Treasury obligated 65 percent (\$69.4 million) to IBM-compatible procurements, 33 percent (\$34.8 million) to Unisys-compatible procurements, and less than 1 percent (\$1 million) to Honeywell-Bull compatible procurements. Of the \$69.4 million obligated for IBM-compatible procurements, \$31.3 million involved IBM equipment.

As requested in discussions with your offices, we also obtained information from Treasury on the procurement methods it used, including Treasury's use of contractors that participate in the Small Business Administration's program for small disadvantaged businesses—known as 8(a) contractors. The detailed questions you asked and our answers are summarized in appendix I. Appendix II contains tables with detailed statistics that are the basis for our answers to your questions. Appendix III contains tables with detailed statistics on the Internal Revenue Service (IRS), which had the largest share of Treasury's procurements. IRS accounted for 83 percent (270 of the 323 procurements) of total Treasury procurements and 74 percent of the obligated dollars (\$200.9 million of the \$270.9 million).

We are reporting information for the 3-1/2 fiscal years from October 1, 1985, through March 31, 1989. All the information is based on Treasury's response to a questionnaire we devised and distributed to 35 agencies. We did not independently validate the information, which Treasury supplied, nor did we evaluate any documentation related to individual Treasury procurements. However, we checked Treasury's information for consistency with the instructions for our questionnaire

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<sup>2</sup>Since several companies manufacture and market IBM-compatible equipment, competition in IBM-compatible procurements may occur among a variety of manufacturers and marketers. However, there are few if any companies that manufacture equipment compatible with Honeywell-Bull or Unisys. As a result, competition in procurements requiring Honeywell-Bull or Unisys compatibility generally occurs only between the manufacturer of the required equipment and companies marketing that manufacturer's equipment.

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and made appropriate revisions. At your request, we did not solicit or obtain comments from Treasury on this report. Appendix IV contains additional details on the objective, scope, and methodology of our work.

In addition to this report on Treasury, we previously reported similar information on the Departments of Agriculture, Commerce, Defense, Health and Human Services, and Justice. We also reported on the Army, Navy, Air Force, and the National Aeronautics and Space Administration.

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As arranged with your offices, unless you publicly announce this report's contents earlier, we plan no further distribution until 30 days after the date of this letter. Copies of this report are being sent to the Department of the Treasury. Copies will also be made available to others upon request.

Should you have any questions about this report or require additional information, please contact me at (202) 275-3195. Major contributors to this report are listed in appendix V.



Jack L. Brock  
Director, Government Information  
and Financial Management

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**Abbreviations**

ADP	automated data processing
GAO	General Accounting Office
GSA	General Services Administration
IBM	International Business Machines
IMTEC	Information Management and Technology Division
IRS	Internal Revenue Service



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# Questions and Answers About Treasury Procurements

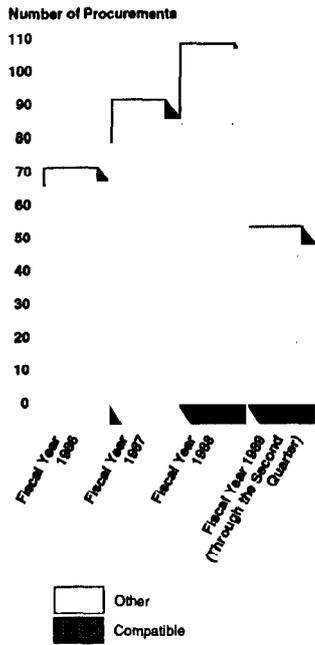
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**What are the numbers and dollar amounts of Treasury's mainframe and mainframe peripheral procurements requiring compatibility, and is there any trend toward the increased use of compatible procurements?**

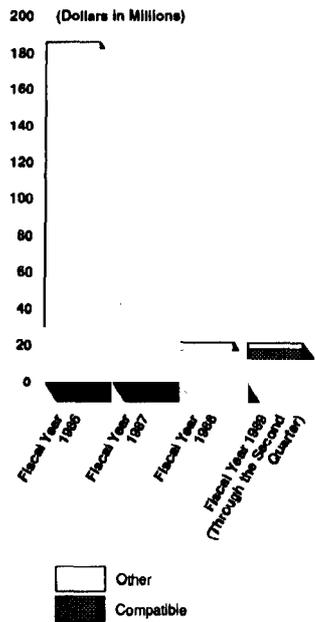
Treasury had a total of 323 procurements and obligated a total of \$270.9 million for mainframe computers and mainframe peripherals during the 3-1/2 fiscal years ending in March 1989. According to Treasury's data, compatible procurements comprised 275 of Treasury's 323 total procurements and represented \$105.4 million of the \$270.9 million obligated. In each of the 3-1/2 fiscal years—using Treasury's number of procurements as a measure—the percentage of compatible procurements versus other procurements was 79 percent or higher. With the exception of fiscal year 1986, the percentage of dollars obligated to compatible procurements versus other procurements was 78 percent or higher in each year. In fiscal year 1986, the percentage of dollars obligated to compatible procurements was 15 percent because of a single non-compatible IRS procurement (\$156 million). Treasury's data did not indicate a trend toward increased compatible procurements.

**Appendix I  
Questions and Answers About  
Treasury Procurements**

**Figure I.1: Number of Treasury Mainframe and Mainframe Peripheral Procurements**



**Figure I.2: Dollars for Treasury Mainframe and Mainframe Peripheral Procurements**

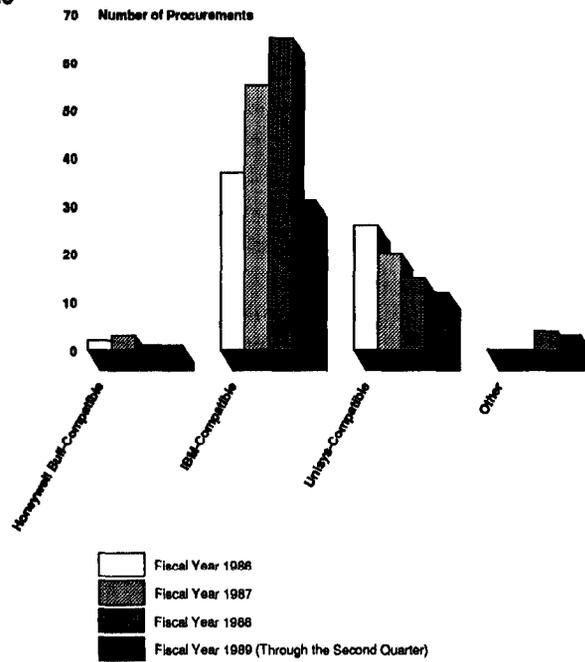


**What is the distribution of Treasury's compatible mainframe and mainframe peripheral procurements according to type of compatibility?**

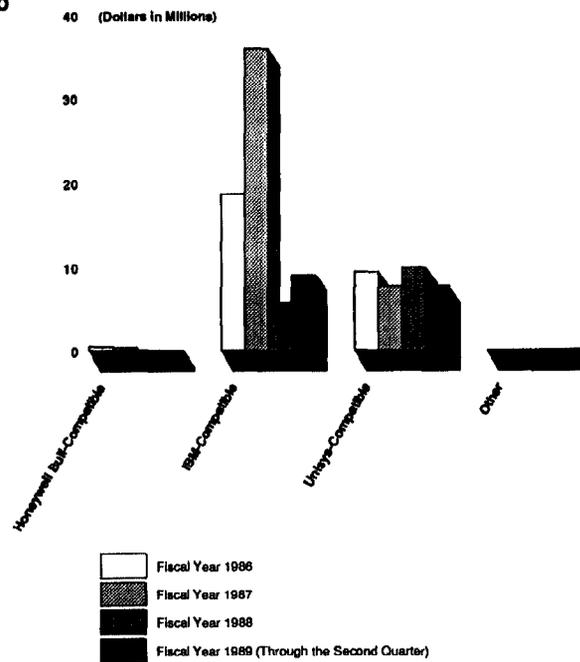
Of those procurements that Treasury identified as having a compatibility requirement, 97 percent were for either Honeywell Bull, IBM, or Unisys compatibility. Specifically, 188 of the 275 procurements were to satisfy IBM-compatible requirements representing \$69.4 million of the \$105.4 million obligated for all compatible procurements. Unisys-compatible requirements represented 73 of the 275 procurements and \$34.8 million of the \$105.4 million in obligations, while Honeywell Bull-compatible requirements represented 7 procurements and \$1.0 million in obligations. Treasury had various other compatible requirements in 7 procurements totaling \$200,000 in obligations.

**Appendix I  
Questions and Answers About  
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**Figure I.3: Number of Treasury  
Compatible Procurements According to  
Type of Compatibility**



**Figure I.4: Dollars for Treasury  
Compatible Procurements According to  
Type of Compatibility**



**What equipment manufacturers are involved in Treasury's IBM-compatible mainframe and mainframe peripheral procurements?**

Treasury obtained IBM equipment more frequently than any other manufacturer's equipment in its IBM-compatible procurements during fiscal years 1986, 1988, and 1989 (through the second quarter). In fiscal year 1987, Treasury obtained IBM and National Advanced Systems equipment in 14 IBM-compatible procurements each. Of the 188 IBM-compatible procurements during fiscal years 1986 through 1989 (through the second quarter), 116 (62 percent) resulted in Treasury obtaining IBM equipment. Using obligated dollars as a measure, IBM equipment represented \$31.3 million (45 percent) of the \$69.4 million obligated to IBM-compatible procurements. In addition, \$28.5 million (41 percent) of the \$69.4 million obligated to IBM-compatible procurements was for procurements involving National Advanced Systems equipment, while \$5.6 million (8 percent) was for procurements involving Amdahl equipment. Memorex, NCR Comten, Storage Technology Corporation, and other manufacturers' equipment was also supplied in IBM-compatible procurements during the same period.

Appendix I  
 Questions and Answers About  
 Treasury Procurements

Figure I.5: Number of Treasury IBM-Compatible Procurements According to Manufacturer of Equipment

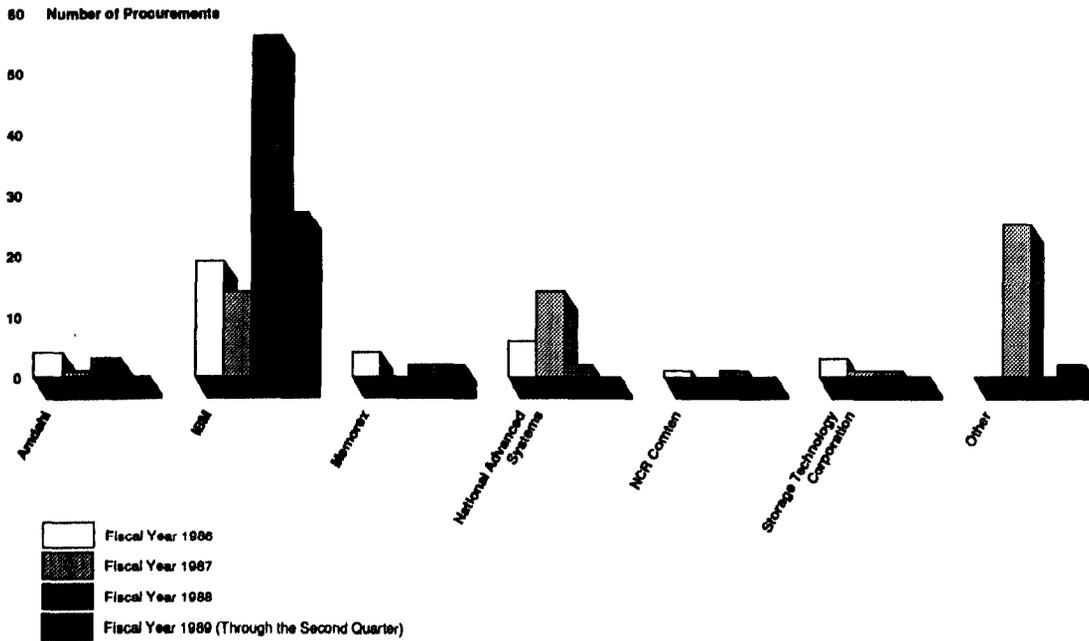
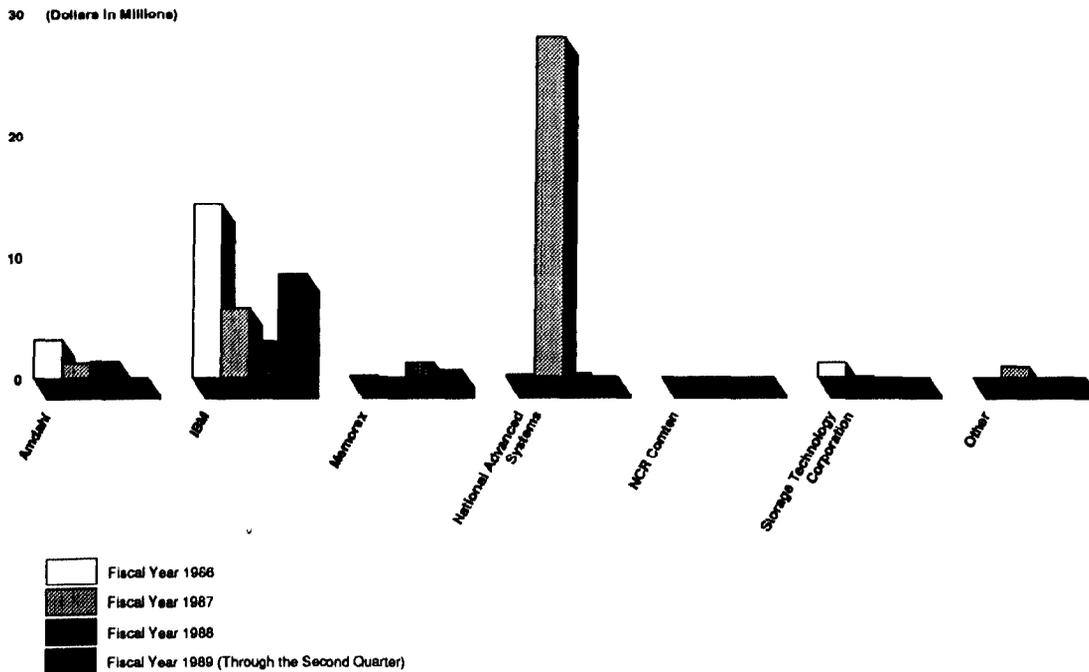


Figure I.6: Dollars for Treasury IBM-Compatible Procurements According to Manufacturer of Equipment



**What procurement methods were used to obtain all types of compatible mainframe computers and mainframe peripheral equipment? And, did Treasury frequently use new contracts with 8(a) contractors to obtain compatible mainframes and mainframe peripherals?**

Overall, purchases from General Services Administration (GSA) schedules were used most frequently as the procurement method when Treasury identified compatible requirements (87 of 275 procurements). These procurements accounted for \$4.6 million of the \$105.4 million obligated for compatible procurements. Also, 81 of the 275 procurements (\$4.0 million) were identified as other procurements and consisted mostly of small purchase orders for a variety of mainframe peripherals under \$25,000 each. Modifications to existing contracts (67 of 275 procurements) made up the largest share of the dollars obligated (\$40.0 million of \$105.4 million) for compatible procurements. New contracts with system developers or integrators made up 7 of the 275 procurements for compatible equipment and accounted for \$29.6 million of the \$105.4 million obligated. New contracts with companies designated as 8(a) firms by the Small Business Administration were used in 3 of the 275 procurements, totaling \$3.4 million.

Appendix I  
 Questions and Answers About  
 Treasury Procurements

Figure I.7: Number of Treasury Compatible Procurements According to Procurement Method

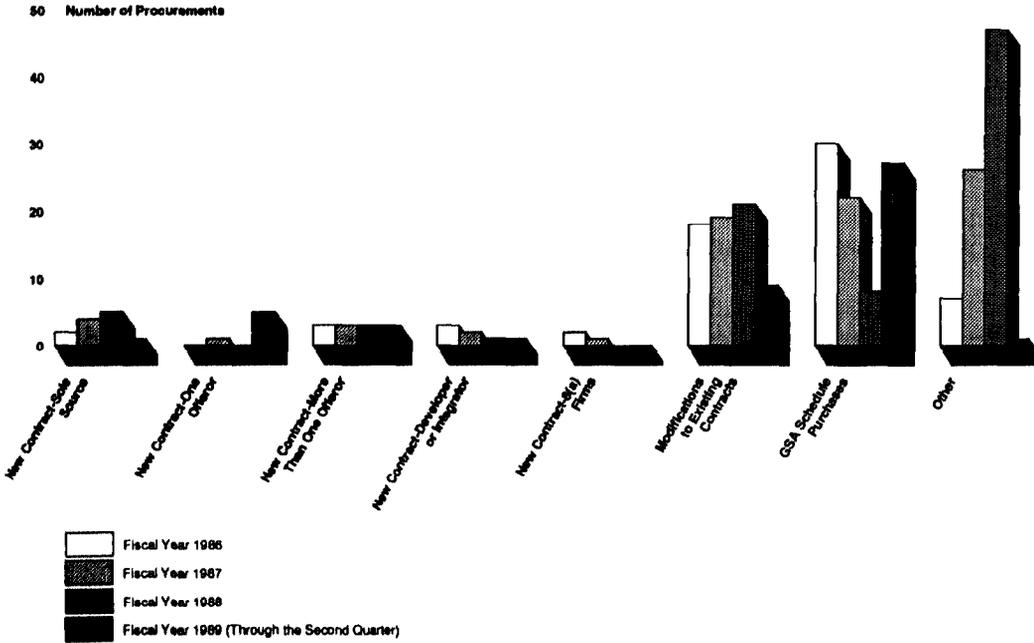
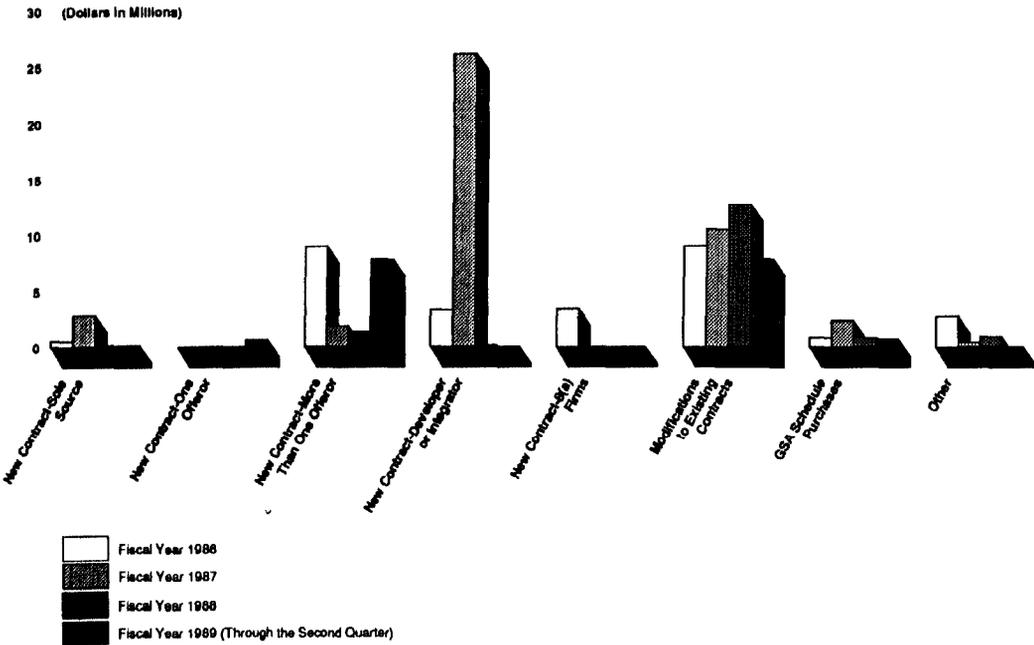


Figure I.8: Dollars for Treasury Compatible Procurements According to Procurement Method



**What procurement methods were used to obtain IBM-compatible mainframe computers and mainframe peripheral equipment? And, did Treasury frequently use new contracts with 8(a) contractors to obtain IBM-compatible mainframes and mainframe peripherals?**

Treasury used GSA schedule purchases and other procurements—consisting mostly of small purchase orders for a variety of mainframe peripherals under \$25,000 each for about 77 percent (144 of 188 procurements) of the procurements used to obtain IBM-compatible equipment. These made up \$6.2 million of the \$69.4 million obligated for IBM-compatible procurements. New contracts with system developers or integrators (6 of 188 procurements and \$29.6 million of \$69.4 obligated) and new contracts with more than one offeror (9 of 188 procurements and \$19.6 million of \$69.4 million obligated) accounted for 71 percent of the dollars obligated for IBM-compatible equipment during the 3-1/2 fiscal years. New contracts with companies designated as 8(a) firms by the Small Business Administration were used in 3 of the 188 procurements for IBM-compatible equipment.

Appendix I  
 Questions and Answers About  
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Figure I.9: Number of Treasury IBM-Compatible Procurements According to Procurement Method

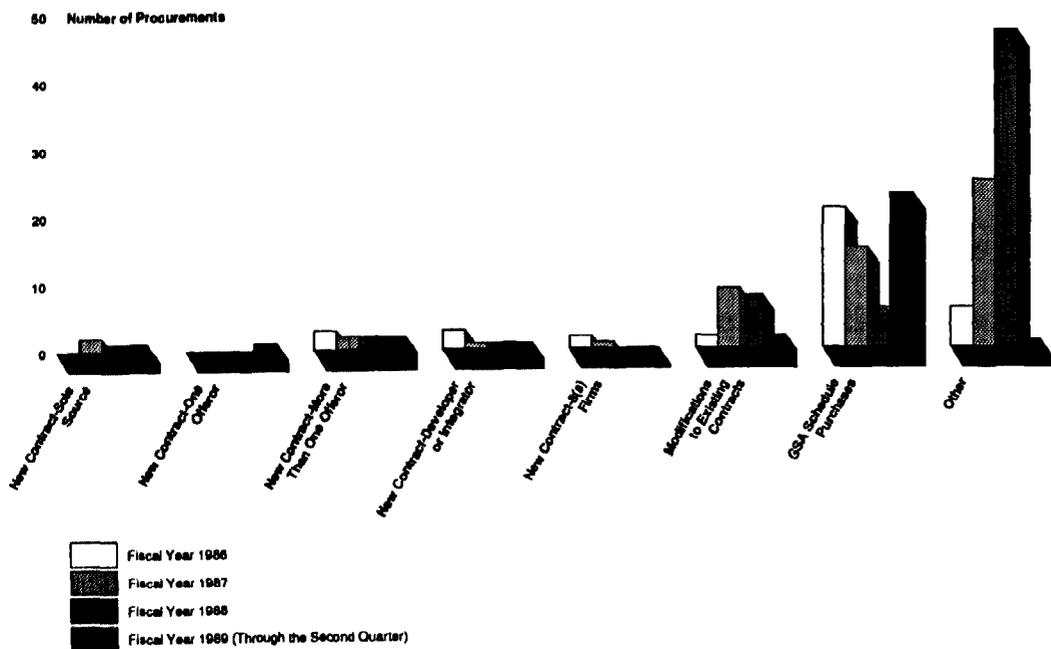
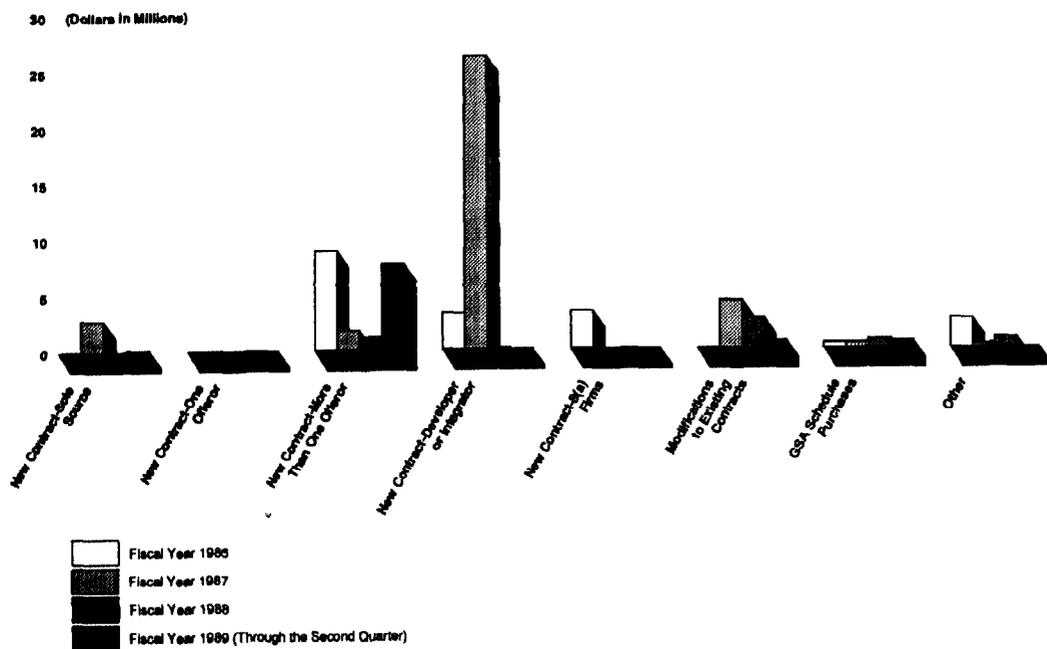


Figure I.10: Dollars for Treasury IBM-Compatible Procurements According to Procurement Method



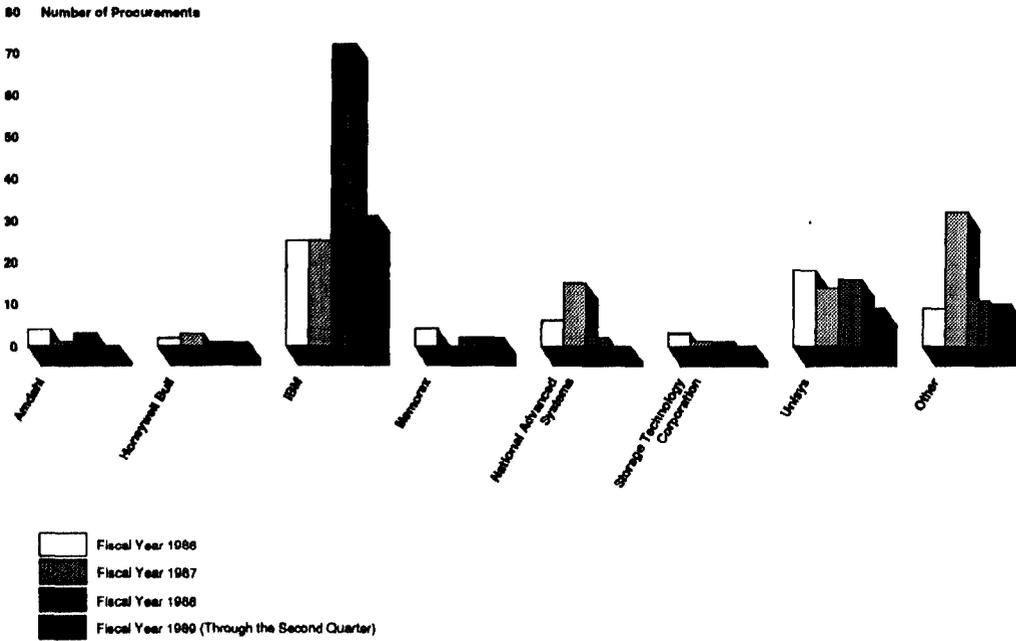
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**What equipment manufacturers are involved in Treasury's mainframe and mainframe peripheral procurements, including both procurements where compatibility is required and procurements with no compatibility requirement?**

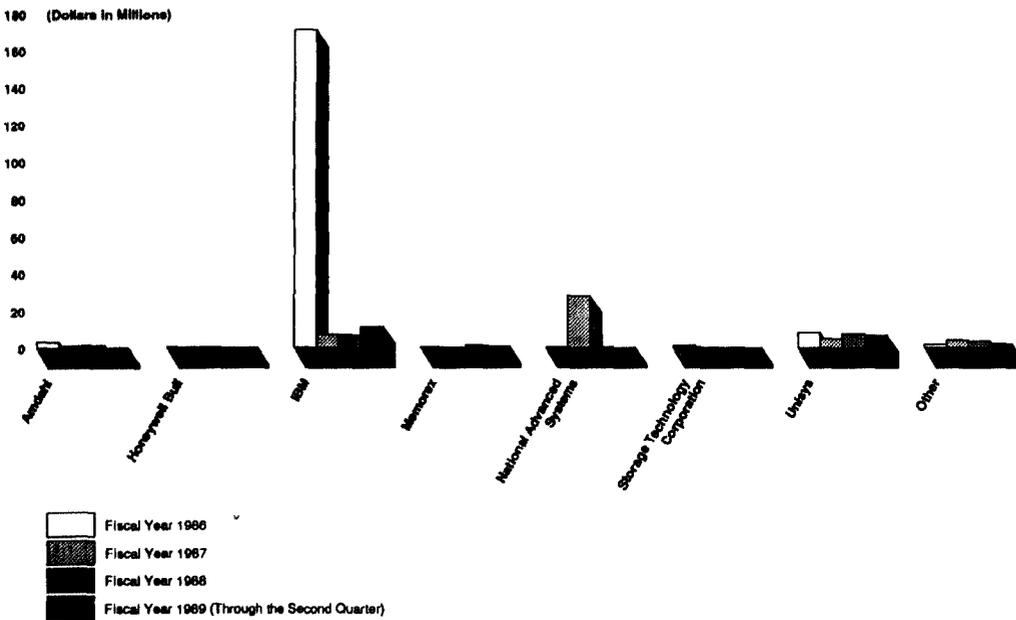
IBM equipment was supplied to Treasury more frequently than any other manufacturer. During the 3-1/2 fiscal years ending March 1989, IBM equipment made up 153 out of 323 total procurements for mainframes and mainframe peripherals. Additionally, using obligated dollars as the measure, Treasury's obligations for procurements involving IBM equipment during the same 3-1/2 fiscal years were \$195.2 million of a total of \$270.9 million. Unisys equipment was supplied to Treasury for 57 of the 323 mainframe and mainframe peripheral procurements for a total of \$26.2 million. National Advanced Systems equipment was supplied in 23 of the 323 procurements for a total of \$28.6 million. Amdahl, Honeywell Bull, Memorex, NCR Comten, and Storage Technology Corporation also supplied equipment to Treasury. Each vendor supplied equipment in less than 9 procurements with less than \$6.0 million in obligations. Various other manufacturers supplied equipment in 60 small procurements with obligations totaling \$11.2 million.

**Appendix I  
Questions and Answers About  
Treasury Procurements**

**Figure I.11: Number of Treasury Mainframe and Mainframe Peripheral Procurements According to Manufacturer of Equipment**



**Figure I.12: Dollars for Treasury Mainframe and Mainframe Peripheral Procurements According to Manufacturer of Equipment**



# Detailed Statistics on Treasury Procurements

**Table II.1: Treasury Mainframe and Mainframe Peripheral Procurements**

Dollars in Millions

	Fiscal Year 1986		Fiscal Year 1987		Fiscal Year 1988		Fiscal Year 1989 <sup>a</sup>		Total	
	Number	Amount	Number	Amount	Number	Amount	Number	Amount	Number	Amount
Compatible	65	\$28.6	78	\$44.0	85	\$15.9	47	\$16.9	275	\$105.4
Other	6	156.6	13	1.3	23	4.4	6	3.2	48	165.5
<b>Total</b>	<b>71</b>	<b>\$185.2</b>	<b>91</b>	<b>\$45.3</b>	<b>108</b>	<b>\$20.3</b>	<b>53</b>	<b>\$20.1</b>	<b>323</b>	<b>\$270.9</b>
<b>Compatible Percent of Total</b>	<b>92%</b>	<b>15%</b>	<b>86%</b>	<b>97%</b>	<b>79%</b>	<b>78%</b>	<b>89%</b>	<b>84%</b>	<b>85%</b>	<b>39%</b>

<sup>a</sup>Fiscal year 1989 through the second quarter.
**Table II.2: Treasury Compatible Procurements According to Type of Compatibility**

Dollars in Millions

	Fiscal Year 1986		Fiscal Year 1987		Fiscal Year 1988		Fiscal Year 1989 <sup>a</sup>		Total	
	Number	Amount	Number	Amount	Number	Amount	Number	Amount	Number	Amount
Honeywell Bull-Compatible	2	\$0.5	3	\$0.4	1	0.1	1	\$ <sup>b</sup>	7	\$1.0
IBM-Compatible	37	18.7	55	35.9	65	5.7	31	9.1	188	69.4
Unisys-Compatible	26	9.4	20	7.7	15	10.0	12	7.7	73	34.8
Other	0	0.0	0	0.0	4	0.1	3	0.1	7	0.2
<b>Total</b>	<b>65</b>	<b>\$28.6</b>	<b>78</b>	<b>\$44.0</b>	<b>85</b>	<b>\$15.9</b>	<b>47</b>	<b>\$16.9</b>	<b>275</b>	<b>\$105.4</b>

<sup>a</sup>Fiscal year 1989 through the second quarter.<sup>b</sup>Less than \$50,000.
**Table II.3: Treasury IBM-Compatible Procurements According to Manufacturer of Equipment**

Dollars in Millions

	Fiscal Year 1986		Fiscal Year 1987		Fiscal Year 1988		Fiscal Year 1989 <sup>a</sup>		Total	
	Number	Amount	Number	Amount	Number	Amount	Number	Amount	Number	Amount
Amdahl	4	\$3.1	1	\$1.2	3	\$1.3	0	\$0.0	8	\$5.6
IBM	19	14.2	14	5.7	56	2.9	27	8.5	116	31.3
Memorex	4	<sup>b</sup>	0	0.0	2	1.2	2	0.6	8	1.8
National										
Advanced Systems	6	0.2	14	28.0	2	0.3	0	0.0	22	28.5
NCR Comten	1	<sup>b</sup>	0	0.0	1	<sup>b</sup>	0	0.0	2	<sup>b</sup>
Storage Technology Corporation	3	1.2	1	0.1	1	<sup>b</sup>	0	0.0	5	1.3
Other	0	0.0	25	0.9	0	0.0	2	<sup>b</sup>	27	0.9
<b>Total</b>	<b>37</b>	<b>\$18.7</b>	<b>55</b>	<b>\$35.9</b>	<b>65</b>	<b>\$5.7</b>	<b>31</b>	<b>\$9.1</b>	<b>188</b>	<b>\$69.4</b>

<sup>a</sup>Fiscal year 1989 through the second quarter.<sup>b</sup>Less than \$50,000.

**Appendix II  
Detailed Statistics on Treasury Procurements**

**Table II.4: Treasury Compatible Procurements According to Procurement Method**

Dollars in Millions

	Fiscal Year 1986		Fiscal Year 1987		Fiscal Year 1988		Fiscal Year 1989 <sup>a</sup>		Total	
	Number	Amount	Number	Amount	Number	Amount	Number	Amount	Number	Amount
New Contract—Sole Source	2	\$0.5	4	\$2.8	5	\$0.1	1	\$0.1	12	\$3.5
New Contract—One Offeror	0	0.0	1	<sup>b</sup>	0	0.0	5	0.6	6	0.6
New Contract—More Than One Offeror	3	8.9	3	1.8	3	1.3	3	7.7	12	19.7
New Contract—Developer or Integrator	3	3.3	2	26.2	1	0.1	1	<sup>b</sup>	7	29.6
New Contract—8a Firms	2	3.4	1	<sup>b</sup>	0	0.0	0	0.0	3	3.4
Modifications to Existing Contracts	18	9.0	19	10.5	21	12.7	9	7.8	67	40.0
GSA Schedule Purchases	30	0.8	22	2.3	8	0.8	27	0.7	87	4.6
Other	7	2.7	26	0.4	47	0.9	1	<sup>b</sup>	81	4.0
<b>Total</b>	<b>65</b>	<b>\$28.6</b>	<b>78</b>	<b>\$44.0</b>	<b>85</b>	<b>\$15.9</b>	<b>47</b>	<b>\$16.9</b>	<b>275</b>	<b>\$105.4</b>

<sup>a</sup>Fiscal year 1989 through the second quarter.

<sup>b</sup>Less than \$50,000.

**Table II.5: Treasury IBM-Compatible Procurements According to Procurement Method**

Dollars in Millions

	Fiscal Year 1986		Fiscal Year 1987		Fiscal Year 1988		Fiscal Year 1989 <sup>a</sup>		Total	
	Number	Amount	Number	Amount	Number	Amount	Number	Amount	Number	Amount
New Contract—Sole Source	0	\$0.0	2	\$2.8	1	<sup>b</sup>	1	\$0.1	4	\$2.9
New Contract—One Offeror	0	0.0	0	0.0	0	0.0	1	<sup>b</sup>	1	<sup>b</sup>
New Contract—More Than One Offeror	3	8.9	2	1.8	2	1.2	2	7.7	9	19.6
New Contract—Developer or Integrator	3	3.3	1	26.2	1	0.1	1	<sup>b</sup>	6	29.6
New Contract—8a Firms	2	3.4	1	<sup>b</sup>	0	0.0	0	0.0	3	3.4
Modifications to Existing Contracts	2	<sup>b</sup>	9	4.3	8	2.7	2	0.7	21	7.7
GSA Schedule Purchases	21	0.5	15	0.5	6	0.8	23	0.6	65	2.4
Other	6	2.6	25	0.3	47	0.9	1	<sup>b</sup>	79	3.8
<b>Total</b>	<b>37</b>	<b>\$18.7</b>	<b>55</b>	<b>\$35.9</b>	<b>65</b>	<b>\$5.7</b>	<b>31</b>	<b>\$9.1</b>	<b>188</b>	<b>\$69.4</b>

<sup>a</sup>Fiscal year 1989 through the second quarter.

<sup>b</sup>Less than \$50,000.

**Appendix II  
Detailed Statistics on Treasury Procurements**

**Table II.6: Treasury Mainframe and Mainframe Peripheral Procurements According to Manufacturer of Equipment**

Dollars in Millions

	Fiscal Year 1986		Fiscal Year 1987		Fiscal Year 1988		Fiscal Year 1989 <sup>a</sup>		Total	
	Number	Amount	Number	Amount	Number	Amount	Number	Amount	Number	Amount
Amdahl	4	\$3.1	1	\$1.2	3	\$1.3	0	\$0.0	8	\$5.6
Honeywell Bull	2	0.5	3	0.4	1	0.1	1	<sup>b</sup>	7	1.0
IBM	25	170.8	25	6.8	72	6.7	31	10.9	153	195.2
Memorex	4	<sup>b</sup>	0	0.0	2	1.2	2	0.6	8	1.8
National										
Advanced Systems	6	0.2	15	28.1	2	0.3	0	0.0	23	28.6
NCR Comten <sup>c</sup>	1	<sup>b</sup>	0	0.0	1	<sup>b</sup>	0	0.0	2	<sup>b</sup>
Storage Technology Corporation	3	1.2	1	0.1	1	<sup>b</sup>	0	0.0	5	1.3
Unisys	18	7.8	14	4.7	16	7.2	9	6.5	57	26.2
Other	8	1.6	32	4.0	10	3.5	10	2.1	60	11.2
<b>Total</b>	<b>71</b>	<b>\$185.2</b>	<b>91</b>	<b>\$45.3</b>	<b>108</b>	<b>\$20.3</b>	<b>53</b>	<b>\$20.1</b>	<b>323</b>	<b>\$270.9</b>

<sup>a</sup>Fiscal year 1989 through the second quarter.

<sup>b</sup>Less than \$50,000.

<sup>c</sup>Included in Other on Figure I.11 and Figure I.12.

# Detailed Statistics on IRS Procurements

**Table III.1: IRS Mainframe and Mainframe Peripheral Procurements**

Dollars in Millions

	Fiscal Year 1986		Fiscal Year 1987		Fiscal Year 1988		Fiscal Year 1989 <sup>a</sup>		Total	
	Number	Amount	Number	Amount	Number	Amount	Number	Amount	Number	Amount
Compatible	52	\$9.9	62	\$11.2	75	\$11.5	39	\$8.3	228	\$40.9
Other	6	156.6	11	0.9	21	2.0	4	0.5	42	160.0
	58	\$166.5	73	\$12.1	96	\$13.5	43	\$8.8	270	\$200.9
Compatible Percent of Total	90%	6%	85%	93%	78%	85%	91%	94%	84%	20%

<sup>a</sup>Fiscal year 1989 through the second quarter.
**Table III.2: IRS Compatible Procurements According to Type of Compatibility**

Dollars in Millions

	Fiscal Year 1986		Fiscal Year 1987		Fiscal Year 1988		Fiscal Year 1989 <sup>a</sup>		Total	
	Number	Amount	Number	Amount	Number	Amount	Number	Amount	Number	Amount
Honeywell Bull-Compatible	1	\$ <sup>b</sup>	0	\$0.0	0	\$0.0	0	\$0.0	1	\$ <sup>b</sup>
IBM-Compatible	25	0.5	42	3.5	56	1.4	24	0.5	147	5.9
Unisys-Compatible	26	9.4	20	7.7	15	10.0	12	7.7	73	34.8
Other	0	0.0	0	0.0	4	0.1	3	0.1	7	0.2
<b>Total</b>	<b>52</b>	<b>\$9.9</b>	<b>62</b>	<b>\$11.2</b>	<b>75</b>	<b>\$11.5</b>	<b>39</b>	<b>\$8.3</b>	<b>228</b>	<b>\$40.9</b>

<sup>a</sup>Fiscal year 1989 through the second quarter.<sup>b</sup>Less than \$50,000.
**Table III.3: IRS IBM-Compatible Procurements According to Manufacturer of Equipment**

Dollars in Millions

	Fiscal Year 1986		Fiscal Year 1987		Fiscal Year 1988		Fiscal Year 1989 <sup>a</sup>		Total	
	Number	Amount	Number	Amount	Number	Amount	Number	Amount	Number	Amount
Amdahl	0	\$0.0	1	\$1.2	1	\$0.1	0	\$0.0	2	\$1.3
IBM	12	0.3	3	0.1	50	0.9	21	0.4	86	1.7
Memorex	4	<sup>b</sup>	0	0.0	1	0.1	1	0.1	6	0.2
National Advanced Systems	6	0.2	13	1.8	2	0.3	0	0.0	21	2.3
NCR Comten	1	<sup>b</sup>	0	0.0	1	<sup>b</sup>	0	0.0	2	<sup>b</sup>
Storage Technology Corporation	2	<sup>b</sup>	1	0.1	1	<sup>b</sup>	0	0.0	4	0.1
Other	0	0.0	24	0.3	0	0.0	2	<sup>b</sup>	26	0.3
<b>Total</b>	<b>25</b>	<b>\$0.5</b>	<b>42</b>	<b>\$3.5</b>	<b>56</b>	<b>\$1.4</b>	<b>24</b>	<b>\$0.5</b>	<b>147</b>	<b>\$5.9</b>

<sup>a</sup>Fiscal year 1989 through the second quarter.<sup>b</sup>Less than \$50,000.

**Appendix III  
Detailed Statistics on IRS Procurements**

**Table III.4: IRS Compatible Procurements According to Procurement Method**

Dollars in Millions

	Fiscal Year 1986		Fiscal Year 1987		Fiscal Year 1988		Fiscal Year 1989 <sup>a</sup>		Total	
	Number	Amount	Number	Amount	Number	Amount	Number	Amount	Number	Amount
New Contract—Sole Source	1	\$ <sup>b</sup>	4	\$2.8	5	\$0.1	0	\$0.0	10	\$2.9
New Contract—One Offeror	0	0.0	1	<sup>b</sup>	0	0.0	5	0.6	6	0.6
New Contract—More Than One Offeror	0	0.0	0	0.0	1	0.1	0	0.0	1	0.1
New Contract—Developer or Integrator	0	0.0	0	0.0	1	0.1	0	0.0	1	0.1
Modifications to Existing Contracts	16	9.0	11	5.9	17	10.1	7	7.1	51	32.1
GSA Schedule Purchases	29	0.7	20	2.1	4	0.2	26	0.6	79	3.6
Other	6	0.2	26	0.4	47	0.9	1	<sup>b</sup>	80	1.5
<b>Total</b>	<b>52</b>	<b>\$9.9</b>	<b>62</b>	<b>\$11.2</b>	<b>75</b>	<b>\$11.5</b>	<b>39</b>	<b>\$8.3</b>	<b>228</b>	<b>\$40.9</b>

<sup>a</sup>Fiscal year 1989 through the second quarter.

<sup>b</sup>Less than \$50,000.

**Table III.5: IRS IBM-Compatible Procurements According to Procurement Method**

Dollars in Millions

	Fiscal Year 1986		Fiscal Year 1987		Fiscal Year 1988		Fiscal Year 1989 <sup>a</sup>		Total	
	Number	Amount	Number	Amount	Number	Amount	Number	Amount	Number	Amount
New Contract—Sole Source	0	\$0.0	2	\$2.8	1	\$ <sup>b</sup>	0	\$0.0	3	\$2.8
New Contract—One Offeror	0	0.0	0	0.0	0	0.0	1	<sup>b</sup>	1	<sup>b</sup>
New Contract—More Than One Offeror	0	0.0	0	0.0	1	0.1	0	0.0	1	0.1
New Contract—Developer or Integrator	0	0.0	0	0.0	1	0.1	0	0.0	1	0.1
Modifications to Existing Contracts	0	0.0	2	0.1	4	0.1	0	0.0	6	0.2
GSA Schedule Purchases	20	0.4	13	0.3	2	0.2	22	0.5	57	1.4
Other	5	0.1	25	0.3	47	0.9	1	<sup>b</sup>	78	1.3
<b>Total</b>	<b>25</b>	<b>\$0.5</b>	<b>42</b>	<b>\$3.5</b>	<b>56</b>	<b>\$1.4</b>	<b>24</b>	<b>\$0.5</b>	<b>147</b>	<b>\$5.9</b>

<sup>a</sup>Fiscal year 1989 through the second quarter.

<sup>b</sup>Less than \$50,000.

**Appendix III  
Detailed Statistics on IRS Procurements**

**Table II.6: IRS Mainframe and Mainframe Peripheral Procurements According to Manufacturer of Equipment**

Dollars in Millions

	Fiscal Year 1986		Fiscal Year 1987		Fiscal Year 1988		Fiscal Year 1989 <sup>a</sup>		Total	
	Number	Amount	Number	Amount	Number	Amount	Number	Amount	Number	Amount
Amdahl	0	\$0.0	1	\$1.2	1	\$0.1	0	\$0.0	2	\$1.3
Honeywell Bull	1	<sup>b</sup>	0	0.0	0	0.0	0	0.0	1	<sup>b</sup>
IBM	18	156.9	13	0.9	65	2.6	24	0.5	120	160.9
Memorex	4	<sup>b</sup>	0	0.0	1	0.1	1	0.1	6	0.2
National Advanced Systems	6	0.2	14	1.9	2	0.3	0	0.0	22	2.4
NCR Comten	1	<sup>b</sup>	0	0.0	1	<sup>b</sup>	0	0.0	2	<sup>b</sup>
Storage Technology Corporation	2	<sup>b</sup>	1	0.1	1	<sup>b</sup>	0	0.0	4	0.1
Unisys	18	7.8	14	4.7	16	7.2	9	6.5	57	26.2
Other	8	1.6	30	3.3	9	3.2	9	1.7	56	9.8
<b>Total</b>	<b>58</b>	<b>\$166.5</b>	<b>73</b>	<b>\$12.1</b>	<b>96</b>	<b>\$13.5</b>	<b>43</b>	<b>\$8.8</b>	<b>270</b>	<b>\$200.9</b>

<sup>a</sup>Fiscal year 1989 through the second quarter.

<sup>b</sup>Less than \$50,000.

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# Objective, Scope, and Methodology

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In February 1989 we were requested by the Chairman and the Ranking Minority Member, House Committee on Government Operations, to perform a comprehensive review of the government's use of IBM-compatible automated data processing procurements. In response to the requests and in discussions with the Chairman's and Ranking Minority Member's offices, we agreed that procurements of mainframes and mainframe peripherals would be included in our review, with emphasis on compatible procurements. Our review covered procurements during the 3-1/2 fiscal years ending in March 1989, at 35 federal agencies.

Our primary objective was to obtain and analyze information on specific aspects of each agency's ADP-related procurements. This report focuses on the Department of the Treasury and includes the number and aggregate dollar value of Treasury's mainframe-related contracts, distribution of procurements among equipment manufacturers, and various procurement methods used by Treasury to obtain mainframe-related equipment.

We used the following mutually exclusive procurement methods to group Treasury's procurements. The first three methods represent specific types of new contracts with mainframe and peripheral equipment manufacturers. These consist of sole source new contracts, new contracts that resulted from competitive procedures where only one offeror remained in the procurement at the time the awardee was selected, and new contracts that resulted from competitive procedures where the awardee was selected from among multiple competitors. We also included a category for new contracts with system developers and integrators—excluding any contracts separately categorized as awarded to 8(a) firms. We also obtained and analyzed data on Treasury's modifications to existing contracts, use of the General Services Administration's multiple award schedule contracts, and other miscellaneous procurement methods.

To accomplish our objective and facilitate Treasury's information gathering, we designed a questionnaire which, when properly completed by Treasury, provided us with the necessary information. Our questionnaire included several charts and provided detailed instructions, with definitions and examples, to help Treasury identify and report the relevant information. Our questionnaire instructions cited pertinent federal regulations to ensure consistency in understanding the terms used and to identify key definitions.

In preparing instructions for our questionnaire, we recognized the need to clearly and consistently identify mainframe computers, as opposed to superminicomputers and supercomputers. Because technology changes, criteria such as storage capacity, processing speed, physical size, cooling requirements, and cost do not provide an adequate basis for clear and consistent identification of mainframes. Therefore, after consulting with computer vendors, GSA, other federal agency officials, and Datapro,<sup>1</sup> we considered vendor marketing strategy—in addition to computer architecture and performance—as the basis for classifying particular computers as superminicomputers, mainframes, or supercomputers. Like Datapro, we classified as mainframes some smaller and less expensive models if they belong to a product line, or family, of mainframes sharing a common architecture or operating system. However, models with similar performance characteristics that do not belong to a mainframe family and are manufactured by companies that are not traditionally recognized as mainframe manufacturers were not classified as mainframes. We provided a list of mainframe manufacturers and models in the instructions for our questionnaire as examples of computers that agencies should include in completing the questionnaire.

We obtained comments on preliminary copies of our questionnaire from information resources management officials at the Departments of Agriculture and Transportation, to aid in ensuring the questionnaire's clarity. After modifying the questionnaire based on comments received, we asked the senior information resources management officials at Treasury and 34 other federal agencies to complete the questionnaire.

Our questionnaire was furnished to Treasury in mid-April 1989. Upon receiving Treasury's response in June 1989, the information was reviewed to determine if the instructions were followed correctly and if the information was clear and consistent. Although we did not independently validate the information supplied in the Treasury response, our questionnaire contained several internal checks to determine if inconsistencies were present. In instances where inconsistencies were found, we contacted Treasury officials to clarify the data. Our work did not include solicitation or evaluation of documents related to Treasury's individual procurements. The information in appendixes I through III was developed from our analyses.

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<sup>1</sup>Datapro is a trade publication that provides detailed information on computers, peripheral equipment, and software.

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We did not solicit or obtain comments from Treasury about this report; however, we discussed our scope and methodology with Treasury officials in June 1990, at Treasury headquarters in Washington, D.C. Our review was conducted from February 1989 through July 1990, in accordance with generally accepted government auditing standards.

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# Major Contributors to This Report

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**Information  
Management and  
Technology Division,  
Washington, D.C.**

Mark E. Heatwole, Assistant Director  
Mark T. Bird, Evaluator-In-Charge  
Bernard R. Anderson, Senior Evaluator  
Ona M. Noble, Senior Evaluator  
Darlene D. Rush, Evaluator  
Peter C. Wade, Evaluator

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(GAO/IMTEC-90-40FS, Sept. 28, 1990).

HHS ADP Procurement: Contracting and Market Share Information (GAO/  
IMTEC-90-87FS, Aug. 30, 1990).

Commerce ADP Procurement: Contracting and Market Share Information  
(GAO/IMTEC-90-77FS, July 31, 1990).

Agriculture ADP Procurement: Contracting and Market Share Informa-  
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NASA ADP Procurement: Contracting and Market Share Information  
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