APPENDIX

The SST and the Interest Rate—An Example of the Role of Discounting

PRESENTED TO THE SUBCOMMITTEE BY DR. LAURENCE E. LYNN, DEPUTY ASSISTANT SECRETARY OF DEFENSE, DEPARTMENT OF DEFENSE, ECONOMICS AND RESOURCE ANALYSIS [49]

The following table shows the potential profitability of the supersonic transport program purely as a financial investment: the present value of total program costs to the Government is subtracted from the present value of the return flow of funds from the manufacturer. * * * All SST costs prior to fiscal year 1969 are considered "sunk," and the calculations assume a fresh decision can be made on whether to continue the program. [As an evaluation of the financial return to the Federal Government, this analysis does not address the question of the relationship of social returns and costs of the SST.]

PRESENT VALUE OF SST INVESTMENT

[In millions of dollars]

	Discount rate (percent)		
	5	10	15
SST market as calculated by Institute for Defense Analyses (IDA)	−344	−528	−579
SST market as calculated by Federal Aviation Administration (FAA)	218	−239	−421

Based on FAA estimates of the potential size of the SST market, the program breaks even as far as the Government is concerned at a discount rate of 6.85 percent. If the opportunity cost of the program's funds is estimated at greater than 6.85 percent, the program will not break even. Using IDA estimates of market size (which assume that sonic boom restrictions will limit sales), the break-even rate is 1.33 percent. If a higher discount rate is used, the program will not break even.

The following table shows results from the same calculations but allowing interest charged to accumulate through 1990, rather than discounting program costs back to the present.

[In millions of dollars]

	SST program costs to 1990 including interest charges at—		
	5 percent	10 percent	15 percent
IDA estimates of market size	−1,057	−4,370	−14,401
FAA estimates of market size	670	−2,143	−10,477

[49] Ibid., pp. 149–150.