INSTITUTIONAL DATA COLLECTION

The central part of Chapter Three includes both an analysis of trends in total costs of attending college and a comparison of these costs with financial aid benefits. These analyses required data on tuition and fees, room and board, and fall enrollment. Fall enrollment was required to weight the cost variables (except where stated otherwise, all average costs are enrollment-weighted). We concentrated only on institutions that granted an AA or a BA.

From the IPEDS data, we used the following cost data: in-state tuition and fees and average room and board charges for dormitories.1 These data were collected for academic years 1990–1996. Over all years, 33 percent (9,983 of 30,121) of schools did not report tuition data. From the Opening Fall Enrollment data source, we obtained information on fall enrollment. Over all years, approximately 21 percent of all institutions (6,374 of 30,121) did not report enrollment information and 21 percent (6,328 of 30,121) did not report both tuition and enrollment data. From the Earned Degrees data source, we obtained the number of AA, BA, or higher degrees granted by each school for the relevant year. Of the 30,121 schools in the raw data file, 8,470 did not grant a certificate, AA, or BA for any given year. (Some of the missing data may be due in part to the fact that in each year

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1Although tuition data included average costs of books and supplies as well as non-dormitory room and board charges, they were not reported often enough to permit use of these variables in our analysis.
schools open and close. Thus, if a school opened in 1993, all the data for previous years would be zero. Alternatively, if a school closed in 1993, all the data for subsequent years would be zero. Thus, we used all schools in any given year for which we had all data elements.)

INSTITUTIONAL DATA ANALYSIS

In Chapter Three, cost estimates are generally weighted by opening fall enrollment. Thus, we dropped schools from our data set if they failed to report either tuition or enrollment for any given year or if the amounts reported were zero. Zero values for tuition and enrollment are understood to be missing.\(^2\)

As WebCASPAR contains all accredited institutions, there were some institutions in our data which did not have undergraduate programs. Thus, we used the Earned Degree variable as a proxy for determining whether or not an institution had an undergraduate program. We eliminated schools for any given year if they did not grant either an AA or a BA during that year.\(^3\) It should be noted that military academies are in this sample.

An important determinant of a student’s financial aid eligibility is the cost of attendance (COA), a term used in financial aid literature. The COA is determined by rules established by Congress and includes tuition and fees (including costs incurred by renting or purchasing equipment, materials, or supplies required by all students pursuing the same course of study); an allowance for room and board; books and supplies; transportation; applicable loan fees; allowance for dependent care; and allowance for disability-related costs. The COA is adjusted for students attending less than full time. Some exceptions and provisions are noted in The Student Guide (http://www.ed.gov/prog_info/SFA/StudentGuide/).

\(^2\)WebCASPAR indicates missing data with a zero. Thus, we could not discriminate between zero values and those that are missing data. This may not be a problem for tuition as we would not expect tuition to be legitimately zero. However, it may be the case that the number of AA or BA degrees granted could be zero.

\(^3\)We would not expect that the error arising from deleting institutions with undergraduate programs which did not confer a BA or AA in any given year to be significant.
We approximate the COA with the variable “total cost,” which we created by adding tuition and fees, typical board charge (dormitory), and typical room charge (dormitory). Throughout this paper, “COA” refers to the cost of attendance as calculated by financial aid entities and “total costs” will refer to our approximation of the COA.

This total cost variable was created only for schools with non-zero data reported for all of the above variables and only for schools granting a BA or higher degree.\(^4\) The latter constraint was imposed because most institutions that grant an AA as their highest degree do not offer room and board for students. As we had extensive data only on dormitory costs, this variable reflects room and board charges on campus.

These constraints may cause our estimates of total cost to be upward biased. First, we can estimate costs only for those schools whose highest degree offered is a BA or above. Second, we do not have extensive data on off-campus room and board expenses. Because students at AA-granting institutions are likely to live off-campus and because we may expect on-campus room and board charges to be greater than off-campus charges, these total-cost estimates will be overestimated.

To facilitate comparisons with data from the various financial aid regimes, including military benefits, for academic and fiscal years beyond 1995–1996, the costs of attendance were projected outward from our time series 1986–1995. This was done by utilizing the Consumer Price Index for All Urban Consumers (CPI-U), U.S. city average, detailed expenditure categories for college tuition. The growth in this index calculated between 1995 and 1996 was 5.7 percent, and the growth observed between 1996 and 1997 was 5.1 percent. These rates were used to project costs for AYs 1996–1997 and 1997–1998. The variance in growth has been small, indicating that our estimates are likely to be reasonable estimates of the realized value.

\(^4\)We found a statistically insignificant, but consistent across time, difference in average tuition between schools that report costs of living than those that did not report such cost of living data—particularly among private schools with HDG of BA or BA and Higher (BA+).
The accounting year for academic institutions, the military, and Consumer Price Index are different. Tuition and other institutional data are reported for academic years, which strictly speaking run from July 1 to June 30. The military data are generally reported for fiscal years, which begin on October 1. The yearly average for the college tuition CPI-U runs from January to December. Thus the growth rate in the annual CPI-U for college tuition between 1996 and 1997 was applied to Fall 1996 cost variables to estimate AY 1997–1998 cost variables. Because the start of a given fiscal year coincides with the start of the school year, we can compare, for example, the costs for AY 1995–1996 to military benefits of FY 1996. For instance, Montgomery GI Bill benefits for FY 1996 would be compared to opening fall tuition for AY 1995–1996.

**MILITARY EDUCATION BENEFITS DATA**

Information on current military education benefits is generally available on the World Wide Web at the relevant service web sites. However, it was often the case that the web sites had not been updated and did not represent present opportunities available. Moreover, historical information on these policies was less accessible. Thus, to fill in missing data for present years and to obtain historical data, we identified appropriate individuals and conducted numerous conversations with them throughout the spring and summer of 1998. These individuals and offices are cited where appropriate.

There is a multitude of military programs by which both enlisted personnel and officers may obtain postsecondary education, both during their service tenure and after (see Thirtle, 2001). However, we concentrated on programs for enlisted personnel. Specifically, we looked at the MGIB Benefits, MGIB plus CF, TA, and LRP. To the extent that the Selected Reserve and National Guard programs provide

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5While this is generally the case, it does occur that a given military program will become effective some time within a fiscal year. For example, in March 1997 (FY 1998) a new Army College Fund program became effective.

6Attempts to utilize the enabling legislation to understand active service, Selected Reserve and Guards programs did not provide key insights. For example, while a program may be authorized for use by a given service, the service may not have budgeted resources to fund the program.

7See Chapter Three reference list for citations in this Appendix.
lucrative alternatives to the active-duty components, we also looked at educational benefits available to members of the Selected Reserves and National Guards.

It should be noted that such programs can vary significantly for different individuals. Loan repayment programs are highly individualized and depend upon the background of the recruit and the needs assessment of the military. Although there are specified maximums and course caps in the TA programs, there are also tremendous opportunities for the local commander’s discretion. If funds are available and if it is deemed necessary, individuals may receive more TA than the specified maximums. Similarly, the current maximum College Fund awards are highly restricted to certain MOS outside of the normal MOS chart. As with federal financial aid programs, military education program maximums must be interpreted somewhat loosely, given the degree of local discretion and the high number of restrictions involved.

To obtain historical and current information on the National Guards and Selected Reserve, we used The National Guard Almanac and Reserve Forces Almanac. However, our discussions with officials in various services suggested that these sources were not always accurate. Collecting data on state-based National Guard programs from each state was beyond the scope of this project.

FEDERAL FINANCIAL AID DATA

We collected current and historical data on federal financial programs offered through the Department of Education as well as the Hope and Lifetime Learning Tax Credit. Current financial aid data may be obtained easily from The Student Guide from the Department of Education website: (http://www.ed.gov). The Department of Education, Forecasting and Policy Analysis Unit provided us with historical data.

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Depending on the service, different terminology is used to designate career fields or occupations: The Army uses the term MOS; the Navy uses the term “rating”; the Air Force uses the terms AFSC or simply “career field.” Throughout this report, we use only MOS to represent all terminology employed by the various services.
A maximum is guaranteed for only one federal program: the Pell Grant program. Thus, data must be interpreted carefully for other program maximums discussed in this chapter. The federal government does not guarantee these maximums and funding for the programs is subject to extreme local discretion. There is often large variation between the average award and the maximum award. One is cautioned against taking other program maximums as applicable to all individuals.

To adequately understand some of the broader objectives and strategies of financial aid offices, we had several conversations with various persons in the Department of Education and consulted a range of written materials. However, it appears that authoritative policy guidance on “bundling”—the process by which various sources of aid are collected into an aid package—is not readily available. The Program Analyst at the Department of Education Forecasting and Policy Analysis division was helpful in our numerous discussions throughout the spring of 1998. To obtain information available to financial aid professionals, we relied upon the Department of Education Office of Postsecondary Education’s website (http://www.ed.gov/offices/OPE/Partners/index.html). Specifically, the Federal Student Financial Aid Handbook, available through the web (http://www.ed.gov/offices/OPE/pubs/hbguide) was highly useful in that it served as a set of guidelines to financial aid professionals.

We compare military educational benefits to federal programs, which are the largest source of financial aid for college. However, federal programs are not the only source of financial aid. Thus this analysis is not an exhaustive catalogue of all funding sources available. Additional sources of funding include state, federal, local, or philanthropic allocations that would lower the “actual cost of attendance” faced by students (College Board, 1997). In addition, we do not include in our analysis several other formal and informal programs of funding college also suggested by the College Board (1997), such as merit-based aid, non–work study student wages, family loans, and use of credit cards.