

Department of Health and Human Services

**OFFICE OF
INSPECTOR GENERAL**

**INTERSTATE FLOW OF
MEDICARE FUNDS**



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EXECUTIVE SUMMARY

Introduction

This inspection details on a state-by-state basis, how the Medicare program (1) obtains its revenue "contributions" through various forms of taxation and insurance premiums and (2) makes "disbursements" to purchase health care services. This inspection collects publicly available 1985 data on each state's contributions to the Medicare trust funds and concurrent disbursement for services to Medicare beneficiaries, calculates the net flow of Medicare funds into or out of each state, and tests possible reasons for this flow.

Results

On average, Part A and B withdrew 1.89 percent of gross state product in Medicare taxes and premiums, while returning 1.76 percent in provider and practitioner reimbursement. However, this ratio varied from state to state. For example, Florida and Pennsylvania each enjoyed an annual "net gain" of over \$1 billion. Conversely, New York and Texas each suffered a "net loss" of over \$1 billion. Overall, 16 states (or other jurisdictions) received \$4.2 billion more in Medicare disbursements than they paid in revenues. Thirty-six states contributed \$9.4 billion more into Medicare revenues than they received in disbursements. The difference accumulated in the Medicare trust funds.

When initiating this inspection, the Office of Inspector General hypothesized that Medicare's fixed deductibles and co-payments would transfer money from states with low average incomes and health care costs to those with high average incomes and health care costs. Contrary to this expectation, multivariate analysis establishes that a state's contributions to Medicare correlate with its economic strength. Disbursements relate to the state's proportion of elderly residents, availability of health care resources, and general health status.

TABLE OF CONTENTS

EXECUTIVE SUMMARY	v
TABLE OF CONTENTS	vi
INTRODUCTION	1
Purpose	1
Medicare	2
Part A contributions	2
Part B contributions	3
Medicare administration	4
Medicare finances	4
Methodology	5
Data sources	5
FINDINGS	7
Interstate flow of Medicare funds	7
Univariate analysis of possible causes	10
Beneficiaries	11
Population	11
Employment	12
Gross State Product	13
Multivariate analysis of possible causes	13
Part A contributions: Payroll tax	13
Part A contributions: General revenue	15
Part A disbursements	16
Part B contributions: Beneficiary premiums	19
Part B contributions: General revenue	19
Part B disbursements	20
Conclusion	20
REFERENCES	22
Appendix 1: Old age, survivors, disability health insurance contributions by state, 1985	23
Appendix 2: General revenue contributions by state, 1985	24
Appendix 3: Part B premium contributions by state, 1985	25
Appendix 4: Total Part A contributions and disbursements by state, 1985	26
Appendix 5: Total Part B contributions and disbursements by state, 1985	27

Appendix 6: Net Part A and Part B contributions and disbursements by state, 1985	28
Appendix 7: Ratio of Part A and Part B contributions to disbursements by state, 1985	29
Appendix 8: Part A and Part B contributions and disbursements per beneficiary by state, 1985	30
Appendix 9: Part A and Part B contributions and disbursements per population by state, 1985	31
Appendix 10: Part A and Part B contributions and disbursements per employee by state, 1985	33
Appendix 11: Part A and Part B contributions and disbursements per gross state product (\$ million) by state, 1985	35
Appendix 12: Population, employees, and gross state product per beneficiary by state, 1985	37
Appendix 13: Payroll tax and Part A general revenue contribution per beneficiary, population, employees, and gross state product by state, 1985	38
Appendix 14: Premiums and Part B general revenue contribution per beneficiary, population, employees, and gross state product by state, 1985	39

INTRODUCTION

Purpose

This inspection originated with the July 1, 1988 enactment of the Medicare Catastrophic Coverage Act of 1988, P.L. 100-360. Among other provisions, this legislation restricted the inpatient deductible to the first hospitalization of the year, removed day limits on hospitalization, eliminated co-insurance on inpatient services, and limited Part B out-of-pocket expenses. It financed these services with an income related premium on Medicare beneficiaries.

The Office of Inspector General hypothesized that certain states have higher than average (1) resident incomes and (2) health care costs (e.g., due to higher local costs, broader array of health services available, and higher intensity of service). Other states, without major medical centers, have lower than average incomes and health care costs. If a health insurance program (like Medicare) has fixed dollar deductibles, co-payments, and limits; residents of higher cost states would reach them more often and more quickly than residents of lower cost states. High cost states would therefore receive a greater proportion of the insurance program's benefits.

At the same time, financing such a program with equal sized premiums from all beneficiaries exacts a disproportionate share of revenues from those beneficiaries with lower average incomes. A flat tax on payroll also regressively burdens residents of states with lower average incomes. Only the portion financed from general revenue (mainly the income tax) progressively spares these states. Medicare could therefore have the net effect of transferring funds from lower income states (which pay a larger share of the taxes and premiums) to higher income states (which generate large health care expenses). The Office of Inspector General (OIG) originally initiated this inspection to test this hypothesis and to determine how the catastrophic coverage legislation's addition of a income based premium on the elderly would affect this flow of Medicare funds between states. Although P.L. 101-234, the Medicare Catastrophic Coverage Repeal Act of 1989, voided P.L. 100-360's coverage on December 13, 1989, the OIG elected to complete its evaluation of the first question.

This inspection makes no value judgment as to the desirability or undesirability of transferring funds between states. Most federal programs necessarily (and appropriately) draw revenue from the nation as a whole and principally disburse it in a limited number of localities. For programs like flood control or disaster relief, the flow of funds intentionally spreads a specific event's costs over the economic capacity of the rest of the country. For programs like defense and agriculture, all states pay taxes but procurement historically concentrates in certain regions. In social welfare programs such as Social Security and Medicare, all states both draw revenue and receive benefits, but in largely unrelated amounts.

Medicare

On July 1, 1966, Medicare commenced its health insurance of the elderly. On July 1, 1973, it expanded coverage to the long-term disabled. Congress intended this program as alternative coverage for people who usually lacked access to health insurance, which is usually available through an employer. The scope of this programs is nationwide: eligibility for basic benefits is the same, regardless of the state in which the beneficiary resides.

Medicare is the common name for title XVIII of the Social Security Act, Health Insurance for the Aged and Disabled. It primarily consists of two major programs.

- Part A Hospital Insurance pays for inpatient hospital care and other related care.
- Part B Supplementary Medical Insurance pays for physicians' services, outpatient hospital services, durable medical equipment, home health care, and other medical expenses.

Medicare collects its revenue at the national level, aggregating its "contributions" from all states. It then "disburses" this money throughout the country from centrally administered trust funds. Accordingly, its only actuarial concern is that total program income matches total program outlays. Medicare's financial structure does not distinguish between the specific sources of funds or their ultimate geographic destination.

Part A contributions

Payroll taxes financed 91.3 percent of the Part A program in 1985. The taxes levied on 115 million current workers paid for services to 31.1 million beneficiaries. The Part A program also maintained a trust fund of about one-half year's disbursements to provide a small reserve against fluctuations in program experience. In 1985, about 28.2 million people age 65 and over, and about 2.9 million disabled people under age 65 were eligible for benefits under Part A.¹

In addition, a small proportion of Part A financing comes from the Railroad Retirement Account for railroad workers, general revenue for deemed military service wage credits and certain

Table 1: Operations of the hospital insurance fund, FY 1985

Source	\$ million
Payroll tax	46490
Railroad retirement transfers	371
Uninsured persons reimbursement	766
Voluntary enrollee premiums	38
Military wage credits	86
Investment interest	3182
Total revenue	50933
Total disbursements	48654
Net change in HI fund	2279

Source: Board of trustees of the federal hospital insurance trust fund. The 1988 annual report of the board of trustees of the federal hospital insurance trust fund. Washington, DC: U.S. Government Printing Office, 1988: 35.

uninsured persons, and premiums paid by voluntary enrollees. Interest from the trust fund provides the balance of Part A revenue. Because states basically contribute to these sources in proportion to unrestricted federal revenue, the balance of this inspection treats them as general revenue.

On a long-range actuarial basis, adequate financing of the Part A program depends upon comparison of the actual tax rates specified by law with the corresponding program costs. The Part A trustees (the Secretaries of the Treasury, Labor, and Health & Human Services; and two public members) estimate the percentage of taxable payroll needed depending upon forecasts of the status of the economy, labor force participation, and other factors that take into account different assumptions about their performance, ranging from optimistic to pessimistic.

Congress has adjusted the tax rate several times since the program's inception in order to keep pace with increased outlays. The rate in 1984 was 1.3 percent each, for employers and employees; and 2.6 percent for self-employed individuals. The comparable rates in 1985 were 1.35 percent and 2.7 percent. In 1986, they became 1.45 percent and 2.9 percent.

In addition, the maximum amount of wages subject to taxation has been increased at various times in order to broaden the tax base. In the 1980s, this increase was scheduled to occur automatically on a yearly basis. In 1984, taxes were paid on up to \$37,800 of earnings; in 1985, it was \$39,600; and in 1986, \$42,000.

Currently, over four covered workers support each Part A beneficiary, but this ratio will decline rapidly early in the next century. By the middle of that century, only about two covered workers will support each enrollee. The anticipated reserves and financing of the Part A program cannot offset this demographic change, except by using the most optimistic assumptions. The trustees project that the trust fund's exhaustion even before the major demographic shift. Efforts to improve the efficiency and reduce the costs of the health care delivery system may moderate this projection. The Prospective Payment System for hospitals comprises one such cost containment efforts.

Part B contributions

The Part B program is financed on the actuarial principle that its trust fund should always be somewhat greater than the claims that have been incurred by beneficiaries but not yet paid. Part B financing comes from three principal sources: Premiums paid by or on behalf of Part B enrollees, general revenue, and interest from investment of the trust fund.

Until 1973, the premium covered half the benefit and administration costs of the Part B plus a contingency reserve. General revenue financed the other half of Part B costs. Beginning in July 1973, Congress limited premium increases to the percentage increase in monthly social security cash benefits and changed the premium adjustment period.

As a result, premiums steadily contributed less to Part B, with 72.7 percent coming from general revenue in 1985.

The Social Security Trust Funds hold all of the income not currently needed to pay benefits and related expenses. The assets of the funds may not be used for any other purposes. They are invested in interest-bearing obligations of the U.S. government.

Medicare administration

The federal government principally administers the Medicare program through three agencies: the Social Security Administration (SSA) and the Health Care Financing Administration (HCFA) in the Department of Health and Human Services (HHS), and the Internal Revenue Service (IRS) in the Department of the Treasury. Within HHS, administrative costs for the Part A program are less than 2 percent of total disbursements. For Part B, they are about 3 percent.

The SSA is responsible for enrolling people into the Medicare program. This usually occurs at the same time they apply for retirement benefits, or two years after receipt of disability benefits. Nationwide, SSA is the primary public contact point for information on the program, billing problems, and provider participation.

The HCFA determines the nature and extent of reimbursement for all covered services. Through contractors, it processes all provider claims for reimbursement. It has established mechanisms to monitor the quality of care provided.

The IRS collects the Medicare taxes from employers and personal income tax filings, and deposits this money in the Trust Funds. The Secretary of the Treasury is the managing trustee of the Part A and Part B trust funds, and is responsible for actually executing all Medicare disbursements to states in the form of payments to carriers (for Part A claims) and fiscal intermediaries (for Part B claims).

Medicare finances

Both Part A and Part B are intended to be actuarially sound. To accomplish this objective, the accrual of funds in each trust fund should "in the long run" balance its disbursements of funds. This calculation of the necessary levels of accruals and disbursements derives from actuarial calculations of national economic, demographic, and health care trends.

Table 2: Operations of supplemental medical insurance trust fund, CY 1985

Source	\$ million
Enrollee premiums	5613
General revenue	18250
Investment interest	1243
Total revenue	25106
Disbursements	23880
Change	1226

Source: Board of trustees of the federal supplementary medical insurance trust fund. The 1988 annual report of the board of trustees of the federal supplementary medical insurance trust fund. Washington, DC: U.S. Government Printing Office, 1988: 26.

For Part A, fiscal soundness is based upon the ratio of the amount of payroll tax dollars coming in as contributions from covered workers to the amount of Medicare dollars being paid out to beneficiaries through fiscal intermediaries and carriers. This ratio changes constantly based on changes in the national and statewide economy, population age, health status, and health care utilization factors.

Part B depends less upon the ratio of contributors to beneficiaries. Subscribers' fees comprise about 25 percent of Part B funding during the study period. The remaining 75 percent from of general revenue remains subject to the fluctuations discussed above.

Methodology

The first phase of this inspection collects publicly available data sources. These sources include federal government statistics and private data for the year 1985. This phase includes a state-by-state calculation of contributions and disbursements to and from the Part A and Part B trust funds. This information demonstrates the basic flow patterns between states due to Medicare, identifying jurisdictions with net losses and net gains.

The second phase of this inspection adjusts these "crude" amounts by controlling for state size. A particular state's large flow of Medicare funds may derive from its being a large state, rather than from unique features of the Medicare program. Accordingly, this phase divides Part A and Part B contributions, disbursements, and nets by beneficiaries, population, employment, and gross state product to obtain ratios for comparison. In addition to reducing the impact of large states, this two dimensional analysis use the coefficient of variation to identify individual causes that influence the flow of Medicare funds. This methodology emphasizes the effect of outlier states that most deviate from mean relationships even upon controlling for state size.

The third phase of this inspection performs multivariate analyses to control for the interaction between the single causes identified in phase two as influencing the flow of Medicare funds. For example, if state wealth and state health facilities each individually affect flow, what effect to they exert together? Wealthier states have greater health care resources and facilities, causing intercorrelation of any variables selected for their measurement. This phase's analyses test individual causes for significance, eliminates outlying cases, performs a stepwise regression, eliminates post-regression outliers, and compares the model's predicted values with actual values to analyze the residuals.

Data sources

The SSA publishes annual statistics about payroll tax collections, both employee and self-employed. In 1985, the Part A program received 2.7 percent of the 14.1 percent tax for "old age, survivors, and disability health insurance" (OASDHI) contributions.

The Part A and Part B trustees report essentially the same dollar amount of payroll tax revenue. [Appendix 1.]

Different statistical series vary in their definitions of "outlying" areas. Appropriate comparison therefore requires careful attention to data sources. For OASDHI outlying areas include revenue from Puerto Rico, Virgin Islands, Guam, American Samoa, sailors, and expatriates. It does not include military personnel, who fall into the "other" category. The armed forces apparently transfer their \$4.7 billion in payroll taxes to Medicare without attributing it to particular states. Indeed, assigning military personnel to states presents a variety of problems for any statistical series. Additionally, military personnel receive essentially no Medicare benefits prior to leaving the service.

The Part A and Part B trustees annually report the amount of general revenue each trust fund receives, but do not break the totals down by state. The Tax Foundation estimates each state's overall federal tax burden which consists principally of general revenue. Accordingly, this inspection divides total Part A and Part B general revenue by the state's proportion of the overall federal tax burden to estimate its contribution.

The Tax Foundation does not estimate the federal tax burden on outlying areas or "other." The Internal Revenue Service reports 1.48 percent of federal revenues derive from outlying areas, international operations, and unallocated receipts. Unfortunately, it does not separate these components. Accordingly, this analysis takes this proportion as a reasonable approximation of their federal tax burden. [Appendix 2.]

Every two years, the HCFA tabulates the number of Part B beneficiaries in each state. For 1985, this inspection multiplies this number by \$186, the premium that year. This total dollar amount closely approximates the actual collections reported by the trustees of the Part B fund. [Appendix 3.]

The HCFA's Part B enumeration includes outlying areas, but not "other." The SSA annually reports the number of Part A enrollees with a separate category for overseas beneficiaries. This inspection therefore uses the SSA data for "other."

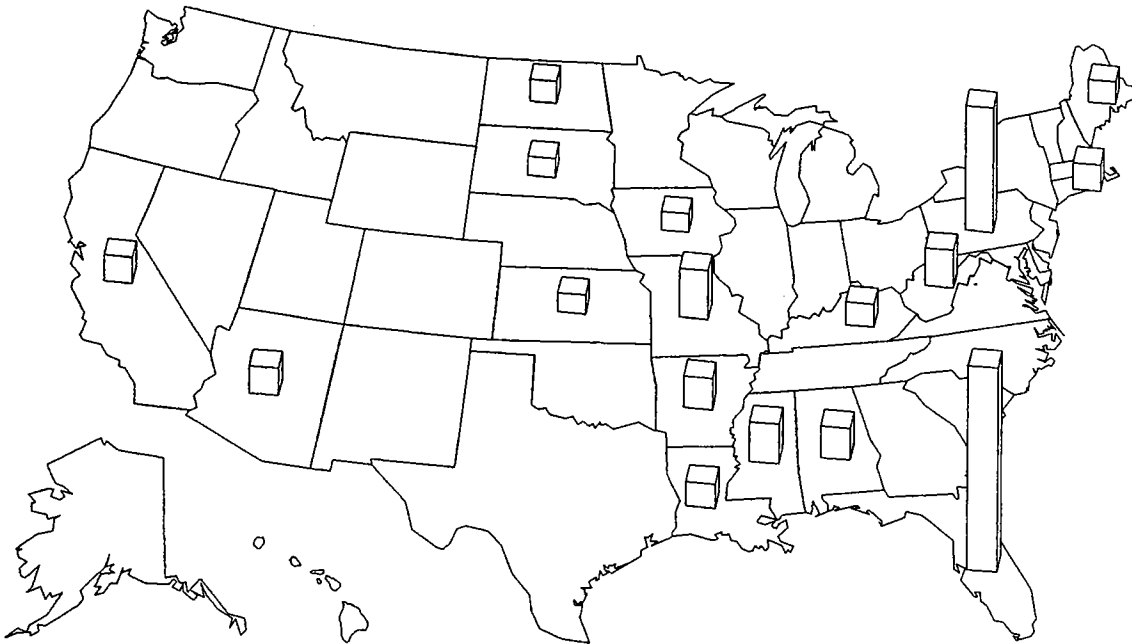
The HCFA also annually aggregates Part A and Part B disbursements by state. It combines billing information from the different Medicare carriers and fiscal intermediaries by state of beneficiary residence. This data contains some preliminary and interim bills that remain subject to slight adjustments at final settlement. These marginal changes (closely on the order of 0.001 percent) should not significantly affect the state by state totals. [Appendices 4 and 5.]

FINDINGS

Interstate flow of Medicare funds

This inspection divided the United States into 53 jurisdictions: 50 states, District of Columbia, outlying areas, and "other." In 1985 they contributed \$75.7 billion to Medicare revenues and received \$70.5 billion in disbursements. The \$5.2 billion difference accumulated in the Medicare trust funds or went to inter-fund borrowing. Theoretically, negative transfers out of the trust funds would eventually offset the current increases in reserve balances. [Appendix 6.]

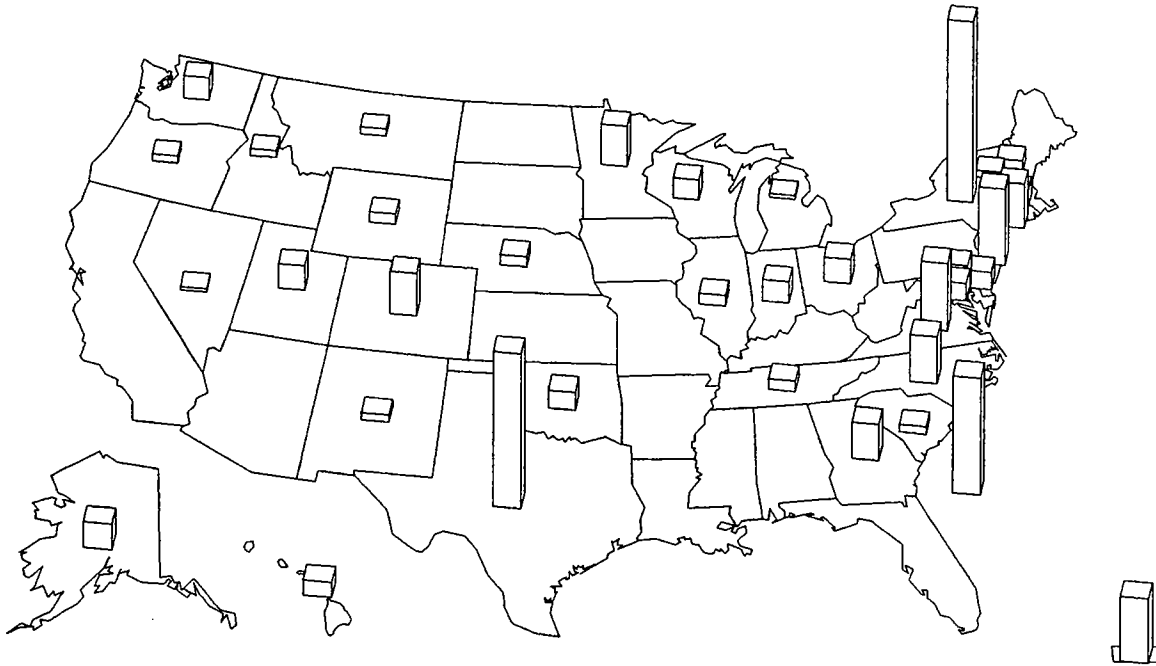
Figure 1: States with Medicare net gains



Sixteen states receive a "net gain" of \$4,237 million more in total Medicare disbursements than they made in total Medicare contributions. Florida and Pennsylvania each gain over a billion dollars more from Medicare than they pay in revenues. Missouri, Mississippi, West Virginia, Alabama, and Arkansas (in descending order) each net over \$100 million from Medicare. Arizona, California, Rhode Island, Maine, Louisiana, Kentucky, North Dakota, South Dakota, and Iowa gain over \$10 million.

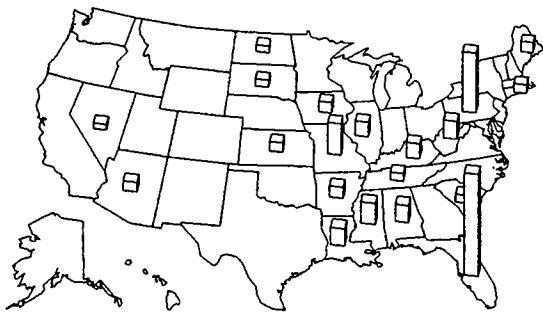
Thirty-seven jurisdictions suffer a "net loss" of \$9,438 million to Medicare. New York and Texas each contribute over a billion dollars more into revenues than they receive in disbursements. "Other," New Jersey, Virginia, outlying areas, Connecticut, North Carolina, Colorado, Minnesota, Georgia, Maryland, Alaska, Utah, Washington, Ohio, Indiana, Wisconsin, District of Columbia, Oklahoma, Delaware, and Massachusetts (in order) each lose in excess of \$100 million. Except for Nevada and Kansas, the

Figure 2: States with Medicare net losses



remaining states each give over \$10 million net to Medicare. For all 53 jurisdictions, the average total net transfer totals \$99.0 million (s 459.6, V 464.5).

Figure 3: States with Part A net gains



As noted in the preceding section, "other" and outlying areas include some statistical anomalies. For revenue purposes, "other" encompasses OASDHI contribution from active duty military personnel and revenues not otherwise accounted for. However, these sources do not receive any Medicare disbursements, skewing the apparent net loss. Similarly, outlying areas receive credit for tax contributions due to international transactions and

unallocated receipts. The accompanying graphics show amounts for outlying areas combined together at Puerto Rico's location, southeast of Florida. Amounts for "other" also appear offshore, but east of Georgia.

Separate calculation of Part A contributions and disbursements produces a pattern similar to that of Medicare as a whole. On average, Part A causes a \$66.6 million net transfer (s 379.7, V 571.3).

Most states with net gains from Part A also enjoy similar gains for all of Medicare. Part A transfers over \$1 billion to Florida. Pennsylvania, Missouri, Mississippi, West

Virginia, Alabama, Louisiana, Illinois, and Kentucky (in order) each gain over \$100 million from Part A. Illinois, South Carolina, Tennessee, and Nevada each have Part A net gains, despite suffering an overall net loss to Medicare.

Conversely, Part A withdraws over \$1 billion annually from New York and "other." Texas, New Jersey, Virginia, California, Connecticut, Minnesota, North Carolina, Colorado, Georgia, Maryland, Alaska, District of Columbia, Utah, Delaware, Massachusetts, and Michigan (in order) each lose over \$100 million. Only California's \$433 million net gain from Part B more than offsets its \$358 million loss to Part A for an overall gain from Medicare.

Figure 4: States with Part A net losses

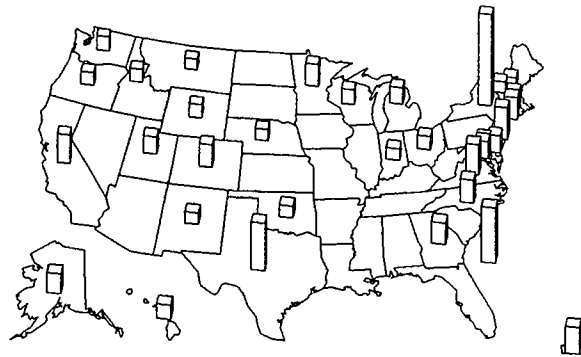


Figure 5: States with Part B net gains



The smaller Part B program differs even more from the overall Medicare net distribution that does Part A. It also shows higher variance with an average net transfer of \$33 million (s 153.2, V 571.3).

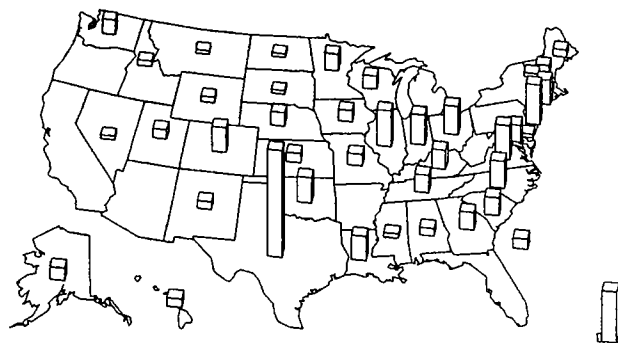
Florida, California, Pennsylvania, and New York each enjoy Part B net gains of over \$100 million. However, New

York, District of Columbia, Oregon, and Michigan still suffer Part A net losses

larger than their Part B net gains.

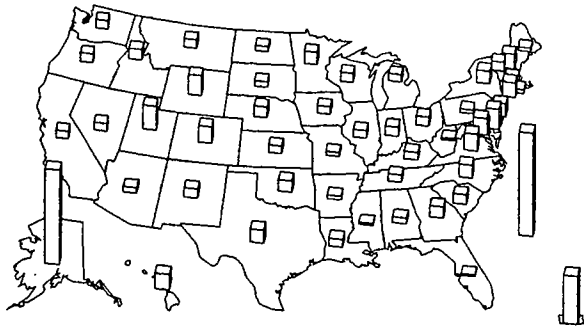
Texas, outlying areas, New Jersey, Illinois, Virginia, Indiana, Ohio, North Carolina, Colorado, Oklahoma, Connecticut, and Louisiana (in order) each suffer a net loss of over \$100 million to Part B. Missouri, Mississippi, Alaska, Maine, Louisiana, Kentucky, North Dakota, South Dakota, Iowa, and Kansas (in order) net more from Part A than they relinquish to Part B in net losses.

Figure 6: States with Part B net losses



The ratio of a state's contributions to disbursements quantifies its net gain or loss while controlling for the size of both contributions and disbursements. The average state contributes 111.5 percent of its disbursements (s 0.282, V 31.5). Florida, West

Figure 7: Ratio of Medicare contributions over disbursements



Virginia, and Pennsylvania have ratios of less than 0.80, demonstrating their net gains to be systematic and not merely a function of their large size. Conversely, Alaska, outlying areas, and "other" contribute more than three times as much into Medicare revenue than they receive in disbursements. For Alaska this ratio represents a real transfer of funds to outside the state. The latter two jurisdictions reflect data collection anomalies. Since "other" receives no disbursements, it has an infinite ratio (truncated to six in the figure). [Appendix 7.]

Univariate analysis of possible causes

Superficial inspection of the interstate flow of Medicare funds suggests the need to control for state size. For example, New York, New Jersey, and Pennsylvania should possess similar inventories of health care services, but have quite different flows of Medicare funds. In addition, contributions do not necessarily relate to disbursements. For contributions deriving from payrolls, employment related variables might best quantify state size. For contributions dependent on general revenue, population or gross state product may best measure size. For disbursements, size may mean the number of beneficiaries.

Controlling for beneficiaries, population, employment, and gross state product tests possible causes for the state by state distribution of net gains and losses. It has the secondary advantage of limiting the interstate variance.

However, units of measurement affect the variance, obscuring comparison of possible causes that have different scales.

The coefficient of variation (V) better quantifies the relative variation by eliminating the units of measurement. It identifies the following relationships having low variation and therefore being likely causes of the interstate flow of Medicare funds.

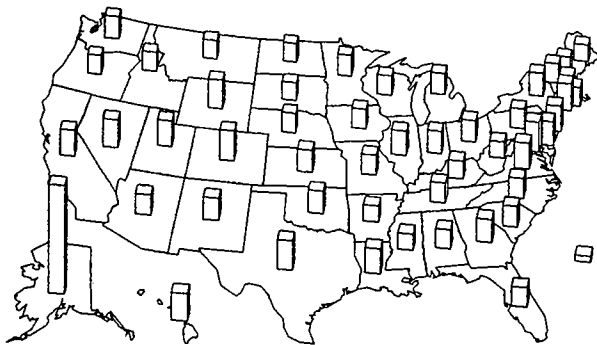
Per:	Benefi- ciary	Popul- ation	Empl- oyee	Gross state product
Part A				
Contributions	74.5	33.4	30.0	
27.9				
Disbursements	24.8	31.5	31.0	
34.5				
Net	364.1	356.3	367.4	
470.1				
Part B				
Contributions	55.0	18.8	21.7	
34.2				
Disbursements	28.9	35.2	34.2	
36.0				
Net	234.1	146.2	162.7	
188.9				
Total Medicare				
Contributions	66.6	26.3	24.0	
24.4				
Disbursements	24.9	31.6	30.9	
33.8				
Net	310.8	239.4	248.8	
299.0				

BENEFICIARIES	Part B contributions and total disbursements.
POPULATION	Part B contributions.
EMPLOYMENT	Part A, Part B, and total contributions.
GROSS STATE PRODUCT	Part A and total contributions.

These relationships conform to intuitive expectations that disbursements follow beneficiaries, while contributions derive from a state's ability to pay. Dividing by these measures of size also highlights the outlier states that most diverge from measures of central tendency.

Beneficiaries

Figure 8: Part B contributions per beneficiary



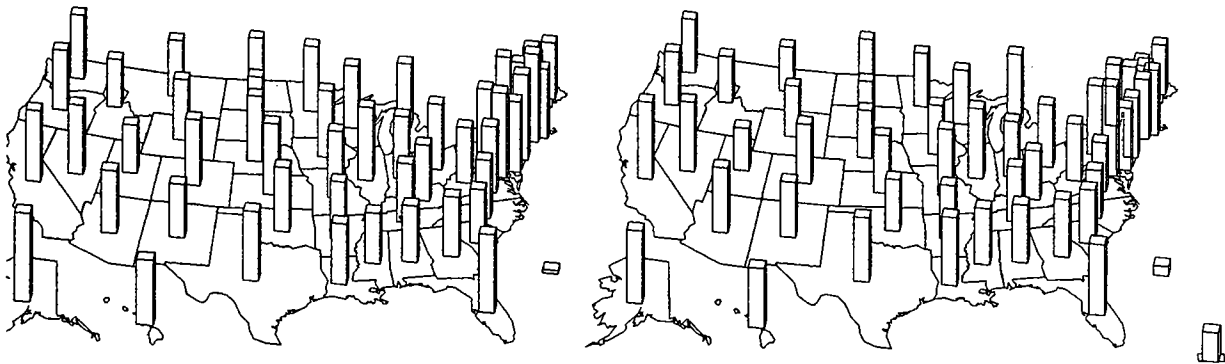
The number of beneficiaries in a state directly affects both its premium contributions to Part B (Pearson r 0.96, $P < 0.0001$) and the total disbursements to the state (Pearson r 0.99, $P < 0.0001$). Dividing Part B contributions by beneficiaries controls for states whose populations consist disproportionately of the elderly (e.g., Florida, Arizona). However, the decreasing fraction of Part B financed by beneficiary premiums weakens any causal linkage. Alaska,

Wyoming, outlying areas, Colorado, and the District of Columbia make the largest Part B per beneficiary contributions. In the first four jurisdictions the elderly constitute unusually small proportions of their total populations. The District of Columbia has a higher per capita income than any state and therefore makes an unusually large contribution to general revenue. "Other," Arkansas, West Virginia, Mississippi, and South Dakota have the lowest Part B contributions per beneficiary. "Other" has essentially no beneficiaries, while the rural states suffer from low average incomes. [Appendix 8].

Similarly, dividing total Medicare disbursements by beneficiaries identifies the District of Columbia, California, Michigan, Illinois, and Nevada as having high costs per beneficiary. The two former locales have disproportionately comprehensive health care facilities. However, no causal characteristics particularly distinguish the latter three states. "Other," outlying areas, Utah, Montana, and North Carolina have the lowest costs per beneficiary. "Other" has no beneficiaries and therefore no disbursements. Utah enjoys a reputation for healthy lifestyles and low morbidity. The remaining areas could have either lower cost or lower intensity health services.

Population

Figure 10: Part B contributions per population Figure 9: Medicare disbursements per beneficiary



Population directly measures a state's size. Its correlates (Pearson r 0.98, $P < 0.0001$) significantly with Part B contributions. This relationship also has the lowest coefficient of variation. Dividing Part B contributions by population, Connecticut, New Jersey, District of Columbia, Alaska, and Massachusetts have the highest quotient. These jurisdictions also enjoy relatively high average incomes. "Other," Utah, Mississippi, Idaho, and South Carolina come in lowest. "Other" scores low because it has no beneficiaries and therefore no beneficiary premiums. Mississippi, Idaho, and South Carolina have relatively low average incomes. Utah has a low proportion of elderly residents; however, so does Alaska. [Appendix 9].

Employment

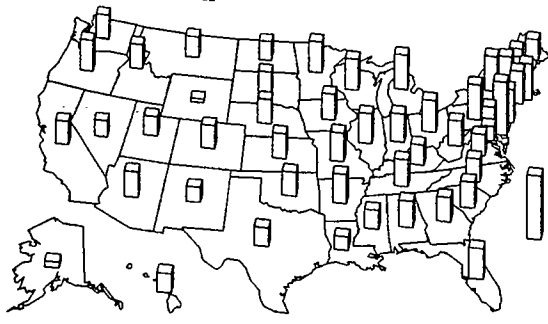
Figure 11: Medicare contributions per employee



The number of employees in a state indirectly quantifies its economic activity. In particular, employment significantly correlates with contributions (Pearson r 0.98, $P < 0.0001$). Dividing total Medicare contributions by employment identifies the District of Columbia, Delaware, Alaska, outlying areas, and New York as making higher than average contributions, especially OASDHI and general revenue. These jurisdictions have higher average earnings and presumably higher rates of taxation. Mississippi, "other," South Dakota, Maine, and Kentucky make the lowest Medicare contributions per employee. The four states have lower average incomes, but "other" includes considerable non-wage income attributed for accounting purposes. This revenue should artificially inflate the average income of the military personnel in this group, suggesting unusually low average incomes among the military. [Appendix 10].

Gross State Product

Figure 12: Medicare contributions per gross state product



Gross state product parallels the economic definition of the gross national product, but for a single state. It directly measures the size of a state's economy and significantly correlates with total Medicare contributions (Pearson $r = 0.98$, $P < 0.0001$). Unlike number of employees, it accounts for differences in their average earnings and includes unearned income. Calculating total contributions as a percentage of gross state product, outlying areas

devote 4.2 percent of their total economic activity to paying for Medicare. "Other" (3.0 percent), Delaware (2.7 percent), Rhode Island (2.2 percent), and New York (2.2 percent) follow with successively lower fractions. These areas have high average incomes, suggesting that Medicare uses relatively progressive methods to raise its revenues. Wyoming (1.1 percent), Alaska (1.1 percent), Louisiana (1.4 percent), New Mexico (1.4 percent), and the District of Columbia (1.5 percent) contribute the smallest proportions of their economies to Medicare. However, Alaska and the District of Columbia have the highest per capita personal incomes in the nation. Their residents must therefore have atypically light Medicare tax burdens. [Appendix 11].

Multivariate analysis of possible causes

Controlling one measure of state size at a time emphasizes the effect of the other possible causes of Medicare funds flows. For example, controlling for population highlights the importance of states with above average incomes. Measuring the interaction between possible causes therefore requires a multivariate analysis of contributions and disbursements. Also, the previous phase emphasizes outliers, whereas a multivariate analysis eliminates outliers.

Table 4: Variables measuring possible causes of FICA contributions to Part A

State economic health

- Failed businesses per capita
- Employed persons per capita
- Persons receiving public aid
- Unemployment rate

Labor force

- Per capita persons in the civilian labor force
- Proportion of population 18-64 years old

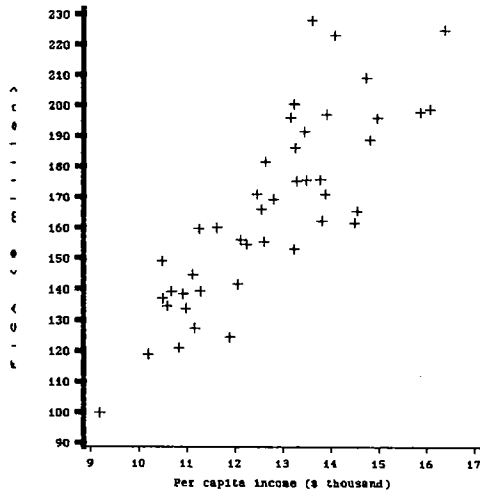
Income

- Disposable income per capita
- Annual pay per capita
- Personal income per capita
- Hourly earnings per capita

Part A contributions: Payroll tax

Part A contributions derive principally from OASDHI. Three possible causes appear most likely to affect the size of a state's FICA tax:

Figure 13: FICA predicted by disposable income

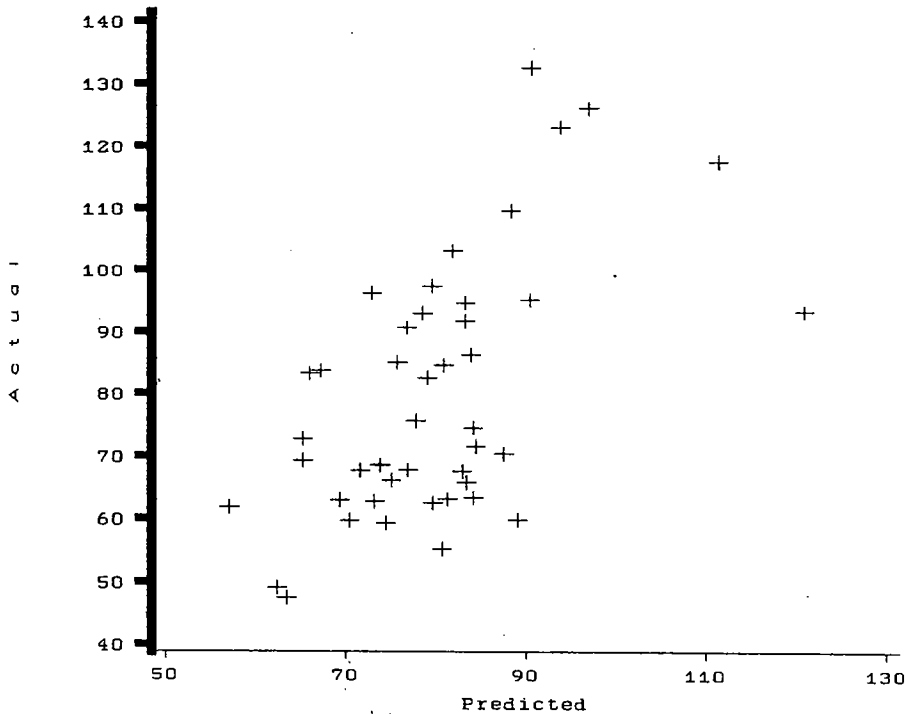


$$FICA_{in} = f(\text{state economic health}^2, \text{labor force}^3, \text{income}).$$

If a state has a vigorous economy with low unemployment and relatively high wages, then more dollars from its wage earners should go into the Part A trust fund. If a state has a high proportion of its residents in the labor force, it should contribute more money to Medicare. Finally, states with high average incomes should yield more payroll taxes, at least until large numbers of residents reach the cap on FICA taxes.

Ten publicly available variables measure these three causes. Correlation coefficients and scattergrams identify per capita disposable income, per capita civilian labor force members, and unemployment rate as attaining significance levels of $p < 0.05$.

Figure 14: Accuracy of Part A FICA predictions



Scattergrams also eliminate Alaska and the District of Columbia as outliers. Upon rescaling without these two outliers, Florida also becomes an outlier. Alaska presumably outliers because it consists disproportionately of young people, while Florida outliers because it consists disproportionately of the elderly. The District of Columbia has higher per capita income than any state except Alaska and Connecticut.

After removing these three jurisdictions and rescaling again, New York, New Jersey, Connecticut, and Delaware become outliers. This status apparently derives from the commuting patterns of their respective work forces. Employer location, not employee residence, determines what state receives credit for their FICA taxes. All these states have a high proportion of residents who commute either into or out of the state to work.

A stepwise regression identifies the strongest explanatory variables. Upon such analysis of the three significant variables against FICA payroll contributions ($p < 0.01$), only per capita disposable income significantly explains the variance in OASDHI. A straight regression analysis at the 0.15 significance level finds that per capita disposable income accounts for 71 percent of the variance among states for FICA payroll taxes, a very strong correlation.

The final phase of this part of the analysis compares the predicted values for FICA contributions to the actual FICA contributions. In a perfect predictive model, we would expect all the values to fall on the 45 degree line. Random errors account for each state's divergence from the predicted value. The very strong relationship between the predicted values and the actual values shows the model to be both precise and valid.

Part A contributions: General revenue

A smaller proportion of Part A contributions come from general revenue. A state's ability to contribute to general revenue depends largely upon its economic vigor. Six variables available from public data sources quantify this possible cause.

As with the FICA analysis, correlation with scattergrams identifies significant variables. Repeated correlation with scattergrams and rescaling, eliminates outlier states.

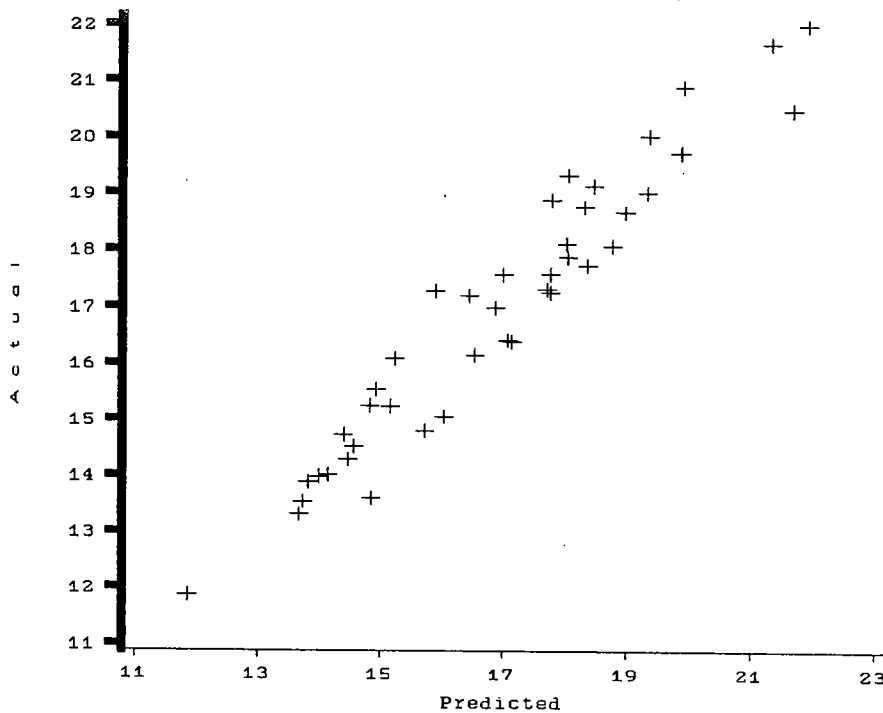
Table 5: Variables measuring possible causes of general revenue contributions to Part A

- Average annual pay
- Personal income per capita
- Hourly earnings per capita
- Civilian labor force
- Total employment
- Failed businesses per capita
- Persons receiving public aid per capita

Source: Horner ER, ed. Almanac of the fifty states, 1988. 3rd ed. Palo Alto, CA: Information Publications, 1988.

Stepwise regression selects per capita personal income and annual pay as being statistically significant allowing for their mutual predictive interaction. Together they explain 93.3 percent of the variance in general revenue contributions to Part A, a very good fit. Both these variables related to a state's capability to pay into federal general revenue. This finding suggests that general revenue contributions to Part A comprise a relatively progressive manner of funding.

Figure 15: Accuracy of Part A general revenue predictions



Part A disbursements

After controlling for state size, Part A disbursements should principally depend upon the population’s physical health, the health care resources available in the state, and the age distribution of the Medicare population.

$$P_{out} = f(\text{population's physical health}^4, \text{health care resources}^5, \text{Medicare age distribution}^6)$$

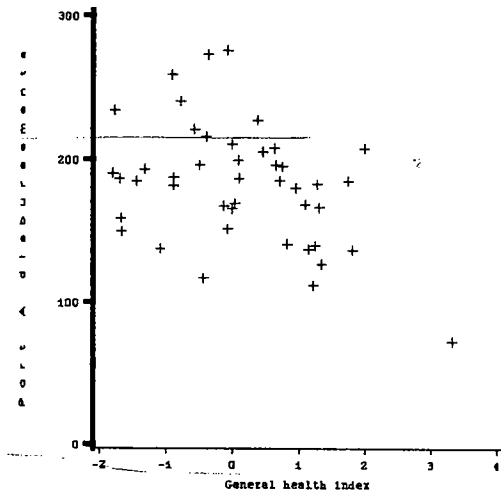
This model considers 12 variables that measure these three possible causes. For physical health, the Northwestern National Life Insurance Company annually publishes computed indices for each state’s general health, lifestyle, and disease severity from various health measures. Assuming that a state has a stable population, unhealthy young people will become unhealthy elders.

Table 6: Variables measuring possible causes of disbursements from Part A

Population’s health
General health index
Average life span
Severity of disease index
General lifestyle index
Average work time lost to illness
Health care resources
Physicians per capita
Hospital beds per capita
Occupation rate of hospital beds
Short term hospital stays per capita
Medicare age distribution
Percent age 65 to 74
Percent age 75 to 84
Percent age 85+

The relative danger of working in a states major industries, the strength of its laws on factory emissions, and other occupational hazards also affect the overall health status of its population. Where significant numbers of workers consistently miss work because of illness but stay in the work force, Medicare receives less contributions from the state. At the same time, the persons who suffer ill health throughout their

Figure 16: Part A disbursements predicted by general health index



working years retain diminished health status as elders, thus increasing their utilization of health care services reimbursed through the Medicare trust fund.

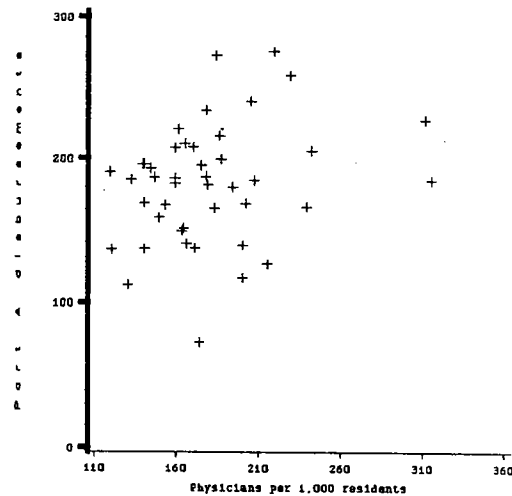
According to numerous studies, the availability of high intensity health services results in their increased utilization.⁷ This trend applies to both necessary services (e.g., a person with a serious illness might not drive fifty miles to have it checked, while a person one mile from service probably will seek health care) and to increased requests for elective procedures. This variable does not change the absolute numerical ratio of contributors to beneficiaries, but can affect

the number and type of services utilized by Medicare-eligible persons so as to change the cost of serving beneficiaries in a particular area.

Additionally, the need for health services may initiate the creation of a medical center. Once established, the medical center then generates further demand for its services. Over time, health care resource availability can indirectly increase the consumption of Medicare services.

The age structure of the Medicare population may also affect Part A disbursements. Persons 85 years of age and older tend to be ill more often than persons aged 65-84. The former group of so-called "old-old" also tend to have illnesses that require more health care resources than do the latter group of "young-old." The use of Medicare benefits could therefore vary with the age structure of the elderly population.

Figure 17: Part A disbursements predicted by physicians per capita



Correlation and scattergram of these variables with Part A disbursements, eliminated variables with weak associations ($p < 0.05$). The general health index, physicians per capita, hospital beds per capita, and percentage of the Medicare population between the ages of 65 and 74 years proved to be significant. Regression and rescaling eliminate outlier states.

In a stepwise regression, all four of these variables remain significant at the 0.01 confidence level. An ordinary least squares regression using these variables explains

Figure 18: Part A disbursements predicted by hospital beds per capita 47 percent of the variance in Part A benefits.

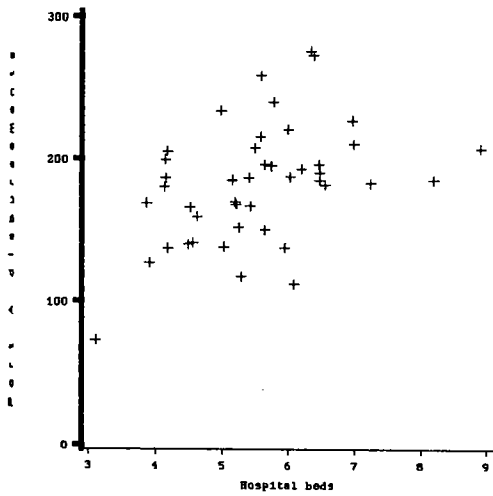
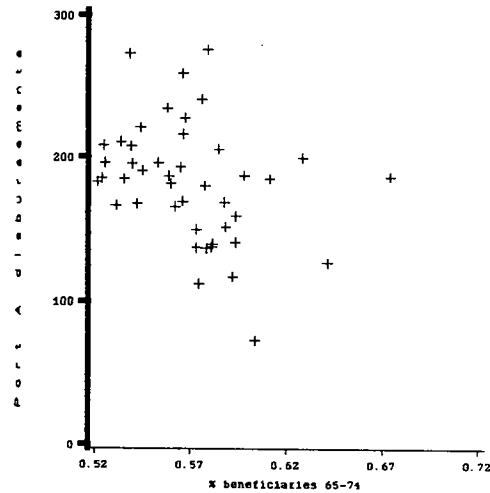
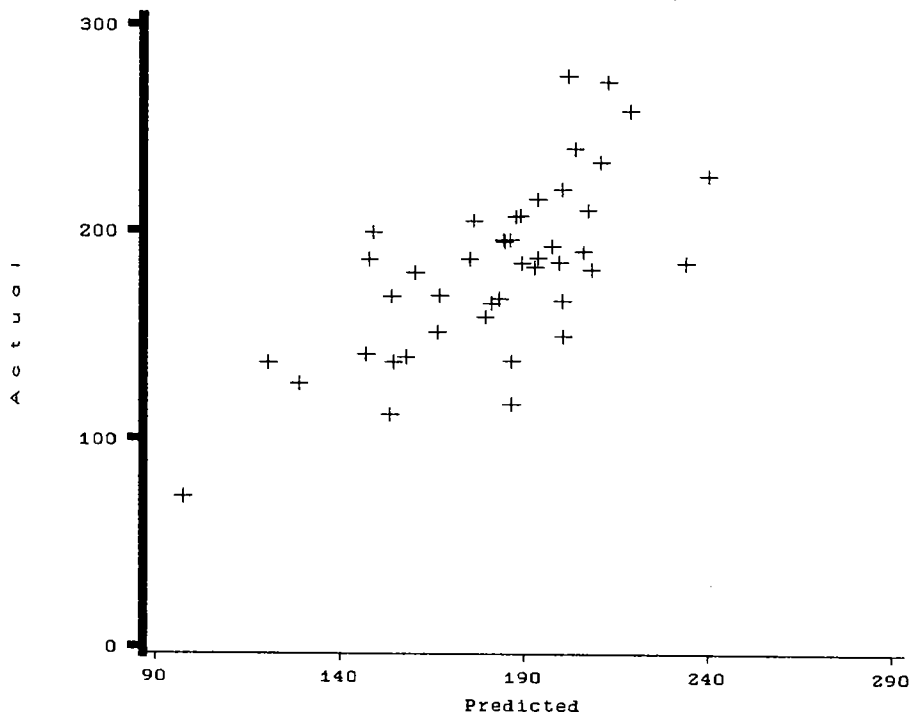


Figure 19: Part A disbursements predicted by Medicare population aged 65-74 years



The final phase of the Part A disbursements analysis consists of a multivariate, straight regression using ordinary least squares. This procedure compares the amounts predicted jointly by the four significant variables to the actual payments in each jurisdiction. Together, they account for 47.2 percent of the variance. An analysis of the residuals shows a strong relationship between predicted and actual values, and reflects a good model.

Figure 20: Accuracy of Part A disbursement predictions



Part B contributions: Beneficiary premiums

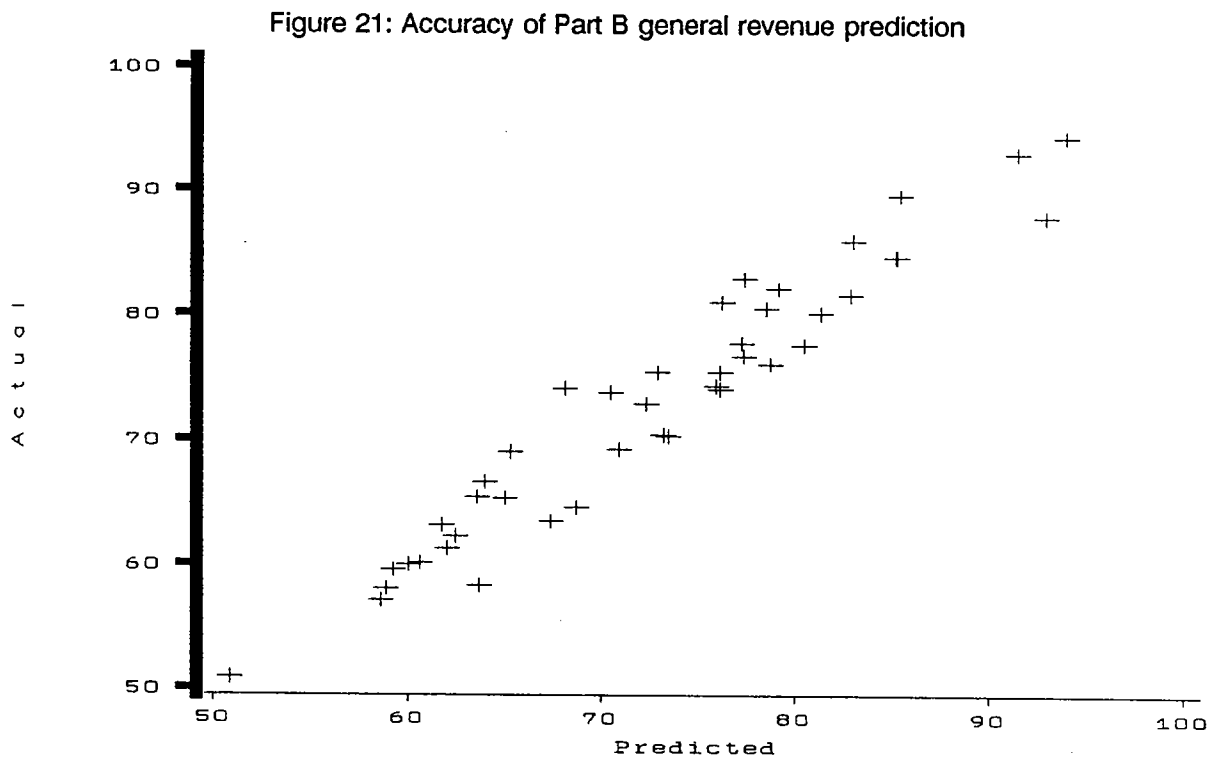
As previously noted, beneficiary premiums comprise about one-quarter of contributions to Part B. This component of Medicare funding does not warrant multivariate analysis. Beneficiaries each pay a flat rate for their Part B coverage, \$186 in 1985. Accordingly, a state's premiums make up a linear function the number of beneficiaries among its residents. Controlling for population, employee, or gross state product predicts premiums less accurately because of these measures' systematic differences and inherent variance.

$$P_{in} = GR_{in} + SP_{in}$$

where GR_{in} represents the general revenue contribution attributable to each state and SP_{in} denotes the total premiums for all subscribers in the state.

Part B contributions: General revenue

The analysis of general revenue contributions to Part B parallels the procedure and results for general revenue contributions to Part A. It uses the same six variables as prospective measures of states' economic health. Correlation tests eliminate nonsignificant variables. Repeated correlation and rescaling removes outlier states.

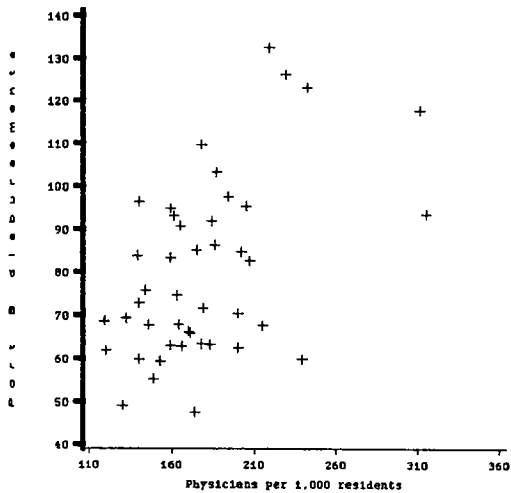


Stepwise regression identifies the variables that in the aggregate best explain general revenue contributions to Part B. Again, only per capita personal income and hourly

earnings contribute significant predictive information. Together, they account for 93.4 percent of interstate differences in general revenue.

Part B disbursements

Figure 22: Part B disbursements predicted by physicians per capita



The modeling of Part B disbursements starts with the same three possible causes as quantified by the 12 variables used for Part A disbursements. The same rationales as for Part A disbursements apply to selection of these variables for Part B disbursements.

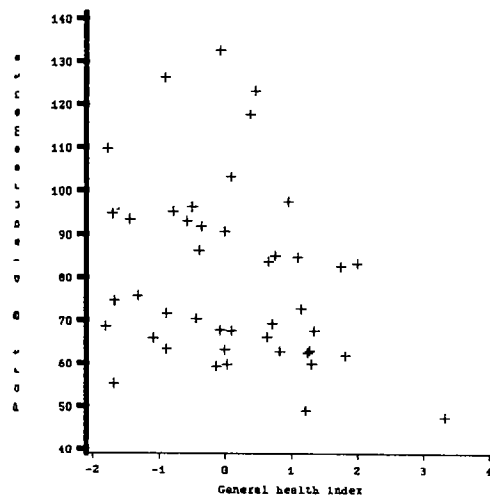
$$P_{out} = f(\text{population's physical health, health care resources, Medicare age distribution})$$

Correlating individual variables with Part B disbursements to eliminate weak associations, the same four variables attained significance at $p < 0.05$. Correlation and rescaling removes outlier states.

The four variables remain significant through a stepwise regression where $p < 0.01$. However, in an ordinary least squares regression at $p < 0.15$ only two variables, physicians per capita and general health rating, continue to be significant. These two variables jointly explain 33 percent of the variance in Part B benefits to states.

The final phase of the analysis compares the disbursements predicted by this model to the actual amounts paid out. An analysis of the residuals demonstrates a strong relationship between the model's predictions and the actual benefits.

Figure 23: Part B disbursements predicted by state health index

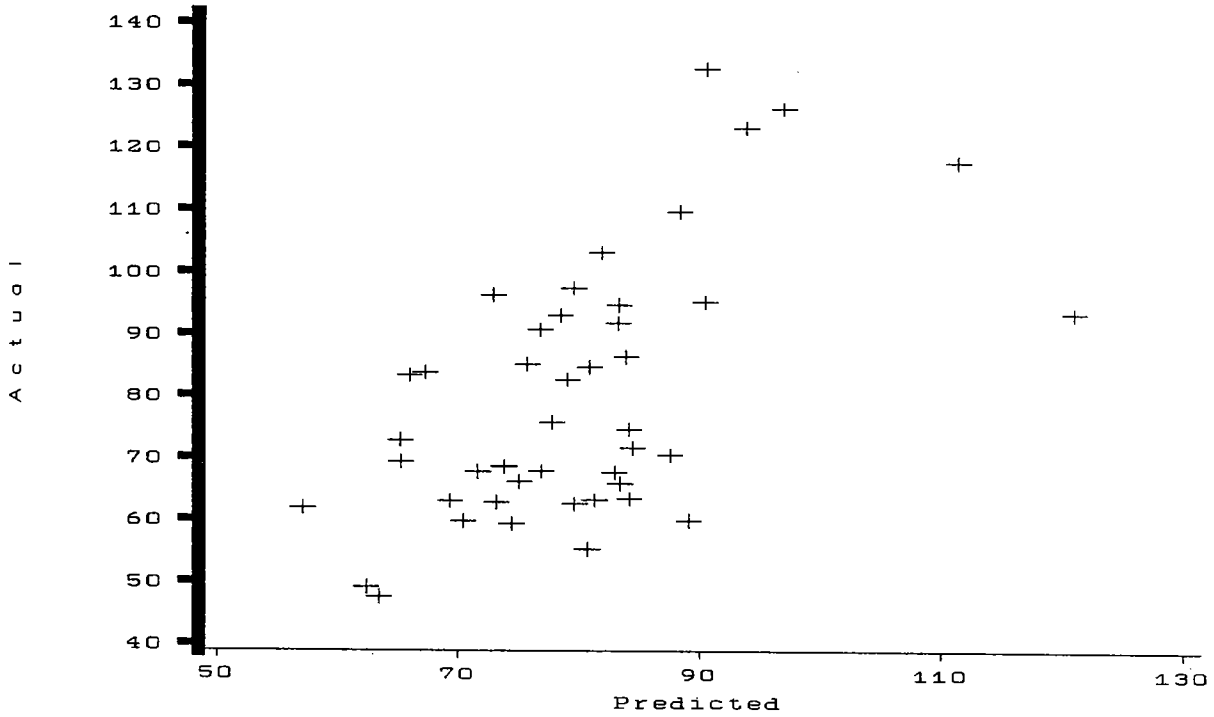


Conclusion

This data shows that Medicare creates large changes in the flow of funds into and out of states. The aggregate, net amounts seem to be random on superficial inspection. However, upon individual analysis the Part A and B contributions and disbursements do significantly associate with logical causes such as average income, proportion of elderly residents, and availability of health care services. The juxtaposition of unusual combinations of characteristics in a state accounts for the seeming randomness of the flow of Medicare funds (e.g., high average income and few elderly residents).

Accordingly, the net flow of Medicare funds discharges the program's current legislative objectives. Policy manipulations of this flow should address the underlying causes, rather than directly affecting the flow itself. Medicare contributions and disbursements constitute a important share of some states' total revenues.

Figure 24: Accuracy of Part B disbursement predictions



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2. Horner ER, ed. Almanac of the fifty states, 1988. 3rd ed. Palo Alto, CA: Information Publications, 1988.
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4. Northwestern National Life Insurance state health rankings: Results, methodology, and discussion, 1989 edition. Minneapolis, MN: Northwestern National Life Insurance Company, 1989.
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6. U.S. Bureau of the Census. State population and household estimates, with age, sex, and component of change: 1981-1987. Current population reports, series P-25, no. 1024. Washington, DC: U.S. Government Printing Office, 1988.
7. For a more detailed discussion of the relationship between medical resource intensity and medical services utilization, see Hamilton, Robert, "Crisis in the Health Care System," Connecticut, May, 1990, pp. 95-100.

Appendix 1: Old age, survivors, disability health insurance contributions by state, 1985 (\$ million)

State	Total OASDHI contributions ¹			Part A contributions ²		
	Wage	Self	Total	Wage	Self	Total
AL	2750	170	2920	527	33	559
AK	771	49	820	148	9	157
AZ	2627	166	2793	503	32	535
AR	1698	136	1834	325	26	351
CA	25434	1908	27342	4870	365	5236
CO	2943	241	3184	564	46	610
CT	4145	234	4379	794	45	838
DE	1132	30	1162	217	6	223
DC	1556	32	1588	298	6	304
FL	8335	635	8970	1596	122	1718
GA	4864	311	5175	931	60	991
HI	838	52	890	160	10	170
ID	694	64	758	133	12	145
IL	11931	663	12594	2285	127	2412
IN	4626	281	4907	886	54	940
IA	2115	222	2337	405	43	448
KS	2047	199	2246	392	38	430
KY	2162	190	2352	414	36	450
LA	3057	202	3259	585	39	624
ME	682	74	756	131	14	145
MD	4309	224	4533	825	43	868
MA	6434	401	6835	1232	77	1309
MI	10397	412	10809	1991	79	2070
MN	4593	285	4878	880	55	934
MS	1240	120	1360	237	23	260
MO	4596	295	4891	880	56	936
MT	515	60	575	99	11	110
NE	1328	139	1467	254	27	281
NV	744	49	793	142	9	152
NH	943	77	1020	181	15	195
NJ	8879	480	9359	1700	92	1792
NM	976	71	1047	187	14	200
NY	24635	981	25616	4717	188	4905
NC	4895	336	5231	937	64	1002
ND	427	79	506	82	15	97
OH	10729	516	11245	2055	99	2153
OK	2471	204	2675	473	39	512
OR	2370	178	2548	454	34	488
PA	11189	666	11855	2143	128	2270
RI	942	53	995	180	10	191
SC	2196	144	2340	421	28	448
SD	400	70	470	77	13	90
TN	3714	258	3972	711	49	761
TX	13976	1036	15012	2676	198	2875
UT	1100	75	1175	211	14	225
VT	398	38	436	76	7	83
VA	4628	296	4924	886	57	943
WA	3647	285	3932	698	55	753
WV	1130	70	1200	216	13	230
WI	4632	252	4884	887	48	935
WY	375	32	407	72	6	78
Outlying ³	1654	87	1741	317	17	333
Other ⁴	4677	0	4677	896	0	896
Total	229548	14128	243676	43956	2705	46661

1. Diez G & Long W. OASDHI covered workers. Social Security Bulletin, Annual Statistical Supplement, 1988: 136. Table 4.B10.
 2. OASDHI contributions * 2.7 / 14.1.
 3. Puerto Rico, Virgin Islands, Guam, American Samoa, ocean-going vessels, and U.S. citizens employed abroad by American employers.
 4. Armed forces and funds otherwise unaccounted for.

Appendix 2: General revenue contributions by state, 1985

State	Federal tax burden ¹		General revenue (\$ million)		
	\$ million	percent	Part A ²	Part B ³	Total
AL	8996	1.25	56	238	294
AK	2355	0.33	15	62	77
AZ	8271	1.15	51	219	270
AR	5011	0.70	31	133	164
CA	86183	11.97	532	2280	2812
CO	10178	1.41	63	269	332
CT	13282	1.84	82	351	433
DE	1994	0.28	12	53	65
DC	2506	0.35	15	66	81
FL	33177	4.61	205	878	1083
GA	15395	2.14	95	407	502
HI	2974	0.41	18	79	97
ID	2179	0.30	13	58	71
IL	38475	5.34	237	1018	1255
IN	14915	2.07	92	395	487
IA	8078	1.12	50	214	264
KS	7480	1.04	46	198	244
KY	8502	1.18	52	225	277
LA	11522	1.60	71	305	376
ME	2752	0.38	17	73	90
MD	15193	2.11	94	402	496
MA	20451	2.84	126	541	667
MI	26213	3.64	162	694	856
MN	12487	1.73	77	330	407
MS	4948	0.69	31	131	162
MO	14124	1.96	87	374	461
MT	2046	0.28	13	54	67
NE	4433	0.62	27	117	144
NV	3005	0.42	19	80	99
NH	3142	0.44	19	83	102
NJ	29802	4.14	184	789	973
NM	3409	0.47	21	90	111
NY	59251	8.23	366	1568	1934
NC	15225	2.11	94	403	497
ND	1889	0.26	12	50	62
OH	30657	4.26	189	811	1000
OK	9101	1.26	56	241	297
OR	7047	0.98	43	186	229
PA	34297	4.76	212	908	1120
RI	2896	0.40	18	77	95
SC	7391	1.03	46	196	242
SD	1641	0.23	10	43	53
TN	11605	1.61	72	307	379
TX	50557	7.02	312	1338	1650
UT	3669	0.51	23	97	120
VT	1286	0.18	8	34	42
VA	17305	2.40	107	458	565
WA	13232	1.84	82	350	432
WV	4183	0.58	26	111	137
WI	13153	1.83	81	348	429
WY	1537	0.21	9	41	50
Outlying	10641 ⁴	1.48	66	282	348
Other	NA	NA	NA	NA	NA
Total	720041	100.00	4443	19053	23496

1. Tax Foundation. Memorandum on the allocation of the federal tax burden and federal grants-in-aid by state, fiscal year 1988.
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4. Projection from federal individual income tax receipts. U.S. Department of Commerce, Bureau of the Census. Statistical abstract of the United States, 1989. 109th ed. Washington, DC: U.S. Government Printing Office, 1990; Table 504. Includes international operations and unallocated receipts, in addition to outlying areas.

Appendix 3: Part B premium contributions by state, 1985

State	Beneficiaries ¹ (thousand)	Premiums ² (\$ million)
AL	519	96
AK	16	3
AZ	395	73
AR	358	67
CA	2858	532
CO	294	55
CT	426	79
DE	75	14
DC	73	14
FL	1965	366
GA	637	118
HI	98	18
ID	114	21
IL	1407	262
IN	680	127
IA	428	80
KS	336	62
KY	482	90
LA	453	84
ME	166	31
MD	463	86
MA	797	148
MI	1108	206
MN	538	100
MS	334	62
MO	719	134
MT	103	19
NE	223	41
NV	96	18
NH	121	23
NJ	1006	187
NM	145	27
NY	2361	439
NC	756	141
ND	91	17
OH	1373	255
OK	408	76
OR	364	68
PA	1779	331
RI	145	27
SC	369	69
SD	101	19
TN	615	114
TX	1561	290
UT	131	24
VT	68	13
VA	613	114
WA	519	97
WV	283	53
WI	652	121
WY	44	8
Outlying	303	56
Other ³	230 ⁴	43
Total	30199	5617

1. U.S. Department of Health & Human Services, Health Care Financing Administration, Bureau of Data Management & Statistics. Medicare program statistics: Medicare enrollment 1985. Baltimore, MD: Health Care Financing Administration, 1989: 19-20. Table 1. HCFA pub. no. 03266.
2. Number of beneficiaries * \$186.
3. From foreign countries.
4. Moaney-Howze A. Hospital insurance: Number of enrollees, by state, July 1, 1966-87. Social Security Bulletin, Annual Statistical Supplement, 1988: 285. Table 7.B3.

Appendix 4: Total Part A contributions and disbursements by state, 1985 (\$ million)

State	Contributed			Disbursed ¹	Net
	OASDHI	General	Total		
AL	559	56	615	775	-160
AK	157	15	172	29	143
AZ	535	51	586	630	-44
AR	351	31	382	462	-80
CA	5236	532	5768	5410	358
CO	610	63	672	451	221
CT	838	82	920	665	255
DE	223	12	235	120	115
DC	304	15	320	180	140
FL	1718	205	1922	3148	-1226
GA	991	95	1086	893	193
HI	170	18	189	133	56
ID	145	13	159	137	22
IL	2412	237	2649	2772	-123
IN	940	92	1032	1026	6
IA	448	50	497	564	-67
KS	430	46	476	515	-39
KY	450	52	503	624	-121
LA	624	71	695	839	-144
ME	145	17	162	242	-80
MD	868	94	962	811	151
MA	1309	126	1435	1322	113
MI	2070	162	2232	2124	108
MN	934	77	1011	774	237
MS	260	31	291	497	-206
MO	936	87	1024	1373	-349
MT	110	13	123	113	10
NE	281	27	308	293	15
NV	152	19	170	175	-5
NH	195	19	215	165	50
NJ	1792	184	1976	1547	429
NM	200	21	222	204	18
NY	4905	366	5271	3517	1754
NC	1002	94	1096	860	236
ND	97	12	109	142	-33
OH	2153	189	2343	2317	26
OK	512	56	568	560	8
OR	486	43	531	484	47
PA	2270	212	2482	3269	-787
RI	191	18	208	250	-42
SC	448	46	494	529	-35
SD	90	10	100	131	-31
TN	761	72	832	865	-33
TX	2875	312	3187	2480	707
UT	225	23	248	119	129
VT	83	8	91	89	2
VA	943	107	1050	666	384
WA	753	82	834	742	92
WV	230	26	256	427	-171
WI	935	81	1016	931	85
WY	78	9	87	57	30
Outlying	333	66	399	134	265
Other	896	NA	896	0	896
Total	46661	4443	51104	47582	3522

1. U.S. Department of Health & Human Services, Health Care Financing Administration, Bureau of Data Management and Statistics. Medicare estimated benefit payments, calendar year 1985.

Appendix 5: Total Part B contributions and disbursements by state, 1985 (\$ million)

State	Contributed			Disbursed ¹	Net
	Premiums	General	Total		
AL	96	238	335	304	31
AK	3	62	65	14	51
AZ	73	219	292	326	-34
AR	67	133	199	227	-28
CA	532	2280	2812	3245	-433
CO	55	269	324	202	122
CT	79	351	431	315	116
DE	14	53	67	57	10
DC	14	66	80	85	-5
FL	366	878	1243	1821	-578
GA	118	407	526	445	81
HI	18	79	97	71	26
ID	21	58	79	62	17
IL	262	1018	1280	1098	182
IN	127	395	521	372	149
IA	80	214	293	241	52
KS	62	198	260	222	38
KY	90	225	315	221	94
LA	84	305	389	284	105
ME	31	73	104	77	27
MD	86	402	488	410	78
MA	148	541	689	685	4
MI	206	694	900	996	-96
MN	100	330	431	346	85
MS	62	131	193	179	14
MO	134	374	507	462	45
MT	19	54	73	60	13
NE	41	117	159	101	58
NV	18	80	97	89	8
NH	23	83	106	63	43
NJ	187	789	976	778	198
NM	27	90	117	91	26
NY	439	1568	2007	2159	-152
NC	141	403	543	412	131
ND	17	50	67	57	10
OH	255	811	1067	927	140
OK	76	241	317	198	119
OR	68	186	254	262	-8
PA	331	908	1238	1573	-335
RI	27	77	104	122	-18
SC	69	196	264	184	80
SD	19	43	62	49	13
TN	114	307	421	341	80
TX	290	1338	1628	1110	518
UT	24	97	121	78	43
VT	13	34	47	32	15
VA	114	458	572	401	171
WA	97	350	447	373	74
WV	53	111	163	180	-17
WI	121	348	469	406	63
WY	8	41	49	25	24
Outlying	56	282	338	110	228
Other	43	NA	43	0	43
Total	5617	19053	24670	22948	1722

1. U.S. Department of Health & Human Services, Health Care Financing Administration, Bureau of Data Management and Statistics. Medicare estimated benefit payments, calendar year 1985.

Appendix 6: Net Part A and Part B contributions and disbursements by state, 1985 (\$ million)

	State Part A			Part B			Total		
	Contributed	Disbursed	Net	Contributed	Disbursed	Net	Contributed	Disbursed	Net
AL	615	775	-160	335	304	31	949	1079	-130
AK	172	29	143	65	14	51	237	43	194
AZ	586	630	-44	292	326	-34	878	956	-78
AR	382	462	-80	199	227	-28	581	689	-108
CA	5768	5410	358	2812	3245	-433	8580	8655	-75
CO	672	451	221	324	202	122	997	653	344
CT	920	665	255	431	315	116	1351	980	371
DE	235	120	115	67	57	10	302	177	125
DC	320	180	140	80	85	-5	399	265	134
FL	1922	3148	-1226	1243	1821	-578	3166	4969	-1803
GA	1086	893	193	526	445	81	1612	1338	274
HI	189	133	56	97	71	26	286	204	82
ID	159	137	22	79	62	17	237	199	38
IL	2649	2772	-123	1280	1098	182	3929	3870	59
IN	1032	1026	6	521	372	149	1553	1398	155
IA	497	564	-67	293	241	52	791	805	-14
KS	476	515	-39	260	222	38	737	737	-0
KY	503	624	-121	315	221	94	817	845	-28
LA	695	839	-144	389	284	105	1084	1123	-39
ME	162	242	-80	104	77	27	265	319	-54
MD	962	811	151	488	410	78	1450	1221	229
MA	1435	1322	113	689	685	4	2124	2007	117
MI	2232	2124	108	900	996	-96	3131	3120	11
MN	1011	774	237	431	346	85	1442	1120	322
MS	291	497	-206	193	179	14	484	676	-192
MO	1024	1373	-349	507	462	45	1531	1835	-304
MT	123	113	10	73	60	13	196	173	23
NE	308	293	15	159	101	58	467	394	73
NV	170	175	-5	97	89	8	268	264	4
NH	215	165	50	106	63	43	320	228	92
NJ	1976	1547	429	976	778	198	2952	2325	627
NM	222	204	18	117	91	26	339	295	44
NY	5271	3517	1754	2007	2159	-152	7278	5676	1602
NC	1096	860	236	543	412	131	1639	1272	367
ND	109	142	-33	67	57	10	175	199	-24
OH	2343	2317	26	1067	927	140	3409	3244	165
OK	568	560	8	317	198	119	885	758	127
OR	531	484	47	254	262	-8	785	746	39
PA	2482	3269	-787	1238	1573	-335	3720	4842	-1122
RI	208	250	-42	104	122	-18	312	372	-60
SC	494	529	-35	264	184	80	758	713	45
SD	100	131	-31	62	49	13	162	180	-18
TN	832	865	-33	421	341	80	1254	1206	48
TX	3187	2480	707	1628	1110	518	4815	3590	1225
UT	248	119	129	121	78	43	369	197	172
VT	91	89	2	47	32	15	138	121	17
VA	1050	666	384	572	401	171	1622	1067	555
WA	834	742	92	447	373	74	1281	1115	166
WV	256	427	-171	163	180	-17	419	607	-188
WI	1016	931	85	469	406	63	1486	1337	149
WY	87	57	30	49	25	24	136	82	54
Outlying	399	134	265	338	110	228	737	244	493
Other	896	0	896	43	0	43	938	0	938
Total	51104	47582	3522	24670	22948	1722	75774	70530	5244

Appendix 7: Ratio of Part A and Part B contributions to disbursements by state, 1985

State	Part A	Part B	Total
AL	0.79	1.10	0.88
AK	5.92	4.67	5.51
AZ	0.93	0.90	0.92
AR	0.83	0.88	0.84
CA	1.07	0.87	0.99
CO	1.49	1.60	1.53
CT	1.38	1.37	1.38
DE	1.96	1.17	1.70
DC	1.78	0.94	1.51
FL	0.61	0.68	0.64
GA	1.22	1.18	1.20
HI	1.42	1.37	1.40
ID	1.16	1.27	1.19
IL	0.96	1.17	1.02
IN	1.01	1.40	1.11
IA	0.88	1.22	0.98
KS	0.92	1.17	1.00
KY	0.81	1.42	0.97
LA	0.83	1.37	0.97
ME	0.67	1.35	0.83
MD	1.19	1.19	1.19
MA	1.09	1.01	1.06
MI	1.05	0.90	1.00
MN	1.31	1.24	1.29
MS	0.59	1.08	0.72
MO	0.75	1.10	0.83
MT	1.09	1.22	1.13
NE	1.05	1.57	1.19
NV	0.97	1.10	1.01
NH	1.30	1.68	1.41
NJ	1.28	1.25	1.27
NM	1.09	1.29	1.15
NY	1.50	0.93	1.28
NC	1.27	1.32	1.29
ND	0.76	1.17	0.88
OH	1.01	1.15	1.05
OK	1.01	1.60	1.17
OR	1.10	0.97	1.05
PA	0.76	0.79	0.77
RI	0.83	0.85	0.84
SC	0.93	1.44	1.06
SD	0.76	1.27	0.90
TN	0.96	1.24	1.04
TX	1.28	1.47	1.34
UT	2.08	1.56	1.87
VT	1.03	1.46	1.14
VA	1.58	1.43	1.52
WA	1.12	1.20	1.15
WV	0.60	0.91	0.69
WI	1.09	1.16	1.11
WY	1.53	1.95	1.66
Other	0	0	0
Outlying	2.98	3.07	3.02
Average	1.07	1.08	1.07

Appendix 8: Part A and Part B contributions and disbursements per beneficiary by state, 1985 (\$)

State	Part A		Part B			Total			Net
	Contributed	Disbursed	Net	Contributed	Disbursed	Net	Contributed	Disbursed	
AL	1185	1494	-309	645	586	59	1830	2080	-250
AK	10481	1771	8710	3992	855	3137	14474	2627	11847
AZ	1484	1596	-112	740	826	-85	2225	2422	-197
AR	1067	1291	-223	556	634	-78	1624	1925	-301
CA	2018	1893	125	984	1135	-151	3002	3028	-26
CO	2286	1533	753	1101	687	415	3387	2220	1168
CT	2160	1561	599	1011	739	272	3171	2300	871
DE	3147	1608	1539	893	764	129	4040	2372	1668
DC	4380	2467	1913	1095	1165	-70	5475	3632	1843
FL	978	1602	-624	633	927	-294	1611	2529	-918
GA	1705	1402	303	826	699	127	2531	2101	430
HI	1922	1354	568	987	723	264	2909	2076	832
ID	1389	1200	189	691	543	148	2080	1744	337
IL	1883	1971	-87	910	781	129	2793	2751	42
IN	1516	1508	8	766	547	219	2282	2055	228
IA	1161	1317	-156	685	563	122	1846	1879	-33
KS	1419	1535	-116	776	662	114	2195	2196	-1
KY	1044	1296	-252	653	459	194	1697	1755	-57
LA	1534	1851	-317	859	627	232	2392	2478	-85
ME	976	1459	-484	625	464	161	1601	1924	-323
MD	2077	1752	326	1054	886	169	3132	2637	495
MA	1800	1659	142	865	859	6	2665	2518	147
MI	2014	1917	97	812	899	-87	2826	2816	10
MN	1879	1438	441	800	643	157	2679	2081	598
MS	871	1488	-617	578	536	42	1449	2024	-575
MO	1424	1910	-486	706	643	63	2130	2552	-423
MT	1193	1097	95	712	583	129	1904	1680	224
NE	1385	1316	68	713	454	259	2098	1770	328
NV	1767	1814	-47	1010	923	88	2777	2737	40
NH	1774	1363	411	873	521	352	2647	1884	763
NJ	1963	1537	426	970	773	197	2933	2310	623
NM	1529	1408	121	808	628	181	2337	2036	301
NY	2233	1490	743	850	914	-64	3083	2404	678
NC	1449	1138	312	719	545	174	2168	1683	486
ND	1195	1562	-367	736	627	109	1930	2189	-259
OH	1706	1688	19	777	675	102	2483	2363	120
OK	1392	1372	21	776	485	291	2168	1857	311
OR	1461	1331	130	699	720	-22	2160	2051	109
PA	1395	1837	-442	696	884	-188	2091	2721	-630
RI	1438	1725	-287	715	842	-127	2153	2567	-414
SC	1338	1434	-96	716	499	217	2054	1932	122
SD	989	1294	-305	615	484	131	1604	1778	-174
TN	1353	1407	-53	685	555	131	2039	1961	77
TX	2041	1589	453	1043	711	332	3085	2300	785
UT	1892	909	983	928	596	332	2819	1505	1315
VT	1348	1313	35	688	472	216	2036	1785	251
VA	1711	1086	625	933	654	279	2644	1740	904
WA	1607	1429	178	860	718	142	2468	2148	320
WV	903	1508	-605	577	636	-59	1480	2144	-664
WI	1558	1427	131	719	622	97	2277	2049	228
WY	2010	1310	701	1120	574	546	3130	1884	1247
Outlying	1317	442	875	1115	363	752	2432	805	1627
Other	3894	0	3894	186	0	186	4080	0	4080
Total	1692	1576	117	817	760	57	2509	2335	174

Appendix 9: Part A and Part B contributions and disbursements per population by state, 1985 (\$)

State (thousand)	Population ¹	Part A			Part B			Total		
		Contributed	Disbursed	Net	Contributed	Disbursed	Net	Contributed	Disbursed	Net
AL	4021	153	193	-40	83	76	8	236	268	-32
AK	521	329	56	274	125	27	99	455	83	372
AZ	3161	185	199	-14	92	103	-11	278	302	-25
AR	2360	162	196	-34	84	96	-12	246	292	-46
CA	26353	219	205	14	107	123	-16	326	328	-3
CO	3232	208	140	69	100	63	38	308	202	106
CT	3175	290	209	80	136	99	36	426	309	117
DE	626	375	192	183	106	91	15	482	283	199
DC	623	513	289	224	128	136	-8	641	425	216
FL	11367	169	277	-108	109	160	-51	279	437	-159
GA	5976	182	149	32	88	74	14	270	224	46
HI	1050	180	127	53	92	68	25	272	194	78
ID	1005	158	136	21	78	62	17	236	198	38
IL	11539	230	240	-11	111	95	16	340	335	5
IN	5500	188	187	1	95	68	27	282	254	28
IA	2873	173	196	-23	102	84	18	275	280	-5
KS	2448	195	210	-16	106	91	16	301	301	-0
KY	3724	135	168	-33	84	59	25	219	227	-7
LA	4484	155	187	-32	87	63	23	242	250	-9
ME	1164	139	208	-69	89	66	23	228	274	-46
MD	4391	219	185	34	111	93	18	330	278	52
MA	5823	246	227	19	118	118	1	365	345	20
MI	9088	246	234	12	99	110	-11	345	343	1
MN	4191	241	185	57	103	83	20	344	267	77
MS	2613	111	190	-79	74	69	5	185	259	-73
MO	5036	203	273	-69	101	92	9	304	364	-60
MT	825	149	137	12	89	73	16	238	210	28
NE	1605	192	183	9	99	63	36	291	245	45
NV	939	181	186	-5	104	95	9	285	281	4
NH	998	215	165	50	106	63	43	321	228	93
NJ	7568	261	204	57	129	103	26	390	307	83
NM	1450	153	141	12	81	63	18	234	203	30
NY	17767	297	198	99	113	122	-9	410	319	90
NC	6258	175	137	38	87	66	21	262	203	59
ND	685	159	207	-49	98	83	14	256	291	-34
OH	10774	217	215	2	99	86	13	316	301	15
OK	3302	172	170	3	96	60	36	268	230	39
OR	2688	198	180	18	95	97	-3	292	278	15
PA	11865	209	276	-66	104	133	-28	314	408	-95
RI	967	215	259	-43	107	126	-19	323	385	-62
SC	3333	148	159	-11	79	55	24	227	214	13
SD	708	141	185	-44	88	69	19	229	254	-25
TN	4766	175	181	-7	88	72	17	263	253	10
TX	16382	195	151	43	99	68	32	294	219	75
UT	1644	151	72	78	74	47	26	225	120	105
VT	535	171	166	4	87	60	27	258	226	32
VA	5704	184	117	67	100	70	30	284	187	97
WA	4407	189	168	21	101	85	17	291	253	38
WV	1936	132	221	-89	84	93	-9	216	314	-97
WI	4775	213	195	18	98	85	13	311	280	31
WY	509	172	112	60	96	49	47	268	161	107
Outlying ²	3282	122	41	81	103	34	69	225	74	150
Other ³	4236	211	0	211	10	0	10	222	0	222
Total	238736	214	199	15	103	96	7	317	295	22

1. U.S. Department of Commerce, Bureau of the Census. Statistical abstract of the United States, 1990. 110th ed. Washington, DC: U.S. Government Printing Office, 1990: 20. Table 26.
2. U.S. Department of Commerce, Bureau of the Census. Estimates of the population of Puerto Rico and the outlying areas: 1980 to 1986. Current Population Reports, Series P-25, No. 1009. Washington, DC: U.S. Government Printing Office, July 1987.
3. U.S. Department of Commerce, Bureau of the Census. Statistical abstract of the United States, 1987. 107th ed. Washington, DC: U.S. Government Printing Office, 1987: 9. Table 4.

Appendix 10: Part A and Part B contributions and disbursements per employee by state, 1985 (\$)

State (thousand)	Employees ¹	Part A			Part B			Total		
		Contributed	Disbursed	Net	Contributed	Disbursed	Net	Contributed	Disbursed	Net
AL	1803	341	430	-89	186	169	17	526	598	-72
AK	253	678	115	564	258	55	203	937	170	767
AZ	1477	397	427	-30	198	221	-23	595	647	-53
AR	1051	364	440	-76	190	216	-26	553	656	-102
CA	2937	446	418	28	217	251	-33	663	669	-6
CC	1720	391	262	129	188	117	71	579	380	200
CT	1711	538	389	149	252	184	68	790	573	217
DE	315	746	381	365	212	181	31	957	562	395
DC	322	992	559	433	248	264	-16	1241	823	418
FL	5338	360	590	-230	233	341	-108	593	931	-338
GA	2865	379	312	67	184	155	28	563	467	96
HI	481	393	277	116	202	148	54	594	424	170
ID	471	337	291	46	167	132	36	504	423	82
IL	5673	467	489	-22	226	194	32	693	682	10
IN	2735	377	375	2	191	136	55	568	511	57
IA	1416	351	398	-47	207	170	37	558	569	-10
KS	1244	383	414	-31	209	178	31	592	592	-0
KY	1695	297	368	-72	186	130	55	482	499	-16
LA	1987	350	422	-72	196	143	53	546	565	-19
ME	552	293	438	-145	188	139	48	481	578	-97
MD	2253	427	360	67	217	182	35	644	542	102
MA	3061	469	432	37	225	224	1	694	656	38
MI	4352	513	488	25	207	229	-22	719	717	3
MN	2234	453	346	106	193	155	38	645	501	144
MS	1211	240	410	-170	159	148	12	400	558	-159
MO	2472	414	555	-141	205	187	18	619	742	-123
MT	405	303	279	24	181	148	33	484	427	57
NE	813	379	360	19	195	124	71	574	485	90
NV	509	335	344	-9	191	175	17	526	519	8
NH	537	400	307	93	197	117	79	597	425	172
NJ	3853	513	402	111	253	202	51	766	603	163
NM	646	343	316	27	181	141	40	524	457	68
NY	8308	634	423	211	242	260	-18	876	683	193
NC	3106	353	277	76	175	133	42	528	410	118
ND	336	323	423	-99	199	170	29	522	592	-70
OH	5130	457	452	5	208	181	27	665	632	32
OK	1573	361	356	5	201	126	75	563	482	81
OR	1327	400	365	36	192	197	-6	592	562	30
PA	5519	450	592	-143	224	285	-61	674	877	-203
RI	500	417	500	-83	207	244	-37	624	744	-120
SC	1563	316	338	-23	169	118	51	485	456	29
SD	347	289	378	-89	179	141	38	468	519	-51
TN	2245	371	385	-15	188	152	36	558	537	21
TX	8053	396	308	88	202	138	64	598	446	152
UT	730	339	163	176	166	107	60	506	270	236
VT	277	330	321	9	168	116	53	498	437	61
VA	2872	365	232	134	199	140	60	565	372	193
WA	2105	396	352	44	212	177	35	609	530	79
WV	765	334	558	-224	214	235	-22	548	793	-246
WI	2374	428	392	36	198	171	27	626	563	63
WY	253	346	225	121	193	99	94	539	324	214
Outlying ²	837	477	160	317	404	131	272	880	292	589
Other ³	2151	416	0	416	20	0	20	436	0	436
Total	118763	430	401	30	208	193	15	638	594	44

1. U.S. Department of Commerce, Bureau of the Census. Statistical abstract of the United States, 1987. 107th ed. Washington, DC: U.S. Government Printing Office, 1987: 377. Table 641.
 2. U.S. Department of Commerce, Bureau of the Census. Statistical abstract of the United States, 1990. 110th ed. Washington, DC: U.S. Government Printing Office, 1990: 820. Table 1420.
- Hiles G. Current employment report, March 1986. Tamuning, GU: Guam Department of Labor, Bureau of Labor Statistics, 1986: 3. Release #86-04.
- U.S.V.I. Bureau of Labor Statistics. U.S. Virgin Islands economic indicators. St. Croix, VI: WSVI-TV, Channel 8, 1988: 7.
3. U.S. Department of Commerce, Bureau of the Census. Statistical abstract of the United States, 1990. 110th ed. Washington, DC: U.S. Government Printing Office, 1990: 339. Table 552.

Appendix 11: Part A and Part B contributions and disbursements per gross state product (\$ million) by state, 1985 (percent)

State	Gross state product ¹	Part A		Part B			Total		Net	
		Contributed	Disbursed	Net	Contributed	Disbursed	Net	Contributed		Disbursed
AL	51919	1.18	1.49	-0.31	0.64	0.59	0.06	1.83	2.08	-0.25
*AK	21237	0.81	0.14	0.67	0.31	0.07	0.24	1.12	0.20	0.91
AZ	48589	1.21	1.30	-0.09	0.60	0.67	-0.07	1.81	1.97	-0.16
AR	29926	1.28	1.54	-0.27	0.67	0.76	-0.09	1.94	2.30	-0.36
*CA	496850	1.16	1.09	0.07	0.57	0.65	-0.09	1.73	1.74	-0.02
CO	56713	1.19	0.80	0.39	0.57	0.36	0.22	1.76	1.15	0.61
CT	64696	1.42	1.03	0.39	0.67	0.49	0.18	2.09	1.51	0.57
DE	10966	2.14	1.09	1.05	0.61	0.52	0.09	2.75	1.61	1.14
DC	27185	1.18	0.66	0.51	0.29	0.31	-0.02	1.47	0.97	0.49
FL	164340	1.17	1.92	-0.75	0.76	1.11	-0.35	1.93	3.02	-1.10
GA	94121	1.15	0.95	0.21	0.56	0.47	0.09	1.71	1.42	0.29
HI	17994	1.05	0.74	0.31	0.54	0.39	0.14	1.59	1.13	0.45
ID	13027	1.22	1.05	0.17	0.61	0.48	0.13	1.82	1.53	0.30
IL	198138	1.34	1.40	-0.06	0.65	0.55	0.09	1.98	1.95	0.03
IN	80262	1.29	1.28	0.01	0.65	0.46	0.19	1.93	1.74	0.19
IA	42100	1.18	1.34	-0.16	0.70	0.57	0.12	1.88	1.91	-0.03
KS	40364	1.18	1.28	-0.10	0.64	0.55	0.09	1.82	1.83	-0.00
KY	51234	0.98	1.22	-0.24	0.61	0.43	0.18	1.60	1.65	-0.05
LA	79719	0.87	1.05	-0.18	0.49	0.36	0.13	1.36	1.41	-0.05
ME	15896	1.02	1.52	-0.50	0.65	0.48	0.17	1.67	2.01	-0.34
MD	70580	1.36	1.15	0.21	0.69	0.58	0.11	2.05	1.73	0.32
MA	106148	1.35	1.25	0.11	0.65	0.65	0.00	2.00	1.89	0.11
MI	143719	1.55	1.48	0.07	0.63	0.69	-0.07	2.18	2.17	0.01
MN	71183	1.42	1.09	0.33	0.60	0.49	0.12	2.03	1.57	0.45
MS	30819	0.94	1.61	-0.67	0.63	0.58	0.05	1.57	2.19	-0.62
MO	79220	1.29	1.73	-0.44	0.64	0.58	0.06	1.93	2.32	-0.38
MT	11543	1.06	0.98	0.09	0.63	0.52	0.12	1.70	1.50	0.20
NE	25639	1.20	1.14	0.06	0.62	0.39	0.23	1.82	1.54	0.28
NV	17918	0.95	0.98	-0.03	0.54	0.50	0.05	1.50	1.47	0.02
NH	16585	1.29	0.99	0.30	0.64	0.38	0.26	1.93	1.37	0.56
NJ	142302	1.39	1.09	0.30	0.69	0.55	0.14	2.07	1.63	0.44
NM	23887	0.93	0.85	0.07	0.49	0.38	0.11	1.42	1.23	0.18
NY	336071	1.57	1.05	0.52	0.60	0.64	-0.05	2.17	1.69	0.48
NC	93821	1.17	0.92	0.25	0.58	0.44	0.14	1.75	1.36	0.39
ND	10725	1.01	1.32	-0.31	0.62	0.53	0.09	1.64	1.86	-0.22
OH	167645	1.40	1.38	0.02	0.64	0.55	0.08	2.03	1.94	0.10
OK	50842	1.12	1.10	0.02	0.62	0.39	0.23	1.74	1.49	0.25
OR	38922	1.37	1.24	0.12	0.65	0.67	-0.02	2.02	1.92	0.10
PA	172990	1.43	1.89	-0.46	0.72	0.91	-0.19	2.15	2.80	-0.65
RI	13961	1.49	1.79	-0.30	0.74	0.87	-0.13	2.23	2.66	-0.43
SC	41832	1.18	1.26	-0.08	0.63	0.44	0.19	1.81	1.70	0.11
SD	9297	1.08	1.41	-0.33	0.67	0.53	0.14	1.75	1.94	-0.19
TN	67560	1.23	1.28	-0.05	0.62	0.50	0.12	1.86	1.79	0.07
TX	307615	1.04	0.81	0.23	0.53	0.36	0.17	1.57	1.17	0.40
UT	23172	1.07	0.51	0.56	0.52	0.34	0.19	1.59	0.85	0.74
VT	7915	1.15	1.12	0.03	0.59	0.40	0.18	1.74	1.53	0.21
VA	95369	1.10	0.70	0.40	0.60	0.42	0.18	1.70	1.12	0.58
WA	71756	1.16	1.03	0.13	0.62	0.52	0.10	1.79	1.55	0.23
WV	23541	1.09	1.81	-0.73	0.69	0.76	-0.07	1.78	2.58	-0.80
WI	72716	1.40	1.28	0.12	0.65	0.56	0.09	2.04	1.84	0.20
WY	12777	0.68	0.45	0.24	0.38	0.20	0.19	1.07	0.64	0.42
Outlying ²	17534	2.28	0.76	1.51	1.93	0.63	1.30	4.20	1.39	2.81
Other ³	31100	2.88	0.00	2.88	0.14	0.00	0.14	3.02	0.00	3.02
Total	4011980	1.27	1.19	0.09	0.61	0.57	0.04	1.89	1.76	0.13

1. U.S. Department of Commerce, Bureau of the Census. Statistical abstract of the United States, 1990. 110th ed. Washington, DC: U.S. Government Printing Office, 1990: 433.
2. U.S. Department of Commerce, Bureau of the Census. Statistical abstract of the United States, 1990. 110th ed. Washington, DC: U.S. Government Printing Office, 1990: 820. Table 1420.
Hutcherson JT. Annual economic review and statistical abstract, 1989. Tamuning, GU: Guam Department of Commerce, Economic Research Center, 1989: 36. Table 12.
- U.S.V.I. Bureau of Labor Statistics. U.S. Virgin Islands economic indicators. St. Croix, VI: WSVI-TV, Channel 8, 1988: 2.
3. U.S. Department of Commerce, Bureau of the Census. Statistical abstract of the United States, 1990. 110th ed. Washington, DC: U.S. Government Printing Office, 1990: 426. Table 691.

Appendix 12: Population, employees, and gross state product per beneficiary by state, 1985

State	Per beneficiary		
	Population	Employees	Gross state product (\$ thousand)
AL	7.8	3.5	1001
AK	31.8	15.5	12972
AZ	8.0	3.7	1231
AR	6.6	2.9	836
CA	9.2	4.5	1739
CO	11.0	5.8	1928
CT	7.5	4.0	1518
DE	8.4	4.2	1469
DC	8.5	4.4	3726
FL	5.8	2.7	836
GA	9.4	4.5	1478
HI	10.7	4.9	1831
ID	8.8	4.1	1141
IL	8.2	4.0	1409
IN	8.1	4.0	1180
IA	6.7	3.3	983
KS	7.3	3.7	1203
KY	7.7	3.5	1064
LA	9.9	4.4	1759
ME	7.0	3.3	959
MD	9.5	4.9	1524
MA	7.3	3.8	1332
MI	8.2	3.9	1297
MN	7.8	4.2	1323
MS	7.8	3.6	923
MO	7.0	3.4	1102
MT	8.0	3.9	1121
NE	7.2	3.7	1152
NV	9.7	5.3	1857
NH	8.2	4.4	1370
NJ	7.5	3.8	1414
NM	10.0	4.5	1648
NY	7.5	3.5	1423
NC	8.3	4.1	1241
ND	7.5	3.7	1180
OH	7.8	3.7	1221
OK	8.1	3.9	1245
OR	7.4	3.6	1070
PA	6.7	3.1	972
RI	6.7	3.5	964
SC	9.0	4.2	1134
SD	7.0	3.4	918
TN	7.8	3.7	1099
TX	10.5	5.2	1971
UT	12.6	5.6	1770
VT	7.9	4.1	1167
VA	9.3	4.7	1555
WA	8.5	4.1	1382
WV	6.8	2.7	831
WI	7.3	3.6	1114
WY	11.7	5.8	2935
Outlying	10.8	2.8	579
Other	18.4	9.4	1352
Total	7.9	3.9	1328

Appendix 13: Payroll tax and Part A general revenue contribution per beneficiary, population, employees, and gross state product by state, 1985

State	Per beneficiary		Per population		Per employee		Per gross state product (percent)	
	OASDHI	General revenue	OASDHI	General revenue	OASDHI	General revenue	OASDHI	General revenue
AL	1078	107	139	14	310	31	1.08	0.11
AK	9593	888	301	28	621	57	0.74	0.07
AZ	1355	129	169	16	362	35	1.10	0.11
AR	981	86	149	13	334	29	1.17	0.10
CA	1832	186	199	20	405	41	1.05	0.11
CO	2072	213	189	19	354	37	1.08	0.11
CT	1968	192	264	26	490	48	1.30	0.13
DE	2982	165	356	20	707	39	2.03	0.11
DC	4168	212	488	25	944	48	1.12	0.06
FL	874	104	151	18	322	38	1.05	0.12
GA	1556	149	166	16	346	33	1.05	0.10
HI	1735	187	162	17	354	38	0.95	0.10
ID	1271	118	144	13	308	29	1.11	0.10
IL	1714	169	209	21	425	42	1.22	0.12
IN	1381	135	171	17	344	34	1.17	0.11
IA	1045	116	156	17	316	35	1.06	0.12
KS	1282	138	176	19	346	37	1.07	0.11
KY	935	109	121	14	266	31	0.88	0.10
LA	1377	157	139	16	314	36	0.78	0.09
ME	873	102	124	15	262	31	0.91	0.11
MD	1875	202	198	21	385	42	1.23	0.13
MA	1642	158	225	22	428	41	1.23	0.12
MI	1868	146	228	18	476	37	1.44	0.11
MN	1736	143	223	18	418	34	1.31	0.11
MS	780	91	100	12	215	25	0.84	0.10
MO	1303	121	186	17	379	35	1.18	0.11
MT	1070	123	134	15	272	31	0.95	0.11
NE	1262	123	175	17	346	34	1.10	0.11
NV	1575	192	162	20	298	36	0.85	0.10
NH	1614	160	196	19	364	36	1.18	0.12
NJ	1781	183	237	24	465	48	1.26	0.13
NM	1383	145	138	15	310	33	0.84	0.09
NY	2078	155	276	21	590	44	1.46	0.11
NC	1325	124	160	15	322	30	1.07	0.10
ND	1066	128	142	17	289	35	0.90	0.11
OH	1569	138	200	18	420	37	1.28	0.11
OK	1255	138	155	17	326	36	1.01	0.11
OR	1341	120	182	16	368	33	1.25	0.11
PA	1276	119	191	18	411	38	1.31	0.12
RI	1315	123	197	18	381	36	1.36	0.13
SC	1215	124	134	14	287	29	1.07	0.11
SD	889	100	127	14	259	29	0.97	0.11
TN	1237	116	160	15	339	32	1.13	0.11
TX	1842	200	175	19	357	39	0.93	0.10
UT	1719	173	137	14	308	31	0.97	0.10
VT	1231	117	156	15	301	29	1.05	0.10
VA	1537	174	165	19	328	37	0.99	0.11
WA	1450	157	171	19	358	39	1.05	0.11
WV	812	91	119	13	300	34	0.98	0.11
WI	1433	124	196	17	394	34	1.29	0.11
WY	1792	218	153	19	308	37	0.61	0.07
Outlying	1100	217	102	20	398	78	1.90	0.37
Other	3894	0	211	0	416	0	2.88	0.00
Total	1545	147	195	19	393	37	1.16	0.11