ASSESSING THE NONPROFIT HOSPITAL TAX EXEMPTION: A COMPARATIVE ANALYSIS OF NONPROFIT AND FOR-PROFIT HOSPITALS

Alicia L. Meckstroth

Internal Revenue Service R:S:F, 1111 Constitution Avenue, NW, Washington, DC 20224

Costs within the health care sector have risen dramatically in the past decade. Total national health care expenditures currently represent over 12 percent of the United States' Gross National Product (GNP), more than any other developed nation [1]. However, in spite of these large expenditures, approximately 37 million individuals remain uninsured by the American health care system [2] and another 56 million remain underinsured and lack appropriate health care [3]. Hospital care represents almost 40 percent of total health care expenditures, and hospitals, obviously, play a significant role in providing quality health care [4]. The growth of for-profit hospitals has increased the level of competition in the health care field and raises questions regarding the comparative effectiveness of the tax-exempt nonprofit hospitals and the corporate, for-profit hospitals.

This is a study of the financial performance and cost containment of the two types of hospitals. Through an examination of financial data such as operating margins and returns on equity from 1982-87, this analysis examines key differences between the two types of health care providers, including the advantage of tax-exemption for the nonprofits.

Recent discussions involving the reform of health care pivot on ways to encourage more efficient provision of health care for all individuals, including the uninsured. While the larger discussion addresses ideas for national health insurance and cost effectiveness, related issues of importance involve the standards for the nonprofit hospital tax-exemption, particularly in regard to the provision of adequate care for the indigent population.

TAX POLICY AND HOSPITAL TAX EXEMPTION

The Internal Revenue Code currently exempts (nonprofit) hospitals from federal income tax under the charitable purpose clause of subsection 501(c)(3). This section of the tax code, outlined by the 1969 Revenue Ruling 69-545, does not explicitly require that nonprofit hospitals provide charity or uncompensated care to indigent patients in exchange for tax exemption [5]. It does, however, imply that nonprofit hospitals qualify for their exemption by providing health care goods and services in an effective manner that fosters the welfare and development of the community and allows the government to decentralize responsibility for medical care to the private, nonprofit sector [6]. The tax law states that a hospital meets the "community benefit standard" if it provides health care to paying individuals, operates a full-time emergency room open to all individuals, regardless of ability to pay, and participates in the Medicaid and Medicare insurance programs for low-income individuals.

While the tax-exempt, nonprofit hospitals are not explicitly required to administer uncompensated medical care to the indigent population, these hospitals, by nature of their charitable function, often do provide some degree of charitable, uncompensated care in order to meet the community benefit standard. Many low-income individuals are not eligible for the subsidized Medicare and Medicaid and are unable to afford health insurance. Medical treatment for this portion of the population often requires costly emergency and long-term care, rather than less costly preventive treatment. It has been estimated that all hospitals provide approximately \$13 billion in uncompensated

care each year [7]. Caring for the indigent increases the financial burden to hospitals and ultimately contributes to escalating long-run health care costs. These issues raise the questions, then, do nonprofit hospitals, supported by tax exemptions, operate more efficiently than for-profit hospitals, provide a greater degree of charity care, and, in general, better promote the public welfare? This paper presents information that will speak to these issues.

DATA SOURCES

The analysis is based on hospital data as collected by the Statistics of Income Division (SOI) of IRS between 1982-87. The analysis uses data as reported by the nonprofit hospitals on the Form 990: "Return of Organization Exempt from Income Tax," and by the corporate, for-profit hospitals on the Form 1120: "U.S. Corporation Income Tax Return." This paper represents a unique, initial comparison of these two IRS data sources.

In 1987, the American Hospital Association (AHA) identified over 6800 hospitals, 48 percent of which were nonprofit/non-government hospitals and 12 percent of which were corporate, for-profit hospitals [8]. The remaining 40 percent were comprised mostly of state and local hospitals, with smaller numbers of psychiatric, federal, and long-term (both specialty and general care) hospitals.

The data collected by the IRS correspond most closely to the AHA's categories of nonprofit/nongovernment hospitals and investor-owned/for-profit hospitals. Many of these comprise part of multi-hospital systems, which represent the fastest growing part of the hospital sector. Currently there are over 250 nonprofit hospital systems and 50 for-profit systems [9]. In this analysis, only those hospitals, both nonprofit and for-profit, that hold \$1,000,000 or more in total assets are considered. These hospitals hold 99.8 percent of total hospital assets and earn 99.0 percent of total hospital revenue, as reported to the IRS. IRS filing requirements give multi-hospital systems the option of filing either separate or consolidated tax returns. Consolidated returns representing multiple hospitals are counted as only one unit in the IRS statistics. For this reason, it is difficult to compare the actual number of hospitals identified by IRS files with the number of hospitals identified by the AHA.

The nonprofit hospital category, as identified by the IRS, excludes the majority of city, county, and state hospitals and all of the federal hospitals. In addition, the majority of the nonprofit university teaching hospitals are excluded from the sample [10]. In terms of the for-profit category, the relatively small number of for-profit hospitals that file as partnerships are also not included [11]. Despite these limitations, these data can be used to analyze general trends and comparisons between the two groups of hospitals rather than to analyze aggregate totals. (All dollar figures and percent changes, unless otherwise indicated, are adjusted using 1982 constant dollar figures [12].)

TAX EXEMPTIONS AND CHARITY CARE

Along with the federal income tax exemption, nonprofit hospitals receive additional social subsidies, including tax-deductible contributions, state and local tax exemptions for income, property, and sales, and the privilege of financing capital investments with tax-exempt bonds. The nonprofit hospitals cannot, however, distribute any of their earnings to private individuals.

The for-profit hospitals, on the other hand, distribute earnings to shareholders, are taxed at corporate rates, and are not held accountable to the requirements of the nonprofits.

The amount of the total subsidies and exemptions provided exclusively to nonprofit hospitals from federal, state, and local governments was estimated by Rudney and Copeland at \$8.5 billion in 1986, with the value of the federal income tax exemption estimated at 18.8 percent of the total subsidy and the nonprofit hospital use of tax-exempt bond financing estimated at 20.0 percent [13]. In addition, nonprofit hospitals, as represented in the IRS sample, received close to \$1.0 billion in grants from federal, state, and local governments in 1986.

The subsidies and exemptions granted to the nonprofit hospitals increase their ability to fulfill their charitable purpose and effectively provide health care. Many studies on the issues of uncompensated and charity care have been performed, and there is general agreement that nonprofit hospitals, as a group, tend to provide a greater proportion of uncompensated health care than for-profit hospitals. Uncompensated care can be defined as charity care plus bad debt expense from uncollected accounts. The nonprofit hospitals hold more assets as accounts receivable, 15 percent, compared to 10 percent for the for-profits (1987). This may show that nonprofit hospitals tend to incur more bad debt expense, extend more payments for patients, or fail to collect certain accounts. This, then, could possibly imply that nonprofits provide a greater proportion of uncompensated care. A recent report by the GAO stated that approximately 80 percent of the nonprofit hospitals in the study provided an amount of uncompensated care that exceeded the estimated value of their federal and state tax exemptions. However, when the amount of charity care was isolated, approximately 57 percent of nonprofit hospitals provided an amount of charity care that was less than the estimated value of their tax exemptions [14]. The remaining analysis will display the financial differences between the two types of hospitals and will compare their financial ability to provide health care both now and in the future.

GROWTH

Hospital Assets

From 1982-87 the assets of for-profit hospitals grew three times as fast as those of nonprofit hospitals. Total for-profit hospital assets in current dollars grew from \$11.4 billion to \$31.4 billion between 1982-87, a constant dollar growth rate of 135 percent. In contrast, nonprofit hospital assets grew by 45 percent, from \$93.6 billion to \$159.4 billion during these same years. Figure A depicts the differences in the growth rates of total assets and revenues for both nonprofit and for-profit hospitals from 1982-87

Much of the growth in assets can be attributed to multi-hospital systems, or chains. While multi-hospital systems are common for both types of hospitals, a majority of the largest for-profit hospitals comprise part of a system or chain. All hospital systems grew in number by approximately 20 percent from 1981-87, while the total number of independent hospitals actually declined during these years [15].

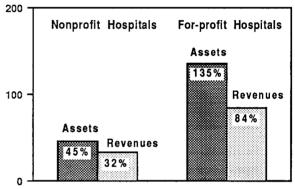
Although significant, the growth in the hospital sector from 1982-87 pales in comparison to the growth during the mid-1970s and early-1980s. During this time, hospitals benefited from the liberal Medicare and Medicaid cost-based reimbursement systems that were designed to cover all "reasonable costs" incurred in the care of patients. In 1983, however, a more competitive "prospective payment system" for Medicare reimbursement was enacted that reimbursed health care providers based on predetermined amounts for specific treatments. This type of reim-

bursement decreased the dollar amount of reimbursements to hospitals, forced hospitals to focus on cost-cutting measures, and increased the level of competition in the hospital industry. In addition, state Medicaid programs also implemented more cost-effective pricing methods (i.e., per-capita payment systems) that had similar effects.

Hospital Revenues and Expenses

Total growth in assets significantly exceeded growth in revenues for both types of hospitals from 1982-87. The revenue of for-profit hospitals, as shown in Figure A, grew two-and-one-half times faster than the total revenue of the nonprofit hospitals, 84 percent compared to 32 percent between the years 1982-87. Interestingly, the overall growth in the hospital sector well exceeded the 22 percent growth rate of the GNP from 1982-87 [16]. Total expenses for both types of hospitals increased slightly faster than revenues during these years, causing many hospitals to incur losses.

Figure A: Changes in Assets and Revenues: 1982-1987 [1]



Assets and Revenues, 1987 (Dollars in Billions)

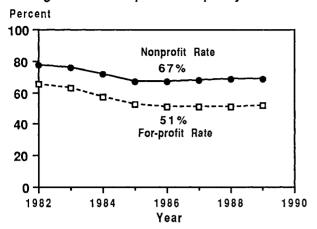
| <u>1987 No</u> | nprofit Hospitals | For-profit Hospitals |
|----------------|-------------------|----------------------|
| Total Assets | \$159.4 | \$31.4 |
| Net Equity [2] | \$ 79.8 | \$ 8.6 |
| Total Revenue | \$141.2 | \$22.1 |
| Net Revenue | \$ 5.7 | 0.9 |

- Percentage changes were converted to constant dollars using the GNP implicit price deflator. However, the dollar amounts displayed at the bottom of the table are represented by current dollars.
- [2] Net Equity = Total Assets Total Liabilities

With assets increasing faster than revenues, it seems that some hospitals, in order to compete in the health care field, may have spent more for development and expansion than what they earned in revenue. Reimbursements from Medicare and Medicaid and private insurance companies fell in relation to costs, exacerbating the financial difficulties of many hospitals. Both hospital expansion and rising health care costs contributed to the declining hospital occupancy rates during the mid-1980s. In addition, as health care costs rose and reimbursement amounts fell, hospitals tended to increase the amount of care performed on an outpatient basis, also contributing to the lower occupancy rates.

The total nonprofit hospital occupancy rate remained substantially higher than the for-profit rate. While the nonprofit rate fell from 78 percent in 1982 to a low of 67 percent in 1986, the for-profit rate dropped from 66 percent in 1982 to a low of only 51 percent in 1986 [17]. Figure B depicts data on occupancy rates, as cited by the American Hospital Association.

Figure B: Hospital Occupancy Rates



(Data Source: American Hospital Association: Hospital Statistics)

The large proportion of uninsured individuals and below-cost Medicare and Medicaid reimbursements [18] have aggravated the budgetary difficulties of hospitals. And, due to increasing costs and possible over-expansion of hospital assets, many hospitals, especially the for-profits, realized losses. For instance, in 1987, an estimated 27 percent of nonprofit hospitals and 33 percent of for-profit hospitals incurred losses. And, as shown in Figure C, only 14 percent of the largest nonprofit hospitals (\$50 million or more in assets), but well over half of the largest for-profit hospitals, incurred losses. (These figures include multi-hospital systems.)

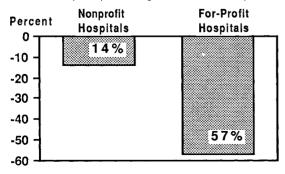
OPERATING MARGINS

In order to determine the relationship of hospital revenues to expenses, median operating margins, or "profit margins," were calculated by dividing the result of total revenues less total expenses by total revenues. To adjust the total revenue of nonprofit hospitals for the sake of comparison with the for-profit hospitals, both the amount of contributions received and the amount of income earned through fundraising efforts were subtracted from total revenue. Expenses attributed to fundraising were also factored out of the equation. The net revenue amount used to calculate the for-profit margin represents revenue earned before taxes and equals total receipts less total deductions.

As health care expenses have continued to rise, hospital operating margins have declined and a majority of hospitals now operate in a loss position. The median figure for the operating margin for all nonprofit hospitals (including hospital systems)

Figure C: Large Hospitals Incurring Revenue Losses, 1987

(All hospitals holding \$50M + in Total Assets)



declined from 0.8 percent in 1985 to -1.4 percent in 1987, while the total for-profit margin fell from 0.6 percent to -1.3 percent. Figure D displays the inflation-adjusted median figures for both types of hospitals between the years 1985-87.

Figure D: Hospital Operating Margins¹

| Size of Assets | Median Operating Margins ² | | |
|----------------|---------------------------------------|------------------------------|------------------------------|
| Size of Assets | 1985 | 1986 | 1987 |
| | (1) | (2) | (3) |
| Nonprofit H | ospitals | | |
| Total | 0.8% -2.0 1.1 2.7 | 0.1% -3.6 0.8 1.7 | -1.4% -3.4 -0.8 0.1 |
| For-profit H | ospitals | | |
| Total | 0.6% 0.6 1.2 - 0.5 | -1.6% -1.6 1.2 -5.6 | -1.3 -1.3 -1.7 -3.4 |

[1] Operating Margin = (Total Revenues - Total Expenses) / Total Revenues
See Footnote [21].

[2] Figures were converted to constant dollars using the GNP implicit price deflator.

The most striking characteristic in the comparison of the two types of hospitals is that the large for-profit hospitals (including hospital systems) achieved less favorable median operating margins than the large nonprofits. This is significant since the largest hospitals, those holding \$50 million or more in total assets, hold the vast majority of assets [19]. In 1987, as displayed in Figure E1, the largest nonprofits had a positive margin of 0.1 percent, compared to a -3.4 percent margin for the for-profits.

Figure E1: Median Operating Margins (%)
Large Hospitals With \$50M+ in Assets

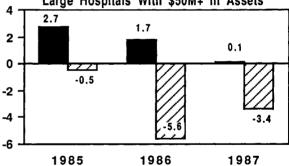
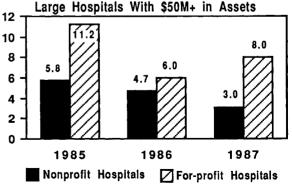


Figure E2: REVISED

Median Operating Margins (%)

Median Operating Margins (%)

Median Operating Margins (%)



Nonprofit hospitals, unlike their for-profit counterparts, receive the benefit of tax-exempt bond financing, which, in effect, allows them to finance investments more cheaply. The large for-profit hospitals, not surprisingly, incur a much larger percentage of total expenses as interest--8 percent--compared to only 3 percent for the nonprofits. This factor helps to explain, in part, the higher nonprofit hospital operating margins.

A revised operating margin, calculated by adding interest expense back into the equation for both types of hospitals, shows different results, however. The revised calculation is based upon the sum of net revenue plus interest expense divided by total revenue. By adding back interest expense to both the nonprofit and for-profit calculations, the nonprofit advantage of tax-exempt bond financing was virtually neutralized. Based upon the revised operating margins, displayed in Figure F, the for-profit hospitals, including the largest ones, generally had higher operating margins than the nonprofits from 1985-87. Figure E2 displays the revised margins for the largest hospitals, showing that in 1987 the for-profits, using the revised formula, earned an 8.0 percent margin, compared to only a 3.0 percent margin for the nonprofits.

Figure F: Revised Operating Margins¹

| Size of Assets | Revised Median Operating Margins ² | | |
|----------------|--|----------------------------|----------------------------|
| | 1985 | 1986 | 1987 |
| | (1) | (2) | (3) |
| Nonprofft H | ospitals | | |
| Total | 3.8% 1.2 4.2 5.8 | 2.6% -0.7 3.5 4.7 | 1.3% -1.2 2.2 3.0 |
| For∍profit H | ospitals | | |
| Total | 4.6% 1.1 4.8 11.2 | 4.1% 4.1 5.2 6.0 | 2.4% 1.5 0.3 8.0 |

^[1] Revised Operating Margin = ((Total Revenues - Total Expenses) + Interest Expense) / Total Revenues

See Footnote [21].

These figures show that after adjusting for the subsidy of tax-exempt bond financing, the nonprofits have not earned as much income relative to expenses as have the for-profits. And, if the value of the federal, state, and local tax exemptions could be easily neutralized in the calculation, the operating margins for the nonprofits would be even lower.

PROFILE: HOSPITAL ASSETS AND INVESTMENTS

The nonprofit and the for-profit hospitals tend to hold a slightly different mix of assets. Nonprofits in 1987 held 46 percent of assets in the form of land, buildings, and equipment (after allowances for accumulated depreciation) and 25 percent as total investment assets [20]. The for-profit hospitals, in 1987, held a similar proportion of assets as land, buildings, and equipment-47 percent; and somewhat more as total investment assets-29 percent. Interestingly, after total liabilities were considered, the nonprofit hospitals, as a group, held almost twice as much equity (total assets less total liabilities) in proportion to total assets as did the for-profits, 50 percent compared to 27 percent.

Many factors have encouraged hospital investment in capital assets. These include new technological advances, new health care needs and demands, the lack of incentives to share costs with

other hospitals, and competitive pressures between hospitals. A greater degree of cost-sharing among hospitals (i.e., in terms of investment in equipment) would possibly help to stem rising health care costs.

RETURNS ON EQUITY

Total returns on equity were calculated by dividing net revenue by total equity [21]. Total equity, in this case, equals total assets less total liabilities. As in the case of the operating margins, both nonprofit and for-profit hospitals saw returns decline from 1985-87. Figure G displays inflation-adjusted median figures for returns on equity for both nonprofit and for-profit hospitals during the years 1985-87.

Figure G: Hospital Returns on Equity¹

| Size of Assets | Median Returns on Equity ² | | |
|----------------|---------------------------------------|------------------------------|----------------------------|
| SIZE OF ASSETS | 1985 | 1986 | 1987 |
| | (1) | (2) | (3) |
| Nonprofit H | ospitals | | |
| Total | 3.4% -1.4 4.4 6.8 | 2.6% -3.2 3.4 5.3 | 0.4% -1.7 1.8 2.7 |
| For-profit H | ospitals | | |
| Total | 5.3% 4.4 12.7 2.9 | 5.1% 5.1 24.1 -12.1 | 1.2% 0.1 34.4 1.5 |

^[1] Return on Equity = Net Revenue / (Total Assets - Total Liabilities) See Footnote [21].

While the total for-profit returns were larger than the total nonprofit returns, isolating the largest hospitals indicates that the nonprofits earned a greater return on equity than the for-profits in all three years. In 1987 the large nonprofits realized a 2.7 percent return, while the large for-profits realized a 1.5 percent return. Figure H1 displays the returns on equity for the largest hospitals from 1985-87.

As in the case of the operating margin, the original return on equity calculation for both types of hospitals was revised in order to neutralize the nonprofit advantage of tax-exempt bond financing. In the revised calculation, interest expense is added back to net revenue. The revised figures, as shown in Figure I, indicate that the for-profit hospitals, including the largest ones, earned significantly higher returns on equity than the non-profits after the effect of tax-exempt financing was neutralized. For example, in 1987, as displayed in Figure H2, the largest for-profit hospitals, using the revised calculation, showed a 30.4 percent return, compared to only 7.5 percent for the nonprofits.

The substantial difference shows that hospitals have invested a substantial amount and that the for-profit hospitals have incurred significantly greater interest expenses than have the non-profits. The tendency for the for-profits to hold significantly lower equity balances in relation to the nonprofits also helps to explain the higher for-profit returns.

HOSPITALS AS PROVIDERS OF HEALTH CARE

When the effect of the nonprofit subsidy of tax-exempt bond financing was neutralized, the for-profit hospitals and hospital systems realized greater returns on equity and had higher revenues in relation to expenses than did the nonprofit hospitals. Given this scenario, are the nonprofits effectively using the

^[2] Figures were converted to constant dollars using the GNP implicit price deflator.

^[2] Figures were converted to constant dollars using the GNP implicit price deflator.

Figure H1: Median Returns on Equity (%)
Large Hospitals With \$50M+ in Assets

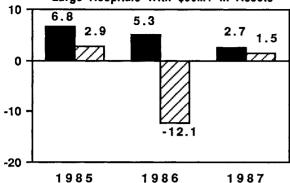
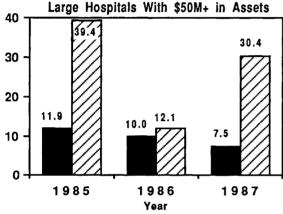


Figure H2: REVISED

Median Returns on Equity (%)



☑ For-profit Hospitals

Figure I: Revised Returns on Equity¹

■ Nonprofit Hospitals

| Size of Assets | Revised Median Returns on Equity ² | | |
|---|---|--------------|--------------|
| | 1985 | 1986 | 1987 |
| | (1) | (2) | (3) |
| Nonprofit i | depitale | • | |
| Total | . 7.3% | 6.0% | 4.1% |
| \$1,0000,000 under \$10,000,000 \$10,000,000 under \$50,000,000 | | 0.8 7.9 | 0.8 6.1 |
| \$50,000,000 or more | 11.9 | 10.0 | 7.5 |
| For-profit i | -tospitals | | , |
| Total | 27.7% | 16.6% | 13.5% |
| \$1,0000,000 under \$10,000,000 | | 14.9 | 7.6 |
| \$10,000,000 under \$50,000,000 | 53.3 | 12.4 12.1 | 33.8 30.4 |

^[1] Return on Equity = (Net Revenue + Interest Expense) / (Total Assets - Total Liabilities)
See Footnote [21].

benefits inherent in their tax exemptions? Or, conversely, are their operating margins and returns explained, in part, by the amount of uncompensated care, and Medicare and Medicaid care that they provide, or by the prices that they charge in comparison to the for-profits? Many questions exist regarding the amount of

charity care provided by hospitals and the reasons behind their differences in financial performance. Researchers need more effective means to collect detailed data from all hospitals on these issues in order to answer specific questions and to properly evaluate the standards for the nonprofit hospital tax exemption.

The financial losses and low occupancy rates of many hospitals, particularly the for-profits, may raise questions regarding the extent to which capital assets have been utilized. This emphasizes the importance of cost-sharing initiatives between hospitals and a possible need for increased emphasis on efficient prioritization of hospital investment needs.

Health care policy must address many challenging questions. Specifically, how can the American health system best provide cost-effective care to everyone while also dealing with the growing concerns of AIDS, trauma care, and the uninsured. The health care system bears part of the burden of other social welfare problems. However, the lack of appropriate health care for large segments of the population only aggravates the other societal problems, thereby contributing to a cycle that creates ever increasing health care and hospital costs.

Hospitals, obviously, play a large role in the provision of health care. Many questions exist for policymakers regarding how to best assess the standards for the nonprofit hospital tax exemption and how to best support both types of hospitals in order to ensure the provision of quality health care for all individuals.

ACKNOWLEDGMENTS

The author would like to extend her thanks to the many individuals from the Statistics of Income Division who made contributions to this paper and provided helpful suggestions. Among these are Dan Skelly, Jim Hobbs, Mike Alexander, Peggy Riley, Cecelia Hilgert, Adrianne Bell, Jonathan Shook, Beth Kilss, Wendy Alvey, Kate Flaherty, Nat Shaifer, Clementine Brittain, and Jeff Rosenfeld, a consultant with IRS. Questions and comments regarding this research are welcome.

NOTES AND REFERENCES

- [1] "AMA Journal Calls for Health Care Overhaul: Special Issue Cites 'Moral Imperative' for Change, Saying Millions Lack Access to Treatment," Spencer Rich, *The* Washington Post, May 14, 1991, p. A17.
- [2] Charles N. Oberg and Cynthia Longseth-Polich, "Medicaid: Entering the Third Decade," *Health Affairs*, Fall 1988, p. 90.
- [3] Emily Friedman, "The Uninsured from Dilemma to Crisis," *Journal of the American Medical Association*, May 15, 1991, Vol. 265, No. 19, p. 2492.
- [4] John Copeland and Gabriel Rudney, "Tax Analysts, Special Report: Federal Tax Subsidies for Not-for-Profit Hospitals," Tax Notes, March 26, 1990, p. 1560.
- [5] Revenue Ruling 69-545, Cumulative Bulletin 1969-2, 117.
- [6] H.R. Rep. No. 1860, 75th Congress, 3rd Session, 19(1938), accompanying the Revenue Act of 1938, reprinted in Cumulative Bulletin 1939-1 (Part II), 728, 742.
- [7] Eli Ginsberg and Miriam Ostow, "Beyond Universal Health Insurance, Journal of the American Medical Association, May 15, 1991, Vol. 265, No. 19, p. 2561.
- [8] AHA Hospital Statistics: A Comprehensive Summary of U.S. Hospitals, 1990-91, American Hospital Association, Chicago, IL., 1990, Table 1, p. 2-7.
- [9] American Hospital Association (AHA) Guide to the Health

^[2] Figures were converted to constant dollars using the GNP implicit price deflator.

- Care Field, 1991 edition, American Hospital Association, Chicago, IL., p. B3.
- [10] The financial information of university hospitals is embedded in the Form 990 return filed by the university to which the hospital is affiliated. There are 98 medical schools that operate hospitals. These represent less than 3.0 percent of total nonprofit hospitals. See: World Directory of Medical Schools, 6th edition, World Health Organization, Geneva, 1988, p. 274-296.
- [11] There are approximately 64 hospitals that file partnership income tax returns. These hold less than 2.5 percent of total for-profit hospital assets.
- [12] The GNP implicit price deflator was used in all applicable instances. Please refer to the Economic Report of the President, U.S. Government Printing Office, Washington, DC, February 1990, Tables C-3 and C-5.
- [13] Copeland and Rudney, Ibid., Table 6, p. 1565.
- [14] "Nonprofit Hospitals: Better Standards Needed for Tax Exemption," U.S. General Accounting Office: Report to the Chairman, Select Committee on Aging, House of Representatives, May 1990, GAO/HRD-90-84.
- [15] American Hospital Association (AHA) Guide to the Health Care Field, 1988 and 1982 editions, American Hospital Association, Chicago, IL, p. B3 and 287-88, respectively.
- [16] Economic Report of the President, Ibid., Table C-2.
- [17] AHA Hospital Statistics: A Comprehensive Summary of U.S. Hospitals, 1990-91, American Hospital Association, Chicago, IL., 1990, Table 1, p. 5.
- [18] Oberg and Longseth-Polich, Ibid., p. 85.
- [19] In 1987, 95 percent of the largest for-profit hospitals and 75 percent of the largest nonprofit hospitals held the

- majority of assets.
- [20] In order to best compare the two types of hospitals in terms of "investment assets," the following definitions were used: 1) Nonprofit hospital investment assets = savings and temporary cash investments + cash + investments in land, buildings, and equipment + investments in securities + other investments; and 2) For-profit hospital investment assets = cash (including savings and temporary cash investments) + investments in government obligations + other current assets + loans to stockholders + mortgage and real estate loans + other investments.
- [21] As in the case of the operating margin calculation, the return on equity calculation was adjusted for the sake of comparison by 1) subtracting from total revenue both the amount of contributions received and the amount of income earned through fundraising efforts; and 2) by factoring out expenses attributable to fundraising.

ADDITIONAL REFERENCES

Gray, Bradford H., editor. For-Profit Enterprise in Health Care/ Committee on Implications of For-Profit Enterprise in Health Care. Institute of Medicine, Wash. DC, National Academy Press, 1986.

Herzlinger, Regina E. and Krasker, William S. "Who Profits from Nonprofits?" *Harvard Business Review*, Jan.-Feb. 1987, p. 93-106

Peregrine, Michael W. and Broccolo, Bernadette M., editors. The Health Care Industry. Gardner, Carton, and Douglas, Chicago, IL., Commerce Clearing House, 1988.

Sullivan, T.J. and Moore, V. "A Critical Look at Recent Developments in Tax-Exempt Hospitals," *Journal of Health and Hospital Law*, March 1990, Vol. 23 No. 3, p. 65-83.