Hospital Care in America: A Comparative Analysis of Nonprofit and For-Profit Providers

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Total national health care expenditures currently represent over 12 percent of the United States' Gross Domestic Product (GDP), the highest share of any developed nation [1]. Hospitals represent nearly 40 percent of total U.S. health care expenditures, and obviously play a significant role in providing quality health care [2].

Today there is more competition than ever between tax-exempt, nonprofit hospitals and corporate, for-profit hospitals; and this raises questions regarding the effectiveness and appropriateness of these two types of health care providers. During much of the 1980s both types of hospitals experienced budgetary strains and the holdings of corporate, for-profit hospitals grew at three times the rate of those of tax-exempt, nonprofit hospitals. The increasing number of for-profit hospitals and hospital chains has restructured a sector of the economy that was once dominated by nonprofit hospitals.

Through an examination of comparative financial indicators such as asset and revenue growth rates, operating margins, debt-to-equity ratios, and returns on equity, this paper examines key economic differences between nonprofit and for-profit hospitals, including the advantage of tax-exemption for the nonprofits.

■ Hospital Tax Exemption and Community Benefits

The Internal Revenue Code currently exempts nonprofit hospitals from federal income tax through the "charitable purpose clause" of subsection 501(c)(3). This section of the tax code implies that nonprofit hospitals qualify for their exemption by providing health care goods and services in a manner that fosters the welfare of a community and allows the government to decentralize responsibility for medical care to the private, nonprofit sector. A voluntary, nonprofit hospital meets the "community benefit standard" for tax exemption 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 Medicare and Medicaid insurance programs. The exemption does not explicitly require that nonprofit hospitals provide charity or uncompensated care to indigent patients.

Along with the Federal income tax exemption, nonprofit hospitals receive additional social subsidies. These subsidies include tax-deductible contributions and the privilege of financing investments with tax-exempt bonds. Furthermore, depending on state and local variations, nonprofit hospitals often receive exemptions from income, property, and sales tax. However, unlike for-profits, these hospitals cannot distribute any of their earnings to private individuals. The for-profit hospitals, on the other hand, are taxed at corporate rates, distribute earnings to shareholders, and are not accountable to the "community benefit" standard of the nonprofits.

Rudney and Copeland estimated that the total value of all subsidies and exemptions provided to nonprofit hospitals from the Federal and from state and local governments equaled approximately $8.5 billion in 1986. Both the federal income tax exemption and the use of tax-exempt bond financing each equal approximately 20 percent of the total subsidy [3].

Charity and Uncompensated Care

Medical treatment for those individuals who cannot afford health insurance and are not eligible for public assistance often involves costly emergency and long-term care, rather than less costly preventive treatment. It has been estimated that all hospitals, both nonprofit and for-profit, provide an estimated $13 billion in uncompensated care each year [4]. This amount represents between 6 and 7 percent of total hospital revenues. The subsidies and exemptions granted to the nonprofit hospitals increase their ability to fulfill their charitable purpose, to provide care to the indigent, and to maintain their financial stability.

There is some agreement that nonprofit hospitals tend to provide a greater proportion of uncompensated and charity care than for-profit hospitals. This may result from the community benefit mission of the nonprofits or from

the possibility that for-profit hospitals tend to serve fewer low-income patients due to the clientele on which they focus and the areas in which they operate.

Nonprofit hospitals provide many services in support of their charitable purpose, including operating health-related programs and services in their communities, conducting medical research, and providing instruction for medical students. In the current environment, which includes recent Congressional dialogue regarding the creation of more explicit standards for tax-exemption and intermediate sanctions for violations, nonprofit hospitals increasingly are being called upon to fulfill their charitable mission and to provide health care as effectively and efficiently as possible.

The Issue of Comparative Effectiveness

These issues raise the questions, then, do nonprofit hospitals, supported by tax exemptions, provide a greater degree of charity care, better promote the public welfare, and operate more efficiently when compared to for-profit hospitals? All hospitals, particularly the nonprofits, can serve their communities through the use of preventive efforts and programs designed to cope with the problems that often lead to or exacerbate the need for hospital care.

Policymakers concerned with the standards for nonprofit hospital tax-exemption have attempted to distinguish the nonprofits from the for-profits in terms of the amount of uncompensated care provided and the prices charged. This analysis, unfortunately, can provide no substantive information on either of these important issues. It will, however, depict the financial abilities of both nonprofit and for-profit hospitals by measuring growth rates, operating margins, debt-to-equity ratios, and returns on equity; factors very important to the provision of both present and future health care.

■ Data Sources

The following analysis is based on hospital financial data from tax reporting years 1987 through 1989 as collected by the Internal Revenue Service (IRS) and as sampled and processed by Statistics of Income of IRS. The data used is reported by the tax-exempt, 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 [5]." The data for a given year, depending on the accounting period of the organization, can include data for that year and part of the following year. When a year is cited in the text, for instance, 1987, it refers to the 1987-1988 period.

All public hospitals and other health-related organizations (i.e. nursing homes) which file the Form 990 were omitted from the analysis. In addition, data on assets and revenues for the nonprofit, university teaching hospitals were added [6]. A number of the hospitals in the analysis comprise part of multi-hospital systems, which represent the fastest growing part of the hospital sector. Throughout the analysis hospitals will be referred to as "small" and "large;" small hospitals are those holding less than $50 million in total assets while large hospitals are those which hold $50 million or more in total assets.

■ Comparative Financial Abilities: Nonprofit and For-Profit Hospitals

Growth in Hospital Assets, Revenues, and Expenses

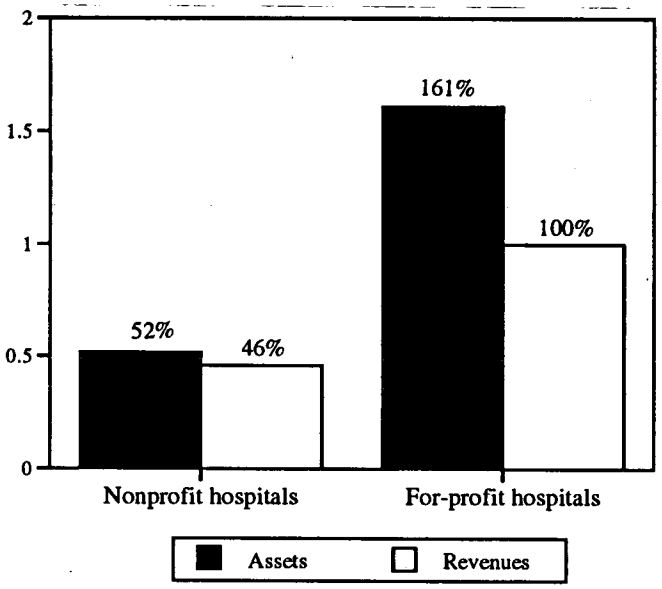
The American Hospital Association (AHA) identified nearly 6,800 hospitals, 48 percent of which are nonprofit and 11 percent of which are for-profit [7]. In addition, there are currently over 250 nonprofit health systems and 50 for-profit systems in the United States [8]. The data incorporate both hospitals and hospital systems; when the term "hospital" is used it includes both hospitals and systems.

The nonprofit hospitals, as a group, held over five times as many assets as the for-profit hospitals in the late 1980s. From 1982 to 1989, however, the assets of for-profit hospitals grew over three times as fast as the assets of nonprofit hospitals. For-profit assets grew to an estimated $38.4 billion, a constant dollar growth rate of over 160 percent from 1982 to 1989. In contrast, nonprofit hospital assets grew by over 50 percent during these years, to $178.0 billion.

Total growth in assets exceeded growth in revenues for both types of hospitals. Like assets, total for-profit hospital revenues, $26.3 billion in 1989, grew over twice as fast as the total nonprofit hospital revenues, $169.5

billion, during the same period. For-profit revenues grew 100 percent, compared to 46 percent for the nonprofits. Exhibit 1 depicts the differences in the growth rates of total assets and total revenues for both types of hospitals and hospital systems from 1982 to 1989. Overall, the growth in the hospital sector markedly exceeded the 29 percent growth rate of the Gross National Product during the same period [9].

Exhibit 1.--Increases in Assets and Revenues: 1982-1989



Note: Percentage changes are displayed in constant dollars.

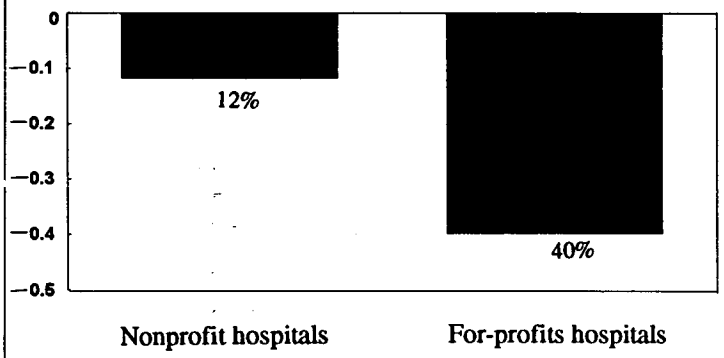
Although significant, the growth in the hospital sector during the 1980s pales in comparison to the growth during the mid-1970s and early-1980s. During that time, hospitals benefitted from the relatively liberal Medicare and Medicaid cost-based reimbursement systems that were designed to cover all "reasonable costs" incurred in the care of patients, including capital construction and acquisition costs. For-profit corporations capitalized on the potential for growth and profit in the health care market by acquiring hospitals or forming hospital systems.

In 1983, however, the more competitive "prospective payment system" for Medicare reimbursement was enacted that reimbursed health care providers based on predetermined amounts for specific treatments. Since this type of reimbursement decreased the dollar amount of reimbursements to hospitals, it forced hospitals to focus on cost-cutting measures, and it increased the level of competition in the hospital industry. State Medicaid programs also implemented more cost-effective pricing methods that had similar effects. As the competition in the hospital industry increased, many nonprofits found it more difficult to fund charitable care than in the past.

Total expenses for both types of hospitals increased faster than revenues during these years, causing many to incur losses. A large number of hospitals, especially the for-profits, realized losses. For instance, a quarter of all nonprofit hospitals and almost half of all for-profit hospitals incurred revenue losses in 1989. And, as shown in Exhibit 2, only 12 percent of the large nonprofit hospitals, but 40 percent of the large for-profit hospitals incurred losses.

Exhibit 2.--Large Hospitals Incurring Revenue Losses: 1989-1990

[All hospitals holding $50 million or more in assets]

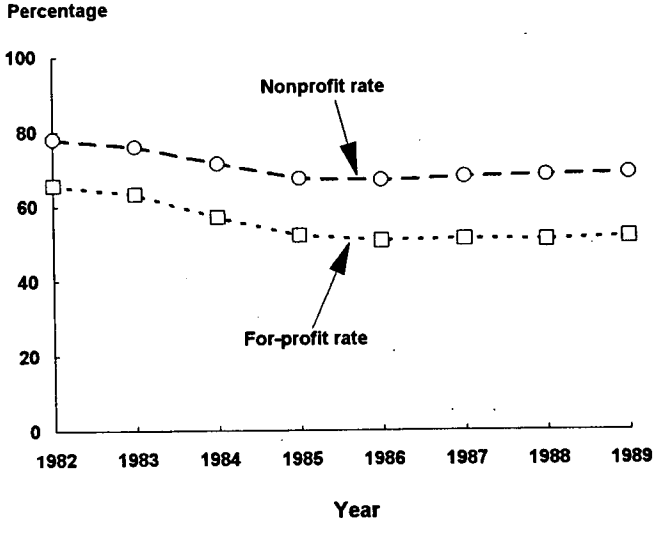


Many factors contributed to the budgetary difficulties of hospitals. Hospital expansion, rising health care costs, reactions to more cost-effective pricing methods, and less than full cost reimbursements all contributed to declining hospital occupancy rates during the mid-1980s. These factors, in turn, led to budgetary strain for many hospitals.

The total nonprofit hospital occupancy rate remained substantially higher than the for-profit rate, 69 percent compared to 52 percent in 1989 [10]. Exhibit 3 displays hospital occupancy rates for 1982 to 1989. Hospitals

tended to increase the amount of care performed on an outpatient basis, thereby contributing to the lower occupancy rates.

Exhibit 3.-- Hospital Occupancy Rates



Data source: American Hospital Association: *Hospital Statistics*

Oftentimes, in order to better compete, many nonprofit hospitals have begun to engage in business activity that generates income which is unrelated to their tax-exempt, charitable purpose. Well over one-third of all nonprofit hospitals and nearly three-fifths of the large nonprofits reportedly paid a tax on "unrelated business gross income (UBI)" in 1989. The tax on UBI represents one way in which policy addresses the issue of unfair competition between nonprofit and for-profit organizations.

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. A minimum or reasonable operating margin is necessary for a hospital to support a constant or increased service capacity for its patients and community. 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. In recent years, contributions to nonprofit hospitals typically have represented only 2 percent of total revenue. However, contributions held by hospital foundations were not included in these totals.

As health care expenses rose, hospital operating margins tended to decline for many hospitals from the early to mid 1980s [11]. Exhibit 4 displays the median figures for operating margins for both types of hospitals for 1987 through 1989. The median operating margin for all nonprofit hospitals remained relatively constant over the years 1987, 1988, and 1989, equaling 2.0, 2.2, and 2.1 percent, respectively. The median for-profit operating margin, 1.9 percent in 1987, dropped below zero in 1988, to -0.1 percent, and remained below the nonprofit margin in 1989, at 1.3 percent.

Exhibit 4.--Hospital Operating Margins [1]

Size of hospital [2]	Median operating margins		
	1987	1988	1989
	Percent		
Nonprofit			
Total	2.0	2.2	2.1
Small hospitals	1.5	1.5	1.1
Large hospitals	3.3	3.2	3.5
For-profit			
Total	1.9	-0.1	1.3
Small hospitals	1.9	-0.1	1.3
Large hospitals	-0.3	0.2	1.6

[1]Operating Margin = (Total Revenues - Total Expenses) / Total Revenues

[2]Small hospitals hold less than $50 million in assets while large hospitals hold $50 million or more.

One striking trend in the data shows that the large nonprofit hospitals, those holding $50 million or more in assets, have tended to earn greater margins than the for-profit hospitals of comparable size. For instance, Exhibit 5, which depicts operating margins for all of the large hospitals, shows that in 1989 the large nonprofits realized a 3.5 percent margin, compared to only 1.6 percent for the large for-profits [12].

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 for-profit hospitals, not surprisingly, incur

Exhibit 5.--Median Operating Margins: Large Hospitals
[All hospitals holding $50 million or more in assets]

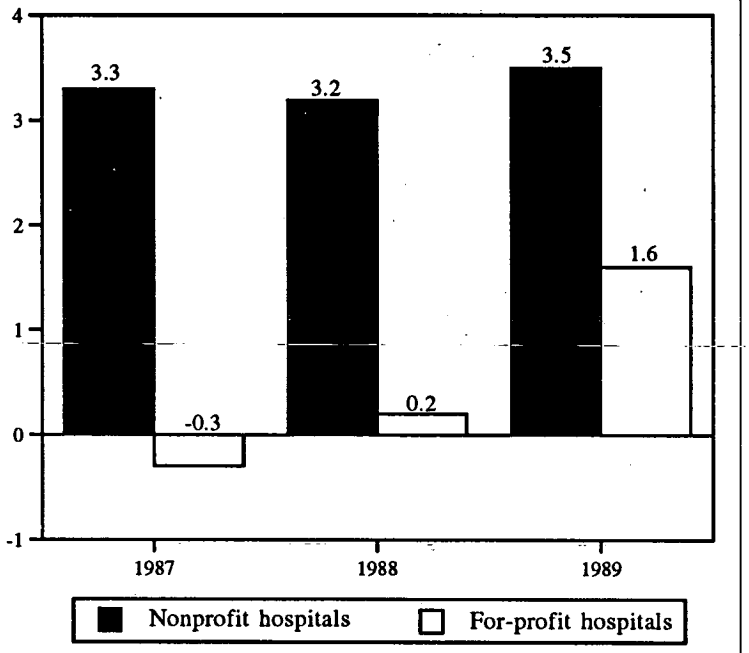


Exhibit 6 .--"Revised"Operating Margins [1]

Size of hospital [2]	"Revised" median operating margins		
	1987	1988	1989
	Percent		
Nonprofit			
Total	4.6	4.6	4.7
Small hospitals	3.7	3.7	3.5
Large hospitals	6.2	6.0	6.3
For-profit			
Total	5.7	3.1	4.8
Small hospitals	4.8	0.2	3.2
Large hospitals	11.5	10.6	12.0

[1]Revised Operating Margin = ((Total Revenues - Total Expenses) + Interest Expenses) / Total Revenues
[2]Small hospitals hold less than $50 million in assets while large hospitals hold $50 million or more.

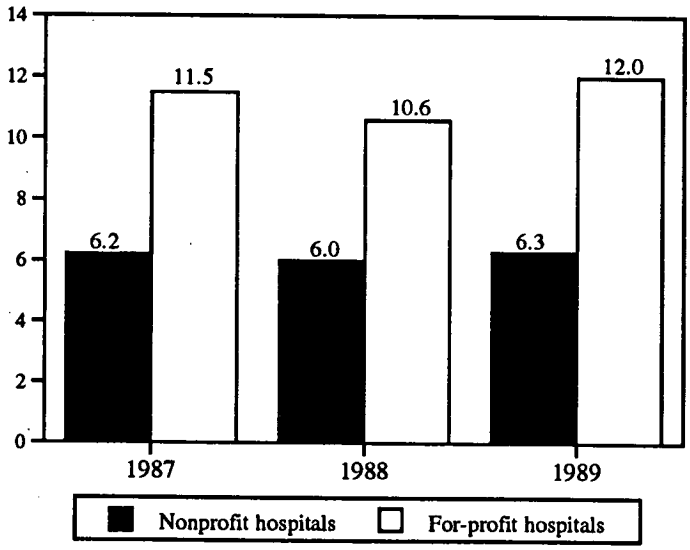
a greater percentage of total expenses as interest, 9 percent, compared to 3 percent for the nonprofits [13]. This factor helps to explain, in part, the higher nonprofit hospital operating margins. Differences in depreciation expense, 7 percent of total expenses for the for-profits, compared to 5 percent for the nonprofits, also contributes somewhat to the difference [14]. For-profit hospitals may tend to rely more heavily on accelerated depreciation methods compared to the nonprofits.

Neutralizing the Tax Exemption: Revised Operating Margins

A "revised" operating margin, calculated by adding interest expense back into the equation for both types of hospitals, shows different results [15]. By adding back interest expense, the formula attempts to neutralize the nonprofit advantage of tax-exempt bond financing [16]. As displayed in Exhibit 6, the for-profit revised operating margin exceeded the nonprofit margin in two of the three years. The for-profit margin narrowly exceeded the nonprofit margin in 1989, 4.8 percent compared to 4.7 percent.

Separating hospitals by size shows that the small nonprofits, those holding less than $50 million in assets, realized greater revised margins than the small for-profits in two of the three years. The large for-profits, on the other hand, realized notably higher revised margins compared to the large nonprofits. For instance, Exhibit 7, which displays the revised margins for the large hospitals, shows that in 1989 the large for-profits realized a 12.0 percent margin, compared to 6.3 percent for the large nonprofits. These figures show that after adjusting for

Exhibit 7.--"Revised" Median Operating Margins: Large Hospitals
[All hospitals holding $50 million or more in assets]



the subsidy of tax-exempt bond financing, the nonprofit hospitals, particularly the large ones, did not earn as much income relative to expenses as did the for-profits.

Debt and Equity

The nonprofit and for-profit hospitals tend to hold a relatively similar mix of assets. However, nonprofit hospitals hold a slightly greater proportion of assets as land, buildings, and equipment, 46 percent, compared to 40 percent for the for-profits; and for-profit hospitals hold a somewhat greater proportion of assets as investments, 31 percent compared to 25 percent for the nonprofits [17].

For-profit hospitals, as a group, tend to incur much more debt when compared to the nonprofits. Exhibit 8 depicts median debt-to-equity ratios for 1987 through 1989 for both types of hospitals. Total equity, in this case, equals total assets less total liabilities. The ratios were calculated for each hospital by dividing debt (or liabilities) by equity (or net worth).

Exhibit 8 .--Hospital Debt-to-Equity Ratios [1]

Size of hospital [2]	Median debt-to-equity ratios		
	1987	1988	1989
	Percent		
Nonprofit			
Total	1.0	1.0	1.0
Small hospitals	0.9	0.9	0.9
Large hospitals	1.1	1.1	1.1
For-profit			
Total	7.4	24.5	7.0
Small hospitals	8.5	28.7	7.5
Large hospitals	4.5	5.7	4.1

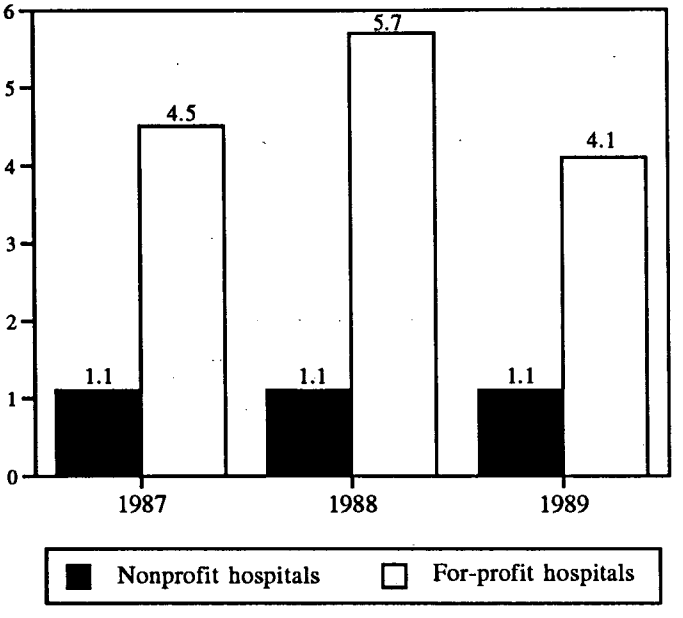
[1] Debt-Equity Ratio (Nonprofit Hospitals) = Total Liabilities/ Total Fund Balances (or Net Worth)
Debt-Equity Ratio (For-profit Hospitals) = Total Liabilities/ Stockholder's Equity

[2] Small hospitals hold less than $50 million in assets while large hospitals hold $50 million or more.

In 1989 the median nonprofit hospital had a ratio of slightly less than one, indicating that the amount of nonprofit "equity," or net worth, actually exceeded the amount of debt acquired by a majority of these hospitals. The median for-profit hospital, on the other hand, had well over seven times more debt than equity. Higher levels of debt put an organization at greater risk during financially difficult times.

Exhibit 9, which focuses on the debt-to-equity ratios of the large hospitals, shows that while the gap between the nonprofit and for-profit hospitals narrowed as the hospitals increased in size, the for-profits still incurred a notably higher level of debt. In 1989, the large for-profits had a debt-to-equity ratio of 4.1, compared to 1.1 for the large nonprofits.

Exhibit 9.--Median Debt-to-Equity Ratios: Large Hospitals
[All hospitals holding $50 million or more in assets]



For-profit hospitals, in general, tend to incur much higher levels of debt compared to the nonprofits. To attract both physicians and patients in the competitive hospital market, hospitals often finance new investments in the form of buildings and equipment. Many other factors encourage hospitals to incur debt. These include, among others, new technological advances, new health care needs and demands, competitive pressures, and the possible lack of built-in incentives to share costs and equipment with other hospitals.

Returns on Equity

As another measure of comparative financial performance, total returns on equity, or net worth in the case of

the nonprofits, were calculated by dividing the amount of net revenue by the amount of equity [18]. Growth in the net worth or equity of an organization, through a strong return on equity, is important for financial strength and resiliency. Unlike the for-profits, the nonprofits can not utilize the equity markets to help finance capital projects, but instead must rely on internal funds and new contributions and gifts.

Exhibit 10 displays median figures for returns on equity for both nonprofit and for-profit hospitals for 1987 through 1989. The returns for the two types of hospitals were relatively comparable in 1987, although in 1988 the median nonprofit hospital earned a higher return. The median for-profit, in that year, had a negative return. However, in 1989 the for-profit return exceeded that of the nonprofit, 6.6 percent compared to 5.1 percent.

Exhibit 10.--Hospital Returns on Equity [1]

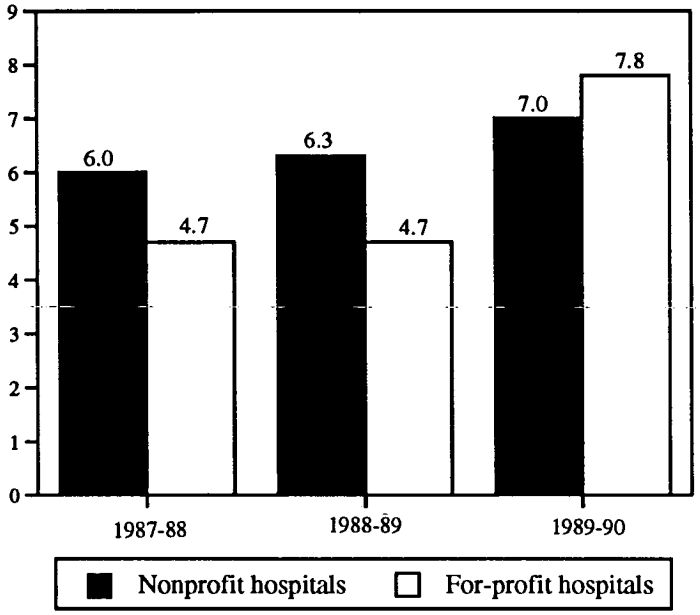
Size of hospital [2]	Median returns on equity		
	1987	1988	1989
	Percent		
Nonprofit			
Total	4.3	4.6	5.1
Small hospitals	3.4	3.6	3.5
Large hospitals	6.0	6.3	7.0
For-profit			
Total	4.4	-0.4	6.6
Small hospitals	4.4	-0.4	6.3
Large hospitals	4.7	4.7	7.8

[1]Return on Equity = Net Revenue / (Total Assets - Total Liabilities)
[2]Small hospitals hold less than $50 million in assets while large hospitals hold $50 million or more.

Isolating the large hospitals indicates that the nonprofits earned a greater return on equity than the for-profits in both 1987 and 1988. Exhibit 11, which depicts returns on equity for only the large hospitals, shows that in 1988 the large nonprofits realized a 6.3 percent return, while the large for-profits realized a 4.7 percent return. In 1989 both groups realized increased returns over 1988, although the large for-profit rate surpassed that of the nonprofit, 7.8 percent to 7.0 percent.

As in the case of the operating margins, when interest expense was added back in order to neutralize the non-

Exhibit 11.--Median Returns on Equity: Large Hospitals
[All hospitals holding $50 million or more in assets]



profit advantage of tax-exempt bond financing, results differed. Although the results are not shown here, under a revised scenario the for-profit hospitals earned notably greater returns on equity than the nonprofits [19].

■ Comparative Effectiveness: Questions and Answers

This was a comparative analysis of nonprofit and for-profit hospitals and hospital systems. It showed that nonprofit hospitals had greater operating margins and much lower debt-to-equity ratios than did for-profit hospitals. Returns on equity for the two types of hospitals varied during the three year period studied. This part of the analysis controlled for contributions and fundraising income of nonprofit hospitals. When other social subsidies, such as tax-exempt bond financing, were added to the analysis, different results occurred. The for-profit hospitals, after neutralizing the nonprofit advantage of tax-exempt bond financing, earned higher operating margins and higher returns on equity than did the nonprofits.

These differences in operating margins, returns on equity, and debt-to-equity ratios raise questions about the economics of for-profit and nonprofit hospitals. How, for instance, are key financial indicators affected by differences in uncompensated care and Medicare and Med-

icaid care? Do the financial losses and low occupancy rates of many hospitals, particularly the for-profits, reflect cost pressures and the possible under-utilization of assets and do they emphasize the importance of cost-sharing initiatives between hospitals? There are many unanswered questions about hospital charity care, quality of care, capital investment, cost efficiency, and the financial performance of the two types of hospitals.

Researchers need more effective means to collect detailed data from all hospitals in order to address the differences in care, spending, and performance. Health care policy must address many challenging questions. How, for example, can American health care best provide cost-effective care to everyone? And, how can hospitals best help to provide this care? Historically, nonprofit hospitals have served their communities through the provision of hospital care and community health programs and services. Within the increasingly competitive hospital industry and with changes to the American health care system approaching, nonprofit hospitals must carefully define their charitable mission and both types of hospitals must operate effectively. Hopefully, these comparative data on the finances of nonprofit and for-profit hospitals can play a part in understanding these important issues.

■ Acknowledgments

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■ Footnotes

[1] Spencer Rich, "AMA Journal Calls for Health Care Overhaul: Special Issue Cites 'Moral Imperative' for Change," *The Washington Post*, May 14, 1991, p. A17.

[2] John Copeland and Gabriel Rudney, "Federal Tax Subsidies for Not-for-Profit Hospitals," *Tax Notes*: Tax Analysts, Special Report, March 26, 1990, p. 1560.

[3] Copeland and Rudney, *Ibid.*, Table 6, p. 1565.

[4] Eli Ginsberg and Miriam Ostow, "Beyond Universal Health Insurance," *Journal of the American Medical Association*, May 15, 1991, Vol. 265, No. 19, p. 2561.

[5] Samples of returns were taken in order to compile data from both of these sources. For the nonprofit hospitals, 100 percent of hospitals and hospital systems holding $10 million or more in assets were included. The smaller hospitals were sampled at lower sampling rates ranging from 8 percent to 34 percent. For the for-profit hospitals, 100 percent of hospitals and systems holding $50 million in assets were included in the sample. The smaller for-profit hospitals were sampled at lower sampling rates, ranging from 5 percent to 50 percent.

[6] These data were obtained from the National Center for Education Statistics, U.S. Department of Education, Office of Educational Research and Improvement, "Integrated Postsecondary Education Data System," 1989/1990 Finance Survey. In addition, in terms of the for-profit category, the relatively small number of for-profit hospitals that file as partnerships were not incorporated into the analysis. There are over 60 hospitals that file partnership income tax returns. These hold less than an estimated 2.5 percent of total for-profit hospital assets.

[7] American Hospital Association, *American Hospital Association (AHA) Hospital Statistics: A Comprehensive Summary of U.S. Hospitals*, 1990-91, American Hospital Association, Chicago, 1990, Table 1, pgs. 2-7. The remaining 40 percent of hospitals were comprised mostly of state and local government hospitals, with smaller numbers of federal and long-term care hospitals.

[8] American Hospital Association, *American Hospital Association (AHA) Guide to the Health Care Field*, 1991 edition, American Hospital Association, Chicago, p. B3. 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.

[9] Council of Economic Advisors, *Economic Report of the President*, U.S. Government Printing Office, Washington, DC, 1993, Table B-2, pg. 350.

[10] American Hospital Association, *American Hospital Association (AHA) Hospital Statistics: A Comprehensive Summary of U.S. Hospitals*, 1990-91, American Hospital Association, Chicago, 1990, Table 1, p. 5.

[11] This statement is based on preliminary *Statistics of Income*/IRS hospital data for the years 1982, 1983, 1985 and 1986.

[12] In 1987, 95 percent of the large for-profit hospitals and 75 percent of the large nonprofit hospitals held the majority of assets.

[13] These data represent reporting year 1989, but are typical of 1987 through 1989.

[14] These data represent reporting year 1989, but are typical of 1987 through 1989.

[15] The revised calculation is based upon the sum of net revenue plus interest expense divided by total revenue.

[16] Some for-profit hospitals have benefitted from the use of tax-exempt industrial development bonds. Adding back interest expense accounts for this benefit as well.

[17] These data represent reporting year 1989, but are typical of 1987 through 1989.

[18] As in the case of the operating margin calculation, the return on equity calculation was adjusted for the sake of comparison by factoring out the amount of contributions, the amount of income earned through fundraising efforts, and the amount of expenses attributable to fundraising.

[19] Due to space considerations, a table showing a "revised" return on equity, which adds interest back into the equation, is not shown here. (Note: These data can be added if HFMA is interested.)

■ Additional References

Cleverly, William O. and Harvey, Roger K. "Does Hospital Financial Performance Measure Up." *Healthcare Financial Management*, May 1992, pgs. 20-26.

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

Gray, Bradford H. Gray, editor. *The New Health Care for Profit: Doctors and Hospitals in a Competitive Environment*. Institute of Medicine, National Academy Press, Washington, DC, 1983.

Herzlinger, Regina E. and Krasker, William S. "Who Profits from Nonprofits?" *Harvard Business Review*, Jan-Feb, 1992, pgs. 93-106.

Kushman, John E. and Muckton, Carol F. "Further Evidence on the Relative Performance of Proprietary and Nonprofit Hospitals." *Medical Care*, March 1977, Vol. 15, pgs. 189-204.

Oberg, Charles N. and Longseth-Polich, Cynthia. "Medicaid: Entering the Third Decade," *Health Affairs*, Fall 1988, p. 90.

Pattison, Robert V. and Katz, Hallie M. "Investor-Owned and Not-for-Profit Hospitals." *New England Journal of Medicine*, August 11, 1983, Vol. 309, pgs. 347-353.

Peregrine, Michael W. and Broccolo, Bernadette M., editors. *The Health Care Industry*. Gardner, Carton, and Douglas, Commerce Clearing House, Chicago, 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, pgs. 65-83.

U.S. General Accounting Office, "Nonprofit Hospitals: Better Standards Needed for Tax Exemption," Report to the Chairman, Select Committee on Aging, House of Representatives, May 1990, GAO/HRD-90-84, p.3. ■