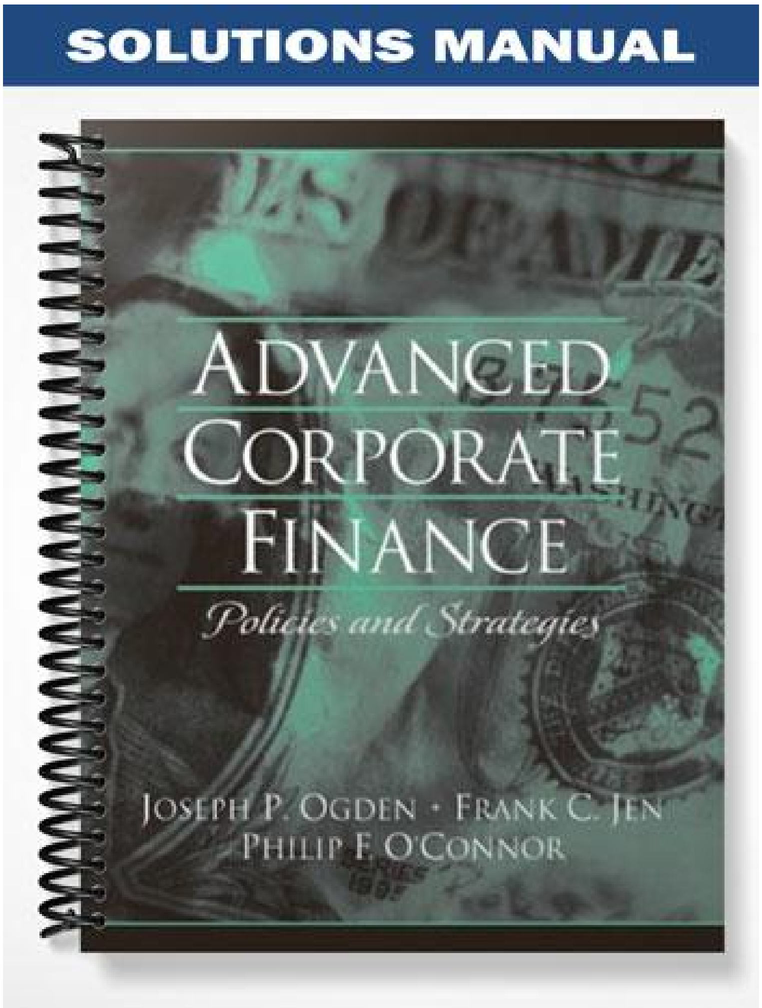
SOLUTIONS MANUAL
ADVANCED CORPORATE FINANCE
Policies and Strategies
JOSEPH P. OGDEN • FRANK C. JEN
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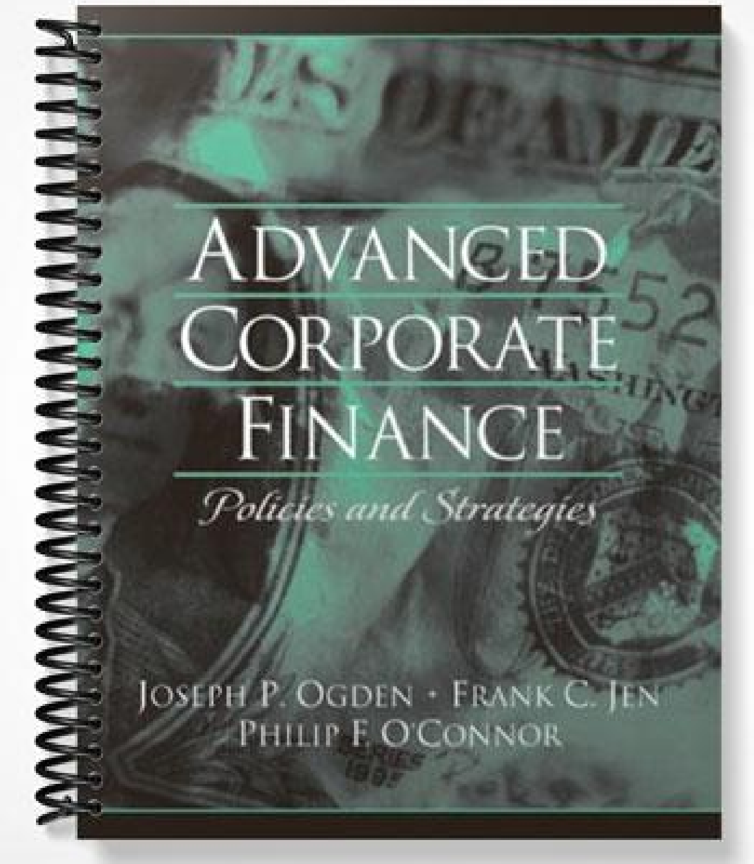

INSTRUCTOR'S MANUAL

ADVANCED CORPORATE FINANCE:
Policies and Strategies

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CHAPTER 1
Empirical Perspectives on the Financial Characteristics of Publicly Traded U.S. Nonfinancial Firms

Guidance

Excluding the appendices, the material in this chapter can be covered in one-half week of lecture (at 3 lecture hours/week).

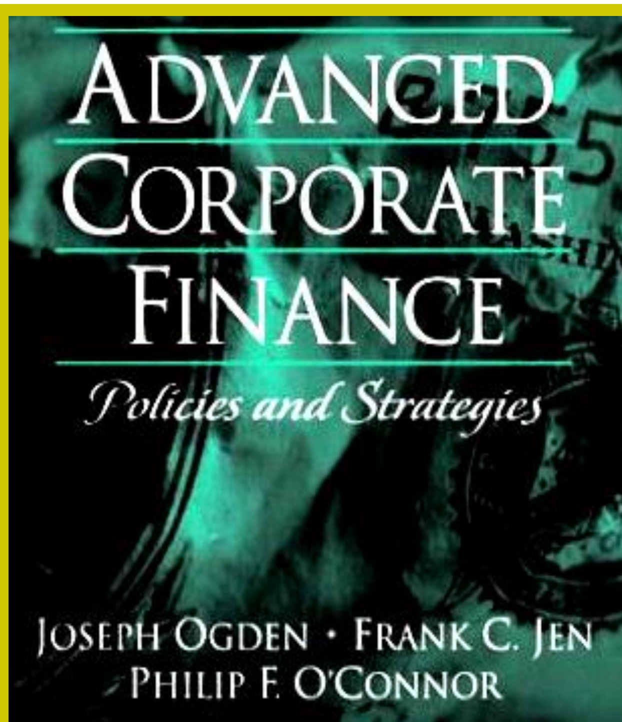
The figures and tables provide empirical perspectives on financial decisions discussed throughout the text. The chart below shows how evidence in each figure and table relate to topics presented in later chapters:

FIGURE	RELATED TOPICS (CHAPTERS)
1-1	Initial public offerings (Chapter 12); Mergers, Acquisitions, and Buyouts (Chapters 16 and 17); Bankruptcies and liquidations (Chapter 18)
1-2A	Capital intensity (various chapters); intangibles (various chapters)
1-2B	Leverage (Chapter 6 and other chapters)
1-3	Market-to-book equity ratio (Chapter 9 and other chapters)
1-4A	Internal cash flow (Chapter 13 and other chapters); Asset sales/divestitures (Chapter 17);
	Issuing debt/liabilities (Chapters 10 and 15); Issuing seasoned equity (Chapter 13)
1-4B	Dividends and stock repurchases (Chapter 14); Acquisitions (Chapter 16); Capital expenditures (various chapters)

1-5 and 1-6	Leverage (Chapter 6 and other chapters)
1-7	Ownership structure (Chapters 3 and 4, other chapters)
TABLE	**RELATED TOPICS (CHAPTERS)**
1-1	Leverage (Chapter 6); Industry and size effects (Chapter 7); Equity valuation (Chapter 9)
1-2	Profitability by industry and firm size (Chapter 7); Equity valuation (Chapter 9)
1-3	Dividend policy (Chapter 14)

Appendix A can be ignored, or used for either of two purposes. *First*, the screening process described can be used to introduce students to Standard & Poor's *Market Insight* database (assuming your institution subscribes to it). *Second*, Table 1.A.1 (Panel B) provides some useful breakdowns of the distribution of U.S. nonfinancials by: S&P index inclusion/exclusion; exchange listing; and firm size (TA).

Appendix B can be ignored, or used to refresh students' knowledge of basic statistics and regression.



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CHAPTER 1

Empirical Perspectives on the Financial Characteristics of Publicly Traded U.S. Nonfinancial Firms

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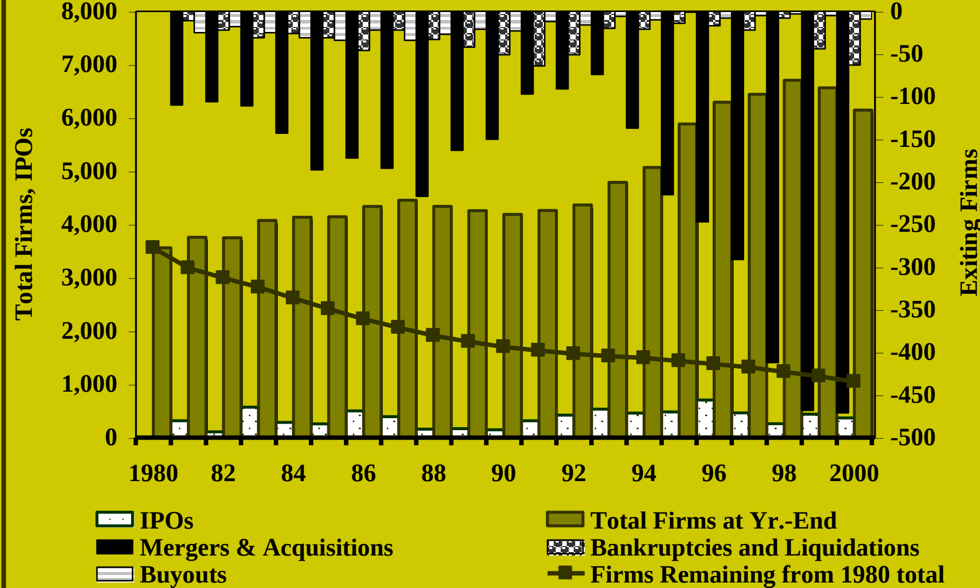
Introduction

- This chapter provides an overview of evidence that reflects the financial policies of publicly traded U.S. nonfinancial firms over the past 20 years, such as:
  - Entry and exit of firms;
  - Composite balance sheets and cash flows;
  - Firms' tendencies to finance growth using internal versus external capital;
  - Cross-sectional and time-series variations in leverage;
  - Market-to-book equity ratios and P/E ratios;
  - Dividend yields and payout ratios.

The Number of Publicly Traded U.S. Nonfinancial Firms Has Changed Substantially Over the Years 1980-2000 Due To:

- Initial Public Offerings (IPOs): 7,355

- Mergers and Acquisitions (M&A): 3,796
- Bankruptcies and Liquidations: 639
- Buyouts: 335



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Composite Total Assets (TA) and Their Composition has also Changed Substantially Over the Years 1980-2000:

- Composite TA increased over 5-fold.
- The proportion of composite TA accounted for by *PP&E* decreased from 56% in 1980 to only 33% in 2000.
- In contrast, the proportion of composite TA accounted for by *Other Noncurrent Assets* (equity investments, intangibles, etc.) increased from 8% in 1980 to 34% in 2000.

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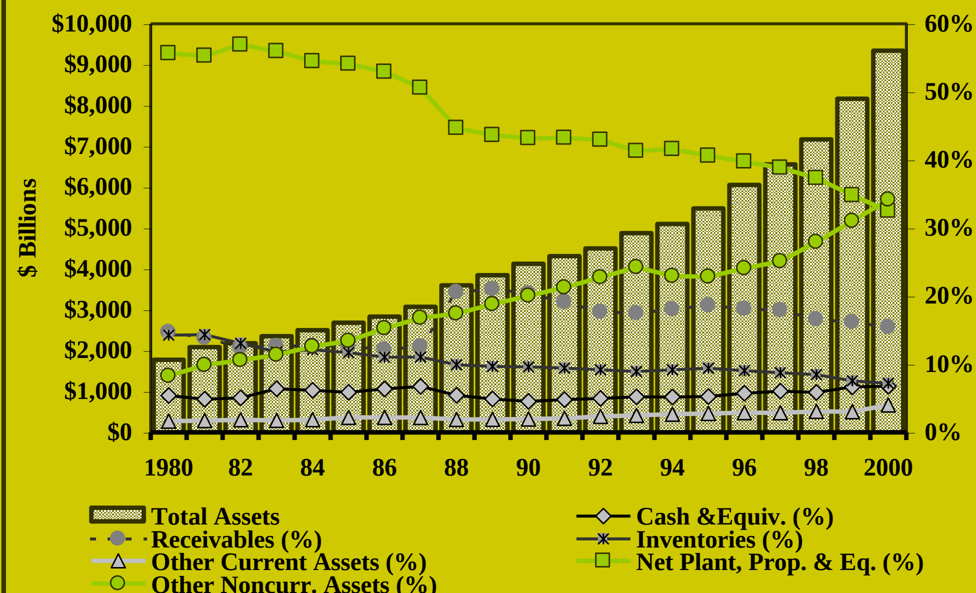
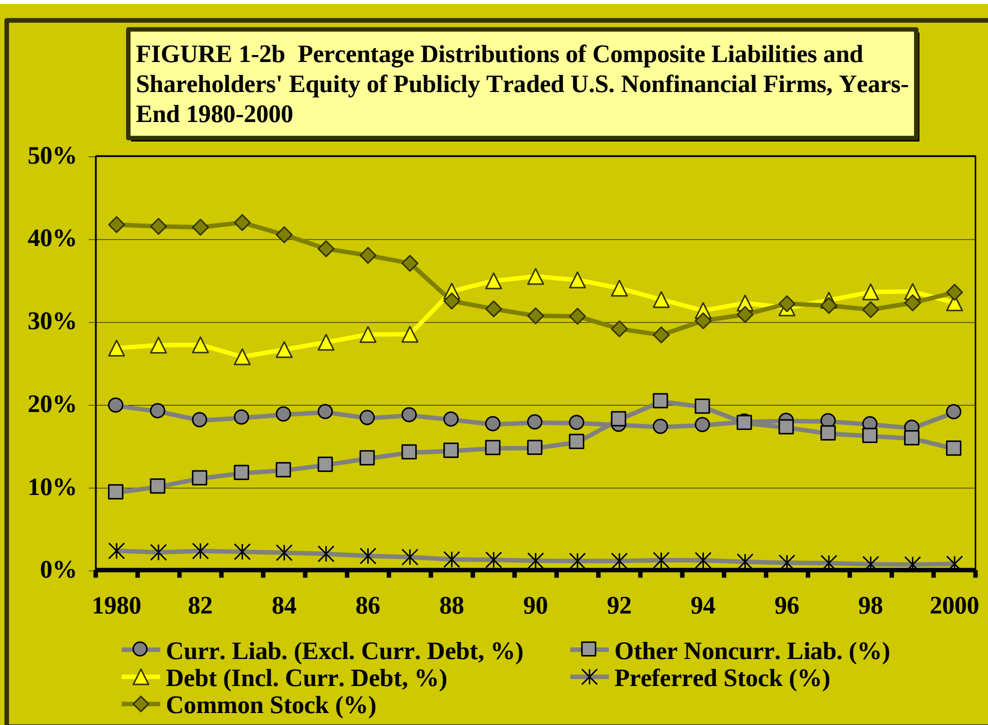
FIGURE 1-2a Composite Total Assets and Percentage Components of Publicly Traded U.S. Nonfinancial Firms, Years-End 1980-2000



The Composition of Composite Liabilities and Equities Has Changed Moderately Over the Years 1980-2000:

- Current liabilities have steadily financed about 20% of Composite TA over the years.
- Long-term debt financed 27% of composite TA in 1980; 32% in 2000.
- Other noncurrent liabilities financed 9% of composite assets in 1980; 15% in 2000.
- Preferred stock has financed less than 3% of composite TA in all years, and is declining.
- Common equity financed 42% of composite TA in 1980; 34% in 2000.



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Composite Market Equity Value (MEQ) Increased at a Faster Pace than Book Equity Value (BEQ) over the Years 1980-2000

- **The composite market-to-book equity ratio:**
  - ➢ was 1.5 at year-end 1980;
  - ➢ rose to 5.4 at year-end 1999;
  - ➢ then fell sharply to 3.7 at year-end 2000.

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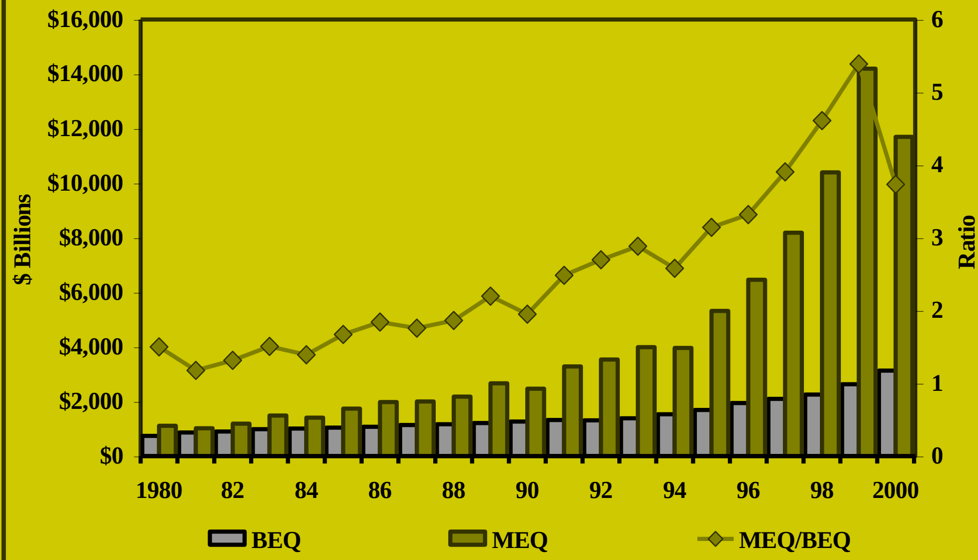
FIGURE 1-3 Composite Book and Market Values of Common Equity (BEQ and MEQ), and Composite Market-to-Book Equity Ratios of Publicly Traded U.S. Nonfinancial Firms, Years-End 1980-2000



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Composite Cash Inflows and Outflows: 1988-2000

- **The leading net source of cash inflow for firms in composite was *Net Cash Flow from Operations.***
- ***Sales of Investments* was a leading source of cash inflow, but was largely offset by purchases (*Increases in Investments*).**
- ***Issuance of long-term debt* was also a leading source of cash inflow, but was largely offset by debt retirements (*Reductions in Long-Term Debt*).**
- ***Issuance of Stock* was a negligible composite source of funds.**
- ***Repurchases of Stock* increased faster than *Cash Dividends*, overtaking dividends in 1997.**

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FIGURE 1-4a Composite Sources of Funds for Firms in the S&P Industrials, 1988-2000

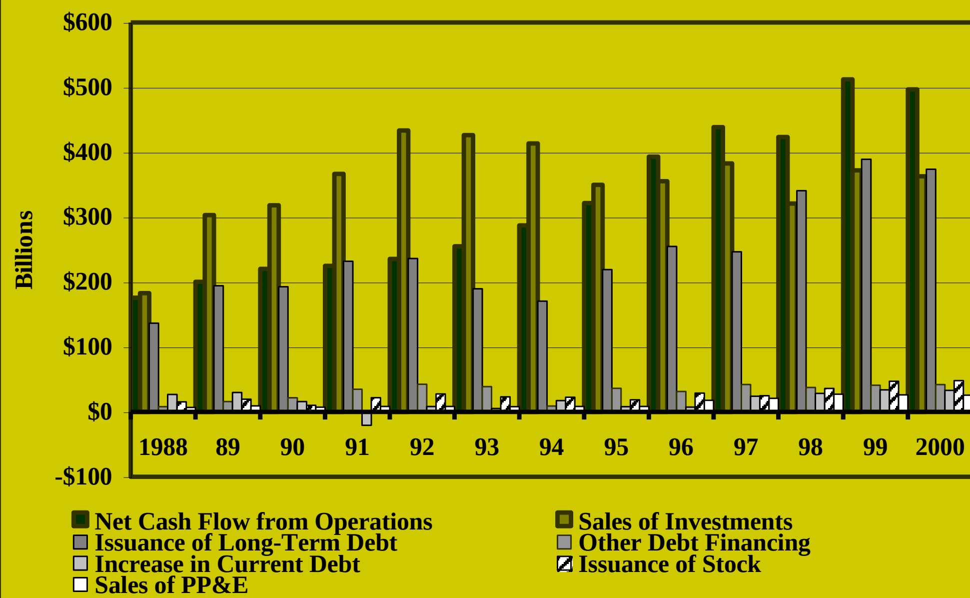
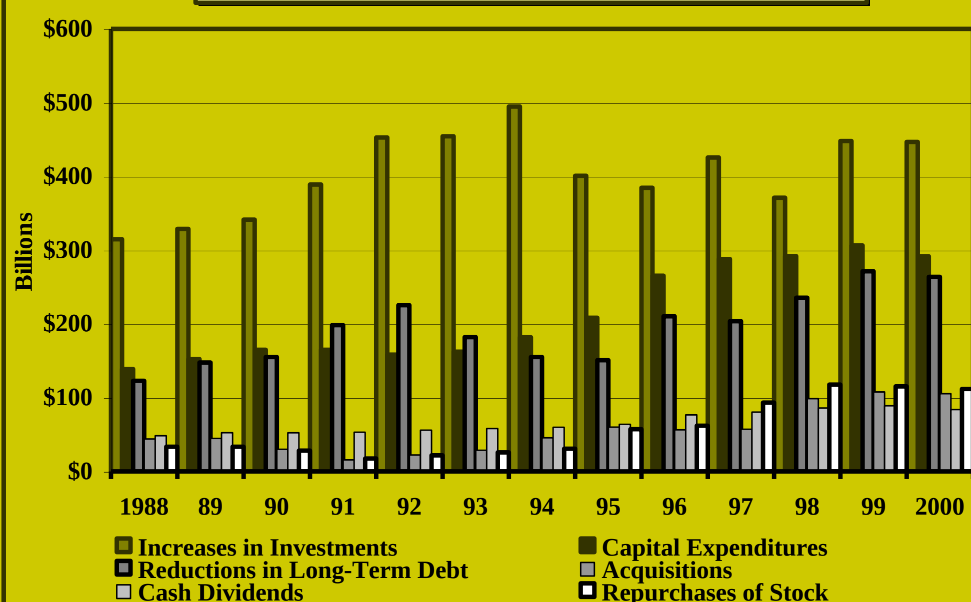


FIGURE 1-4b Composite Uses of Funds for Firms in the S&P Industrials, 1988-2000



Distributions of Book and Market Debt Ratios of Individual Firms

- **Both book debt ratios (D/TA) and market debt ratios (D/TA_{mkt}) for individual firms vary substantially across industries and firm size.**
- **Market debt ratios are generally lower than book debt ratios because market equity value is generally greater than book equity value (i.e., MEQ>BEQ).**

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FIGURE 1-5 Distributions of Book Debt Ratios (D/TA) for Individual Firms in the Indicated Categories, Year-End 2000*

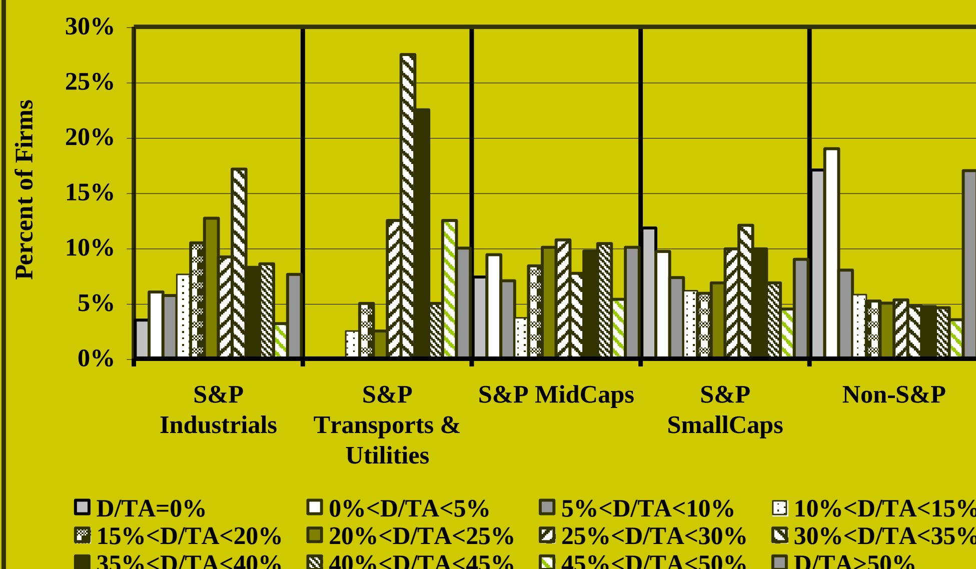

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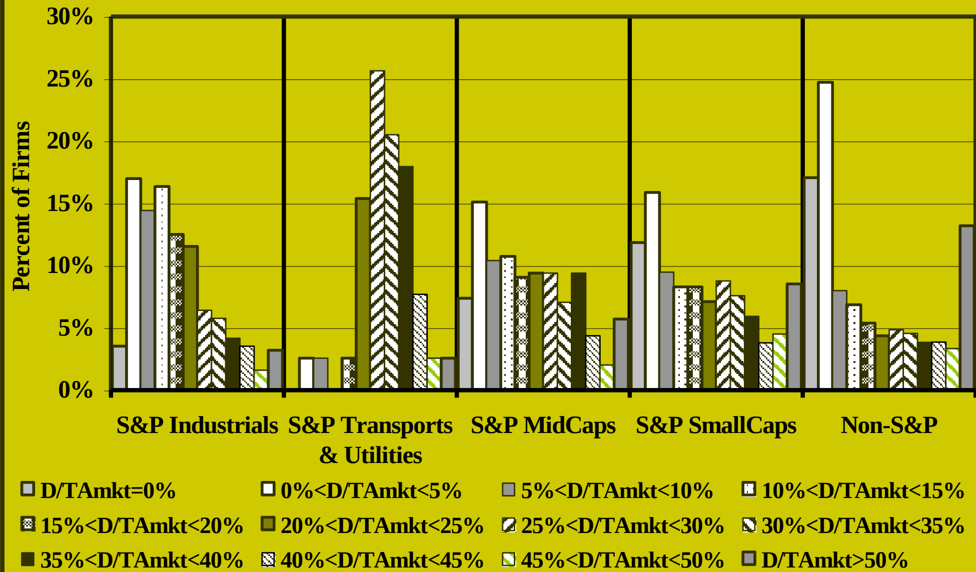
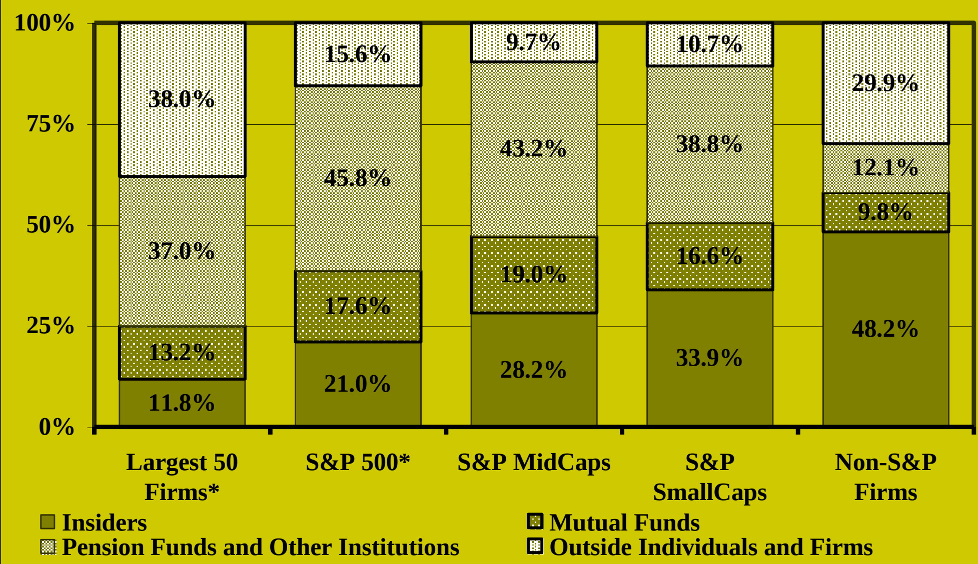
FIGURE 1-6 Distributions of Market Debt Ratios for Individual Firms in the Indicated Categories, Year-End 2000



Ownership Structure Distributions

- ***Ownership structure*** **refers to the distribution of a firm's stockholders among: insiders; financial institutions (mutual funds; pension funds); other firms; and individuals.**
- **Ownership structures of publicly traded U.S. nonfinancial firms vary substantially by firm size, but ownership is generally *diffuse.***

FIGURE 1-7 Ownership Structures for Publicly Traded U.S. Nonfinancial Firms: Average Percentages of Shares Owned by Investors in Indicated Classes for Indicated Categories of Firms, Year-End 1999



Composite ROE, P/E Ratios, Payout Ratios, and Dividend Yields

- **Composite ROE is sensitive to macroeconomic growth (e.g., composite ROE fell around the 1991-1992 recession).**
- **Composite P/E ratios generally rose substantially over the years 1980-2000.**
- **Composite payout ratios and dividend yields generally fell over the years 1980-2000.**

Tables 1-2 and 1-3 Composite ROE, P/E Ratios, Payout Ratios, and Dividend Yields, 1980-2000 (All Firms)

Year-End	ROE	P/E Ratio	Payout Ratio	Div. Yield	Year-End	ROE	P/E Ratio	Payout Ratio	Div. Yield
1980	17.2%	10.3	39.8%	3.9%	1990	12.0%	16.9	57.9%	3.4%
1981	16.4%	8.4	41.1%	4.9%	1991	7.6%	34.1	88.0%	2.6%
1982	11.7%	11.7	52.1%	4.4%	1992	3.6%	74.5	189.3%	2.5%
1983	12.0%	13.8	52.6%	3.8%	1993	9.2%	33.1	76.5%	2.3%
1984	13.5%	10.5	44.7%	4.2%	1994	15.1%	19.0	45.4%	2.4%
1985	11.0%	15.7	55.9%	3.6%	1995	14.8%	23.4	49.0%	2.1%
1986	10.1%	18.9	67.3%	3.6%	1996	16.3%	23.4	40.6%	1.7%
1987	12.9%	14.4	54.2%	3.8%	1997	14.2%	29.6	40.8%	1.4%
1988	14.7%	13.0	51.6%	4.0%	1998	14.0%	35.5	41.5%	1.2%
1989	14.3%	15.9	50.6%	3.2%	1999	13.6%	46.3	38.8%	0.8%
					2000	9.6%	42.8	43.4%	1.0%

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