



MERCER CAPITAL

2020 Benchmarking Guide for Family Business Directors

Family Business Advisory Services Group

About Mercer Capital

Mercer Capital provides valuation, financial education, and other strategic financial consulting services to family businesses.

We help family ownership groups, directors, and management teams align their perspectives on the financial realities, needs, and opportunities of the business.

We have had the privilege of working with successful family and closely held businesses for the past 35 years. Given our experience, we are convinced that an effective board of directors and an engaged shareholder base are essential for the long-term health and success of a family business. Yet, equipping family business directors and cultivating an engaged shareholder base are often difficult. We can help.

Services Provided

- Customized Board Advisory Services
- Confidential Shareholder Surveys
- Management Consulting
- Benchmarking / Business Intelligence
- Independent Valuation Opinions
- Shareholder Engagement
- Transaction Advisory Services
- Shareholder Communication Support

The group also publishes weekly content about corporate finance & planning insights for multi-generational family businesses in the blog,

Family Business Director.

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Why Benchmarking?

Helping You Become a More Informed Director

Family business directors need the best information available when making strategic financial decisions that will help set the course of their business for years to come.

Benchmarking helps provide valuable context to directors when making the most critical decisions.

- **What should our dividend policy be?**
- **What investments should we be making to ensure a sustainable future for our family business?**
- **How should we finance our family business?**

Questions Addressed

7 Questions Benchmarking Data Can Answer

- 1 How much money do companies like ours make?
- 2 How much money do companies like ours invest?
- 3 How much money do companies like ours distribute?
- 4 How much money do companies like ours borrow?
- 5 What is the hurdle rate for companies like ours?
- 6 How fast do companies like ours grow?
- 7 What kinds of returns do companies like ours generate for shareholders?

Data Set

Universe of Benchmarking Companies :: Russell 3000 Index Companies

		Revenue \$millions
 Communication Services	1st Quintile	\$12,937
 Consumer Discretionary	Median	514,405
	Largest	5,435
	Smallest	5,435
 Consumer Staples	2nd Quintile	\$3,107
	Median	5,402
	Largest	2,052
	Smallest	2,052
 Energy	3rd Quintile	\$1,322
	Median	2,052
	Largest	867
	Smallest	867
 Health Care	4th Quintile	\$501
	Median	862
	Largest	282
	Smallest	282
 Industrials	5th Quintile	\$114
	Median	282
	Largest	10
	Smallest	10
 Information Technology		
 Materials		

Note: Our data set excludes the following industry sectors: Financials, Real Estate, and Utilities.

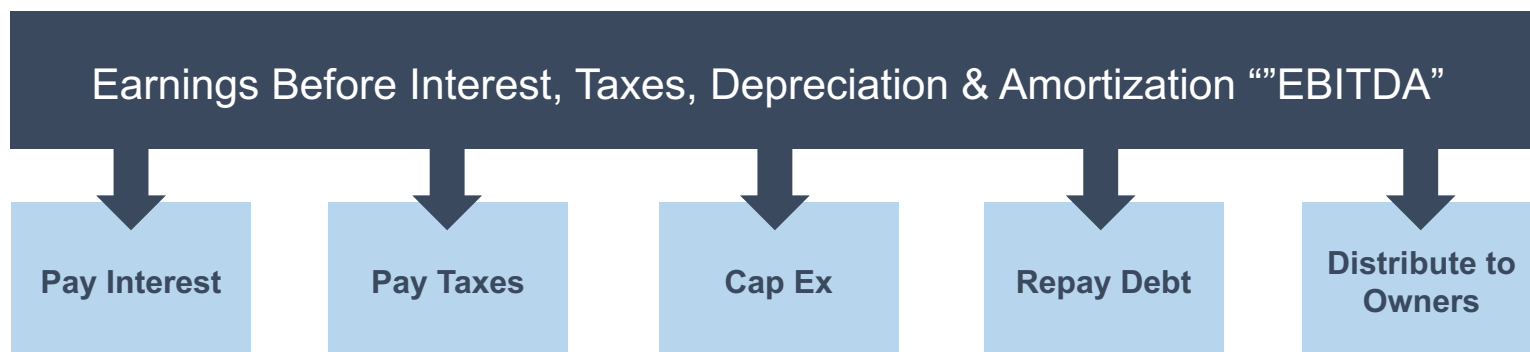
We have also excluded companies with revenue of less than \$10 million in 2019

How Much Money Do Companies Like Ours Make?

Section 1

What is EBITDA?

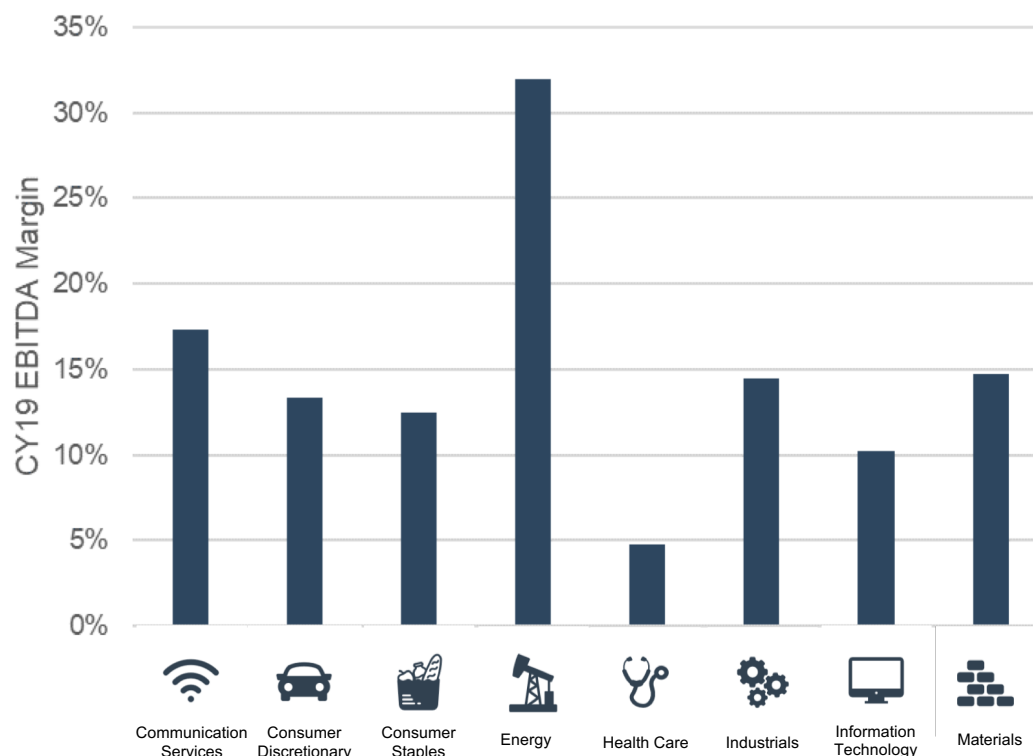
Defining Profitability



EBITDA, or Earnings Before Interest, Taxes, Depreciation & Amortization, is the most cited measure of earnings for private companies. EBITDA is a proxy for discretionary cash flow available to service debt, pay taxes, fund reinvestment, and provide for shareholder distributions. EBITDA promotes comparability among firms with differing capital structures, tax attributes, and fixed asset intensity.

EBITDA Margin by Industry

Industry Influence on EBITDA Margin











The overall average EBITDA margin for the group was 13.8%. However, as depicted in the chart to the left, there is significant variation among the different industry sectors analyzed. In short, asset-intensive industries tend to earn higher EBITDA margins, which is necessary to fund ongoing capital expenditures and other investments.

EBITDA Margin by Company Size

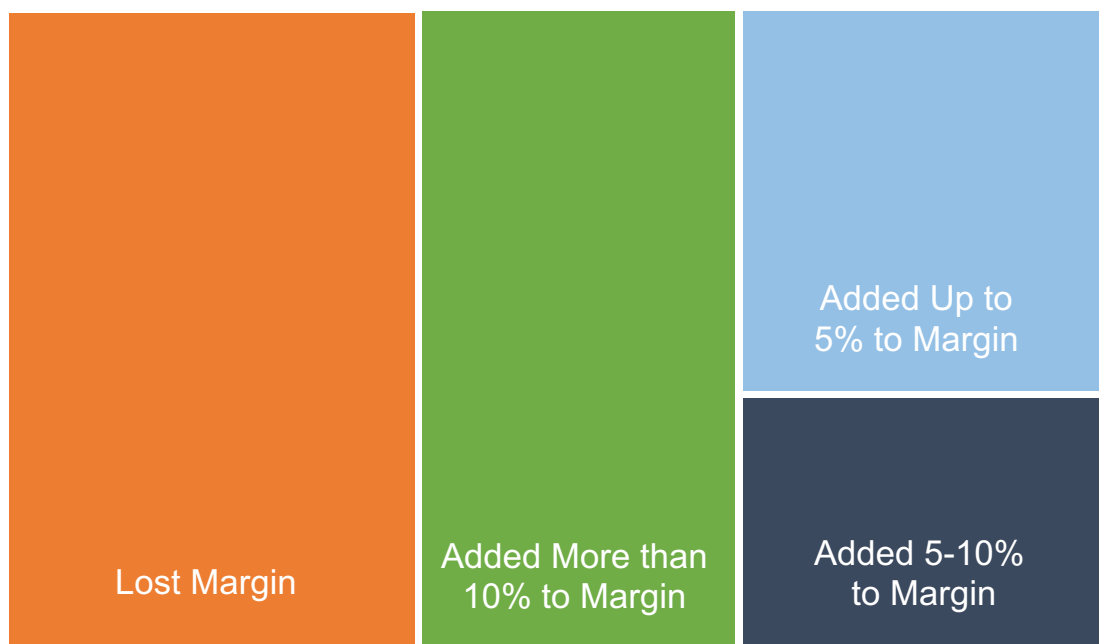
Data Suggests That Economies of Scale are Less Important in Some Industries

Comparing average EBITDA margins across size quintiles confirms that economies of scale matter. Larger companies tend to earn higher margins than smaller companies. However, the data reveals that economies of scale tend to be less important for companies in the consumer discretionary, energy, and industrial sectors.

		Size Quintile (1 = largest)				
		1	2	3	4	5
	Communication Services	25.5%	21.9%	14.4%	20.3%	4.4%
	Consumer Discretionary	12.7%	15.7%	12.8%	14.0%	11.6%
	Consumer Staples	15.5%	15.6%	13.8%	11.9%	5.9%
	Energy	24.5%	37.4%	32.4%	31.9%	33.7%
	Health Care	21.7%	16.2%	-0.3%	-8.9%	-4.9%
	Industrials	14.9%	14.3%	16.2%	12.4%	14.5%
	Information Technology	22.1%	17.7%	10.8%	4.7%	-4.0%
	Materials	19.1%	16.0%	14.9%	14.6%	9.3%
All Companies		18.8%	17.9%	12.3%	9.2%	6.9%

EBITDA Margin by Company Size

Change in Margin for Companies That Have Successfully Scaled



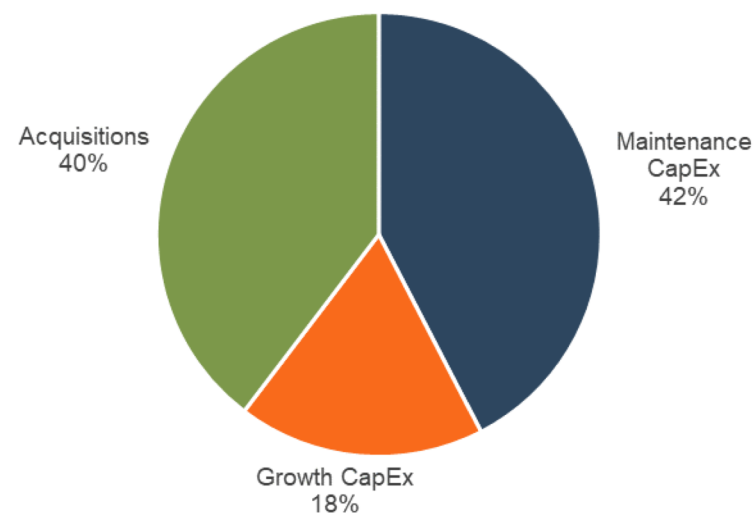
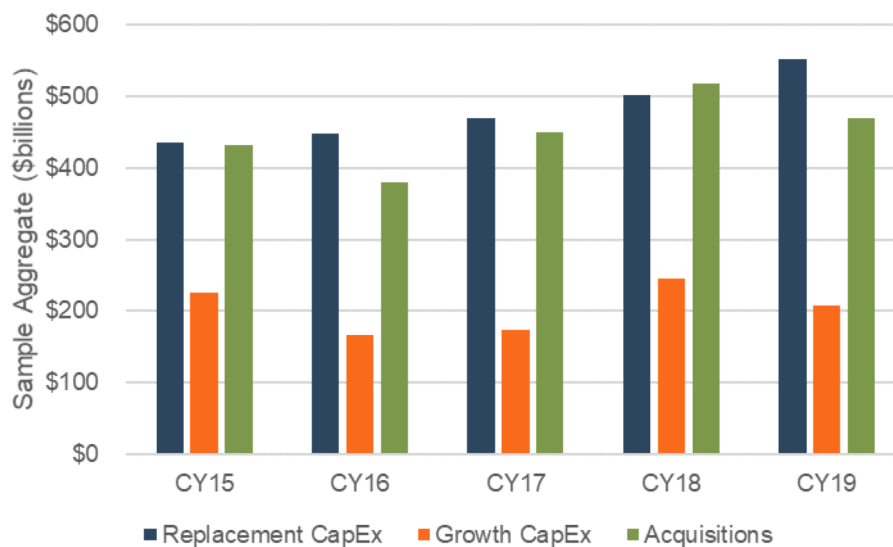
Of the companies in our sample, 233 at least doubled revenue from CY15 to CY19. For this subset of companies that have successfully scaled, nearly two-thirds experienced margin expansion, with almost 30% of the companies increasing EBITDA margin by more than 10% over the period.

How Much Money Do Companies Like Ours Invest?

Section 2

Aggregate Investment Trends

Companies Invest to Maintain Productive Capacity and Grow



Aggregate annual investment for the companies in our sample fluctuated between \$1.0T and \$1.3T over the period analyzed. Excluding maintenance capital expenditures, spending on acquisitions outpaced growth capital expenditures by a more than 2:1 margin.

Investment Benchmarks

Three Ways to Measure Relative Investment

Revenue

$$\frac{\text{Gross Investment}}{\text{Revenue}}$$

5.4%

EBITDA

$$\frac{\text{Gross Investment}}{\text{EBITDA}}$$

42%

Invested Capital

$$\frac{\text{Net Investment}}{\text{Beg Invested Capital}}$$









2.0%

To make meaningful comparisons of investment activity across industries and companies, we must scale investment activity to another measure of size. Using EBITDA as a proxy for cash flow, reveals how discretionary cash flow is allocated to different uses. Treating revenue as the denominator removes the effect of profitability on investment decisions. Finally, assessing investment relative to invested capital removes the impact of differing turnover attributes.

Percentages are overall median observations from the sample universe

Investment by Industry

Both Magnitude and Composition of Investment Vary by Industry

	Median Observations			Industry Aggregates (\$millions)			% of Total		
	Gross / Revenue	Gross / EBITDA	Net / Invested Capital	Maintenance CapEx	Growth CapEx	Acquisitions	Maintenance CapEx	Growth CapEx	Acquisitions
 Communication Services	7.4%	42.4%	1.1%	\$89,302	\$33,690	\$39,762	54.9%	20.7%	24.4%
 Consumer Discretionary	3.9%	34.4%	1.5%	\$90,584	\$27,948	\$22,572	64.2%	19.8%	16.0%
 Consumer Staples	3.9%	34.6%	1.6%	\$38,392	\$10,136	\$50,325	38.8%	10.3%	50.9%
 Energy	21.0%	82.0%	3.0%	\$119,998	\$37,172	\$33,846	62.8%	19.5%	17.7%
 Health Care	5.5%	32.2%	1.3%	\$32,926	\$19,095	\$108,069	20.6%	11.9%	67.5%
 Industrials	5.3%	40.7%	3.1%	\$70,631	\$51,791	\$49,915	41.0%	30.1%	29.0%
 Information Technology	5.8%	41.9%	2.9%	\$73,234	\$18,312	\$144,364	31.0%	7.8%	61.2%
 Materials	6.4%	44.6%	1.1%	\$35,423	\$9,488	\$20,290	54.3%	14.6%	31.1%
All Companies	5.4%	41.6%	2.0%	\$550,490	\$207,632	\$469,142	44.9%	16.9%	38.2%

Excluding the energy sector, the median level of investment when measured relative to EBITDA ranged from 32% to 45%. Maintenance capital expenditures are most prominent for communication services, consumer discretionary, and energy firms. Industrial firms allocated more net investment dollars to growth capex, while acquisitions were the primary avenue of growth for consumer staples, health care, and information technology companies.

Investment and Company Size

No Pronounced Size Effect Discernable From the Data

	Median Observations			Industry Aggregates (\$millions)			% of Total		
	Gross / Revenue	Gross / EBITDA	Net / Invested Capital	Maintenance CapEx	Growth CapEx	Acquisitions	Maintenance CapEx	Growth CapEx	Acquisitions
1st Quintile	5.2%	35.7%	2.5%	\$433,952	\$161,140	\$343,275	46.2%	17.2%	36.6%
2nd Quintile	6.2%	40.9%	2.5%	\$68,316	\$22,076	\$83,283	39.3%	12.7%	48.0%
3rd Quintile	5.3%	46.0%	1.9%	\$27,542	\$12,972	\$25,947	41.4%	19.5%	39.0%
4th Quintile	4.7%	42.9%	1.4%	\$13,856	\$5,667	\$10,591	46.0%	18.8%	35.2%
5th Quintile	5.8%	46.2%	1.7%	\$6,823	\$5,777	\$6,045	36.6%	31.0%	32.4%
All Companies	5.4%	41.6%	2.0%	\$550,490	\$207,632	\$469,142	44.9%	16.9%	38.2%

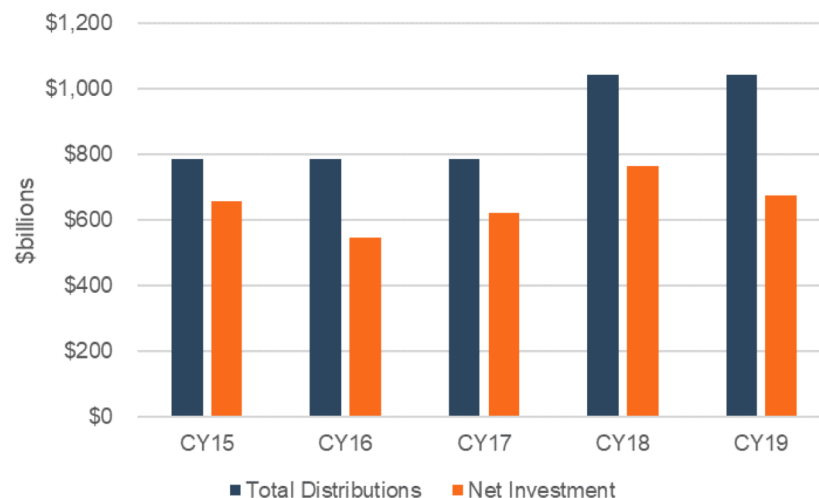
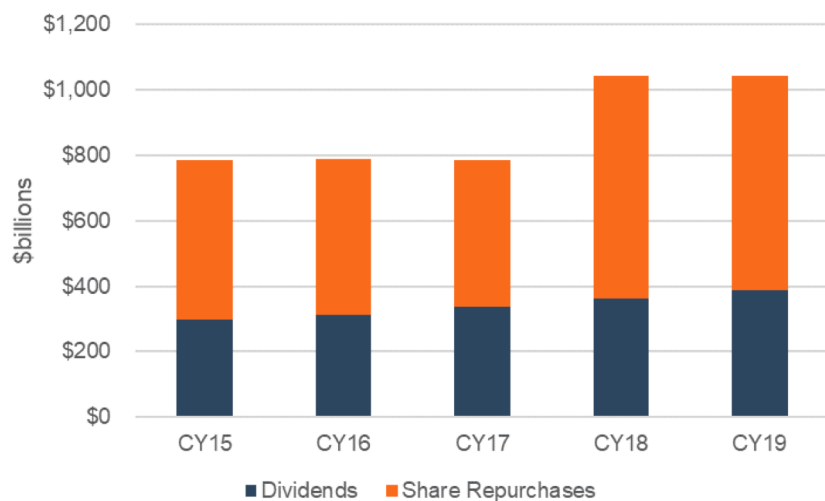
Larger companies tend to be more profitable and deploy capital more efficiently (i.e., generate more revenue per dollar of invested capital). As a result, investment represents a lower portion of available cash flow for the largest companies (35.7%) than for the smallest companies (46.2%). The smallest companies tend to be somewhat less acquisitive than their larger counterparts.

How Much Money Do Companies Like Ours Distribute?

Section 3

Aggregate Distribution Trends

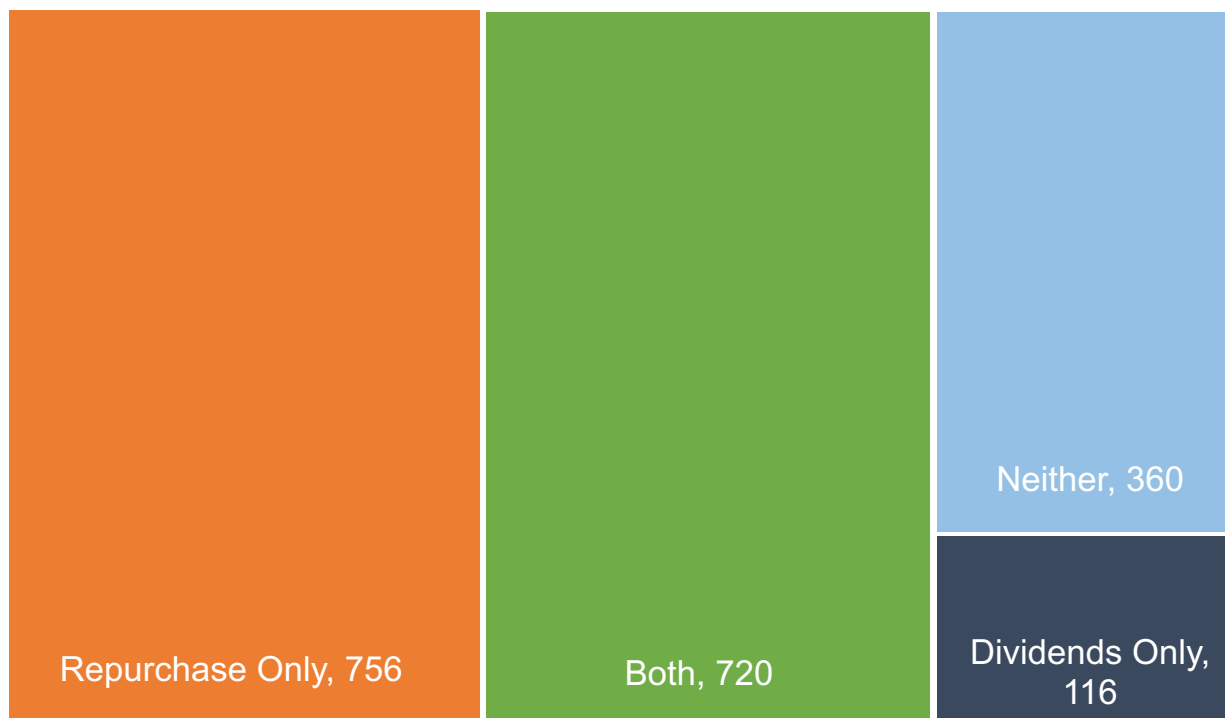
Companies Weigh Distributions Against Available Investment Opportunities



Public companies generally prefer a sustainable level of dividends that can withstand temporary downturns in performance. As a result, aggregate share purchases have exceeded dividends paid during each of the preceding five years. For the universe of companies we analyzed, total distributions (dividends + share repurchases) exceeded net investment by about 35% for the period.

Prevalence of Distributions

Companies Select Form of Shareholder Distributions



Less than 20% of the companies in our sample neither paid dividends nor repurchased shares during CY19.

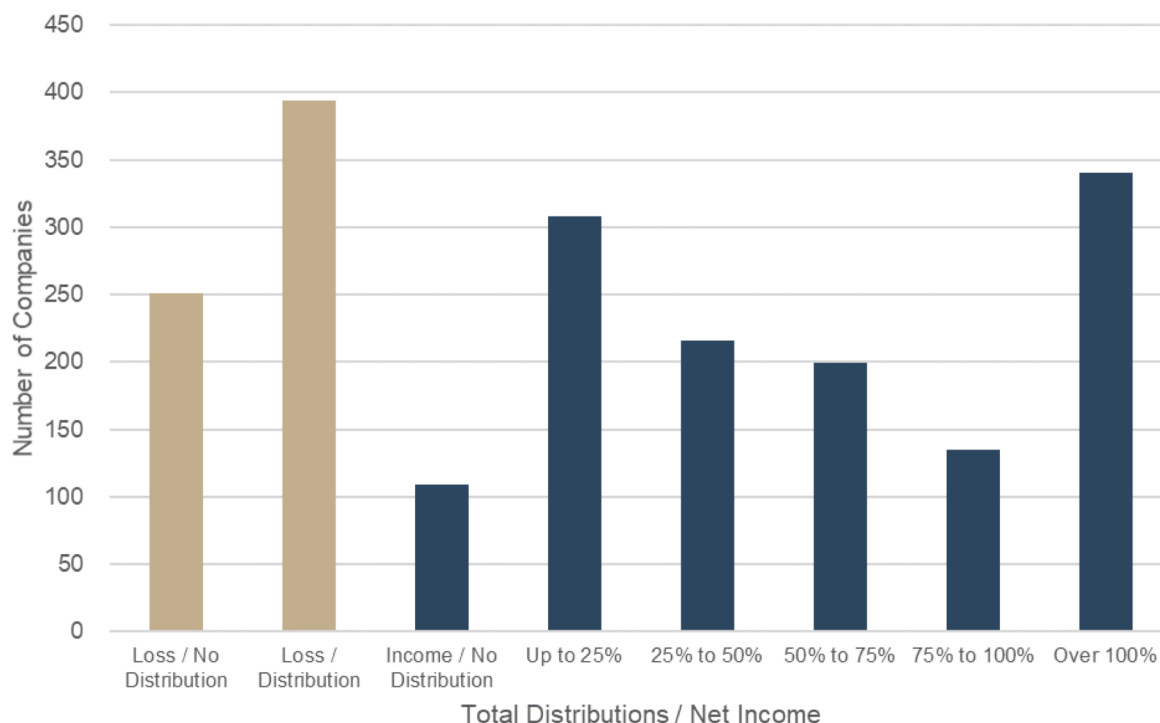
Over 85% of dividend payers also repurchased shares, while only 50% of companies repurchasing shares also paid dividends.

Magnitude of Distributions

Distributions as a Percentage of Net Income

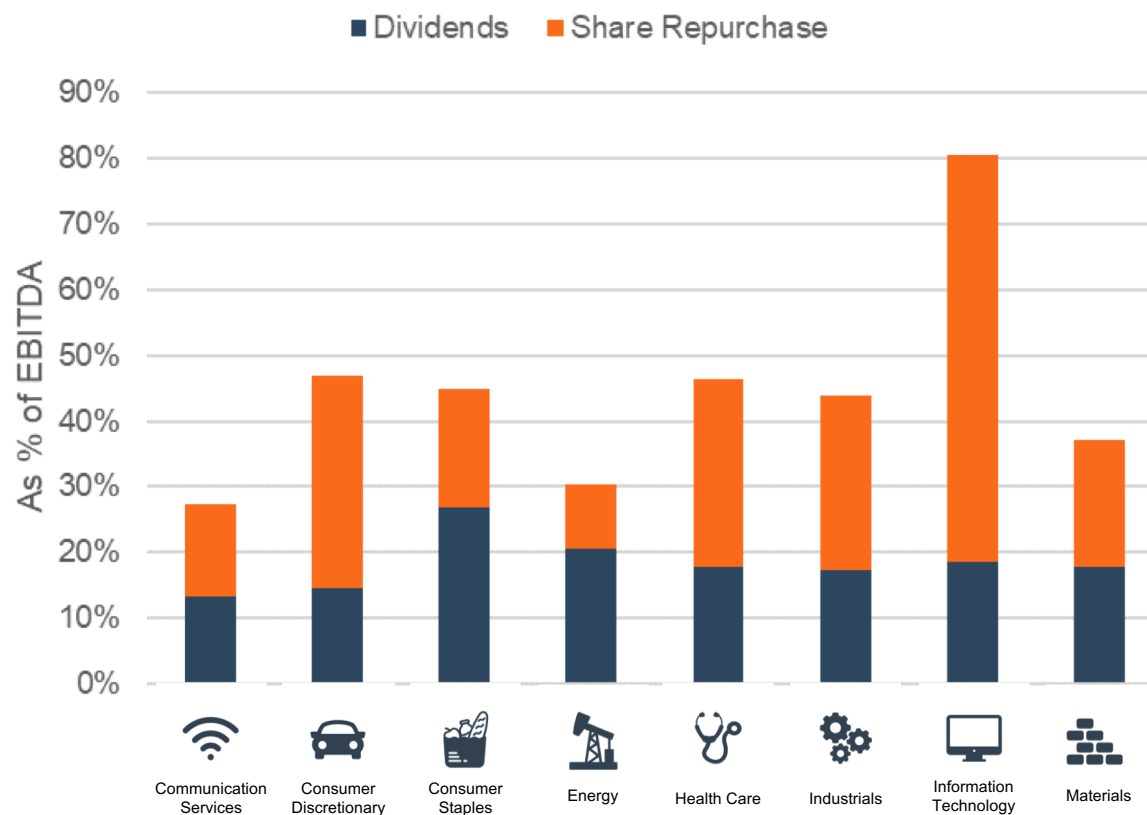
Approximately one-third of the companies in our sample reported a net loss during CY19. Of these companies, over 60% still made a distribution (dividend, share repurchase, or both) to shareholders.

Of the profitable companies in our sample, approximately 25% made total distributions in excess of net income during CY19.



Distributions by Industry

Aggregate Distribution Data Reveals Differences Among Industries



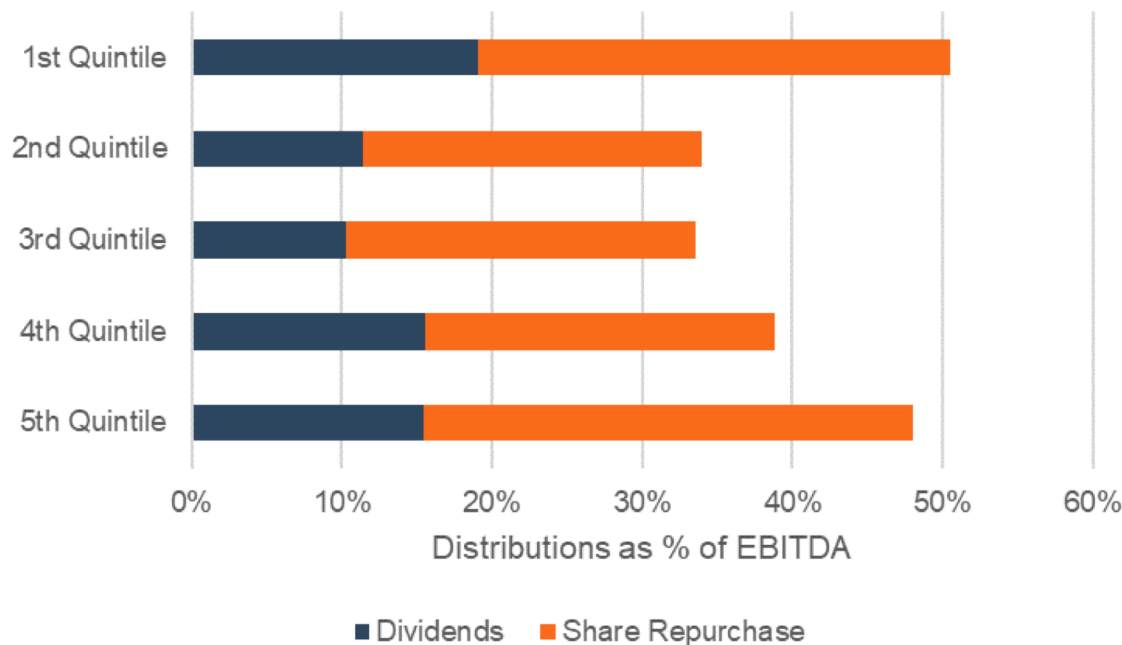
Capital intensive industries such as communication services and energy devote a smaller portion of cash flow to shareholder distributions.

Relative to consumer staples companies, consumer discretionary companies hedge their higher volatility by relying more on share repurchases than dividends.

Information technology companies were the most aggressive share repurchasers.

Distributions and Company Size

Largest Firms Make Larger Shareholder Distributions



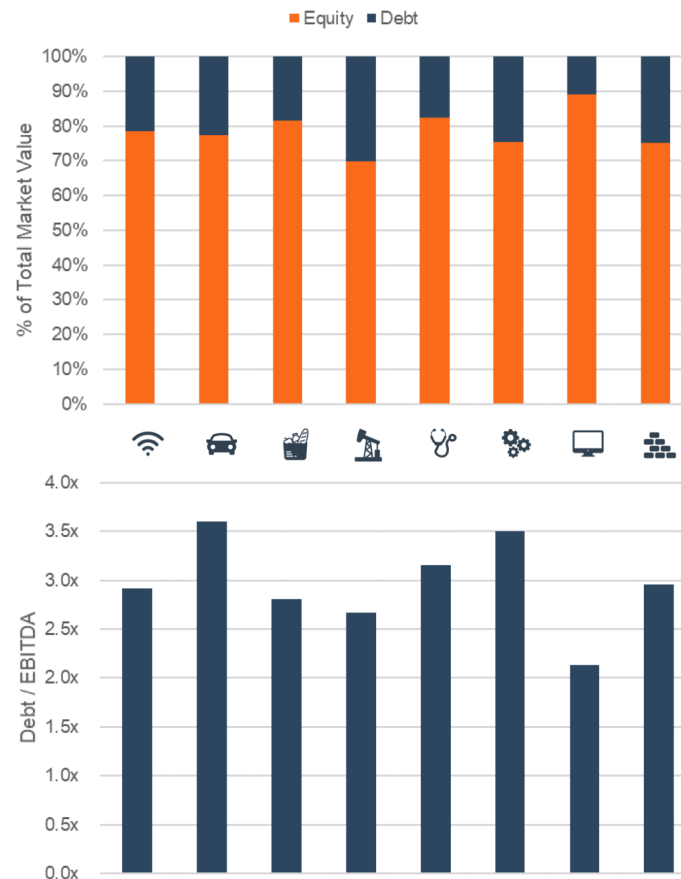
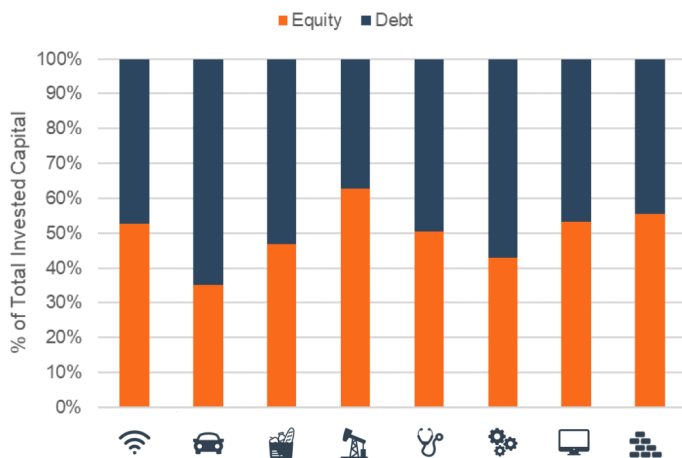
The largest companies distribute the greatest proportion of operating cash flow (as proxied by EBITDA) to shareholders. Aggregate payout ratios for the smallest companies are skewed by the lower profitability of that group.

How Much Money Do Companies Like Ours Borrow?

Section 4

Financial Leverage by Industry

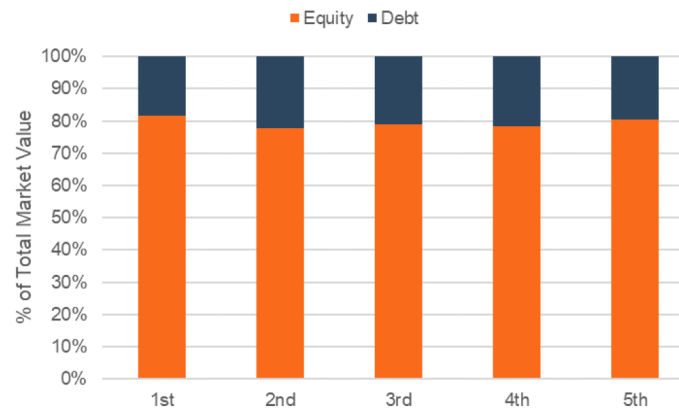
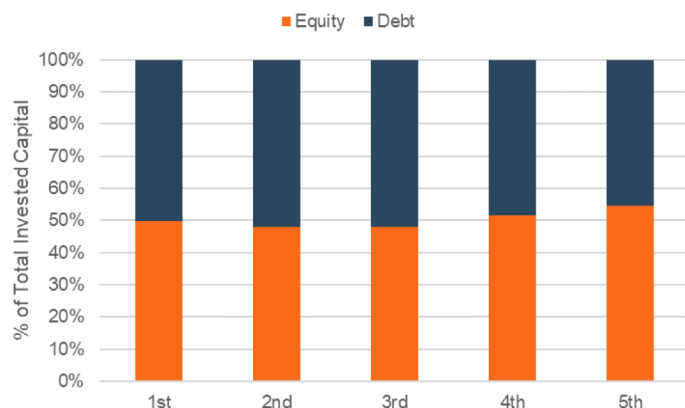
Borrowing Capacity Influenced by Assets and Cash Flow



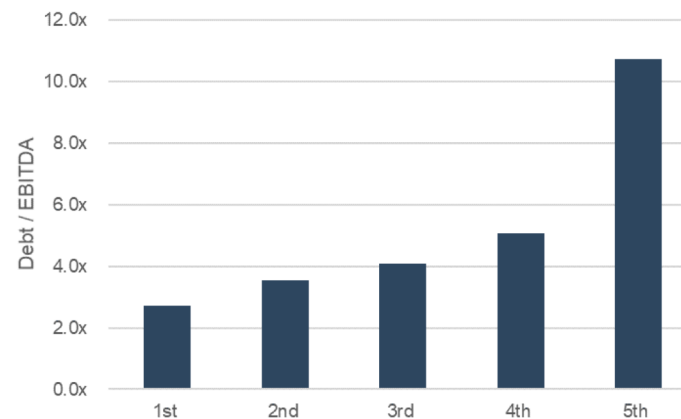
Financial leverage can be measured by comparing total debt to invested capital (book values of debt and equity), market values, or relative to cash flow. On a market value basis, leverage at the end of 2019 ranged from 10% (IT) to 30% (energy).

Financial Leverage by Size

Impact of Size Most Evident in Cash Flow Leverage Multiples











There is little discernable size effect with respect to book or market values. However, lower EBITDA margins on the part of the smaller firms increase the aggregate ratio of debt to EBITDA for such firms.



Use of Debt by Industry

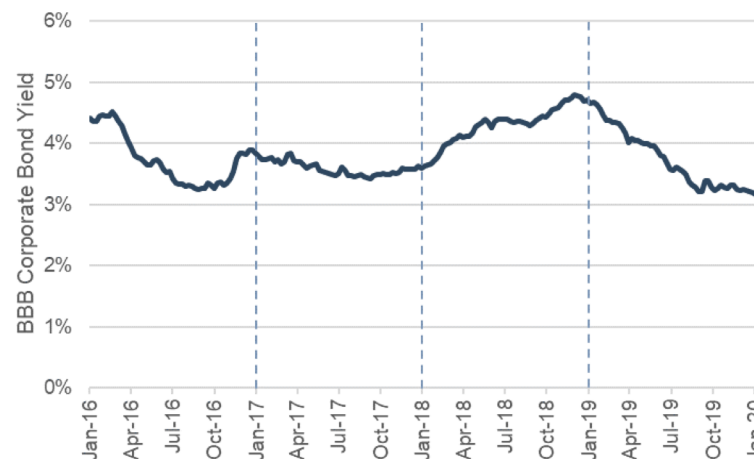
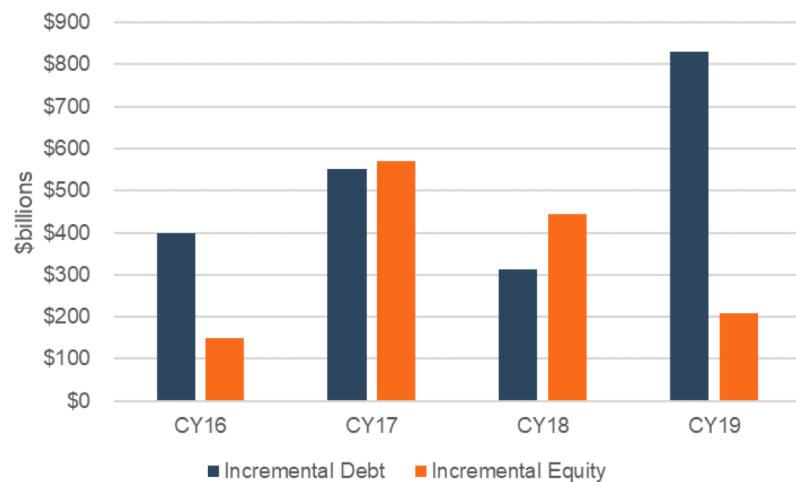
Debt Reliance Measured Relative to Total Invested Capital

	All Companies	 Communication Services	 Consumer Discretionary	 Consumer Staples	 Energy	 Health Care	 Industrials	 Information Technology	 Materials
No Debt	94	5	18	2	4	19	14	31	1
0% to 20%	431	26	53	26	25	132	60	93	16
20% to 40%	421	19	62	18	38	74	94	84	32
40% to 60%	513	18	73	31	57	78	117	96	43
60% to 80%	288	25	61	17	20	36	71	35	23
Over 80%	205	16	60	14	6	43	31	23	12
Total	1,952	109	327	108	150	382	387	362	127
No Debt	4.8%	4.6%	5.5%	1.9%	2.7%	5.0%	3.6%	8.6%	0.8%
0% to 20%	22.1%	23.9%	16.2%	24.1%	16.7%	34.6%	15.5%	25.7%	12.6%
20% to 40%	21.6%	17.4%	19.0%	16.7%	25.3%	19.4%	24.3%	23.2%	25.2%
40% to 60%	26.3%	16.5%	22.3%	28.7%	38.0%	20.4%	30.2%	26.5%	33.9%
60% to 80%	14.8%	22.9%	18.7%	15.7%	13.3%	9.4%	18.3%	9.7%	18.1%
Over 80%	10.5%	14.7%	18.3%	13.0%	4.0%	11.3%	8.0%	6.4%	9.4%
Total	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%

With respect to the companies in our sample, the use of debt is evenly distributed, with approximately 27% of companies having less than 20% debt in their capital structure, 48% between 20% and 60%, and 25% above 60%. Health care and IT firms are most likely to avoid debt, while companies in the communication services and consumer discretionary sectors are more likely to fund capital needs with larger amounts of debt.

Marginal Funding Sources

Annual Changes in Invested Capital Balances



Assessing the annual change in debt and equity balances reveals how companies view the marginal costs of incremental financing needs. On a relative basis, the companies in our sample borrowed most aggressively during CY16 and CY19, two periods during which corporate yields fell sharply.

What is The Hurdle Rate for Companies Like Ours?

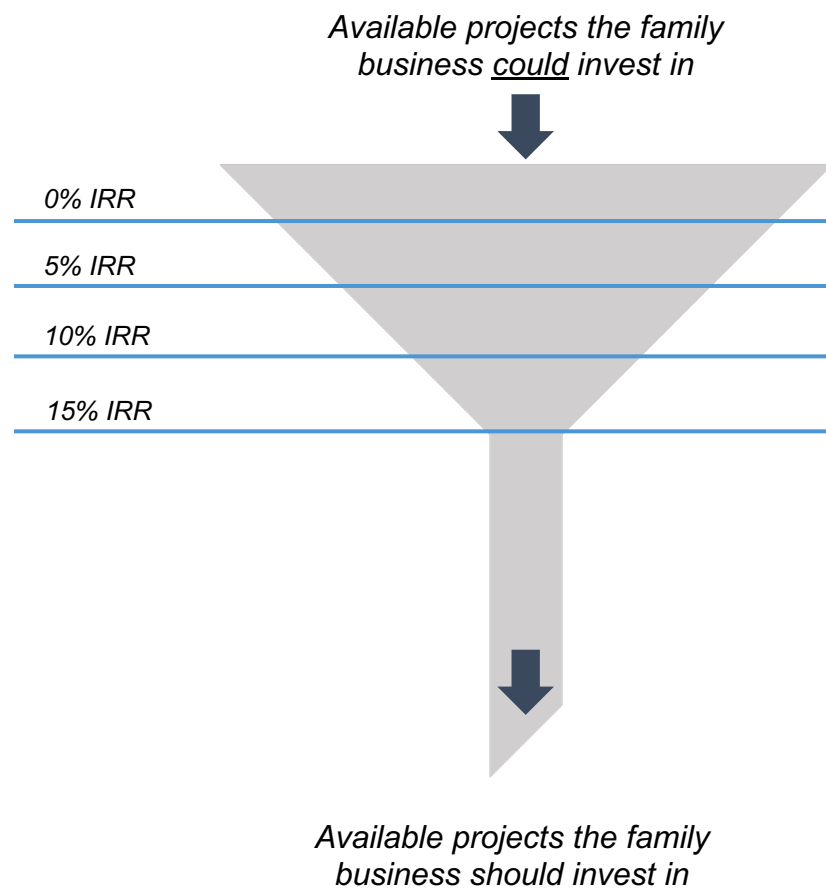
Section 5

What is a Hurdle Rate?

Evaluating Potential Investments

Companies use hurdle rates to help screen out potential investments. All family businesses face capital constraints, which means there are more investments they could invest in than they should invest in. Along with a robust strategic review, using a hurdle rate can help directors limit review of potential projects to those that are financially feasible.

Some companies use their weighed average cost of capital, or WACC, as their hurdle rate. Others prefer to add a discretionary premium to the WACC as a means of rationing scarce capital and mitigating the risk that projected cash flows are too aggressive.



What is the WACC?

The WACC is the Blended Return Expectation for Lenders and Shareholders

Market Value of Debt

What would an informed lender charge our family business to borrow this money today?

- Credit metrics (leverage, cash flow multiples, collateral quality)
- Relevant market data (treasury rates and credit spreads)
- Tax benefits from deductibility of interest expense

Market Value of Equity

What return would an informed shareholder expect to earn from the equity in our family business?

- Total return = Dividend Yield + Capital Appreciation
- Available return on “risk-free” assets
- Premium return expected on basket of large cap stocks
- Relative risk of family business compared to market
 - Industry characteristics
 - Financial leverage
- Size of family business – equity returns tend to be higher for smaller companies
- Unique risks of the family business
 - Key person dependencies, geographic concentrations, etc.

Total Capital

WACC is the blended (after-tax) expected return for both lenders and shareholders



Returns and Risks are Related

Beta Coefficient Measures Relevant Risk for Equity Investors

Return follows risk, so riskier companies should have higher hurdle rates.

According to the most prominent theoretical model, beta measures the relevant risk of an individual company.

Beta is positively related to risk, with a beta of 1.0 indicating risk equal to that of the market.

		All Companies	Size Quintile (1 = largest)				
			1	2	3	4	5
	Communication Services	0.92	0.94	0.92	0.99	0.92	0.83
	Consumer Discretionary	1.00	1.15	1.13	1.06	0.97	0.68
	Consumer Staples	0.70	0.79	0.55	0.56	0.70	0.88
	Energy	1.45	1.42	1.46	1.64	1.28	1.44
	Health Care	1.16	0.98	1.18	1.21	1.20	1.22
	Industrials	1.28	1.28	1.40	1.30	1.30	1.13
	Information Technology	1.10	1.31	1.26	1.26	0.88	0.79
	Materials	1.41	1.26	1.43	1.59	1.59	1.18









Weighted Average Cost of Capital

Academic Research Suggests That Smaller Companies Face Higher Capital Costs

The weighted average cost of capital is the blended return expectation of lenders and shareholders.

We calculate the cost of each source of capital and calculate the weighted average with reference to the market value of total capital.

WACCs are generally higher for smaller companies.

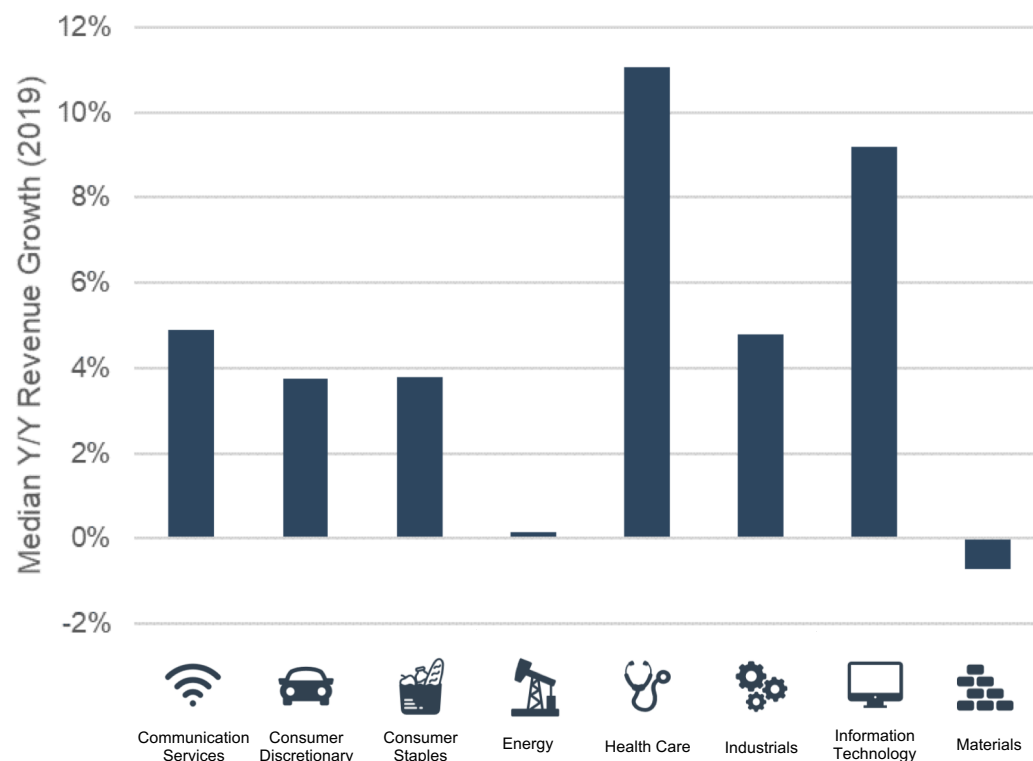
	All Companies	Size Quintile (1 = largest)				
		1	2	3	4	5
 Communication Services	7.6%	6.6%	6.3%	7.9%	8.3%	9.1%
 Consumer Discretionary	7.6%	6.8%	7.1%	7.7%	7.9%	8.3%
 Consumer Staples	6.5%	5.4%	5.1%	5.8%	7.1%	9.2%
 Energy	9.0%	8.3%	7.9%	9.0%	9.2%	10.6%
 Health Care	9.9%	6.7%	8.8%	10.4%	11.4%	12.4%
 Industrials	8.8%	7.7%	9.1%	8.7%	9.1%	9.4%
 Information Technology	9.2%	8.5%	9.0%	9.8%	8.9%	9.6%
 Materials	9.1%	7.8%	8.7%	9.7%	9.0%	10.1%

How Fast Do Companies Like Ours Grow?

Section 6

Revenue Growth by Industry

Revenue Growth a Function of Industry Factors, Organic Growth, and Investment



Revenue growth rates for energy and materials companies are heavily influenced by commodity price trends.

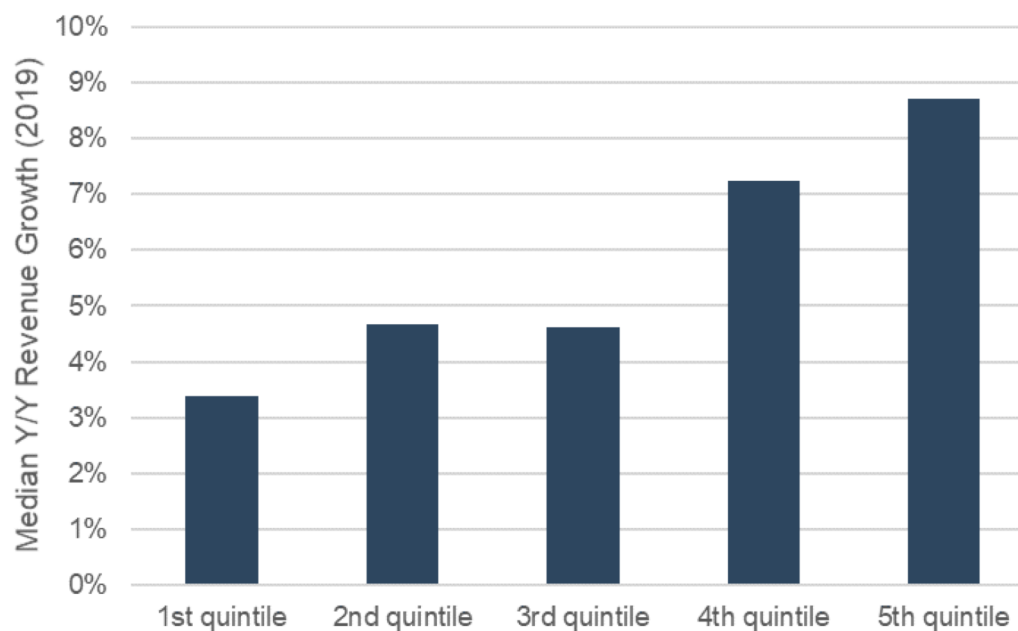
For other sectors, revenue growth reflects both broader economic growth, industry demand, and investment activity.

Unless disclosed by reporting companies, organic and acquisition-related sources of growth are not easily distinguished.

Revenue Growth by Size

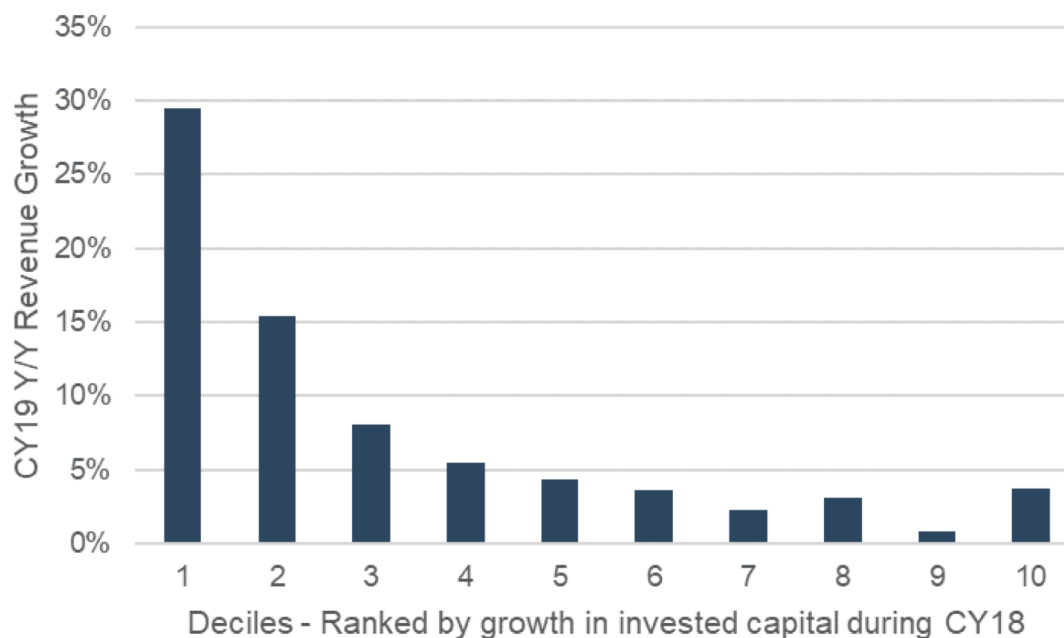
Revenue Growth a Function of Industry Factors, Organic Growth, and Investment

Smaller companies tend to exhibit faster revenue growth. In general, it is easier for such firms to generate revenue growth through investment, while it is relatively harder for the largest firms to “move the needle” decisively through incremental investment.



Acquired vs. Organic Growth

Revenue Growth Correlated to Previous Investments



To help shed some light on the difference between organic growth and that associated with incremental investment, we first calculated the percentage increase in invested capital during CY18 for each of the companies in our sample. We then sorted the companies into 10 deciles based on that measure. The chart to the left depicts the year-over-year revenue growth during CY19 for each decile. This analysis suggests that, for the market, organic growth during CY19 was on the order of 2.5%.

What Kinds of Returns Do Companies Like Ours Generate for Shareholders?

Section 7

What are Shareholder Returns?

Two Potential Sources of Shareholder Return

Dividend Yield

$$\frac{\textit{Dividends received during the year}}{\textit{Value at the beginning of the year}}$$

Capital Appreciation

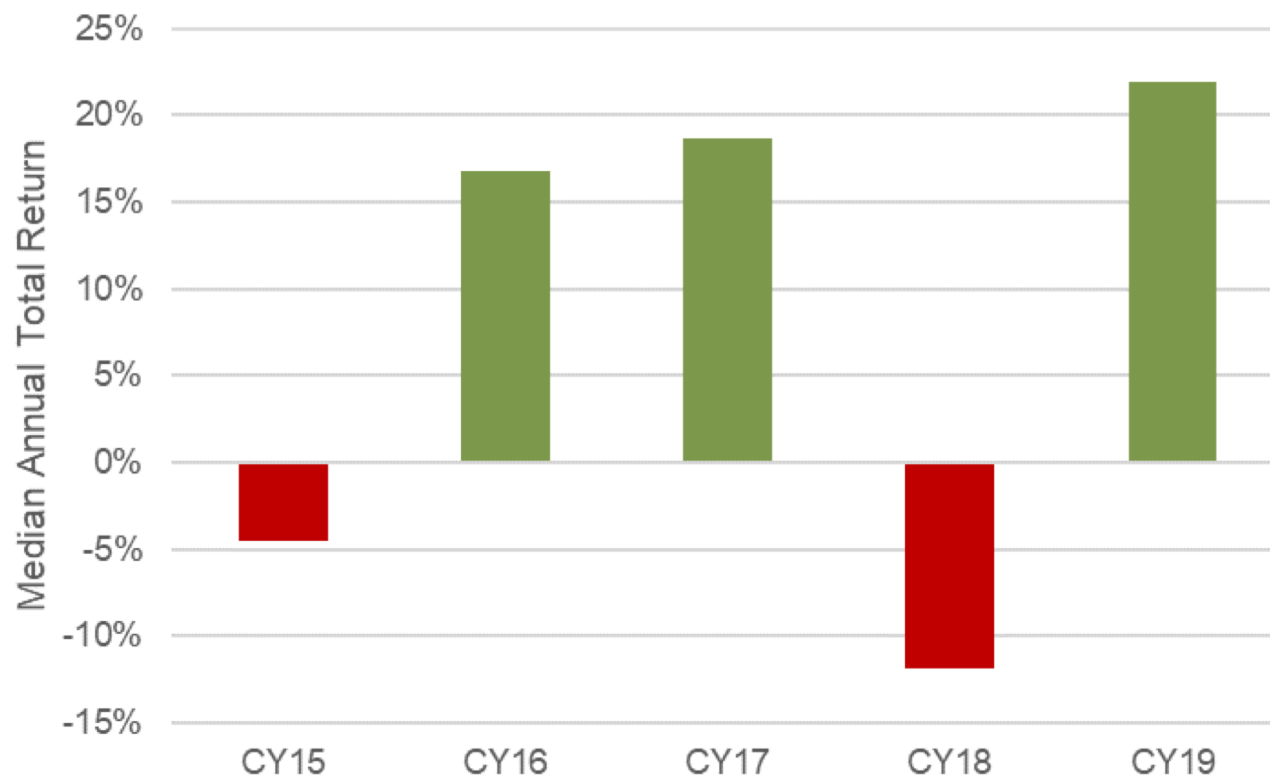
$$\frac{\textit{Change in value during the year}}{\textit{Value at the beginning of the year}}$$

Total Return

$$\textit{Dividend Yield} + \textit{Capital Appreciation}$$

Annual Return Trends

Annual Returns for Public Companies are Volatile



Annualized Returns

Average Total Shareholder Returns (CY15 through CY19)

	All Companies	Size Quintile (1 = largest)				
		1	2	3	4	5
Communication Services	1.5%	10.6%	4.2%	-7.1%	0.9%	-2.5%
Consumer Discretionary	3.5%	4.8%	3.0%	4.0%	2.5%	2.8%
Consumer Staples	6.2%	2.5%	4.3%	8.3%	4.3%	12.1%
Energy	-12.1%	-2.5%	-16.3%	-18.7%	-9.2%	-18.6%
Health Care	7.3%	6.4%	14.4%	7.5%	0.5%	5.9%
Industrials	7.2%	7.7%	5.9%	7.0%	9.8%	5.6%
Information Technology	13.6%	16.1%	13.2%	13.6%	10.4%	13.5%
Materials	2.3%	5.7%	6.3%	2.4%	0.3%	-3.0%
All Companies	5.7%	7.4%	6.7%	5.3%	4.2%	4.3%

Annualized returns over the preceding five years revealed mixed performance, with information technology firms leading and the energy sector lagging.

Larger companies provided superior returns to smaller companies over the period analyzed, despite theoretical expectations that smaller companies should generate higher returns.

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