

*Case Study***Central Circuit Breaker<sup>1</sup>**

Central Circuit Breaker is a small family-owned business that is engaged in reconditioning and selling used circuit breakers. A number of businesses like CCB operate throughout the U.S. These businesses exist in large part because of technological changes in circuit breaker design. Original equipment manufacturers no longer make circuit breakers that are compatible with many existing panel boards. Owners of buildings and equipment designed with old style panel boards and who need to replace existing circuit breakers that are no longer being manufactured must either replace entire panel boards or purchase reconditioned breakers from a company like CCB.

The reconditioning business is not complicated. Minor investments in equipment are required and, by far, the largest capital investment is for acquisition of an inventory of circuit breakers that are available for reconditioning or can be used for parts in other reconditioned breakers, and for adequate warehouse space in which to house the inventory. Most of the business of a reconditioner is conducted by telephone: both acquiring inventory (often from salvage operations), and selling (usually to large businesses and electrical parts distributors who are familiar with the reconditioned breaker market). Breakers usually are stored in the condition they are acquired until an order is received, at which point, the expense of cleaning and reconditioning the breaker is incurred. Because CCB is focused on replacement of obsolete circuit breakers, the business has negligible exposure to fluctuations in the overall economy.

Because reconditioning does not require a large capital investment, the scale economies of the business are slight. Viable businesses often operate with annual sales revenue in the \$1 million to \$2 million range, with little potential for growth, except by opening additional warehousing and reconditioning operations in other locations. However, multi-plant economies of scale are negligible.

The owners of CCB are nearing retirement age and are interested in selling the business. CCB is organized as a C corporation, and pays corporate taxes on net income each year at an effective rate of 25 percent. To minimize taxes, the owners of CCB generally are able to incur a number of discretionary expenses that collectively result in reporting corporate net income near zero, but high enough so that a small tax liability is incurred in most years. The owners expect to be able to sell for approximately six times annual cash flow, after adjusting for discretionary expenses, including such things as higher-than-necessary CEO salary, facilities rent, and travel. In conjunction with acquisition of the business, the purchaser would acquire ownership of the building.

Jack Ryan, the general manager of CCB, has worked for the company for the past 11 years. He is interested in acquiring the business, if he can figure out how to do so, and

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<sup>1</sup> Company name, dates, and financial information are disguised to preserve confidentiality.

if the price would be low enough to reasonably compensate for the risk. To help him assess the value of the business, the owners have given him five years of historical income statements (Exhibit 1). The company is debt-free. Ryan would acquire all of the business assets and assume the short-term liabilities. He understands that the assets are sufficient to continue operating the business without requiring additional investment and that the current balances of accounts receivable and accounts payable are at normal levels for the business.

As part of the purchase price, Ryan would acquire the building that CCB currently rents from the existing owners. He believes that the current market rental rate for the building is \$36,000 per year less than the rate the owners are charging CCB, and that the fair market value of the building is about \$400,000, based on market rent. This value takes account of costs to maintain the building indefinitely. Ryan would continue to hold the building as a personal asset so that depreciation expenses would not appear at the corporate level, but would reduce his personal income taxes.

The current owners drive expensive automobiles, which they depreciate on the company books. Ryan believes that with less expensive cars he can reduce automobile depreciation expense by half. There are no other significant depreciation expenses. The automobile depreciation expenses correspond approximately to economic depreciation so that the company would need to make periodic investments in new vehicles that approximately offset the depreciation expense in the income statement. Ryan also believes that essential travel would run about \$3,000 per year. Key executive life insurance also is a benefit that ultimately would accrue to the owners. Finally, he believes the owners' salaries are substantially above market, and that the appropriate market salary is about \$60,000. Ryan's current salary is \$35,000. If he becomes CEO, he can hire a new general manager at about the same rate that he currently is receiving. If the business is sold to someone else, he is likely to remain in the general manager position at about the same salary.

Ryan's current salary is not very risky. He believes the risk level of income generated from the business would be greater and that his earnings as CEO would be riskier, with the differential relative to his salary as general manager varying, over time in proportion to the variability of adjusted net income. Ryan is 47 and expects to retire at age 65. If he buys CCB he would sell the business and the facility at that point on terms similar to those of the current sale.

Ryan is considering a number of possible means of financing the acquisition. He believes he can scrape together \$50,000 of his own money by selling various assets, and liquidating some investments in the stock market he has built up over time. Doing so would leave him with about another \$100,000 of wealth that would be outside of the business. He expects to be able to take advantage of a minority assistance loan program for \$150,000 at a rate of 6 percent, and an economic development assistance loan program for \$200,000 at 5.6 percent. For similar levels of debt service from non-subsidized sources, he would only be able to borrow about \$135,000 and \$180,000, respectively. The balance of the financing would have to be borrowed at the prevailing

market rate, which could be done by mortgaging the facility and arranging a buyout with the current owners. All borrowing would be Ryan's personal obligations, and not liabilities of the business.

Ryan needs to determine whether the business is worth the asking price, particularly since he would need to commit a large fraction of his personal wealth to it. He believes that the availability of subsidized financing should be factored into the decision, but is unsure how to do so. Market information relevant to the decision is provided in Exhibit 2.

Exhibit 1

<b>Central Circuit Breaker</b>					
<b>Operating History (in real terms)</b>					
	<b>Year 1</b>	<b>Year 2</b>	<b>Year 3</b>	<b>Year 4</b>	<b>Year 5</b>
Sales revenue	\$1,400,000	\$1,600,000	\$1,100,000	\$1,200,000	\$1,500,000
Cost of goods sold	\$560,000	\$620,000	\$460,000	\$500,000	\$580,000
Gross profit	\$840,000	\$980,000	\$640,000	\$700,000	\$920,000
Operating expenses	\$820,000	\$955,000	\$635,000	\$680,000	\$930,000
Net taxable income	\$20,000	\$25,000	\$5,000	\$20,000	(\$10,000)
Tax expense	\$5,000	\$6,250	\$1,250	\$5,000	(\$2,500)

<b>Notational Items Included in Operating Expenses</b>					
Owner salary and bonus	\$90,000	\$100,000	\$70,000	\$70,000	\$90,000
Depreciation - Owner's autos	\$12,000	\$12,000	\$12,000	\$14,000	\$14,000
Building rent	\$50,000	\$50,000	\$45,000	\$45,000	\$55,000
Life insurance	\$6,000	\$6,000	\$6,000	\$6,000	\$6,000
Travel and entertainment	\$12,000	\$13,000	\$2,000	\$4,000	\$7,000

Discretionary Expenses	\$66,000	\$76,000	\$41,000	\$42,000	\$72,000
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Exhibit 2

<b>Current Yield and Market Information</b>	
Short-term Treasury Notes	5.50%
Long-term Treasury Notes	6.25%
Investment Grade Corporate Bonds	8.50%
Expected Annual Inflation	4.00%

<b>Historical Yield and Market Information</b>	
Short-term Treasury Notes	4.00%
Long-term Treasury Notes	4.50%
Investment Grade Corporate Bonds	6.00%
Market Risk Premium (long-term)	6.50%