

THE EVALUATION OF A FLOATING-RATE SALE-LEASEBACK

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CASE DESCRIPTION

The primary subject matter of this case concerns the evaluation of a sale-and-leaseback arrangement. Secondary issues examined include differences in tax ramifications and financial reporting implications of the leasing arrangement, and simple scenario analysis. The case is intended for an introductory finance course delivered to juniors and seniors in a business program. Students should have prior familiarity with the structure of the balance sheet and the income statement, and discounted cash flow analysis, including the concept of net present value. The case will require approximately two hours of preparation outside of class, after which it can comfortably be discussed in a one-hour class. It is recommended that the instructor provide a ten-minute overview of the case in a prior class period.

CASE SYNOPSIS

Rockhill, Inc. is an electric utility operating in mid-western United States. The process of deregulation in electricity generation has transformed the utility's competitive landscape, prompting it to divest much of its generating assets, shift its focus to electricity transmission and distribution, and revise several of its financial policies. Among other things, the company has adopted the policy to lease, rather than purchase, any additions to its fleet of vehicles. While the vehicles it currently owns represent slightly over 40% of its entire fleet (with the remainder being leased), over time, its "lease-only" policy will eliminate owned vehicles altogether, since vehicles must eventually be replaced. In the meantime, though, it wishes to evaluate the economic advisability of speeding up the process of eliminating ownership by converting the owned vehicles into leased vehicles through a "sale and lease-back" arrangement with another party.

One of Rockhill's financial analysts has just been assigned the task of determining whether such a lease will add value to the firm. She must project the cash flow implications of the switch from ownership to leasing, and then estimate the present value of those incremental cash flows. Based upon her analysis, she needs to make a recommendation to management at the upcoming meeting. The estimation of incremental cash flows will require a careful consideration of the tax treatment of the leasing arrangement as well as a forecast of the floating interest rate that the utility will have to pay on its lease.

COMPANY BACKGROUND

Rockhill, Inc. is a regulated transmission and distribution utility that serves almost 1.2 million customers over three counties. The customers are primarily residents, rather than businesses, and, by national standards, enjoy an above-average per capita income. Over the past three years, Rockhill's customers have had the option to choose other suppliers of power, and to date about 10% of them have switched to alternative providers. While the service area is fairly stable, it is also mature, and growth is expected to be moderate for the foreseeable future; estimates of the growth rate range from 1.5% to 2.5% assuming normal weather conditions.

The utility has divested a large portion of its generating assets to Altisar Corporation, with whom it has a five-year, fixed-price contract to purchase the electricity needed to fulfill its standard service commitment to its customers. Altogether, its power purchase agreements and its remaining ownership interest in generating assets is very likely to meet the utility's supply needs for the next six years.

Rockhill recently acquired a smaller electricity distributor, Teslar, Inc., which cost approximately \$3 billion. While the proceeds from the sale of generating assets to Altisar Corporation paid for more than half this amount, almost 45% of the funds needed for the acquisition of Teslar came from the issue of long-term debt. A favorable interest rate environment has made this bond issue an attractive source of financing, but it has also raised significantly the utility's debt ratio.

Like most utilities, Rockhill, Inc. operates a large fleet of vehicles, including a variety of trucks, vans, cranes, backhoes, and tractors. If purchased new, these vehicles would cost anywhere from \$3000 to as much as \$200,000. For a few years now, Rockhill's management has adopted a policy of leasing any additions to its existing fleet. Currently, the utility owns 200 vehicles, and an additional 250 are leased through the Dalton Leasing and Finance Corporation (DLFC).

THE REQUEST FOR LEASE ANALYSIS

By leasing rather than buying the new vehicles, the utility avoids large outlays of cash. As a corollary, it avoids booking a large amount of debt and depreciating vehicles over long periods, often beyond the original costs (which the rules of the Federal Energy Regulatory Commission, FERC, can engender). Thus, the utility can maintain its cash reserves and keep its debt and coverage ratios in a more desirable range. This is of particular concern in the face of some active credit downgrades currently occurring in the industry. Indeed, an industry that has traditionally been characterized by high payout ratios now finds many of its firms cutting back on their dividends in an effort to satisfy credit rating agencies and preserve their bond ratings.

In the case of Rockhill, conserving cash and reducing debt is of particular concern in the light of its recent acquisition of Teslar, Inc. As noted earlier, this purchase came at a cost of \$3 billion, of which approximately 45% was financed by long-term debt. Not surprisingly, then, the

utility's treasury department recently received a suggestion from management to evaluate the feasibility of converting the 200 owned vehicles to leased vehicles. The utility could consummate such a conversion by first determining the current market value of the owned vehicles and then establishing an amortization period and mutually agreeable value with the potential lessor, probably DLFC. DLFC would then reimburse the utility for the agreed-upon market value, and the latter would lease the same vehicles from DLFC. Management expects that such a sale-and-lease-back arrangement will significantly reduce fleet costs, since the annual amortization on the lease will be significantly less than the current depreciation on these vehicles. Of course, the transaction would also result in an upfront inflow of cash equal to the market value of the vehicles.

THE ANALYST GATHERS INFORMATION

Meg Hawkins, a financial analyst with Rockhill's treasury department, has been assigned the task of evaluating the sale-and-leaseback, and must report her recommendation to management within a week. She begins by contacting the Fleet Management department, which informs her that none of the vehicles is scheduled to be sold or salvaged for two years. It also estimates the market value of the 200 owned vehicles to be approximately \$3,000,000. For financial reporting purposes, the vehicles currently have a book value of approximately \$12,000,000, and the firm charges annual depreciation of \$1,500,000 on the vehicles to the transportation clearing account. The depreciation amount is based on original costs, and continues at the same level as long as the company owns the vehicles. On the other hand, for tax purposes, these vehicles are almost fully depreciated at this point, and have a remaining tax basis of approximately \$25,000. Thus, by the time the lease goes into effect, the owned vehicles would have a negligible depreciation tax shield.

Ms. Hawkins apprises the potential lessor, DLFC, of Rockhill's interest in a sale-and-leaseback transaction. DLFC also contacts Fleet Management at Rockhill, Inc., and obtains information pertaining to the vehicles involved in the leasing arrangement. DLFC concurs with Fleet Management's estimate of \$3,000,000 for the value of the vehicles, and quotes Ms. Hawkins a spread of 125 basis points over the one-month LIBOR for a lease involving a 24-month amortization period. The current level of the one-month LIBOR is 2.5%, and this will determine Rockhill's initial finance cost. Any change in the LIBOR will be recognized at the end of the first year of the lease. According to the lease terms, the residual value of the vehicles will be \$0, so the entire amount of \$3,000,000 will be amortized over the 24-month period, at a rate of \$125,000 per month. Payment will be made monthly, and, in addition to the \$125,000 amortization payment, will include an interest payment calculated on the unamortized value at the beginning of the month. Rockhill has the option to terminate the lease at the end of the first year, but provides the lessor a "residual guarantee" of up to \$1,150,000 if the equipment is sold for less than the unamortized lease balance. This amount can be looked upon as the utility's "maximum obligation", in addition to the first twelve monthly payments. Unless Rockhill terminates the lease at the end of the year, the lease will

be remain in effect for another twelve months, with interest payments being determined at the reset LIBOR rate. At the end of the two-year period, Rockhill can repurchase the vehicles for the unamortized value, which is zero. Exhibit 1 shows DLFC's sample amortization schedule for the lease (some information has deliberately been hidden, and represented by Xs, since the reader will be asked to ascertain it). Note that this schedule is based on the assumption that the currently prevailing LIBOR of 2.5% will continue through the two years of the lease.

Ms. Hawkins knows that Rockhill's marginal tax rate is 38%, that its weighted average cost of capital is 9%, and that its cost of secured debt is 7% on a pre-tax basis. For the lease analysis, she will use the after-tax cost of secured debt, rather than the firm's weighted average cost of capital, as the discount rate. This is because the lease payments by the lessee are akin to debt service cash flows on secured debt rather than like operating cash flows; the lower discount rate reflects the lower risk of these incremental cash flows. Before she can ascertain the economic feasibility of the lease, however, the analyst needs two more pieces of information: a forecast of the LIBOR one year from now, and a clear determination of the tax treatment of the lease. Luckily, the former is readily available, since she just completed a project in connection with which she forecasted the following LIBOR rates for the next 4 years (beginning today), respectively: 2.5%, 2.6%; 2.35%; and 2.31%.

The tax treatment of the sale-and-leaseback, on the other hand, is a more complicated issue. Being somewhat less familiar with this aspect of leases, Ms. Hawkins decides to consult some textbooks pertaining to the accounting and tax classification of leases. In addition, she requests DLFC to provide its input on the matter.

CLASSIFICATION OF THE LEASE AGREEMENT

The analyst finds that the lease has different implications for financial reporting and reporting for tax purposes. Of course, she is interested in both the financial reporting and tax aspects of the sale-and-leaseback, even though only the tax treatment of the lease has an impact on cash flow. The results of the analyst's research and the opinion provided by a Vice President of DLFC *on the specific leasing arrangement proposed by Rockhill* can be summarized as follows. For financial accounting purposes, the sale-and-leaseback is looked upon as an operating lease. Therefore, the lessee (Rockhill) is not required to book the lease obligations as a liability and the leased property as an asset. For tax purposes, on the other hand, the same lease is viewed as a financing arrangement. The lessee maintains the operating control of the asset, and retains the tax benefits associated with the debt implied by the lease.

A few key features of the proposed lease agreement should be noted, which are relevant to the tax treatment summarized above. First, as mentioned earlier, under the proposed agreement, the lessee would have the option to purchase the leased vehicles at the end of the 24-month period for a fixed price equal to the unamortized lease balance, which in this case is zero. Thus, Rockhill would retain the right to any upside equipment value. Second, Rockhill would provide a residual guarantee

in the form of additional rent, should the lease be terminated, and the equipment sold for less than the unamortized lease balance. There will be a cap on this guarantee, but the risk to the lessor (DLFC) would be less than 20% of the original cost. Third, a portion of each payment made by Rockhill would represent amortization; since the utility has the option to purchase the equipment at the expiration of the lease (at the unamortized balance), this portion of each payment essentially represents a build-up of equity for Rockhill. Finally, the remaining portion of each payment would represent interest, which would be computed on the basis of the unamortized value at the beginning of each month, as noted earlier.

These key features of the proposed lease indicate that all the benefits, and a substantial part of the risk of ownership are to be retained by Rockhill. For tax purposes, therefore, the utility can be treated as the owner of the equipment, and the lease may be treated as a financing arrangement. Indeed, the analyst obtained a copy of the IRS Field Service Advice on a similar lease, which deemed the lease to be a financing arrangement, or a “conditional sale agreement”. Rockhill can thus reduce its taxable income by the amount of the interest involved in the lease. While it can also claim depreciation expense on the equipment by virtue of being treated as the owner of the equipment, the vehicles will have no depreciable basis by the time the lease is expected to go into effect. The analyst does not, therefore, need to consider any tax shield from depreciation in her evaluation of this leasing arrangement.

For financial reporting purposes, Meg Hawkins finds that the Financial Accounting Standards Board (FASB) Statement No.13 (FASB 13) sets out the criteria that determine whether a lease might be classified as an operating lease or a capital lease. Should the lease meet any one of four criteria specified by FASB 13, it would have to be classified as a capital lease. These criteria, and Meg Hawkins’ assessment of whether the proposed lease meets any of those criteria, are provided in Exhibit 2. As reported there, the analyst finds that the proposed lease fails to meet each of the criteria defined by FASB 13, and concludes that the lease would in fact be classified as an operating lease rather than as a capital lease.

The classification of the sale-and-leaseback as an operating lease for financial reporting purposes implies that the vehicles will not appear as assets on the utility’s balance sheet, nor will the required payments be reported as a liability. Meg Hawkins notes with some satisfaction that, should she find the lease to be sound on economic grounds, its “off-balance-sheet” classification will lead management to receive the sale-and-leaseback proposal with greater enthusiasm.

The analyst is curious to find out how the numbers will play out in the case of this lease. She organizes all the information she has gathered, starts up her spreadsheet program, and begins the process of arriving at some hard figures that will help her make a recommendation to management in the upcoming meeting.

**Exhibit 1—Sample Amortization Schedule for Rockhill, Inc.
Dalton Leasing and Finance Corporation**

Equipment Cost	\$3,000,000
Payment Frequency	Monthly
Amortization Period	24
Expected Residual Value	0
Spread over LIBOR	1.25%
Indexed to LIBOR Rate	2.50%
Lease Rate	3.75%
PV of 12 payments:	
NPV of Total Payments	\$X,XXX,XX
As % of Fair Value	XX.XX%

End of Period	Unamortized Value	Amortization for the Month	Lease Rate	Total Payment	Lessee's Max. Obligation
0	\$3,000,000				
1	2,875,000	\$125,000	\$9,375.00	\$134,375.00	
2	2,750,000	125,000	8,984.38	133,984.38	
3	2,625,000	125,000	8,593.75	133,593.75	
4	2,500,000	125,000	8,203.13	133,203.13	
5	2,375,000	125,000	7,812.50	132,812.50	
6	2,250,000	125,000	7,421.88	132,421.88	
7	2,125,000	125,000	7,031.25	132,031.25	
8	2,000,000	125,000	6,640.63	131,640.63	
9	1,875,000	125,000	6,250.00	131,250.00	
10	1,750,000	125,000	5,859.38	130,859.38	
11	1,625,000	125,000	5,468.75	130,468.75	
12	1,500,000	125,000	5,078.13	130,078.13	\$1,150,000.00
13	1,375,000	125,000	4,687.50	129,687.50	
14	1,250,000	125,000	4,296.88	129,296.88	
15	1,125,000	125,000	3,906.25	128,906.25	
16	1,000,000	125,000	3,515.63	128,515.63	
17	875,000	125,000	3,125.00	128,125.00	
18	750,000	125,000	2,734.38	127,734.38	
19	625,000	125,000	2,343.75	127,343.75	
20	500,000	125,000	1,953.13	126,953.13	
21	375,000	125,000	1,562.50	126,562.50	
22	250,000	125,000	1,171.88	126,171.88	
23	125,000	125,000	781.25	125,781.25	
24	0	125,000	390.63	125,390.63	

	\$X,XXX,XX
PV of First Year Payments	X
	\$X,XXX,XX
PV of Residual Guarantee	X

Exhibit 2—Classification Criteria for Capital Leases			
	FASB Criterion	Does Lease Meet Criterion?	Explanation
1	“The lease transfers ownership of the property to the lessee by the end of the lease term.”	No	The lease provides a purchase option but not a predetermined transfer of ownership.
2	“The lease contains a bargain purchase option.”	No	The lease does contain a purchase option, but the price is not a bargain.
3	“The lease term is equal to 75% or more of the estimated economic life of the leased property.”	No	The estimated useful economic life of the property is more than 2.7 years, and therefore the lease term is less than 75% of the estimated useful life.
4	“The present value at the beginning of the lease term of the minimum lease payments equals or exceeds 90% of the fair value of the leased property at the inception of the lease.”	No	The present value of the minimum lease payments, including the residual guarantee at the end of the first twelve-month term, is less than 90% of the fair value of the leased property at the inception of the lease.

Source for Criteria: *Financial Accounting Standards Board, Statement 13, “Accounting for Leases”, Paragraph 7. The criteria are quoted from the FASB statement.*

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