

**Krull, Inc.**<sup>1</sup>

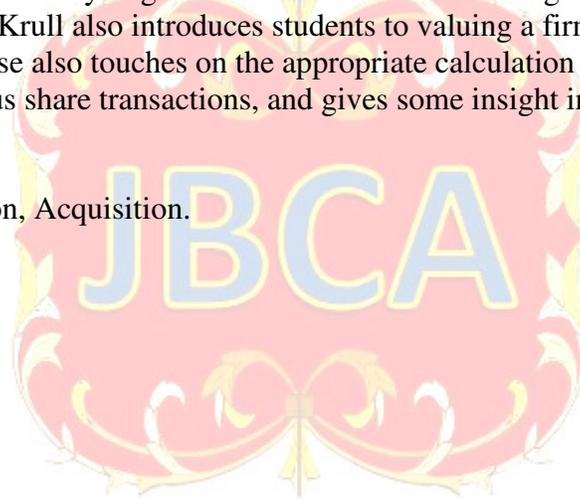
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**Abstract**

This short, fictitious case is designed for use in an undergraduate finance course to help students understand the valuation of an acquisition target. The firms in the case, Krull Inc. and Wilson Industries, are in slightly different but related industries and the merger allows students insight into synergies and how synergies affect the valuation of a target. Examining the proposed acquisition of Wilson by Krull also introduces students to valuing a firm both with and without synergies present. The case also touches on the appropriate calculation of cash flows in an acquisition, on cash versus share transactions, and gives some insight into bidding during an acquisition.

Keywords: Firm Valuation, Acquisition.



*Fictitious Case Statement: The events, firms, and individuals depicted in this case are fictitious. Any similarity to any person living or dead or any firm is merely coincidental.*

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<sup>1</sup> Krull, Inc. Teaching Note and two Excel files (a template for students and a solution to accompany the teaching note) are available from the authors: Bradley Stevenson ([bstevenson@bellarmine.edu](mailto:bstevenson@bellarmine.edu)) and David Collins ([dcollins@bellarmine.edu](mailto:dcollins@bellarmine.edu)).

## LEARNING OBJECTIVES

- 1) Understand the concept of synergy and identify instances of synergy in the proposed merger.
- 2) Understand the appropriate method for calculating cash flows in an acquisition when synergies are present.
- 3) Get introduced to determining firm value in the presence of synergies and without synergies.
- 4) Gain a basic understanding of the difference between share and cash transactions in an acquisition.
- 5) Get a beginning understanding of bidding on a target in an acquisition.

## BACKGROUND

It is the beginning of 2014 and Krull, Inc. is a successful firm that designs and manufactures lawn and garden equipment. While Krull is healthy, it is one of many smaller players in a competitive industry. The Chairperson of the Board, Danielle Smith, and the CEO, Roland Spalding, have been concerned about the intense competition in the industry and are contemplating expanding to take advantage of economies of scale that Krull does not currently enjoy. One reason for the concern is shareholder pressure to continue growth and expansion in line with the firm's trajectory over the last 10 years.

## GROWTH OPPORTUNITIES

The firm currently focuses mostly on hand tools and implements for home gardeners. While they do sell nationally over the internet, their stores, and consequently their sales, are concentrated in the eastern U.S. Up to now Krull's sales growth has been internal by expanding the range and style of tools. The current product line includes a wide range of hand gardening tools and other garden items, such as birdbaths, flowerpots, etc., but provides little room for additional growth. Other than increasing their sales territory, Danielle and Roland know that future growth would require moving into related, but uncharted, territory such as power tools.

For Danielle, expanding into power tools would be a natural extension of the company's current products and would build on their recognized brand name. Also, the growth rate in power tools matches the rate in their current line of business of around five percent per year for the foreseeable future. Roland agrees in principal, but is apprehensive. Such a move would require significant expenditures in R&D, property plant and equipment, and sales training. With these obstacles in mind, Danielle asked Roland to find a way to expand while minimizing these costs.

## THE TARGET

One option Roland and the management team focused on is a strategic acquisition of a firm that already successfully produces the power tools Krull is considering. Of the firm's that fit this description, the management team identified Wilson Industries as a possible target. It is approximately the same size as Krull, was formed about 40 years ago by the Wilson family, and went public about 15 years ago.

Based in Boise, Idaho, Wilson sells its products mainly in the west coast and the Great Plains states. While Wilson is successful, it is facing increased competition in its product lines and would benefit by adding the complementary product lines offered by Krull. The opportunity to buy Wilson has arisen because the Wilson family, which still owns 51% of the shares, wants to liquidate their investment. The next generation of Wilsons do not want to be involved in the family business, much to the dismay of Grandpa Wilson.

## THE DECISION

While Danielle is receptive to the acquisition, she wants Roland and his team to lay out a detailed argument of the benefits of acquiring Wilson to present to the rest of the board. To this end, Roland gathered data to determine the value of Wilson as it currently stands and as a part of Krull, Inc. For his report to the board, Roland sets out to answer the following questions.

## QUESTIONS

- 1) What factors impact the decision to proceed with this merger between Krull and Wilson? Which of these are strategic and what factors may create potential synergy in the merger?
- 2) Table 1 presents financial forecasts for Wilson for 2014, 2015, and 2016. Assuming no synergies, what is Wilson's enterprise value and enterprise value per share as a stand-alone firm using the DCF methodology assuming a 9.3% WACC and a growth rate beyond 2016 of 5%? What is Wilson's equity value and equity value per share?
- 3) Based on Wilson's financial information and the industry multiples given below, what is the value of Wilson Industries? How could Krull use this information to enhance or alter their DCF valuation of Wilson?
- 4) Because of the synergies that exist between Wilson and Krull, a benefit of \$90,000 after taxes per year is expected due to the merger. What is the enterprise value and enterprise value per share of Wilson to Krull considering this synergistic benefit? What is Wilson's equity value and equity value per share?
- 5) If Krull goes through with the acquisition, they can either pay cash or offer shares in Krull in exchange for shares in Wilson. What are the advantages and disadvantages of shares compared to a cash offer? What are some tax issues that must be considered when making the bid?
- 6) To complete their merger analysis, what other option should Krull consider before proceeding?
- 7) Based on your analysis above in parts two and four, what range of prices would be acceptable as a purchase price per share for Krull to buy Wilson? What factors will affect the final purchase price?

- 8) Suppose that Krull and Wilson agree to a price for the Merger of \$35 per share. What is the exchange ratio in this transaction and the NPV of the stock acquisition?

	2014	2015	2016
Net sales	\$3,016,500.00	\$3,634,500.00	\$4,023,000.00
EBIT	\$318,700.00	\$388,891.50	\$430,461.00
Depreciation	\$51,400.00	\$50,600.00	\$54,900.00
Taxes	\$111,545.00	\$136,112.03	\$150,661.35
Net income (loss)	\$155,755.00	\$202,179.48	\$224,899.65
NWC Change	\$28,900.00	\$30,900.00	\$19,425.00
Capital Investment	\$25,000.00	\$38,500.00	\$26,400.00
Year-end shares outstanding	184,200	186,000	185,400
Earnings per share	\$0.85	\$1.09	\$1.21
Dividends per common share	\$0.50	\$0.52	\$0.54
Long-term debt	\$374,000.00	\$235,670.00	\$397,000.00
P/E	38.565	31.460	31.046

	Wilson – 2013	Krull – 2013
Net sales	\$2,865,675.00	\$4,213,600.00
EBIT	\$302,765.00	\$632,040.00
Depreciation	\$48,830.00	\$73,400.00
Taxes	\$105,968.00	\$211,000.00
Net income (loss)	\$147,967.00	\$401,190.00
NWC Change	\$27,455.00	\$2,600.00
Capital Investment	\$23,750.00	\$34,300.00
Year-end shares outstanding	184,000	110,000
Earnings per share	\$0.80	\$3.65
Dividends per common share	\$0.48	\$1.90
Price per share	\$30.00	\$40.50
Long-term debt	\$355,300.00	\$397,000.00
P/E	37.306	11.124

	Sales	Cash Flow	Operating Income	Net Income	BV of Equity	MV of Equity	Total Debt
GreenGro	161	7	11	4	25	246	9
Smith's	1603	286	482	173	1368	675	825
Hearty Lawn	65	4	5	4	12	150	12
Lawn Pro	341	19	36	8	44	162	276
Merlin	449	23	34	11	120	789	144
EarthStore	255	35	43	19	147	1212	6
	EV/CF	Equity/NI	EV/Sales				
GreenGro	36.4	61.5	1.6				
Smith's	5.2	3.9	0.9				
Hearty Lawn	40.5	37.5	2.5				
Lawn Pro	23.1	20.3	1.3				
Merlin	40.6	71.7	2.1				
EarthStore	34.8	63.8	4.8				
<b>Average</b>	<b>30.1</b>	<b>43.1</b>	<b>2.2</b>				

