

# Masonite International Corporation: Case Study Of A Leveraged Buyout

Barbara S. Pettitt, Bournemouth University, UK

F. John Mathis, Thunderbird School of Global Management, USA

## ABSTRACT

*This case study deals with the leveraged buyout of door manufacturer and merchandiser Masonite International Corporation, at a time of uncertainty, marked by the ever-increasing cost of raw materials, the tightening of monetary policy, and the concerning health of the housing market. It offers the opportunity to discuss leveraged buyouts, to value the company, and to analyze the financing of the transaction.*

**Keywords:** leveraged buyout; KKR; discounted cash flows valuation; multiples; financing

## INTRODUCTION

It was February 16, 2005, and Edgar James<sup>1</sup> from Merrill Lynch, one of the leading investment banks, was reviewing the file regarding the leveraged buyout (LBO) of Masonite International Corporation (Masonite). A couple of months earlier, Kohlberg, Kravis and Roberts (KKR), one of the oldest and largest private equity firms, had teamed up with Masonite's senior managers and offered to take the company private via a US\$2.52 billion LBO. A shareholder meeting to vote on the transaction was scheduled in less than 48 hours, but it was very likely that the deal would be voted down. Most of the major shareholders had already announced that they would reject the transaction, arguing that the premium offered by KKR was insufficient. The meeting scheduled earlier on that day to discuss the financing of the deal had been cancelled. As the head of Merrill Lynch's team working on the LBO, Edgar had to finalize his recommendation before talking to Masonite's Board of Directors. Was KKR about to walk out? After all, there were increasing concerns about the profitability and growth prospects of building products companies in general and Masonite in particular, due to the ever-increasing cost of raw materials, the negative impact of the tightening of monetary policy on consumer spending and mortgage rates, and the concerning health of the housing market. But Masonite was still one of the best-positioned companies in the industry, with strong earnings and cash flows. Would this be enough to entice KKR to increase their offer?

## MASONITE'S HISTORY, PRODUCTS, MARKETS AND COMPETITORS

Masonite was one of the world's largest manufacturers and merchandisers of doors, door components and door entry systems, headquartered in Mississauga, Ontario. It operated 75 facilities in 16 countries, sold its products to customers in 50 countries, and employed about 14,000 people.

The company, initially called Premdor Inc. (Premdor), started business in 1955 in Toronto, Ontario, as the purchasing division of a retail lumberyard. In 1961, it began manufacturing a full line of flush doors. Over the following four decades, the local producer turned into a vertically integrated and global manufacturer and merchandiser. The first growth stage was mainly organic, and involved extending production facilities from Canada to the United States (US). Though Premdor's portfolio of products became more robust, by the mid-1970s, it mainly included internal doors with wooden or medium density fiber (MDF) frames. The second growth stage was a combination of organic growth and acquisitions, which enabled Premdor to expand worldwide. From 1975 to 2000, the company established and acquired doors and door component manufacturers as well as logistical and fabrication

---

<sup>1</sup> Edgar James is a fictional character, who serves as the protagonist for this case study.

centers, notably in the United Kingdom (UK) and in France. Over this period, it increased its sales of interior doors, and expanded its product line with architectural doors, and steel and fiberglass exterior doors and entry systems.

With the early 2000s came the third growth stage, driven by major acquisitions. In August 2001, Premdor purchased Masonite Corporation, one of the world's leading manufacturers of door components, for US\$500 million. The following year, it changed its name to Masonite International Corporation, to leverage up the world-famous Masonite brand. In December 2003, Masonite acquired the residential entry door division of The Stanley Works for US\$160 million. This gave Masonite the opportunity not only to continue its focused strategy in the door business worldwide, but also to reinforce its position for external doors, particularly with steel and fiberglass frames. This acquisition added about US\$200 million in annual sales, and also improved global procurement of raw materials and more efficient logistics.

The purchase of The Stanley Works' residential entry door division was completed in March 2004. Two months later, Masonite announced two other acquisitions. The first one was the purchase of a 75% stake, for US\$27 million, in Kronodoor, a leading door manufacturer of MDF products with production facilities in the Czech Republic and in Poland, and a strong presence in Central and Eastern Europe. The second acquisition was the purchase of a state of the art wood composite molded door facing manufacturing facility in Malaysia from Samling for US\$25 million. The combination of Samling's division with existing operations in China and South Korea would provide the framework for a fully integrated supply system in Asia, with logistical and distribution capability throughout the region.

By 2005, Masonite offered a wide range of products, and was generating 66% of its sales from interior products vs. 33% from exterior products. Revenues were evenly split between new constructions, both residential and commercial, and repair, renovation and remodeling. North America was still the main market, representing 79% of sales and 83% of operating income, but the company was expecting the share of Europe, the Middle East, South America and Asia to increase in the future.

Masonite operated in a competitive environment with several global companies looking to grow their market share. The top competitors, with operations reasonably similar to Masonite's, were Canada-based Royal Group Technologies Limited, and US-based American Standard Companies Inc., American Woodmark Corporation, The Black and Decker Corporation, Elkc corp, Fortune Brands Inc., Jacuzzi Brands Inc., Masco Corporation, Mohawk Industries Inc., The Sherin-Williams Company and The Stanley Works.

## **MASONITE'S PERFORMANCE**

The previous day, Masonite had reported its results for 2004. Between 2003 and 2004, sales had soared by 23.8% to US\$2.2 billion, a balance of organic growth and acquisitions. Earnings before interest tax depreciation and amortization (EBITDA) and earnings before interest and tax (EBIT) were up by 23.0% and 20.8%, respectively. Net income had increased by 18.8% to US\$128.0 million. The results for the fourth quarter were, however, telling a slightly different story. Between the last quarter of 2003 and the last quarter of 2004, revenues were up 25.1% to US\$570.2 million, but all the margins were down: the EBITDA margin had dropped from 13.7% to 13.6%, the EBIT margin from 10.9% to 10.1%, and the net profit margin from 6.4% to 4.8%. Earnings per share (EPS) had decreased by 4 cents, from US\$0.54 to US\$0.50, breaking a trend of 18 consecutive quarters of profit growth.

The decrease in profitability was the consequence of two major factors. First, the company had struggled to align price increases with cost increases. The primary raw materials that Masonite used in the manufacture of its doors were wood (lumber, plywood and hardboard), steel, fiberglass and polyurethane. Like all door manufacturers, Masonite was now facing two issues: an increase in the cost of all raw materials and a decrease in availability. Of particular concern was the fact that the cost of raw materials represented 75% of the cost of sales, and that the cost of most of these raw materials had pretty much doubled over the last year. Back in the first quarter of 2004, Philip Orsino, Masonite's Chief Executive Officer (CEO), had reassured the investment community that the company had the ability to pass through all the cost increases to its customers. But the company was now acknowledging that major distributors such as Home Depot, which accounted for a quarter of sales, and Lowe's were resisting price increases. Second, Masonite had recently undertaken a program of standardizing its entry door product offering and

as a consequence, it had closed two manufacturing facilities in the US. This had led to restructuring expenses of US\$10.4 million in 2004. Management was adamant that they were one-off, non-recurring items.

Though Masonite had enjoyed double-digit growth rates for several years, it remained, like all building products companies, highly sensitive to the state of the economy, particularly to the level of interest rates and the health of the housing markets. And there were, in these areas, mounting concerns. Back in June 2004, the Federal Reserve (Fed) had started increasing its target rate from a 46-year low of 1.0% to 2.5%, but most analysts and economists were predicting further increases, perhaps all the way back to the 6 to 7% level of the mid-1990s. This tightening of monetary policy would have a negative impact on consumer spending, and that would directly affect sales, earnings and cash flows of building products companies. It would also put pressure on mortgage rates, an important factor behind home purchases and improvements.

In addition, there were increasing concerns about the health of the housing market. Though the number of housing starts had broken another record in January 2005, the National Association of Home Builders (NASH) and both the Federal National Mortgage Association (nicknamed Fannie Mae) and the Federal Home Mortgage Corporation (nicknamed Freddie Mac), the large, government sponsored enterprises guaranteeing half the mortgages in the US, were forecasting a decrease of 8 to 11% of housing starts for 2005. They were also expecting a decline in home sales of up to 12% if mortgage rates were rising due to interest rates increases. The housing bubble argument was also raging, in particular after the statistics for the fourth quarter of 2004 showed that national median home prices had increased by 13.0%, and as much as 30.5% in Los Angeles and 41.7% in Las Vegas. The consensus was growing that there was indeed a bubble, but economists and analysts were disagreeing regarding the outcome. Would the bubble burst, or just deflate slowly? In any event, a slowdown in housing starts and home sales would impact Masonite and other building products companies.

## **PRIVATE EQUITY, LEVERAGED BUYOUTS AND KKR**

The private equity (PE) industry gained prominence in the early 1980s, and included two kinds of players: venture capital (VC) firms and buyout firms, the latter representing a larger segment than the former. There were two categories of buyout firms: the mega-cap buyout firms, which took public companies private, and the middle-market buyout firms, which purchased private companies whose revenues and earnings were too small to access capital from the public equity markets. Buyout firms were typically seeking to capture and add value by opportunistically identifying companies that were cheap compared to their intrinsic value, by restructuring operations and improving management, and by capturing any gains from the restructuring of the existing debt or by adding new debt. One of the recurring themes behind LBOs was indeed to take advantage of the tax shield provided by debt, in light of Modigliani and Miller's (1963) famous proposition that in a world with corporation tax, a leveraged firm was worth more than an equivalent unleveraged (or low leveraged) one.

Exiting the investment was also, for PE firms, an important consideration. First, there was a non-negligible chance that the buyout would end in failure, leading to bankruptcy and liquidation. PE firms were therefore looking at high internal rates of returns, sometimes as high as 30 or 40%. Second, because PE was by definition not publicly traded, the exit process was not straightforward. Exit strategies included initial public offerings (IPOs) and sale to a third party, either to a strategic buyer or to another PE firm.<sup>2</sup> Though buyout firms were looking for quick returns on their investments, it was usually taking them five to ten years to exit.<sup>3</sup>

A LBO was a form of acquisition that involved a high degree of financial leverage. When possible, buyout firms were teaming up with management to take over the target<sup>4</sup>, providing the equity of the newly acquired

---

<sup>2</sup> A sale to another PE firm is called a secondary buyout, a growing trend over the 2000s.

<sup>3</sup> Kaplan and Strömberg (2009) studied 17,171 LBOs done between 1970 and 2007. They found that in 54% of the cases, exit had not happened yet. When exit had already happened, it had been through an IPO in 14% of the deals, a sale to a strategic buyer in 38% of the deals, a sale to another PE firm in 24% of the deals, another form of divestment in 18% of the deals, and bankruptcy in 6% of the deals. It had taken less than two years in 12% of the deals, three to six years in 39% of the deals, seven to ten years in 25% of the deals, and more than 10 years in 24% of the deals.

<sup>4</sup> LBOs that involve investment by the company's managers are called management buy-outs (MBOs).

company. But as they typically only had a fraction of the money needed to purchase the target, they had to turn to lenders to provide the bulk of the financing. The target's cash flows were then used to service the debt and repay the principal, and its assets very often served as collaterals for secured borrowings. The financial health of the target was therefore critical in making the LBO successful. Buyout firms were focusing on companies in attractive industries, with a good competitive position, strong and sustainable cash flows, tangible assets, and preferably with a performing management team showing strong leadership. As for all acquisitions, it was also necessary to be able to gain control of the company, meaning that there had to be some flexibility in the ownership structure.

Since the birth of this industry in the early 1980s, there had been two major waves of LBOs. The first wave had seen the rise of players such as Fortsmann Little & Co. and Kohlberg, Kravis and Roberts & Co. (KKR), competing for larger and larger deals, financed with increasingly larger amounts of debt. At the peak of this wave, deals were concluded with leverage ratios of up to 10 to 1. This over-reliance on debt paved the way for trouble. As the US slid into recession in 1989, several large LBOs were failing. Federated Department Store and Revco, amongst others, filed for bankruptcy, and RJR Nabisco, the icon mega-deal of this first wave, had to be restructured to avoid the same fate. The junk bond market, which had provided the extra-debt buyout firms required, collapsed, credit spreads widened, and the LBO market shrank from about US\$17.5 billion in 1987 to approximately US\$7.5 billion in 1991.

LBO activity picked up again in 1994 and reached a peak of US\$22.3 billion in the second quarter of 1998, spreading around the world as yet another illustration that financial globalization was taking place. But the number and value of deals really reached new highs in the 2000s. The LBO of Dex Media in 2002 marked the return of highly leveraged transactions, and the beginning of a new wave of mega-deals. In the third quarter of 2004, LBOs hit a new high of US\$30.6 billion.

In early 2005, KKR was one of Wall Street's leading buyout firms, with experience in over 125 major deals around the world. The firm, founded in 1976 by Jerry Kohlberg, Henry Kravis and George Roberts, had US\$15.1 billion in assets under management. Its first major deal was the purchase of A.J. Industries for US\$26 million in 1977. In 1979, KKR acquired Houdaille Industries for US\$380 million, the first ever buyout of a mid-sized, publicly traded company. In 1986, it bought out Beatrice in its first-ever hostile takeover, leading to the departure of Kohlberg, unhappy about the firm's new hostile image. In the 20 years that followed, KKR became famous for breaking records about the size of its deals, in the US and abroad.

In the early days, KKR focused on creating value through well-structured financing deals. With the purchase of Beatrice in 1986, the firm started selling pieces of the companies it was acquiring, and used junk bonds to finance some of its investments. But by the early 2000s, it also turned its attention to improving operational efficiencies, bringing industry experts to work with management to deliver top-line growth, cut cost wherever possible, and reduce the amount of cash tied in working capital.

## **MASONITE'S LEVERAGED BUYOUT**

Masonite's LBO was announced on December 22, 2004. KKR, through its wholly-owned subsidiary Stile Consolidated Corporation (Stile), was offering C\$40.20 (or US\$32.66) per share to take control of Masonite. The offer represented an implied premium of 13.2% based on the stock price at the close of the previous trading day, and a 21.3% premium based on the average stock price over the previous 60 trading days.

Though management and the Board of Directors (BoD) had unanimously approved the deal, it had taken 15 months to organize. In early October 2003, KKR asked Scotia Capital, who had a business relationship with Masonite, to arrange a meeting with Philip Orsino, Masonite's CEO, to discuss a potential transaction between KKR, Masonite and another building products company. The first meeting between Philip Orsino and KKR's representatives took place in November 2003, and the talks were promising. By December 2003, KKR and Masonite had dropped the idea of involving another building products company, and they had signed a confidentiality and standstill agreement to start working on a deal. At a BoD meeting on February 10, 2004, Masonite's directors authorized Philip Orsino to continue the discussions. A month later, KKR presented a tentative transaction, which

was reviewed by Masonite's directors on March 16 and 23, 2004. But at the request of Philip Orsino, the BoD terminated the talks because the offer price was far too low.

KKR did not give up, and approached Masonite again. In July 2004, Philip Orsino accepted to re-open the negotiations on the basis of C\$40 to C\$42 per share and at a BoD meeting on August 30, 2004, Philip Orsino convinced the directors to give KKR a second chance. In September 2004, KKR provided details about a potential LBO, including strategic growth alternatives and the key characteristics for the financing. At a BoD meeting on October 4, 2004, Philip Orsino presented two five-year financial models that had been provided by KKR, and indicated that the buyout firm was asking him and other executives to remain in place and to provide approximately 5% of the equity. As there was now a real possibility that a transaction involving management might go forward, Masonite's BoD appointed a Special Committee to consider KKR's proposal, review the alternatives available to the company, and conduct negotiations in the best interest of Masonite's shareholders. One of their first decisions was to engage a financial advisor. On December 1, 2004, they reviewed and retained the proposal put forward by Edgar and his team at Merrill Lynch. Edgar had structured deals for KKR before, and he was eager to get this LBO done. The next day, he was meeting with the Special Committee to review their legal obligations, and explain how they would proceed forward. It was agreed that Merrill Lynch would receive an engagement fee of C\$1 million and transaction fees of C\$1.9 million for doing the valuation and expressing a fairness opinion.

Over the following fortnight, Edgar and his team worked around the clock on "Project Balboa", reviewing public information about Masonite and its competitors, making financial projections about assets, liabilities, earnings and cash flows, studying previous acquisitions made by building product companies, and meeting regularly with senior management to gather and share information. On December 14, 2004, a sleep-deprived but enthusiastic Edgar met with the Special Committee, and discussed the preliminary analysis of the transaction. Based on his analyses, he had put Masonite's value per share in the range of C\$37 to C\$46.

The following day, KKR made its formal offer to acquire Masonite at US\$32.25 per share (C\$39.44 per share) with a breakup fee of US\$0.82 per share (C\$1.00 per share). Though negotiations started on the basis of C\$40 to C\$42 per share, KKR had decided to lower its offer due to the continuous depreciation of the US\$ compared to the C\$ since June 2004. Within 24 hours, the BoD came back to KKR indicating that the offer was too low, but that they would entertain an offer of C\$43.50 per share with a breakup fee of no more than C\$0.50 per share. KKR immediately stated that C\$43.50 per share was unacceptably high.

On December 19, 2004, the Special Committee contacted Edgar, and gave him 48 hours to come up with an update with respect to the financial analysis of the proposed transaction, including a recommendation about the offering price, size of the breakup fee and financing. During the day and well into the nights of December 20 and 21, negotiations between KKR and Masonite carried on, with Edgar always in the loop. On the morning of December 22, KKR finally increased its offer to C\$40.20 per share with a breakup fee of C\$0.50 per share, and indicated that it was its final offer. Within a few hours, Edgar delivered his oral opinion to the Special Committee and subsequently confirmed in writing that the consideration to be received by Masonite's shareholders was fair. By lunchtime, the LBO was publicly announced, just in time before the Christmas break.

KKR, through Stile, was offering to pay C\$40.20 (or US\$32.66) per share for the 54,796,531 shares of common stock outstanding. But its offer also extended to the 2,281,018 stock options, 299,433 restricted share units (RSUs) and 167,443 deferred share units (DSUs). RSUs and DSUs were phantom shares, part of the compensation package awarded to senior managers if they reached performance targets. These shares had the same price as shares of common stock, but they could not be cashed immediately. Managers had to wait three years to cash their RSUs, and could not cash their DSUs until they either retired or left the company. By extending its offer to stock options and phantom shares, KKR was not only giving management the opportunity to monetize their compensation package early, but also providing the bulk of the financing for the 5% equity stake they required for the transaction to be completed. All this was structured in a very tax-efficient way, as the shares could be rolled over with no tax on capital gains.

During the course of their analyses, Edgar and his team had prepared historical and projected financials (Exhibit 1). They had also gathered data about comparable companies (Exhibit 2) and comparable transactions (Exhibit 3).

**Exhibit 1: Masonite's Historical and Projected Financials, 2005-2009 In Millions Of US\$**

	Historical				Projected				
	2001	2002	2003	2004	2005	2006	2007	2008	2009
<b>Income Statement</b>									
Sales	1,421.6	1,619.5	1,777.2	2,199.9	2,444.1	2,544.3	2,709.6	2,902.0	3,119.7
% Growth		13.9%	9.7%	23.8%	11.1%	4.1%	6.5%	7.1%	7.5%
EBITDA	143.5	209.8	234.9	289.0	332.4	358.7	395.6	438.2	486.7
% Margin	10.1%	13.0%	13.2%	13.1%	13.6%	14.1%	14.6%	15.1%	15.6%
EBIT	108.1	164.9	186.3	225.1	261.5	262.1	311.6	345.3	390.0
% Margin	7.6%	10.2%	10.5%	10.2%	10.7%	10.3%	11.5%	11.9%	12.5%
<b>Cash Flow Statement</b>									
D&A Expense (1)	-35.4	-44.9	-48.6	-63.9	-70.9	-96.7	-84.0	-92.9	-96.7
Change in WC (2)	-23.1	-6.3	-14.7	-76.8	-13.8	3.5	-1.2	-5.6	-8.0
Capital Expenditure	-30.5	-43.5	-49.5	-59.5	-70.0	-80.0	-90.0	-100.0	-110.0

(1) D&A stands for Depreciation and Amortization

(2) WC stands for Working Capital

Source: Merrill Lynch, "Presentation to the Special Committee of the Board of Directors Regarding Project Balboa", Filing SC 13E3, filed with the Securities and Exchange Commission on January 19, 2005, p. 6.

**Exhibit 2: Comparable Companies**

	As of 02/16/05			EV/EBITDA		EV/EBIT		Net Debt / 2004 EBITDA
	Stock Price	Market Value	Enterprise Value (EV)	2004	2005E	2004	2005E	
<b>US</b>								
ASD	45.10	10,163	12,072	10.7	9.7	11.9	10.5	1.7
MWD	41.69	692	681	7.2	6.1	10.7	8.7	-0.1
BDK	82.19	7,036	7,724	10.1	8.6	12.4	10.4	0.9
ELK	39.81	832	990	10.7	8.3	13.2	10.9	1.7
FO	83.80	12,570	14,704	10.5	9.8	13.0	11.7	1.3
JJZ	10.19	792	1,230	8.3	7.4	9.9	9.1	3.0
MAS	36.91	16,922	20,207	9.9	9.3	11.3	10.6	1.6
MHK	89.46	6,079	6,970	9.2	8.3	11.0	10.1	1.2
SHW	44.93	6,648	7,344	9.7	8.7	11.7	10.6	0.9
SWK	46.33	3,989	4,424	9.8	8.3	10.8	10.1	0.9
			<b>Mean</b>	9.6	8.5	11.6	10.3	1.3
			<b>Median</b>	9.9	8.5	11.5	10.5	1.3
<b>Canada</b>								
RYG	8.47	791	1,285	5.5	5.7	10.1	10.9	2.1
MHM	32.42	1,820	2,532	8.8	7.8	11.2	9.4	2.2

American Standard Companies Inc. (ASD), American Woodmark Corporation (MWD), The Black and Decker Corporation (BDK), Elcorp (ELK), Fortune Brands Inc. (FO), Jacuzzi Brands Inc. (JJZ), Masco Corporation (MAS), Mohawk Industries Inc. (MHK), The Sherin-Williams Company (SHW) and The Stanley Works (SWK), Royal Group Technologies (RYG) and Masonite International Corporation (MHM).

Source: Merrill Lynch, "Presentation to the Special Committee of the Board of Directors Regarding Project Balboa", Filing SC 13E3, filed with the Securities and Exchange Commission on February 17, 2005, p. 7.

Exhibit 3: Comparable Transactions

Date	Target	Acquirer	Transaction Value (In millions)	Transaction Value / EBITDA	
<b>2004</b>	<i>Dec-04</i>	<i>Associated Materials</i>	<i>Investcorp</i>	<i>US\$945</i>	7.6
	<i>Nov-04</i>	<i>Goodman Global</i>	<i>Apollo Advisers</i>	<i>US\$1,430</i>	8.6
	<i>Sep-04</i>	<i>Tapco</i>	<i>Headwaters</i>	<i>US\$715</i>	8.7
	<i>Aug-04</i>	<i>Atlas Copco Tools</i>	<i>Techtronic Industries</i>	<i>US\$713</i>	n/a
	<i>Aug-04</i>	<i>Professional Paint</i>	<i>Consortio Comex</i>	<i>US\$400</i>	8.3
	<i>Jul-04</i>	<i>MW Manufacturers</i>	<i>Ply-Gen</i>	<i>US\$4320</i>	7.4
	<i>Jul-04</i>	<i>Pentair Tools</i>	<i>Black &amp; Decker</i>	<i>US\$775</i>	7.5
	<i>Jul-04</i>	<i>Nortek</i>	<i>Thomas H. Lee Partners</i>	<i>US\$1,750</i>	7.4
	<i>Mar-04</i>	<i>MAAX</i>	<i>J.W. Childs</i>	<i>US\$424</i>	7.1
	<i>Feb-04</i>	<i>Hillman Companies</i>	<i>Code Hennessy &amp; Simmons</i>	<i>US\$510</i>	8.3
<b>2003</b>	<i>Dec-03</i>	<i>Gower</i>	<i>Nobia</i>	<i>SEK890</i>	n/a
	<i>Dec-03</i>	<i>Atrium</i>	<i>Kenner / UBS Capital / ML PE</i>	<i>US\$700</i>	7.3
	<i>Dec-03</i>	<i>Door Division of Stanley Works</i>	<i>Masonite</i>	<i>US\$160</i>	7.6
	<i>Dec-03</i>	<i>Nortek / Ply-Gen</i>	<i>Caxton-Iseman</i>	<i>US\$570</i>	7.5
	<i>Nov-03</i>	<i>Therma-Tru</i>	<i>Fortune Brands</i>	<i>US\$925</i>	8.4
	<i>Sep-03</i>	<i>Norcraft</i>	<i>Saunders Karp / Trimaran</i>	<i>US\$315</i>	7.6
	<i>Jul-03</i>	<i>Baldwin Hardware &amp; Weiser Lock</i>	<i>Black &amp; Decker</i>	<i>US\$275</i>	n/a
<b>2002</b>	<i>Apr-02</i>	<i>Nortek</i>	<i>Kelso</i>	<i>US\$1,600</i>	7.5
	<i>Apr-02</i>	<i>Omega Cabinets</i>	<i>Fortune Brands</i>	<i>US\$538</i>	8.6
	<i>Apr-02</i>	<i>Associated Materials</i>	<i>Harvest Partners</i>	<i>US\$455</i>	7.1
	<i>Mar-02</i>	<i>West-Wood</i>	<i>Door Holding A/S</i>	<i>EUR315</i>	7.5
<b>2001</b>	<i>Nov-01</i>	<i>Dal-Tile International</i>	<i>Mohawk Industries</i>	<i>US\$1,702</i>	9.8
	<i>Jul-01</i>	<i>Cadaron Mira</i>	<i>Kohler</i>	<i>EUR301</i>	9.9
	<i>Jun-01</i>	<i>Milgard</i>	<i>Masco</i>	<i>US\$420</i>	8.0
	<i>Apr-01</i>	<i>Sanitec</i>	<i>BC Partners</i>	<i>EUR1,200</i>	8.4
	<i>Mar-01</i>	<i>United Dominion Industries</i>	<i>SPX Corp</i>	<i>US\$1,830</i>	6.4
				<b>Mean</b>	7.9
				<b>Median</b>	7.6

Sponsor deals are in italics.

Source: Merrill Lynch, "Presentation to the Special Committee of the Board of Directors Regarding Project Balboa", Filing SC 13E3, filed with the Securities and Exchange Commission on February 17, 2005, p. 9.

One issue that Masonite had been facing for years was the low liquidity on its stock, with average trade volumes of only 3 million shares a month on the Toronto Stock Exchange, and less than 250,000 shares a month on the New York Stock Exchange. As a consequence, Masonite's stock was trading at a discount compared to its peers, and KKR had reflected this discount in its offering price, by lowering its bid by 10%. By building up Masonite's size and diversifying the company and by using its connections with brokers, it was expected that KKR could align Masonite's multiples with Masco's, a fairly similar competitor. Though it was too early to tell how KKR would exit its Masonite investment, most speculated that it would be through an IPO in the US.

To get the deal done, KKR needed to raise US\$2.52 billion (Exhibit 4). After the transaction, Masonite's capital structure would include a mix of common equity and debt. The equity would be provided by KKR and various employees and officers. Specifically, KKR would invest US\$550 million. Approximately 40 of Masonite's employees and officers would provide US\$25 million, including US\$19.5 million from four executives: Philip Orsino would contribute US\$7.5 million, and James Morrison, Larry Repar and John Ambruz would provide US\$4 million each. As an incentive to turn the LBO into a success, KKR also set up a stock option plan that could give these employees and officers an additional 7 to 13% of the equity if performance targets were met.

Exhibit 4: Structure Of The Deal

	Amount (in US\$ million)	Percentage of Total
<b>Uses of Funds</b>		
Purchase of Common Equity	1,865	74.0%
Debt Refinancing	574	22.8%
Tax Liability on Debt Refinancing	17	0.7%
Transaction Fees	8	0.3%
Financing Fees	56	2.2%
<b>Total</b>	<b>2,520</b>	<b>100.0%</b>
<b>Sources of Funds</b>		
Options Proceeds	30	1.2%
Proceeds from Sale of Land	5	0.2%
Equity	575	22.8%
Debt	1,910	75.8%
<b>Total</b>	<b>2,520</b>	<b>100.0%</b>

Source: Merrill Lynch, "Presentation to the Special Committee of the Board of Directors Regarding Project Balboa", filing SC 13E3, filed with the Securities and Exchange Commission on January 19, 2005, p. 14-15.

Bank of Nova Scotia had structured the financing on the debt side, and had been joined by four other banks: Bank of Montreal, Deutsche Bank AG, SunTrust Bank Inc. and UBS AG. There would be a senior credit facility, including a senior secured term loan facility of US\$1.175 billion, and a senior secured multi-currency revolving credit facility of up to US\$350 million. These facilities would be secured by Masonite's assets, with covenants attached to them. Stile, the investment vehicle, would also issue up to US\$300 million of senior unsecured floating rate notes and up to US\$525 million of unsecured senior subordinated notes. Last, there would be an unsecured bridge facility of up to US\$825 million in the event Stile could not issue the bonds (Exhibit 5).

Exhibit 5: Financing

<b>Sources of Funds</b>					
Type	Amount (in US\$ million)	Amortize	Maturity	Interest Rate	Moody's Rating
Senior Secured Term Loan	1,175	Yes	2013	LIBOR + 250 bp	B2
Senior Secured Multi-Currency Revolving Credit Facility	350	No	2011	LIBOR + 250 bp	B2
Senior Unsecured Floating Rate Notes	300	No	2013	LIBOR + 600 bp	B3
Senior Unsecured Subordinated Notes	525	No	2015	LIBOR + 600 bp	Caa1
Bridge Facility	825	No	2006	First two quarters: Maximum of LIBOR + 600 bp or 8.5% Thereafter: Increase of 50 bp per quarter	n/a
<b>Covenants</b>					
The senior secured credit facilities will contain affirmative and negative covenants, including:					
<ul style="list-style-type: none"> <li>• A net debt to EBITDA coverage ratio of maximum 7.9 times with step-down provisions.</li> <li>• An EBITDA interest coverage ratio of 1.5 times minimum with step-up provisions.</li> <li>• Other covenants restricting asset sales, indebtedness, investments, mergers and acquisitions, transactions with affiliates, dividends and stock repurchases.</li> </ul>					

Source: Management Proxy Circular, Filing SC 13E3, filed with the Securities and Exchange Commission on January 19, 2005, p. 36-38.



The day after the LBO was announced, Standard & Poor's put Masonite on negative watch, because of the financial leverage that would result from the transaction. It then lowered the credit rating on bonds from BB+ to B+ and on bank loans from B- to BB-. Gone was the investment grade credit rating that had repeatedly been discussed as a priority over the last few years.

## **THE ISSUES**

Despite Merrill Lynch's fairness opinion, the deal was not as well received as Edgar had hoped for. Very quickly, investors and journalists voiced concerns, the three major ones being related to the offer price, the breakup fee and more importantly, the role of senior managers and the BoD in reaching the best deal for Masonite's shareholders.

First, several investors and analysts were arguing that KKR was trying to buy Masonite on the cheap. In particular, they were highly critical of the 10% discount factored in the offer price to reflect the low liquidity on the stock. Analysts were indeed of the opinion that due to Masonite's strong growth and recent acquisitions abroad, it would soon reach international status, and the discount would naturally disappear. All KKR was doing was to take advantage of this slow adjustment process.

Second, the investment community was shocked at the size of the breakup fee, C\$0.50 per share or C\$28.7 million, including all shares and options. It was always in the best interest of the target's shareholders if a bidding war was to follow the announcement of an acquisition. But Masonite was prevented from seeking another bidder and if one emerged, it would face a penalty of close to a quarter of annual net income to break the deal with KKR. This could very well prevent any company that might have an interest in Masonite from coming forward, something that was detrimental for current shareholders.

In fact, everybody was wondering why the BoD had remained so secretive about the deal until its announcement. Why had they accepted to put the company for sale, in particular, when Masonite was in reportedly good financial health? And why had they decided to sell to the first buyer that came along without auctioning the company? Back in December 2004, Edgar had discussed with the Special Committee the opportunity of soliciting interest from potential buyers, including industry players and financial groups. He was, in particular, keen in talking to Masco and Fortune Brands, who would surely be interested in at least discussing a potential combination with Masonite. But the BoD had turned the idea down, saying that nobody had expressed an interest in buying the company during the last 15 years, that the chance of another bidder emerging was slim, and that auctioning the company would prove extremely disruptive.

Last but not least, investors and journalists were pointing out that senior managers were facing a substantial conflict of interest. First of all, their job description was to act in the best interest of shareholders, but by accepting to team up with KKR to take over the company, they were no longer in a position to do so. In fact, the management team was asking shareholders to sell, when they were themselves buying into the company. Could it be that they had purposefully sold the company on the cheap to be able to buy it at a discount? Second, by being able to roll their common and phantom shares into the new company, they were offered a tax-efficient deal, when all other shareholders would have to pay capital gains.

In February 1, 2005, Ricky Sanders, the manager of Eminence Capital, a New York-based hedge fund that started investing in Masonite when the LBO was announced and had accumulated about 5.5% of the company's common stock since then, crystallized these criticisms by sending a letter to the Securities and Exchange Commission (SEC). He argued that the company was worth at least C\$50 per share, and noted several inconsistencies in the valuation produced by Merrill Lynch. First, the valuation reflected a growth rate in revenues of only 1 to 3%. But a few weeks earlier, during the conference call with analysts, management had reiterated their forecast of a growth rate of revenues of 7 to 10%. What could possibly explain such a dramatic change in such a short period of time, without informing investors? Second, the forecasted cash flows were not reflecting the recent acquisitions of Kronodoor and Samling's door facing manufacturing facility in Malaysia, therefore under-estimating Masonite's fundamental value. The same day, the SEC issued a list of 48 questions and comments, asking Masonite and KKR to provide more clarity about the deal. Unsatisfied about the answers, the SEC sent two other requests on February 8 and 9, 2005.

When on February 11, 2005, the Ontario Teachers’s Pension Plan (Teachers) announced that it would join Greystone Managed Investments, Eminence Capital and Mawer Investment Management and vote against the LBO, Edgar knew that the writing was on the wall. Teachers only owned 1% of Masonite’s common stock, but it was a big player in the PE industry, managing a C\$5 billion portfolio and having generated a 25% annual return since 1991. It was also a champion of good corporate governance. Teachers was not opposed to LBOs as a matter of principle. In fact, it had already hooked up with KKR to buy Shoppers Drug Mart in 2001, Yellow Pages in 2002 and Alias in 2004. But it did not think that KKR’s price was reflecting the full value of Masonite. If Teachers was against the LBO, no doubt that a lot of smaller shareholders would follow suit and would turn the deal down.

**CONCLUSION**

In order for KKR to proceed, the transaction had to be approved by at least two thirds of the votes. With the press regularly publishing negative stories about the deal and institutional investors opposed to it, Edgar knew that the shareholders meeting scheduled in a couple of days would have to be called off. But was there a chance to rescue the deal? What offer price would win the votes of Eminence Capital, Teachers and other institutional investors?

Edgar checked his watch. He had an hour before meeting Masonite’s BoD, and they would certainly ask him an update about a realistic price range. He therefore decided to go over his valuation one more time, and to incorporate the latest market conditions and expectations (Exhibit 6). He opened his Excel financial model and started digging into the numbers.

**Exhibit 6: Current Market Conditions (As Of 02/16/05)**

**Interest Rates**

**1-year LIBOR:** 3.51%

Source: British Bankers’ Association

**Yields on U.S. Treasuries, by maturity**

Source: Federal Reserve

1 month	3 month	6 month	1 year	2 year	3 year	5 year	7 year	10 year	20 year
2.39%	2.58%	2.85%	3.04%	3.39%	3.54%	3.75%	3.94%	4.14%	4.58%

**Other Information**

**Market Risk Premium:** 5.5%

Source: E. Dimson, P. Marsh and M. Staunton, “The Worldwide Equity Premium: A Smaller Puzzle”, Working Paper, April 7, 2006, p. 17.

**Masonite**

- Masonite’s effective tax rate is 24%.
- Stock Price: US\$32.42  
Source: Merrill Lynch, “Presentation to the Special Committee of the Board of Directors Regarding Project Balboa”, Filing SC 13E3, filed with the Securities and Exchange Commission on February 17, 2005, p. 7.
- Beta: 1.15  
Source: Worldscope
- Debt: All of Masonite’s US\$637.3 million debt carries floating rates at a weighted average cost of debt of LIBOR + 250 basis points. But the company has entered two five-year swap agreements, one for US\$250 million in September 2001 to pay a fixed rate of 7.96% and the other one for US\$75 million in August 2002 to pay a fixed rate of 5.72%.  
Source: Masonite’s Form 40-F, 2003, p. 46

**QUESTIONS**

1. How sustainable are Masonite’s earnings and cash flows?
2. Is Masonite a good candidate for a LBO?

3. How much is Masonite worth? Use the discounted cash flows and multiples approach, and compare the valuations given by these two approaches.
4. Does Masonite's capital structure after the LBO look sensible? Can Masonite afford this amount of debt?
5. Has KKR the ability and willingness to raise its offer? What are the pros and cons of doing so?
6. What should Edgar recommend when he meets Masonite's Board of Directors?

#### **AUTHOR INFORMATION**

**Barbara S. Petitt** (Ph.D.) is a Senior Lecturer of Finance at Bournemouth University. Her areas of research and teaching expertise include corporate financial management, equity investments and mergers, acquisitions and corporate restructurings. Dr. Petitt published several articles in finance and management journals as well as a book on valuation. She received her Ph.D. from the University of Grenoble, and is also a CFA Charterholder.

**F. John Mathis** (Ph.D.) is Director of the Thunderbird Global Financial Services Center and Professor of global finance at the Thunderbird School of Global Management. He conducts research in the areas of global finance and banking, balance of payments and exchange rates, and country risk analysis. Prior to joining Thunderbird, Dr. Mathis served as senior financial policy analyst at the World Bank, senior portfolio officer at the International Finance Corporation, chief international economist for Continental Illinois National Bank, and international economist at Chase Manhattan Bank.

#### **REFERENCES**

1. Kaplan, S. N., & Strömberg, P. (2009). Leveraged Buyouts and Private Equity. *Journal of Economic Perspectives*, 23(1), 121-146.
2. Modigliani, F., & Miller, M. H. (1963). Corporate Income Taxes and the Cost of Capital: A Correction. *American Economic Review*, 53(3), 433-443.

**NOTES**