Seagate Technology Buyout

In early November 1999, Stephen Luczo, president and chief executive officer of Seagate Technology, Inc. ("Seagate"), met with representatives of the private equity firm Silver Lake Partners L.P. to discuss a major restructuring proposal. Seagate was one of the world's largest manufacturers of computer disk drives and related data storage devices, with approximately $6.5 billion in annual revenues. The restructuring contemplated a leveraged buyout of Seagate's disk drive operations, followed by the tax-free acquisition of Seagate's remaining assets by VERITAS Software Corporation, an independent manufacturer of storage management software. Besides the disk drive operations, Seagate's main asset was a significant ($21 billion) stake in VERITAS's common stock.

Management and Silver Lake believed the two-step transaction could generate significant wealth gains for Seagate shareholders. The need to take some action had become increasingly apparent since late summer, when, following a major run up in VERITAS's stock price, the market value of Seagate's VERITAS stake had come to substantially exceed Seagate's *entire* market capitalization. Management attributed this "value gap" to two factors. First, the company would incur a significant tax liability if it attempted to monetize its VERITAS stake by selling the shares, and this liability was capitalized in Seagate's stock price. Second, the company's core disk drive operations were not receiving full value in the stock market, which currently favored Internet businesses and companies that manufactured cheaper data storage hardware. The proposed transaction was designed to allow Seagate shareholders to realize full value for the company, by distributing the VERITAS stock tax free, and by selling the disk drive operations at fair market value.

The transaction raised a number of thorny issues, however. First was the question of how much the investors should pay to acquire Seagate's disk drive operations. Since Seagate was a public company, Luczo and the other company directors had a fiduciary duty to obtain a fair price for their shareholders in the sale. However, Silver Lake and its co-investors had to earn a rate of return on their investment that would adequately compensate them for the risks they would incur, and Luczo and other key senior Seagate executives would continue to manage the disk drive business.[1]

A second issue was how the buyout should be financed, since this would directly determine the capital structure of the new Seagate. This was a pioneering transaction in the emerging area of technology buyouts, and traditional buyout financial structures might not be appropriate.

[1]As the only member of management on Seagate's board of directors, in order to avoid any conflicts of interest, Luczo was excluded from all board deliberations, and from the final vote that approved the transactions described in the case. The entire process was coordinated and supervised by the Co-Chairmen of Seagate's board, Gary Filler and Lawrence Perlman, neither of whom were members of management or investors in the buyout.

Professors Gregor Andrade, Stuart Gilson, and Todd Pulvino prepared this case. The case draws on research by George Taylor (HBS Class of 2000) as reported in his paper, "The Emergence of Technology Buyouts" and on discussions with Cindy Shaw of Salomon Smith Barney. HBS cases are developed solely as the basis for class discussion. Cases are not intended to serve as endorsements, sources of primary data, or illustrations of effective or ineffective management.

Third, the deal had to address the needs and a concerns of VERITAS, as an essential participant in the transaction. The terms of the second-stage merger therefore had to be attractive to VERITAS shareholders as well. Without their consent, the restructuring could not be done.

Finally, Seagate's board had considered several alternative options for addressing the company's low stock price. These included repurchasing Seagate stock and selling off part of the VERITAS stake, undertaking a tax-free spin-off of either the disk drive business or the entire VERITAS stake, and selling Seagate as a whole. The Silver Lake transaction had to be approved by both Seagate and VERITAS shareholders, so it was necessary to show that the transaction dominated these alternative restructuring options.

Negotiations among Silver Lake, Seagate, VERITAS, and their advisors continued through March 2000. The transaction was extremely complicated, and there was no guarantee that deal terms could be found that would be acceptable to all parties.

The Disk Drive Industry

Hard disk drives were the most common medium for storing electronic information and data, thus making them the largest sector of the information storage industry. Disk drives were integrated into various products, largely classified into three main markets:

- **Desktop:** The desktop market included all desktop personal computers, targeted for either home or business use. For the most part, performance attributes (speed, capacity, etc.) and quality were standardized across disk drive manufacturers. Furthermore, there was little disk drive brand awareness at the PC consumer level. As a result, disk drives had become commodities and manufacturers competed largely on price. Gross margins in the desktop sector were around 10–15%.
- **Enterprise:** The enterprise market included high performance workstations, servers, minicomputers, mainframes, and redundant arrays of inexpensive drive (RAID) subsystems. Because most applications and software that ran on enterprise systems were highly computation- and data-intensive (such as CAD/CAM, scientific applications, and corporate-wide accounting and payroll systems), manufacturers of these disk drive products emphasized performance and reliability, as well as price, as key selling points. The enterprise market was characterized by higher value-added products than those in the desktop market, with higher average gross margins of 20–25%.
- **Mobile:** The mobile market included laptop computers, hand-held computers, and personal digital assistants. Mobile disk drives differed from desktop drives in that they were smaller, and were made from more durable materials. Profit margins were higher than in the desktop segment, as products competed on not only price, but also durability and power consumption. In the long run, however, analysts expected the markets for mobile and desktop drives to converge.

Table A summarizes worldwide market shares for the major disk drive manufacturers.[2] Six firms accounted for 95% of all sales. Competition was intense, with manufacturers fighting for a limited number of major customers. These customers would normally do business with only two or three disk drive suppliers at a time. At the beginning of each new product cycle, which usually lasted from 6 to 12 months, customers would pre-select

[2]Seagate and most other major independent disk drive manufacturers competed with some of their own customers, including IBM, Fujitsu, and Samsung. These companies could either purchase disk drives from third parties or manufacture the drives in-house.

TABLE A
Market Share in the Worldwide Disk Drive Industry, 1999

Source: "Disk Drive Quarterly Report" (March 2000) by Salomon Smith Barney.

	Total Market[a]	Enterprise	Desktop
Number of units shipped			
Seagate	21.1%	41.0%	21.1%
Quantum	17.1	7.2	20.5
IBM	14.0	34.6	6.1
Maxtor	13.3	[b]	17.7
Fujitsu	12.3	8.8	12.4
Western Digital	11.1	3.8	14.6
Samsung	5.9	[b]	7.5
Total sales ($millions)	$25,273	$7,438	$14,627

[a]Includes mobile.
[b]Amount is not material.

their suppliers for that cycle, based on pre-announced performance and reliability requirements. Therefore, if a disk drive manufacturer did not have new products ready to submit to customers for testing at the time of pre-selection, they could miss up to a year's worth of sales and risk damaging key sales relationships.

In the late 1990s, the disk drive industry had benefited from increasing worldwide demand for electronic data storage, but had also experienced fierce price competition. Exhibit 1 shows that since 1997, while the number of disk drive units sold had grown at rates in the upper teens, prices had dropped dramatically, causing overall revenues to decline. Industry experts did not expect this situation to change. Through the medium-term at least, revenue growth was expected to lag far behind unit growth. As a result, disk drive manufacturers sought new avenues for growing revenues. Two areas in particular appeared promising:

Storage Networking

With the rapid expansion in Internet use and e-mail, as well as the increasingly data-intensive nature of audio and video-based applications, the amount of data stored was, for the foreseeable future, expected to double every year. As a result, there was increasing demand for larger and more efficient data access and storage solutions. Two new storage architectures appeared to be particularly promising in meeting this demand: Storage Area Networks (SAN) and Network Attached Storage (NAS). Both technologies combined arrays of disk drives with sophisticated networking equipment and software, providing disk drive manufacturers the means to differentiate their products.

Consumer Electronics Market

Newly developed consumer electronics appliances, requiring storage of large amounts of data, represented a rapidly expanding source of demand for desktop disk drives. Most applications were video-related, such as digital recorders (e.g., Tivo) and video games (e.g., Microsoft's Xbox). While small relative to the traditional disk drive market (analysts projected 2000 sales of $0.5 billion vs. more than $26 billion in the mainstream market), this segment was expected to grow over 50% annually over the next three years.

While these areas appeared promising, it was difficult to assess their likely impact on disk drive manufacturers' bottom lines. In consumer electronics, all major disk drive suppliers intended to compete vigorously. Therefore, it was possible that the business would experience the same fierce competition as the traditional disk drive business. As for storage networking, disk drive producers would be competing against large established manufacturers of hardware and software, such as IBM, Sun Microsystems, Dell, Compaq, and EMC.

Seagate Technology

Seagate was founded in 1979 by a group of five technology entrepreneurs and executives, whose collective experience included playing a key role in the early development of hard disk drives.[3] By 2000, Seagate was the leader in the worldwide disk drive industry, with total annual revenues of nearly $7 billion and a market share of 21%. The company designed, manufactured, and marketed a broad line of disk drives for use in computer systems for desktop PCs, workstations and servers, and supercomputers. For the fiscal year ending June 1999, 39% of Seagate's sales came from desktop drives and 51% came from enterprise systems. Tape drives and software contributed the remaining 10%.

Seagate sold its products both to original equipment manufacturers (OEMs) for use in their own computer systems, and through distributors, dealers, and retailers. Sales to OEMs accounted for 65% of Seagate's total disk drive revenues. Drives were produced almost entirely offshore, taking advantage of low-cost labor. In 1997, approximately 80% of Seagate's 111,000 employees were located in Asia.

Seagate was the only major independent disk drive manufacturer to be fully vertically integrated. In addition to assembling disk drives, Seagate designed and manufactured most of the key components.[4] Although this necessitated higher R&D and capital expenses than those incurred by its competitors (see Exhibits 2 and 3), management believed that vertical integration gave the company some important competitive advantages.

First, having control over critical enabling technologies—by developing them in-house—meant that Seagate would not have to depend on independent suppliers to develop those technologies. This eliminated the risk that in an economic downturn, these suppliers might cut back on R&D, reducing Seagate's ability to offer cutting-edge technologies in its products.

A second benefit of being vertically integrated was that it gave the company more control over the manufacturing process, allowing it to ramp up production more quickly in response to unexpected surges in demand. Such ramp-ups could also be achieved at a higher yield (fewer defects coming off the line). When Luczo became COO in 1997, Seagate required 12 weeks to ramp up production to 80% of increased target output, and it was recognizing $200 million every quarter in scrap (defective components or products that were either destroyed or sent back to manufacturing to be repaired). The ability to ramp up quickly was becoming increasingly important in the disk drive industry, given the sharp decline in product life cycles, and the increasing consolidation of the industry's customers.[5]

Finally, management believed that vertical integration allowed the company to maintain lower inventories of disk drive components, since it did not have to worry whether suppliers would be able to provide it with the components during a sudden increase in demand.

[3]The founders were Finis Conner, Syed Iftkar, Doug Mahon, Tom Mitchell, and Alan Shugart.

[4]The technical performance of a disk drive depended on numerous factors. Among the most important were the disk media (the material comprising the part of the drive that actually spins, and that affects how much information can be stored), the head (essentially the stylus that reads the information contained on the media), and the spindle (on which the disk spins).

[5]With fewer customers, represented by such large firms as Dell Computer and IBM, disk drive manufacturers could no longer afford to be late to market with a new product, or come out with an inferior product. In addition, shorter product cycles meant that drive manufacturers had little time to redesign their products to match better products made by the competition, since by the time the redesign was complete, the current generation of products would already be technologically obsolete.

Most financial analysts who covered the disk drive industry disagreed with Seagate's views on vertical integration, however. They argued that vertically integrated firms had substantially higher fixed costs, which would hurt them in a downturn. In apparent support of this view, in recent years technology firms like Hewlett-Packard, Cisco, and IBM had increasingly outsourced the manufacture of computer hardware to specialized contract equipment manufacturers, such as Solectron. In theory, these entities could achieve substantial economies of scale by serving the computer industry's combined manufacturing needs.

Historically, the financial performance of Seagate and the rest of the disk drive industry had been extremely volatile (Exhibit 2). During slowdowns in PC sales in the mid 1980s, early 1990s, and again in 1997–98, computer manufacturers severely cut back on disk drive purchases. Because of long manufacturing lead times, hard disk producers often ended up with excess capacity and inventory, resulting in price cuts and sharp profit declines.

Always known as an efficient, low-cost producer, Seagate fared better than most—it was the only independent disk drive manufacturer to remain profitable in 1992–93 and again in 1999. A key reason for the company's cost advantage was that, unlike most of its competitors, it maintained a mix of products in both high end *and* low end markets. The latter included, for example, hard disk drives for PCs. Although the company earned relatively low margins for these products, serving these less glamorous markets on a large scale produced significant scale economies that translated into lower costs for Seagate's other businesses as well.

In 1996 and early 1997, Seagate's business experienced a downturn with the rest of the industry, and it launched a broad restructuring effort.[6] Beginning in 1997, Seagate closed or sold selected manufacturing operations in Ireland, Scotland, Malaysia, Mexico, and the Philippines. It exited from the mobile disk drive segment, discontinued a number of product lines, and cut back expenditures on new production facilities. As a result of these initiatives, by late 1999 the company's employee headcount had declined by over 20%. An additional casualty was Seagate's co-founder and CEO, Alan Shugart, who was ousted by the board and replaced by Stephen Luczo in July 1998.

Luczo and his management team viewed the primary challenge facing Seagate as one of consolidating and expanding the firm's leadership position, not only in hard disk drives, but in general data storage applications.[7] This meant diversifying away from traditional disk drive segments into faster growing and higher margin businesses. The company had already begun supplying WebTV with disk drives, and other consumer electronics applications were being developed. In addition, Seagate began to target network-based storage applications. In January 2000, Seagate made its first major foray into storage networking with the acquisition of privately held XIOtech Corp, a provider of SAN technology.

Analysts also expected that Seagate would re-enter the mobile disk drive segment. Currently, there were no independent mobile drive suppliers in the market. However, most computer manufacturers liked to deal with at least two disk drive suppliers, and preferably none that were competitors in the consumer market. Industry analysts believed that a reputable independent supplier could quickly gain significant share in the

[6]Seagate's problems were exacerbated, or possibly even primarily caused, by an earlier decision in 1996 to focus on the development and manufacture of high performance, but expensive, dual processor drives. Soon after this decision had been taken, IBM introduced a competing single drive device that, while less sophisticated than Seagate's product, was much cheaper and sufficiently powerful to attract a significant number of customers from Seagate. Seagate management estimated that the company lost almost $1 billion in revenue to IBM as a result.

[7]*Financial Times,* May 3, 2000.

mobile segment. Because of the higher margins, and the technological proximity and customer overlap between the mobile and desktop drive segments, this would be a potentially attractive area for future growth in Seagate's business.

Seagate's future business expansion required it to make significant capital investments, however. When Luczo took over as CEO, he felt that the company had been seriously under-investing in technology, and correcting this would require large outlays on R&D and improvements in manufacturing capacity. The company estimated that expenditures on R&D and capital could be increased by no less than $1–$2 million, a year.

With disk drive producers already out of favor in the stock market, obtaining capital for long-term projects from public financial markets could prove to be difficult. By going private, Seagate might be able to aggressively pursue investments that had longer-term payoffs. Roger McNamee, a co-founder of Silver Lake Partners, said that once Seagate was taken private, it would "invest like crazy" in new product development and manufacturing facilities to support the growth of Seagate's core disk drive business.[8]

Background of the Buyout Transaction

In May 1999, Seagate Technology sold its Network & Storage Management Group (NSMG) to VERITAS Software. In exchange, Seagate received approximately 155 million shares of VERITAS stock, making it VERITAS's largest stockholder with an ownership stake over 40%.[9]

In the six months following the transaction, VERITAS's stock price increased by more than 200%. In contrast, over the same period, Seagate's stock price increased by 25%. Seagate's board was concerned that the market was not recognizing the full potential value of the company's VERITAS stake. At times, the value of Seagate's stake in VERITAS exceeded the entire market value of Seagate's equity. (See Exhibit 4 for a stock price history of Seagate and VERITAS, and Exhibit 5 for selected financial information about VERITAS.) The market appeared to be assigning no value—even a *negative* value—to Seagate's disk drive business, despite its large size and market-leading position.

Management realized it had to act quickly to address the situation. The company had been receiving numerous inquiries from concerned stockholders. And it was becoming more difficult to provide proper incentives to employees. Although Seagate's employees held significant amounts of stock options and restricted stock in the company, the increasing market value of the VERITAS stake meant that Seagate's stock price was becoming increasingly tied to VERITAS's stock price—and less to the performance of Seagate's core disk drive business.

As a result, senior management began to consider ways to increase the stock price and unlock the value that it saw in the VERITAS stake and disk drive operations. The company sold some VERITAS shares and repurchased its own shares in the open market. However, both actions proved ineffective. Seagate's ability to sell off its VERITAS stake was limited by prior agreement with VERITAS (which feared that such sales would depress its own stock price), and the fact that such sales were taxable. Repurchasing Seagate stock had little impact on the stock price.

In late October, the board of directors authorized Luczo to engage Morgan Stanley to advise the company on its options for increasing Seagate's stock price. A major consideration in any analysis of Seagate's options was the potentially huge tax liability that

[8] *Financial Times,* March 31, 2000.

[9] The number of shares reported in the case has been adjusted for stock splits and stock dividends.

would be created—at both the corporate and personal levels—if Seagate simply sold its VERITAS shares, or distributed those shares to Seagate shareholders.[10]

In early November, Morgan Stanley arranged a meeting between Luczo and representatives of Silver Lake Partners, a successful private equity firm that had extensive experience investing in technology businesses. After several months of discussion and analysis, the Silver Lake group, led by James Davidson, Glenn Hutchins, David Roux, and Integral Capital Partners, produced a proposal that would necessitate Seagate separating its disk drive operations from its VERITAS stake without triggering the punitive tax liability.

The proposal was a complicated two-stage transaction (see Exhibit 6). In the first stage, Seagate would sell all of its disk drive manufacturing assets, including approximately $765 million of cash, to a newly formed company ("Suez Acquisition Company") controlled by Silver Lake. The purchase price would be financed with a combination of equity (put up by Silver Lake and a group of other private equity investors[11]) and a significant but as yet undetermined amount of debt. Thus Silver Lake proposed to take Seagate's disk drive business private in a leveraged buyout (LBO).

In the second stage of the transaction, the remaining Seagate shell corporation, whose assets would then consist of 128,059,966 VERITAS shares, a few miscellaneous equity investments, and proceeds from the Seagate buyout, would be merged with VERITAS through a tax-free stock swap.[12] Under terms of the agreement, each share of Seagate stock would be exchanged for a combination of cash and VERITAS shares.[13] VERITAS executives indicated they would be interested in acquiring the Seagate shell corporation in exchange for 109,330,300 VERITAS shares. Provided the merger qualified as a "reorganization" under Section 368(a) of the Internal Revenue Code, no corporate or personal tax liability would be created by the deal.

Silver Lake had great confidence in the abilities of Seagate's current management team. On average, Seagate's top executives had over 10 years of experience in the disk drive industry. Therefore as an important condition of the deal, the six top managers, including Luczo and Charles Pope, Seagate's chief financial officer, had to continue in these roles, and convert a portion of their Seagate equity into new equity and deferred compensation of the company that would operate the disk drive business.

The Buyout Market

The term "buyout" refers to the purchase, typically by a group of private investors, of a controlling stake in a company's equity. The traditional buyout model involved a group of investors purchasing a company or a division of a larger company, employing a small amount of equity (the investor's own capital), and financing most of the purchase

[10]Because Seagate owned less than 80% of VERITAS's voting stock, a distribution of the 128 million VERITAS shares to Seagate shareholders would be treated like a sale of the shares. Therefore, Seagate would have to pay corporate income tax on the gain, i.e., the difference between the current value of those shares distributed and their tax basis. In addition, Seagate shareholders would have to pay ordinary income taxes on the VERITAS shares they received, as if they were a dividend. If instead Seagate sold the VERITAS shares, and distributed the cash to shareholders, the tax treatment would be the same (tax on the gain, shareholder taxes on the dividend).

[11]Silver Lake would be the controlling shareholder of Suez Acquisition Company. The remainder of the equity investment in the buyout entity would be made by Texas Pacific Group, August Capital, Chase Capital Partners, and Goldman Sachs.

[12]Transactions where some of a company's assets are sold and the remaining shell is merged with another company are sometimes referred to as "downstairs mergers."

[13]Seagate shareholders would be immediately taxed on the cash portion of the distribution. Taxes on the equity portion, i.e., the VERITAS shares, would be deferred until the VERITAS shares were sold.

price with debt backed by the company's assets. Because the resulting capital structures were often highly leveraged, these transactions were commonly called leveraged buyouts (LBOs). Investment returns from buyouts came from business efficiency improvements, improved management incentives, and increased interest tax shields (when the buyout is financed with debt). In addition, in some cases buyouts provided an opportunity to purchase undervalued assets at a favorable price.

Buyouts had their origin in the 1970s and grew to prominence in the 1980s. As buyout deals became larger, eventually it seemed like every company in America was a potential target. The $30 billion purchase of RJR Nabisco in April 1989, led by the private equity investment firm Kohlberg, Kravis, and Roberts, is the largest buyout in history. This transaction spawned the *New York Times* best selling book and movie *Barbarians at the Gate,* epitomizing the degree to which the buyout craze captured the fascination of not only Wall Street investment bankers, but also the American public.

The growth of the buyout market in the 1980s was fueled in large part by the increasing availability of high-yield bond financing.[14] High yield bonds allowed buyout specialists to borrow heavily against the assets of their target companies, and pursue ever-larger deals. Exhibit 7 displays common capital structures for LBOs over the last twenty years. By the late 1980s, when the frequency and size of LBO activity peaked, the average transaction had a debt-to-total capitalization ratio of 92%.[15]

In a typical LBO, financial leverage was highest right after the deal closed, and then declined over time as cash flows from asset sales and operations were used to pay down the debt. To support the high levels of debt, LBO firms typically targeted companies that operated in mature industries, generated stable and predictable cash flows, and had significant tangible assets that could be used as collateral.

Investors' fascination with LBOs faded in the early 1990s when some of the 1980s LBOs failed spectacularly, generating large losses for both debt and equity investors. Although LBOs resurfaced in the mid-1990s, they were much smaller, and generally exhibited more conservative capital structures than those of the 1980s.

Emergence of Technology Buyouts

In the 1980s and early 1990s, LBO firms tended to avoid technology businesses where the combination of rapid growth, short product cycles, and substantial demand uncertainty made cash flows extremely hard to predict. The lack of tangible assets in many technology businesses further reduced their attractiveness to LBO specialists. These attitudes began to change in the late 1990s, however. Many investors and industry insiders believed that certain segments of the technology sector had begun to exhibit the maturity and stability typical of traditional LBO candidates. In addition, based on then-current stock market valuation multiples, entire segments of the technology sector were trading at all time lows. And the high-yield debt market had significantly rebounded, making large amounts of financing available for new deals.

In the wake of these developments, there began to emerge a new class of private equity investors, who had expertise in both LBOs and technology businesses. Major private equity firms like Silver Lake Partners, Texas Pacific Group, and Hicks Muse Tate & Furst raised billions of dollars to invest in technology buyouts.

[14]High-yield bonds, also known as "junk bonds," are corporate bonds, which carry ratings below investment grade (i.e., BB or lower). They are considered highly speculative, with significant default risk. As a result, they pay much higher interest than investment grade bonds.

[15]In contrast, historically the average publicly traded corporation in the United States has held a 20% to 35% debt-to-total market capital ratio (Source: Ronald Masulis, 1988, "The Debt/Equity Choice," pages 8–9, Ballinger Publishing).

Against this backdrop, Silver Lake began to investigate the possibility of acquiring Seagate's disk drive operations. Due to Seagate's size, market capitalization, and industry-leading position, the proposed buyout had the potential to become a landmark transaction, similar in stature to the RJR Nabisco deal in 1989.

The characteristics of the disk drive business, which Luczo would describe as "the extreme sport of technology,"[16] did not make it an easy place to do LBOs, however. Price competition was intense, product life cycles were extremely short (often under six months), and the technological sophistication of disk drives required large expenditures on R&D. R&D was the lifeblood of the business, as being the first to introduce a new product or innovation generally made the difference between making or losing money. In addition, to win business, a disk drive manufacturer had to be able to produce an order to a customer's specifications quickly and on a large scale. This required significant investment in manufacturing capacity. Like the expenditures on R&D, this investment would use up scarce cash and make it more difficult to support a relatively high debt load, as found in traditional LBO structures.

In addition to all this, Seagate's disk drive business was highly vertically integrated, which also required significant investment in R&D and capital equipment. Thus Seagate appeared to be particularly unsuited for an LBO.

Seagate's disk drive business had a number of characteristics that might allow it to do well as an LBO, however. Management believed that being vertically integrated gave the company a strong competitive advantage, allowing it to respond more quickly to changes in technology and customer demands, and avoid costly supply chain disruptions. And high R&D and capital expenditures, while using up cash, could also give the company a competitive advantage, by deterring new entry by smaller, less well-capitalized competitors.

The Silver Lake team was also extremely optimistic about the disk drive industry's prospects. For the last two years the firm had come to the view that data storage was going to be the wave of the future in technology. Disk drives were the key technological component in a growing number of hardware products, including workstations and related technologies that managed and processed data. As Glenn Hutchins, one of Silver Lake's principals, would say: "If there's going to be an information superhighway, we're going to need plenty of parking lots."

Closing the Deal

Silver Lake's proposal offered a potentially attractive solution to Seagate's difficulties. However, the buyout group still had to determine how much to pay for the disk drive operations and how to finance the deal. As part of this process, the group intensively analyzed Seagate's historical financial performance and that of its competitors (Exhibits 2 and 3). In addition, it developed detailed financial projections for Seagate following the buyout and merger (Exhibit 8).[17]

Despite continued competitive pressure in its traditional disk drive segments, revenues and profits were expected to grow as Seagate re-entered the mobile disk drive segment and capitalized on its foray into SAN and NAS storage networking. Capital expenditures were projected to continue rising through 2003 as Seagate invested in

[16] *Financial Times*, May 3, 2000.

[17] The projections in Exhibit 8 are based on publicly disclosed projections of revenues, gross margins, and EBITA from Seagate SEC filings, and case writer estimates of depreciation and capital expenditures.

these new opportunities, but were projected to drop thereafter. Net noncash operating working capital used in the disk drive business had historically been about zero.[18]

These base case projections represented a "best guess" concerning performance, and thus summarized expectations for the future. However, to assess the sensitivity of the valuation to the underlying growth assumptions, both "upside" and "downside" projections were generated. Excerpts from the valuation performed by Seagate's financial advisor, Morgan Stanley, are shown in Exhibit 9.

Another decision that the buyout team had to make involved the capital structure of the new entity. In order to maximize the return on their equity investments, LBOs had traditionally employed large amounts of debt and maintained small cash balances. Given the volatility of disk drive profits, a prudent capital structure for this transaction would be more conservative (i.e., less leveraged) than that of traditional LBOs. The challenge was to weigh the possible benefits of higher debt against the potential costs. Seagate's access to future financing would probably be enhanced if it were able to maintain an investment grade rating of BBB or better throughout the projection period. Therefore, credit rating agencies' assessment of Seagate's debt post-buyout would no doubt be an important consideration in the buyout team's analysis.

Exhibit 10 contains information on long-term interest rates for different credit ratings, as of March 2000. Exhibit 11 reports median coverage and leverage ratios, by S&P debt rating, for a large sample of industrial issuers. However S&P explicitly points out "financial ratios are viewed in the context of a firm's business risk. A company . . . with more predictable cash flows can afford to undertake added financial risk while maintaining the same credit rating."[19] Conversely, companies with above average business risk and less predictable cash flows would need higher coverage and lower leverage than the figures reported in Exhibit 11 to attain a given rating.

A final consideration was that the buyout could not proceed unless VERITAS shareholders approved the second-stage merger. Therefore it would be necessary to offer them a sufficiently attractive return for acquiring the remaining assets of Seagate (mainly 128 million VERITAS shares) after the disk drive business had been sold.

[18]Net noncash operating working capital is defined as (Accounts Receivable + Inventories + Other Current Assets) – (Accounts Payable + Accrued Employee Compensation + Accrued Expenses).

[19]Source: *Standard & Poor's 2000 Ratings Criteria.*

EXHIBIT 1 Worldwide Hard Disk Drive Industry Historical Performance and Projections, 1991–2003E

Source: *Computer Industry Abstracts* (various issues) and "Disk Drive Quarterly Report" (June 1999) by Salomon Smith Barney.

	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000E	2001E	2002E	2003E
Total Sales (000s of units)	33.1	38.4	51.8	69.0	90.0	106.8	129.3	143.6	165.9	187.8	212.5	238.1	268.2
Y/Y % Change		*16.0%*	*34.9%*	*33.2%*	*30.4%*	*18.7%*	*21.0%*	*11.1%*	*15.5%*	*13.2%*	*13.1%*	*12.1%*	*12.6%*
Total Revenues (millions of $)	$24,300	$26,200	$21,730	$22,966	$22,991	$27,596	$27,340	$25,483	$25,273	$26,640	$28,409	$30,450	$32,699
Y/Y % Change		*7.8%*	*–17.1%*	*5.7%*	*0.1%*	*20.0%*	*–0.9%*	*–6.8%*	*–0.8%*	*5.4%*	*6.6%*	*7.2%*	*7.4%*

EXHIBIT 2 Historical Operating Performance and Capitalization Ratios for Seagate Technology and U.S. Disk Drive Industry (1981 to 1999)

Source: Casewriters' estimates based on data compiled from Compustat.

	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999
Seagate																			
Sales	9.79	40.45	110.41	343.90	214.65	459.84	958.07	1,265.97	1,371.57	2,413.18	2,676.98	2,875.27	3,043.60	3,500.10	4,539.57	8,588.35	8,940.02	6,819.00	6,802.00
% Growth		*313.2%*	*173.0%*	*211.5%*	*–37.6%*	*114.2%*	*108.3%*	*32.1%*	*8.3%*	*75.9%*	*10.9%*	*7.4%*	*5.9%*	*15.0%*	*29.7%*	*89.2%*	*4.1%*	*–23.7%*	*–0.2%*
EBITDA	0.87	10.70	18.82	63.51	0.07	58.34	208.24	150.77	90.97	297.24	255.57	309.04	439.05	449.17	629.85	1,004.53	1,521.03	451.00	1,011.00
% Sales	*8.9%*	*26.5%*	*17.0%*	*18.5%*	*0.0%*	*12.7%*	*21.7%*	*11.9%*	*6.6%*	*12.3%*	*9.5%*	*10.7%*	*14.4%*	*12.8%*	*13.9%*	*11.7%*	*17.0%*	*6.6%*	*14.9%*
EBIT	0.65	9.89	16.16	55.72	–12.01	39.18	180.63	100.40	12.96	179.32	117.31	139.91	284.03	310.96	442.98	627.38	1,019.83	–138.00	398.00
% Sales	*6.6%*	*24.4%*	*14.6%*	*16.2%*	*–5.6%*	*8.5%*	*18.9%*	*7.9%*	*0.9%*	*7.4%*	*4.4%*	*4.9%*	*9.3%*	*8.9%*	*9.8%*	*7.3%*	*11.4%*	*–2.0%*	*5.9%*
Assets	9.47	43.47	157.25	214.72	275.23	305.08	814.12	1,093.95	1,076.77	1,851.46	1,880.06	1,816.60	2,031.19	2,877.53	3,361.26	5,239.64	6,722.88	5,645.00	7,072.00
Depreciation & Amortization	0.22	0.81	2.65	7.80	12.08	19.17	27.60	50.37	78.02	117.91	138.26	169.13	155.02	138.21	186.86	377.15	501.20	589.00	613.00
CAPX	2.45	5.04	38.83	42.66	31.22	38.68	78.40	284.41	78.09	102.38	90.87	90.66	173.57	197.68	353.43	906.94	890.46	709.00	603.00
Debt/Book Assets	19%	1%	5%	5%	13%	5%	37%	28%	29%	31%	23%	18%	14%	19%	16%	15%	10%	12%	10%
Debt/Mkt. Assets	NA	0%	1%	2%	9%	2%	14%	20%	24%	28%	27%	16%	14%	18%	12%	11%	6%	8%	8%
(Debt-Cash)/Book Assets	18%	–27%	–10%	–2%	11%	–10%	–11%	20%	11%	17%	9%	–10%	–17%	–27%	–21%	–7%	–24%	–20%	–13%
(Debt-Cash)/Market Assets	NA	–6%	–2%	–1%	7%	–5%	–4%	14%	9%	15%	11%	–9%	–17%	–26%	–15%	–5%	–13%	–13%	–10%
EBITDA Interest Coverage	10.12	57.84	47.05	73.51	0.04	20.26	41.01	6.88	3.77	6.10	6.01	9.09	18.67	17.05	19.11	17.99	43.66	8.84	20.25
EBIT Interest Coverage	7.56	53.46	40.40	64.49	–6.84	13.61	35.57	4.58	0.54	3.68	2.76	4.11	12.08	11.81	13.44	11.24	29.27	–2.71	8.29
Disk Drive Industry Medians																			
EBITDA as % of Sales	8.9%	6.2%	7.3%	0.7%	–4.4%	8.6%	7.8%	6.2%	7.3%	9.6%	8.6%	8.9%	3.9%	2.5%	4.7%	7.0%	9.3%	5.6%	6.1%
EBIT as % of Sales	5.4%	3.2%	3.4%	–3.5%	–10.3%	5.3%	4.5%	2.3%	5.3%	5.9%	4.3%	5.9%	–0.3%	–2.4%	1.9%	3.9%	7.5%	–1.4%	1.1%
Debt/Book Assets	19%	9%	5%	12%	19%	13%	16%	12%	13%	10%	13%	16%	19%	12%	10%	13%	6%	14%	9%
Debt/Mkt. Assets	7%	4%	1%	5%	7%	5%	7%	8%	8%	9%	8%	16%	13%	7%	3%	4%	1%	7%	4%
(Debt-Cash)/Book Assets	9%	–5%	–12%	–6%	–5%	–7%	–11%	0%	–5%	–7%	2%	–1%	–9%	–4%	–8%	–6%	–21%	–9%	–23%
(Debt-Cash)/Mkt Assets	0%	–2%	–6%	–2%	–3%	–4%	–4%	–3%	–2%	–4%	–1%	–3%	–3%	–2%	–3%	–5%	–8%	–5%	–5%
EBITDA Interest Coverage	3.31	3.46	4.12	–1.58	–3.19	6.20	6.37	8.15	5.74	6.03	4.06	9.00	4.38	5.58	3.59	7.06	13.00	4.20	–0.09
EBIT Interest Coverage	2.19	1.42	2.34	–3.37	–7.57	2.25	1.94	4.58	2.71	3.30	1.55	4.31	–0.05	0.37	1.84	5.04	8.52	–2.04	–2.91

EXHIBIT 3 Summary Financial Data on Publicly Traded Hard Disk Drive Manufacturers

Source: Data compiled from Compustat and SEC Filings.

	Seagate Technology			Quantum HDD[a]			Western Digital			Maxtor		
	Jun97	Jun98	Jun99	Mar97	Mar98	Mar99	Jun97	Jun98	Jun99	Dec96	Dec97	Dec98
Income Statement ($ million)												
Sales	$8,940	$6,819	$6,802	$4,591	$4,615	$3,599	$4,178	$3,542	$2,767	$799	$1,424	$2,409
Cost of Goods Sold	6,918	5,830	5,250	4,093	4,242	3,308	3,464	3,187	2,562	842	1,287	2,034
Gross Margin	2,022	989	1,552	498	373	291	714	355	205	–43	137	375
EBITDA	1,521	451	1,011	146	–6	–61	365	–41	–188	–191	–32	134
Depreciation + Amortization	501	589	613	109	68	71	63	107	131	47	66	74
Operating Profit	1,020	–138	398	37	–74	–133	302	–148	–319	–238	–97	60
Interest Expense	35	51	48	20	11	9	0	12	33	18	37	29
Net Income	658	–530	1,176	41	–53	–153	268	–290	–493	–256	–110	31
Capital Expenditures	890	709	603	164	119	82	156	199	107	54	82	95
Balance Sheet ($ million)												
Cash and Equivalents	$2,284	$1,827	$1,623	NA	$325	$524	$208	$460	$226	$31	$33	$258
Net Receivables	1,041	799	872	NA	586	392	546	369	273	89	248	318
Inventories	808	508	451	NA	212	148	224	187	144	81	155	153
Net Property, Plant, and Equipment	1,787	1,669	1,687	NA	228	199	248	347	238	92	99	108
TOTAL ASSETS	6,723	5,645	7,072	NA	1,646	1,470	1,307	1,443	1,022	315	555	863
Accounts Payable	883	577	714	NA	401	342	418	330	336	110	207	428
Short-term Debt	1	1	1	NA	0	0	0	0	10	204	245	5
Long-term Debt	702	704	703	NA	109	115	0	519	534	229	224	145
Shareholders' Equity	3,476	2,937	3,563	NA	906	791	620	318	–154	–327	–221	169
Net Working Capital[b]	2,717	2,241	1,773				364	464	72	93	440	170
				NA	739	709						
Capital Market Information ($ million)												
Year-end Market Equity Capitalization	$5,861	$5,844	$8,620	NA	NA	NA	$2,716	$1,043	$589	NA	NA	$1,320
Equity Betas[c]			1.2			0.8			0.6			1.0
Total Book Debt (3/10/00)			704			110			236			114
Debt Rating			BBB			B2			B2			B1
Stock Price (3/10/00)—$/share			64.25			8.875			5.1875			11.625
Shares Outstanding (3/10/00)—millions			227.2			82.6			129.1			113.2

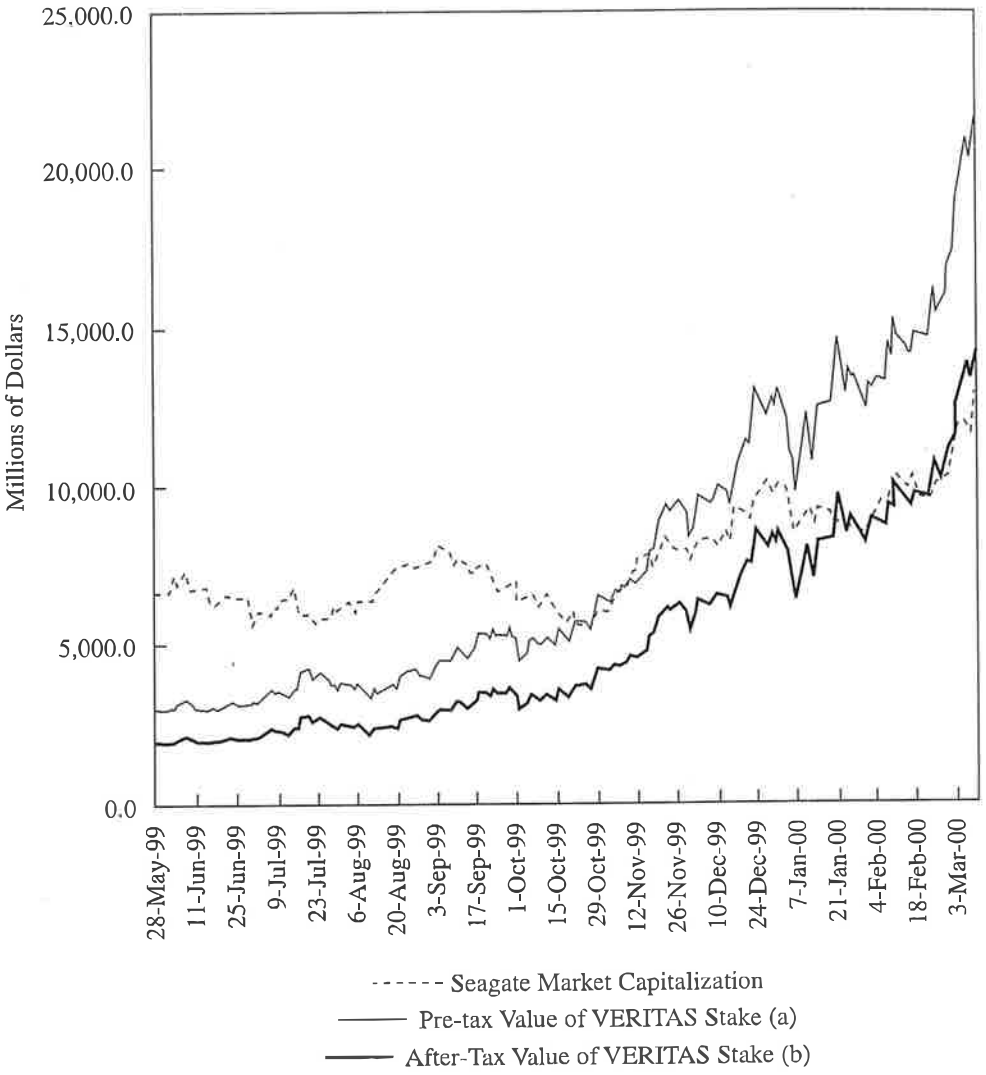
[a]Quantum HDD was floated in August 1999 as a separately traded subsidiary of Quantum Corporation, containing just the hard disk drive operations. As a result, there is no information on historical stock prices or market capitalization, prior to that date.

[b]Net Working Capital = Total Current Assets – Total Current Liabilities (excluding Short-term Debt).

[c]Equity betas estimated using daily returns over the six-month period from 9/1/99 to 3/1/00.

EXHIBIT 4
Stock Market Valuation of Seagate and VERITAS Stake

Source: Casewriters' estimates based on stock prices compiled from Yahoo.



(a)(Number of shares of VERITAS held by Seagate) × (VERITAS closing stock price).
(b)Assumes Seagate sells its entire VERITAS stake at the pretax value, and pays a 34% corporate tax on the full proceeds. Ignores any personal taxes paid by Seagate shareholders on any proceeds distributed by Seagate.

EXHIBIT 5
Summary Financial Data on VERITAS Software

Source: Compustat and SEC Filings.

	VERITAS Software		
	Dec96	Dec97	Dec98
Balance Sheet ($ Million)			
Cash and Equivalents	$67.6	$151.3	$278.2
Net Receivables	16.0	30.3	52.7
Inventories	NA	NA	NA
Net Property, Plant, and Equipment	7.0	10.1	26.5
TOTAL ASSETS	94.5	241.9	349.1
Accounts Payable	1.8	1.6	5.0
Short-term Debt	0.1	0.0	0.0
Long-term Debt	0.5	100.0	100.0
Shareholders' Equity	75.0	104.2	169.9
Stock Market Information			
Total Book Debt (3/10/00)—$ Millions			451
Equity Beta[a]			1.81
Stock Price (3/10/00)—$/Share			168.69
Shares Outstanding (3/10/00)—Millions			393.6

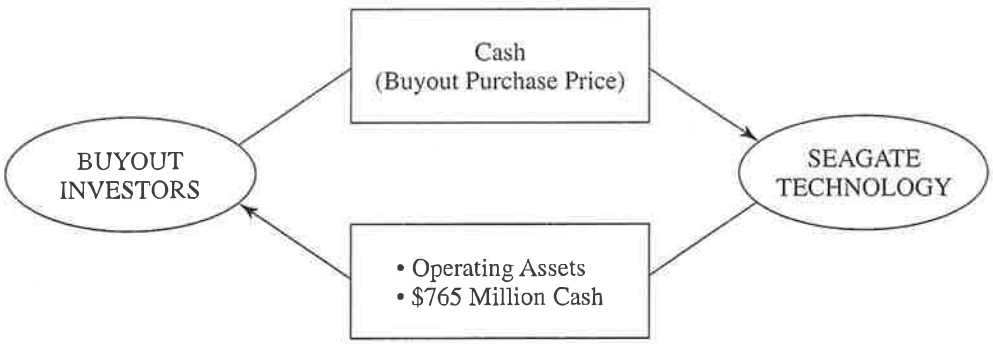
[a]Equity beta estimated using daily returns over the six-month period from 9/1/99 to 3/1/00.

EXHIBIT 6

Key Features of Proposed Transaction between Seagate Technology and VERITAS

Source: VERITAS and Seagate Joint Proxy Statement/Prospectus dated October 23, 2000, and casewriter adjustments.

STEP 1: Seagate sells all operating assets to group of investors (the "Seagate Technology Buyout").



STEP 2: Seagate exchanges existing equity stake in VERITAS for new VERITAS shares. The remaining Seagate assets are distributed to shareholders.

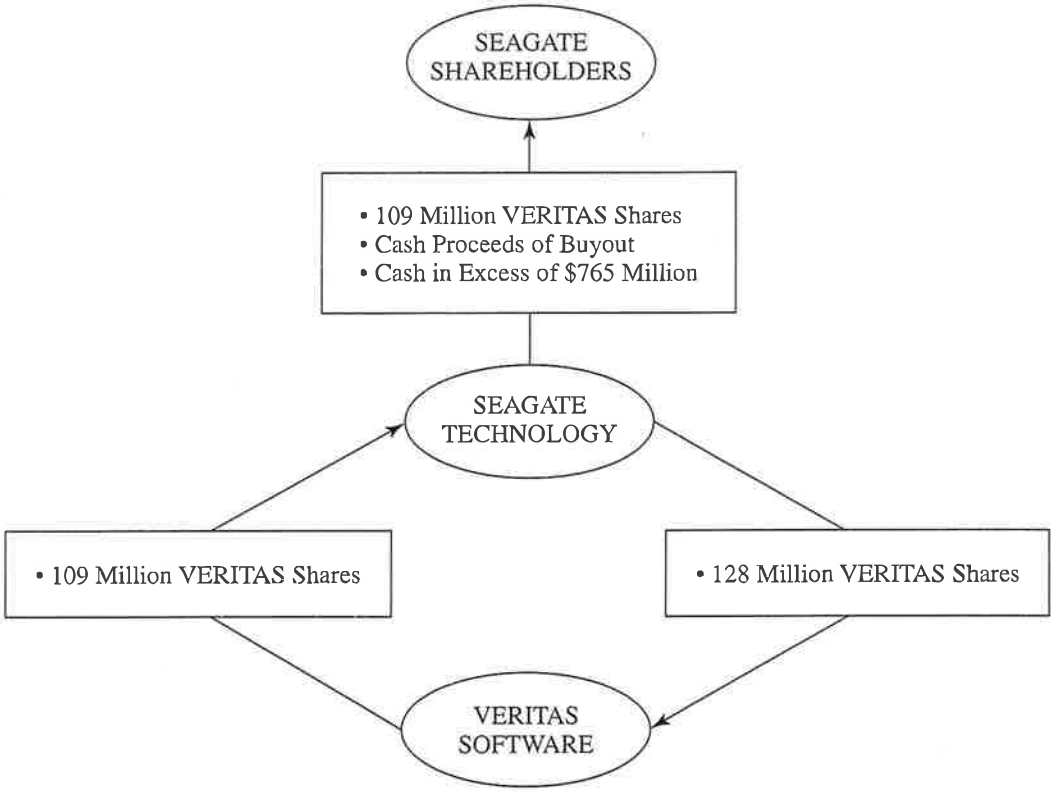
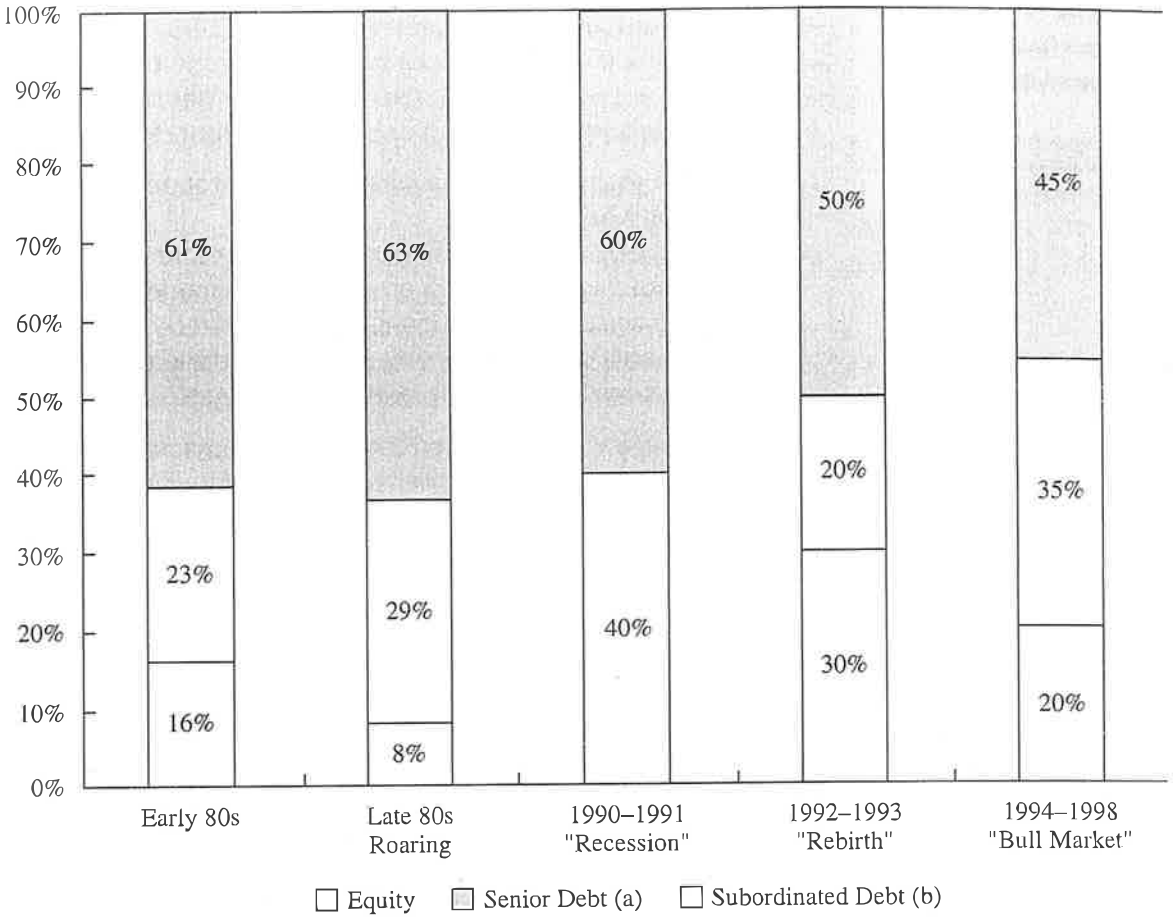


EXHIBIT 7
Capitalization Structure for LBO Transactions (1980–1999)

Source: Reproduced from "The Emergence of Technology Buyouts," an HBS student project by George Taylor. Original data from Chase Securities, Inc. and Thomas H. Lee Company Research.



[a]Senior debt is defined as all debt instruments, which have first priority in a liquidation or bankruptcy.
[b]Subordinated debt is defined as all debt instruments that have lower priority than senior debt in liquidation.

EXHIBIT 8 Projected Operating Performance of Seagate Disk Drive Business

Source: Casewriters' estimates based on revenues and EBITA projections contained in SEC filings.

	Year Ending June 30,						
	2000	2001	2002	2003	2004	2005	2006
Base Case ($ million)							
Revenues	$6,619	$7,417	$8,564	$9,504	$10,416	$11,359	$12,350
Gross Margin	1,264	1,409	1,696	2,043	2,312	2,624	3,026
EBITA	141	189	316	449	499	614	724
Depreciation	625	626	642	666	708	726	729
Capital Expenditures	627	690	720	795	700	725	750
Upside Case ($ million)							
Revenues	$6,619	$8,185	$10,146	$11,283	$12,626	$13,961	$15,404
EBITA	141	365	689	783	867	1,000	1,167
Downside Case ($ million)[a]							
Revenues	$6,619	$7,393	$7,797	$8,310	$8,801	$9,269	$9,759
EBITA	141	189	322	363	378	403	407

[a]The "downside case" is based on the "buyer case" described in the first VERITAS and Seagate Joint Proxy Statement/Prospectus filed with the SEC in May 2000.

EXHIBIT 9
Morgan Stanley Fairness Opinion

Source: Seagate Technology, Inc., SEC Filings. Form 13E3, filed on May 19, 2000.

Under an engagement letter dated February 10, 2000, Seagate retained Morgan Stanley to provide it with financial advisory services in connection with a possible strategic business combination, restructuring or other transaction.

In connection with rendering its opinions, Morgan Stanley, among other things:

—reviewed certain publicly available financial statements and other information concerning Seagate;
—reviewed certain internal financial statements and other financial and operating data concerning Seagate prepared by the management of Seagate;
—reviewed certain financial projections prepared by the management of Seagate;
—discussed with senior executives of Seagate the past and current operations and financial condition and the prospects of Seagate.

Morgan Stanley also reviewed for illustrative purposes estimated ranges of values for Seagate's operation businesses derived using various methodologies, including a comparable companies analysis, (. . .) a discounted cash flow analysis, and a hypothetical "sum-of-the-parts" analysis of Seagate's disc drives, tapes, information management, and storage area network segments.

As part of this review, Morgan Stanley analyzed the two cases developed by Seagate management, as well as a third case developed by Morgan Stanley as a sensitivity case, which reflected Seagate management's base case but assumed that gross margins for the desktop segment of Seagate's disk drive business remained constant for years 2000 through 2008. For each of these analyses, Morgan Stanley calculated an implied value for Seagate's operation assets (. . .). The discounted cash flow analysis (was) based upon multiples of calendar year 2006 EBITA ranging from 6.0x to 9.0x and a discount rate of 15%.

EXHIBIT 10 Market Interest Rates (March 2000)

Source: Standard & Poor's Datastream.

Corporate Long-Term Bonds						Government Securities		
AAA	AA	A	BBB	BB	B	3 Month	6 Month	30 Year
7.01%	7.14%	7.31%	7.72%	9.18%	10.44%	5.88%	6.15%	5.84%

EXHIBIT 11 S&P Key Industrial Financial Ratios by Long-Term Debt Rating

Source: Standard & Poor's Credit Week, September 2000.

	Three-Year Medians—1997 to 1999						
	AAA	AA	A	BBB	BB	B	CCC
EBIT Interest Coverage	17.5x	10.8x	6.8x	3.9x	2.3x	1.0x	0.2x
Total Debt as % of Market Cap.[a]	3.7%	9.2%	16.4%	30.4%	47.5%	59.3%	74.3%

[a]Defined as the ratio of Total Debt (long term and short term) to Total Market Capitalization (the sum of total debt, minority interest, preferred equity, and year-end market value of equity).