Yale SCHOOL *of* MANAGEMENT

Becton Dickinson & Company

February 21, 2006

INDUSTRY RATING

Market Weight

Target Value: $16.2B

Current Price: $16.26B

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- **Initiation of Coverage.** We initiate coverage of Becton Dickinson and Company (BDX) at Market weight.

- **Healthcare Spending remains strong.** BDX should prosper from continued strong spending in the healthcare sector and especially from the diabetes epidemic.

- **Weak competitive position**. BDX is one of many devices players and operates on the lower end of the gross margin spectrum.

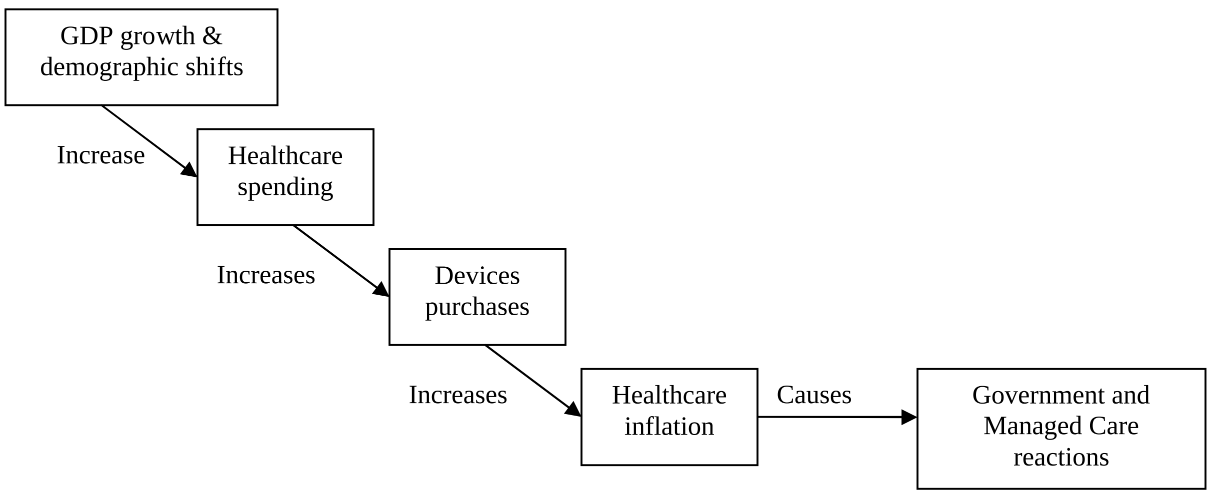
- **Valuation. Our DCF valuation produced an intrinsic equity value of $16.2 billion, which closely corresponds to the current market capitalization of $16.26 billion.**

Please see important disclaimer at the end of this report for important information.

Industry Drivers

Growth

Growth in the medical devices will be a function of both macroeconomic/demographic forces and the strategic moves of large players within the greater healthcare market. The sequence of events is roughly:



GDP growth

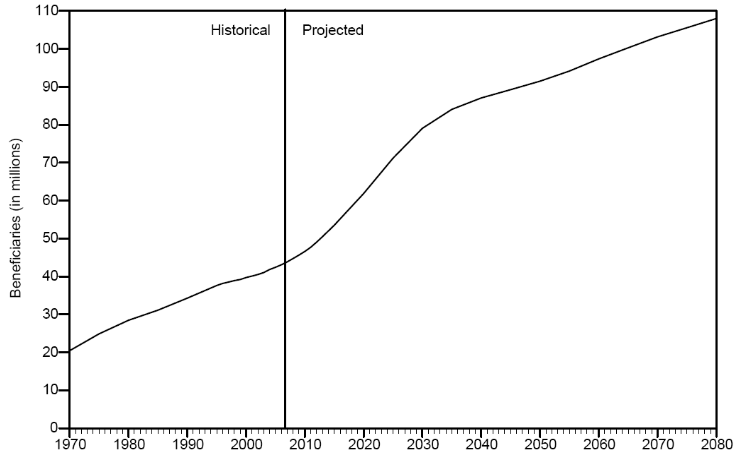
A key insight within the overall healthcare industry is that individuals spend a higher proportion of income on healthcare as they become richer. High GDP growth increases consumers' disposable income, which increases their spending on healthcare. Thus, a robust economy will produce a higher rate of healthcare spending than a weak economy. This effect has an especially significant effect on the devices industry since many devices, such as artificial joints, are used in elective (non-life-threatening) surgeries. The Congressional Budget Office (CBO) expects real GDP growth of 3.4% in 2006[1]. We assume that growth in medical devices will not fall below the rate of GDP growth, and establish 3% as the long-term GDP growth rate.

Demographic Shifts

One of the largest issues in contemporary healthcare is the effect of the baby boomer generation on the public system. As the approximately 77 million baby boomers approach Medicare eligibility the burden of supplying devices and other healthcare to these individuals falls on the government (see figure 1). Medicare spending is expected to steadily increase for the next ten years, with growth rates as high as 9%.[2] Since older citizens consume a disproportionately higher percentage of health care, the influx of baby boomers into Medicare will have tremendous beneficial effects for the devices industry.

[1] S&P
[2] S&P

Figure 1

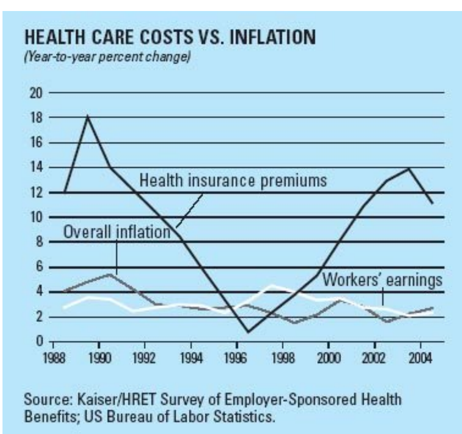


Source: www.medpac.gov

<u>Healthcare inflation</u>

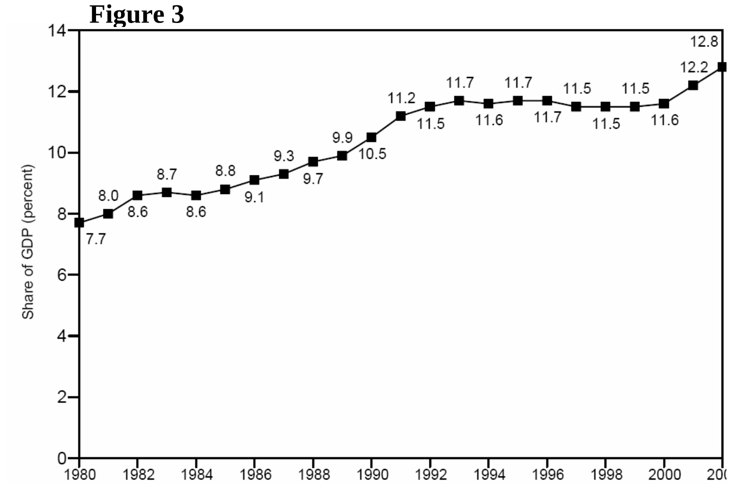
Increases in the prices of devices are fueled by increases in healthcare spending (demand) as well as input/production costs (supply). Devices manufacturers are developing increasingly complex products to satisfy the demands of individuals and to differentiate from competitors. Thus, the cost of inputs, the amount of research and development required to develop products, and the capital outlays required to build production capacity all increase. The effects of healthcare inflation on the individual can be observed by examining insurance premiums paid. As can be seen in figure 2, since 1988 healthcare inflation has outpaced overall inflation every year except for 1997. As can be seen in figure 3, on the national level healthcare spending is consuming an ever-increasing percentage of GDP.

Figure 2



Source: S&P

Figure 3



Source: National Coalition on Health Care

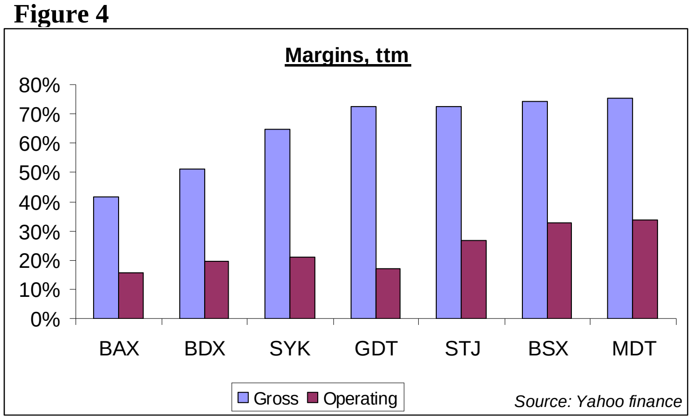
Payer reactions

In order to curb consumption and inflation the Centers for Medicaid and Medicare Services (CMS) as well as the managed care industry are implementing several new initiatives. CMS' primary tactic is to control which procedures will be reimbursed; since it is common for up to 33% of a hospital's patients to be Medicare recipients, CMS has substantial buyer power. The implication for devices manufacturers is to ensure that new devices are approved. Johnson and Johnson executed this strategy to perfection with their initial stent launch; the devices were on the CMS approved list before they were commercially available. In addition to using buyer power, managed care organizations are developing several initiatives such as consumerism and pay-for-performance, both of which will result in higher scrutiny of devices' effectiveness. With patients and physicians weighing the cost of the "next best thing" against its marginal benefit, substantial downward pressure could develop on new product demand and therefore prices.

Profitability

Products in the medical devices industry range from cutting-edge high-tech diagnostic systems to commodities such as latex gloves. Predictably, the higher-tech products command higher margins and the commodity products earn minimal margins. Some devices manufacturers, such as Baxter International and Becton Dickinson, produce items all along the product spectrum while other manufacturers, such as Boston Scientific, focus more on the high end. The choice of product mix has a tremendous impact on gross margins and a substantial impact on operating margins, as can be seen in figure 4 below.

Figure 4



BDX vs. Industry

As could be observed in figure 4 above, BDX plays on the lower-margin end of the spectrum. BDX describes its product catalog as "a catalog of medical supplies, devices, laboratory equipment and diagnostic products."[3] The catalog includes over 16 product categories, each containing up 20 to sub-categories and products ranging from alcohol swaps to extra-cellular matrix proteins. BDX groups its businesses into three main categories:

1. BD Medical: (10% growth in 2005; $3.0B in revenues; 55% of total)

This division includes blood glucose monitors (BGM), testing strips for BGMs, pen needles for insulin injection, safety-engineered products, pre-filled IV flush syringes, pre-fillable syringes sold to pharmaceutical companies, and the new BD Nexiva Closed IV Catheter System[4].

This division includes one of BDX's main growth opportunities: the diabetic population. Diabetes is considered by many to be the most acute health epidemic in the United States today. Total direct and indirect costs associated with diabetes in the U.S. were $132B in 2002, with $92B in direct medical costs and $40B in indirect costs such as disability and work loss.[5] The statistics surrounding diabetes are staggering[6]:

- 17 million Americans have been diagnosed with diabetes.
- 5 million Americans have diabetes but don't know it. They risk severe complications such as blindness, amputations, and death
- 12 million Americans have impaired glucose tolerance, the early stage of type II diabetes
- Almost two out of three Americans are overweight
- Half of the overweight are obese (twice as much obesity as in 1976-1980)

BDX dominates the market for insulin syringes but is just one of many firms selling BGMs and the accompanying strips. At least 25 different meters are commercially available; they differ in several ways, including[7]:

- Amount of blood needed for each test
- Testing speed
- Overall size
- Ability to store test results in memory
- Cost of the meter
- Cost of the test strips used

BDX sells the BGMs at a loss in order to profit on the sale of strips that a diabetic feeds into the monitor each time he checks his glucose. These devices have yet to generate a profit for

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[3] http://catalog.bd.com
[4] BDX annual report 2005
[5] www.cdc.gov, "National Diabetes Fact Sheet: United States, 2005"
[6] http://www.webmd.com/content/Article/74/89419.htm
[7] www.fda.gov/diabetes/glucose.hmtl#3

BDX, but management is optimistic about progress thus far. In 2004, BDX incurred a $50 million loss, which improved to a $43 million loss in 2005[8].

We conclude that the rising tide of diabetes, combined with BDX's established position, should ensure at least modest growth going forward. However, given the multitude of competitors and the inherent profitability challenges of the "razor blade" business model, we do not believe that the diabetes business segment will enable BDX to exceed consensus growth projections.

2. BD Diagnostics (8% growth in 2005; $1.7B in revenues; 30% of total)

BD Diagnostics continues to innovate by making products that focus on ease of use. BDX successfully launched the BD Vacutainer Push Button Blood Collection Set and the BD Phoenix (for bacterial identification) in 2006, and enjoyed strong results from the BD ProbeTec ET platform. The BD Viper ER System is planned for launch in early 2006.

BDX recently announced the completion of its $230M acquisition of GeneOhm Sciences, Inc., a producer of devices used to detect bacterial organisms. The primary business opportunity is to help healthcare providers prevent the 6 million healthcare-associated infections (HAIs) that occur annually in the U.S., Europe, and Japan; HAIs cause an estimate 90,000 deaths annually in the U.S. alone. HAIs are receiving increased levels of scrutiny due to the quality initiative in healthcare, which should provide a solid business opportunity for GeneOhm products, two of which are already FDA-approved. It is difficult to predict the financial impact of this acquisition since GeneOhm was a privately held company, but BDX has announced that the acquisition will be dilutive. Geneohm's 2005 revenues were only $5 million (vs. BDX's $5.4B), so we anticipate substantial ramp-up costs before BDX captures significant value from the deal[9]. Thus, since the market is relatively new and little information exists, we conclude that this acquisition will not enable BDX to exceed consensus growth projections.

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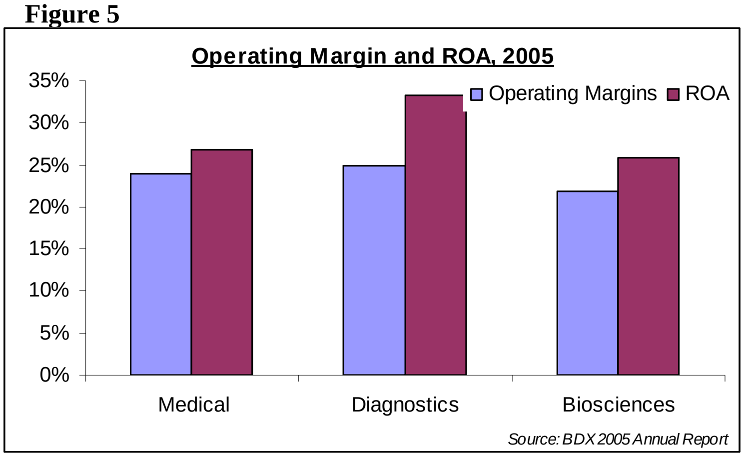
[8] 1Q06 Analyst call
[9] www.bd.com, press release 1/10/2006

3. BD Biosciences (11% growth; $800M in revenues; 15% of total)

Given the complexity of the product line, BD Biosciences requires R&D expense of up to 5.65% of sales, which is up from 5% of sales in years past. As can be observed in figure 5, the Biosciences segment slightly lags the other two segments in both operating margin and return on assets.

Figure 5



Valuation

Assumptions

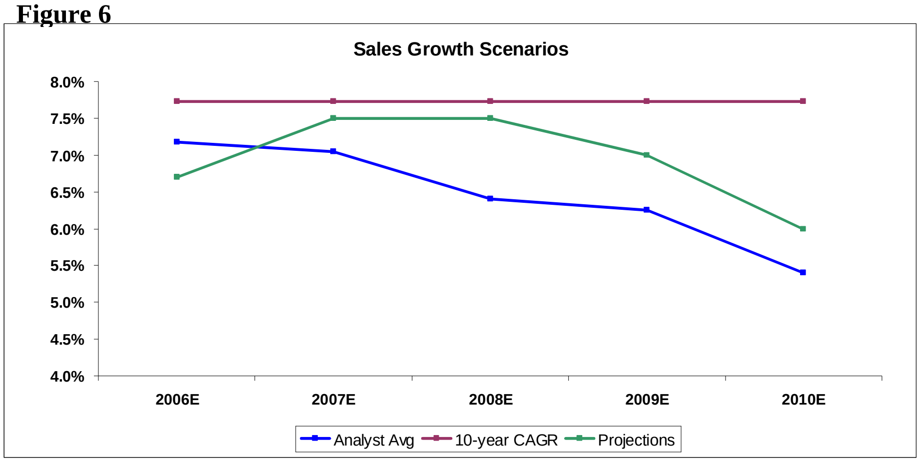
Sales Growth

Sales growth estimates were forecasted based on three different sources of data (see attached). The first set of information that we looked at was management's growth forecast of 6.7% which includes a 200 basis point negative impact due to foreign currency translations. In the medical segment of the business BDX forecasts growth at a rate of 6.5%. Revenues for the medical segment of the business account for 55% of the company's sales. The diagnostics segment of the business is forecasted to grow at 6%. Revenues from diagnostics comprise 30% of the business. And lastly, BDX projects the biosciences unit to grow at rate of 8.5%. Biosciences make up 15% of the company's revenues.

We looked at several Wall Street analysts' revenue estimates as a reality check on management. Estimates for fiscal year 2006 average 7.2% (see Appendix 2). This is 50 basis points higher than our projections as well as management's guidance. The average estimate we found for 2007 is 7.1% trending down to 5.4% in 2009.

Finally we calculated a 9 year historical compound annual growth rate to give us an idea of the company's past performance. From these three data sources we culled what we believe to be very reasonable growth rates (see below).

Figure 6



Cost of Goods Sold

Management has been dedicated to improving gross margins throughout the company and the results are evident. Gross margins have increased from 44% in 2002 to 51% in 2005. Management projects another 40 basis point gain this year but we remained conservative and forecast cost of goods sold coming at 50%.

SG&A

Based on historical rates of SG&A expense we calculated 22% to be a reasonable number going forward.

Research and Development

We used historical R&D expense and management guidance of 5.65% (which reflects a 12% increase over 2005A) as a projection going forward.

Depreciation

Historically, Becton Dickinson's depreciation as a percentage of sales has come in at 8%. This is our projection for the future as well.

Tax Rate

We calculated the tax rate to be 26% because it is consistent with the management's future guidance. We feel that this is a fairly conservative number in that it represents one of the higher effective tax rates that the company will pay with respect to last six years. In fiscal years 2000, 2001, and 2002, the effective tax rates were 24.4%, 24%, and 23.6% respectively. In fiscal years 2003, 2004, and 2005, the effective rates were 23.1%, 22.6%, and 31.1% respectively. The tax rate for 2005 was inordinately high because it reflects a one time charge in the fourth quarter.

Cost of Debt

All of Becton Dickinson's long-term debt is single A rated with different coupons, maturities and dates of issue. We calculated the cost of debt to be 4.93% according to the current maturities of five-year single A rated corporate debt as of 2/20/06.[10]

Beta

We ran a regression of returns for our seven-firm medical devices index against the excess returns of the stock market (NYSE/AMEX/NASDAQ) for the past 10 years. We used CRSP monthly data and calculated beta for this time period to be .58. We did not use a beta based on BDX alone because the five and ten year beta figures came in at .26 and .45 respectively. These very low betas resulted in WACC rates in the low 6% range which is unrealistic in our estimation. Though we feel that BDX deserves a low beta because it is a "defensive" stock, we believe that .58 is a more appropriate risk level for a company of this kind.

Cash

Cash has grown as a percentage of sales by between 3-5% in absolute terms, reaching 19% in 2005. We continued this trend until reaching 31% in 2008. We believe that BDX's cash requirements will increase due to the need for future acquisitions.

CAPEX

Management forecasted fiscal year 2006 CAPEX to be $400 million, which represents 7% of projected sales. We used 7% of sales as our basis going forward.

Other Balance Sheet Items

All other balance sheet items were calculated based upon historical 5-year averages and held constant from 2006 forward.

[10] Yahoo finance via ValuBond

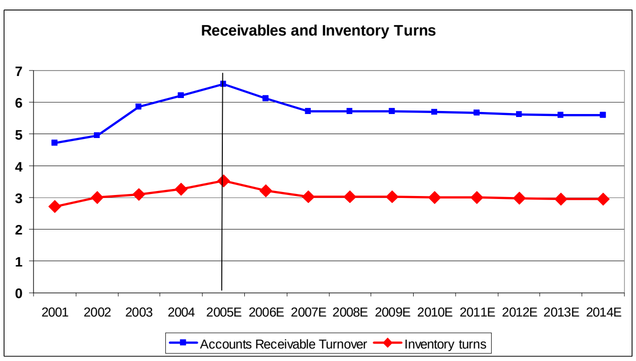
WACC Calculations

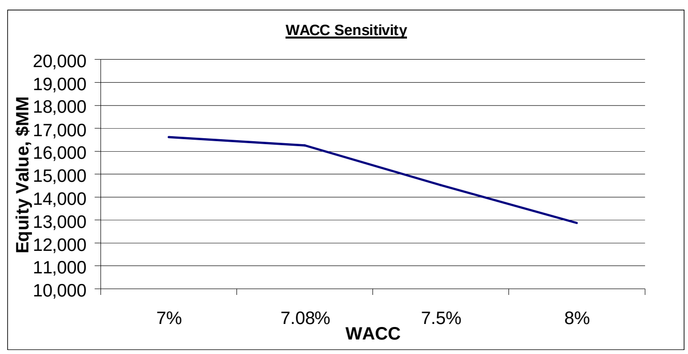
WACC Calulations		
10-year T-bill	4.55%	
Less risk premium	1.00%	per classroom guidance
Risk-free rate	3.55%	
Industry Beta	0.58	10 Yr Monthly Regression
Market Risk Premium	6.45%	Historical Market Return
Cost of Equity	7.29%	
Cost of Debt	4.93%	A Rated 5 Yr Corp. Debt
Tax rate	26%	See attached
MV Equity ($MM)	16,166	
E/V	94%	
MV Debt ($MM)	973	
D/V	6%	
WACC	**7.08%**	

For the past five years the debt to equity ratio for Becton Dickinson has been relatively constant. There is no reason to believe that their capital structure will change in any dramatic fashion. For this reason we believe that the Weighted Average Cost of Capital is the optimal method to discount future cash flows.

Outputs

Our discounted cash flow valuation produced an **equity value of $16.2 billion**. The current market value of equity is $16.3B. Thus, our recommendation is **Market Weight**. For Income Statement, Balance Sheet, and Free Cash Flow analysis refer to Appendices 3 – 5. Key balance sheet metrics remained within an acceptable range. The model is highly sensitive to the WACC, as can be observed below. This is due in large part to the high percentage of total equity value comprised of terminal value.

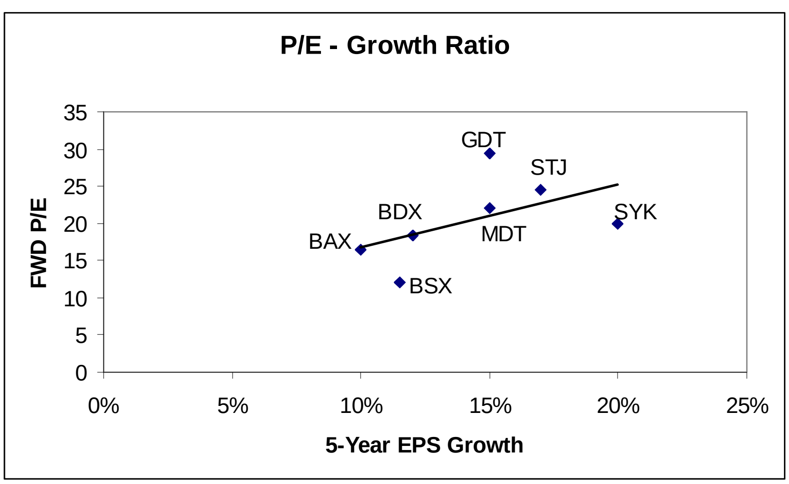




BDX shares have enjoyed a 30% appreciation since November 2005, which we believe reflects the price of BDX shares moving to match the intrinsic value of the business.

Comparables Analysis

To verify our DCF output we regressed the forward P/E ratios of our 7-firm index against the analyst consensus 5-year EPS growth forecasts. We found that BDX falls exactly on the best-fit regression line, indicating that BDX is appropriately valued relative to its peers. This supports our DCF valuation, which asserts that BDX is fairly priced in the market.



Our Position vs. Analysts' Positions

Our position is very similar to both analyst consensus and management projections. We feel that analysts have a very precise valuation basis for this firm due to its 100+ year existence and the fact that it is in a well-understood industry. Accordingly, we do not believe that management could successfully misrepresent its projections without drawing instantaneous criticism.

Investment Thesis

Overall, we believe that BDX is well positioned to benefit from the overall strength of the healthcare market, but is not poised for radical growth due to the competitive landscape and BDX's low-margin product portfolio. We believe that BDX shares are accurately priced in the market, owing to analysts' thorough understanding of the business fundamentals as well as the recent appreciation of the shares.

Appendix 1: BDX Product Catalog

MICROBIOLOGY PRODUCTS
- Adapters and Tubing
- Microbiology Testing
  - Blood Culture
  - Collection and Transport
  - Direct Testing and Serology
  - Environmental Systems
  - Identification and Susceptibility
  - Dehydrated Culture Media
  - Prepared Media
  - Stains and Reagents
- Microbiology Equipment and Supplies
  - Equipment and Supplies
  - Molecular Diagnostics
  - Mycobacteria Testing

MOLECULAR DIAGNOSTICS & PROTEOMICS PRODUCTS

LABORATORY PRODUCTS
- Cytokines and Media Additives
- Extracellular Matrix Proteins
- Labware
  - Assay Plates and HTS Systems
  - Cell Cultureware
  - Containers
  - Centrifuge and Test Tubes
  - Filtration Units
  - Petri Dishes
  - Pipets and Pipetters
  - Serum Separators

HOME CARE PRODUCTS
- Hosiery
- Sports Medicine
- Exam Gloves
- Thermometers

DIABETES CARE PRODUCTS
- Alcohol Swabs
- Blood Glucose Monitoring
- Diabetes Accessories
- Insulin Syringes
- Insulin Pens and Pen Needles
- Lancets

OEM PRODUCTS
- Syringes and Needles
  - Anesthesia Needles and Accessories
  - Anesthesia Syringes
  - Radiology Needles
  - Radiology Accessories
  - General Use Syringes & Needles
  - General Safety Syringe & Needles
- Adapters
- Catheters
- Surgical Blades, Handles and Scalpels

EDUCATIONAL MATERIAL

SAFETY-ENGINEERED INJECTION PRODUCTS
- Injection Systems
  - Allergy Syringes With Needles
  - General Use Syringes
  - General Use Syringes With Needles
  - Hypodermic Needles
  - Insulin Syringes With Needles
  - Tuberculin Syringes With Needles
- Needleless Systems
  - Interlink® System
  - Needleless Adapters

SAFETY-ENGINEERED BLOOD COLLECTION
- Lancets
- Capillary Blood Collection
- Venous Blood Collection Tubes
- Venous Blood Collection
  - Adapters and Holders
  - Collection Sets
  - Sample Needles

SAFETY-ENGINEERED INFUSION THERAPY
- Introducers
- Infusion Sets
- IV Catheters
- IV Flush Syringes

OTHER SAFETY-ENGINEERED PRODUCTS
- Blood Sampling Systems
- Surgical Blades, Handles and Scalpels
- Sharps Collectors
- Ophthalmology

CRITICAL CARE PRODUCTS
- Blood Sampling Systems
- Cardiac Output Injectate Kits & Cables
- Cardiac Cath Lab Accessories
- Central Venous Catheters
- Disposable Domes and Kits
- Fluid Administration Products
- Pressure Accessories and Cables
- Pressure Transducers
- Pulmonary Artery Catheters

INFUSION THERAPY PRODUCTS
- IV Flush Syringes
- IV Site Maintenance
- IV Products
  - Extended Dwell Catheters
  - IV Adapters
  - IV Catheters
  - Stopcocks
- Infusion Sets
- Needleless Systems
  - Interlink® System
  - Needleless Adapters

SPECIMEN MANAGEMENT PRODUCTS
- Lancets
- ABG Syringes
- Blood Collection
  - Venous Blood Collection Tubes
  - Capillary Blood Collection
  - Molecular Diagnostics & Proteomics
- Sample Needles & Collection Sets
- Sharps Collectors
- Urine Collection

OPHTHALMOLOGY PRODUCTS
- Microkeratome Products
- Ophthalmology
- Specialty Blades

SURGICAL PRODUCTS
- Adapters and Tubing
- Antimicrobial Soaps and Scrubs
- LeVEEN Shunt
- Sharps Collectors
- Specialty Blades
- Surgical Blades, Handles and Scalpels
- Surgical Accessories

INJECTION PRODUCTS
- Alcohol Swabs
- Sharps Collectors
- Syringes
  - General Use Syringes
  - IV Flush Syringes
  - Oral Syringes
- Needles
  - Anesthesia Needles, Syringes, Kits
  - Biopsy Needles
  - General Use Needles
  - Pharmacy Needles
  - Radiology Needles
  - Specialty Needles
- Syringes with Attached Needles
  - Allergy Syringes
  - Anesthesia Needles, Syringes, Kits
  - General Use Syringes With Needles
  - Insulin Syringes
  - Insulin Pens and Pen Needles
  - Tuberculin Syringes
- Needleless Systems
  - Interlink® System
  - Needleless Adapters
- Syringe Accessories and Parts

BD Helping all people live healthy lives

Appendix 2: Analysts' Sales Growth Estimates

Analyst Sales Growth Projections						
Firm	**Date**	**06/05**	**07/06**	**08/07**	**09/08**	**10/09**
Morgan Stanley	1/26/2006	7.2%	7.4%	6.8%	6.5%	5.4%
S.G. Cowen	1/27/2006	7.0%	6.0%	6.0%	6.0%	
Baird	1/27/2006	6.7%	8.1%			
Bear, Sterns, & co.	1/27/2006	7.8%	6.7%			
	Average	**7.2%**	**7.1%**	**6.4%**	**6.3%**	**5.4%**

Appendix 3: Income Statement

Income Statement	2001	2002	2003	2004	2005	2006E	2007E	2008E	2009E	2010E	2011E	2012E	2013E	2014E
Sales (Net) (MM$)	3,618	3,746	4,464	4,935	5,415	5,777	6,211	6,677	7,144	7,573	7,951	8,269	8,517	8,773
Cost of Goods Sold (MM$)	1,913	2,084	2,297	2,500	2,662	2,831	3,081	3,312	3,544	3,757	3,944	4,102	4,225	4,352
Gross Profit	1,705	1,663	2,167	2,435	2,753	2,947	3,130	3,365	3,600	3,816	4,007	4,167	4,292	4,421
Selling, General & Admin. Expenses (MM$)	983	1,032	1,114	1,093	1,063	1,271	1,320	1,419	1,518	1,610	1,690	1,758	1,810	1,865
R&D Expense	212	220	224	236	272	326	351	377	404	428	449	467	481	496
EBITDA	510	411	829	1,106	1,418	1,349	1,459	1,568	1,678	1,779	1,868	1,942	2,001	2,061
Depreciation & Amortization	306	305	336	357	388	279	478	514	550	583	612	637	656	676
EBIT (MM$)	**204**	**106**	**493**	**749**	**1,031**	**1,070**	**980**	**1,054**	**1,128**	**1,195**	**1,255**	**1,305**	**1,345**	**1,385**
Interest Expense	55	33	43	45	56									
Pre-tax income	149	72	450	704	975									
Income Taxes - Total (MM$)	138	149	167	170	313									
Extraordinary Items	37	0	-8	-115	30									
Net Income	**47**	**-76**	**275**	**419**	**692**									

Income Statement Assumptions	2001	2002	2003	2004	2005	2006E	2007E	2008E	2009E	2010E	2011E	2012E	2013E	2014E
Revenue Growth		*4%*	*19%*	*11%*	*10%*	*6.7%*	*7.5%*	*7.5%*	*7.0%*	*6.0%*	*5.0%*	*4.0%*	*3.0%*	*3.0%*
COGS as a % of Sales	*53%*	*56%*	*51%*	*51%*	*49%*	*49%*	*50%*	*50%*	*50%*	*50%*	*50%*	*50%*	*50%*	*50%*
SG&A as a % of Sales	*27%*	*28%*	*25%*	*22%*	*20%*	*22%*	*21%*	*21%*	*21%*	*21%*	*21%*	*21%*	*21%*	*21%*
R&D as % of Sales	*6%*	*6%*	*5%*	*5%*	*5%*	*5.65%*	*5.65%*	*5.65%*	*5.65%*	*5.65%*	*5.65%*	*5.65%*	*5.65%*	*5.65%*
Depreciation as % Sales	*8%*	*8%*	*8%*	*7%*	*7%*	*7.7%*	*8%*	*8%*	*8%*	*8%*	*8%*	*8%*	*8%*	*8%*

Appendix 4: Balance Sheet

Balance Sheet	**2001**	**2002**	**2003**	**2004**	**2005**	**2006E**	**2007E**	**2008E**	**2009E**	**2010E**	**2011E**	**2012E**	**2013E**	**2014E**
Cash	82	243.1	519.9	719	1043	1,271	1,553	1,869	2214.62	2347.5	2464.87	2563.47	2640.37	2719.59
Short-term inv	5	2	0	32	87	18	18	22	24	26	28	30	33	35
Receivables - Total (MM$)	768	746	781	807	843	1,046	1,125	1,209	1,294	1,372	1,440	1,498	1,543	1,589
Inventories - Total (MM$)	708	686	795	739	776	982	1,056	1,135	1,214	1,287	1,351	1,405	1,448	1,491
Current Assets - Other (MM$)	201	240	242	344	227	207	214	255	282	309	330	354	381	408
Total Current Assets	1,763	1,917	2,338	2,641	2,976	3,524	3,965	4,490	5,029	5,342	5,614	5,851	6,044	6,242
Net PP&E	1,716	1,766	1,845	1,881	1,934	2,055	2,012	1,965	1,915	1,862	1,806	1,748	1,689	1,627
Goodwill	432	492	537	473	470	401	415	494	546	599	640	688	739	791
Other Intangible Assets	892	854	852	757	693	693	693	693	693	693	693	693	693	693
Total Assets (MM$)	**4,802**	**5,029**	**5,572**	**5,752**	**6,073**	**6,673**	**7,085**	**7,642**	**8,183**	**8,496**	**8,753**	**8,980**	**9,165**	**9,353**
Current Liabilities (non-interest bearing)	1,265	1,248	1,043	1,050	1,299	1,582	1,701	1,828	1,956	2,074	2,177	2,264	2,332	2,402
Other LT Liabilities (non-interest bearing)	426	497	448	463	428	605	650	699	748	793	833	866	892	919
Long-Term Debt - Total (MM$)	783	803	1,184	1,172	1,061									
Total Liabilities (MM$)	2,474	2,548	2,675	2,685	2,788	2,187	2,351	2,527	2,704	2,866	3,010	3,130	3,224	3,321
Debt + Equity (Plug)						*4,486*	*4,734*	*5,115*	*5,479*	*5,630*	*5,744*	*5,850*	*5,941*	*6,033*
Common Equity + APIC	481	518	590	747	949									
Retained Earnings	3,137	3,507	3,951	4,265	4,806									
Other Equity	-1,290	-1,544	-1,644	-1,944	-2,470									
Total Stockholders' Equity (MM$)	2,329	2,481	2,897	3,068	3,285									
Total Liabilities and Stockholders' Equity	**4,802**	**5,029**	**5,572**	**5,753**	**6,073**	**6,673**	**7,085**	**7,642**	**8,183**	**8,496**	**8,753**	**8,980**	**9,165**	**9,353**
Balance Check	0	0	0	-1	0	0	0	0	0	0	0	0	0	0

Balance Sheet Assumptions	**2001**	**2002**	**2003**	**2004**	**2005**	**2006E**	**2007E**	**2008E**	**2009E**	**2010E**	**2011E**	**2012E**	**2013E**	**2014E**
Cash as % Sales	2%	6%	12%	15%	19%	*22%*	*25%*	*28%*	*31%*	*31%*	*31%*	*31%*	*31%*	*31%*
S-T Inv as % Sales	0.1%	0.1%	0.0%	0.6%	1.6%	*0.5%*	*0.5%*	*0.5%*	*0.5%*	*0.5%*	*0.5%*	*0.5%*	*0.5%*	*0.5%*
Receivables as % Sales	*21%*	*20%*	*17%*	*16%*	*16%*	*18%*	*18%*	*18%*	*18%*	*18%*	*18%*	*18%*	*18%*	*18%*
Inventories as % Sales	*20%*	*18%*	*18%*	*15%*	*14%*	*17%*	*17%*	*17%*	*17%*	*17%*	*17%*	*17%*	*17%*	*17%*
Other current assets as % Sales	*6%*	*6%*	*5%*	*7%*	*4%*	*5.7%*	*5.7%*	*5.7%*	*5.7%*	*5.7%*	*5.7%*	*5.7%*	*5.7%*	*5.7%*
CAPEX as % Sales	10%	7%	6%	5%	6%	6.9%	*7%*	*7%*	*7%*	*7%*	*7%*	*7%*	*7%*	*7%*
CAPEX value	364	256	259	266	318	**400**	*435*	*467*	*500*	*530*	*557*	*579*	*596*	*614*
Goodwill as % Sales	*12%*	13%	12%	10%	9%	11%	*11%*	*11%*	*11%*	*11%*	*11%*	*11%*	*11%*	*11%*
Other intagnible assets as % Sales	*25%*	23%	19%	15%	13%	19%	*19%*	*19%*	*19%*	*19%*	*19%*	*19%*	*19%*	*19%*
Total current liabilities to Sales	*35%*	*33%*	*23%*	*21%*	*24%*	*27%*	*27%*	*27%*	*27%*	*27%*	*27%*	*27%*	*27%*	*27%*
Other LT liabilities to Sales	*12%*	*13%*	*10%*	*9%*	*8%*	*10%*	*10%*	*10%*	*10%*	*10%*	*10%*	*10%*	*10%*	*10%*

Appendix 5: Free Cash Flow Analysis

Discounted Cash Flow Analysis										
Calculations										
Tax rate	26%	See note								
WACC	7.08%	See WACC calculations								
Terminal Growth	3%	Approximate long-run GDP growth								
Market Vale of Debt	973	BV of debt; all debt rated A								
Cost of Debt	4.93%	See WACC calculations								
		2006E	**2007E**	**2008E**	**2009E**	**2010E**	**2011E**	**2012E**	**2013E**	**2014E**
Year		1	2	3	4	5	6	7	8	9
After-tax EBIT		792	726	780	835	885	929	966	995	1,025
Plus: Depreciation		279	478	514	550	583	612	637	656	676
Less: CAPEX		(400)	(435)	(467)	(500)	(530)	(557)	(579)	(596)	(614)
(Less) Plus Changes in WC		(265)	(323)	(397)	(410)	(196)	(169)	(150)	(125)	(128)
Free Cash Flow		406	446	430	474	742	815	874	930	958
Present Values		379	389	350	361	527	541	541	538	518
Terminal Value		24,171								
PV(Terminal Value)		13,054								
Enterprise Value		17,197								
Less: (Net Debt)		973								
Equity value		**16,224**								

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