Equity Research
United States

April 2007

Industrial Gases

Favorable Fundamentals and Defensive Characteristics, at a Price

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Summary and Investment Conclusion

- **We view the industrial gas industry favorably.** The industry is an orderly oligopoly (four largest players command about 70% of the global market) wherein contracts often contain four attractive features: (1) long-term duration of 10-20 years; (2) "take-or-pay" minimum volume requirements; (3) pass-through of natural gas cost fluctuations; and (4) formula-based selling price escalators.
- **Shares offer attractive defensive characteristics.** With commodity chemicals past peak earnings, and recent concerns about the U.S. economy (e.g., housing and autos), the defensive nature of industrial gases is increasingly compelling. Aforementioned contracts render industrial gas names less cyclical and more stable than commodity and specialty chemical peers, which can lead to superior relative performance, especially during periods of economic weakness.
- **Global growth remains healthy despite deceleration of U.S. demand.** Higher growth end-use U.S. markets such as energy (9% of industry sales), health care (9%) and electronics (9%) support U.S. demand at 1.5x growth in U.S. industrial production. As a consequence, we project U.S. volume growth of 2.4% in 2007, based on BAS industrial production forecast of 1.6%. Demand appears more robust in international markets. European volume/price trends have accelerated in recent months to rival double-digit growth in the emerging markets of Asia and Latin America.
- **Airgas is our favorite way to play.** On March 8, 2007, we upgraded shares of Airgas (ARG, $41.84, Buy, Target Price: $46), a leader in packaged (cylinder) gases given pricing power, prospects for margin expansion and external growth opportunities. Airgas stock trades for 18.3x our calendar 2007 estimate versus 18.5x for Praxair (PX, $62.96, Neutral, Target Price: $61) and 17.6x for Air Products (APD, $73.94, Neutral, Target Price: $74).

Figure 1

Price and Relative Price, 10 Years

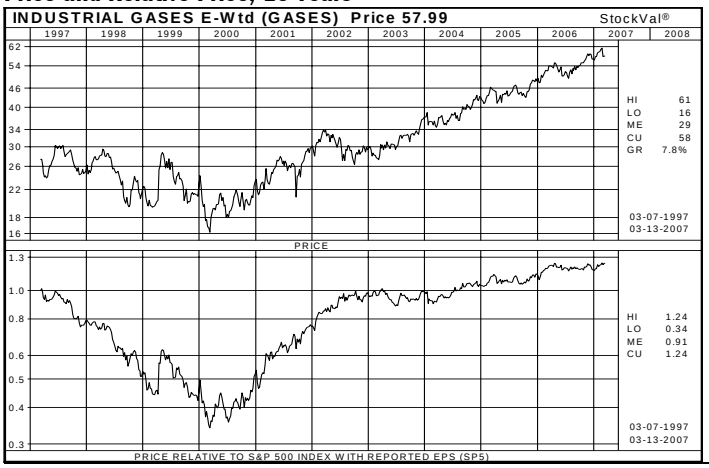
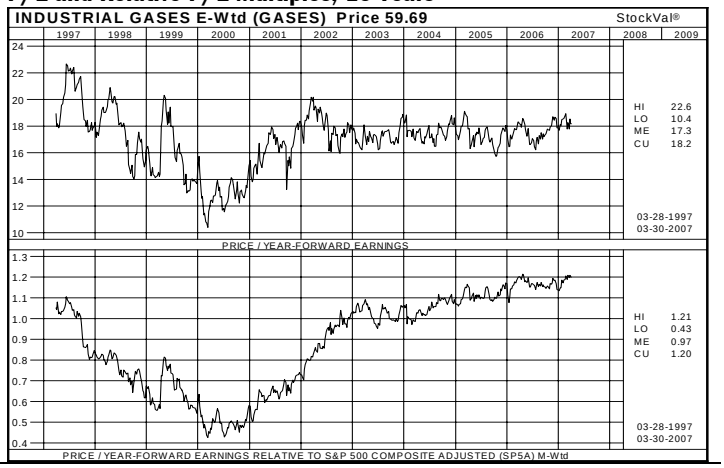


Figure 2

P/E and Relative P/E Multiples, 10 Years



Note: BAS Industrial Gas Index includes Air Liquide, Air Products, Airgas and Praxair.

Source: StockVal.

Industry Overview

Attractiveness

Players enjoy stable cash flows and premium growth.

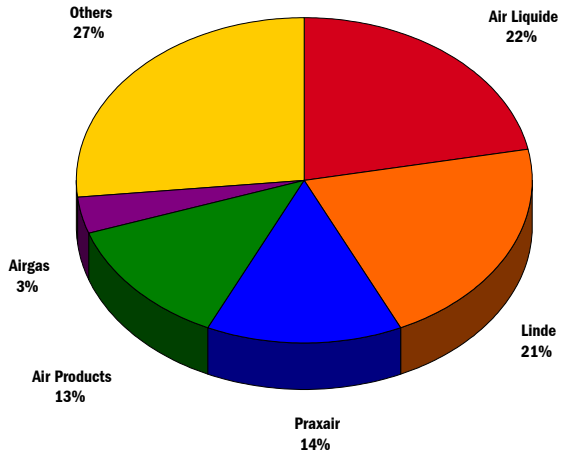
We view the industrial gas industry favorably. Industrial gas contracts typically contain the following four attractive features: (1) long-term duration of ten to 20 years; (2) "take-or-pay" minimum volume requirements; (3) pass-through of natural gas cost fluctuations; and (4) formula-based selling price escalators. As a consequence, industry participants enjoy stable, utility-like cash flows with attractive growth of 1.5x in industrial production. We view Praxair, Air Products and Airgas as high-quality, well-managed companies that have generally outperformed the S&P 500 and chemical industry peers over long periods of time.

However, valuation already reflects a substantial premium. The group stocks trade at an average price-to-earnings (P/E) multiple of 18.1x calendar 2007 earnings per share (EPS) and a relative P/E multiple of 1.20x, which is near the 10-year high of 1.21. On a normalized or midcycle basis, the group trades at a median premium of 1.3 P/E multiple points versus chemical industry peers.

The industrial gas industry is an orderly oligopoly. Following industry consolidation in recent years, the top four industrial gas players account for about 70% of the global business. Competition is orderly and regional leaders tend to enjoy superior profitability and higher returns on capital (ROC), mainly because of density of distribution networks. Although certain players may accept lower profitability in order to compete for projects in high-growth applications, major players do not tend to underbid contracts in order to take business away from regional leaders.

Figure 3

Global Industrial Gas Market, 2006
(%)



Source: Company reports, Banc of America Securities LLC estimates.

Four producers dominate the industrial gases market. They are Air Liquide ($12.5 billion in 2006 sales), Linde ($11.9 billion, pro forma for the BOC acquisition), Praxair ($7.8 billion) and Air Products ($7.4 billion). The sales figures quoted refer to calendar 2006 and include only the industrial gas businesses of each player. Airgas ($3.1 billion, including welding and safety-related hardgoods) often is included in the list of major industrial gas producers, although it is mainly a distributor of industrial gases. The top four producers account for about 70% of the global industrial gas market, as shown in Figure 3.

Industrial gases saw another major deal in 2006. We predicted in our initiation work in industrial gases in December 2005 that there was still some room for consolidation and the likely players would be Linde and/or BOC. Sure enough, in October 2006 Linde acquired BOC for £8.0 billion, or 11.2x trailing EBITDA before synergies and divestitures. Prior to the combination of Linde and BOC, the largest transaction was the purchase of Messer Gresheim by Air Liquide in May 2004 for €2.7 billion, or 10.1x trailing EBITDA before synergies and divestitures. Previously, BOC had accepted a joint offer from Air Products and Air Liquide in 1999, but the transaction ultimately was rejected over antitrust concerns.

Industrial gas markets are more regional than global.

The industrial gas business is generally regional in nature. In most applications, it is not economically viable to transport gas more than 250-300 miles, which provides players that possess a dominant regional position with a competitive advantage that elevates them to "provider of choice" status. Most often, gases play a critical role in the process they are used, but they do not represent a large cost component, a combination that makes it unlikely for a customer to jeopardize security of supply in favor of a marginal cost reduction by switching to a competitor that does not have a strong local network. As a result, incumbent suppliers often enjoy attractive pricing power.

Key factors of production are energy and capital.

Raw materials are essentially free and energy costs usually are passed through. Atmospheric gases (nitrogen, oxygen and argon) are manufactured from air in plants called air separation units (ASUs), so the key "raw material," air, is free. The two major cost components are capital and energy. Capital costs, as discussed in the following section, are mitigated through long-term take-or-pay contracts, and energy costs most often are passed through to the customer. Energy almost always is passed through for "onsite" sales, such as delivery to a customer via dedicated onsite production or via pipeline. Merchant gas contracts are less homogeneous. Producers may have to recover higher utility costs with pricing actions on a portion of their merchant sales.

Long-term contracts lock in onsite returns on capital. For most major producers, the preferred production method is onsite because the nature of onsite contracts locks in a fixed return on investment over a long period of time. Industrial gas companies typically establish 15-year contracts with major customers on whose site such gas separation plants are built. These contracts include energy pass-throughs and increasingly other clauses that account for market volatility, such as price escalators and foreign exchange pass-throughs. Coproduct gases not consumed onsite (such as liquid argon) are sold to the merchant and packaged markets. Overall profitability depends on a company's ability to sell these coproducts to the regional market.

Barriers to entry are high.

Barriers to entry include capital intensity and technology. The high capital costs of building and owning ASUs combined with high technological intensity in designing and building ASUs, pose high barriers to entry in the industrial gas business. In fact, the United States and Europe have not had a new major industrial gas player enter the market in decades.

Industrial gases are used in many different industries.

Customer diversity delivers stability and growth. Key end markets include high-growth sectors, such as energy, health care, and electronics and stable industrial activities, such as metals processing, chemical applications, manufacturing, aerospace, and food and beverages. This diversity of end-use markets and customers enhance the stability of cash flow. Also, the onsite business baseline load provides further stability to overall cash flows.

Substitutes are limited. Industrial gases are used to increase process efficiency and to reduce emissions, and to a lesser extent as raw materials for chemical reactions. In most cases, the use of industrial gases is highly efficient and/or is determined by chemistry. Therefore, it is not often feasible to substitute other chemicals or materials for industrial gases.

Large players grow at a multiple of gross domestic product (GDP). Among leading players, industrial gas revenues tend to grow globally at a pace of 1.5-2.0x industrial production. Growth in excess of 1.0x industrial production is driven by applications aimed at increased efficiency and improved environmental performance. We believe that there is also an underlying trend of increasing use of gases per unit of industrial production.

Many players sell related equipment in addition to gases.

Integrated producers sell more than just gases. Industrial gas companies sell a diverse range of products, from gas storage and handling equipment to electronic consumables such as pads and slurries for chemical mechanical planarization (CMP). BOC, now owned by Linde, supplies equipment to the electronics industry. Praxair, Airgas and other distributors of "packaged" gases sell hardgoods such as torches, tanks and safety glasses, along with cylinders of gas for welding applications. Linde and Air Products offer technology; both companies design and manufacture equipment for cryogenic air separation (ASUs), gas processing and hydrogen purification.

Market Size and Growth

We estimate the 2006 global industrial gas market at $57 billion.

Global 2006 industrial gas sales are estimated at $57 billion. Annual growth rates, in terms of volume, are presented in Table 1. In terms of value, gas sales are likely to grow faster than volume, owing to the escalating cost of energy, tempered by the faster growth of pipeline and onsite supply over the more expensive merchant and packaged gas sales. For example, hydrogen sales could grow faster than volume because of the escalating cost of natural gas used to make the hydrogen.

Table 1

Estimated Annual Volume Growth Rates, 2005—Estimated 2010
(%)

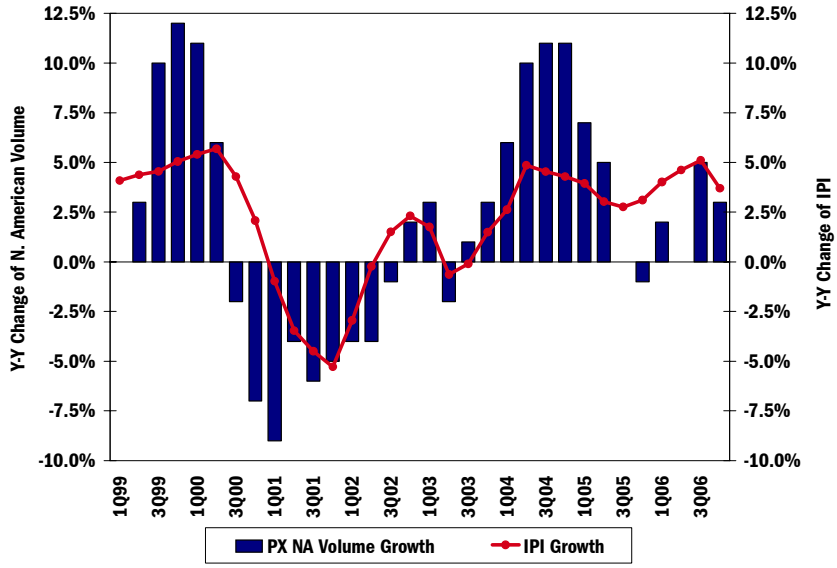
	United States	W. Europe	China	Japan	Total
Atmospheric gases	2-3%	3-4%	10-15%	1%	3%
Hydrogen	10%	8%	10-12%	2%	9-10%
Total	4-5%	4-5%	13%	2%	5%

Sources: SRI Consulting, CryoGas, Banc of America Securities LLC estimates.

Industrial production is a good proxy for volume growth. Among macroeconomic indicators, we generally prefer industrial production (IP) to GDP when it comes to demand for industrial gases. Figure 2 plots Praxair's North American volume history versus growth in U.S. industrial production.

Figure 4

Praxair, Inc.
North American Volume Growth, First-Quarter 1999—Fourth-Quarter 2006
(%)



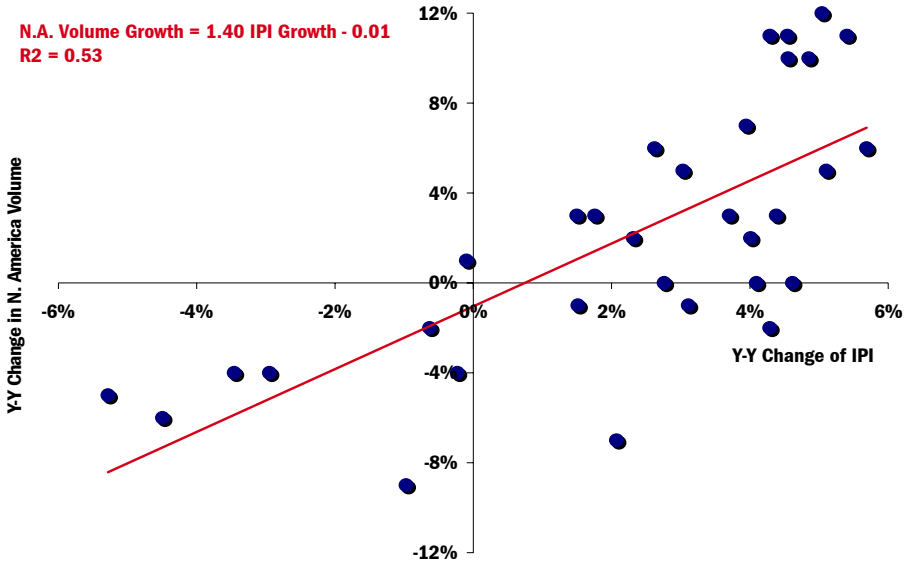
Source: Company reports.

Industrial gas volume tends to grow faster than industrial production.

Industrial gas revenues grow by 1.5x industrial production. Among leading players, growth in excess of IP is driven by industry consolidation, strategic focus on growth markets, technology-based offerings, strong positions in applications aimed at increased efficiency and improved environmental performance, and dominant regional positions with a competitive advantage that elevates them to "provider of choice" status. For example, Praxair volumes in North America have been growing at nearly 1.5x the industrial production index (IPI), as shown in Figure 3. We believe that other major players also have enjoyed superior growth relative to GDP and industrial production in recent years.

Figure 5

Praxair, Inc.
North American Volume Growth Versus IPI Growth, First Quarter 1999—Fourth Quarter 2006
(%)



Source: Company reports, Banc of America Securities LLC.

Capital Intensity

Capital expenditures run higher than D&A for industrial gas companies.

The industrial gas industry is capital intensive. Capital expenditures typically exceed depreciation and amortization (D&A) for industrial gas companies, as was the case in 2006 for Praxair, Air Products and Airgas. Consumers of industrial gases typically prefer to purchase gases from highly specialized players rather than produce these gases themselves. Large industrial players often establish long-term contracts with industrial gas companies for production of gases from units located on the customer's plant site but owned and operated by the industrial gas company. This synergistic relationship benefits the consumer because it alleviates capital intensity and the need for expertise in the space. Such arrangements also benefit the industrial gas producer by establishing long-term relationships with fixed contract terms that enable attractive return on capital (ROC) with stable cash flows. Ultimately, each party is permitted to focus on its inherent expertise.

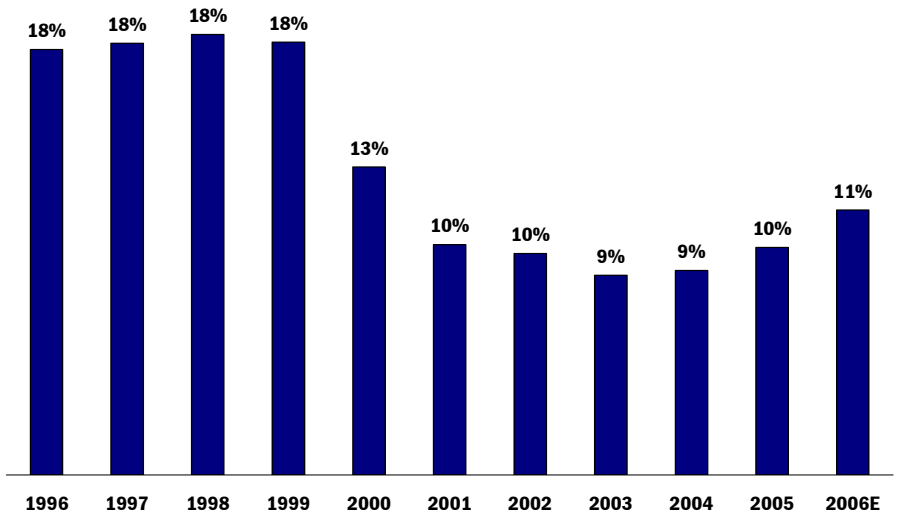
Regional economics depend on efficient capacity loading. Major industrial gas players typically build onsite production facilities, based on large long-term contracts. Onsite production capacity typically is built larger than the contracted amount. Also, in the case of air separation units (ASUs) not all coproducts are covered by the long-term onsite contract. Excess production and coproducts are sold to the regional pipeline, merchant and packaged gas markets. In most applications, it is not economically viable to transport gas more than 250-300 miles, which provides dominant regional players with a competitive advantage and superior economics.

Capital intensity declined from 1998-2003, but has begun to rebound. In the 1990s, the capital expenditures of major industrial gas players were in the range of 18% of sales, a level that was not viable for economic returns. As shown in Figure 4, capital expenditures have since declined to a sales range of 9-11% and are expected to stay at this level for the balance of this decade. In the past two years, capital expenditures have inched up as a function of (a) significant capital investment in hydrogen and in Asia and (b) increase in capital costs because of prices of metals and relative scarcity of engineering labor.

Capital expenditures have moderated since 1999.

Figure 6

Industrial Gases
Capital Expenditure Trends,* 1996–2006
(% of sales)



*Average annual capital expenditures as a percent of sales of Air Liquide, Air Products, Linde, Messer Greisheim and Praxair.

Source: Company reports.

Valuation

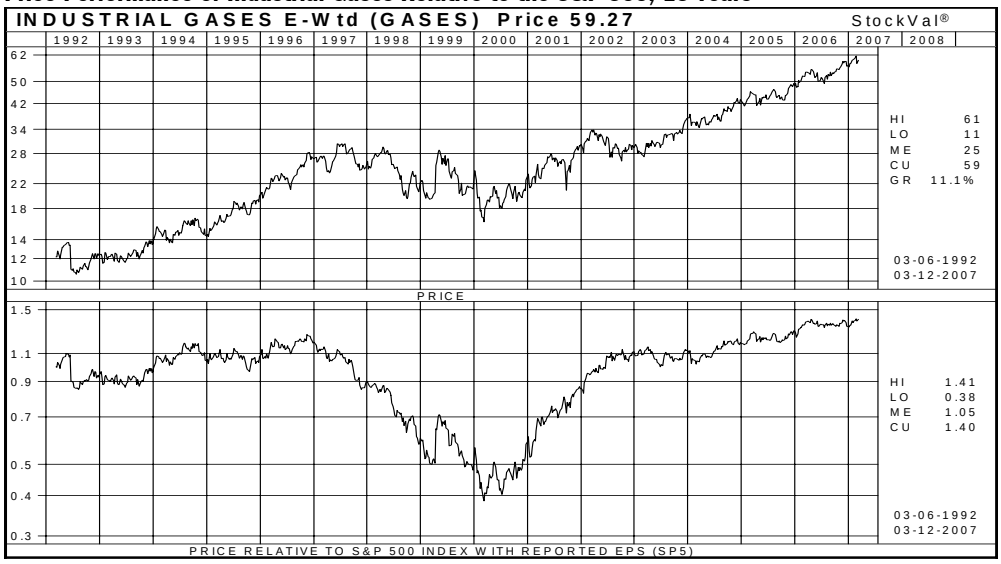
Price Performance and Relative Performance

Gases have outperformed the S&P 500 index since 2001.

Industrial gases generally have outperformed the S&P 500 over the past 15 years. As shown in Figure 5, Banc of America Securities' industrial gases index (GASES) reached a high point relative to the S&P 500 index in November 1996, followed by relative underperformance through mid-2000 and subsequent superior performance from mid-2000 to date. We note that during the recession of 2001 industrial gas stocks dramatically outperformed the S&P 500, a tribute to the companies' resilient business models and consequent defensive characteristics. Our GASES index is equally weighted and includes Air Liquide, Air Products, Airgas and Praxair. In prior years, GASES also included BOC, but the stock no longer trades following Linde's acquisition of BOC earlier this year.

Figure 7

Price Performance of Industrial Gases Relative to the S&P 500, 15 Years

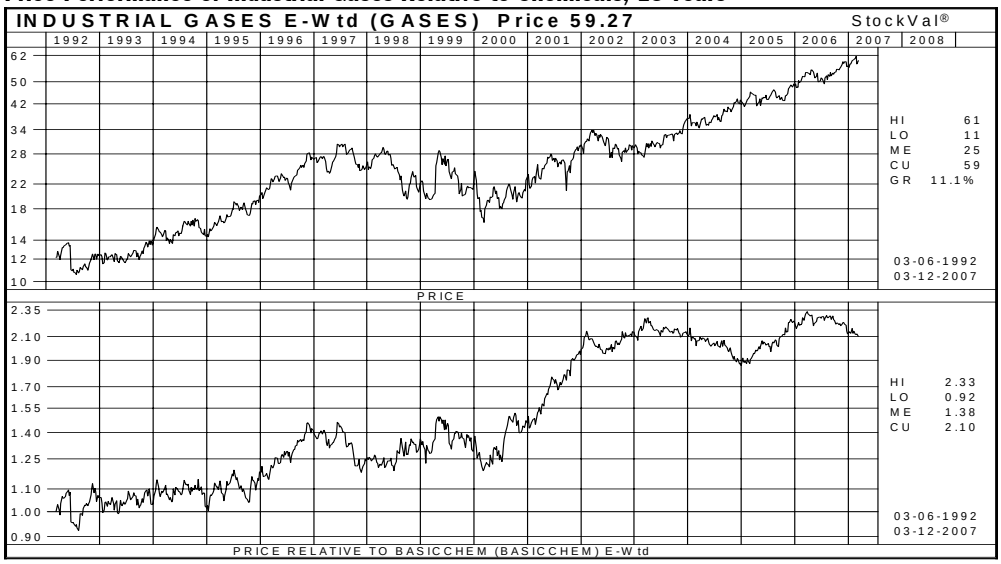


Source: StockVal.

Industrial gases likewise have outperformed other chemical stocks. As shown in Figure 6, gases reached a high point relative to Banc of America Securities' Basic Chemicals index (BASICCHEM) in April 2003, near a trough in U.S. chemical industry capacity utilization. Gases also outperformed chemicals during the recession of 2001, which is expected, given the defensive nature of the industrial gases subsector. However, gases underperformed from mid-2003 through early 2005 as more deeply cyclical names fared better during the early stages of recovery in U.S. industrial manufacturing. In 2006 and so far in 2007, both chemical and gas stocks have rallied, with industrial gases largely outeperforming broader chemicals stocks since March 2006.

Figure 8

Price Performance of Industrial Gases Relative to Chemicals, 15 Years



Source: StockVal.

Relative Valuation

Gases trade at a premium to U.S. major chemicals.

Gases trade at a premium to other U.S. major chemical companies. The global gases group trades at a median P/E multiple of 18.5x calendar 2007 EPS versus 14.1x for the large-cap U.S. chemical peers, listed on Table 2, and 16.0x for our coverage universe. To adjust for the effects of cyclical fluctuations, we also examine trading multiples based on "normalized" or midcycle earnings. Shares of Praxair, Air Products and Airgas trade at a median P/E multiple of 18.3x normalized EPS versus 16.0x for our coverage universe.

Table 2

Industrial Gases
Comparable Company Analysis, as of April 2, 2007

Company	Ticker	CY06 P/E	CY07E P/E	CY08E P/E	CY06 EV/EBITDA	CY07E EV/EBITDA
Dow Chemical	DOW	10.7	11.3	12.8	6.5	6.7
DuPont	DD	16.8	15.3	14.0	9.5	8.6
Rohm and Haas	ROH	15.0	14.6	13.8	8.0	7.7
PPG Industries	PPG	14.3	13.7	13.4	7.7	7.4
Mean – Major Chemicals		**14.2**	**13.7**	**13.5**	**7.9**	**7.6**
Median - Major Chemicals		**14.6**	**14.1**	**13.6**	**7.8**	**7.6**
Air Liquide	401140	21.8	19.4	17.3	10.0	9.2
Linde	574081	18.1	19.5	15.4	9.0	9.2
Praxair	PX	21.1	18.5	16.8	10.8	9.6
Air Products and Chemicals	APD	20.1	17.6	15.5	9.9	8.9
Airgas	ARG	22.0	18.3	15.7	9.6	8.8
Mean – Industrial Gases		**20.6**	**18.7**	**16.1**	**9.9**	**9.1**
Median – Industrial Gases		**21.1**	**18.5**	**15.7**	**9.9**	**9.2**

Note: Air Products (fiscal year ends September) and Airgas (fiscal year ends March) have been restated on a calendar-year basis.

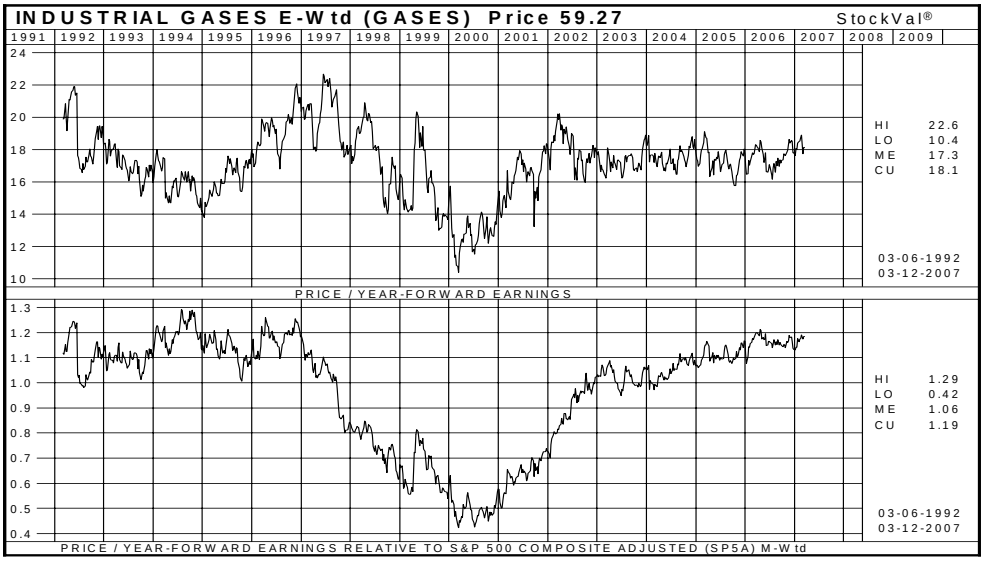
Sources: FactSet, Banc of America Securities LLC estimates.

P/E Multiple and Relative P/E Multiple

P/E multiple relative to the S&P 500 is near a 15-year high. As shown in Figure 9, industrial gas companies have traded at an average P/E multiple of 1.06x the S&P 500 index. The P/E multiple relative to the S&P 500 reached a peak in 1994 and traded high again in 1996, and it has been trading at relative high levels throughout 2005 and 2006. Today's relative P/E multiple of 1.19x is near the all-time high of 1.29x in 1994, which suggests to us that the risk of P/E multiple compression may outweigh the risk of continued expansion of gas company P/E multiples over the next 12 months.

Figure 9

P/E Multiple of Industrial Gases Relative to the S&P 500, 15 Years

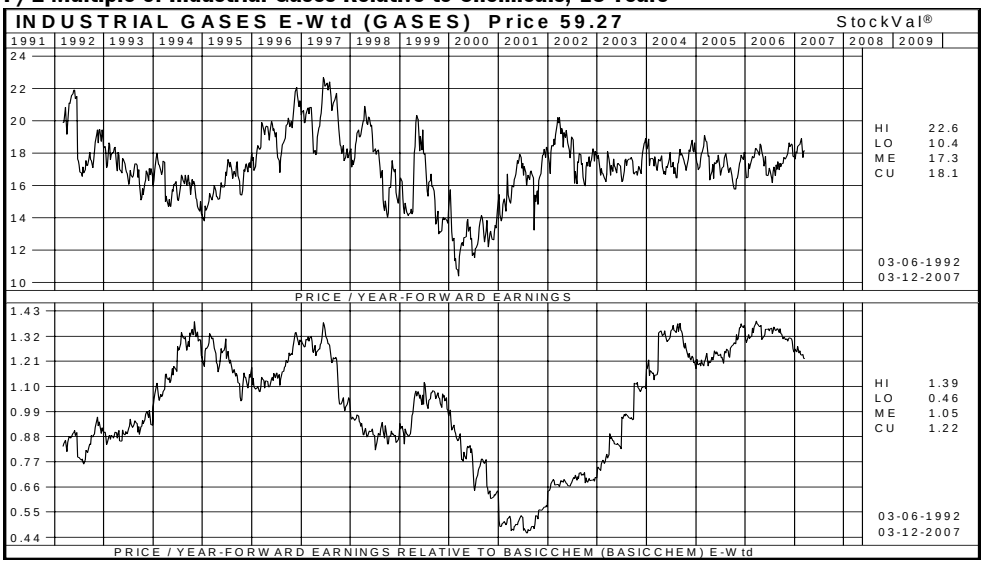


Source: StockVal.

P/E multiple relative to chemicals is also near a 15-year high. As shown in Figure 10, industrial gases on average have outperformed the P/E multiple of chemicals (average is 1.05x). Industrial gases are trading at 1.22x which is near a 15-year high relative to chemicals (1.39x), recorded in 2006. The previous high was 1.38x, recorded in 1997. However, the cyclical behavior of chemical industry P/E multiples is driven by the differential in relative cyclicality.

Figure 10

P/E Multiple of Industrial Gases Relative to Chemicals, 15 Years



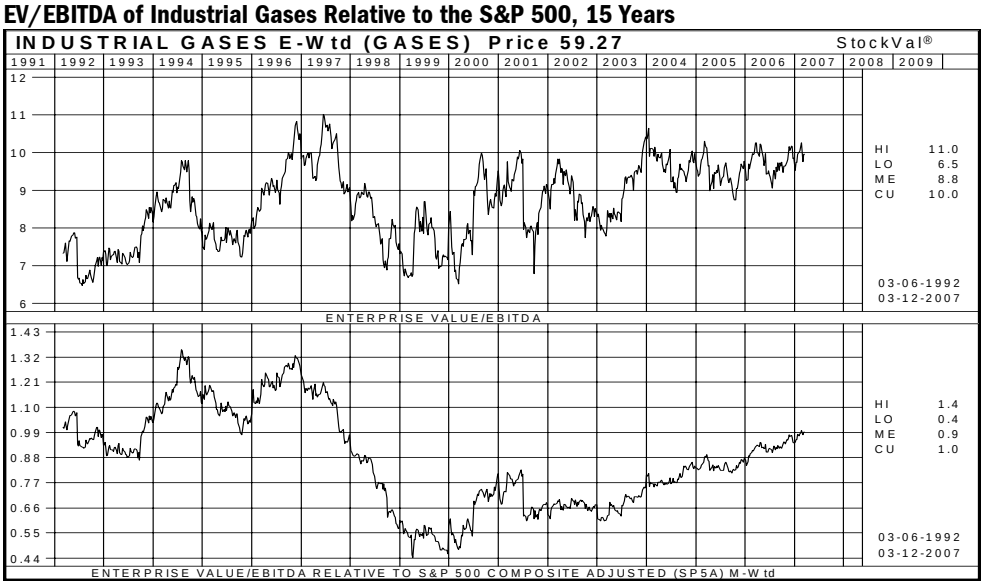
Source: StockVal.

EV/EBITDA

On an EV/EBITDA basis, industrial gases are trading in line with the broader market. As shown in Figure 11, our industrial gas index trades for 10.0x trailing EV/EBITDA, above the 15-year average of 8.8x. In EV/EBITDA terms, gases reached high points in 1994 and in 1996. Currently, industrial gases trade at a relative EV/EBITDA multiple of about 1.0x the S&P 500, above the 0.9x 15-year average.

Figure 11

EV/EBITDA of Industrial Gases Relative to the S&P 500, 15 Years

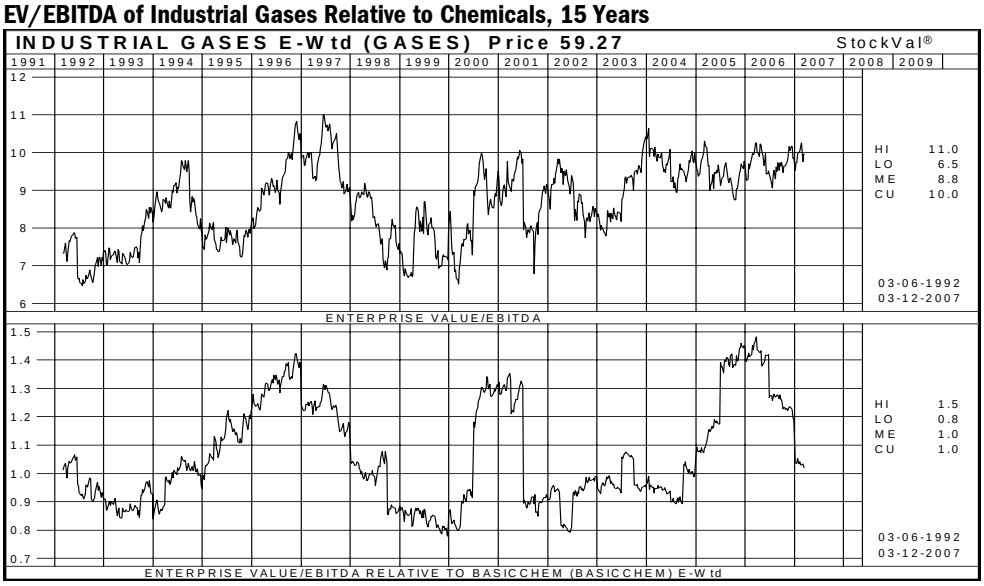


Source: StockVal.

Gases are trading at par EV/EBITDA levels relative to chemicals. As shown in Figure 12, industrial gas stocks have traded at high EV/EBITDA multiples relative to chemicals (more than1.4x) in 1996, late 2000 and early 2001 (the advent of the recent U.S. economic recession), and in 2005-2006. In early 2006, the ratio tested all-time high levels almost 1.5x and later came down as chemical stocks recently rallied. Historically, industrial gases have traded at par with chemicals (15-year average of 1.0x).

Figure 12

EV/EBITDA of Industrial Gases Relative to Chemicals, 15 Years



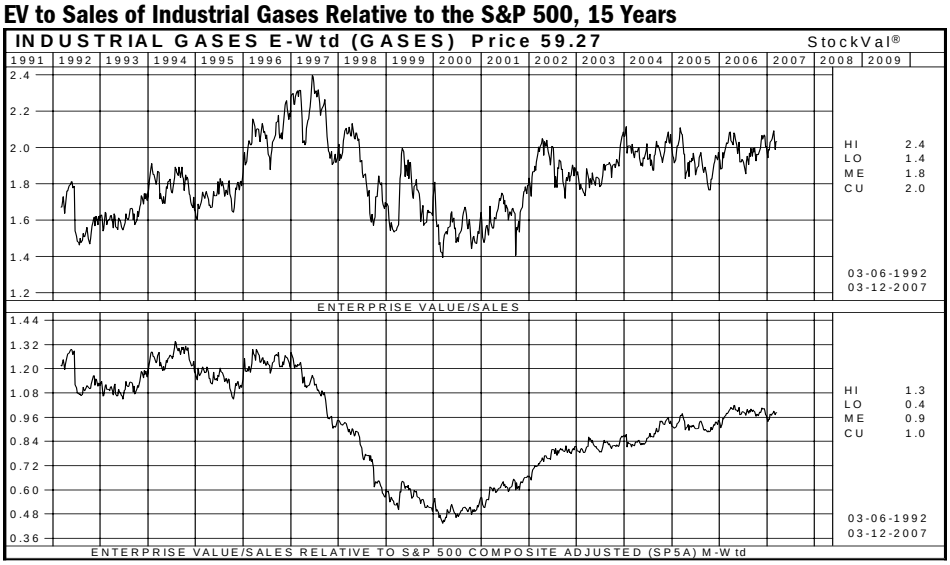
Source: StockVal.

Relative EV/Sales

Gases are trading at average EV-to-sales levels relative to the S&P 500. As shown in Figure 13, industrial gases are trading above the 15-year average EV to sales, both in absolute terms and relative to the S&P 500. In EV/sales terms, gases reached several high points before 1997. The relative relationship saw highs in 1992, 1994 and 1996.

Figure 13

EV to Sales of Industrial Gases Relative to the S&P 500, 15 Years

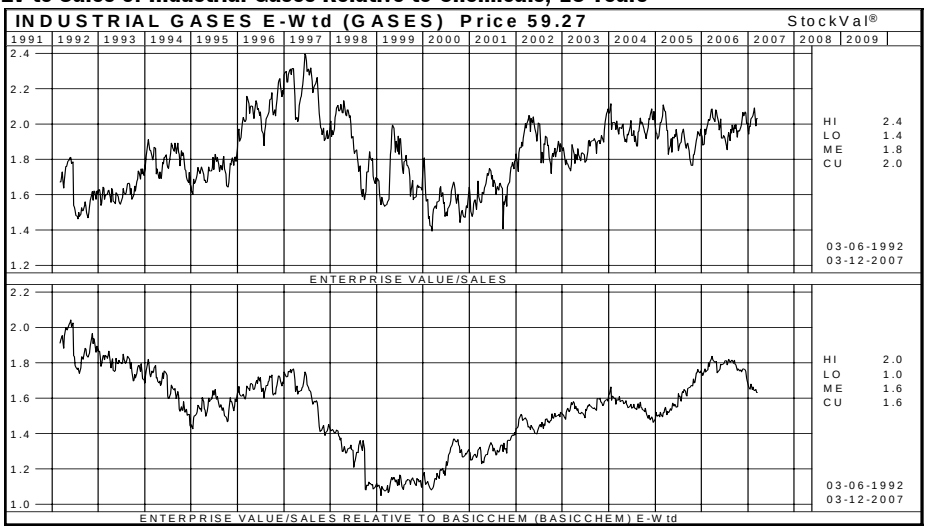


Source: StockVal.

Gases are trading at above-average EV/sales levels relative to chemicals. As shown in Figure 14, industrial gases are trading at the 15-year average EV/sales of 1.6x relative to chemicals. The relative relationship reached its 15-year high point of 2.0x in 1992. More recently, industrial gases traded at EV/sales of 1.8x relative to chemicals for much of 2006.

Figure 14

EV to Sales of Industrial Gases Relative to Chemicals, 15 Years

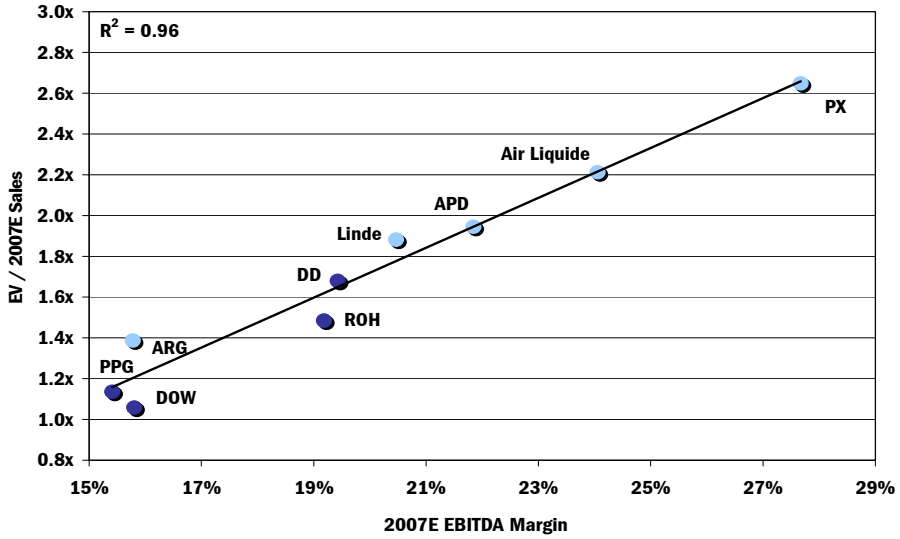


Source: StockVal.

As shown in Figure 15, EV/sales multiples tend to correlate well with profitability, as expressed by EBITDA margin.

Figure 15

Chemicals Sector
EV to Sales Versus EBITDA Margin for Selected Companies, Estimated 2007



Source: Company reports, FactSet, Banc of America Securities LLC estimates.

Dividend Yield

Dividend yields have declined because of stock price appreciation.

Dividend yield is low relative to the S&P 500. As shown in Figure 16, industrial gases' dividend yield reached a high in 2000. Generally, dividends in absolute terms tend to rise gradually, and highs in dividend yield coincide with price declines in the sector. Relative to the S&P 500, gases historically have paid lower dividends (average dividend yield relative to the S&P 500 is 0.88x), which likely reflects superior prospects for reinvestment of FCF. The relative relation went through a sharp high in 2000, again reflecting that S&P prices (denominator) were high with respect to industrial gas prices. The industrial gas group's current dividend yield relative to the S&P 500 stands at 0.87x almost at par with the historical average of 0.88x.

Figure 16

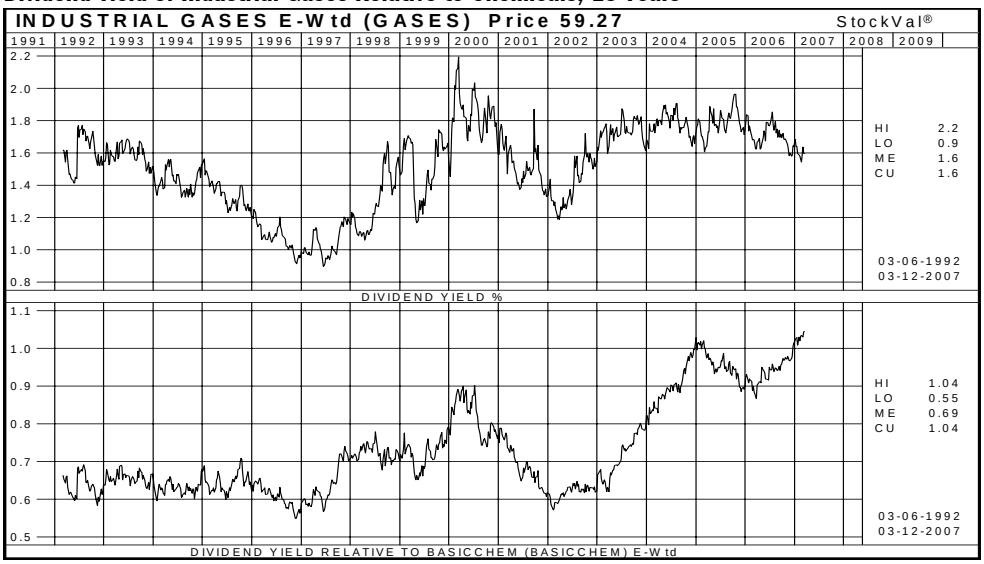
Dividend Yield of Industrial Gases Relative to the S&P 500, 15 Years

Source: StockVal.

Dividend yield is at high levels relative to chemicals. Historically, chemical stocks have offered investors higher yields than gas stocks, as evidenced by the 15-year average of 0.69x. Currently, industrial stocks yield at a 15-year high relative to chemicals, just ahead of chemical stocks (1.04x).

Figure 17

Dividend Yield of Industrial Gases Relative to Chemicals, 15 Years



Source: StockVal.

Free-Cash-Flow Yield

We consider FCF yields unattractive, at this time.

Free cash flow (FCF) yield is not the strong suit of U.S. industrial gas companies. As shown in Table 3, shares of Praxair, Air Products and Airgas trade at estimated fiscal 2007 FCF yields of 3.0%, 3.9% and 0.8%, respectively, which are among the lowest in our coverage universe. On the other hand, most capital projects that industrial gas companies take on are supported by long-term contracts with a risk profile that is considerably more attractive than installing capacity for a typical commodity chemical operation. For our purposes, we define FCF as cash flow from operations less capital expenditures.

Table 3

U.S. Industrial Gases
Free-Cash-Flow Yield, Fiscal 2006—Estimated Fiscal 2009
($ millions)

	F2006	F2007E	F2008E	F2009E
Praxair	3.1%	3.0%	3.7%	5.0%
Air Products	0.5%	3.9%	4.8%	5.3%
Airgas	2.4%	0.8%	3.7%	4.8%
Equal-Weighted Average	**2.0%**	**2.6%**	**4.1%**	**5.0%**

Note: Air Products FCF yield is estimated to be 2.3% in fiscal 2006, excluding a $300-million tank purchase.

Source: Company reports, Banc of America Securities LLC estimates.

Chemical Sector
Valuation Matrix

	TKR	Price	Rating	Analyst	Target Price	% to Target	Equity market Cap. (Bil.)	Div. Yield	2006 EPS	2007E EPS	2008E EPS	Normalized EPS	LT Growth Rate	2006 P/E	2007E P/E	2008E P/E	Normalized P/E	Normalized PEG	2006 EV/EBITDA	2007E EV/EBITDA	Normalized EV/EBITDA	S&P500?	Vol
DuPont	DD	$49.06	Neutral	KM	$49	3%	44.7	3.0%	2.92	3.20	3.50	3.11	9%	16.8	15.3	14.0	15.8	1.8	9.5	8.6	8.6	Yes	L
Monsanto Company	MON	$54.88	Neutral	KM	$47	-13%	30.4	0.9%	1.35	1.68	1.93	1.68	20%	40.7	32.7	28.4	32.7	1.6	18.5	15.8	15.8	Yes	M
Praxair	PX	$62.96	Neutral	KM	$61	-1%	20.7	1.9%	2.99	3.40	3.75	3.40	11%	21.1	18.5	16.8	18.5	1.7	10.8	9.6	9.6	Yes	L
Air Products & Chemicals	APD	$73.94	Neutral	KM	$74	2%	16.5	2.1%	3.68	4.19	4.76	4.19	10%	20.1	17.6	15.5	17.6	1.8	9.9	8.9	8.9	Yes	L
Rohm and Haas	ROH	$51.74	Buy	KM	$56	11%	11.3	2.6%	3.46	3.55	3.75	3.54	10%	15.0	14.6	13.8	14.6	1.5	8.0	7.7	7.7	Yes	M
Airgas	ARG	$41.84	Buy	KM	$47	13%	3.5	0.7%	1.90	2.29	2.67	2.29	11%	22.0	18.3	15.7	18.3	1.7	9.6	8.8	8.8	No	M
Albemarle Corporation	ALB	$42.02	Neutral	KM	$40	-5%	4.1	1.0%	2.02	2.45	2.88	1.91	10%	20.8	17.2	14.6	22.0	2.2	11.4	9.8	9.8	No	M
Average, Specialties						**1%**	**18.7**	**1.7%**					**12%**	**22.3x**	**19.2x**	**17.0x**	**19.9x**	**1.7**	**11.1x**	**9.9x**	**9.9x**		
Median, Specialties						**2%**	**16.5**	**1.9%**					**10%**	**20.8x**	**17.6x**	**15.5x**	**18.3x**	**1.7**	**9.9x**	**8.9x**	**8.9x**		
Average, Specialties, exc. Monsanto						**4%**	**16.8**	**1.9%**					**10%**	**19.3x**	**16.9x**	**15.1x**	**17.8x**	**1.8**	**9.9x**	**8.9x**	**8.9x**		
Median, Specialties exc. Monsanto						**3%**	**13.9**	**2.0%**					**10%**	**20.4x**	**17.4x**	**15.1x**	**18.0x**	**1.7**	**9.8x**	**8.8x**	**8.8x**		
Dow Chemical	DOW	$45.60	Neutral	KM	$42	-5%	44.3	3.3%	4.25	4.05	3.55	3.77	7%	10.7	11.3	12.8	12.1	1.7	6.5	6.7	8.8	Yes	M
PPG Industries	PPG	$70.59	Buy	KM	$76	10%	11.8	2.8%	4.93	5.15	5.25	6.04	9%	14.3	13.7	13.4	11.7	1.3	7.7	7.4	8.9	Yes	L
Eastman Chemical	EMN	$63.86	Neutral	KM	$64	3%	5.4	2.8%	5.00	4.65	4.35	3.72	7%	12.8	13.7	14.7	17.2	2.5	6.1	6.0	7.3	Yes	L
Celanese Corporation	CE	$30.99	Buy	KM	$35	13%	5.0	0.5%	2.99	3.20	3.20	1.91	7%	10.4	9.7	9.7	16.2	2.3	6.3	6.5	9.5	No	H
FMC Corporation	FMC	$75.34	Neutral	KM	$72	-3%	3.0	1.0%	5.47	5.90	5.95	5.49	8%	13.8	12.8	12.7	13.7	1.7	7.5	7.0	8.3	No	M
Average, Hybrids						**4%**	**13.9**	**2.1%**					**8%**	**12.4x**	**12.2x**	**12.7x**	**14.2x**	**1.9**	**6.8x**	**6.7x**	**8.6x**		
Median, Hybrids						**3%**	**5.4**	**2.8%**					**7%**	**12.8x**	**12.8x**	**12.8x**	**13.7x**	**1.7**	**6.5x**	**6.7x**	**8.8x**		
Lyondell Chemical	LYO	$30.12	Neutral	KM	$31	6%	7.9	3.0%	3.49	3.65	3.70	2.19	6%	8.6	8.3	8.1	13.8	2.3	4.9	5.2	5.6	No	H
Nova Chemicals	NCX	$31.10	Neutral	KM	$26	-15%	2.6	1.3%	1.34	1.60	1.50	1.08	6%	23.2	19.4	20.7	28.8	4.8	7.1	7.5	11.0	No	H
Westlake Chemicals	WLK	$28.15	Neutral	KM	$29	4%	1.8	0.6%	3.08	2.10	1.95	2.36	7%	9.1	13.4	14.4	11.9	1.7	5.2	5.8	8.6	No	H
Georgia Gulf	GGC	$17.75	Neutral	KM	$19	9%	0.6	1.8%	2.42	1.00	0.90	2.27	6%	7.3	17.8	19.7	7.8	1.3	5.6	6.0	6.2	No	H
Average, Commodity Petrochemicals						**1%**	**3.2**	**1.7%**					**6%**	**12.1x**	**14.7x**	**15.8x**	**15.6x**	**2.5**	**5.7x**	**6.1x**	**7.8x**		
Median, Commodity Petrochemicals						**5%**	**2.2**	**1.5%**					**6%**	**8.9x**	**15.6x**	**17.1x**	**12.8x**	**2.0**	**5.4x**	**5.9x**	**7.4x**		
Potash Corp of Saskatchewan	POT	$160.02	Neutral	MR	$140	-12%	17.1	0.4%	5.31	7.25	8.70	5.23	12%	30.1	22.1	18.4	30.6	2.5	16.3	12.6	16.7	No	H
Mosaic	MOS	$26.85	Buy	MR	$33	23%	11.8	0.0%	0.58	1.42	2.00	1.09	9%	46.3	18.9	13.4	24.7	2.7	21.5	10.0	13.4	No	H
Agrium	AGU	$37.65	Neutral	MR	$36	-4%	5.0	0.3%	0.73	2.70	3.10	1.73	10%	51.6	13.9	12.1	21.8	2.2	15.9	7.4	10.5	No	M
CF Industries	CF	$39.01	Buy	MR	$44	13%	2.1	0.2%	0.60	2.35	2.80	2.35	5%	65.0	16.6	13.9	16.6	3.3	11.6	5.8	9.8	No	E
Average, Fertilizers						**5%**	**9.0**	**0.2%**					**9%**	**48.3x**	**17.9x**	**14.5x**	**23.4x**	**2.7**	**16.3x**	**9.0x**	**12.6x**		
Median, Fertilizers						**4%**	**8.4**	**0.2%**					**10%**	**48.9x**	**17.8x**	**13.7x**	**23.2x**	**2.6**	**16.1x**	**8.7x**	**11.9x**		
Average, Universe						**3%**	**12.5**	**1.5%**					**9.0%**	**23.0x**	**16.3x**	**15.2x**	**18.3x**	**2.1**	**10.0x**	**8.2x**	**9.7x**		
Median, Universe						**3%**	**6.6**	**1.1%**					**9.0%**	**18.4x**	**16.0x**	**14.2x**	**16.9x**	**1.8**	**8.7x**	**7.5x**	**8.9x**		

Notes:
All estimates are shown on a calendar year basis. MON fiscal year ends in August, APD fiscal year ends in September, ARG fiscal year ends in March, and MOS fiscal year ends in May
Stocks priced as of April 2, 2007
Normalized data reflect trough to peak average
Volatility ratings: L=Low; M=Medium; H=High; E=Extreme

Source: Company reports, Banc of America Securities LLC estimates.

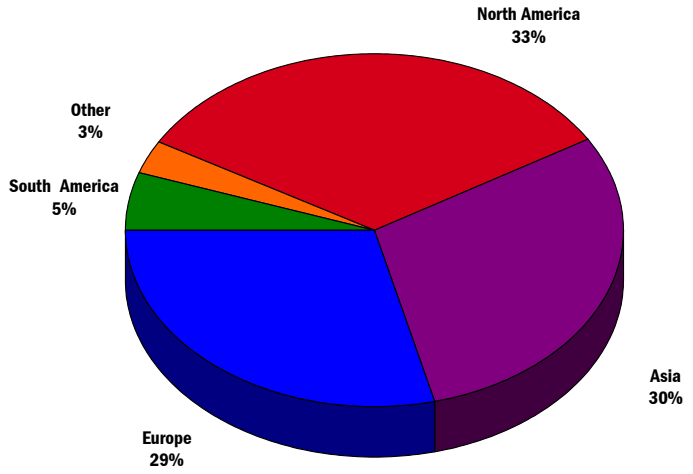
Chemicals
Kevin W. McCarthy, CFA 212.847.5370

Geographic Exposure

Industry sales are balanced across all geographic regions. As shown in Figure 18, North America accounts for 33% of the global market, followed by Asia (30%), Europe (29%), South America (5%) and the rest of the world (3%). Compared with our geographic analysis last year, we estimate that North America and Europe came down a combined 2-3%, which was gained by Asia, the fastest growing region of the world.

Figure 18

Industrial Gas Industry
Sales by Region, 2006
(%)



Source: Company reports, Banc of America Securities LLC estimates.

North America

North America accounts for 33% of the global market.

North America is still the largest industrial gas market. North America accounts for one-third of the global market, with $18.8 billion industrial gas estimated sales. U.S. producers Praxair ($5.0 billion of total North American sales) and Air Products ($4.3 billion of North American gas sales) dominate the U.S. market, with the two European players, Air Liquide and Linde, with North American sales of $2.6 and $2.7 billion respectively (see Figure 17). Refinery hydrogen and health care are key end markets to regional growth, with Praxair and Air Products heavily invested in these markets.

Figure 19

North American Sales by Company, 2006
(total of $18.8 billion)

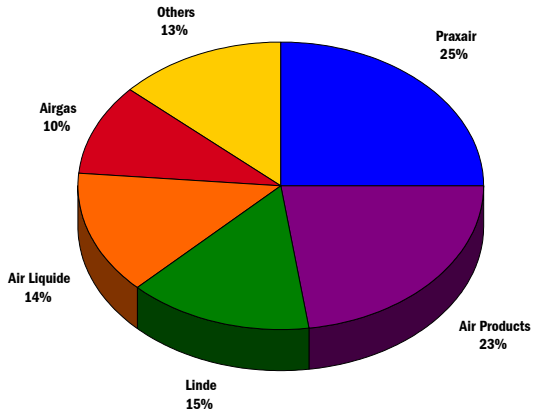
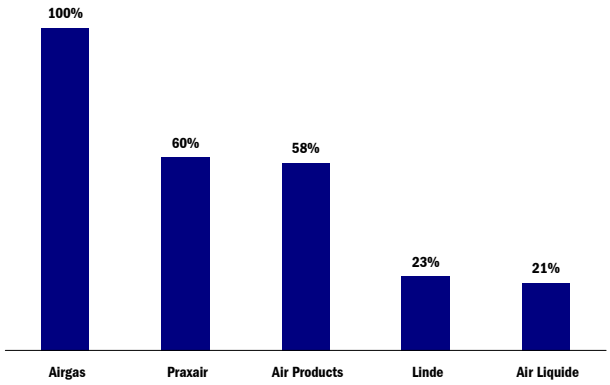


Figure 20

Company Exposure to North America, 2006
(% of company sales, excluding nongas sales)



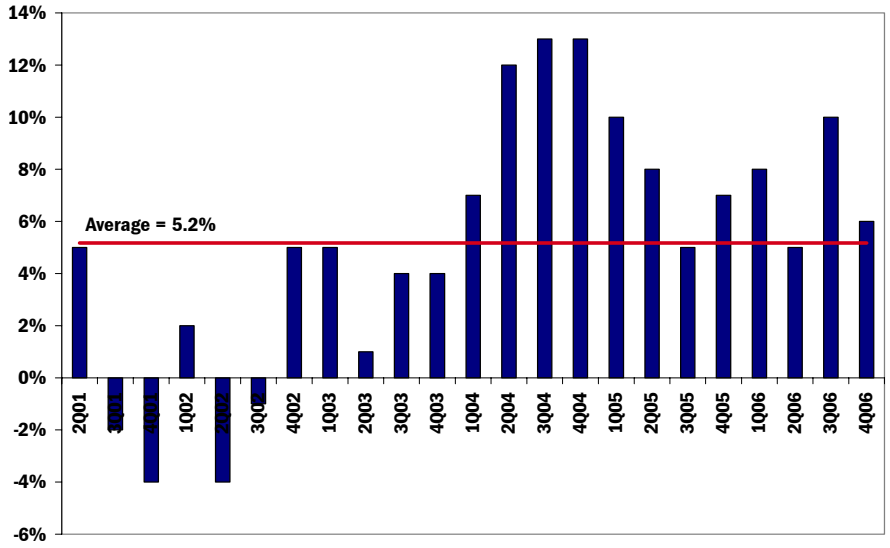
Source: Company reports, Banc of America Securities LLC estimates.

Praxair remains the market leader in North America, but Air Products is a close second.

North American market shares and regional exposures are depicted in Figures 19 and 20. The upturn in the industrial production cycle starting in 2004 has driven growth in industrial gases, as sales are correlated closely with industrial production growth. Refinery hydrogen, and to a lesser extent health care, are the largest growth markets in the United States and the focus of investment by all major gas players. Strict, new U.S. sulfur regulations for 2006 are driving near-term growth in hydrogen, while the aging of the U.S. population is driving secular growth for gases used in respiratory therapy. In 2006, Air Products closed the gap with market leader Praxair and Linde has moved ahead of European peer Air Liquide by consolidating N.A. Linde and BOC assets. In Figure 21 we present year-over-year price and volume growth of Praxair's North American region.

Figure 21

Praxair, Inc.
North American Price/Volume Growth, Second Quarter 2001—Fourth Quarter 2006
(%)



Source: Company reports, Banc of America Securities LLC estimates.

Asia

Taiyo Nippon Sanso is the market leader in Japan.

Asia has moved past Europe to the number-two global position. Asia, the fastest-growing region, is estimated at $16.8 billion in sales. New chemical plants, steel mills, electronics, and refineries in China, along with continued growth in semiconductor and electronics in Korea and Taiwan, are driving growth for industrial gases and consumables in the region. BOC (now part of Linde) invested early in electronics in Asia and competes for regional leadership with Air Liquide, while Air Products and Praxair are growing rapidly in the region with major investments and joint-venture announcements. The Asian market remains highly fragmented, with the major players accounting for only 34% of the regional gas market. Taiyo Nippon Sanso is the market leader in Japan.

Air Liquide is number one in Asia, followed by Linde's regional BOC business.

Asian market shares and regional exposures are depicted in Figures 22 and 23. Air Liquide is the market leader among majors in Asia. Linde's token presence in Asia has been boosted by the acquisition BOC's business in 2006. BOC was an early participant in Asia, with a third of its business located in the region. In 2005 Air Liquide overtook BOC as the leading industrial gas player in Asia and retains the leading position in 2006. Taiyo Nippon Sanso is a large regional competitor, with estimated pro forma gas sales of $2.6 billion worldwide, of which an estimated 85% are in Japan. Nippon Sanso completed its merger with Taiyo Toyo Sanso in 2004. The new company, Taiyo Nippon Sanso Corporation, is Japan's largest industrial gas player. Its core business activities are in Japan, with a small presence in mainland China, as well the United States, under the U.S. subsidiary name Matheson Tri-Gas. Accounting for market shares of the four majors and including Taiyo Nippon Sanso, Asia is the least consolidated region. Asia represents a dual opportunity for premium growth as well as market share gains for Air Liquide, Air Products, Linde and Praxair.

Figure 22

Asian Sales by Company, 2006
(total of $16.8 billion)

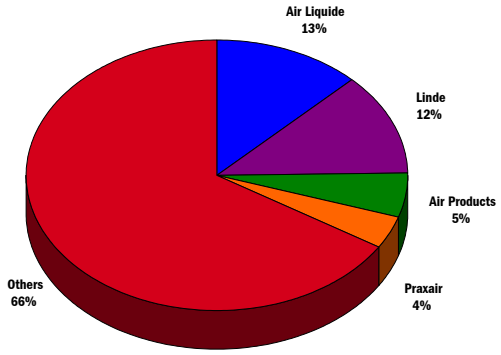
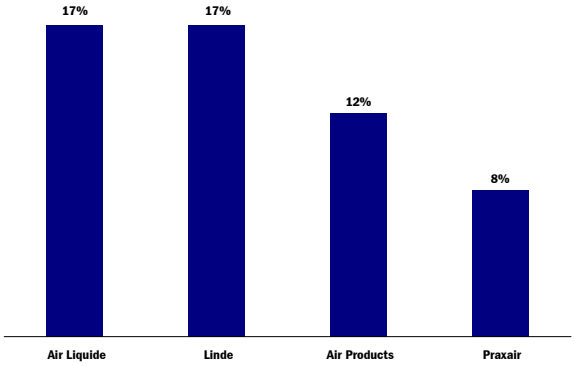


Figure 23

Company Exposure to Asia, 2006
(% of company sales, excluding nongas sales)



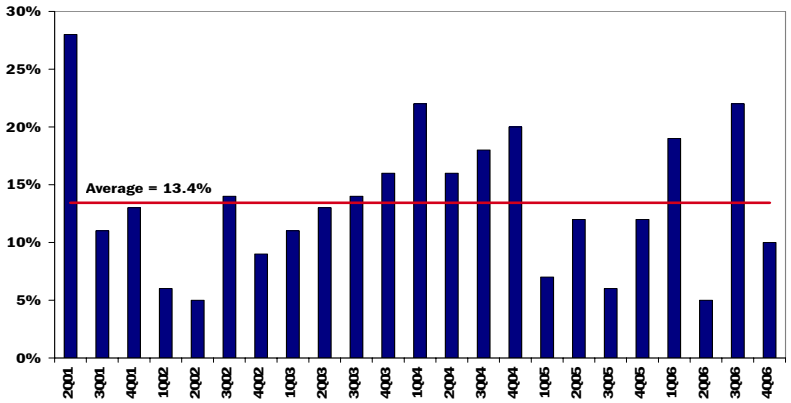
Source: Company reports, Banc of America Securities LLC estimates.

China and electronics are driving growth in Asia. Asia is the fastest-growing gas market, based on the booming industrial expansion in China and India as well as electronics manufacturing mainly in China, Japan, Korea and Taiwan. The recent growth in basic industries has created opportunity for large onsite projects to support new chemical complexes, steel mills and automotive plants. Merchant capacity is expanding to service the growing manufacturing base in China, with local and regional companies building plants to compete against the five global majors. Electronics will continue to drive growth in the region, as small circuitry and faster speeds demand new specialty gases and materials. Major players also have an opportunity to take market share away from the highly fragmented local players. However, strong volume growth is somewhat tempered by speculative capacity built and subsequent price erosion, attributed to undisciplined business practices of local players.

In Figure 24 we depict year-over-year sales growth for Praxair's Asian region.

Figure 24

Praxair, Inc.
Asian Price/Volume Growth, Second Quarter 2001—Fourth Quarter 2006
(%)



Source: Company reports, Banc of America Securities LLC estimates.

Europe

Air Liquide and the Linde/BOC combination dominate in Europe.

The European industrial gas market is now number three globally, behind Asia. We estimate that by year-end 2006 Europe was overtaken by Asia as the second largest industrial gas market globally. Air Liquide continues to lead the $16.5 billion European market, with a market share of 43%, followed by the consolidated Linde, with a market share of 35%. Interestingly, Linde and BOC had minimal overlap in most national European markets, so the combination will be dominant on a broader European scale. Air Products has a significant position in Europe, and Praxair recently became a more significant player by acquiring Messer's German assets from Air Liquide in 2004.

Figure 25

European Sales by Company, 2006
(total of $16.5 billion)

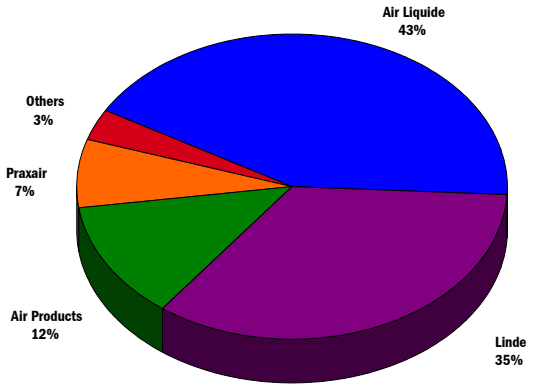
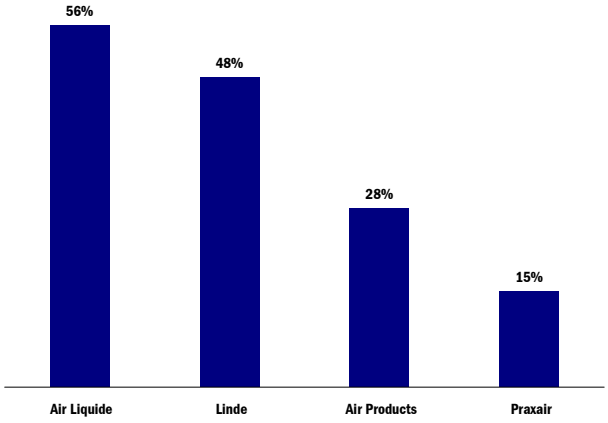


Figure 26

Company Exposure to Europe, 2006
(% of company sales, excluding nongas sales)



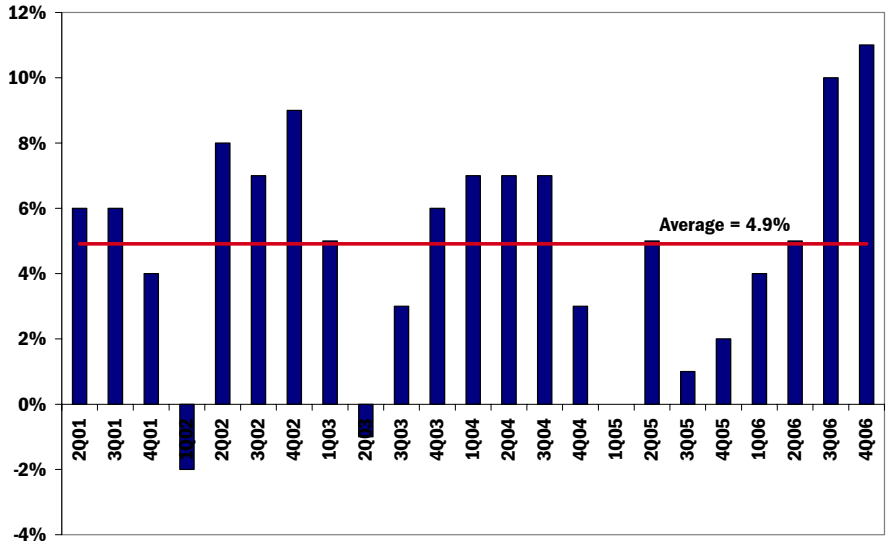
Source: Company reports, Banc of America Securities LLC estimates.

Merger-and-acquisition (M&A) activity has changed the competitive landscape in Europe. Faced with a mature, slower-growth home market, European majors have used restructuring and consolidation to lower costs, sustain prices and improve returns. M&A activity continued in 2006 with Linde acquiring BOC shares for £8.0 billion, changing the competitive landscape once again. In 2004, market leader Air Liquide bought European major Messer Gresheim in a €2.7-billion deal, before divestitures. Praxair increased its exposure to the European market with the $667 million acquisition of the German packaged gas and pipeline business of the former Messer Gresheim from Air Liquide in October 2004. The acquisition increased Praxair's sales to Europe from $847 million in 2004 to an estimated $1.1 billion in 2005, which still amounts to the lowest European market share among the major players. European market shares and regional exposures are depicted in Figures 25 and 26.

In Figure 27 we depict year-over-year sales growth for Praxair's European region.

Figure 27

Praxair, Inc.
European Price/Volume Growth, Second Quarter 2001—Fourth Quarter 2006
(%)



Source: Company reports, Banc of America Securities LLC estimates.

South America

Praxair is number one in Brazil.

Praxair dominates South America. Praxair's White Martins Gases subsidiary is the leading regional producer, with estimated market share in Brazil of 60-65%. Linde and BOC each had a smaller S. American business than Air Liquide, but the consolidated Linde now holds the second-highest market share in the region. Air Products is the regional laggard among the major players. Although a relatively small market ($3.0 billion 2006 sales), South America has healthy growth, driven mainly by the energy, metals, manufacturing and health care end markets. South American market shares and regional exposures are depicted in Figures 23 and 24.

Figure 28

Latin American Sales by Company, 2006
(total of $3.0 billion)

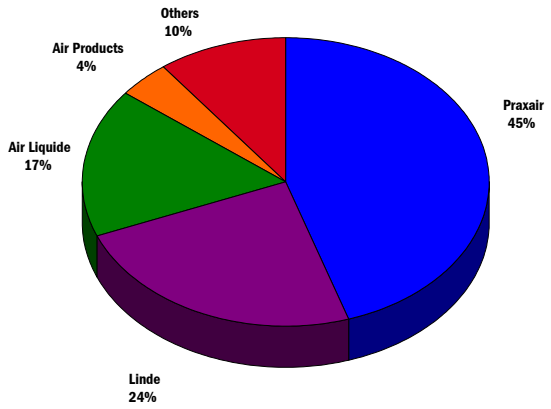
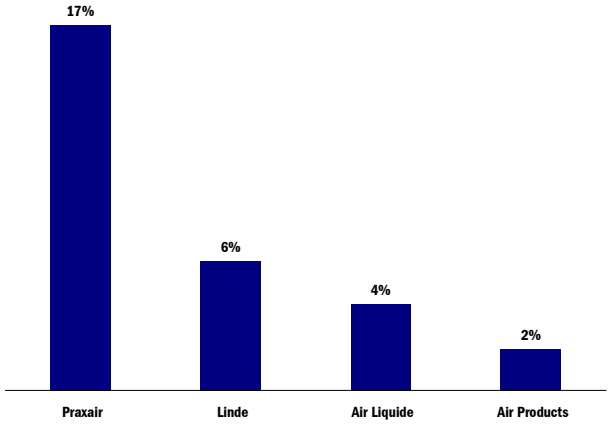


Figure 29

Company Exposure to Latin America, 2006
(% of company sales, excluding nongas sales)

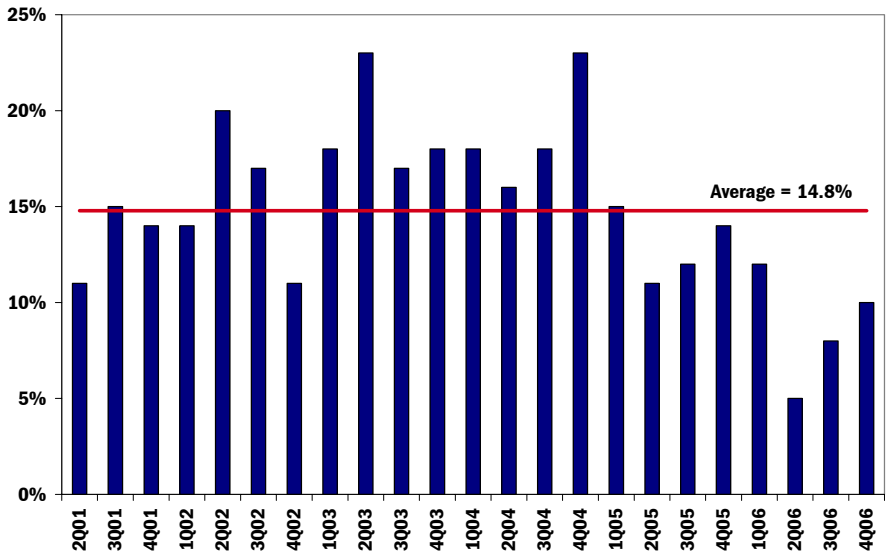


Source: Company reports, Banc of America Securities LLC estimates.

In Figure 30 we depict year-over-year sales growth for Praxair's Latin American region.

Figure 30

Praxair, Inc.
Latin American Price/Volume Growth, Second Quarter 2001—Fourth Quarter 2006
(%)



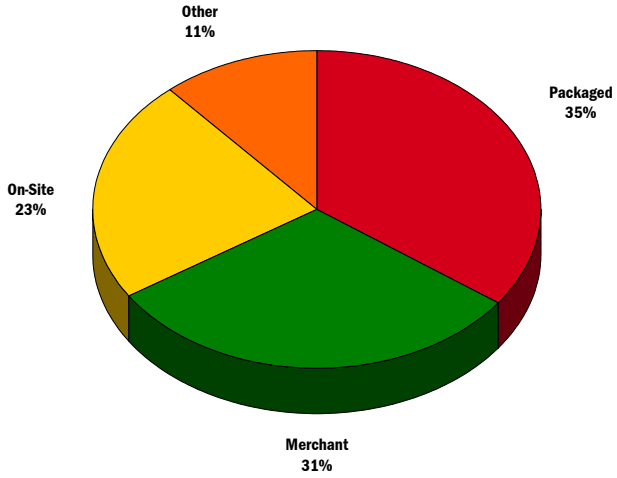
Source: Company reports, Banc of America Securities LLC estimates.

Modes of Supply

Industrial gas companies deliver their products to customers via various modes of supply that include pipeline delivery or onsite production (onsite), tank trucks (merchant) and cylinders (packaged gases). Figure 31 shows global industrial sales by mode of supply.

Figure 31

Industrial Gas Industry
Sales by Supply Mode, 2006
(%)



Source: Company reports, Banc of America LLC Securities.

- **Onsite/pipeline (23% of total sales).** Onsite deliveries are made via pipeline from an air separation unit (ASU) either connected to a network or located at the customer's manufacturing site.
- **Merchant gases (31%).** Merchant sales are delivered as liquids in tank trucks. As the product is delivered at low temperatures, merchant distribution is limited to a 250-300 mile radius around an ASU. Merchant contracts are shorter than onsite, typically three to five years.
- **Packaged gases (35%).** Packaged gases are delivered in cylinders for smaller-volume applications, such as welding, respiratory therapy and some electronics manufacturing. In addition to selling the gas, companies collect rental fees on the cylinders and other equipment, and they sell welding hardgoods and other consumables.

We expand on each of these modes of supply in the following sections.

Onsite

Onsite production involves long-term contracts with favorable terms.

Onsite production is the backbone of the industry. Onsite sales are based on long-term (more than 15 years) take-or-pay contracts using formula pricing, which generally cover fixed costs plus a relatively low margin. To protect this margin over time, onsite contracts often include pass-through allowances for energy and even currency fluctuations. As onsite demand accounts for less than 100% of onsite production, additional production and coproducts are delivered to customers via merchant or packaged sales. Although onsite sales account for only 23% of total sales, onsite production of major players is much higher than sales. Effective utilization of onsite assets is a key determinant of overall profitability.

Onsite/pipeline supply is growing. Company market shares and exposures to onsite sales are depicted in Figures 26 and 27. Onsite and pipeline global sales account for an estimated $13.0 billion (23% of total sales). Large customers such as chemical companies, steel mills and petroleum refineries, and even electronics players, are supplied directly from a large cryogenic plant (ASU) or a smaller noncryogenic plant built adjacent to a customer's facility, hence, the term "onsite." Alternatively, the gases are delivered through a pipeline network from a nearby production location. Supply generally is governed by a long-term contract, typically five to 20 years in duration. Several producers have established pipeline "basins," a network of pipelines joining several ASUs with half a dozen or more customers. Air Products, for example, has pipeline networks in Texas and southern California to supply hydrogen to refiners. Most onsite plants have spare capacity and also produce coproducts sold into the local merchant market. Although onsite sales account for less than a quarter of sales, major players produce most of their sales in onsite facilities.

Figure 32

Global Onsite Sales by Company, 2006
(total of $13.0 billion)

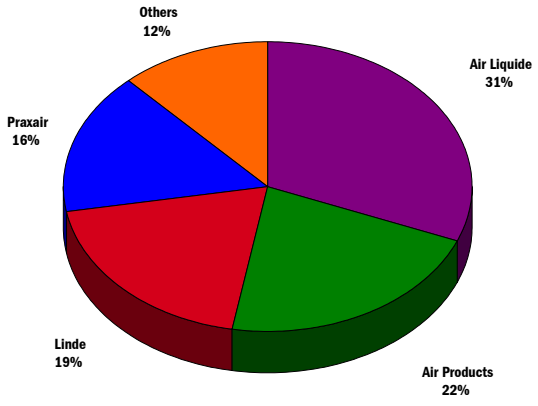
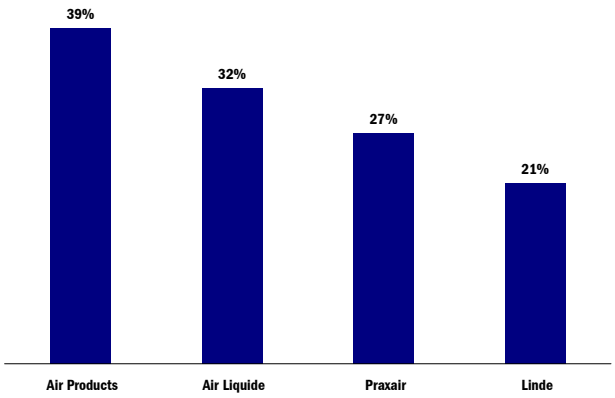


Figure 33

Company Exposure to Onsite Supply, 2006
(% of company sales, excluding nongas sales)



Source: Company reports, Banc of America Securities LLC estimates.

Producers are shifting from liquid bulk to noncryogenic onsite supply. Industrial gas producers have been moving away from building large, capital-intensive cryogenic ASUs over the last few years. Especially in applications where high purity and/or high throughput are not required, companies have turned to smaller, noncryogenic plants, based on adsorption or membrane technology, to keep pace with growth in demand.

Noncryogenic plants enable producers to add capacity incrementally, with much less capital and lower risk. The result has been higher onsite sales at better margins but lower reported sales of liquid bulk and flat liquid bulk operating rates. Onsite sales will likely increase at the expense of bulk liquid sales. Historically, industrial gas producers built 1,000-ton-per-day cryogenic ASUs to serve a large number of merchant customers in a given region. This capital-intensive approach required significant up-front investment in a long-term asset backed by relatively short-term contracts (three to five years) for customers with a high cost to serve (delivery via truck). ASU capacity additions tended to depress pricing and returns on capital. The industry is shifting from this merchant model to more onsite production, using 50 to 100-ton-per-day noncryogenic units, which require lower capital and support better margins backed by more flexible contracts. Merchant operating rates have remained about 85% through the recent recovery, reflecting the merchant to onsite trend. Numerous onsite units are satisfying incremental merchant demand.

Noncryogenic capacity is a win-win scenario. Producers like noncryogenic plants as they eliminate high-cost-to-serve liquid customers, generate lower distribution costs and free up additional capacity at large cryogenic plants. Customers favor onsite supply because of lower-cost, reliable and continuous supply.

Onsite growth is driven by new projects. Timing of new projects at steel mills, chemicals plants and other manufacturing sites can make growth somewhat lumpy and harder to predict. The previous peak in growth of onsite business was 1999, coinciding with an upturn in the economy and the chemicals cycle. Growth slowed in 2002 and 2003 but accelerated recently amid strong economic growth in China and conversions from liquid bulk to onsite supply. Steel, energy and chemicals combined account for over 80% of onsite demand. However, new onsite projects are built with capacity to satisfy regional merchant and packaged demand, not just the requirements of the onsite contract. New onsite cryogenic plants are built mainly in Asia, whereas in the United States and in Europe, most new plants are noncryogenic.

Hydrogen plants are another source of onsite growth. Industrial gas majors are building hydrogen capacity and connect it to pipeline networks to supply hydrogen to refiners. The increasing demand for hydrogen to the energy market is another major source of onsite growth.

Merchant

Merchant gases are likely to lose some ground to onsite supply over time.

Merchant sales growth is trailing onsite sales growth. Global merchant sales account for an estimated $17.4 billion (31% of total sales). Smaller volumes of industrial gas products are delivered to thousands of mid-sized industrial gas consumers in liquid or gaseous form by tanker trucks or tube trailers. As liquid bulk gases are delivered by truck, it is a regional business, limited to a 250- to 300-mile radius around an ASU. Liquid bulk customers store the product near the point of use, normally in liquid state, and vaporize the product for use as needed. Small onsite generators also supply some customers. Liquid bulk customers' contracts normally run from three to five years in duration. Merchant volume growth is likely to trail onsite volume growth, as flexible noncryogenic plants now are able to satisfy demands too small to justify building a local cryogenic plant. Company market shares and exposures to merchant sales are depicted in Figures 34 and 35. We note that Airgas acquired eight air separation units (ASU) from Linde in the United States on March 9, 2007, increasing Airgas' global merchant share to an estimated 6% versus 2% shown in Figure 34. Equivalently, Linde's estimated global merchant share dropped to 14% versus 18% in 2006.

Figure 34

Global Merchant Sales by Company, 2006
(total of $17.4 billion)

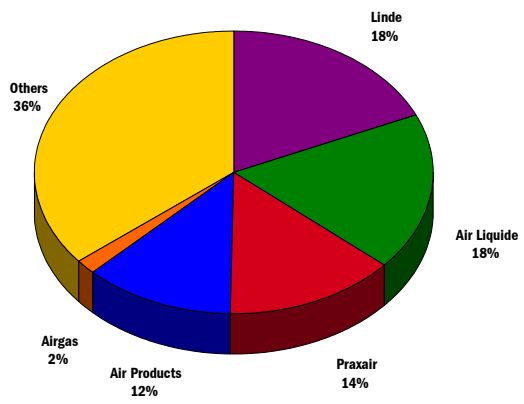
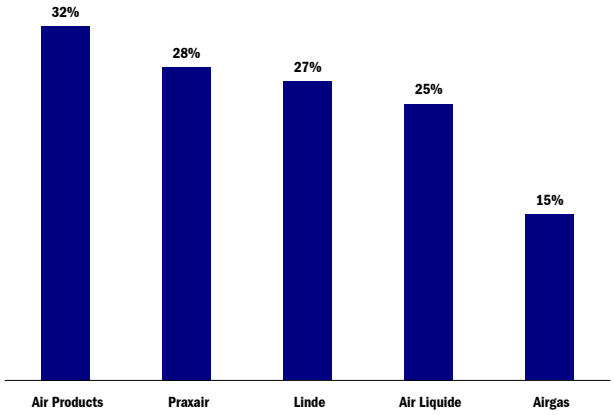


Figure 35

Company Exposure to Merchant Supply, 2006
(% of company sales, excluding nongas sales)



Source: Company reports, Banc of America Securities LLC estimates.

Packaged Gases

Packaged gas supply is a local distribution business, led by Airgas in the United Stares.

Packaged gases still represent the largest supply mode. Packaged gases represent a $19.9 billion business (35% of total sales). Industrial and various specialty and medical gases also can be delivered in cylinders, dewars (large tanks) and lecture bottle sizes. Examples of packaged gas supply include welding gases, specialty gases for electronics applications, helium used in magnetic resonance imaging (MRI), gases used in laboratory and educational applications, and oxygen used by patients for respiratory therapy in a hospital or home setting. Packaged gas supply is a local distribution business. Airgas has been a key consolidator of small U.S. gas distributorships, with an estimated 85% of the company's gas sales in the form of packaged supply in 2006. Company market shares and exposures to packaged sales are depicted in Figures 36 and 37. We note that on March 29 Airgas announced agreement to acquire most of Linde's packaged gas business in the United States. Upon completion, we estimate that Airgas' share will increase by 1%, to 9%, at the expense of Linde's share.

Figure 36

Global Packaged Sales by Company, 2006
(total of $19.9 billion)

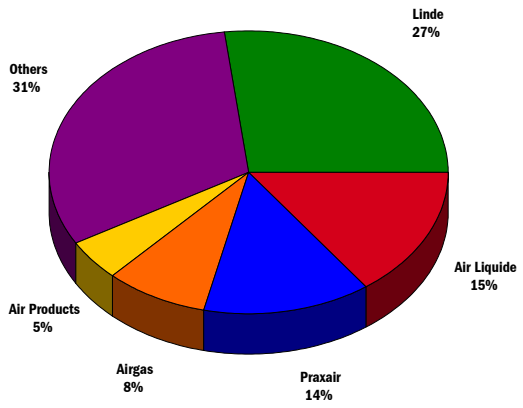
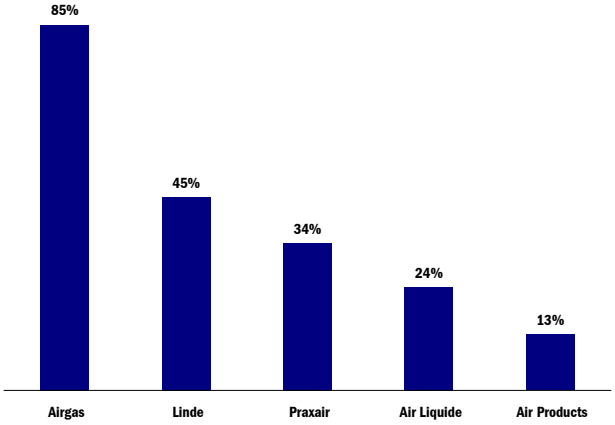


Figure 37

Company Exposure to Packaged Supply, 2006
(% of company sales, excluding nongas sales)



Source: Company reports, Banc of America Securities LLC estimates.

Producers are investing in new production capacity in the United States. In some regions of the country, argon and increasingly oxygen has become very tight. We estimate a capital commitment of $25-35 million given production capacity of 350 tons per day (TPD). Typical construction time is two years. Regional markets are likely to remain tight in the next few years in our view. In Table 4 we summarize recent capacity expansion in the United States.

Table 4

U.S. Industrial Gases
Capacity Additions—Air Separation Units (ASUs) for Merchant Liquid Sales, Estimated 2007—Estimated 2009
(tons per day)

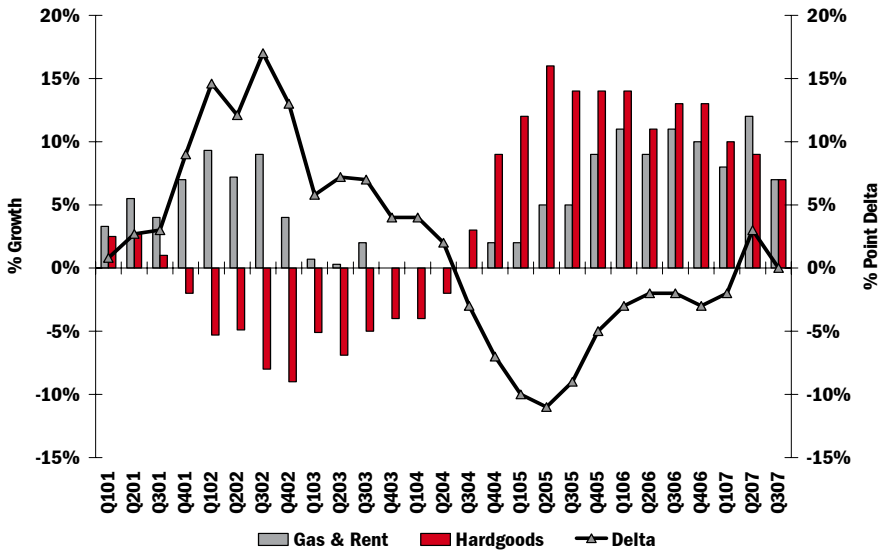
Company	Location	2007E	2008E	2009E	Total
Matheson	Los Angeles, CA	600			600
Linde (formerly BOC)	Cartersville, GA	175	525		700
	Beloit, WI		700		700
	Subtotal - Linde	175	1,225	-	1,400
Air Liquide	Salt Lake City, UT		300		300
Airgas	Carrollton, KY		88	263	350
Air Products	Ashland, KY		113	338	450
	Reidsville, NC		200	200	400
	Subtotal - Air Products		313	538	850
Total		**775**	**1,925**	**800**	**3,500**
Percent Increase		1.2%	2.9%	1.2%	5.3%

Source: Company reports, Banc of America Securities LLC estimates.

Figure 38 depicts a history of Airgas' same store sales for gas and rent as well as hardgoods, such as welding and safety supplies. As the graph shows, sale of welding-related hardgoods tends to be a leading indicator of future gas sales.

Figure 38

Airgas, Inc.
Same-Store Sales, First Quarter of Fiscal 2001—Third Quarter of Fiscal 2007
(%)



Source: Company reports, Banc of America LLC Securities.

M&A Trends

Most of the global industry is well consolidated. Following industry consolidation, the top four industrial gas players account for about 70% of the global business. Linde announced the acquisition of BOC in January 2006 and closed in September, in what will likely be the last of the major consolidation deals in the U.S. and in Europe. Table 4 highlights several significant transactions completed since 1999.

Table 5

Global Industrial Gas Industry
Selected Transactions, 1999—Present
($ millions)

Yr	Mo	Acquirer	Counterparty	Property	Value
1999	7	Air Products & Air Liquide	The BOC Group	The BOC Group	12,700
1999	8	Linde AG	AGA AB	AGA AB	4,500
2001	1	Private Equity Group	Messer AG	Messer AG	2,450
2002	1	Airgas	Air Products and Chemicals	U.S. packaged gas business	270
2002	7	Air Products	San Fu Gases Company (Taiwan)	San Fu Gases Company Ltd. (Taiwan)	115
2002	10	Air Products	American Homecare Supply	American Homecare Supply	166
2003	12	Nippon Sanso	Taiyo Toyo Sanso Co. Ltd.	Taiyo Toyo Sanso Co. Ltd.	657
2004	1	Air Liquide	Messer AG	European operations of Messer AG	3,375
2004	6	Praxair	Harvest Partners	Home Care Supply	245
2004	10	Praxair	Messer AG (Air Liquide)	German pipeline business	667
2006	10	Linde AG	The BOC Group	The BOC Group	15,400
2006	12	Air Liquide	Linde AG	45% stake in Japan Air Gases Ltd	1,726
2007	1	Air Products	Linde AG	BOC's assets in Poland	482
2007	2	Praxair	Linde AG	Industrial and medical gases in Mexico	NA
2007	3	Airgas	Linde AG	U.S. bulk gas assets	495
2007	3	Air Liquide	Linde AG	Linde Gas UK Ltd	NA
2007	3	Airgas	Linde AG	U.S. packaged gas business	310

Source: Company reports.

Further consolidation could occur in Asia, Eastern Europe and U.S. packaged gases.

Consolidation is most likely in Asia and Eastern Europe. Outside of packaged gases, we view further consolidation as most likely in Asia and Eastern Europe, where the industrial gas market is highly fragmented and significant capacity is still owned and operated by industrial manufacturers who have not outsourced the industrial gas function to a major player, as has been the case in the United States and in Western Europe.

The U.S. packaged gas market also remains highly fragmented. Consequently, this market represents another opportunity for continued consolidation. The top five players control only 44% of the U.S. packaged gas market. The leader, Airgas, controls 26% of sales (including the pending acquisition of Linde's U.S. packaged gas business), followed by Praxair at 11%, while the "other category remains large at 56% of U.S. packaged gas sales.

Manufacturing Processes

Atmospheric Gases (Oxygen, Nitrogen and Argon)

Electric power accounts for half of the total cost of producing industrial gases.

Gas separation consumes a lot of electricity. Dry air consists of nitrogen (78% by volume), oxygen (21%), argon (1%) and trace amounts of carbon dioxide, neon and helium. The key input for separating air into purified gases is energy in the form of electricity. All three air separation processes (cryogenic, pressure swing adsorption and membrane) begin with the compression of air. Electricity is used to power the compression equipment, and large plants can consume tens of thousands of kilowatts per hour. Power accounts for 40-60% of the total cost of producing industrial gases. Separation units produce commercial quantities of gases, based on differences in boiling points (cryogenic separation), molecular weight (pressure swing adsorption) and molecular size (membrane separation). In general, pressure swing adsorption and membrane separation are cost-effective technologies for applications that require lower capacity and/or lower purity. Noncryogenic technologies are constrained in purity, especially, when operating at high rates of throughput. Table 5 summarizes the key features of each gas separation technology.

Table 6

Industrial Air Separation Technologies

	Products	Capacity (tons/day)	Capital Intensity	Energy Intensity	Purity
Pressure swing adsorption	N_2, O_2	< 100	Low	Medium	Medium – High
Cryogenic separation	N_2, O_2, Ar	100-4,000	High	High	Very High
Membrane separation	N_2	< 75	Low	Low	Medium – High

Source: Consulting Resources Corporation, Cryogas, Banc of America Securities LLC.

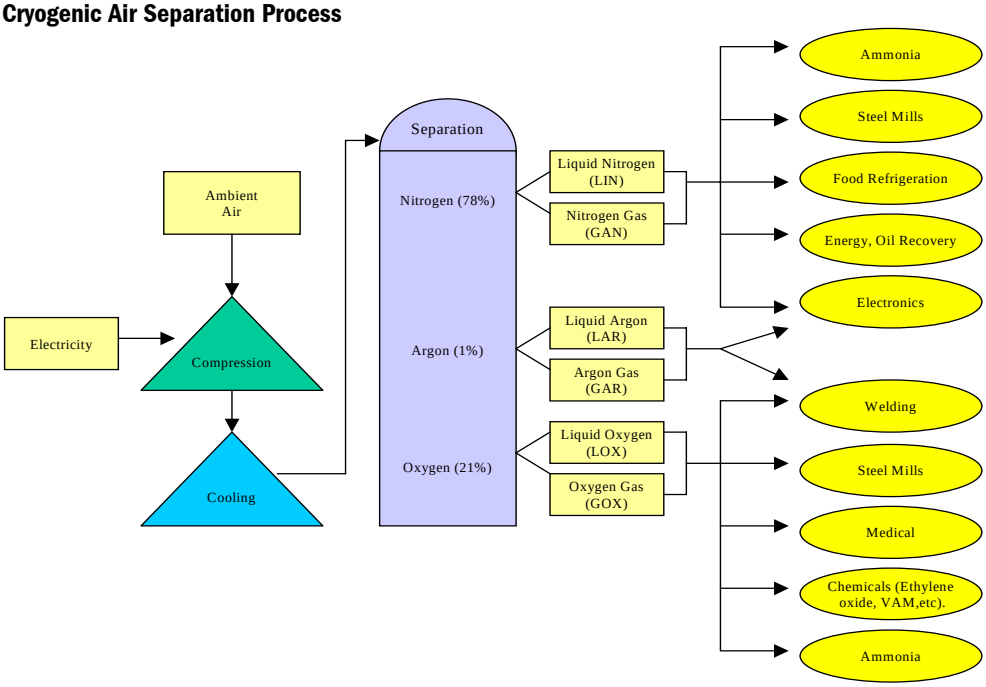
We outline the three primary air separation technologies, which are as follows:

- **Cryogenic separation.** Cryogenic plants—air separation units (ASUs)—are the primary technology used to produce industrial gases. Cryogenic plants use low temperature distillation to separate air components and achieve desired purities. The first step is filtering and compressing air to about 90 pounds per square inch (psi). Water vapor and carbon dioxide are removed to prevent freezing during the cryogenic process. The purified air is cooled to minus 185 degrees Celsius and sent to distillation columns to separate the air into oxygen, nitrogen and argon. As oxygen and argon have similar boiling points, "crude argon" is sent to a "de-oxo" unit to remove the 2-3% oxygen mixed with the argon stream. In the last step of the process, cold gaseous products from the distillation columns either are warmed to near-ambient temperature for delivery to onsite customers via pipeline or are cooled further to liquid form for merchant sales. Figure 32 depicts the cryogenic air separation process.
- **Pressure swing adsorption (PSA).** PSA units produce oxygen (or nitrogen) by passing air through an adsorbent material that withholds nitrogen, moisture and carbon dioxide gas, allowing the oxygen to pass through. Product purities for oxygen are 92-95% versus more than 99% for cryogenic systems.
- **Membrane separation.** Membrane nitrogen generators consist of bundles of tubes made of a special polymer. Gases have different permeation rates through these tubes. Oxygen diffuses rapidly, leaving behind nitrogen and

argon. Membrane units can be turned on and shut off quickly as there are no moving parts. Gas companies have increased the size of membrane units to serve merchant customers where high purity is not a requirement.

Figure 39

Cryogenic Air Separation Process



Source: Messer Group, Banc of America Securities LLC.

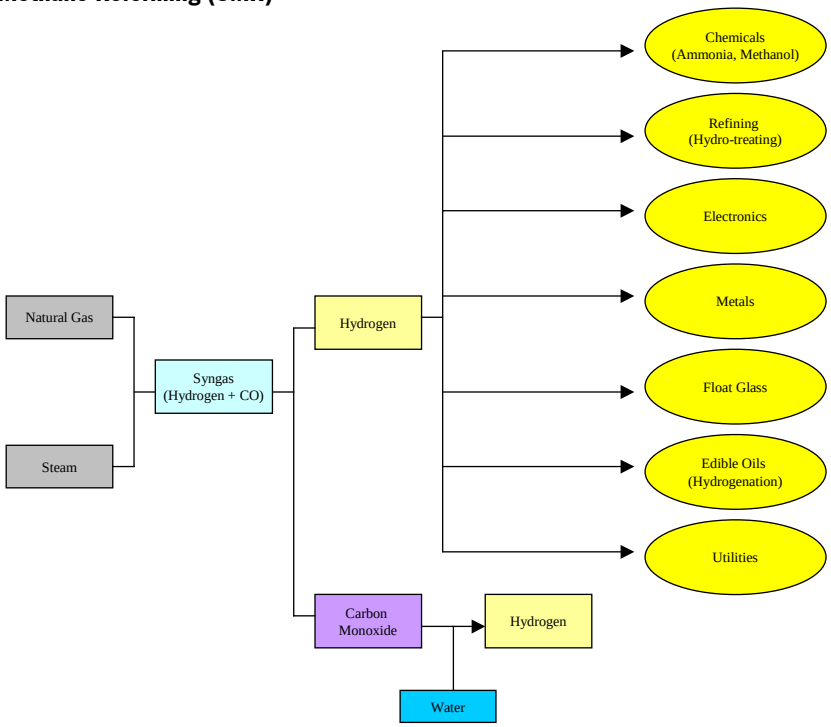
Hydrogen

SMRs make "syngas" or HyCO, a combination of hydrogen (H_2) and carbon monoxide (CO).

Hydrogen is produced via steam methane reforming (SMR). Hydrogen is produced either as the main product or as a byproduct of other chemical/petrochemical processes. Chemical companies produce hydrogen as a byproduct of chlorine (chlor-alkali), MTBE and ethylene production. Byproduct hydrogen requires purification via a cryogenic, PSA or a membrane process, and it generally is sold to industrial gas companies for subsequent merchant market sale. Hydrogen is produced "on-purpose" by captive users such as refiners, ammonia/methanol producers and food companies for internal use and by industrial gas companies for merchant sale. On-purpose hydrogen is produced via steam methane reforming of natural gas or water electrolysis, but SMR accounts for the majority of on-purpose hydrogen. Steam reforming of natural gas (or other hydrocarbons) takes place at high pressure over a nickel catalyst. The process produces a mixture of hydrogen and carbon monoxide known as synthesis gas or "syngas." Hydrogen is separated from carbon monoxide, which reacts further with steam to produce carbon dioxide and additional hydrogen via the water-gas shift reaction (see Figure 33). Hydrogen prices are correlated highly with natural gas, which accounts for 70% of the production cost via SMR.

Figure 40

Steam Methane Reforming (SMR)



Source: Messer Group, Banc of America Securities LLC.

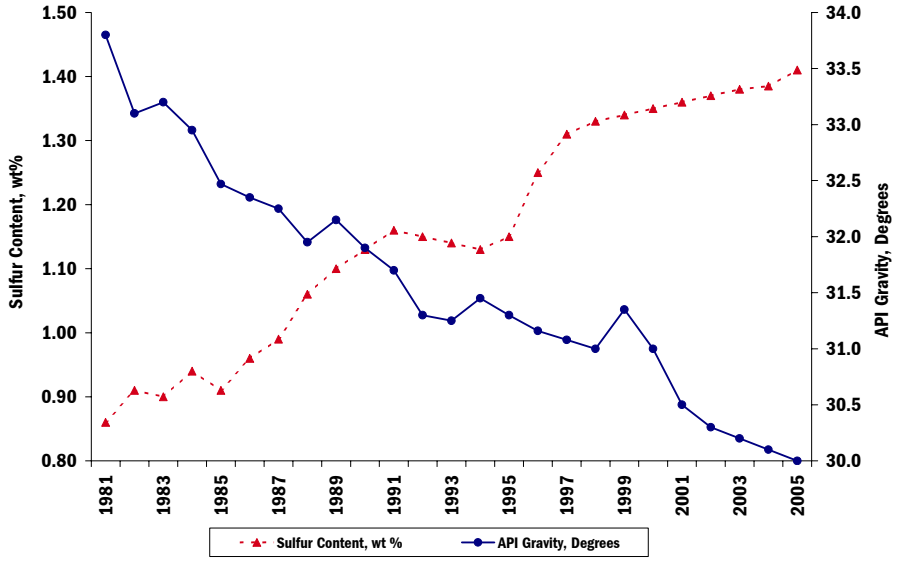
Environmental regulations have spurred increased demand for hydrogen.

Crude oil refiners are large producers and consumers of hydrogen. Refineries produce hydrogen as a byproduct of catalytic reforming (which converts naphtha into high-octane reformate for gasoline blending) and the fluid catalytic cracking (FCC) process. Approximately 600-1,600 standard cubic feet (scf) of hydrogen are produced per barrel of feed, which equates to 2-6 billion scf of hydrogen per day, based on U.S. refining capacity. However, refiners also consume between 8-10 billion scf of hydrogen in the United States. Hydro-cracking and hydro-treating consume hydrogen in order to remove sulfur and other contaminants from various gasoline, naphtha and distillate streams. New low-sulfur gasoline regulations, combined with imports of increasingly heavier and higher sulfur crude oil, have increased the refinery hydrogen requirement. Figure 34 shows that crude oil processed in U.S. refineries has become heavier—lower API gravity—and richer in sulfur over time. The greater hydrogen deficit is met by a combination of the following: (1) more captive production; (2) onsite production by industrial gas companies; (3) more efficient use of hydrogen within the refining process; and (4) merchant volumes.

Increasing consumption of heavy sour crude oil also increases demand for hydrogen.

Figure 41

Historical U.S. Refinery Input Quality



Source: Company reports, Banc of America Securities LLC estimates.

Carbon Dioxide

CO_2 comes from SMRs and refineries as well as production of ammonia and ethanol.

Carbon dioxide is a byproduct. Most commercial carbon dioxide (CO_2) is produced as a byproduct of hydrogen production via steam methane reforming (see the preceding section). Refiners are major users of hydrogen and therefore producers of CO_2. Ammonia production also requires hydrogen and is also a major source of byproduct CO_2. Ethanol production, through the fermentation of starch or sugar to produce ethyl alcohol, also emits significant quantities of CO_2. Recent expansion of ethanol production capacity in the Midwest could lead to greater supplies of CO_2 in coming years. Finally, some CO_2 is recovered from ethylene oxide (EO) plants using nitrogen for catalytic oxidation.

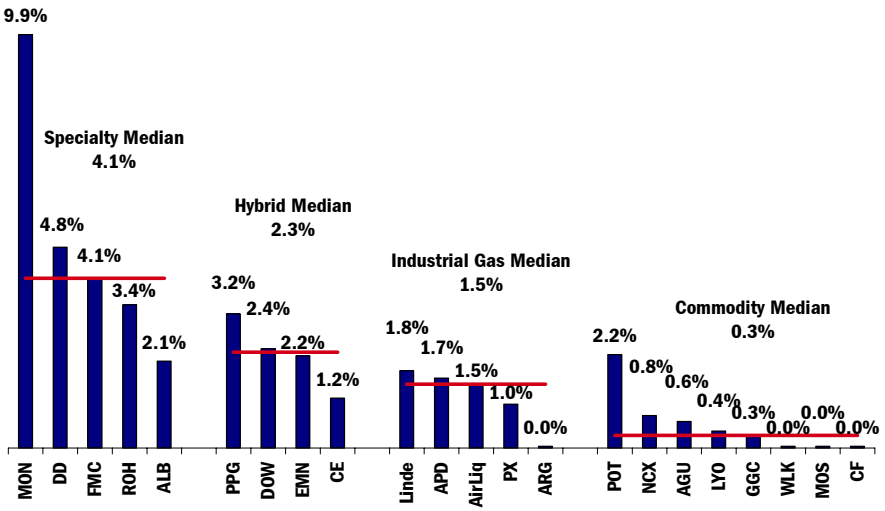
Innovation

Low research and development (R&D) expenditures reflect the commodity-like nature of gases. Industrial gas companies spend far less on R&D than their specialty chemical peers, more in line with commodity and hybrid chemical companies. The R&D-to-sales ratio for Rohm & Haas Company (ROH, $51.74, **Buy**, Target Price: $56) is 3.4% and nearly 10% for agriculture biotechnology leader Monsanto Company (MON, $55.01, **Neutral**, Target Price: $47), compared with less than 2% for Praxair and Air Products. Lower spending by industrial gas companies, in our view, is a reflection of the commodity-like nature of industrial gases. Onsite air separation units are similar to utilities, providing an uninterrupted supply of a necessary, standardized product at a fixed margin over a long period. However, there are opportunities for innovation, primarily in the penetration of industrial gases into new markets. Environmental regulation has created new market opportunities for gases. Praxair developed ozone from oxygen to replace chlorine in papermaking, helping customers meet more stringent environmental regulations. Figure 42 compares R&D with sales for selected specialty, hybrid, commodity and industrial gas players. Figure 36 shows how R&D spending as a percentage of sales of major industrial gas players generally has been declining over the past decade.

Low R&D expense in industrial gases is more similar to commodities and hybrids than specialties.

Figure 42

Chemicals Sector
R&D Benchmarking, 2006
(% of sales)



Source: Company reports.

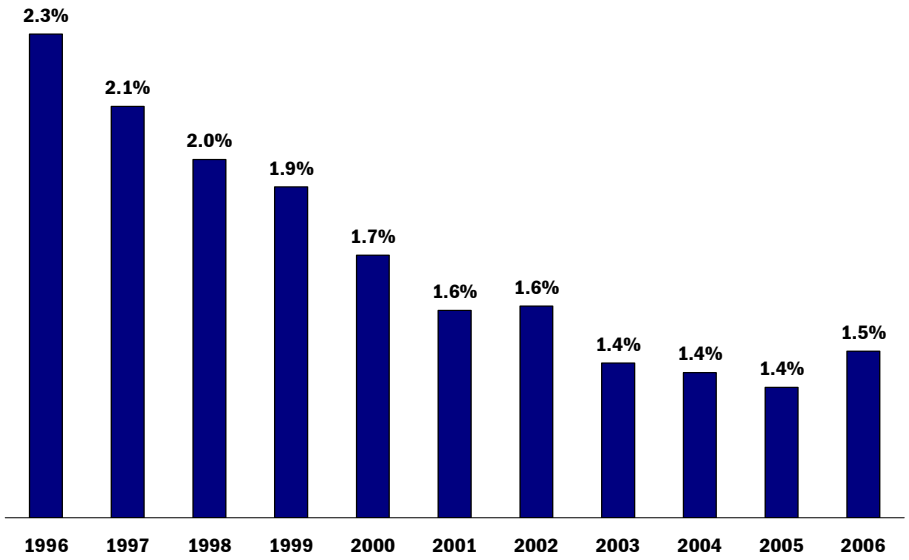
Specialty gases and materials require a bit more R&D.

Electronics remains a focus of industry R&D spending. Electronics R&D spending has decreased over the last several years, a reflection of cash flow constraints and lower returns in electronics. Industrial gas companies are developing new products for this market. New consumables for semiconductor manufacturing are the focus of R&D efforts, stimulated by the switch to 300-mm wafers and the smaller, 90-nm fabrication process.

The industry's ratio of R&D to sales has declined by 35-40% over the past decade.

Figure 43

Industrial Gases
R&D Trends,* 1996—2006
(% of sales)



*Average annual R&D spending of Air Liquide, Air Products, BOC, Linde, Messer Greisheim and Praxair.

Source: Company reports.

Air Products is the industry leader in NF_3. The nitrogen trifluoride (NF_3) market growth is spurred by demand for liquid crystal displays (LCDs). LCD fabs represent one-fifth of the NF_3 market, but LCD demand is growing 2-3 times as fast as other semiconductor applications. Air Products is the world leader in NF_3 production with 40-50% of global capacity. Air Products supplies customers from its 2,000 ton per year facility located in Hometown, Pennsylvania. The company is also building an additional 500 ton/year capacity in Ulsan, South Korea, to service the Asian electronics market including South Korean heavyweight Samsung. Other NF_3 producers include Mitsui (Japan), KDK (Japan), Central Glass (Japan), Formosa Plastics (Taiwan), and Sodiff (South Korea). Except for Air Products, other major industrial gas players do not have significant NF_3 capacity, so they purchase NF_3 from other producers to satisfy the needs of their electronics customers.

Productivity gains play an important role in industrial gases. Praxair, for example, aims to reduce its cost structure by 4% each year. The company has been able to reduce SG&A from 16.0% of sales in 2002 to 13.9% in 2006. 45% of the savings came from implementing Six Sigma companywide. Other opportunities include advance control systems, power plant efficiencies, network optimization and application of enterprise software.

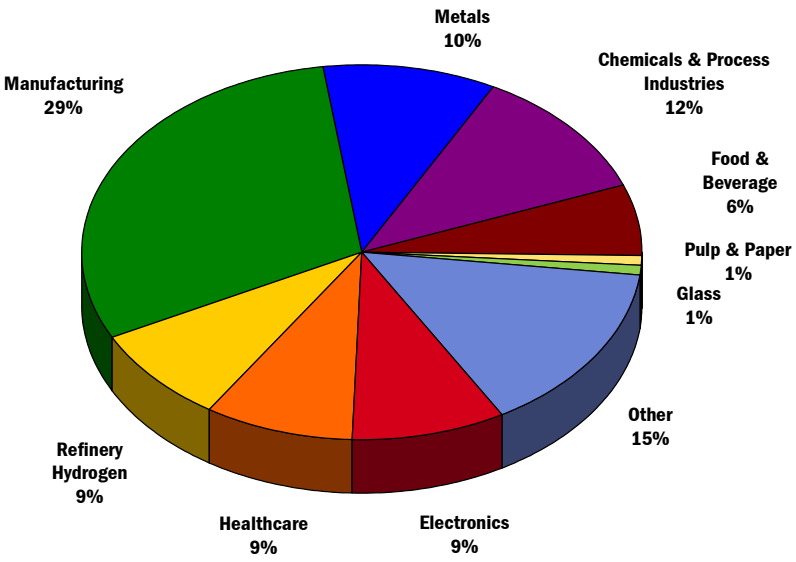
End-Use Markets

Gases are used in a broad range of industries.

Industrial gas end-use markets are quite diverse. Industrial gases are used in a multitude of end markets, as shown in Figure 44. Industrial gases are used by a variety of cyclical (such as metals, chemicals, electronics, and paper) and noncyclical (such as health care and food and beverage) industries. Generally, sales are correlated highly with the industrial economy. Manufacturing is the largest end market, accounting for an estimated 29% of industrial gas sales.

Figure 44

Industrial Gas Industry
Sales by End Market, 2006



Source: Company reports, Banc of America Securities LLC estimates.

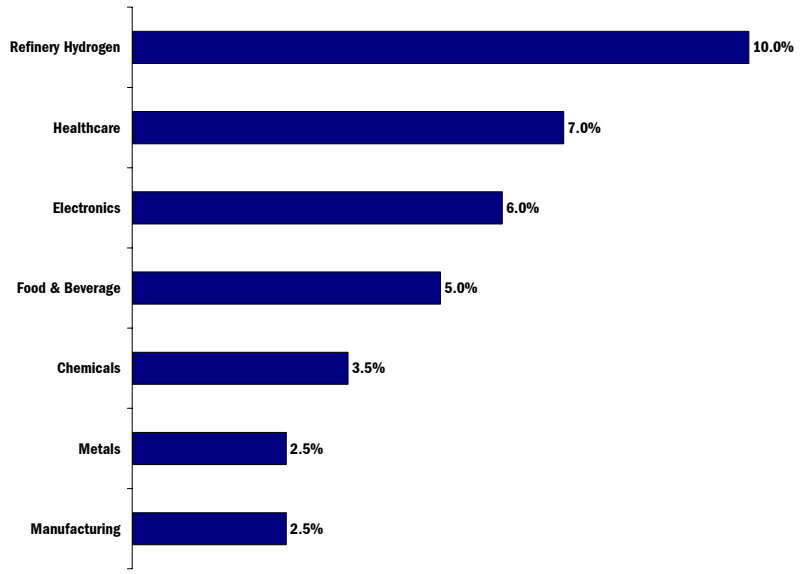
Electronics, health care and hydrogen tend to propel growth.

Growth markets include electronics, health care and hydrogen. The industry benefits from a diverse application base, with pockets of strong growth, as shown in Figure 45. Health care, refinery hydrogen and electronics markets are of particular interest, as they represent growth platforms for leading industrial gas players. Over the past 10 years, major industrial gas producers have diversified sales away from manufacturing by investing heavily in these high-growth markets.

- **Refinery hydrogen.** In refinery hydrogen, already a $4.7 billion global market, new environmental regulations for gasoline and heavier, increasingly sour crude oil imports are driving double-digit volume growth.
- **Health care.** The aging U.S. population and the greater need for respiratory therapy and home care are spurring demand for medical gases, a $5.0 billion global market, with solid global growth of 6-8% per year.
- **Electronics.** Electronics is a $5.0 billion industrial gas market, growing at 5-7% per year, driven by semiconductor and liquid crystal display (LCD) manufacturing in Asia. Growth is lower in the United States and in Europe, as manufacturing of electronics increasingly is migrating to Asia.

Figure 45

Industrial Gases
Estimated Annual Volume Growth by End Market, 2005—Estimated 2010
(%)



Source: Cryogas, Banc of America Securities LLC estimates.

Manufacturing (29% of Industry Sales)

Description

Industrial gases are used for welding and cutting of steel and other metals by equipment, aerospace, appliance and auto manufacturers. Manufacturing also includes the use of gases for heat-treating and coating.

Growth Drivers

- Demand tends to track industrial production growth. We expect industrial growth in North America to be similar to Europe and lower than Asia.
- Our estimated five-year growth rate is 3-4%.

Supply Modes

- Cylinders are used for small auto repair shops.
- Bulk liquid trucks are utilized for large industrial consumers.

Figure 46
Global Manufacturing Sales by Company, 2006
(total of $17.1 billion)

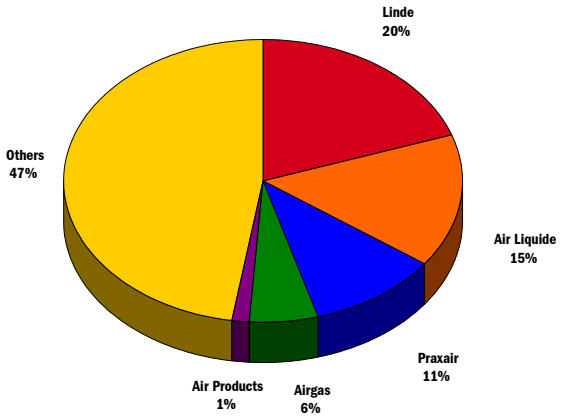
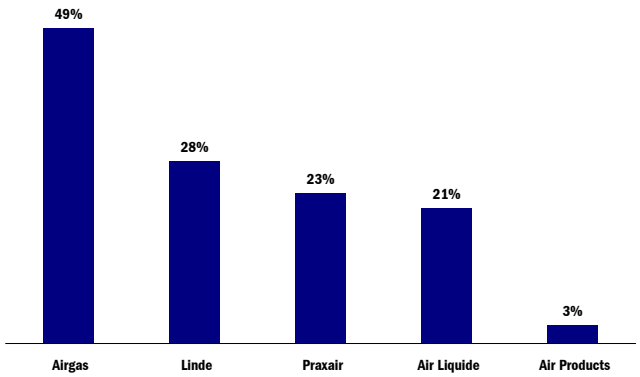


Figure 47
Company Exposure to Manufacturing, 2006
(% of company sales, excluding nongas sales)



Applications

- **Metal cutting.** Oxygen is used to cut carbon steel and nitrogen is used for cutting stainless steel. Laser cutting is used on thin metals requiring high precision as in auto production. Plasma cutting uses an electric arc to cut the metal, with less accuracy and higher productivity. Flame cutting is a common, manual, cutting process using a torch and oxygen as fuel.
- **Welding.** There are four types, which are as follows: (1) flame (which uses an oxygen-acetylene mix); (2) TIG (carbon dioxide); (3) MIG (inert gases such as helium); and (4) laser (carbon dioxide). Argon is used during the welding process to shield welds as they solidify, preventing oxidation. Helium and hydrogen also are combined with argon to enhance performance.

Key Customers

- A wide spectrum of industrial companies use gases, ranging from global conglomerates such as General Electric Company (GE, $35.29, **Buy**, Target Price: $44, covered by BAS analyst Robert McCarthy) to local auto body repair shops.
- Major industrial customers include aerospace original equipment manufacturers (OEMs), such as Boeing and General Dynamics (GD, $76.27, **Buy**, Target Price: $83, covered by BAS analyst Robert Stallard); auto parts suppliers, such as Johnson Controls and Borg Warner; and auto OEMs, such as Toyota and Ford Motor Company (F, $8.09, **Neutral**, Target Price: $8, covered by BAS analyst Ron Tadross).

Source: Company reports, Banc of America Securities LLC estimates.

Metals (10% of Industry Sales)

Description

Metal producers use oxygen and other gases to produce steel and other metals. Although gases are used to produce ferrous and nonferrous metals, steel is the largest end use. Based on global steel production capacity of 1 billion tons per year, annual oxygen demand for steel is about 90 million tons per year or 250,000 tons per day. Global steel making capacity is split into integrated mills (two thirds) and "mini" mills (one third). Integrated mills use a three-step process to produce steel from coal involving basic oxygen furnace (BOF) technology. In BOF, molten pig iron is injected with high-purity oxygen to produce steel. Mini mills produce steel from scrap metal using electric arc furnace (EAF) technology. Integrated mills with BOFs use about 0.12 tons per day of oxygen, while mini mills use only 0.04 tons per day.

Growth Drivers

- Global steel production is growing 2-3% per year, led by China, followed by India, Ukraine and Brazil.
- The amount of oxygen consumed per ton of steel is increasing, adding 1-2% to demand growth.
- We estimate a five-year average growth rate of 2-3%.

Gas Supply Modes

- Gases either are produced onsite or supplied from a nearby plant via pipeline.
- A metals plant often consumes 70-80% of the capacity of an ASU, leaving the balance open to sale to the local merchant market.

Figure 48
Global Metals Sales by Company, 2006
(total of $5.7 billion)

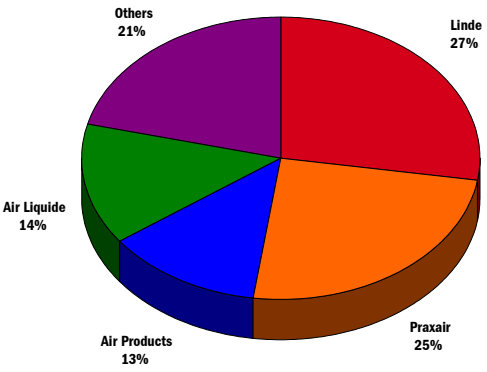
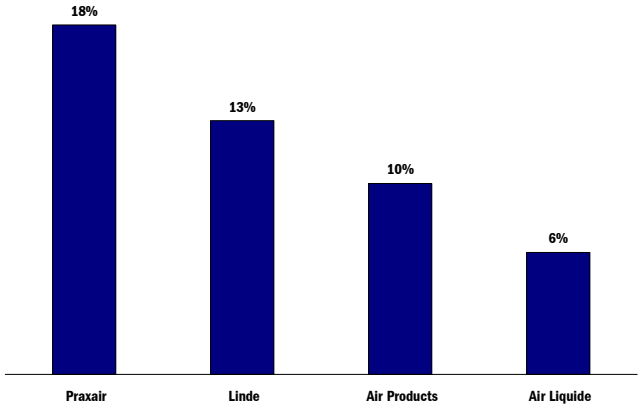


Figure 49
Company Exposure to Metals, 2006
(% of company sales, excluding nongas sales)



Applications

- Oxygen is used in the EAF and BOF processes to support combustion and increase productivity.
- Nitrogen is used as an inert gas to blanket during transport and storage and provide stirring of molten nickel and copper.
- Hydrogen is used for heat treatment in rolling mills and to reduce iron content.

Key Customers

- Steel producers are the largest consumers, led by Mittal Steel, U.S. Steel, Nucor, Gerdau-Ameristeel, and AK Steel in North America.
- The steel industry has undergone considerable consolidation in recent years.

Source: Company reports, Banc of America Securities LLC estimates.

Chemicals and Other Process Industries (12% of Industry Sales)

Description

Gases are used as raw materials, inerting agents or reaction enhancers to produce commodity chemicals such as methanol, ammonia and cyclohexane; intermediates such as ethylene oxide as well as vinyl chloride; and polymers such as polycarbonate resin and fine chemicals. By enriching the air used in oxidation reactions with oxygen, chemical manufacturers improve chemical yields.

Growth Drivers

- Economic expansion is supporting volume growth in chemicals.
- High energy prices are driving demand of bulk gases used for enhanced oil recovery (EOR).
- We estimate a five-year average growth rate of 3-4%.

Gas Supply Modes

- Delivered via pipeline or in bulk tankers.
- Pipelined/onsite delivery is heavily discounted over merchant liquid bulk, typically is sold on long-term take-or-pay contracts.

Figure 50
Global Chemicals Sales by Company, 2006
(total of $6.5 billion)

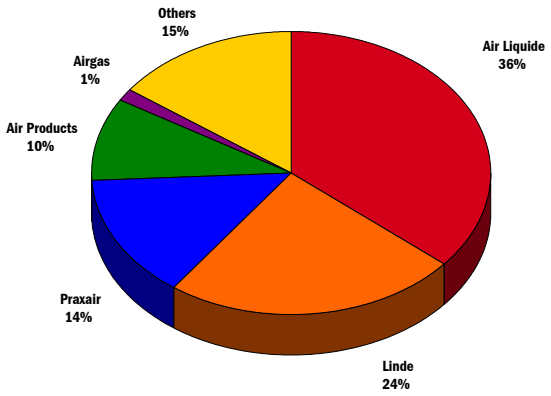
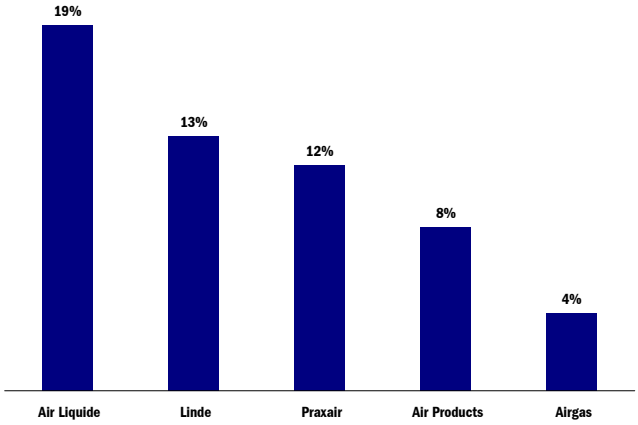


Figure 51
Company Exposure to Chemicals, 2006
(% of company sales, excluding non-gas sales)



Applications

- Oxygen is used to produce ethylene oxide (EO), propylene oxide (PO), ethylene dichloride (EDC), vinyl acetate monomer, (VAM) and titanium oxide (TiO_2).
- Nitrogen mostly is used as an inert, to prevent combustion during chemical storage and transfer and to protect equipment against oxidation and humidity. Exploration and production (E&P) companies inject nitrogen or carbon dioxide into oil/gas wells to improve reserve recovery.
- Hydrogen is used to produce ammonia, paints, detergents and plastics.
- Carbon monoxide is used to produce polycarbonate resin and oxo-alcohols.

Key Customers

- Clients include commodity chemical producers such as Dow, Lyondell and Huntsman.
- Customers also comprise specialty chemical producers such as DuPont and Rohm & Haas.

Source: Company reports, Banc of America Securities LLC estimates.

Health Care (9% of Industry Sales)

Description

Hospitals and home care patients use oxygen and other mixes for respiratory therapy. The market is made up of integrated suppliers/distributors—such as Praxair, Air Products and Airgas—health care companies—such as Apria Healthcare Group, Inc. (AHG, $32.42, **Sell**, Target Price: $23, covered by BAS analyst Gary Taylor) and Lincare Holdings, Inc. (LNCR, $36.76, **Neutral**, Target Price: $35, covered by BAS analyst Gary Taylor)—and local "mom and pop" distributors. The home care market has grown significantly in the last several years because of the aging of the population and greater incidence of respiratory ailments among the elderly. The Medicare Reform Act recently cut reimbursement rates for medical gases. Industrial gas companies favor health care because of low asset intensity and higher return on capital. In the late 1990s, gas producers diversified into the growing health care market, primarily through acquisition of smaller players, focusing aggressively in supplying directly.

Growth Drivers

- Our estimated five-year growth is 6-8%.
- Growth in the home care market (7-9% per year) is outpacing growth in the more mature hospital market (4-5% per year).
- Opportunity to grow through consolidation is possible.

Gas Supply Modes

- Gases are delivered either in bulk or in cylinders to hospitals.
- Respiratory gas is delivered in cylinders to home care patients.

Figure 52
Global Health Care Sales by Company, 2006
(total of $5.0 billion)

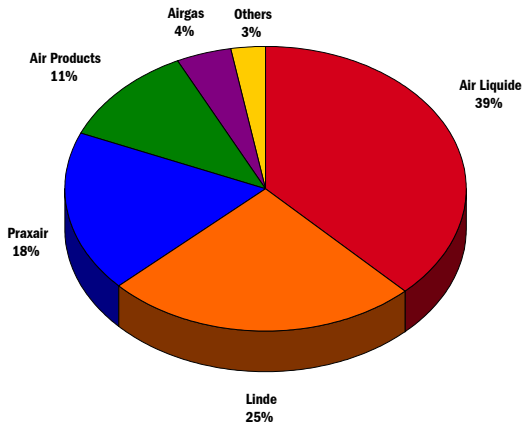
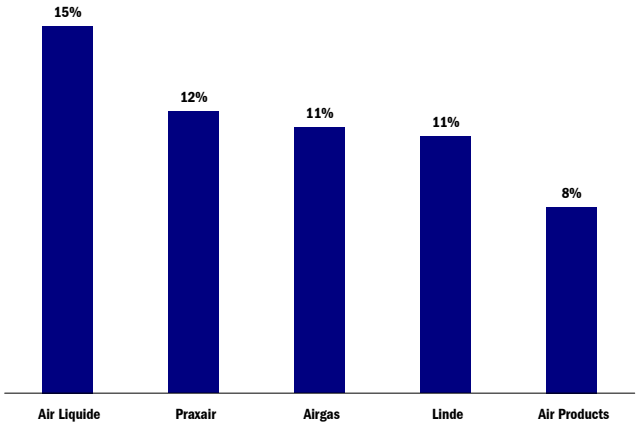


Figure 53
Company Exposure to Health Care, 2006
(% of company sales, excluding nongas sales)



Applications

- **Hospitals.** O_2 (intensive care), N_2 (freezing and preserving living tissue), CO_2 (organ replacement surgery and deep breathing), gas mixtures (instrument sterilization), liquid He (cooling large MRI magnets).
- **Laboratories**. Nitrogen (thermoregulation and chemical reactor cooling), oxygen (fermentation). Also, gases are used in inerting, cryo-grinding, chromatography, spectroscopy and liquid separation.

Key Customers

- Health care is a highly fragmented market serving hundreds of hospitals and thousands of home care patients.

Source: Company reports, Banc of America Securities LLC estimates.

Electronics (9% of Industry Sales)

Description

Industrial gases are used to manufacture semiconductors, assemble and package ICs (integrated circuits) and to test devices. The largest end use is semiconductor production, which requires a variety of ultra-high-purity industrial gases. Industrial gas companies sell an integrated package of bulk carrier gases such as nitrogen, oxygen and hydrogen; specialty gases such as nitrogen trifluoride (NF_3) and silane; and other consumables such as wet chemicals, photoresists, metallization materials (PVDs), films, CMP pads and slurries. Offerings of nongas materials give gas companies a greater share of wallet with semiconductor manufacturers. LCD materials are another growing market for bulk and specialty gases.

Growth Drivers

- Our estimated five-year growth is 5-7%.
- Growth in specialty gases (12-14%) is surpassing bulk gases (5-7%). East Asia outpaces the United States and Europe.
- Square inches of silicon produced and semiconductor layers of circuitry on silicon wafer are growth drivers.

Gas Supply Modes

- Carrier gases such as nitrogen are supplied onsite.
- Specialty gases, used in smaller quantities, are delivered in bulk or cylinders.
- BOC recently introduced onsite supply of fluorine, an alternative etching gas, to compete with packaged NF_3.

Figure 54
Global Electronics Sales by Company, 2006
(total of $5.0 billion)

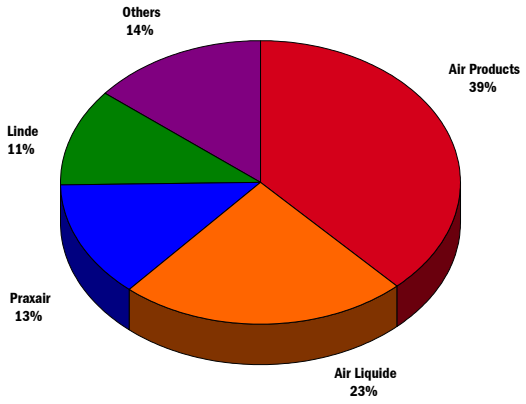
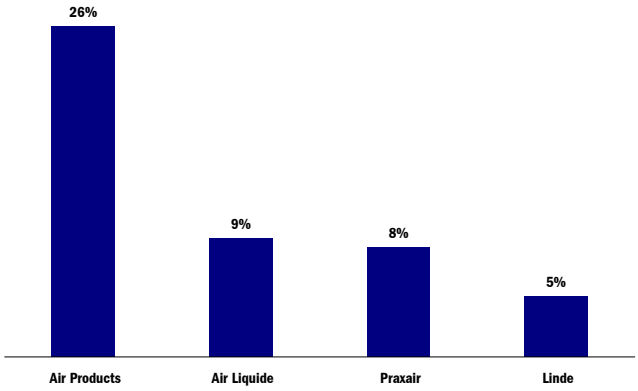


Figure 55
Company Exposure to Electronics, 2006
(% of company sales, excluding nongas sales)



Gases Used and Applications

- **H_2, N_2, Ar.** Carrier gases (inerts) used to carry vapor from one chamber to another.
- **N_2.** Protection against impurities and oxidation in semiconductor manufacture.
- **CO_2.** An environmentally friendly remover of photoresists from wafers.
- **O_2.** Oxidize materials such as silicon, and in chemical vapor deposition (CVD).
- **NF_3.** An etchant and a cleaning agent in CVD.

Key Customers

- **Semiconductor manufacturing.** Texas Instruments, NEC, STMicroelectronics, Infineon, Micron, Tochiba, Hitachi.
- **Electronic packaging/assembly.** Honeywell International, Inc. (HON, $46.15, **Buy**, Target Price: $50, covered by BAS Analyst Robert McCarthy) and Siemens.
- **LCD panel manufacturing.** Samsung, LG Philips and AUO Optronics.

Source: Company reports, Banc of America Securities LLC estimates.

Refinery Hydrogen (9% of Industry Sales)

Description

Refineries use hydrogen to reduce the sulfur content of crude oil and in gasoline. Environmental regulations require a reduction of 95% in sulfur levels for U.S. gasoline next year, from 300 ppm to only 30 ppm. Over the last two years, refiners have added hydro-treating capacity to remove sulfur from hydrocarbons, a process that requires hydrogen. Steam methane reforming (SMR) is the most common hydrogen production technology. In SMR, steam reacts with natural gas (methane) in the presence of a catalyst to produce syngas, a mixture of hydrogen and carbon monoxide. The syngas is separated for use in various products. Hydrogen also is used in fuel cells, which eventually could power cars and buses, but this technology is still at an early stage.

Growth Drivers

- Our estimated five-year growth is 10%.
- Heavier, more sour crude imports into the United States.
- Tighter environmental regulations on gasoline exist in the United States and Europe.
- Greater refined product demand exists in Asia.

Gas Supply Modes

- For large customers (refineries), hydrogen is produced onsite or delivered via pipeline.
- Also, it is delivered in gaseous or liquid form via truck or even in cylinders.

Figure 56
Global Hydrogen Sales by Company, 2006
(total of $4.7 billion)

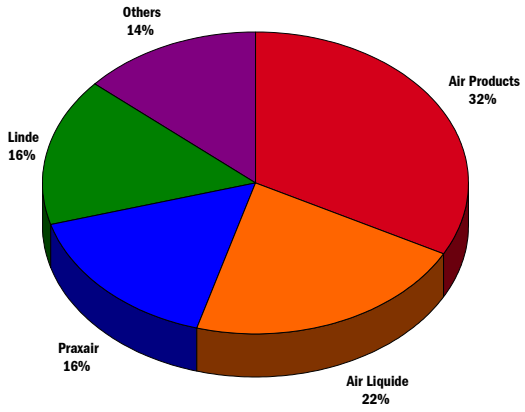
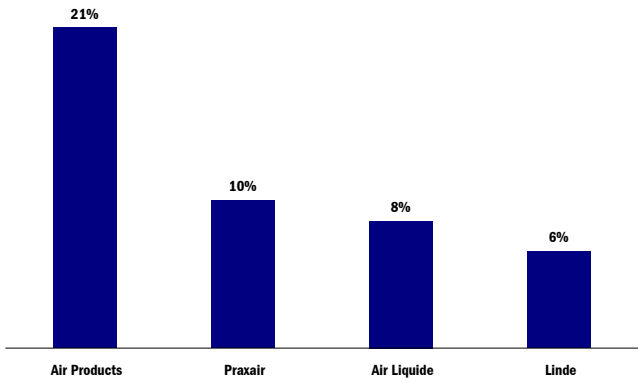


Figure 57
Company Exposure to Refinery Hydrogen, 2006
(% of company sales, excluding nongas sales)



Gases Used and Applications

- Hydrogen.

Key Customers

- Large customers include all the major refiners such as Chevron (CVX, $74.83, Neutral, Target Price: $80), ExxonMobil (XOM, $76.16, **Buy**, Target Price: $85) BP (BP, $65.04, **Buy**, Target Price: $77), Royal Dutch/Shell (RDS.A, $66.84, **Neutral**, Target Price: $72) and Total (TOT, $70.28, **Buy**, Target Price: $88). Chevron, ExxonMobil, Royal Dutch/Shell, BP and Total are covered by BAS analyst Dan Barcelo.

Source: Company reports, Banc of America Securities LLC estimates.

Food and Beverage (6% of Industry Sales)

Description

The food and beverage industry uses industrial gases to provide carbonation for soda and beer and to flash freeze foods for storage and transportation.

Growth Drivers

- Our estimated five-year growth is 5%.
- Demand tends to track GDP.
- Gas sales likely will benefit from continued efforts to prolong shelf life, particularly, in convenience foods.

Gas Supply Modes

- Large food processors and beverage companies take delivery of gases mostly in bulk via truck.

Figure 58
Global Food and Beverage Sales by Company, 2006
(total of $3.4 billion)

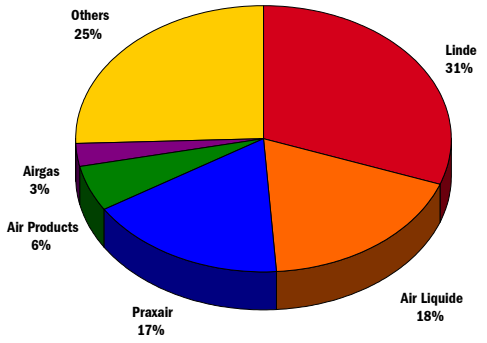
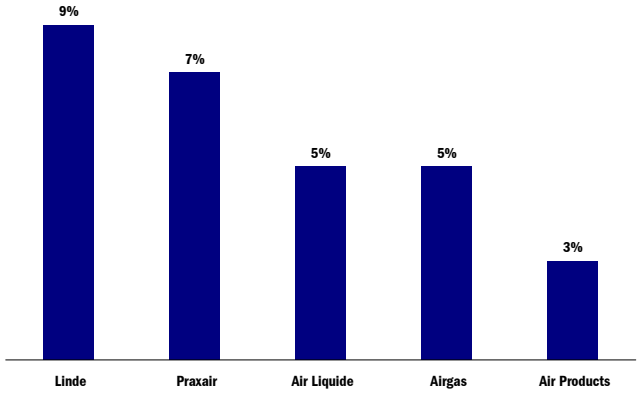


Figure 59
Company Exposure to Food and Beverage, 2006
(% of company sales, excluding nongas sales)



Gases Used and Applications

- **Carbon dioxide.** Used in carbonated drinks such as soda and in beer, and inerting for packaging foods.
- **Hydrogen.** Used for protective atmosphere and on the production of various oils.
- **Nitrogen.** Inerting gas during production of wine, beer and dairy product, and for the storage and preservation of fruits, vegetables and grains.
- **Liquid nitrogen or carbon dioxide.** Freezing of foods for storage and transport.
- **Oxygen.** Used for enriching the water on fish farms.

Source: Company reports, Banc of America Securities LLC estimates.

Key Customers

- The market for food and beverage gases is highly fragmented, with tens of thousands of customers worldwide.

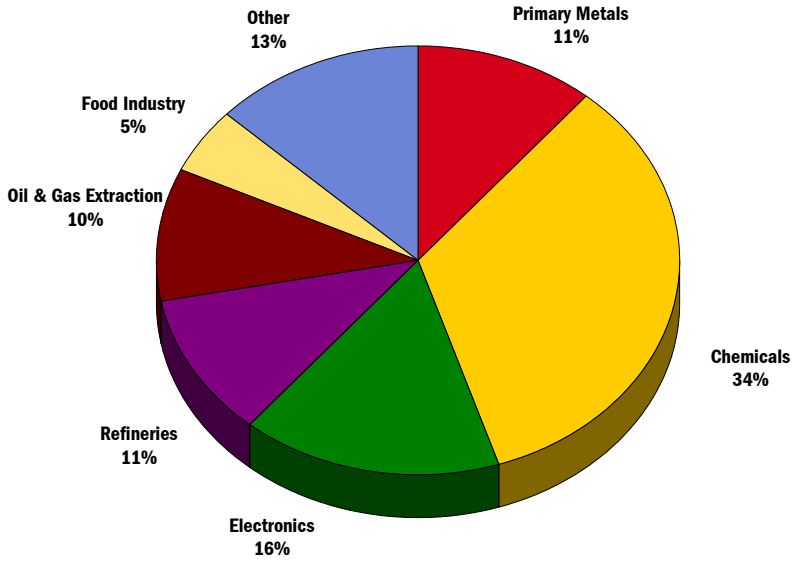
Profiles of Selected Gases

Nitrogen

Chemicals and electronics account for half of U.S. merchant consumption of nitrogen, as shown in Figure 60. U.S. nitrogen volumes are expected to grow per year at about 3% for the next five years.

Figure 60

U.S. Merchant Nitrogen Consumption by End Market
(%)



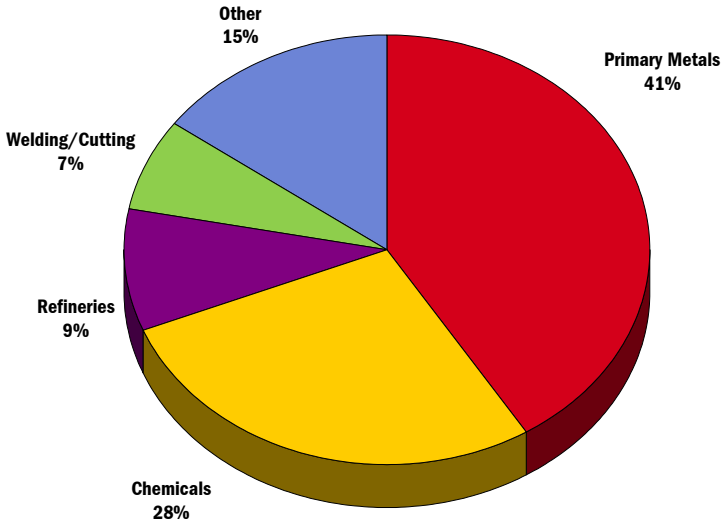
Source: SRI Research, Banc of America Securities LLC estimates.

Oxygen

U.S. consumption of oxygen is driven by industrial production. Figure 61 depicts U.S. merchant consumption by end market. Overall oxygen consumption volumes are expected to grow per year at roughly 2% in the next five years. The use of oxygen is linked to a variety of environmental applications such as oxygen-enriched combustion. Many newly developed oxygen applications can be served using noncryogenic product, which is more economical overall and also available in smaller volumes. As the composition of air determines the ratio of oxygen/nitrogen production, oxygen determines the rate of production of cryogenic units, and we typically have excess of nitrogen available for use.

Figure 61

U.S. Merchant Oxygen Consumption by End Market
(%)



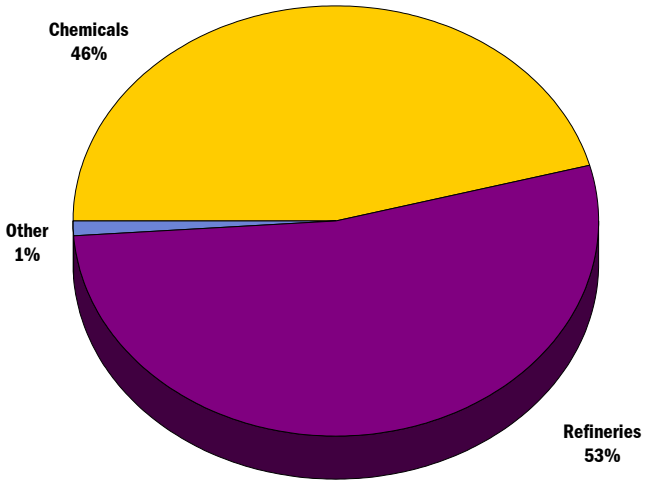
Source: SRI Research, Banc of America Securities LLC estimates.

Hydrogen

Refineries and chemical processes account for almost all hydrogen used in the United States, as shown in Figure 62. Refinery consumption is hydrogen's key growth driver. Refineries use hydrogen to reduce the sulfur content of crude oil and in gasoline. Also, U.S refineries process a higher proportion of heavy, sour crude oil, which requires more hydrogen to process than does light sweet crude. Total hydrogen volumes used by U.S. refineries are projected to grow at an annual rate of 10% in the next five years.

Figure 62

U.S. Hydrogen Consumption by End Market
(%)



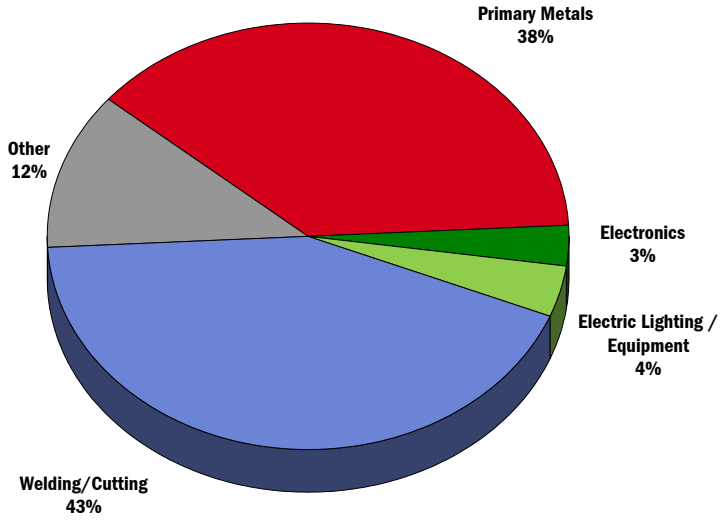
Source: SRI Research, Banc of America Securities LLC estimates.

Argon

Argon is produced predominantly as a cryogenic atmospheric gas, and produced and sold as a liquid. U.S. merchant consumption of argon, by end market, is depicted in Figure 63. Argon consumption in stainless steel production is the key driver. U.S. argon volume consumption is projected to grow by an annual rate of roughly 3% in the next five years. Relative to oxygen and nitrogen, argon is sold in lower volumes at higher price points, which tends to widen the economic distribution radius. The U.S. argon market is quite tight in early 2007 as a function of limited supply growth despite healthy demand in recent years.

Figure 63

U.S. Merchant Argon Consumption by End Market
(%)



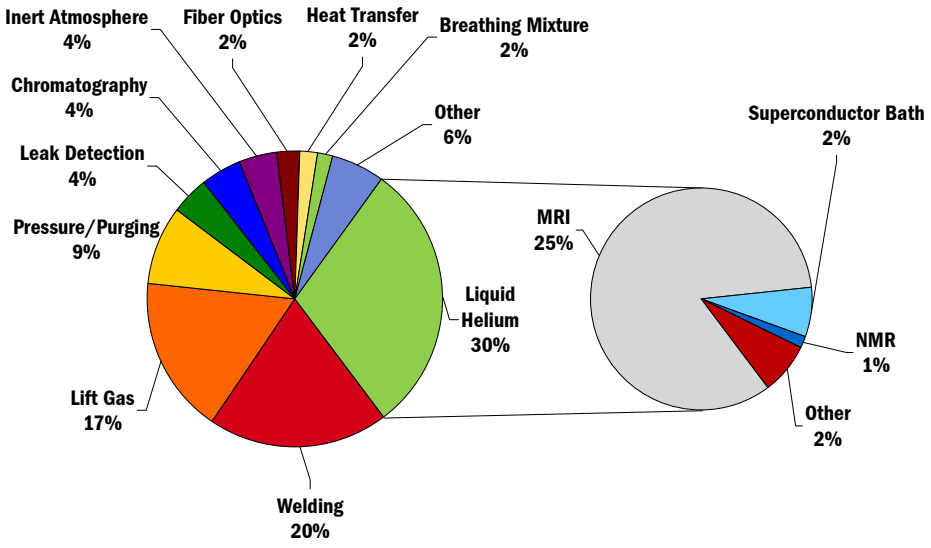
Source: SRI Research, Banc of America Securities LLC estimates.

Helium

Helium typically is extracted from natural gas by employing a low-temperature separation process that recovers crude helium, in a mixture with nitrogen. The crude helium typically is purified using pressure swing adsorption (PSA). Cryogenic separation is another purification method. After purification, the helium almost always is liquefied. About 85% of helium capacity is in the United States, with nearly all of the remaining capacity in Algeria, Russia and Poland. Figure 64 depicts the U.S. consumption of high-purity helium.

Figure 64

U.S. High-Purity Helium Consumption by End Market
(%)



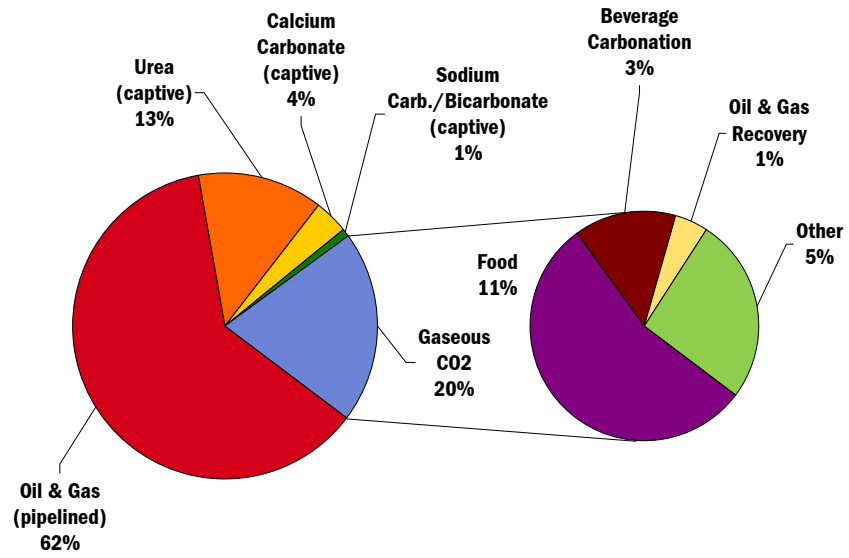
Source: SRI Research, Banc of America Securities LLC estimates.

Carbon Dioxide

Carbon dioxide is produced as a byproduct of hydrogen (through "syngas"), or a byproduct of other chemical processes. In some regions, it is also recovered from naturally occurring deposits. Figure 65 summarizes the uses of carbon dioxide in the United States. Annual volume growth is estimated at roughly 2% in the next five years.

Figure 65

U.S. Merchant Carbon Dioxide Consumption by End Market
(%)



Source: SRI Research, Banc of America Securities LLC estimates.

Company Reports

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April 3, 2007

PX

$62.96

12-Month Target:
$61.00

Total Return To Target:
(1.2%)

Neutral

Market Cap.	Volatility
$20.7 BB	Low

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Changes at a glance

(Please see page 2 for additional detail)

Rating?	Target Price?
No ◀▶	No ◀▶
Maintain Neutral	Maintain $61.00 Target

Revenue (MM)			Prev	Curr	
FY06	No		–	$8,324.0	
FY07E	No		–	$9,016.0	

EPS**			Prev	Curr	P/E
FY06	No	◀▶	–	$2.99	21.1
FY07E	No	◀▶	–	$3.40	18.5
FY08E	No	◀▶	–	$3.75	16.8

* No Previous Values

▲ = Up; ▼ = Down; ◀▶ = No Change. ** These estimates adjusted to account for FAS 123r, Expensing of Employee Stock Options.

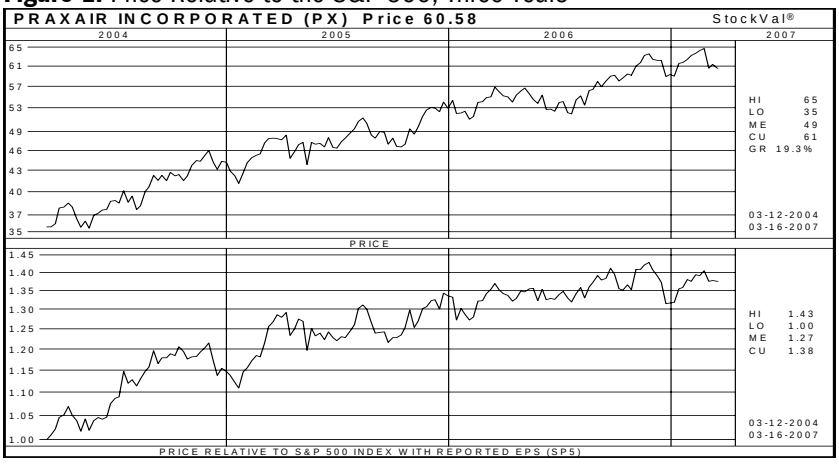
Chemicals

Praxair, Inc.

Well-Managed, Disciplined Leader; Remain Neutral on Valuation, Mix

- **We maintain our rating of Neutral with a target price of $61.** Praxair is the largest supplier of industrial gases (nitrogen, oxygen and hydrogen) in the Americas. Notwithstanding our enthusiasm for global fundamentals, we consider Praxair shares fully valued at 18.5x our 2007 EPS estimate of $3.40, given underweight positions in Asia, and a recovering European market as well as overweight exposure to primary metals in the U.S.
- **We consider Praxair a high-quality company.** Management demonstrates exemplary discipline in pursuit of the dual goals of maximizing return on capital (ROC) and growth via focus on 11 core geographic markets: United States, Canada, Spain, Italy, Germany/Benelux, South Korea, China, Thailand, India, Brazil and Mexico.
- **We view the industrial gas industry favorably.** We consider the industry an attractive oligopoly (four largest players command 70% of the global market) wherein long-term contracts typically contain four attractive features: (1) long-term duration of 10-20 years; (2) "take-or-pay" minimum volume requirements; (3) pass-through of natural gas cost fluctuations; and (4) formula-based selling price escalators. Such conventions render industrial gas companies less cyclical and more stable than other commodity chemical manufacturers.
- **Our primary obstacle to a more constructive posture is valuation.** Despite our enthusiasm for fundamental prospects, we consider Praxair shares fully valued at 18.5x our 2007 estimate of $3.40, which is 3.1 multiple points higher than 15.4x for the S&P500 and near the highest relative P/E multiple in Praxair's 13-year history as a publicly traded company.
- **Valuation and Target Price Analysis:** Our DCF-based target price of $61 suggests Praxair shares merit a multiple of 17.9x our 2007 EPS estimate of $3.40.

Figure 1: Price Relative to the S&P 500, Three Years



Source: StockVal.

Praxair, Inc.

Company Data

52-Week Range	$65-51
Market Capitalization (BB)	$20.7
Shares Outstanding (MM)	329.5
Float (MM)	322.6
Short Interest	1.1%
Average Daily Volume	1,492,932
Dividend/Yield	$1.20/1.9%
12/06 ROE/ROIC	23.8%/14.4%
Exchange-Traded Funds	XLB,PBW,IYM
Convertibles	NO
Proj. 3-Yr. EPS Growth Rate	14%

Balance Sheet (12/06)

Net Cash/Share	($9.50)
Book Value/Share	$13.81
Price/Book Value	4.6x
Debt/Cap.	41.0%

Estimates (FYE Dec)	2006A	2007E Prev	2007E Curr	2008E Prev	2008E Curr
EPS*					
1Q (Mar)	$0.68	–	$0.79	–	
2Q (Jun)	0.75	–	0.85	–	
3Q (Sep)	0.74	–	0.87	–	
4Q (Dec)	0.82	–	0.89	–	
Fiscal Year	**$2.99**	–	**$3.40**	–	**$3.75**
First Call Mean			$3.42		$3.86
Calendar Year	**$2.99**	–	**$3.40**	–	**$3.75**
P/E	21.1		18.5		16.8
P/E/G	150%		132%		120%
Revenue (MM)					
1Q (Mar)	$2,026.0	–	$2,158.0	–	
2Q (Jun)	2,076.0	–	2,246.0	–	
3Q (Sep)	2,099.0	–	2,295.0	–	
4Q (Dec)	2,123.0	–	2,318.0	–	
Fiscal Year	**$8,324.0**	–	**$9,016.0**	–	**$9,557.0**
First Call Mean			$9,021.2		$9,782.7

* These estimates adjusted to account for FAS 123r, Expensing of Employee Stock Options. First Call Mean estimates might not have been similarly adjusted.

Top Picks

Celanese Corporation
(CE, $30.99, B, $35.00 Target)

Airgas, Inc.
(ARG, $41.84, B, $47.00 Target)

Least Favorites

NOVA Chemicals Corporation
(NCX, $31.10, N, $26.00 Target)

Albemarle Corporation
(ALB, $42.02, N, $39.50 Target)

Company Description

▶ Praxair is the largest industrial gases company in North and South America, with 2006 sales of $8.3 billion. Industrial gases are 94% and Surface Technology (wear- and corrosion-resistant metallic and ceramic coatings/powders) is 6% of sales. Praxair serves 25 industries, including health care, energy, electronics, food, steel, aerospace, chemicals and manufacturing.

Sector View

▶ Market-weight.

Chemicals
Kevin W. McCarthy, CFA 212.847.5370

Summary and Investment Conclusion

Praxair is the leading industrial gas player in North America.

We rate Praxair shares Neutral with a target price of $61. We expect Praxair to generate $9.0 billion of sales in 2007, of which 94% is derived from industrial gases such as nitrogen, oxygen, hydrogen, helium, argon and carbon dioxide. The balance of 6% comes from Praxair Surface Technologies (PST), a business that focuses on ultra-high-performance coatings and related technologies. As ranked by equity market capitalization, Praxair is the fourth-largest U.S. chemical company behind Dow Chemical (DOW, $45.60, Neutral, Target Price: $42), DuPont (DD, $49.06, Neutral, Target Price: $49) and Monsanto (MON, $55.01, Neutral, Target Price: $47).

Praxair has fostered growth by investing in selected platforms and geographies.

We project long-term sales and earnings growth of 6% and 11%, respectively. Management pursues a dual strategy, emphasizing high returns on capital, coupled with high sales growth. In pursuit of this dual objective, Praxair focuses on 11 core geographic markets that include the United States, Canada, Spain, Italy, Germany/Benelux, South Korea, China, Thailand, India, Brazil and Mexico. It is this geographic focus, or regional density, in our view, that allows for superior returns given high barriers to entry and higher growth via favorable network effects. Historically, demand for industrial gases has grown at 1.5x industrial production growth, while growth in recent years has been even greater as a function of customers' efforts to improve production efficiency and environmental profiles, while reducing energy consumption.

Praxair appears well positioned for long-term growth. Over the near term, mix issues concern us given underweight positions in Asia and (a recovering) Europe market as well as overweight exposure to primary metals in the U.S., for example, via sale of oxygen for steel production. In terms of end-use markets, fast-growing applications include refinery hydrogen (10% of estimated 2007 sales), health care (11%) and electronics (8%). Key emerging markets include China (share of about 8-10% of a more than $2 billion market with growth of 15-20%), India (a share of about 35% of more than a $350-million market with 20% growth) and Brazil (share of about 60-65% of a more than $1.5-billion market with growth of 10-15%,). Praxair's project pipeline of 38 projects with size greater than $5 million also enhances visibility. Demand for hydrogen could grow by 10-15%, driven by low-sulfur regulations as well as the need to process heavy, sour crude oil. Praxair also benefits from enhanced oil recovery (EOR), which is economic at more than $35/bbl and could grow 20-25% for the balance of the decade.

Praxair stock trade at a premium of 17% to the S&P 500.

Valuation is fair, in our view. Our DCF-based target price of $61 suggests that the shares are fully valued, notwithstanding our enthusiasm for industry structure and international growth prospects. Praxair trades at a multiple of 18.5x our 2007 EPS estimate of $3.40, a 3.1 multiple-point premium versus a multiple of 15.4x consensus 2007 EPS estimate for the S&P 500. Indeed, Praxair shares' relative P/E multiple of 1.2x that of the S&P 500 is near the highest in Praxair's 13-year history as a publicly traded company. Although projected return on capital (ROC) of 15.2% for 2007 is respectable, FCF is less attractive. Praxair shares offer an estimated 2007 FCF yield of only 3.0%, among the lowest in our coverage universe.

Figure 2

Sales by Segment, Estimated 2007

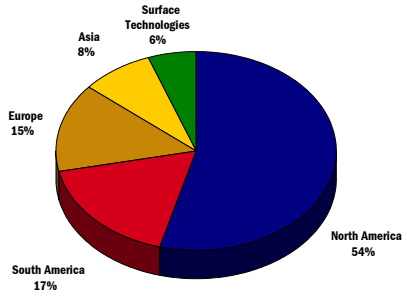
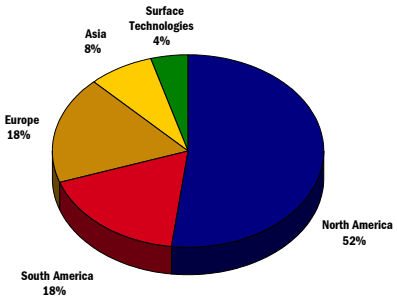


Figure 3

EBIT by Segment, Estimated 2007



Source: Banc of America Securities LLC estimates, company reports.

Figure 4

Sales by Geography, Estimated 2007

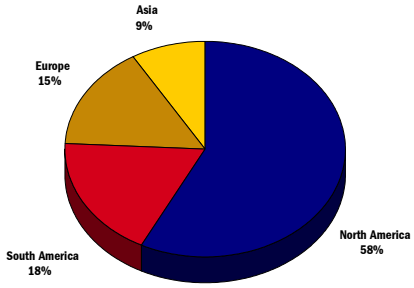
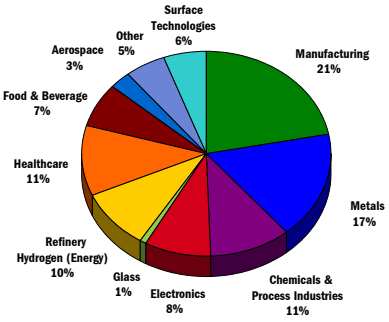


Figure 5

End-Use Markets, Estimated 2007



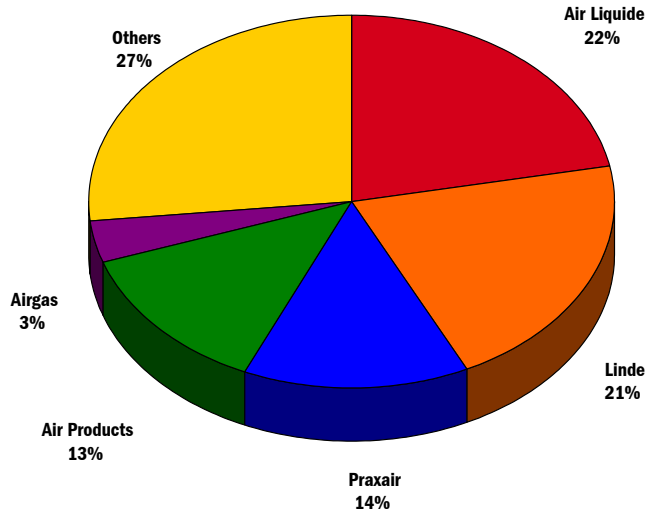
Source: Banc of America Securities LLC estimates, company reports.

Investment Positives

- **The global industrial gas industry is well consolidated.** The industry is oligopolistic in nature. Primary competitors include Air Liquide (France), Linde/BOC (Germany) and Air Products (United States). These top four firms account for about 70% of global industry sales, as shown in Figure 6.

Figure 6

Industrial Gases
Global Market Share, 2006



Source: Banc of America Securities LLC estimates.

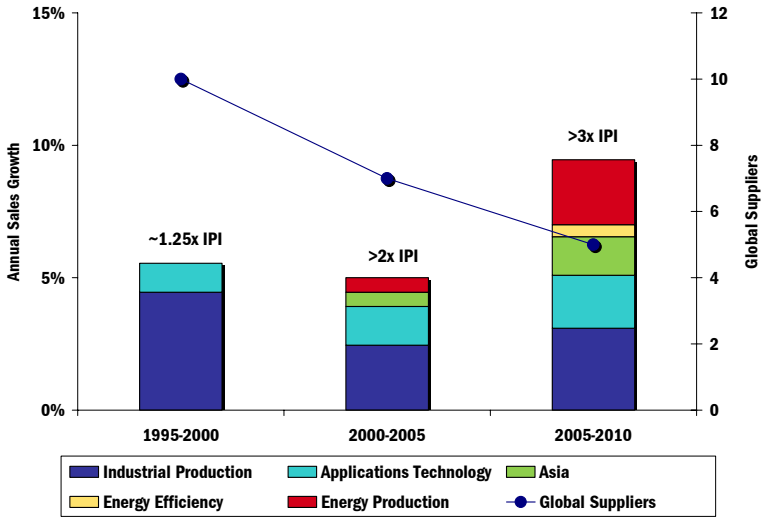
- **Praxair is the purest U.S. play in industrial gases.** Industrial gases represent 94% of Praxair's estimated 2007 sales. The company historically has traded at a premium over primary U.S. competitor Air Products. This "pure-play edge," however, represents less of a distinction between the two competitors today than it did in the past. We expect Air Products' nongas portion to decline from 24% of sales in fiscal 2005 to 9% in fiscal 2007 pro forma for proposed divestitures.

Growth is driven by Asia and energy.

- **Praxair enjoys sustainable growth.** As shown in Figure 7, historically Praxair has been able to grow faster than industrial production (IPI) because of the increased use of industrial gases in new technologies that have boosted gas sales. In the early part of this decade, IPI growth dropped, but Praxair's multiple of IPI growth increased to more than 2x, thanks to new business in emerging Asian economies and applications in energy production. Looking ahead, we expect growth to continue with important contributions from Asia and the energy arena. Moreover, with increases of natural gas and crude oil prices to record levels, Praxair is now benefiting from energy efficiency applications that promote the use of oxygen in combustion.

Figure 7

Praxair, Inc.
Sources of Sales Growth

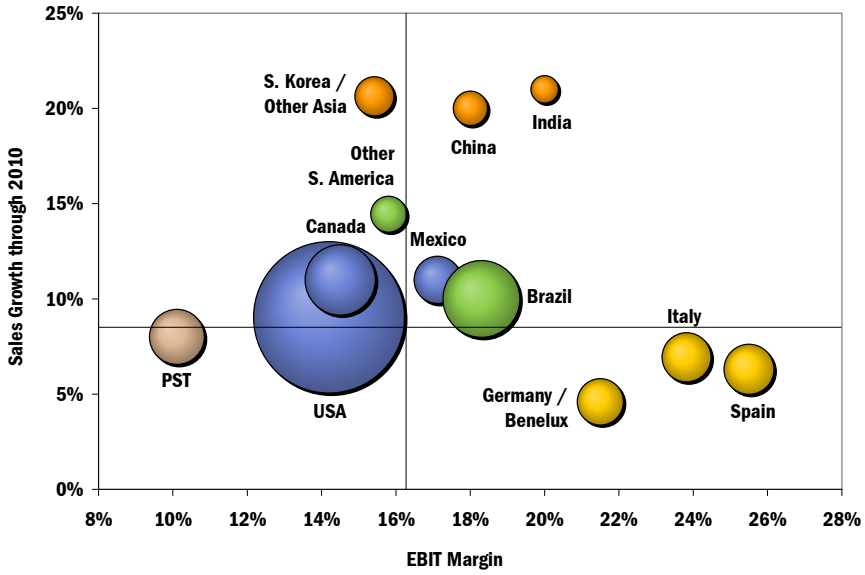


Source: Banc of America Securities LLC estimates.

- **Praxair's strategy of high regional density is paying off.** Management pursues a dual strategy emphasizing high returns on capital coupled with high sales growth. In pursuit of this dual objective Praxair focuses on 11 core geographic markets: United States, Canada, Spain, Italy, Germany/Benelux, South Korea, China, Thailand, India, Brazil and Mexico. It is this geographic focus, or regional density, that allows for superior returns given high barriers to entry and higher growth via favorable network effects. Although these geographic markets are not explicitly reported, we have attempted to estimate growth and margins by region, as shown in Figure 8 (the crosshairs represent the company average, excluding eliminations because of internal company sales). Praxair's business is well diversified, with premium growth coming from Asia and premium margins coming from Europe. North America is Praxair's core market, where the company wins business through dense networks and diverse technology offerings. Praxair also dominates the industrial gas business in S. America with a market share of about 45%. Another important aspect of profitability is return on capital (ROC), which does not necessarily follow the pattern of Figure 8.

Figure 8

Praxair, Inc.
Portfolio Analysis, by Geographic Region



Source: Banc of America Securities LLC estimates.

China is growing rapidly from a small base at Praxair.

Hydrogen demand is growing about 10-15% per year.

- **Praxair is number one/two in three key emerging markets: China, India and Brazil.** Asia and S. America markets account for about 25% of total 2007 sales estimates, and are growing at a double-digit pace.
- **Hydrogen is a high growth market.** Praxair sells hydrogen to refineries, which use it to remove sulfur in compliance with environmental regulations. Refinery hydrogen sales account for an estimated 10% of Praxair's sales mix with projected annual growth of 10-15% over the next five years as a function of increasingly stringent environmental regulations and a higher proportion of heavy, sour crude oil, which requires more hydrogen to process than does light sweet crude. In 2004, Praxair added BP and Motiva to its list of major customers serviced along the company's 310-mile hydrogen pipeline in the U.S. Gulf Coast. In third quarter 2006, Praxair the company started supplying high-purity hydrogen to Valero's Houston and Texas City refineries. Praxair announced the development of a new 25-30 mile pipeline system in N. California, with capacity of 260 mmscfd, due online in third quarter 2008. The pipeline will be proximate to Chevron, ConocoPhillips, Shell, Valero and Tesoro refineries.
- **Health care acquisitions supplement organic growth.** Oxygen is used for respiratory therapy in the home and in hospitals to treat patients with emphysema, asthma and other respiratory ailments. We project attractive organic growth of about 6% as a function of favorable demographics and increased focus on homecare over hospital care. Bolt-on acquisitions also add to growth and earnings via improved geographic density. For example, in August 2004, Praxair acquired Home Care Supply (HCS), the largest privately held U.S. home respiratory and medical equipment provider with 59 locations in 13 states from Texas through the mid-Atlantic. The $245 million acquisition (1.45x 2003 sales) made Praxair the

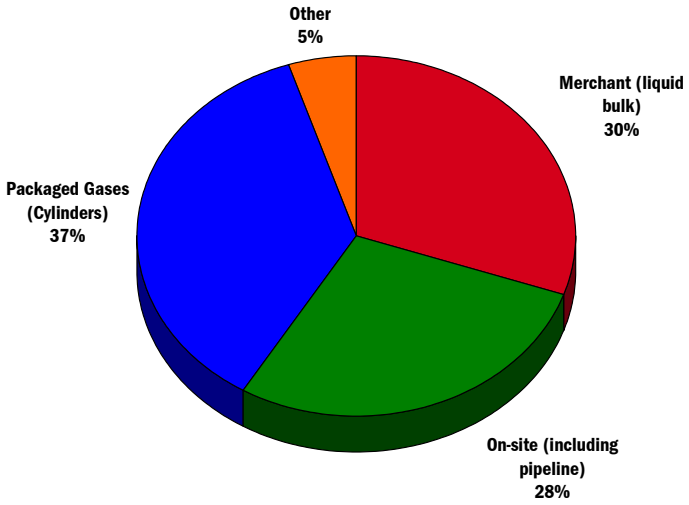
fourth-largest U.S. home health care provider behind Lincare (LNCR, $36.76, **Neutral**, Target Price: $35, covered by BAS analyst Gary Taylor), Apria (AHG, $32.42, **Sell**, Target Price: $23, covered by BAS analyst Gary Taylor) and Rotech (ROHI, $1.75, Not Rated). More recently, Praxair acquired Lake County Medical Gas for an undisclosed amount to strengthen its position in Illinois, and JSA Healthcare Corp, also for an undisclosed amount, which provided regional strength in Central Florida, Las Vegas, Nevada, and Southern California. Both acquisitions were announced and closed in November 2006.

Energy exposure is mitigated via pass-through of natural gas costs.

- **Contracts typically contain favorable provisions.** As shown in Figure 9, onsite production, including deliveries via pipeline, will account for an estimated 28% of Praxair's industrial gases revenue in 2007. Onsite/pipeline business typically features long-term contracts with four attractive features: (1) long-term duration of 10-20 years; (2) "take-or-pay" minimum volume requirements; (3) pass-through of natural gas cost fluctuations; and (4) formula-based selling price escalators. Praxair's pipeline complexes (United States, Brazil, Spain and Germany) also provide barriers to entry that confer economic advantages on Praxair as an incumbent supplier. For merchant/bulk liquid (nonpipeline) business (estimated at 30% of 2007 sales), contracts are usually three to five years in duration and include energy pass-through provisions, but may exclude take-or-pay requirements and automatic price escalators.

Figure 9

Praxair, Inc.
Mode of Supply, Estimated 2007



Source: Company reports, Banc of America Securities LLC estimates.

- **Sales of packaged gases are thriving.** Packaged gases refer to gases delivered in cylinders as opposed to other modes of supply such as on-site production, pipeline delivery and merchant sales of liquid gases. Packaged gases are estimated at 37% of Praxair's gases mix in 2007 estimates.

- **Corporate governance receives high marks.** GovernanceMetric International, a leading independent governance ratings agency, assigned Praxair its highest rating placing the company among the top 2% of 2,588 companies worldwide. Moreover, Praxair is one of only four companies to have received the top score in each of the last three years.

Investment Risks

- **Exposure to Latin America is significant.** Praxair has considerable exposure to South America through its White Martins business, which enjoys an estimated market share of 60-65% in Brazil. Revenues from South America comprise an estimated 17% of Praxair's total sales in 2007 estimates. Brazil alone accounts for roughly 12% of total sales, exposing Praxair to earnings risk during periods when the Brazilian Real weakens relative to the U.S. dollar (please see Figure 10). However, in about 40% of its Brazilian contracts Praxair has currency pass-through clauses that mitigate exposure.

The Brazilian Real generally has strengthened since 2002.

Figure 10

Brazilian Real Indexed Exchange Rate

Source: FactSet.

- **Praxair's portfolio is underexposed to Asia relative to peers.** Despite premium growth, Asia is expected to account for only 8% of Praxair's estimated total 2007 sales, versus 13% for competitor Air Products.
- **Volume growth is positively correlated with industrial production.** As a consequence, any deceleration in industrial production could pressure volume growth and, consequently, profitability.
- **Welding litigation poses a risk.** Praxair has been named as a defendant on claims brought by welders alleging that exposure to manganese contained in welding fumes caused neurological injury. Praxair's predecessor Union Carbide manufactured such welding consumable products prior to 1985. At year-end 2006,

Praxair was co-defendant in 1,531 cases in Federal and State courts, involving 5,394 individual claimants. In the past, Praxair has been dismissed from the cases with no payment, or settled for nominal amounts. If Praxair were to be found at fault in a substantial portion of the pending cases, the effect on Praxair's financials could be significant. However, this appears to us unlikely, given the outcomes of cases to date.

- **Homecare business is subject to reductions in Medicare reimbursement rates.** Praxair's homecare business profitability has been adversely affected by reimbursement reductions caused by the Medicare Modernization Act of 2003. We do not believe that another wave of such legislation is imminent as such legislation is debated extensively before it is enacted. We expect the current rates are likely to remain in place until at least 2009.

Valuation

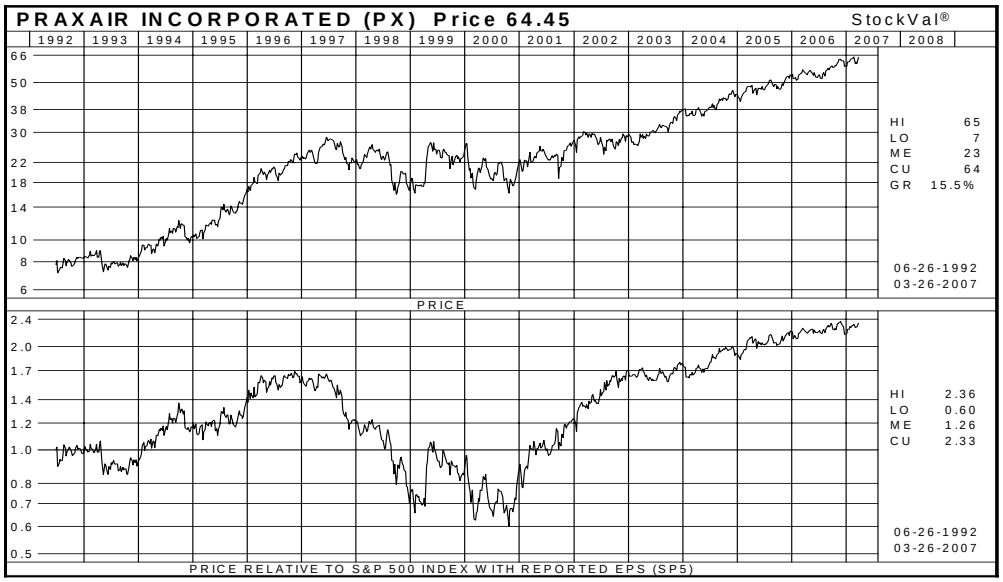
Performance and Relative Performance

Praxair has outperformed the broader market in recent years. Since the company's spin-off from former parent Union Carbide in June 1992, Praxair shares have appreciated by 687% (15.3% per year), handily outpacing the S&P500 index price return of 305% (10.1% per year) over the same period. Including dividends, total shareholder return has grown at a rate of 15.9% per year (S&P500: 11.2%). Figure 11 depicts Praxair's share price performance and its performance relative to the S&P 500 since the company's spin-off from Union Carbide in June 1992. Throughout the current economic cycle (2000-present), Praxair has consistently outperformed the S&P500 index and is trading near its all-time high.

Praxair is trading near its all-time high price.

Figure 11

Praxair Inc.
Share Price Performance and Relative Performance Versus S&P 500, 1992—2007



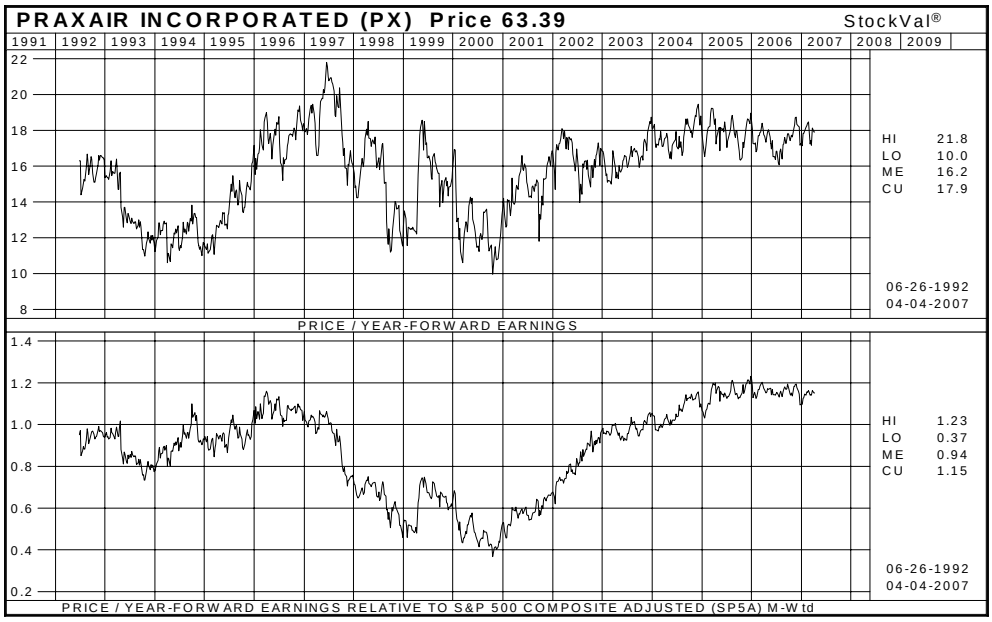
Source: StockVal.

P/E and Relative P/E Multiple Analysis

Praxair trades near an all-time high P/E relative to the S&P 500. Praxair stock trades at a multiple of 18.5x 2007 EPS estimates of $3.40, a substantial premium to the 15.4x 2007 EPS estimate for the S&P 500. Figure 12 depicts Praxair's historical forward P/E performance as well as its performance relative to the S&P 500. Praxair stock trades well above its 16.2x historical forward average. Relative to the S&P 500, it trades near its all-time high of 1.23x.

Figure 12

Praxair Inc.
Historical Forward P/E Range and P/E Relative to the S&P 500 Index, 1992—2007



Source: StockVal.

Praxair is trading well above its historical average P/E multiples, relative to the S&P 500.

Relative Valuation

Praxair trades at a premium to the company's U.S. major chemicals and industrial gases peers.

Praxair stock trades at a premium versus U.S. major chemical players. Praxair shares trade at a multiple of 9.6x estimated 2007 EBITDA, or 0.3 EBITDA points over the median of industrial gas peers and 2.0 EBITDA points over major U.S. major chemical company peers, mainly because of lower cyclicality and stable cash flows (see Table 1). In fairness, as major chemical companies approach peak earnings, enterprise value (EV)/EBITDA tends to decrease as the denominator increases to its peak value. In other words, major chemicals' stocks tend to exhibit lower multiples close to their cyclical peak. Industrial gases' stocks have smoother earnings over time and their multiples fluctuate less over the cycle.

Table 1

Praxair, Inc.
Comparable Company Analysis

Company	Ticker	2006 P/E	2007E P/E	2008E P/E	2006 EV/EBITDA	2007E EV/EBITDA
Dow Chemical	DOW	10.7	11.3	12.8	6.5	6.7
DuPont	DD	16.8	15.3	14.0	9.5	8.6
Rohm and Haas	ROH	15.0	14.6	13.8	8.0	7.7
PPG Industries	PPG	14.3	13.7	13.4	7.7	7.4
Mean – Major Chemicals		**14.2**	**13.7**	**13.5**	**7.9**	**7.6**
Median - Major Chemicals		**14.6**	**14.1**	**13.6**	**7.8**	**7.6**
Air Liquide	401140	21.8	19.4	17.3	10.0	9.2
Air Products and Chemicals	APD	20.1	17.6	15.5	9.9	8.9
Linde	574081	18.1	19.5	15.4	9.0	9.2
Airgas	ARG	22.0	18.3	15.7	9.6	8.8
Mean – Industrial Gases		**20.5**	**18.7**	**16.0**	**9.6**	**9.0**
Median – Industrial Gases		**21.0**	**18.9**	**15.6**	**9.8**	**9.0**
Praxair	**PX**	**21.1**	**18.5**	**16.8**	**10.8**	**9.6**

Note: Company financials are on a calendar basis.

Sources: FactSet, Banc of America Securities LLC estimates.

Praxair shares trade at a premium to industrial gas competitors. Praxair's leadership position, business mix, earnings quality and size make the company a close competitor mainly with Air Liquide and Air Products that trade at an estimated 2007 EV/EBITDA of 9.2x and 8.9x, respectively. In EV/EBITDA terms, Praxair's stock trades at a premium over Air Liquide and Air Products.

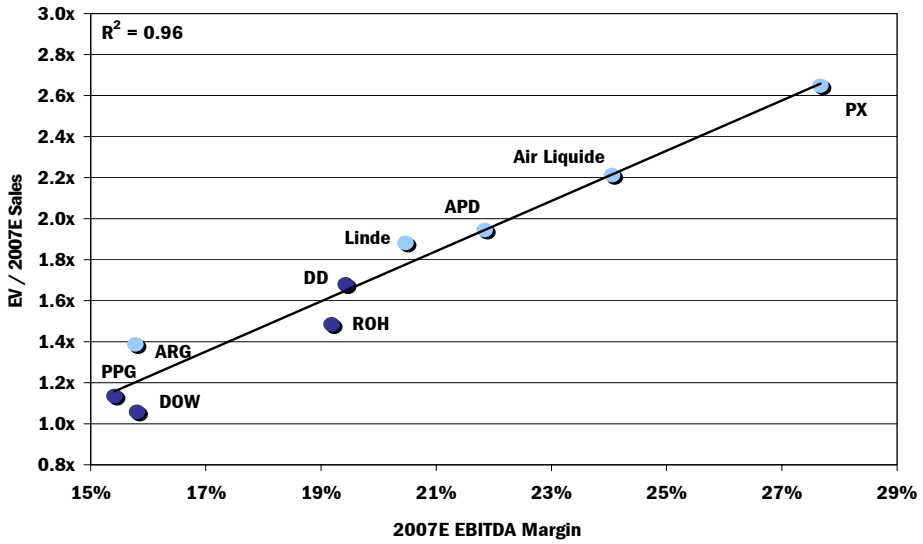
From the perspective of EV to sales, Praxair trades at a multiple of 2.6x EV to estimated 2007 sales, a premium of about 100% over the average of 1.3x for major chemical comparables, and a premium of 36% over the average of 1.9x for industrial gas peers. However, the estimated 2007 EBITDA margin of 28% for Praxair, which is 9% more than the average of industrial gas and major chemical comparables, partially justifies the premium, as shown in Figure 13.

We see limited upside at these valuation levels.

P/E multiple analysis reveals that Praxair's stock trades at a significant premium versus U.S. major chemical companies and within range compared to industrial gas peers. Based on these observations, from P/E and EV/EBITDA comparative analyses, we view Praxair as fairly valued at current trading levels.

Figure 13

Praxair, Inc.
EV to Sales Versus Chemical Company Peers, Estimated 2007



Source: Company reports, Banc of America Securities LLC estimates.

Discounted-Cash-Flow Analysis

DCF analysis suggests Praxair shares are fully valued.

We favor discounted cash flow (DCF) analysis as the valuation method of choice for chemical companies. Our 10-year, three-stage DCF valuation models incorporate many aspects of companies' economic value not always captured via simple P/E and EV/EBITDA multiples. These include timing of fluctuations in the earnings cycle, financial leverage, cost of capital, working capital management, capital efficiency, tax efficiency, pension plan funded status, significant investments and extraordinary cash flows. Our DCF-derived valuation of $61 suggests that at current trading levels, Praxair is fully valued.

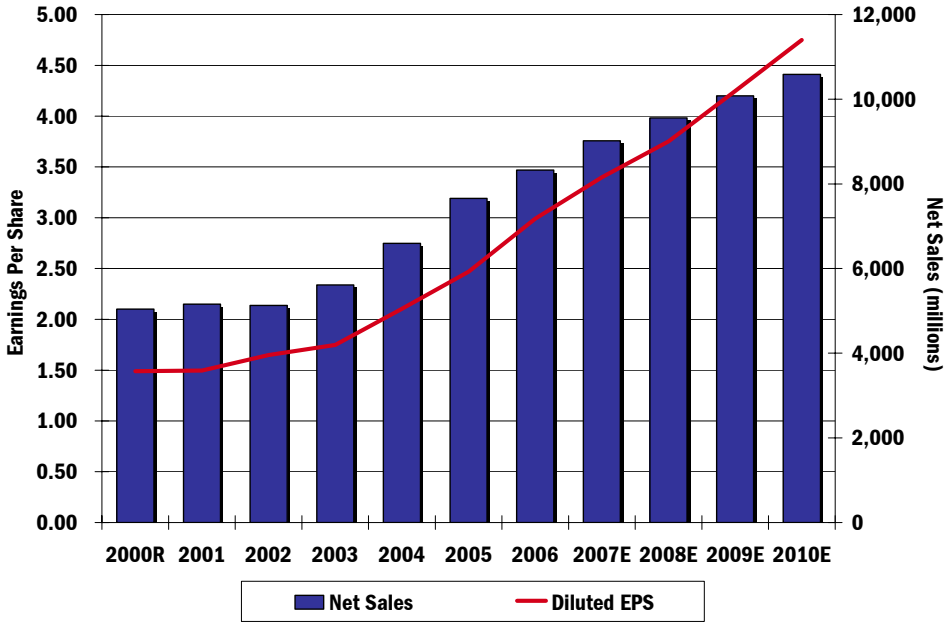
Income Statement

We project long-term earnings growth of 11%. This is in line with industrial gas peers, as a result of a combination of exposure to fast-growing South American and Asian markets, counterbalanced by a large portion of income coming from the mature markets of North America. Europe has reported strong growth as well in recent months.

Praxair's strategy to focus on 11 strategic regions likely will continue to provide growth opportunities even in mature markets by leveraging the benefits of the company's leading distribution network. Limited research and development (R&D) spending by industrial gas companies is a clear indicator that there is focus on incremental improvements but little expectation for a transformational technology changing the dynamics of the industry. The consolidated structure of the industrial market does not seem to leave much room for growth via a transformational deal. We believe that Praxair is likely to supplement its growth through a series of bolt-on acquisitions in carefully selected growth sectors such as health care.

Figure 14

Praxair, Inc.
Income Statement, 200R–Estimated 2010



Source: Company reports, Banc of America Securities LLC estimates.

Energy costs mostly are passed through to the customer.

Energy costs generally are passed through. The industrial gases business has low raw material costs as well as high capital and energy costs. The high capital costs are addressed by building onsite production facilities with long-term take-or-pay contracts. Most contracts include a pass-through provision for energy costs. The few contracts that do not include such a provision involve premium pricing as compensation. Although pass-throughs do not affect cash profits in nominal terms, margins can be significantly lower in periods with high energy costs.

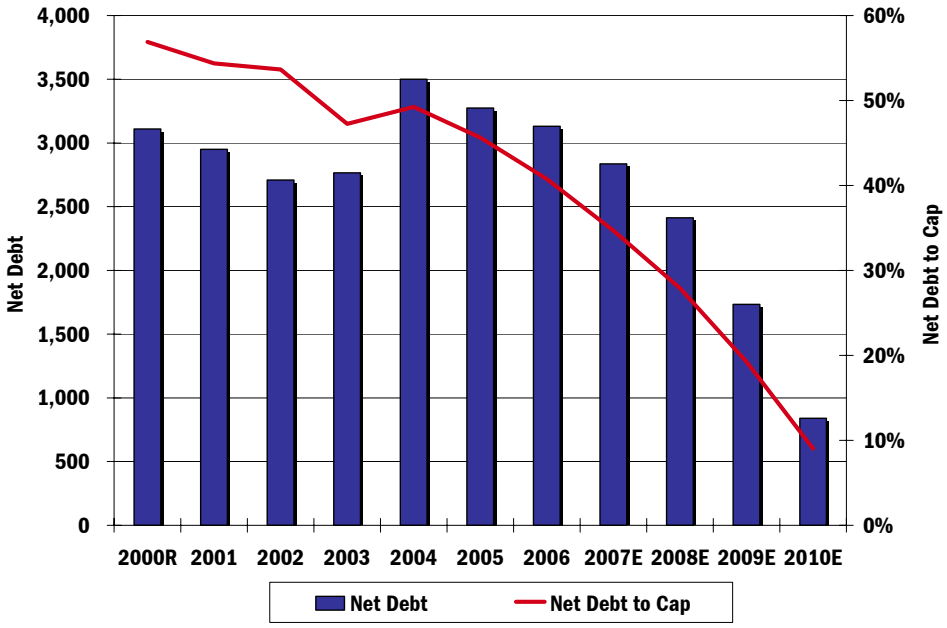
Balance Sheet

Praxair is rated "A," with a strong balance sheet position.

Balance sheet is in decent shape. Net debt accounted for 41% of total capitalization as of December 31, 2006. We view financial leverage as manageable given the company's modest cyclicality, consistent cash flows and history of improving leverage ratios. Standard & Poor's rates the company's senior debt as "A," with a stable outlook and Moody's corresponding rating is "A2," also with a stable outlook. Praxair's acquisition of certain German assets from Air Liquide (originally Messer assets) in 2004 did not result in a significant balance sheet setback, as shown in Figure 15. We believe that the company's target capital structure is near current levels. Interest coverage, defined as earnings before interest and tax (EBIT)/interest expense, is a comfortable 9.7x and debt to EBITDA is only 1.4x. Despite plenty of "dry powder" to do a larger deal, industry structure and past history indicate to us that Praxair is more likely to continue to grow in selective sectors (such as North American distribution) via a series of bolt-on acquisitions.

Figure 15

Praxair, Inc.
Balance Sheet, 2000—Estimated 2011



Source: Company reports, Banc of America Securities LLC estimates.

We expect no difficulty in refinancing debt. As shown on Table 2, in 2007-2008 $1.05 billion are coming due. We do not expect any difficulty refinancing at reasonable rates given the company's solid credit rating and stable cash flows.

Table 2

Praxair, Inc.
Term Structure
($ millions)

Issue Date	Issued ($)	Coupon	Maturity
19-Jun-02	250	4.750%	15-Jul-07
20-Oct-97	250	6.625%	15-Oct-07
07-Mar-01	250	6.500%	01-Mar-08
05-Jun-03	300	2.750%	15-Jun-08
19-Mar-02	500	6.375%	01-Apr-12
30-May-03	350	3.950%	01-Jun-13
02-Nov-06	400	5.375%	01-Nov-16
15-Mar-07	325	5.200%	15-Mar-17
Total	**$2,625**		

Source: Company reports, Banc of America Securities LLC estimates.

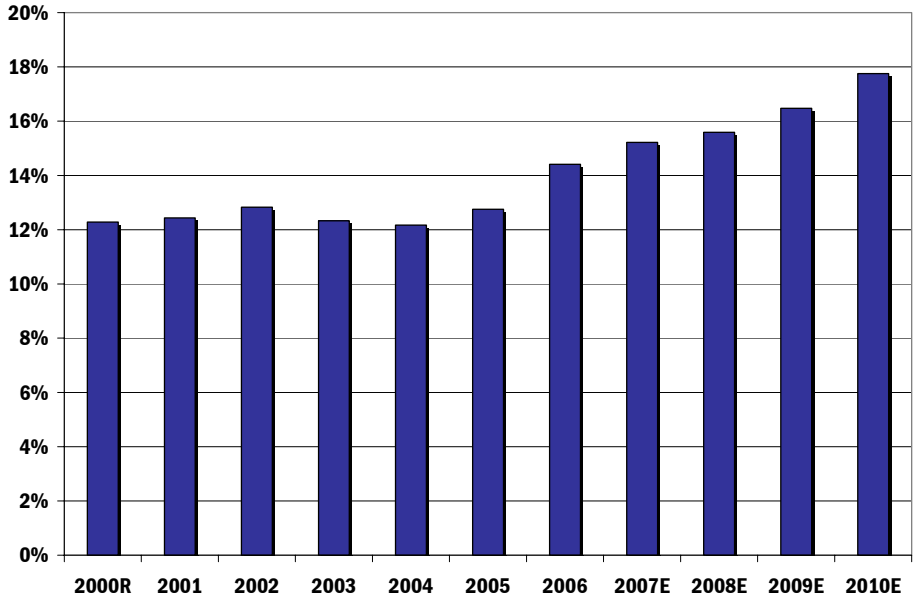
Praxair's off-balance sheet financing is not excessive. As of December 31, 2006, Praxair had a total of $315 million of operating leases, $1,191 million in unconditional purchase obligations (primarily take-or-pay commitments for electricity, natural gas and other feedstock), $970 million in construction commitments and $89 million in other guarantees. The total off-balance sheet financing was $2.6 billion at year-end 2006, up from $1.1 billion at year-end 2004.

Praxair has a solid record of high returns on capital. During the period 2000- 2006, Praxair generated an average return on capital of 12.7% (see Figure 16). We expect this solid performance to improve. Certain key aspects that have supported such high returns include careful containment of capital expenditure and R&D spending, as well as focus on 11 key geographies where Praxair can provide superior service while leveraging its existing dense network, thereby minimizing incremental capital costs.

We expect ROC levels exceeding 14% for the balance of the decade.

Figure 16

Praxair, Inc.
Cash Return on Capital, 2000R–Estimated 2011



Note: ROC is calculated as net operating profit after tax (NOPAT)/average (debt plus equity).

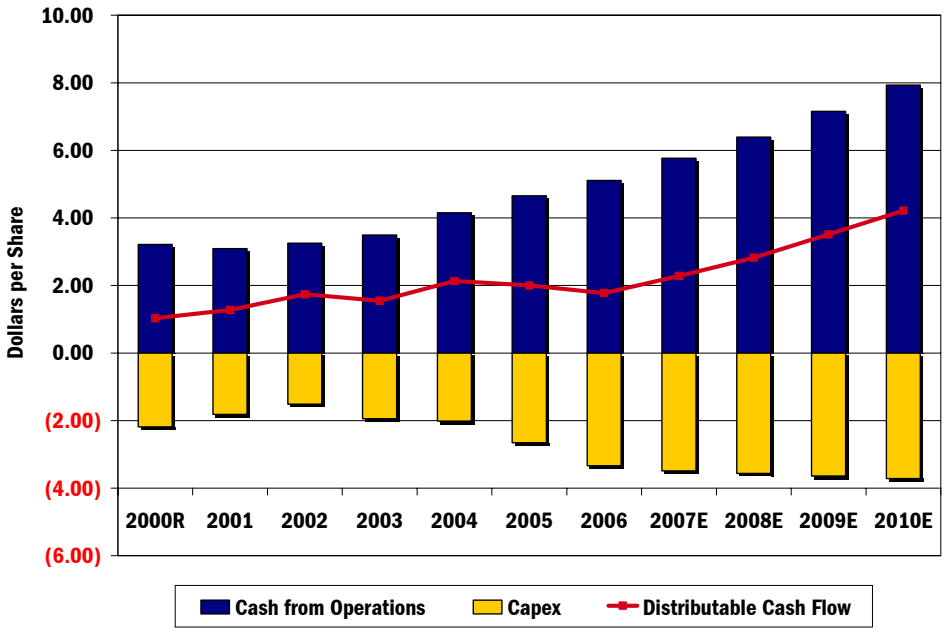
Source: Company reports, Banc of America Securities LLC estimates.

Cash Flow

We expect cash flow to continue to strengthen. Figure 17 shows our forecast of increasing free cash flow (FCF) through 2010. We expect Praxair to generate $1.9 billion cash from operations in 2007, increasing to $2.6 billion by 2010, driven by improvement in net income.

Figure 17

Praxair, Inc.
Sources and Uses of Funds, 2000R—Estimated 2011



Source: Company reports, Banc of America Securities LLC estimates.

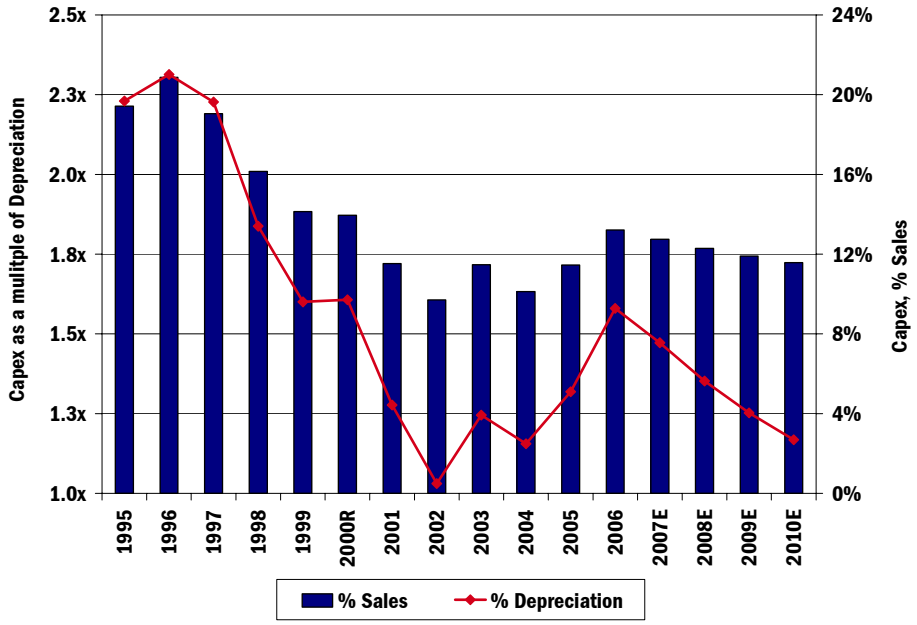
Working capital efficiency could be affected by growth outside of North America. Accounts receivable days outstanding (DSO) have been in the 59-62 days range during the period 2000-06 and we expect 61-62 days for the balance of the decade. We attribute the modest increase mainly to growth coming from regions where longer DSO is standard business practice (Latin America, Europe and China). Lower DSO is an item company management stresses as an important factor as the company pursues new business in these areas.

We expect capital expenditures to continue to exceed depreciation. Long-term success in industrial chemicals is tied to disciplined capital spending. As shown in Figure 18, in the mid-1990s, Praxair once had capital expenditures exceeding 2x depreciation and as high as 20% of sales, levels typical of the industrial gases industry at that time. Capital expenditures in 2000-2006 dropped to an average of 32% above depreciation and 11.6% of sales.

In 2007, we project capital of $1.15 billion (13% of sales and 147% of depreciation). Although capital expenditures have declined significantly since the mid-90s, further reductions, in our opinion, could compromise the company's ability to grow at 1.5-2x gross domestic product (GDP). The capital-expenditure requirement to maintain existing facilities is about $250 million (this level would result in market share loss). Praxair spends about $50 million per year on cost-reduction projects. The additional capital expenditures are used to fuel company growth, mainly through onsite capital projects. If these were to be reduced, growth would most likely suffer, in our view.

Figure 18

Praxair, Inc.
Capital Expenditure History, 1995—Estimated 2011



Source: Company reports, Banc of America Securities LLC estimates.

We expect dividend growth to continue. Praxair has a history of raising its dividend each year since its 1992 spin-off from Union Carbide. Current yield stands at 1.9%. No significant buyback program has been announced.

Pensions are underfunded. Praxair's pension plans were underfunded by $188 million (for the United States, $148 million; and for international, $40 million) as of year-end 2006. With book assets of $11.1 billion, Praxair's underfunded pensions represent less than 2% of book assets, well under the current industry average of 10%, so we do not view this status as cause for alarm.

Free-cash-flow (FCF) yield is modest. Praxair's free cash flow (FCF) has increased from $324 million in 2002 to an estimated $631 million in 2007 (see Table 3). We project FCF, as well as FCF yield, to double by 2010, but for a company the size of Praxair, the free cash flow is modest. According to management, future uses of free cash flow, in order of priority, include reinvestment in the business, bolt-on acquisitions, share repurchases to offset option dilution, debt reduction and dividend increases.

Table 3

Praxair, Inc.
Free-Cash-Flow Yield Calculation
($ millions, except share price)

	2005	2006	2007E	2008E	2009E	2010E
Net Income	726	989	1,120	1,236	1,400	1,565
Plus D&A	665	696	781	869	958	1,049
Less Capital Expenditures	(877)	(1,100)	(1,150)	(1,175)	(1,200)	(1,225)
Less Working Capital	(63)	68	(120)	(160)	(120)	(124)
Free Cash Flow	**451**	**653**	**631**	**770**	**1,038**	**1,265**
Diluted Shares Outstanding	330.3	329.7	329.5	329.5	329.5	329.5
FCF / Share	1.37	1.98	1.91	2.34	3.15	3.84
Praxair Share Price	62.96	62.96	62.96	62.96	62.96	62.96
FCF Yield	**2.2%**	**3.1%**	**3.0%**	**3.7%**	**5.0%**	**6.1%**

Source: Company reports, Banc of America Securities LLC estimates.

Portfolio Management

Praxair was Union Carbide's industrial gases subsidiary until 1992. Praxair was spun off as an independent company in June 1992, and Dow Chemical acquired the remainder of Union Carbide in February 2001. Praxair since has engaged in considerable merger-and-acquisition (M&A) activity, the most significant of which is the acquisition of the Liquid Carbonic assets in 1996, the acquisition of Home Care Supply in 2004 and certain German assets from Air Liquide, originally belonging to Messer, in 2004. Praxair also has acquired multiple regional suppliers of medical equipment and services in an effort to develop a strong presence in this subsegment. In 2006, Praxair divested from its aviation repair business and continued with bolt-on acquisitions of packaged gases and health care businesses. In 2007, Praxair acquired Linde's business in Mexico, excluding the Mexican assets BOC which remained with Linde. A more detailed list of recent transactions is shown on Table 4.

We consider management good stewards of capital. The company has been on record for evaluating AGA, BOC and Messer, and either passing on these opportunities or being outbid. However, Praxair management has a record of acting on acquisitions when the price is right and the assets serve an important strategic goal of the company. With the 1996 acquisition of Liquid Carbonic, Praxair gained a strong position in Latin America. Today, Praxair is the leader in Latin America, with an estimated market share of 45%. Also, Praxair was underrepresented in Europe, but its recent acquisition of German assets from Air Liquide has given the company a strong presence in the industrial center of Germany, with an established pipeline/onsite business.

Table 4

Praxair, Inc.
Selected Portfolio Transactions, 1999—Present
($ millions)

Announce	Transaction	Property	Business	Counterparty	Value
Aug-99	Acquisition	TAFA, supplier of thermal spray technologies/equipment	Surface Tech	Eutectic & Castolin	ND
Nov-99	Acquisition	Materials Research Corp, provider of electronic materials	Electronics	Sony	ND
Dec-99	Acquisition	Tender offer for additional 15% stake in White Martins	Brazil	White Martins	143
May-00	Sale	Quimbarra, Latin American produced of calcium carbonate	S. America	Imerys	80
Jun-04	Acquisition	Home Care Supply	Health Care	Harvest Partners	245
Mar-05	Acquisition	Provider of home respiratory therapy equipment/services	Health Care	Interwest	37
Mar-05	Acquisition	Producer of electrostatic chucks	Electronics	Dorsey Gage	ND
Mar-05	Acquisition	Provider of respiratory and other home care services	Health Care	Alpine Medical	ND
Apr-05	Acquisition	United Welding Specialties division	PDI	Union Industrial Gas	ND
May-05	Acquisition	Provider of home respiratory therapy equipment/services	Health Care	Falls Medical	ND
May-05	Acquisition	Provider of respiratory therapy equipment/services	Health Care	HealthCare Partners	ND
May-05	Acquisition	Bulk gas business in Western Canada	Merchant	Air Products	ND
Aug-05	Acquisition	Provider of home respiratory therapy equipment/services	Health Care	Messer	ND
Aug-05	Sale	Praxair Polska, the Polish industrial gas subsidiary	Europe	BOC	50
Oct-05	Sale	Fire division of Praxair Distribution	PDI	Silco Fire Protection	ND
Oct-05	Acquisition	Manufacturing of polishing belts and pads used in CMP	Electronics	Madison CMP Group	ND
Oct-05	Acquisition	Cryomag Services (diagnostic MRI services)	Health Care	Cryomag Services	ND
Oct-05	Acquisition	Originally Messer-owned, German pipeline-based business	Onsite	Air Liquide	667
Oct-05	Acquisition	High purity aluminum refining and casting operations	Surface Tech	Alcan	ND
Dec-05	Acquisition	Packaged gas business (10 facilities in GA, TN and SC)	PDI	Constar	ND
Apr-06	Sale	Praxair Aviation Services	Surface Tech	Gridiron Capital	ND
Oct-06	Acquisition	Packaged gas business (Fort Wayne, Indiana)	PDI	Hobart Industrial Gases	ND
Nov-06	Acquisition	JSA Healthcare Corp	Health Care	Jupiter Partners	ND
Nov-06	Acquisition	Welding equipment and distribution, primarily in So. California	PDI	Welding Equipment Co.	ND
Nov-06	Acquisition	Medical gases, primarily in Illinois	Health Care	Lake County Med. Gas	ND
Dec-06	Acquisition	Packaged gas business, primarily in California	PDI	Withrow Oxygen Service	ND
Jan-07	Acquisition	Packaged gas business and welding equipment/supplies	PDI	Mittler Supply	ND
Feb-07	Acquisition	Aga SA de CV (primarily Mexico City, Mexico)	N. America	Linde Group	ND

Source: Company reports.

Company Description

Praxair is the world's second-largest producer of industrial gases behind Air Liquide (France). Praxair has a global market share of 14%, with estimated 2007 sales of more than $9.0 billion. Headquartered in Danbury Connecticut, Praxair operates in 40 countries and has 27,000 employees and one million customers worldwide. The company was founded in 1907. Table 5 summarizes Praxair's 2007 profitability profile.

Operations consist of two major product lines, industrial gases and Praxair Surface Technologies (PST). Industrial gas activities include the manufacturing and distribution of atmospheric gases (oxygen, nitrogen, argon, and rare gases) and process gases (carbon dioxide, helium, hydrogen, specialty gases, and acetylene). These gases are frequently co-products of the same manufacturing process. Praxair manufactures and delivers most products on a regional basis, so the company reports business segments that are defined geographically with the exception of surface technologies.

Table 5

Praxair, Inc.
Profitability Profile, Estimated 2007
($ millions)

	Sales	Sales %	Sales Growth	EBIT	EBIT (% Total)	EBIT (% Sales)
North America	$4,893	54%	4%	$893	52%	18.2%
South America	1,558	17%	16%	303	18%	19.5%
Europe	1,319	15%	13%	307	18%	23.3%
Asia	742	8%	17%	137	8%	18.5%
Subtotal Gases	**8,511**	**94%**	**9%**	**1,640**	**96%**	**19.3%**
Surface Technologies	505	6%	5%	74	4%	14.7%
Total	**9,016**	**100%**	**8%**	**1,714**	**100%**	**19.0%**

Source: Banc of America Securities LLC estimates.

Sales Trends for 2007

We expect 2007 Praxair sales to increase on higher price and volume.

We expect 2007 sales to increase by 8% over the previous year. Nearly half of this increase represents volume gains with the remaining representing mostly price gains. Overall volume and pricing trends are summarized on Table 6.

Table 6

Praxair, Inc.
Volume and Pricing Trends

	2006 vs. 2005			Estimated 2007 vs. 2006		
	Volume	Price/Mix	Total	Volume	Price/Mix	Total
Total	4.2%	4.5%	8.7%	4.0%	4.3%	8.3%

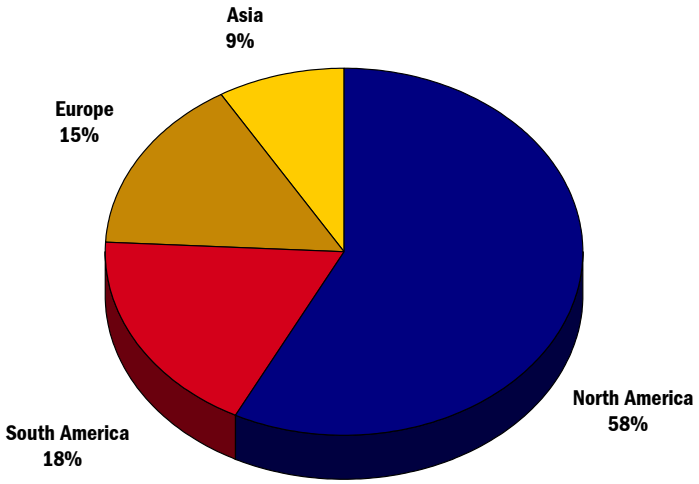
Source: Banc of America Securities LLC estimates.

Sales by Geography

Praxair is the largest player in the Americas. As shown in Figure 19, North America accounts for 58% of sales, while the balance breaks down as 18% in Latin America, 15% in Europe and 9% in East Asia. Unlike its key competitors, Praxair runs and reports its business on a global basis, with a single account manager for every region. Praxair is the leader in North and South America, with a number-one position in the United States and in Brazil.

Figure 19

Praxair, Inc.
Sales by Geography, Estimated 2007
(%)



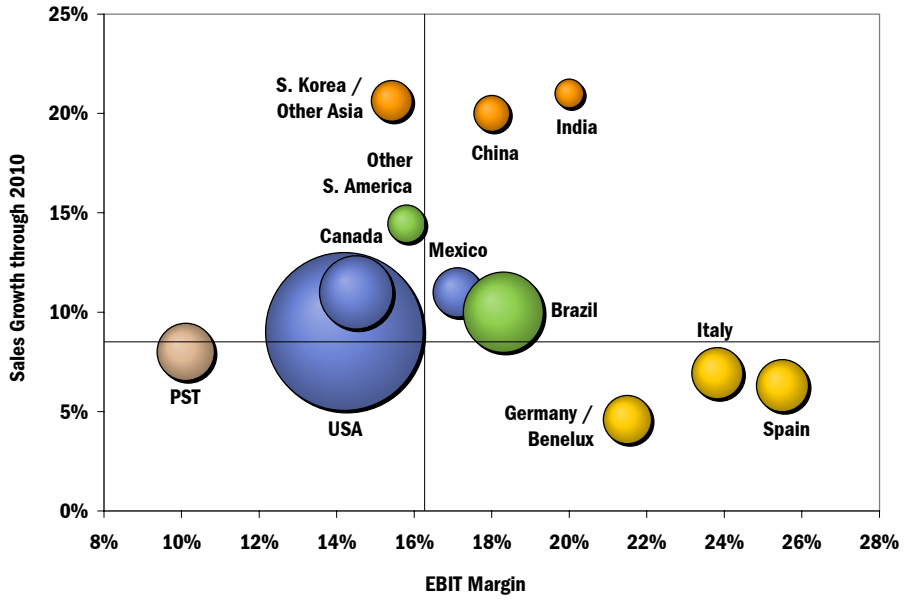
Note: Geographic split excludes the Surface Technologies segment.

Source: Company reports, Banc of America Securities LLC estimates.

Praxair focuses on 11 core geographic markets. These are the United States, Canada, Spain, Italy, Germany/Benelux, South Korea, China, Thailand, India, Brazil and Mexico. Historically, Praxair somewhat was underrepresented in northern Europe, but its acquisition of assets from Air Liquide in 2004 for $667 million has given the company a strong presence in the industrial center of Germany, with two established pipeline complexes. In Figure 20, we show an estimate of growth and profitability by geographic region.

Figure 20

Praxair, Inc.
Portfolio Analysis, by Geographic Region



Source: Banc of America Securities LLC estimates.

Sales by End Market

End markets are diverse. As shown in Figure 21, Praxair services many end markets that require industrial gases. Praxair serves approximately 25 industries as diverse as health care, petroleum refining, electronics, beverages, steel, aerospace, water treatment and chemicals.

Figure 21

Praxair, Inc.
Sales by End Market, Estimated 2007

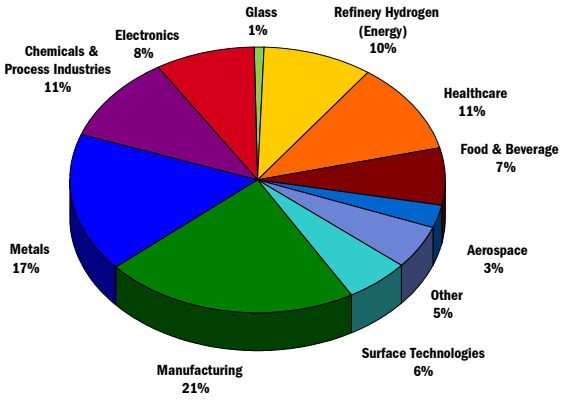
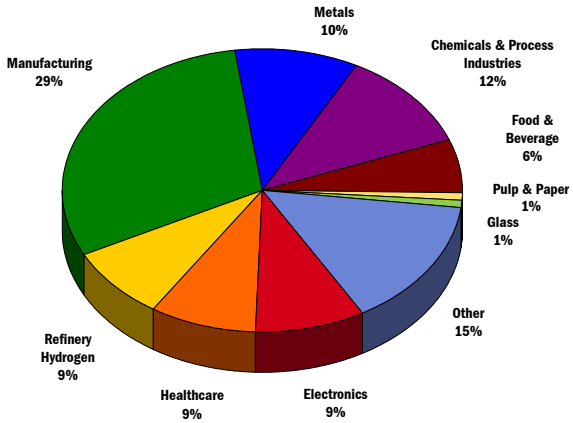


Figure 22

Global Industrial Gases Industry
Sales by End Market, Estimated 2007

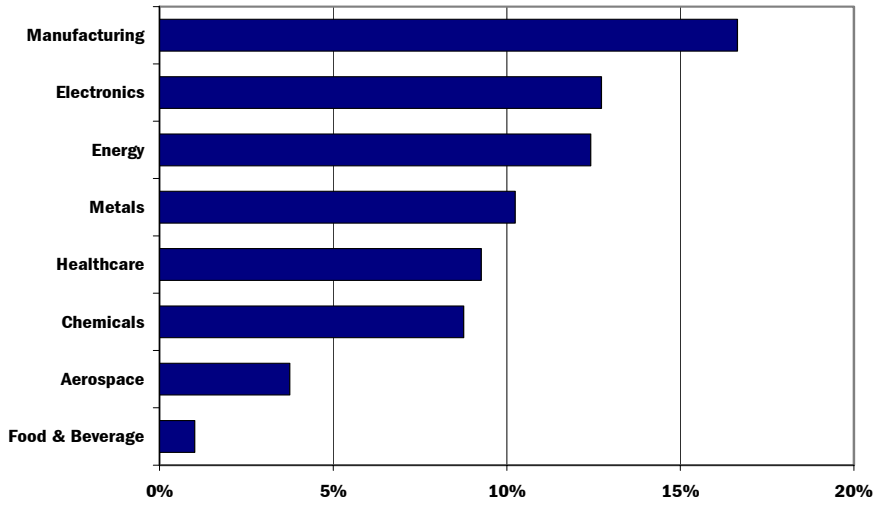


Source: Company reports, Banc of America Securities LLC estimates.

We view Praxair's industry mix as favorable. Figure 23 shows that Praxair has experienced premium growth in its manufacturing, electronics, energy and metals businesses in the past four years. Praxair's diverse end-market base gives us comfort that the company's performance is not overly tied to any specific end market.

Figure 23

Praxair, Inc.
Estimated Compound Annual Sales Growth by End Market, 2001—Estimated 2010*
(%)



*Compounded growth includes the effect of price, volume, currency and acquisitions.

Source: Company reports, Banc of America Securities LLC estimates.

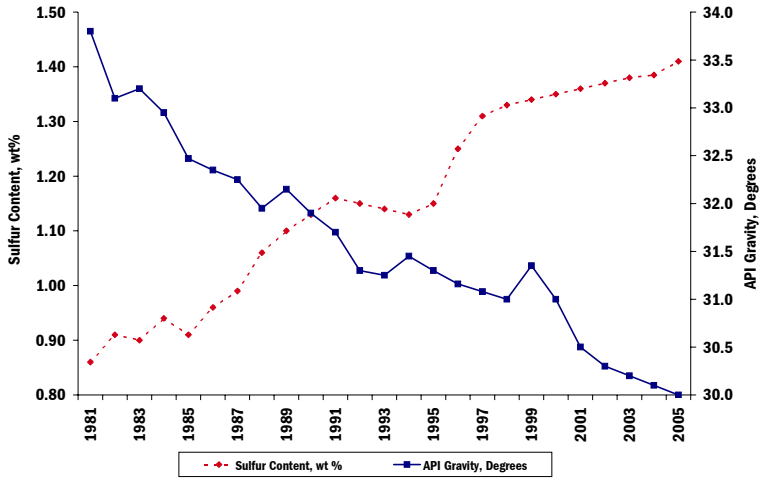
Energy Growth Platform (10% of Estimated 2007 Sales; Growth of 10%)

Refinery hydrogen is growing, on environmental regulations and imports of increasingly sour crude.

The energy market is a growth platform for Praxair, as well as other industrial gas players. Industrial gas use in energy applications represents an annual organic growth opportunity of 10% for the balance of the decade, in our estimation. Hydrogen consumption is being driven by tighter Environmental Protection Agency (EPA) standards mandating lower permissible amount of sulfur in gasoline and the upgrading of increasingly sour crude oil (see Figure 24).

Figure 24

Praxair, Inc.
Historical U.S. Refinery Input Quality



Source: Company reports, Banc of America Securities LLC estimates.

In the U.S. Gulf Coast, Praxair has substantial infrastructure in place, with 310 miles of pipeline connecting 50 refining and chemicals customers, representing an estimated 85% of current refining capacity. This infrastructure enables hydrogen delivery to customers at a fraction of the cost of alternative delivery methods. Praxair has estimated production capacity of 700 mmscfd. In third quarter 2006, Praxair the company started supplying high-purity hydrogen to Valero's Houston and Texas City refineries. Praxair announced the development of a new 25-30 mile pipeline system in N. California, with capacity of 260 mmscfd, due online in third quarter 2008. The pipeline will be proximate to Chevron, ConocoPhillips, Shell, Valero and Tesoro refineries. Capital investment is supported by long-term contracts already in place.

Carbon dioxide (CO_2) and nitrogen (N_2) are used in drilling for natural gas in the United States and Canadian Rockies in order to fracture gas wells and allow the natural gas to flow out of the otherwise impermeable rock. Praxair is well positioned with regional presence, technology and customer base to benefit from this activity. The company reports more than $200 million in sales in gas well fracturing, expected to grow by 25% per year for the rest of the decade.

Another energy application of industrial gases is enhanced oil recovery. N_2 and CO_2 are injected into old mature wells to remove the remaining oil from the reservoir. Praxair reports a number of new projects in the area, most notable, a large PEMEX project starting in 2007 and expected to generate about $30 million per year, which is included in our financial forecasts.

Health Care Growth Platform (11% of Estimated 2007 Sales; Growth of 6%-8%)

Praxair is growing its health care business both organically and through bolt-on acquisitions.

The health care growth platform has been the focus of multiple bolt-on acquisitions, including the larger acquisition of Homecare Care Supply in June 2004 for $245 million (see Table 4). Two thirds of the business is in the United States, with a significant presence in Brazil as well, as shown in Figure 25. The business focuses on the home care market with a hospital component as well, as shown in Figure 26.

Praxair believes that the home care market has non-cyclical organic growth potential of 6%-8% per year and also it is ripe space for industry consolidation. In addition, for established players, new business can come with low additional capital intensity. Although the company does not have a specific acquisition budget, given appropriately priced regional opportunities, Praxair is likely to continue to seek bolt-on acquisitions in the home care side of the health care segment.

Praxair's home care market is a combination of home oxygen and sleep therapy. Oxygen is delivered in packaged form. In the United States, the market is regional and highly fragmented. The two market leaders, Lincare and Apria, together account for a third of the $8 billion U.S. market. Rotech and Praxair are believed to be next, with 5% each, and Air Products and American Home Patient hold the fifth and sixth positions with similar sizes. The rest of the market (about 50%) is split among about 2,000 local providers.

Medicaid and Medicare represent 40% of Praxair's home care business (see Figure 26). This portion of the business recently suffered reimbursement cuts that came in the following three waves: (1) a drug reimbursement cut by 50%, effective January 1, 2005; (2) an equipment reimbursement cut by 8.5% (better than the proposed cutback of 15%), effective April 1, 2005; and (3) the dispensing fee, historically $5 per prescription, which was increased to $57 in 2005 to compensate for the other cuts, and then adjusted down to $33 effective January 1, 2006. Despite the publicity of the reimbursement cuts, history has shown that they are not as frequent as the constant pressure from private insurers to reduce rates, and they are visible ahead of implementation. Private insurers revisit rates on an annual basis and use their considerable leverage to apply margin pressure at the regional and the national level. On the government side, we believe that the home care market will not be hit with additional legislative pressure before 2009-2010. Unlike leaders Lincare and Apria, which are exclusively domestic U.S. home care players, Praxair has a thriving home care business in Brazil and in Europe as well.

Lastly, the hospital business, which is mainly merchant liquid business, focuses on oxygen supply systems as well as analytical gases. The business is believed to be as profitable as home care, but does not offer the same opportunity for organic growth because hospital beds are not increasing at the same rate as home care.

Figure 25

Praxair, Inc.
Global Health Care Sales, Estimated 2007
(%)

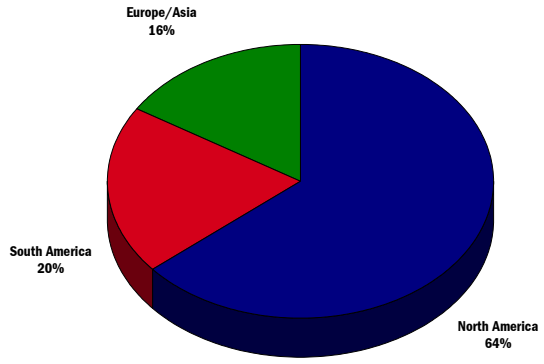
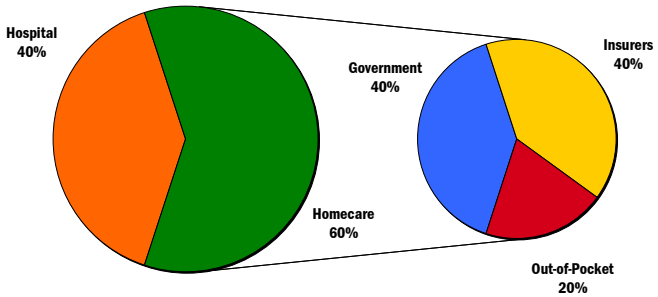


Figure 26

Praxair, Inc.
Health Care Service Offerings
(%)



Source: Company reports, Banc of America Securities LLC estimates.

North America (52% of Estimated 2007 EBIT)

Praxair's North America operating segment includes the industrial and packaged gases operations in the United States, Canada and Mexico, as well as several other product lines, servicing the electronics, energy, and health care markets. We expect estimated 2007 sales to increase by 4% over 2006. Quarterly trends are summarized in Table 7.

Table 7

Praxair, Inc.
North American Quarterly Trends
($ millions)

	1Q06	2Q06	3Q06	4Q06	1Q07E
Sales	**1,169**	**1,158**	**1,187**	**1,182**	**1,173**
Sales Change (Year to Year)	4.8%	0.4%	2.4%	-5.7%	0.3%
Sales Change (Sequential)	-6.7%	-0.9%	2.5%	-0.4%	-0.8%
EBIT	**200**	**215**	**204**	**203**	**213**
EBIT Change (Year to Year)	26.6%	33.5%	23.6%	5.2%	6.6%
EBIT Change (Sequential)	3.6%	7.5%	-5.1%	-0.5%	5.0%
EBIT Margin	**17.1%**	**18.6%**	**17.2%**	**17.2%**	**18.2%**

Source: Company reports, Banc of America Securities LLC estimates.

North American estimated 2007 EBIT is expected to grow by 9% over 2006, driven by strong growth of Praxair's distribution and hydrogen businesses. We expect minor margin expansion in 2007 (18.2% versus 17.5% in 2006), mainly because of the following factors: (1) successful price increases; and (2) lower energy costs pass-through that leaves dollar profits intact and tends to increase margins.

Praxair's North American business is growing faster than the industrial market.

Over the longer term, Praxair's North American volumes have grown at 1.5-2.0x the industrial production index (IPI), a broad measure of U.S. industrial production, as depicted in Figures 27 and 28. The volume growth shown in these figures does not include acquisitions. Praxair has been able to sustain growth of more than 1x IPI, primarily owing to the three following factors: (1) participation in higher-growth markets; (2) increased use of gases per unit production because of efficiency gains; and (3) emission reduction trends that favor increased use of oxygen. Bolt-on acquisitions would be an additional source of growth.

Figure 27

Praxair, Inc.
North America Volume Growth Versus IPI Growth
(%)

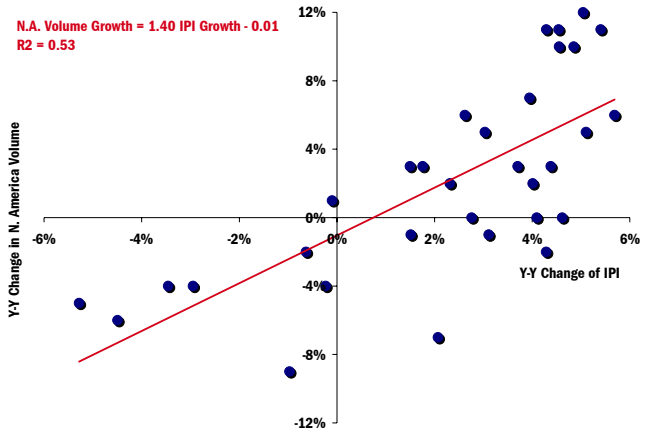
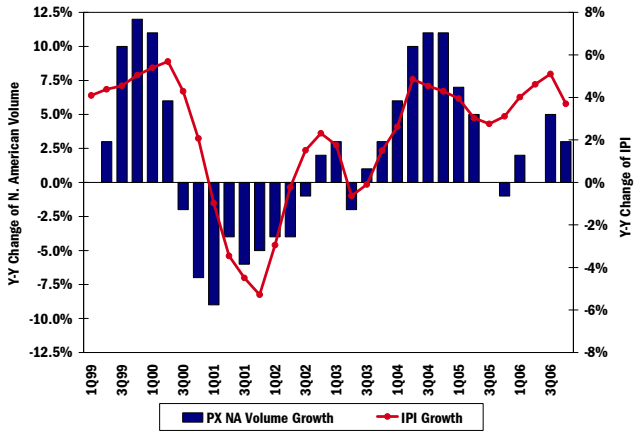


Figure 28

Praxair, Inc.
North American Sales Volume Growth
(%)



Source: Company reports, Banc of America Securities LLC estimates.

Europe (18% of Estimated 2007 EBIT)

Praxair is enjoying high profitability in Europe.

Praxair's European business is concentrated in Germany, Benelux, France, Spain, and Italy. We expect estimated 2007 sales to increase by 13%. Small margin expansion expectation (23.3% versus 22.4% in 2006) is attributed to lower energy pass-through pricing that preserves profits and increases margins. Quarterly trends are summarized in Table 8.

Table 8

Praxair, Inc.
European Quarterly Trends
($ millions)

	1Q06	2Q06	3Q06	4Q06	1Q07E
Sales	**268**	**296**	**293**	**306**	**321**
Sales Change (Year to Year)	-6.6%	1.0%	11.8%	16.3%	19.7%
Sales Change (Sequential)	1.9%	10.4%	-1.0%	4.4%	4.9%
EBIT	**59**	**65**	**63**	**73**	**76**
EBIT Change (Year to Year)	-10.6%	-9.7%	0.0%	19.7%	28.3%
EBIT Change (Sequential)	-3.3%	10.2%	-3.1%	15.9%	3.7%
EBIT Margin	**22.0%**	**22.0%**	**21.5%**	**23.9%**	**23.6%**

Source: Company reports, Banc of America Securities LLC estimates.

South America (18% of Estimated 2007 EBIT)

Praxair is the market leader in South America, with an estimated market share of 45% in the region and 60-65% in Brazil. South American operations are conducted by White Martins Gases, Praxair's subsidiary, the largest industrial gases player in Brazil and a dominant player in the entire region. Brazil represents more than 80% of the segment. We estimate 2007 sales to increase by 16% over 2006 results, on higher volumes, higher prices, and a favorable currency translation effect. The segment has been a strong performer for Praxair and can grow further, as on-site volume is limited by available capacity. We expect 2007 segment margins to increase compared to 2006 on lower energy pass through pricing which tends to leave dollar margins intact and increase percent margins. Quarterly trends are summarized in Table 9.

Table 9

Praxair, Inc.
South American Quarterly Trends
($ millions)

	1Q06	2Q06	3Q06	4Q06	1Q07E
Sales	**317**	**340**	**340**	**351**	**368**
Sales Change (Year to Year)	29.4%	24.1%	16.0%	11.8%	16.2%
Sales Change (Sequential)	1.0%	7.3%	0.0%	3.2%	4.9%
EBIT	**57**	**58**	**69**	**68**	**73**
EBIT Change (Year to Year)	35.7%	13.7%	32.7%	21.4%	27.4%
EBIT Change (Sequential)	1.8%	1.8%	19.0%	-1.4%	6.8%
EBIT Margin	**18.0%**	**17.1%**	**20.3%**	**19.4%**	**19.7%**

Source: Company reports, Banc of America Securities LLC estimates.

Asia (8% of Estimated 2007 EBIT)

The Asian industrial gas business is more fragmented than other regions. Leading players are Air Liquide and Linde/BOC, each with 13% and 12% in market shares, respectively. According to its 11-region focus strategy, Praxair has chosen to concentrate on four countries, China, India, South Korea, and Thailand, with smaller operations in Japan, Malaysia and Taiwan. In China, company management believes that it holds the leading position in the steel, semiconductor and petrochemical industries. In India, Praxair is the leading player, with an estimated $130 million of sales (a market share of 30-40%) in a market that is shared with Linde/BOC and Air Products. The company expects to grow its Indian franchise by 20% per year through 2010.

We expect estimated 2007 sales to grow by 17% over 2006, mainly because of volume increases. Electronics and metal sales have been strengthened from new on-site plants put in place. Historically, there has been strong carbon dioxide demand for food freezing. Finally, there has been some price erosion, attributed to speculative new capacity put in place by new stand-alone regional players. Overall, we are projecting 2007 profit margins expanding to 18.5% versus 17.5% in 2006. Quarterly trends are summarized in Table 10.

Table 10

Praxair, Inc.
Asian Quarterly Trends
($ millions)

	1Q06	2Q06	3Q06	4Q06	1Q07E
Sales	**147**	**155**	**165**	**169**	**174**
Sales Change (Year to Year)	20.5%	13.1%	21.3%	14.2%	18.7%
Sales Change (Sequential)	-0.7%	5.4%	6.5%	2.4%	3.2%
EBIT	**23**	**28**	**27**	**33**	**30**
EBIT Change (Year to Year)	9.5%	16.7%	12.5%	32.0%	32.0%
EBIT Change (Sequential)	-8.0%	21.7%	-3.6%	22.2%	-8.0%
EBIT Margin	**15.6%**	**18.1%**	**16.4%**	**19.5%**	**17.4%**

Source: Company reports, Banc of America Securities LLC estimates.

Surface Technologies (4% of Estimated 2007 EBIT)

Three quarters of engine parts are treated with a protective coating.

Praxair Surface Technologies (PST) coatings extend the lifespan of aircraft engine parts. Surface Technologies began making wear-resistant and corrosion control coatings and powders in the early 1950s when jet-engine manufacturers looked for ways to make their parts last longer between overhauls. PST developed super-hard ceramic and metallic coatings that prevent corrosion and offer temperature protection. More than 75% of engine parts now are treated with some type of protective coating. PST's coating treatment can prolong the lifespan of certain parts by 10 to 20 times. Higher operating temperatures and greater fuel efficiency are driving demand for new specialized coatings. Praxair sold its aviation repair business to Gridiron Capital in April 2006.

PST's wear resistant coatings are used outside aerospace, in metals, steel, chemicals, plastics, petroleum, textiles, electronics, food, auto parts, and printing equipment. A line of specialty powders is used for abrasive polishing on computer hard disks and plastic lenses. Praxair also manufactures parts, such as Praxair laser-engraved, ceramic rolls used for ink application in printing. The business is managed globally, with operations primarily in the United States and Europe, as well as smaller operations in Asia and Brazil.

In 2007, we expect PST to generate sales of $505 million, an increase of 5% over 2006, despite the divestiture of the aviation repair business in April 2006, on continued strong demand for aircraft engine coatings. We expect strong volumes in industrial coatings for power turbines and oil field service components as well. We expect 2007 EBIT to increase to $74 million, an increase of 23% over $60 million in 2006. We expect 2007 margins to expand to 14.7% from 12.5% in 2006. Quarterly trends are summarized on Table 11.

Table 11

Praxair, Inc.
Surface Technologies Quarterly Trends
($ millions)

	1Q06	2Q06	3Q06	4Q06	1Q07E
Sales	**125**	**127**	**114**	**115**	**121**
Sales Change (Year to Year)	5.9%	2.4%	-5.8%	2.7%	-3.0%
Sales Change (Sequential)	11.6%	1.6%	-10.2%	0.9%	5.4%
EBIT	**13**	**16**	**15**	**16**	**15**
EBIT Change (Year to Year)	18.2%	14.3%	15.4%	60.0%	16.0%
EBIT Change (Sequential)	30.0%	23.1%	-6.3%	6.7%	-5.8%
EBIT Margin	**10.4%**	**12.6%**	**13.2%**	**13.9%**	**12.4%**

Source: Company reports, Banc of America Securities LLC estimates.

Praxair, Inc.

Annual Sales and Operating Income Statement, 2000R–Estimated 2011
($ millions)

													Growth	
Net Sales:	2000R	2001	2002	2003	2004	2005	2006	2007E	2008E	2009E	2010E	2011E	01-06	06-11E
North America	$3,294	$3,434	$3,351	$3,627	$4,191	$4,680	$4,696	$4,893	$5,191	$5,477	$5,755	$6,036	8%	5%
South America	727	674	632	708	866	1,126	1,348	1,558	1,653	1,744	1,832	1,922	17%	7%
Europe	542	537	589	699	847	1,105	1,163	1,319	1,399	1,476	1,551	1,627	19%	7%
Asia	220	255	324	389	487	543	636	742	787	831	873	915	20%	7%
Gas Sub-Total	4,783	4,900	4,896	5,423	6,391	7,454	7,843	8,511	9,030	9,528	10,011	10,501	11%	6%
Surface Technologies	414	410	394	400	447	475	481	505	528	552	576	602	4%	5%
Eliminations	(154)	(152)	(162)	(210)	(244)	(273)	0	0	0	0	0	0		
Total	5,043	5,158	5,128	5,613	6,594	7,656	8,324	9,016	9,557	10,080	10,588	11,103	11%	6%
Annual Change	9.2%	2.3%	-0.6%	9.5%	17.5%	16.1%	8.7%	8.3%	6.0%	5.5%	5.0%	4.9%		
EBITDA														
North America	804	851	853	861	967	1,050	1,214	1,337	1,445	1,586	1,715	1,845	7%	9%
South America	250	208	195	176	222	292	347	410	440	489	540	592	12%	11%
Europe	172	165	188	231	286	363	366	426	460	514	560	608	19%	10%
Asia	49	71	94	114	135	157	177	211	229	258	293	328	20%	13%
Gas Sub-Total	1,275	1,295	1,330	1,382	1,610	1,862	2,104	2,384	2,574	2,847	3,107	3,375	11%	10%
Surface Technologies	66	74	69	61	71	85	97	111	115	124	133	144	6%	8%
Corporate	(4)	0	(13)	0	0	0	0	0	0	0	0	1		
Total	1,337	1,369	1,386	1,443	1,681	1,947	2,201	2,495	2,689	2,971	3,241	3,519	12%	10%
Annual Change	6.9%	0.5%	3.8%	2.5%	19.1%	16.2%	17.4%	13.9%	6.2%	10.6%	8.9%	8.5%		
Operating Margin														
North America	15.9%	15.9%	16.6%	15.1%	14.9%	14.5%	17.5%	18.2%	18.2%	18.9%	19.2%	19.5%	16%	19%
South America	22.1%	19.1%	21.2%	16.4%	17.6%	17.9%	18.7%	19.5%	19.4%	20.5%	21.6%	22.7%	18%	20%
Europe	23.6%	22.2%	23.6%	24.6%	25.3%	23.7%	22.4%	23.3%	23.4%	25.0%	25.8%	26.8%	24%	24%
Asia	10.5%	14.9%	15.7%	16.5%	16.4%	17.3%	17.5%	18.5%	18.7%	20.2%	22.2%	24.1%	16%	20%
Gas Sub-Total	17.5%	17.0%	18.0%	16.6%	16.7%	16.6%	18.4%	19.3%	19.3%	20.2%	20.9%	21.6%	17%	20%
Surface Technologies	8.2%	9.5%	8.9%	6.5%	7.6%	10.1%	12.5%	14.7%	14.8%	15.7%	16.7%	17.7%	9%	15%
Total	17.2%	16.9%	17.6%	16.5%	16.7%	16.7%	18.1%	19.0%	19.0%	20.0%	20.7%	21.4%	17%	20%
Annual Change	-0.4%	-0.3%	0.7%	-1.1%	0.2%	0.0%	1.3%	0.9%	0.0%	0.9%	0.7%	0.7%		
Operating Income														
North America	524	545	557	548	623	677	822	893	946	1,033	1,105	1,180	8%	8%
South America	161	129	134	116	152	201	252	303	321	358	396	436	15%	11%
Europe	128	119	139	172	214	262	260	307	328	368	401	435	19%	10%
Asia	23	38	51	64	80	94	111	137	147	167	193	220	52%	14%
Gas Sub-Total	836	831	881	900	1,069	1,234	1,445	1,640	1,742	1,926	2,096	2,271	11%	9%
Surface Technologies	34	39	35	26	34	48	60	74	78	87	96	107	10%	11%
Other	(4)	0	(13)	0	0	0	0	0	0	0	0	1		
Total	866	870	903	926	1,103	1,282	1,505	1,714	1,820	2,013	2,192	2,379	12%	9%
Annual Change	7%	0%	4%	3%	19%	16%	17%	14%	6%	11%	8.9%	8.5%		
Breakdown of Sales Growth:														
Volume Index	142.1	139.0	138.2	140.2	153.1	156.3	162.9	169.3	175.4	180.6	185.3	189.8	3.6%	3%
Volume	4.5%	-2.1%	-0.6%	1.5%	9.2%	2.1%	4.2%	4.0%	3.6%	3.0%	2.6%	2.4%		
Equipment Sales	-0.2%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%		
Price	2.9%	5.8%	2.0%	3.0%	2.8%	4.0%	4.0%	3.9%	2.0%	2.0%	2.0%	2.0%		
Natural Gas Passthrough	1.0%	0.4%	-1.0%	2.0%	0.8%	1.0%	-1.0%	0.5%	0.5%	0.5%	0.5%	0.5%		
Currency	-2.0%	-3.9%	-3.0%	2.0%	2.5%	5.0%	1.8%	0.0%	0.0%	0.0%	0.0%	0.0%		
Acquisitions (Divestitures)	3.0%	2.1%	2.0%	1.0%	2.3%	4.0%	-0.2%	0.0%	0.0%	0.0%	0.0%	0.0%		
Total	9.2%	2.3%	-0.6%	9.5%	17.5%	16.1%	8.7%	8.3%	6.0%	5.5%	5.0%	4.9%		

Source: Company reports, Banc of America Securities LLC estimates.

Praxair, Inc.
Quarterly Sales and Operating Income Statement, 2006—Estimated 2007
($ millions)

	2006					2007E				
Net Sales:	1Q	2Q	3Q	4Q	2006	1QE	2QE	3QE	4QE	2007E
North America	$1,169	$1,158	$1,187	$1,182	$4,696	$1,173	$1,222	$1,252	$1,247	$4,893
South America	317	340	340	351	1,348	368	391	393	406	1,558
Europe	268	296	293	306	1,163	321	330	330	338	1,319
Asia	147	155	165	169	636	174	180	191	196	742
Gas Sub-Total	1,901	1,949	1,985	2,008	7,843	2,037	2,122	2,166	2,186	8,511
Surface Technologies	125	127	114	115	481	121	124	128	131	505
Eliminations	0	0	0	0	0	0	0	0	0	0
Total	2,026	2,076	2,099	2,123	8,324	2,158	2,246	2,295	2,318	9,016
Annual Change	11%	8%	11%	5%	9%	7%	8%	9%	9%	8%
EBITDA										
North America	298	313	302	301	1,214	324	335	338	341	1,337
South America	81	82	93	92	347	99	99	105	108	410
Europe	85	91	89	99	366	105	106	107	107	426
Asia	39	44	43	49	177	49	53	54	55	211
Gas Sub-Total	504	531	528	542	2,104	578	593	603	610	2,384
Surface Technologies	22	25	24	25	97	24	29	29	29	111
Corporate	0	0	0	0	0	0	0	0	0	0
Total	526	556	552	567	2,201	602	622	632	639	2,495
Annual Change	18%	19%	19%	14%	17%	16%	12%	16%	13%	14%
Operating Margin										
North America	17.1%	18.6%	17.2%	17.2%	17.5%	18.2%	18.3%	18.1%	18.4%	18.2%
South America	18.0%	17.1%	20.3%	19.4%	18.7%	19.7%	18.4%	19.9%	19.9%	19.5%
Europe	22.0%	22.0%	21.5%	23.9%	22.4%	23.6%	23.3%	23.4%	22.8%	23.3%
Asia	15.6%	18.1%	16.4%	19.5%	17.5%	17.4%	19.2%	18.4%	18.7%	18.5%
Gas Sub-Total	17.8%	18.8%	18.3%	18.8%	18.4%	19.2%	19.2%	19.3%	19.4%	19.3%
Surface Technologies	10.4%	12.6%	13.2%	13.9%	12.5%	12.4%	15.9%	15.2%	15.1%	14.7%
Total	17.4%	18.4%	18.0%	18.5%	18.1%	18.9%	19.0%	19.0%	19.2%	19.0%
Annual Change	1.1%	1.6%	1.2%	1.4%	1.3%	1.5%	0.6%	1.0%	0.6%	0.9%
Operating Income										
North America	200	215	204	203	822	213	223	227	229	893
South America	57	58	69	68	252	73	72	78	81	303
Europe	59	65	63	73	260	76	77	77	77	307
Asia	23	28	27	33	111	30	35	35	37	137
Gas Sub-Total	339	366	363	377	1,445	392	407	417	424	1,640
Surface Technologies	13	16	15	16	60	15	20	20	20	74
Other	0	0	0	0	0	0	0	0	0	0
Total	352	382	378	393	1,505	407	426	437	444	1,714
Annual Change	18%	19%	19%	14%	17%	16%	12%	16%	13%	14%
Breakdown of Sales Growth:										
Volume Index										
Volume	3.0%	3.0%	6.9%	4.1%	4.2%	2.6%	4.3%	5.4%	5.2%	4.4%
Equipment Sales	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Price	6.0%	3.0%	4.0%	3.0%	4.0%	3.5%	3.5%	3.5%	3.5%	3.5%
Natural Gas Passthrough	1.0%	0.0%	-1.0%	-4.0%	-1.0%	0.5%	0.5%	0.5%	0.5%	0.5%
Currency	1.0%	2.0%	2.0%	2.0%	1.8%	0.0%	0.0%	0.0%	0.0%	0.0%
Acquisitions (Divestitures)	0.0%	0.0%	-0.8%	0.0%	-0.2%	0.0%	0.0%	0.0%	0.0%	0.0%
Total	10.9%	8.2%	11.1%	5.1%	8.7%	6.5%	8.2%	9.3%	9.2%	8.3%

Source: Company reports, Banc of America Securities LLC estimates.

Praxair, Inc.

Annual Income Statement, 2000R–Estimated 2011

($ millions)

	2000R	2001	2002	2003	2004	2005	2006	2007E	2008E	2009E	2010E	2011E	01-06	06-11E
Sales	$5,043	$5,158	$5,128	$5,613	$6,594	$7,656	$8,324	$9,016	$9,557	$10,080	$10,588	$11,103	11%	6%
Cost of Sales	3,028	3,048	2,950	3,333	3,987	4,641	4,968	5,274	5,545	5,712	5,878	6,041	12%	4%
Gross Profit	2,015	2,110	2,178	2,280	2,607	3,016	3,356	3,742	4,012	4,368	4,710	5,062	10%	8%
Gross Margin	40.0%	40.9%	42.5%	40.6%	39.5%	39.4%	40.3%	41.5%	42.0%	43.3%	44.5%	45.6%		
Selling General & Administrative	662	699	751	766	869	988	1,086	1,172	1,242	1,310	1,376	1,443	9%	6%
Selling General & Administrative/Sales	13.1%	13.6%	14.6%	13.6%	13.2%	12.9%	13.0%	13.0%	13.0%	13.0%	13.0%	13.0%		
SG&A/Gross Profit	32.9%	33.1%	34.5%	33.6%	33.3%	32.7%	32.4%	31.3%	31.0%	30.0%	29.2%	28.5%		
Depreciation and Amortization	471	499	483	517	578	665	696	781	869	958	1,049	1,140	8%	10%
D&A/Sales	9.3%	9.7%	9.4%	9.2%	8.8%	8.7%	8.4%	8.7%	9.1%	9.5%	9.9%	10.3%		
D&A/Gross Profit	23.4%	23.6%	22.2%	22.7%	22.2%	22.1%	20.7%	20.9%	21.7%	21.9%	22.3%	22.5%		
Research & Development	65	66	69	75	77	80	87	93	99	105	111	117	5%	6%
R&D/Sales	1.3%	1.3%	1.3%	1.3%	1.2%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.1%		
R&D/Gross Profit	3.2%	3.1%	3.2%	3.3%	3.0%	2.7%	2.6%	2.5%	2.5%	2.4%	2.4%	2.3%		
Operating Expenses	1,198	1,264	1,303	1,358	1,524	1,733	1,869	2,046	2,210	2,374	2,536	2,701	9%	8%
Operating Expenses/Sales	23.8%	24.5%	25.4%	24.2%	23.1%	22.6%	22.5%	22.7%	23.1%	23.5%	24.0%	24.3%		
Operating Expenses/Gross Profit	59.5%	59.9%	59.8%	59.6%	58.5%	57.5%	55.7%	54.7%	55.1%	54.3%	53.8%	53.4%		
Other Income	49	24	28	4	20	(1)	18	18	18	18	18	18		
Operating Income	866	870	903	926	1,103	1,282	1,505	1,714	1,820	2,013	2,192	2,379	12%	9%
Operating Margin	17.2%	16.9%	17.6%	16.5%	16.7%	16.7%	18.1%	19.0%	19.0%	20.0%	20.7%	21.4%		
Interest Expense	224	224	191	151	155	163	155	163	145	120	79	26	-6%	-28%
Income Before Income Taxes	642	646	712	775	948	1,119	1,350	1,551	1,675	1,893	2,113	2,354	16%	12%
Pretax Margin	12.7%	12.5%	13.9%	13.8%	14.4%	14.6%	16.2%	17.2%	17.5%	18.8%	20.0%	21.2%		
Income Taxes	147	148	158	184	232	281	344	411	419	473	528	588	19%	11%
Tax Rate	22.9%	22.9%	22.2%	23.7%	24.5%	25.1%	25.5%	26.5%	25.0%	25.0%	25.0%	25.0%		
Income of Consolidated Entities	495	498	554	591	716	838	1,006	1,140	1,256	1,419	1,585	1,765	15%	12%
Minority Interests	(27)	(18)	(20)	(24)	(30)	(37)	(31)	(32)	(33)	(34)	(35)	(36)		
Income from Equity Investments	12	9	9	12	11	15	11	12	13	14	15	16		
Net Income from Operations	480	489	543	579	697	816	986	1,120	1,236	1,400	1,565	1,745	15%	12%
Non Recurring Items	(118)	(57)	5	6	0	(84)	3							
Cumulative Effect of Accounting Change	0	(2)	(139)	0	0	(6)								
Reported Net Income	363	430	409	585	697	726	989	1,120	1,236	1,400	1,565	1,745	19%	12%
Diluted Earnings Per Share:														
Earnings From Operations	$1.49	$1.50	$1.65	$1.75	$2.10	$2.47	$2.99	$3.40	$3.75	$4.25	$4.75	$5.30	15%	12%
Change	13%	0%	10%	6%	20%	17%	21%	14%	10%	13%	12%	12%		
Nonrecurring Items	0.24	(0.17)	0.02	0.02	0.00	(0.25)								
Cumulative Effect of Accounting Change	0.00	(0.01)	(0.42)	0.00	0.00	(0.02)								
Reported Earnings Per Share	1.73	1.31	1.24	1.77	2.10	2.20	2.99	3.40	3.75	4.25	4.75	5.30	19%	12%
Shares Outstanding (Millions)	322.2	327.0	329.5	331.0	331.4	330.3	329.7	329.5	329.5	329.5	329.51	329.51	0%	0%
Sequential Change (Millions)	(2.3)	4.8	2.5	1.5	0.4	(1.1)	(0.5)	(0.2)	0.0	0.0	0.00	0.00		
Estimated Option Expense			0.08	0.08	0.08	0.08	0.00	0.00	0.00	0.00	0.00	0.00		
Diluted EPS (FAS123R Options Adjusted)			$1.57	$1.67	$2.02	$2.39	$2.99	$3.40	$3.75	$4.25	$4.75	$5.30		
Change				6%	21%	18%	25%	14%	10%	13%	12%	12%		
EBITDA	$1,337	$1,369	$1,386	$1,443	$1,681	$1,947	$2,201	$2,495	$2,689	$2,971	$3,241	$3,519	11%	10%
Growth in EBDITA/Share	7%	1%	0%	4%	16%	16%	13%	13%	8%	10%	9%	9%		
EBITDA Margin	26.5%	26.5%	27.0%	25.7%	25.5%	25.4%	26.4%	27.7%	28.1%	29.5%	30.6%	31.7%		
EBITDA/Share	$4.15	$4.19	$4.21	$4.36	$5.07	$5.90	$6.68	$7.57	$8.16	$9.02	$9.84	$10.68	11%	10%

Source: Company reports, Banc of America Securities LLC estimates.

Praxair, Inc.
Quarterly Income Statement, 2006—Estimated 2007
($ millions)

	2006					2007E				
	1Q	2Q	3Q	4Q	2006	1Q	2Q	3Q	4Q	2007E
Sales	$2,026	$2,076	$2,099	$2,123	$8,324	$2,158	$2,246	$2,295	$2,318	$9,016
Cost of Sales	1,207	1,238	1,259	1,264	4,968	1,246	1,313	1,352	1,362	5,274
Gross Profit	819	838	840	859	3,356	911	933	942	955	3,742
Gross Margin	40.4%	40.4%	40.0%	40.5%	40.3%	42.2%	41.5%	41.1%	41.2%	41.5%
Selling General & Administrative	273	271	272	270	1,086	295	292	294	291	1,172
Selling General & Administrative/Sales	13.5%	13.1%	13.0%	12.7%	13.0%	13.7%	13.0%	12.8%	12.6%	13.0%
SG&A/Gross Profit	33.3%	32.3%	32.4%	31.4%	32.4%	32.3%	31.3%	31.2%	30.5%	31.3%
Depreciation and Amortization	171	174	173	178	696	192	195	194	200	781
D&A/Sales	8.4%	8.4%	8.2%	8.4%	8.4%	8.9%	8.7%	8.5%	8.6%	8.7%
D&A/Gross Profit	20.9%	20.8%	20.6%	20.7%	20.7%	21.1%	20.9%	20.6%	20.9%	20.9%
Research & Development	21	22	21	23	87	22	24	22	25	93
R&D/Sales	1.0%	1.1%	1.0%	1.1%	1.0%	1.0%	1.0%	1.0%	1.1%	1.0%
R&D/Gross Profit	2.6%	2.6%	2.5%	2.7%	2.6%	2.5%	2.5%	2.4%	2.6%	2.5%
Operating Expenses	465	467	466	471	1,869	509	511	510	516	2,046
Operating Expenses/Sales	23.0%	22.5%	22.2%	22.2%	22.5%	23.6%	22.8%	22.2%	22.2%	22.7%
Operating Expenses/Gross Profit	56.8%	55.7%	55.5%	54.8%	55.7%	55.9%	54.8%	54.1%	54.0%	54.7%
Other Income	(2)	11	4	5	18	5	5	5	5	18
Operating Income	352	382	378	393	1,505	407	426	437	444	1,714
Operating Margin	17.4%	18.4%	18.0%	18.5%	18.1%	18.9%	19.0%	19.0%	19.2%	19.0%
Interest Expense	38	41	38	38	155	44	42	39	38	163
Income Before Income Taxes	314	341	340	355	1,350	363	384	398	406	1,551
Pretax Margin	15.5%	16.4%	16.2%	16.7%	16.2%	16.8%	17.1%	17.3%	17.5%	17.2%
Income Taxes	83	90	90	81	344	96	102	105	108	411
Tax Rate	26.5%	26.4%	26.5%	22.8%	25.5%	26.5%	26.5%	26.5%	26.5%	26.5%
Income of Consolidated Entities	231	251	250	274	1,006	267	282	292	298	1,140
Minority Interests	(8)	(7)	(7)	(9)	(31)	(8)	(7)	(7)	(9)	(32)
Income from Equity Investments	2	3	1	4	11	3	4	2	5	12
Net Income from Operations	225	247	244	269	986	261	279	287	294	1,120
Non Recurring Items	0	0	3	0	3	0	0	0	0	0
Cumulative Effect of Accounting Change	0	0	0	0	0	0	0	0	0	0
Reported Net Income	225	247	247	269	989	261	279	287	294	1,120
Diluted Earnings Per Share:										
Earnings From Operations	$0.68	$0.75	$0.74	$0.82	$2.99	$0.79	$0.85	$0.87	$0.89	$3.40
Change	20%	19%	22%	22%	21%	16%	13%	17%	9%	14%
Nonrecurring Items	0.00	0.00	0.01	0.00	0.01	0.00	0.00	0.00	0.00	0.00
Cumulative Effect of Accounting Change	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Reported Earnings Per Share	0.68	0.75	0.75	0.82	3.00	0.79	0.85	0.87	0.89	3.40
Shares Outstanding (Millions)	330.0	329.9	329.5	329.5	329.7	329.5	329.5	329.5	329.5	329.5
Sequential Change (Millions)	0.6	(0.2)	(0.4)	0.0	(0.5)	0.0	0.0	0.0	0.0	(0.2)
Estimated Option Expense	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Diluted EPS (FAS123R Options Adjusted)	$0.68	$0.75	$0.74	$0.82	$2.99	$0.79	$0.85	$0.87	$0.89	$3.40
Change										
EBITDA	$523	$556	$551	$571	$2,201	$407	$426	$437	$444	$1,714
Growth in EBDITA/Share	14%	15%	14%	10%	13%	-22%	-23%	-21%	-22%	-22%
EBITDA Margin	25.8%	26.8%	26.3%	26.9%	26.4%	18.9%	19.0%	19.0%	19.2%	19.0%
EBITDA/Share	$1.59	$1.69	$1.67	$1.73	$6.68	$1.23	$1.29	$1.33	$1.35	$5.20

Source: Company reports, Banc of America Securities LLC estimates.

Praxair, Inc.

Annual Sales Detail by Segment, 2000R—Estimated 2011

($ millions)

	2000R	2001	2002	2003	2004	2005	2006	2007E	2008E	2009E	2010E	2011E	Growth 01-06	Growth 06-11E
Gases														
Manufacturing	760	783	955	1,081	1,212	1,665	1,831	1,973	2,100	2,215	2,315	2,419	19%	6%
Metals	832	850	794	873	1,094	1,269	1,415	1,525	1,604	1,685	1,760	1,840	13%	5%
Chemicals & Process Industries	572	584	582	641	684	872	916	967	1,014	1,049	1,085	1,118	11%	4%
Electronics	364	372	423	408	479	555	666	763	828	890	948	995	12%	8%
Glass	48	49	49	54	64	79	83	85	87	88	90	92	13%	2%
Refinery Hydrogen (Energy)	416	425	423	582	821	951	749	858	918	982	1,051	1,124	17%	8%
Healthcare	572	584	582	582	752	872	916	994	1,067	1,141	1,215	1,294	11%	7%
Food & Beverage	572	584	476	466	479	555	583	620	645	671	698	726	1%	4%
Aerospace	22	28	26	33	50	79	250	260	270	280	290	300	52%	4%
Other	628	641	586	703	757	556	435	466	498	528	559	593	-6%	6%
Total	4,783	4,900	4,896	5,423	6,391	7,454	7,843	8,511	9,030	9,528	10,011	10,501	11%	6%
Surface Technologies	414	410	394	400	447	475	481	505	528	552	576	602		
Total Gross Sales	5,197	5,310	5,290	5,823	6,838	7,929	8,324	9,016	9,557	10,080	10,588	11,103		
Eliminations	(154)	(152)	(162)	(210)	(244)	(273)								
Net Sales	5,043	5,158	5,128	5,613	6,594	7,656	8,324	9,016	9,557	10,080	10,588	11,103		

	2000R	2001	2002	2003	2004	2005	2006	2007E	2008E	2009E	2010E	2011E
Gases												
Manufacturing	10%	3%	22%	13%	12%	37%	10%	8%	6%	5%	4%	4%
Metals	9%	2%	-7%	10%	25%	16%	12%	8%	5%	5%	4%	4%
Chemicals & Process Industries	9%	2%	0%	10%	7%	28%	5%	6%	5%	3%	3%	3%
Electronics	9%	2%	14%	-4%	17%	16%	20%	15%	9%	8%	6%	5%
Glass	10%	2%	0%	11%	18%	24%	5%	2%	2%	2%	2%	2%
Refinery Hydrogen (Energy)	9%	2%	0%	38%	41%	16%	-21%	14%	7%	7%	7%	7%
Healthcare	9%	2%	0%	0%	29%	16%	5%	9%	7%	7%	6%	6%
Food & Beverage	9%	2%	-18%	-2%	3%	16%	5%	6%	4%	4%	4%	4%
Aerospace	46%	29%	-5%	25%	52%	59%	215%	4%	4%	4%	4%	3%
Other	9%	2%	-9%	20%	8%	-27%	-22%	7%	7%	6%	6%	6%
Gases - Total	10%	2%	0%	11%	18%	17%	5%	9%	6%	6%	5%	5%
Surface Technologies	6%	-1%	-4%	2%	12%	6%	1%	5%	4%	4%	4%	4%
Total Gross Sales	9%	2%	0%	10%	17%	16%	5%	8%	6%	5%	5%	5%
Total Net Sales	9%	2%	-1%	9%	17%	16%	9%	8%	6%	5%	5%	5%

	2000R	2001	2002	2003	2004	2005	2006	2007E	2008E	2009E	2010E	2011E
Gases												
Manufacturing	15%	15%	18%	19%	18%	21%	22%	22%	22%	22%	22%	22%
Metals	16%	16%	15%	15%	16%	16%	17%	17%	17%	17%	17%	17%
Chemicals & Process Industries	11%	11%	11%	11%	10%	11%	11%	11%	11%	10%	10%	10%
Electronics	7%	7%	8%	7%	7%	7%	8%	8%	9%	9%	9%	9%
Glass	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%
Refinery Hydrogen (Energy)	8%	8%	8%	10%	12%	12%	9%	10%	10%	10%	10%	10%
Healthcare	11%	11%	11%	10%	11%	11%	11%	11%	11%	11%	11%	12%
Food & Beverage	11%	11%	9%	8%	7%	7%	7%	7%	7%	7%	7%	7%
Aerospace	0%	1%	0%	1%	1%	1%	3%	3%	3%	3%	3%	3%
Other	12%	12%	11%	12%	11%	7%	5%	5%	5%	5%	5%	5%
Gases - Total	92%	92%	93%	93%	93%	94%	94%	94%	94%	95%	95%	95%
Surface Technologies	8%	8%	7%	7%	7%	6%	6%	6%	6%	5%	5%	5%
Total Gross Sales	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%

Source: Company reports, Banc of America Securities LLC estimates.

Praxair, Inc.
Regional Matrix of Key Industrial Gas Metrics, 2006
($ millions)

	U.S	Canada	Mexico	N.A.	Germany/ Benelux	Spain	Italy	Europe	China	India	Korea	Thailand/ Other	Asia	Brazil	Other	LatAm	Total
Sales	3,557	792	348	4,696	384	413	367	1,163	197	128	202	109	636	1,119	229	1,348	7,843
% of Regional Sales	76%	17%	7%	100%	33%	35%	32%	100%	31%	20%	32%	17%	100%	83%	17%	100%	100%
% of Total Sales	45%	10%	4%	60%	5%	5%	5%	15%	3%	2%	3%	1%	8%	14%	3%	17%	100%
% Growth (06 vs. 05)	-3%	3%	0%	0%	2%	2%	-1%	5%	20%	20%	12%	12%	17%	20%	20%	20%	5.2%
EBIT	605	150	66	822	73	99	88	260	32	26	35	19	111	215	37	252	1,445
% Margin	17.0%	19.0%	19.0%	17.5%	19.0%	24.0%	24.0%	22.4%	16.0%	20.5%	17.1%	17.1%	17.5%	19.2%	16.0%	18.7%	18.4%
% of Total	42%	10%	5%	57%	5%	7%	6%	18%	2%	2%	2%	1%	8%	15%	3%	17%	100%
Interest (allocated)	62	14	6	82	8	9	8	26	5	3	5	3	15	22	4	26	149
Pretax Income	543	137	60	740	64	90	80	234	27	23	30	16	96	193	32	226	1,296
Taxes (allocated)	138	35	15	189	16	23	20	60	7	6	8	4	25	49	8	58	330
Net Income	405	102	45	551	48	67	60	175	20	17	22	12	72	144	24	168	966
NOPAT	451	112	49	612	54	74	66	194	23	20	26	14	83	160	27	188	1,077
Assets	4,408	982	431	5,820	596	640	569	1,805	320	208	329	177	1,034	1,549	317	1,867	10,526
% of Total	42%	9%	4%	55%	6%	6%	5%	17%	3%	2%	3%	2%	10%	15%	3%	18%	100%
Avg. Invested Capital	3,200	713	313	4,226	433	465	413	1,311	233	151	239	128	751	1,125	230	1,355	7,643
ROC	14.1%	15.7%	15.7%	14.5%	12.6%	15.9%	15.9%	14.8%	10.1%	12.9%	10.8%	10.8%	11.0%	14.3%	11.9%	13.9%	14.1%
Market Share	23%	41%	28%	26%	12%	12%	13%	7%	8%	32%	25%	15%	4%	65%	25%	50%	14%
Mode of Supply ($)																	
Onsite	1,011	222	97	1,330	109	116	103	328	83	51	81	44	258	243	64	307	2,223
Merchant Liquid	1,027	226	99	1,352	107	124	110	341	59	45	71	38	213	386	69	455	2,361
Packaged Gases	1,332	305	134	1,770	148	153	136	436	45	26	40	22	133	431	85	516	2,855
Other	186	40	17	243	19	21	18	58	10	6	10	5	32	59	11	71	404
Total	3,557	792	348	4,695	384	413	367	1,105	197	128	202	109	604	1,119	229	1,348	7,842
Mode of Supply (%)																	
Onsite	28%	28%	28%	28%	29%	28%	28%	28%	42%	40%	40%	40%	41%	22%	28%	23%	28%
Merchant Liquid	29%	29%	29%	29%	28%	30%	30%	29%	30%	35%	35%	35%	33%	34%	30%	34%	30%
Packaged Gases	37%	39%	39%	38%	39%	37%	37%	37%	23%	20%	20%	20%	21%	39%	37%	38%	36%
Other	5%	5%	5%	5%	5%	5%	5%	5%	5%	5%	5%	5%	5%	5%	5%	5%	5%
Total	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%

Note: Analysis is for Gases business only and excludes Praxair Surface Technologies (5-6% of total sales)

Source: Company reports, Banc of America Securities LLC estimates.

Praxair, Inc.
Balance Sheet, 2000R—Estimated 2011
($ millions)

													Growth	
Assets:	2000R	2001	2002	2003	2004	2005	2006	2007E	2008E	2009E	2010E	2011E	01-06	06-11E
Cash & Equivalents	$31	$39	$39	$50	$25	$173	36	$36	$36	$36	$36	$36	10%	0%
Accounts Receivable	876	857	860	962	1,231	1,386	1,456	1,546	1,636	1,726	1,821	1,920	13%	6%
Inventories	297	287	277	302	328	373	381	411	441	471	503	536	7%	7%
Other Current Assets	157	93	110	135	160	201	186	186	186	186	186	186	17%	0%
Total Current Assets	1,361	1,276	1,286	1,449	1,744	2,133	2,059	2,179	2,299	2,419	2,545	2,677	12%	5%
Property Plant & Equipment at Cost	8,893	9,242	9,427	10,795	12,034	12,861	6,694	7,844	9,019	10,219	11,444	12,694	-2%	14%
Less: Accumulated Depreciation	4,122	4,425	4,761	5,543	6,088	6,753	0	781	1,650	2,608	3,656	4,797		
Fixed Assets, Net	4,771	4,817	4,666	5,252	5,946	6,108	6,694	7,063	7,369	7,611	7,788	7,897	8%	3%
Goodwill	1,097	1,136	985	1,075	1,551	1,545	1,613	1,613	1,613	1,613	1,613	1,613	10%	0%
Investments and Advances	242	198	184	182	210	210	0	0	0	0	0	0		
Other	291	288	280	347	427	495	736	736	736	736	736	736	21%	0%
Total	7,762	7,715	7,401	8,305	9,878	10,491	11,102	11,591	12,017	12,379	12,682	12,924	9%	3%
Liabilities and Shareholders' Equity:														
Accounts Payable	409	413	378	413	502	639	682	732	742	792	845	900	13%	6%
Short Term Debt	159	178	215	133	454	231	130	130	130	130	130	130	0%	0%
Current Portion of Long Term Debt	341	86	23	22	195	290	56	56	56	56	56	56	24%	0%
Other Current Liabilities	530	517	484	549	724	841	890	840	790	740	690	640	14%	-6%
Total Current Liabilities	1,439	1,194	1,100	1,117	1,875	2,001	1,758	1,758	1,718	1,718	1,721	1,726	13%	0%
Long Term Debt	2,641	2,725	2,510	2,661	2,876	2,926	2,981	2,685	2,262	1,583	689	(436)	3%	
Other Noncurrent Liabilities	1,167	1,158	1,287	1,244	1,294	1,460	1,587	1,587	1,587	1,587	1,587	1,587	6%	0%
Minority Interests	138	141	164	195	225	202	222	222	222	222	222	222	9%	0%
Preferred Stock	20	20	0	0	0	0		0	0	0	0	0		
Shareholders' Equity	2,357	2,477	2,340	3,088	3,608	3,902	4,554	5,339	6,228	7,269	8,463	9,825	14%	17%
Total	7,762	7,715	7,401	8,305	9,878	10,491	11,102	11,591	12,017	12,379	12,682	12,924	9%	3%
Financial Leverage Analysis														
Change in Net Cash (Debt)	(191)	160	241	(57)	(734)	226	143	296	423	679	894	1,125		50%
Net Cash (Debt)	(3,110)	(2,950)	(2,709)	(2,766)	(3,500)	(3,274)	(3,131)	(2,835)	(2,412)	(1,733)	(839)	286	3%	
Net Cash (Debt) Per Share	(9.65)	(9.02)	(8.22)	(8.36)	(10.56)	(9.91)	(9.50)	(8.60)	(7.32)	(5.26)	(2.55)	0.87	3%	
Book Value Per Share	$7.32	$7.57	$7.10	$9.33	$10.89	$11.81	$13.81	$16.20	$18.90	$22.06	$25.68	$29.82	14%	17%
L.T. Debt/(L.T. Debt + Equity)	53%	52%	52%	46%	44%	43%	40%	33%	27%	18%	8%	-5%		
Net Debt/(Net Debt + Equity)	57%	54%	54%	47%	49%	46%	41%	35%	28%	19%	9%	-3%		
Total Debt/EBITDA	2.35	2.18	1.98	1.95	2.10	1.77	1.44	1.15	0.91	0.60	0.27	(0.07)		
Interest Coverage (EBIT/Interest Exp.)	3.9	3.9	4.7	6.1	7.1	7.9	9.7	10.5	12.5	16.8	27.7	92.8		51%
Interest Coverage (EBITDA/Interest Exp.)	6.0	6.1	7.3	9.6	10.8	11.9	14.2	15.3	18.5	24.8	40.9	137.3		52%
Working Capital Analysis														
Trade Working Capital	764	731	759	851	1,057	1,120	1,155	1,225	1,335	1,405	1,479	1,556	11%	6%
Working Capital Ratio	0.9	1.1	1.2	1.3	0.9	1.1	1.2	1.2	1.3	1.4	1.5	1.6		
Accounts Receivable Days Outstanding	62	61	61	59	61	62	62	61	61	61	61	61		
Inventory Cost of Sales Days Outstanding	37	35	35	32	29	28	28	27	28	29	30	31		
Inventory Turnover	10.0	10.4	10.5	11.5	12.7	13.2	13.2	13.3	13.0	12.5	12.1	11.6		
Accounts Payable Days Outstanding	46	49	49	43	42	45	49	49	49	49	51	53		
Sales/Assets	0.65	0.67	0.68	0.71	0.73	0.75	0.77	0.79	0.81	0.83	0.84	0.87		
Return on Capital														
PX Reported Annualized After-Tax ROC	12.0%	12.0%	13.4%	12.8%	12.5%	13.2%	14.6%							
Return on Avg. Shareholders' Equity (ROE)	21.3%	20.6%	23.0%	21.8%	21.4%	22.3%	23.8%	23.0%	21.7%	21.0%	20.1%	19.3%	22.1%	21.5%
Cash Return on Capital (CROC)	12.3%	12.4%	12.8%	12.3%	12.2%	12.8%	14.4%	15.2%	15.6%	16.5%	17.7%	18.7%	12.8%	16.4%
Return on Assets (ROA)	8.4%	8.6%	9.2%	8.8%	9.0%	9.2%	10.2%	10.9%	11.4%	12.2%	13.0%	13.8%		
Shares Outstanding Year End (Mil.)	322.2	327.0	329.5	331.0	331.4	330.3	329.7	329.5	329.5	329.5	329.5	329.5	0%	0%

Source: Company reports, Banc of America Securities LLC estimates.

Praxair, Inc.
Cash Flow Statement, 2000R–Estimated 2011
($ millions)

	2000R	2001	2002	2003	2004	2005	2006	2007E	2008E	2009E	2010E	2011E	Growth 01-06	Growth 06-11E
Operating Activities														
Reported Net Income	$363	$430	$409	$585	$697	$726	$989	$1,120	$1,236	$1,400	$1,565	$1,745	19%	12%
Depreciation	438	466	483	517	578	665	696	781	869	958	1,049	1,140	9%	10%
Amortization	33	33												
Deferred Income Taxes	35	36	37	33	89	120								
Unremitted Earnings of Affiliates														
Gain on Sale of Assets														
Other	10		3	21	11	27	(1)							
Special Charge	158	47	139											
Funds from Operations	1,037	1,012	1,071	1,156	1,375	1,538	1,684	1,901	2,105	2,358	2,613	2,885	11%	11%
Working Capital Changes:														
Accounts Receivable	(36)	46	6	(96)	(203)	(106)	(90)	(90)	(90)	(90)	(95)	(99)		2%
Inventories	(13)	20	4	(22)	(24)	(50)	(15)	(30)	(30)	(30)	(32)	(33)		12%
Other Current Assets	(22)	11	4	(19)	6	0	0	0	0	0	0	0		
Accounts Payable and Accruals	31	(22)	(41)	78	153	156	207	50	10	50	53	55		
CBI Acquisitions Payments							0							
Other Noncurrent Assets & Liabilities	(98)	(47)	(43)	40	(64)	(63)	(34)	(50)	(50)	(50)	(50)	(50)		
Subtotal	(138)	8	(70)	(19)	(132)	(63)	68	(120)	(160)	(120)	(124)	(127)		
Operating Activities	899	1,020	1,001	1,137	1,243	1,475	1,752	1,781	1,945	2,238	2,490	2,758	12%	10%
Investing Activities														
Capital Expenditures	(704)	(595)	(498)	(644)	(668)	(877)	(1,100)	(1,150)	(1,175)	(1,200)	(1,225)	(1,250)	15%	2%
Acquisitions	(290)	(213)	(113)	(73)	(929)	(44)	(14)							
Asset Sales	106	45	24	64	45	34	126							
Other				(339)			0							
Investing Activities	(888)	(763)	(587)	(992)	(1,552)	(887)	(988)	(1,150)	(1,175)	(1,200)	(1,225)	(1,250)	9%	4%
Operating Less Investing	11	257	414	145	(309)	588	764	631	770	1,038	1,265	1,508		
Financing Activities														
Short Term Debt, Net	433	21	67	(94)	(113)	(29)	0							
Long Term Debt, Net	(306)	(210)	(312)	137	779	26	(378)							
Minority Transactions and Other	(64)	(14)	27	(5)	(8)	(48)	16							
Commercial Paper, Net							0							
Issuances of Common Stock	124	142	206	246	212	242	267							
Purchases of Common Stock	(144)	(76)	(276)	(271)	(394)	(396)	(487)							
Dividends	(98)	(110)	(123)	(149)	(195)	(233)	(323)	(335)	(347)	(359)	(371)	(383)	24%	3%
Subtotal	(55)	(247)	(411)	(136)	281	(438)	(905)	(335)	(347)	(359)	(371)	(383)		
Foreign Exchange	(1)	(2)	(3)	2	3	(2)	4							
Net Cash Flow	(46)	8	0	11	(25)	148	(137)	296	423	679	894	1,125		
Per Share:														
Total Sources	$3.22	$3.09	$3.25	$3.49	$4.15	$4.66	$5.11	$5.77	$6.39	$7.16	$7.93	$8.76	11%	11%
Total Uses	(2.61)	(1.80)	(1.72)	(2.00)	(2.41)	(2.85)	(3.13)	(3.85)	(4.05)	(4.01)	(4.09)	(4.18)	14%	5%
Net	0.60	1.30	1.53	1.49	1.74	1.81	1.98	1.91	2.34	3.15	3.84	4.58		
Change in Cash & Equivalents	(46)	8	0	11	(25)	148	(137)	296	423	679	894	1,125		
Cash at Beginning of Year	76	31	39	39	50	25	173							
Cash at End of Year	31	39	39	50	25	173	36	296	423	679	894	1,125		
Analysis:													Growth	
Capex to Sales	14.0%	11.5%	9.7%	11.5%	10.1%	11.5%	13.2%	12.8%	12.3%	11.9%	11.6%	11.3%	11.3%	12.2%
Funds from Operations/Sales	21%	20%	21%	21%	21%	20%	20%	21%	22%	23%	25%	26%		
Change in Working Capital To Change In Sales	32%	-7%	-233%	4%	13%	6%	-10%	17%	30%	23%	24%	25%	-37.9%	18.1%
D&A Less Capital Expenditures	(233)	(96)	(15)	(127)	(90)	(212)	(404)	(369)	(306)	(242)	(176)	(110)	53%	-23%
Cash From Operations Less Capex	195	425	503	493	575	598	652	631	770	1,038	1,265	1,508		
Cash From Operations Less Capex Less Dividends	97	315	380	344	380	365	329	296	423	679	894	1,125		
Capex to Gross Fixed Assets	8%	6%	5%	6%	6%	7%	16%	15%	13%	12%	11%	10%	8%	13%
Dividend Payout Ratio	27%	26%	30%	25%	28%	32%	33%	30%	28%	26%	24%	22%	29%	27%
Conversion of Net Income to Free Cash Flow before Di	54%	99%	123%	84%	82%	82%	66%	56%	62%	74%	81%	86%		

Source: Company reports, Banc of America Securities LLC estimates.

Chemicals
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Praxair, Inc.
Discounted-Cash-Flow Valuation
($ millions)

DCF Growth/Discount Assumptions		Equity Assumptions		Debt Assumptions		Performance Metrics	
First Stage EBIT Compound Annual Growth (Yrs 1-4)	8.5%	Risk Free Rate %	4.6%	Pre-Tax Cost of Debt	5.5%	Cash ROC (2006E)	14.4%
First Stage EBIT Compound Annual Growth (Yrs 5-10)	6.5%	Market Risk Premium %	6.9%	Marginal Tax Rate	38.0%	WACC	9.7%
Terminal Value Growth Rate	3.0%	Adjusted Beta	0.88	After Tax Cost of Debt	3.4%	CROC-WACC	4.7%
WACC	9.7%	Cost of Equity %	10.7%	Market Value of Debt	3,436	Capital Employed	$7,643
Industrial Gas Industry Average Unlevered Beta	0.80	Current Stock Price	$62.96	MV Debt/Equity	17%	EVA	$360
		Shares Outstanding (mm	329.5				
		Market Value of Equity	20,746				

Year	1 2007E	2 2008E	3 2009E	4 2010E	5 2011E	6 2012E	7 2013E	8 2014E	9 2015E	10 2016E	Growth 07E-11E	Growth 11E-16E	Terminal Value
Sales	$9,016	$9,557	$10,080	$10,588	$11,103	$11,830	$12,605	$13,430	$14,310	$15,247	5.3%	6.5%	
Operating Profit	1,714	1,820	2,013	2,192	2,379	2,535	2,701	2,878	3,066	3,267	8.5%	6.5%	
Operating Margin	19.0%	19.0%	20.0%	20.7%	21.4%	21.4%	21.4%	21.4%	21.4%	21.4%			
Equity Earnings	12	13	14	15	16	16	17	18	18	19	7.2%	3.4%	
Minority Interest	(32)	(33)	(34)	(35)	(36)	(36)	(37)	(38)	(38)	(39)	3.0%	1.6%	
Plus Depreciation and Amortization	781	869	958	1,049	1,140	1,215	1,294	1,379	1,469	1,566	9.9%	6.5%	
Less Capital Expenditures	(1,150)	(1,175)	(1,200)	(1,225)	(1,250)	(1,300)	(1,385)	(1,476)	(1,573)	(1,676)	2.1%	6.0%	
Net Capital Expenditures	(369)	(306)	(242)	(176)	(110)	(85)	(91)	(97)	(103)	(110)	-26.1%	0.1%	
Deferred Taxes	0	0	0	0	0	0	0	0	0	0			
Less Cash Taxes	(350)	(372)	(411)	(448)	(486)	(518)	(552)	(588)	(626)	(667)	8.5%	6.5%	
Cash Tax Percentage	20%	20%	20%	20%	20%	20%	20%	20%	20%	20%	0.0%	0.0%	
Working Capital Requirements	(120)	(160)	(120)	(124)	(127)	(141)	(150)	(160)	(170)	(182)	1.4%	7.4%	
Free Cash Flow to the Firm (FCFF)	855	962	1,220	1,425	1,636	1,771	1,888	2,013	2,146	2,288	17.6%	6.9%	35,469

NPV of FCFF in Years 1-10	9,322	40%
NPV of Terminal Value	14,057	60%
Total Enterprise Value	23,378	100%
Less Total Debt	3,436	
Less Funded Status of Pension and OPEB, Net of Taxes	282	
Plus Cash and Marketable Securities	36	
Plus PV Adjustment (DCF discounts to 1/1/06)	533	
Total Equity Value	20,229	
Equity Value Per Share	**$61**	

Sensitivity Analysis

		Terminal Growth Rate				
		2.0%	2.5%	3.0%	3.5%	4.0%
	7.7%	82	89	96	106	118
	8.2%	74	79	85	92	102
	8.7%	67	71	76	82	89
	9.2%	61	64	68	73	78
WACC	9.7%	55	58	**$61**	65	70
	10.2%	51	53	56	59	63
	10.7%	47	49	51	54	57
	11.2%	43	45	47	49	51
	11.7%	40	41	43	45	47

E = Banc of America Securities Research Estimates

Source: Company reports, Banc of America Securities LLC estimates.

April 3, 2007

APD

$73.94

12-Month Target:
$74.00

Total Return To Target:
2.1%

Neutral

Market Cap.	Volatility
$16.5 BB	Low

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Changes at a glance

(Please see page 2 for additional detail)

Rating? No ◀▶ — Maintain Neutral

Target Price? No ◀▶ — Maintain $74.00 Target

Revenue (BB)			Prev	Curr	
FY06	No		–	$9.1	
FY07E	No		–	$10.1	

EPS**			Prev	Curr	P/E
FY06	No	◀▶	–	$3.51	21.1
FY07E	No	◀▶	–	$4.05	18.3
FY08E	No	◀▶	–	$4.60	16.1

* No Previous Values

▲ = Up; ▼ = Down; ◀▶ = No Change. ** These estimates adjusted to account for FAS 123r, Expensing of Employee Stock Options.

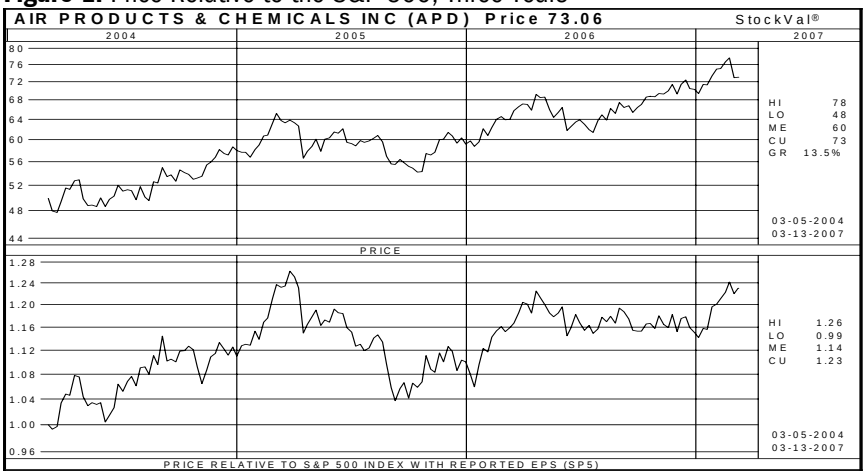
Chemicals

Air Products and Chemicals Inc.

Pure Play in Progress Delivering Great Growth

- **Fundamental prospects appear favorable.** Air Products enjoys above-average exposure to fast growing applications such as energy/hydrogen (17% of fiscal 2006 sales) and electronics (21%). The company also derived 17% of fiscal 2006 sales from fast-growing Asian markets with leading positions in Korea and Taiwan.
- **New portfolio is closer to a pure-play in industrial gases.** We expect Chemicals to decline from 24% of sales in fiscal 2005 to 9% in fiscal 2007 pro forma for proposed divestitures. Conversely, we expect Gases and Equipment to grow to 91% of sales by fiscal 2007, driven by new hydrogen capacity and growth in Asia and Europe.
- **Restructuring supports a higher multiple.** We see the focus on gases, rising ROC and lower earnings volatility post-restructuring as favorable for long-term prospects and warranted valuation. Praxair stock now trades at a premium of only 5% to Air Products on calendar 2007 EPS estimates.
- **Air Products appears committed to share repurchases.** We believe Air Products' repurchase commitment ($1 billion through 4Q07) is not contingent upon net proceeds from pending asset sales. However, we estimate divestitures could generate total gross proceeds of $1.1-1.3B, although net proceeds could be meaningfully less given the low tax basis in Chemicals.
- **We remain Neutral.** Although we like Air Products' fundamental prospects and view restructuring of Chemicals positively, we remain reluctant to pay a wide premium of 17.6x our calendar 2007 estimates versus 15.4x for the S&P 500 index.
- **Valuation and Target Price Analysis:** Our DCF-based target of $74 suggests that shares merit a multiple of 18.3x our fiscal 2007 EPS estimate of $4.05.

Figure 1: Price Relative to the S&P 500, Three Years



Source: StockVal.

Air Products and Chemicals Inc.

Company Data

52-Week Range	$79-59
Market Capitalization (BB)	$16.5
Shares Outstanding (MM)	223.4
Float (MM)	216.0
Short Interest	0.9%
Average Daily Volume	1,044,750
Dividend/Yield	$1.52/2.1%
12/06 ROE/ROIC	18.0%/12.8%
Exchange-Traded Funds	XLB,PBW,IYM
Convertibles	NO
Proj. 3-Yr. EPS Growth Rate	9%

Balance Sheet (12/06)

Net Cash/Share	($13.81)
Book Value/Share	$22.88
Price/Book Value	3.2x
Debt/Cap.	38.0%

Estimates (FYE Sep)	2006A	2007E Prev	2007E Curr	2008E Prev	2008E Curr
EPS*					
1Q (Dec)	$0.77	–	$1.03A	–	
2Q (Mar)	0.89	–	1.02E	–	
3Q (Jun)	0.92	–	1.00E	–	
4Q (Sep)	0.94	–	1.01E	–	
Fiscal Year	**$3.51**	–	**$4.05**	–	**$4.60**
First Call Mean			$4.11		$4.59
Calendar Year	**$3.68**	–	**$4.19**	–	**$4.76**
P/E	20.1		17.6		15.5
P/E/G	223%		196%		173%
Revenue (BB)					
1Q (Dec)	$2.4	–	$2.4A	–	
2Q (Mar)	2.5	–	2.5E	–	
3Q (Jun)	2.5	–	2.6E	–	
4Q (Sep)	2.4	–	2.6E	–	
Fiscal Year	**$9.1**	–	**$10.1**	–	**$10.8**
First Call Mean			$9.9		$10.2

* These estimates adjusted to account for FAS 123r, Expensing of Employee Stock Options. First Call Mean estimates might not have been similarly adjusted.

Top Picks

Celanese Corporation
(CE, $30.99, B, $35.00 Target)

Airgas, Inc.
(ARG, $41.84, B, $47.00 Target)

Least Favorites

NOVA Chemicals Corporation
(NCX, $31.10, N, $26.00 Target)

Albemarle Corporation
(ALB, $42.02, N, $39.50 Target)

Company Description

- Air Products generated $9.1 billion of sales in fiscal 2006, of which 73% was derived from industrial gases (such as oxygen, nitrogen and hydrogen), while related equipment accounted for an additional 5%. The balance of 22% came from performance chemicals and intermediates used in agricultural chemicals, paints, coatings, adhesives and other applications.

Sector View

- Market-weight.

Chemicals
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Summary and Investment Conclusion

Our target price of $74 suggests that shares are fairly valued.

We rate Air Products shares Neutral with a target price of $74. As ranked by equity market capitalization, Air Products is the fifth-largest U.S. chemical company behind Dow Chemical (DOW, $45.60, Neutral, Target Price: $42), DuPont (DD, $49.06, Neutral, Target Price: $49), Monsanto (MON, $55.01, Neutral, Target Price: $47) and competitor Praxair (PX, $62.96, Neutral, Target Price: $61). We expect Air Products to generate $10.1 billion in fiscal 2007 sales, of which 91% will come from industrial gas and related activities. The remaining 9% will come from the company's chemicals portfolio, which is under restructuring. We expect industrial gases to remain above trend in second half of fiscal 2007, as operating rates increase at new hydrogen facilities and strong growth looks to continue in Asia and Europe. Air Products' struggling Health Care business (6% of sales) showed signs of improvement in first quarter of fiscal 2007 as sales increased 15% and margins grew sequentially.

We like Air Products' geographic mix at this juncture. The company also derives 13% of sales from fast-growing Asian markets, with leading market positions in Korea and Taiwan, as well as 26% of sales from a recovering European market, where the company's exposure is increasing in Eastern Europe. In January 2007, Air Products acquired Linde's industrial gas business in Poland. We see the transaction as a good strategic fit that will enhance exposure to faster-growing markets. The former BOC property was required to be sold by Linde as a result of its purchase of BOC in September 2006. The transaction value of €370 million (US$481 million) represents multiples of 2.94x fiscal 2006 sales of €126 million (US$164 million) and 9.7x associated EBITDA of €38 million (US$50 million). Sales mix is packaged gases (43%), liquid bulk (35%) and onsite (22%). EBITDA multiple is similar to Air Products' own, but as low as 7.4x following synergies, which should permit EPS accretion in fiscal 2008 after neutral impact in fiscal 2007.

In terms of end-use markets, Air Products enjoys three primary growth drivers. We project long-term sales and earnings growth of 6% and 10%, respectively, based on exposure to fast-growing applications such as energy/hydrogen (20% of estimated fiscal 2007 sales), electronics (22%) and health care (6%).

We view the global industrial gas industry as an attractive oligopoly. The industry is well consolidated, with relatively high barriers to entry such as existing pipeline networks. Participants enjoy attractive growth prospects of 1.5-2.0x industrial production and long-term contracts that include the ability to pass through energy-related costs to customers, thereby insulating the companies from volatility in the natural gas market. Air Products' primary competitors include Air Liquide (France), Linde (Germany) and Praxair (United States). These top four firms account for approximately 70% of global industry sales.

Shares appear fairly valued. Our DCF-based target price of $74 suggests that shares offer modest upside of 2%. We consider valuation fair, at a multiple of 17.6x our calendar 2007 EPS estimate of $4.19, a premium to the S&P 500 multiple of 15.4x.

Figure 2

Sales by Segment, Estimated Fiscal 2007

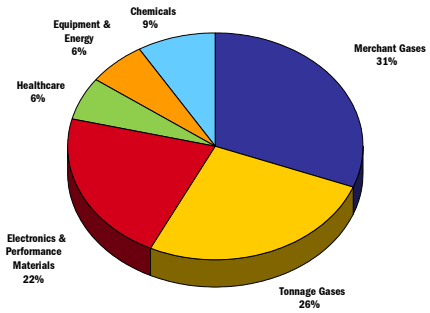
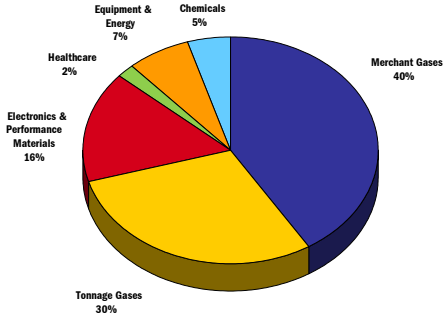


Figure 3

EBIT by Segment, Estimated Fiscal 2007



Source: Banc of America Securities LLC estimates, company reports.

Figure 4

Sales by Geography, Estimated Fiscal 2007

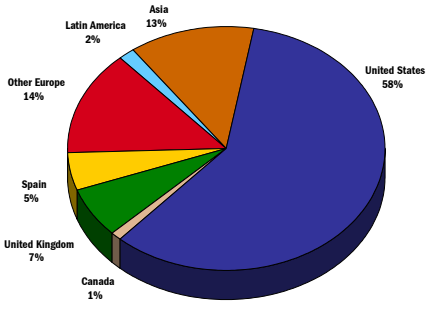
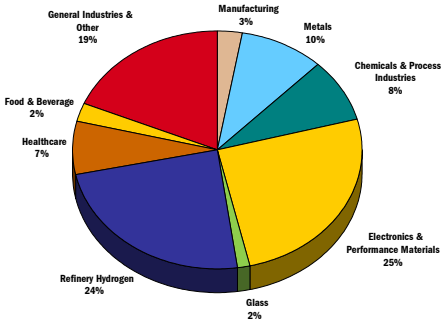


Figure 5

End-Use Markets, Estimated Fiscal 2007



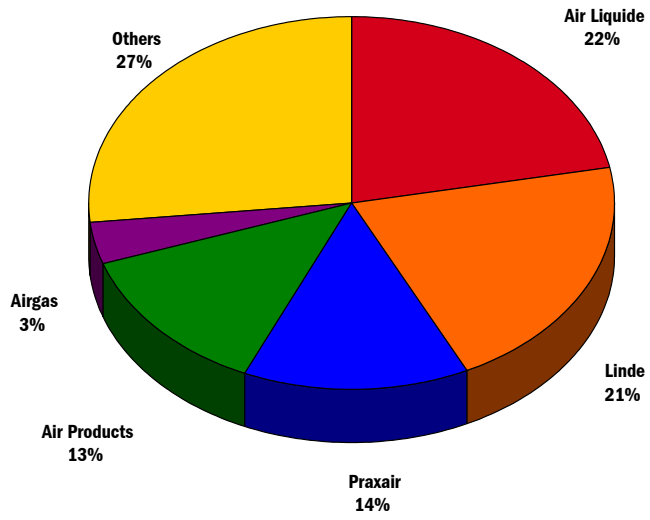
Source: Banc of America Securities LLC estimates, company reports.

Investment Positives

- **Industrial gas companies can be viewed as high-growth utilities.** The industry has several attractive characteristics, including a high degree of consolidation, high barriers to entry, appealing growth prospects, defensive characteristics and favorable contract provisions such as automatic price escalators and the ability to minimize risk by passing through energy-related input costs (e.g., natural gas).
  - **The industry is an oligopoly.** Air Products' primary competitors include Air Liquide (France), the recent combination of Linde (Germany) and BOC (United Kingdom), Praxair (United States) and Nippon Sanso (Japan). These top four firms account for about 70% of global industry sales.

Figure 6

Industrial Gases
Global Market Share, 2006



Source: Banc of America Securities LLC estimates.

Industrial gases offer good, stable growth.

- **Growth prospects are attractive relative to other chemical markets.** Given exposure to diverse end-use markets, we consider global industrial production as the most relevant macroeconomic proxy. We project long-term sales and earnings growth for Air Products of 6% and 10%, respectively, based on overweight exposure to fast-growing applications such as electronics (25% of total fiscal 2007 estimated sales; includes performance materials) and energy/hydrogen (24%). We believe the use industrial gases in mature and innovative technologies, with extra boosts from growth in emerging economies, energy recovery, and energy efficiency applications can provide sustainable sales growth of 1.5- 2x IPI. In Figure 3, we show the correlation of N.A. merchant volume with U.S. IPI, which should be viewed as the "floor" of upcoming sales growth, as energy recovery, energy efficiency, and emerging geography opportunities are projected to increase.

- **Industrial gas markets are generally regional.** Unlike many commodity chemicals, industrial gas markets are more regional in nature than global or even national. As a result, profitability tends to be well insulated from prospective capacity additions in Asia and the Middle East that could precipitate an eventual cyclical downturn in the markets for ethylene and chlorine derivatives.

Figure 7

Air Products and Chemicals Inc.
Volume Growth Versus U.S. Industrial Production, First-Quarter 1999—Third-Quarter 2006

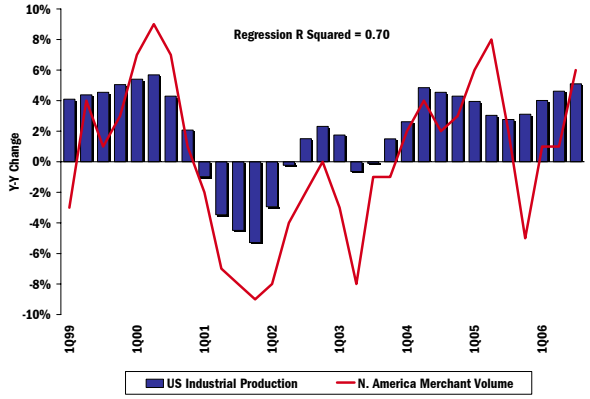
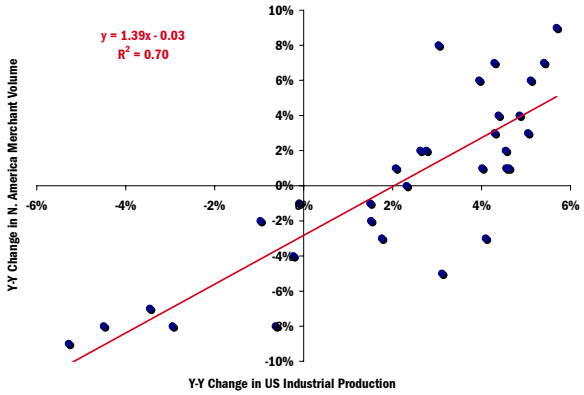


Figure 8

Air Products and Chemicals Inc.
Volume Growth Versus U.S. Industrial Production, Regression Analysis



Source: Company reports, FactSet.

Natural gas costs are passed through to customers.

- **Contracts contain attractive provisions.** Onsite/pipeline business (39% of total fiscal 2007 estimated gas sales) typically feature long-term contracts with four attractive features: (1) long-term duration of 10-20 years; (2) "take-or-pay" minimum volume requirements; (3) pass-through of natural gas cost fluctuations; and (4) formula-based selling price escalators. For merchant/bulk business (32% of total sales), contracts are usually three to five years in duration and include energy pass-through provisions, but may exclude take-or-pay requirements and automatic price escalators.

Attractive onsite/pipeline supply accounts for 39% of Air Products' mix.

Figure 9

Air Products and Chemicals Inc.
Mode of Supply, Estimated Fiscal 2007

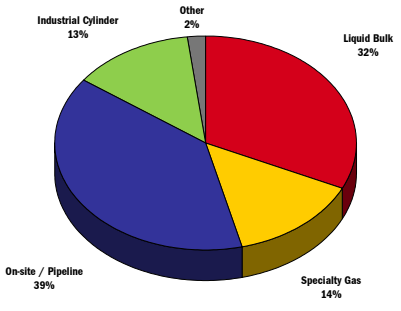
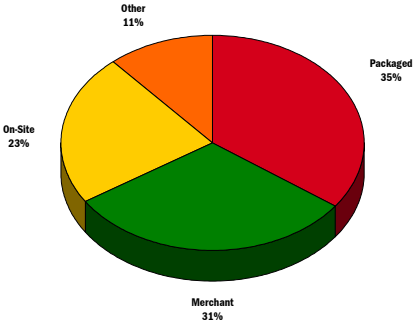


Figure 10

Global Industrial Gas Industry
Mode of Supply, 2006



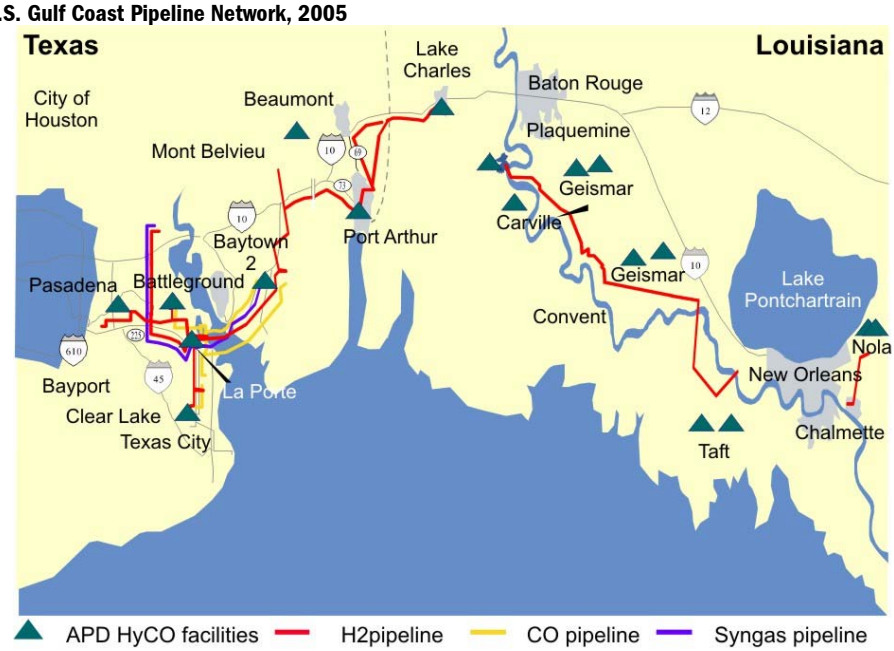
Source: Company reports, Banc of America Securities LLC estimates.

Pipeline networks insulate Air Products from competition.

- **Existing infrastructure affords a competitive advantage.** Air Products has existing pipeline networks in Texas, Louisiana, Southern California, Rotterdam and Canada (Sarnia and Edmonton). As an incumbent pipeline supplier to these regions, we believe Air Products enjoys an inherent economic advantage in bidding for new business. Existing pipeline networks also create formidable barriers to entry. Figure 11 shows Air Products' pipeline network on the U.S. Gulf Coast.

Figure 11

Air Products and Chemicals Inc.
U.S. Gulf Coast Pipeline Network, 2005

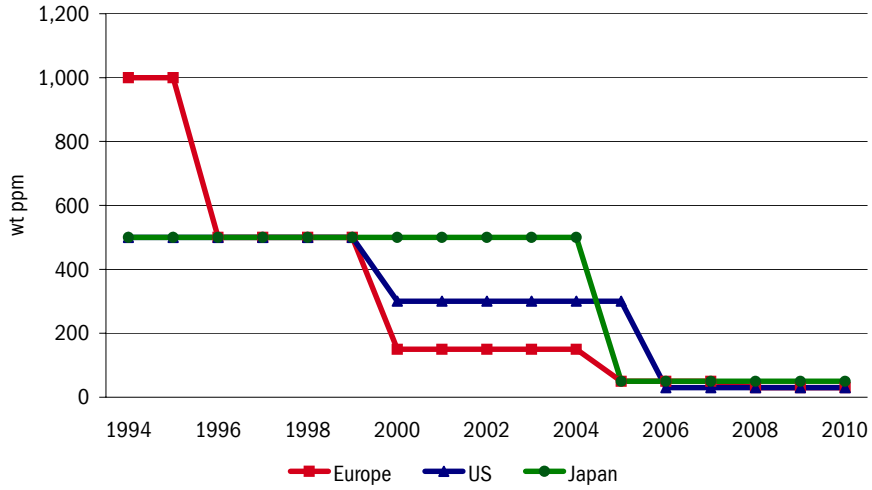


Source: Company reports, Banc of America Securities LLC estimates.

- **Balance sheet is good shape.** Net debt accounted for 38% of total capitalization as of December 31, 2006. We view financial leverage as moderate to low given the company's modest cyclicality and relatively consistent, "utility-like" cash flows. Standard & Poor's rates Air Products debt "A" with a stable outlook, and Moody's rates the company "A2," also with stable outlook.

Figure 12

Air Products and Chemicals Inc.
Gasoline Sulfur Specifications, 1994—2010



Source: Company reports, Banc of America Securities LLC estimates.

Air Products plans to expand hydrogen production by 35% in fiscal 2006.

▶ **Hydrogen is a high-growth market.** Energy-related markets accounted for $1.5 billion in sales, or 17% of Air Products' total sales in fiscal 2006, with the largest portion (about $1.2 billion, or 14% of total sales) coming from the sale of hydrogen to refiners. The company holds the leading position with an estimated 33% share of the global refinery hydrogen market, which is growing at an average rate of 10-12% per year as a result of tighter gasoline regulations related to sulfur content, and increased reliance on heavy, sour crude oil. U.S. specifications require refiners to remove 90% of the sulfur in gasoline and 95% in diesel by 2006 (see Figure 12 above). At the same time, the sulfur content of the crude coming into refineries is increasing as the U.S. imports more heavy sour crude from overseas. The combination of higher sulfur coming in and the need for lower sulfur coming out drives robust demand for refinery hydrogen. By 2010, we estimate that refineries will account for 75% of hydrogen demand versus 45% in 2001. As shown on Table 1, Air Products brought on 6 new plants in fiscal 2006 equivalent to 450 million scf/day, expanding its capacity by 35%. The majority of this new hydrogen production (about 85%) is already sold under long-term take or pay contracts. Over the long term, we think Air Products is well positioned to benefit from increased hydrogen demand required to convert tar sands in western Canada into less viscous, more marketable crude oil.

Figure 13

Global Industrial Gas Industry
Hydrogen Market Share, 2006

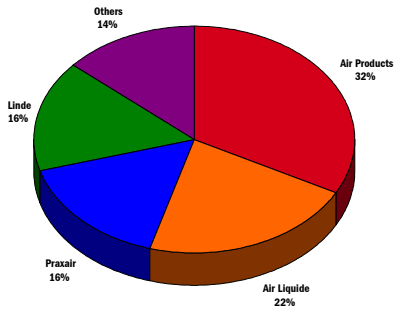
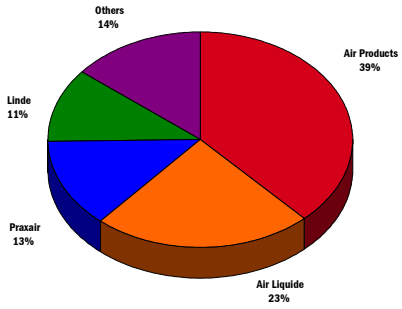


Figure 14

Global Industrial Gas Industry
Electronics Market Share, 2006



Source: Company reports, Banc of America Securities LLC estimates.

Table 1

Air Products and Chemicals Inc.
Growth in Hydrogen Production Capacity, 2003—Estimated 2009
(MMSCFD)

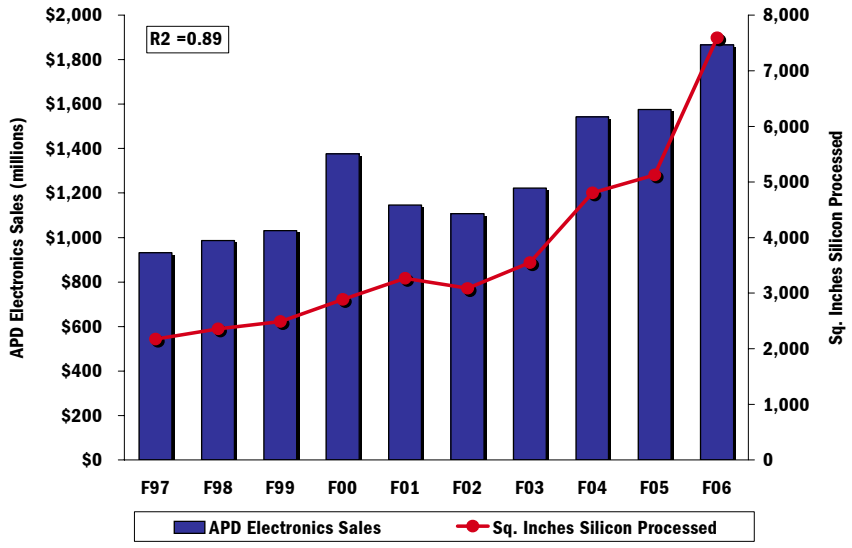
Customer	Location	Capacity	Timing	Use
Murphy Oil	Louisiana	40	2003	Oil Refining
Marathon Oil	Caitlesburg, KY	40	2003	Oil Refining
ConocoPhillips	Westlake, LA	100	May 2004	Oil Refining
Petroplus	Cressier, Switzerland	20	2005	Oil Refining
IES	Mantova, Italy	20	2005	Oil Refining
Exxon	Baytown, TX	70	Dec 2005	Oil Refining
Motiva / Marathon	Convent, LA	110	Dec 2005	Oil Refining
Petro-Canada	Edmonton, Alberta	70	April 2006	Oil Refining
Suncor & Shell	Sarnia, Ontario	80	April 2006	Oil Refining
Exxon	Joliet, IL	20	May 2006	Oil Refining
Premcor	Pert Arthur, TX	110	Sept 2006	Oil Refining
Petro-Canada	Edmonton, Alberta	105	April 2008	Tar Sands
Nanjing Chemical (Sinopec sub.)	Nanjing, China	100	1Q09	Ammonia & Chemicals
Marathon Oil	Garyville, LA	120	Late 2009	Oil Refining
Total Incremental Capacity		**1,005**		
Beginning Capacity		**800**		
Ending Capacity		**1,805**		
Percent Increase		**126%**		

Source: Company reports, Banc of America Securities LLC estimates.

- **Health care offers attractive long-term growth, but must be fixed first.** Air Products' health care business was realigned as an identifiable segment in the fourth quarter of fiscal 2006, with fiscal 2006 sales of $571 million (6% of total sales), of which 75% is derived from homecare applications such as use of oxygen for respiratory therapy, while the remaining 25% is used in hospitals. The health care segment in fiscal 2006 suffered from a drop in operating profits to $8 million from $82 million in fiscal 2005, prompting corporate management to initiate reorganization of health care management and salesforce. Health care showed signs of improvement in first quarter of fiscal 2007 as sales increased by 15% and margins grew sequentially. We project organic market volume growth of 6-8% through 2010. Previously, Air Products added to its existing position in Europe (Spain) by entering the U.S. homecare market via acquisition of American Homecare Supply in 2002. After 15 subsequent bolt-on acquisitions, Air Products is now the sixth-largest U.S. provider of respiratory therapy gases. Competitors include Lincare (LNCR, $36.76, Neutral, Target Price: $35, covered by BAS analyst Gary Taylor), Apria (AHG, $32.42, Sell, Target Price: $23, covered by BAS analyst Gary Taylor), Praxair and Rotech (ROHI, $1.75, Not Rated). The main issue, however, in health care are the rate cuts associated with Medicaid and Medicare, addressed below in the risks section of this report.
- **Electronics is growing rapidly.** Air Products established electronics as an identifiable segment in the fourth quarter of fiscal 2006, with $1.9 billion in sales (22% of total fiscal 2006 sales), including a small performance materials business that previously was included in the chemicals segment. Air Products competes in the $9 billion market for wafer fabrication materials via sale of gases, process chemicals, photoresist ancillaries, and slurries/pads for chemical mechanical planarization (CMP). We forecast global market growth of 6-8% through 2010 driven by Asia, which accounts for an estimated 45% of the company's electronics mix. As shown in Figure 15, Air Products' electronics exposure is highly correlated with square inches of silicon processed, which jumped in 2006 after only a small increase in 2005, boosting Air Products' electronics sales. Other factors driving growth include the number of layers in a semiconductor chip (11 in 2005 versus 8 in 2001) and the expansion of LCD panel manufacturing capacity.

Figure 15

Air Products and Chemicals Inc.
Electronics Sales Versus Square Inches of Silicon, Fiscal 1997—Fiscal 2006



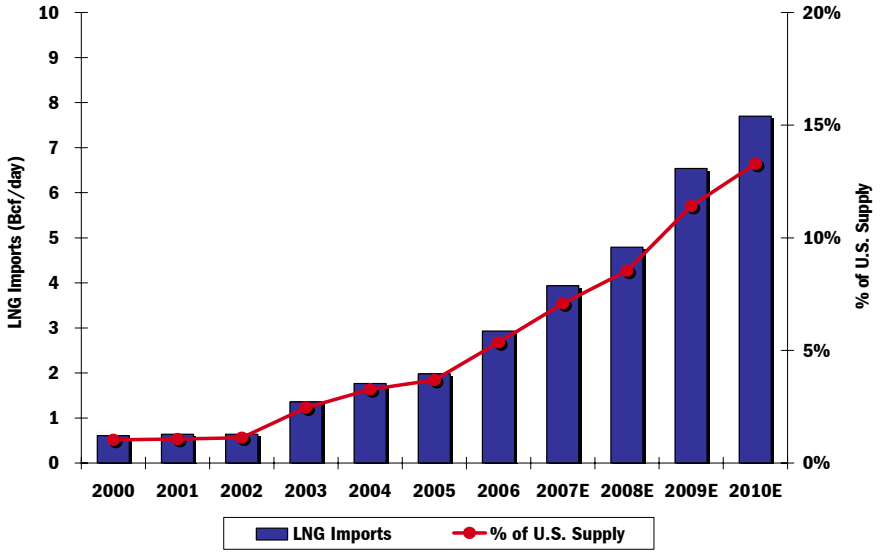
Source: Company reports, SEMI.

LNG has contributed to growth.

- **Air Products is the global leader in equipment for liquefied natural gas (LNG).** As shown in Figure 12, Banc of America Securities oil & gas E&P analyst, Robert Morris, expects LNG to account for 13% of U.S. natural gas supply in 2010. LNG heat exchangers and other equipment accounted for $401 million of Air Products' sales in fiscal 2005, or about 5% of total sales. Air Products' AP-X manufacturing technology offers an increase of 50% in production capacity to 8 million tons per year, which we believe is unmatched among competitors such as Linde, Philips and Shell. In fourth quarter of fiscal 2006, LNG became part of the newly formed Equipment & Energy segment, which posted sales of $537 million in fiscal 2006 (6% of total sales).

Figure 16

Air Products and Chemicals Inc.
Projected Growth in U.S. LNG Demand, 2000—Estimated 2010



Source: Banc of America Securities LLC, company reports.

- **Air Products has meaningful equity affiliates.** On a 100% basis, affiliates generate revenue of $2.4 billion, with concentrations in Italy, Mexico, Japan and South Africa. Income from equity affiliates in fiscal 2006 was $108 million, or 9.5% of operating income of $1.14 billion, which does not include income from affiliates.
- **Tax efficiency is improving.** The company's tax rate has declined from 32% in fiscal 1998 to 26.6% for fiscal 2006, thanks to tax credits related to investment, research and foreign operations. We project sustainable tax rate of about 27%.

Investment Risks

NF_3 volume is growing but prices are eroding.

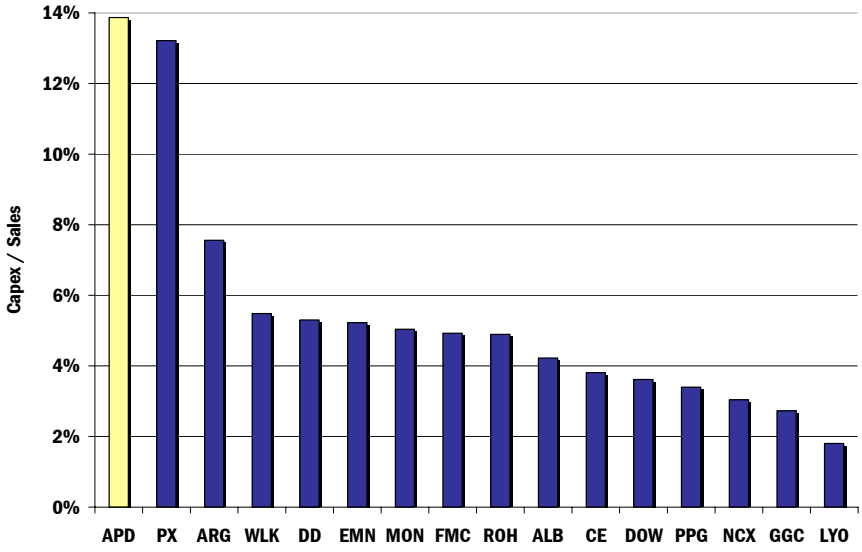
- **Portfolio is leveraged to electronics, a cyclical market where prices for certain specialty materials are eroding.** Of Air Products' fiscal 2006 sales, 22% was exposed to electronics. Air Products sells an estimated 85% of its electronics gases and chemicals into the semiconductor industry, which is highly cyclical (see Figure 13). We estimate Air Products sells more than $200 million in nitrogen trifluoride (NF_3), representing an estimated 15% of Air Products' electronics portfolio. NF_3 competitors include Formosa, Mitsui, Showa Denko and Central Glass. The NF_3 market continues to suffer from overcapacity and prices have generally eroded since peaking in 2000. Despite eroding returns, the company recently completed a 50% expansion of its NF_3 capacity at its Hometown, Pennsylvania plant, bringing total capacity to 2,000 metric tons per year. We see the expansion as a defensive move, allowing the company to maintain market share amid intense competition and position the company to supply the rapidly growing LCD panel industry. We expect LCD demand to grow at more than 20% per year for the next several years.

Capital expenditure to sales has averaged 15% since 1995.

- **Capital intensity is high.** Since 1995 Air Products' additions to plant, property and equipment (PP&E) have on average exceeded 15% of sales versus an average of 4% for the balance of our coverage universe and leads our coverage group in 2006, as seen in Figure 13. In fiscal 2006, capital expenditures rose by 32%, to $1.26 billion (13.9% of sales). Approximately 75% of Air Products' capital expenditures are directed to four growth markets: refinery hydrogen/energy, electronics, health care and Asia.

Figure 17

U.S. Chemical Industry
Capital Spending to Sales Ratio, 2006



Source: Company reports, Banc of America Securities LLC estimates.

- **Health care prospects could be at risk.** Medicaid and Medicare represent about 20% of Air Products' health care. This portion of the business recently suffered reimbursement cuts that came in the following three waves: (1) a drug reimbursement cut by 50%, effective January 1, 2005; (2) an equipment reimbursement cut by 8.5% (better than the proposed cutback of 15%), effective April 1, 2005; and (3) the dispensing fee, historically $5 per prescription, which was increased to $57 in 2005 to compensate for the other cuts, and then adjusted down to $33 effective January 1, 2006. Despite the publicity of the reimbursement cuts, history has shown that they are not as frequent as the constant pressure from private insurers to reduce rates, and they are visible ahead of implementation. We note that the health care business is approximately equally split between the U.S. and Europe. The European pricing structure has not suffered a similar setback. Moreover, Air Products has indicated that U.S. volumes also have been hurt. In response, the company announced that the segment will be led by a new management team, focused on increased accountability and better consistency of product offerings across different regions. Senior management set an expectation for significant improvement in fiscal 2007. Over the longer term, we continue to believe that the segment has a potential for organic growth of 6-8%.

Valuation

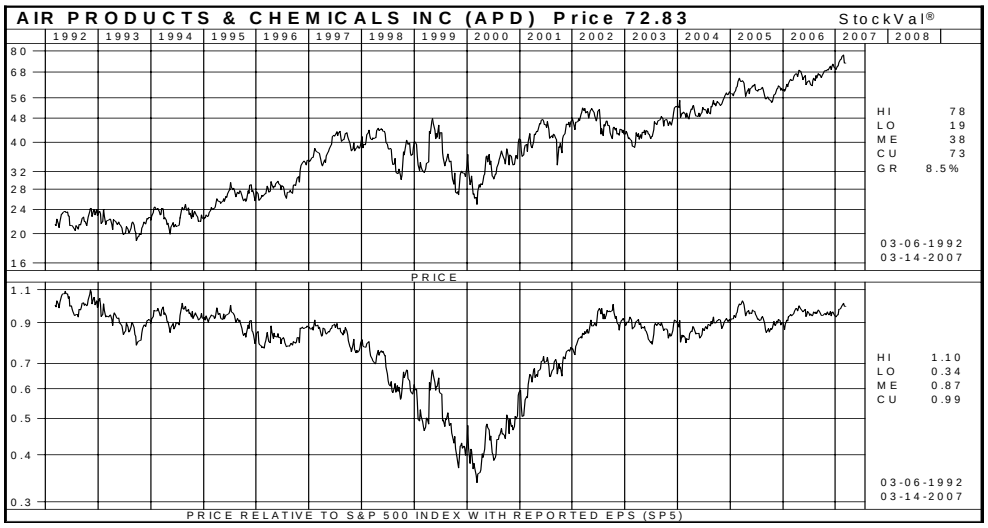
Performance and Relative Performance

Air Products shares recently traded in line with the S&P 500.

Air Products has outperformed the S&P index since March 2000. Over the last 15 years, the shares of Air Products have returned 9.7% including dividends, compared with 11.1% for the S&P 500 index. Figure 18 depicts Air Product's share price performance and the performance relative to the S&P 500 over the last 15 years. Air Products underperformed the S&P 500 from 1995-2000, a reflection of investor rotation into technology and telecom shares and a cyclical downturn in the Chemical and Equipment businesses. In July 1999, shares fell 21% following the announcement of Air Products' joint bid with Air Liquide for the BOC Group. The company withdrew its bid in May 2000, which proved to be a positive catalyst for the shares. From May 2000 to May 2002, Air Products outperformed the S&P index by 93% as many investors rotated back into more defensive names.

Figure 18

Air Products and Chemicals Inc.
Price and Performance Relative to the S&P 500, 15 years



Source: StockVal.

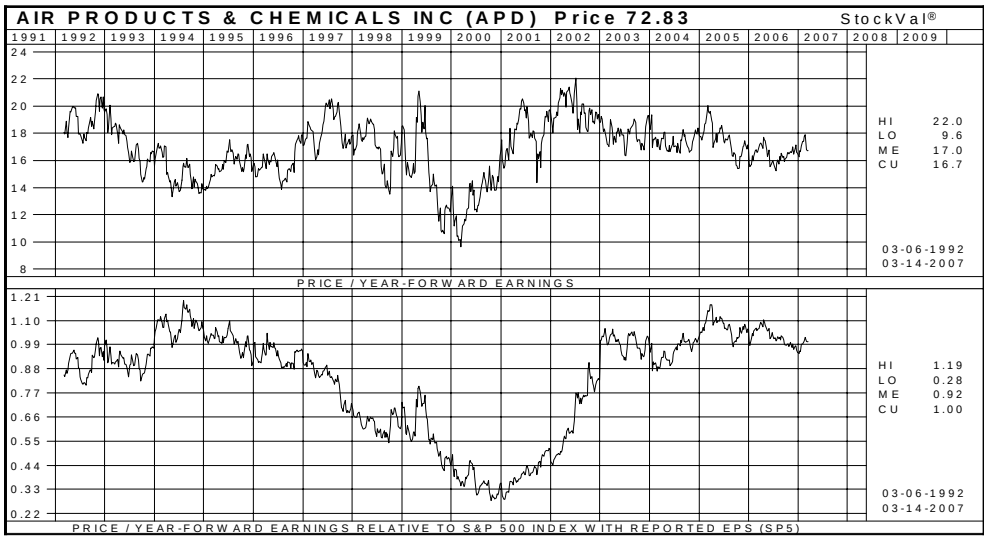
P/E and Relative P/E Multiple Analysis

Air Products' stock historically has traded at a premium of 2% to the S&P 500.

Valuation appears richer than historical benchmarks. Air Products trades at 17.6x our calendar 2007 EPS estimates of $4.19, premium of 11% to its average 15-year forward P/E average of 17.0x. Valuation tends to fluctuate with the industrial economy, with the chemical cycle adding to short-term volatility. Air Products shares still trade at a slight discount to peer Praxair, despite Air Products' higher exposure to faster-growing applications such as refinery hydrogen. In our view, margin compression in electronics, because of lower prices, in chemicals, because of energy inflation, and in health care, towing to reimbursement cuts, has contributed to erosion of Air Products' P/E multiple relative to Praxair in recent quarters.

Figure 19

Air Products and Chemicals Inc.
Forward P/E and Relative Forward P/E Multiples, 15 years



Source: StockVal.

Relative Valuation

Air Products stock trades at a premium to specialty chemical peers. On a P/E multiple basis, Air Products stock trades at a multiple of 17.6x calendar 2007 estimates of $4.19, a premium of 4% to our sector subgroup of specialty chemical names Dupont, Praxair, Rohm & Haas, Airgas and Albemarle. Likewise, the company trades at an EV/calendar 2007 EBITDA estimate of 8.9x, at parity with specialty peers.

Discounted-Cash-Flow Analysis

DCF, our valuation method of choice, suggests Air Products shares are fairly valued.

We favor discounted-cash-flow (DCF) analysis as the valuation method of choice for chemical companies. Our 10-year, three-stage DCF valuation models incorporate many aspects of companies' economic value not always captured via simple P/E and EV/EBITDA multiples. These include timing of fluctuations in the earnings cycle, financial leverage, cost of capital, working capital management, capital efficiency, tax efficiency, pension plan funded status, significant investments and extraordinary cash flows. Our DCF-derived valuation of $74 suggests that Air Products shares are fully valued.

Financial Projections

Management has outlined the following financial goals:

- **Organic sales growth.** Management aims to grow total sales at twice the rate of global industrial production growth, with greater growth opportunities in Asia offset by more modest long-term growth prospects in North America and Europe. We believe that this target is reasonable given Air Products' favorable product mix and exposure to the fast-growing Asia region. We forecast average annual sales growth of 7% through fiscal 2010.
- **Earnings.** Management has put forth a range of $3.84-4.00 for fiscal 2007, which corresponds to earnings growth of 10-14%. We estimate fiscal 2007 EPS of $4.05, which represents growth of 15%. We forecast a compounded earnings growth of 10% for the balance of the decade.
- **Operating return on net assets (ORONA).** Management aims to generate ORONA of 12.5% in fiscal 2007 versus 11.3% in fiscal 2006 and 10.0% in fiscal 2005. Over the longer term, management aims to exceed 13% ORONA. ORONA is defined as 12-month-trailing operating income (excluding charges) divided by average net assets over the previous 15 months. Net assets equals total assets less investments in equity affiliates.

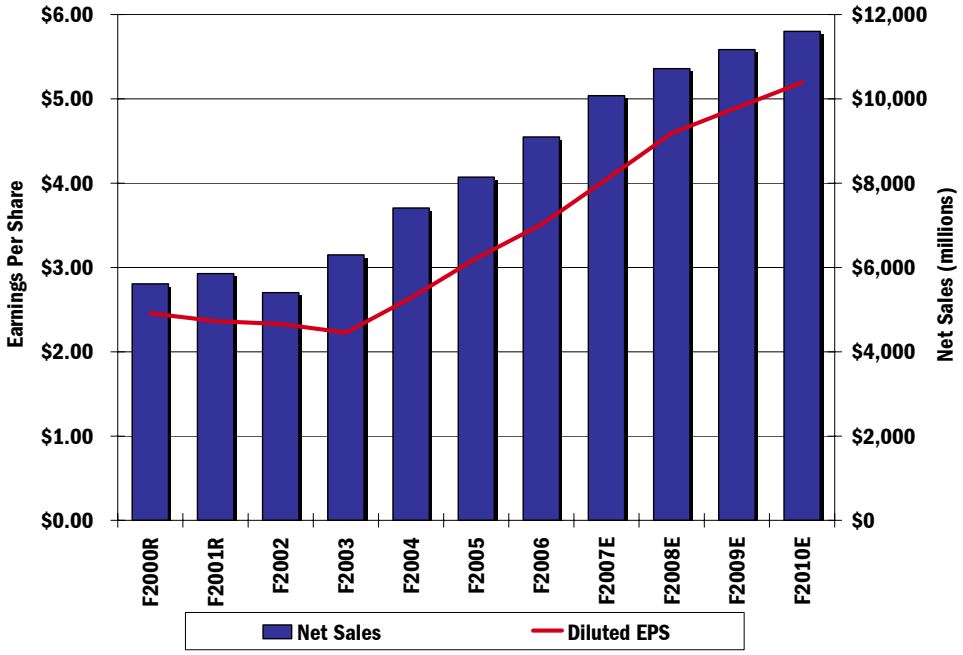
Income Statement

Positive secular trends should support 10% earnings growth.

We project long-term earnings growth of 10%. We project a long-term growth rate of 10%, slightly below the expected growth of 11% for peers Praxair and Airgas and on par with the expected growth of 10% for the specialty chemical group. Our projections reflect slower growth in Air Products' mature chemicals businesses and slower growth in gases tied to an expected downturn in the industrial economy later in the decade. We believe that refinery hydrogen demand should grow at a double-digit pace through 2007 but slow in the later part of the decade as gasoline regulations are implemented. We expect equipment sales and to remain healthy through the global buildout of LNG capacity, but equipment is too small a part of the mix (6% of sales) to drive meaningful earnings growth. We continue to see positive secular trends in health care and electronics continuing to drive top-line growth in the high-single digits in these segments through 2010.

Figure 20

Air Products and Chemicals Inc.
Income Statement, Fiscal 2000—Estimated Fiscal 2010



Source: Company reports, Banc of America Securities LLC estimates.

Chemicals restructuring should help earnings. Chemicals operating profit has been on a declining trend since fiscal 2002, compared with growth of 14% per year in gases and growth of 34% in equipment. Energy and raw material cost inflation has resulted in significant chemical margin erosion over the last several years. Management has reduced exposure to chemicals by divesting from amines to Taminco in 2006 and selling its Geismar plant which produces polyurethane intermediates to BASF. At the same time, management reaffirmed its commitment to performance products/solutions by acquiring Tomah3 in 2006 and combining the performance portfolio into a new segment that includes performance chemicals as well as electronics. The continued restructuring of chemicals is serving to transform Air Products into a near-pure play in industrial gases, similarly with peer Praxair.

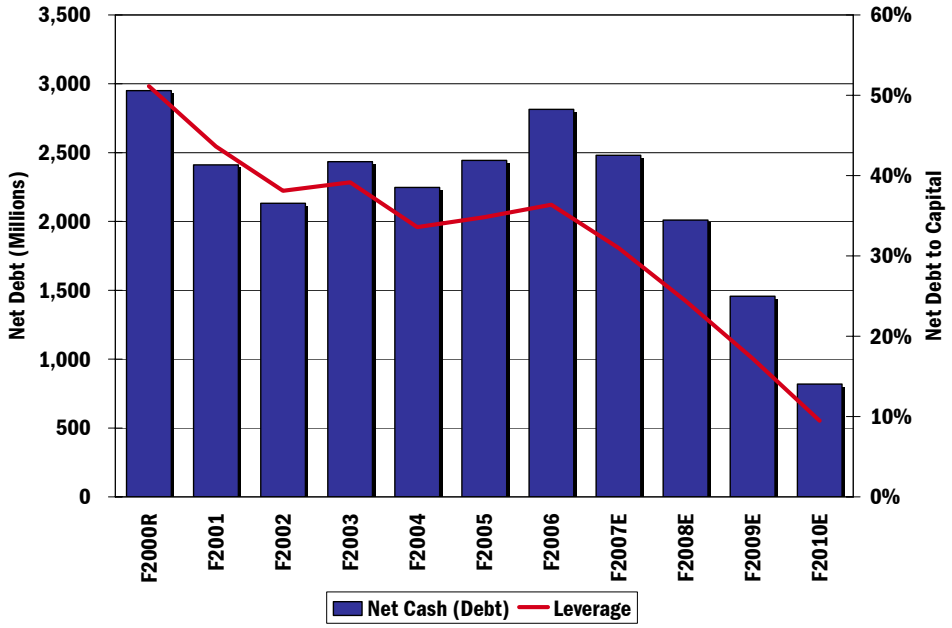
Balance Sheet

Net debt to total capitalization is 36%.

Financial leverage appears reasonable. Air Products ended fiscal 2006 with a comfortable net-debt-to-total-capitalization ratio of 36%, in line with fiscal 2005 (35%) and 2004 (34%). Debt to EBITDA at year-end fiscal 2006 was a manageable 1.4x, down from more than 2.0x in fiscal 1999. Since fiscal 2000 to fiscal 2002, the company was focused on paying down the debt it had added in the late 1990s. The company lowered its net-debt-to-total-capitalization ratio from 51% in fiscal 2000 to the mid-thirties in recent years by reducing capital spending, selling assets like its U.S. packaged gases business and suspending share repurchases. The company has debt maturities of $347 million in fiscal 2007, including $9 million in capital leases.

Figure 21

Air Products and Chemicals Inc.
Balance Sheet, Fiscal 2000—Estimated Fiscal 2010



Source: Company reports, Banc of America Securities LLC estimates.

Cash Flow

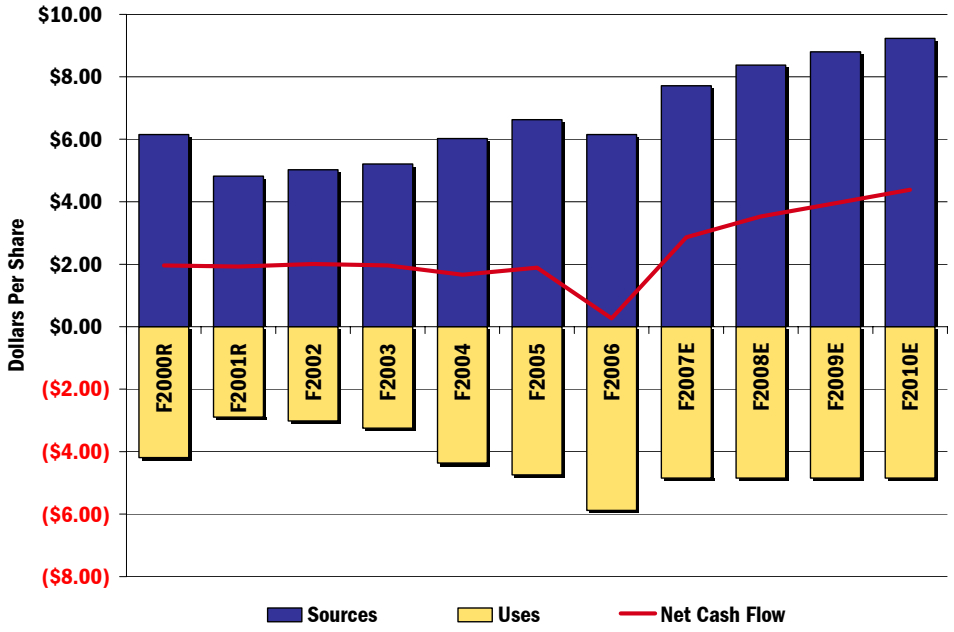
We forecast FCF yield of 3.9% in fiscal 2007.

We expect free cash flow (FCF) to strengthen in fiscal 2007. From fiscal 2000 to fiscal 2005, free cash flow (cash from operations less capital spending) has remained essentially flat, at about $400 million per year. Cash from operations increased from $1.1 billion in fiscal 2000 to $1.5 billion in fiscal 2005 through higher net income and better working capital management. In fiscal 2006, cash from operations dropped to $1.4 billion and capital expenditures increased by $308 million reducing FCF to $89 million. We expect FCF to increase to $640 million in fiscal 2007, based on higher net income and lower capital expenditures. Figure 22 shows our forecast through fiscal 2010.

Working capital utilization has improved. In fiscal 2004, accounts receivable days outstanding were higher than normal owing to SAP software implementation, hitting a peak of 76 days in third quarter of fiscal 2004. The company has since gradually worked down its receivables to 63 days in first quarter of fiscal 2007, matching the company's historical average. We project a further drop in days sales outstanding (DSOs) to 57 days by fiscal 2010. Inventories have remained lean through the latest upturn in the industrial economy. Inventory days outstanding have come down from 46 days in fiscal 2000 to 34 days in fiscal 2006.

Figure 22

Air Products and Chemicals Inc.
Sources and Uses of Funds, Fiscal 2000—Estimated Fiscal 2010



Source: Company reports, Banc of America Securities LLC estimates.

Capital spending is expected to decrease by more than 20% in fiscal 2007. We expect Air Products to invest $1.0 billion in its businesses in fiscal 2007 versus 1.26 billion in fiscal 2006. If we exclude the purchase of a $300-million bulk tank that was formerly leased, Air Products spent approximately $960 million on capital expenditures in fiscal 2006, so we project an increase of 4%, to $1.0 billion this fiscal year. We believe that Air Products will continue to invest heavily in hydrogen.

Return on capital is a key compensation metric. Employee compensation is aligned closely with financial and share price performance. Employees own 5% of company shares. From a financial perspective, net income growth and return on capital are the two biggest factors in determining management bonuses. Safety, diversity and business-level performance round out this list.

Pensions are funded adequately. In our view, Air Products' pension plans are funded adequately, at this time. The company made a voluntary contribution of $280 million to its pension plans in fiscal 2004 but expensed only $130 million of the contribution. Air Products therefore was obligated to recognize a $100-million "catch-up" charge in fiscal 2005 or about $0.10 per share. Reported pension expense was $117 million in fiscal 2005 and $154 million in fiscal 2006. The increase in pension expense in fiscal 2006 versus fiscal 2005 is attributed to a 60 basis points in the weighted average discount rate.

Table 2

Air Products and Chemicals Inc.
Free-Cash-Flow Yield Calculation
($ millions)

	F2005	F2006E	F2007E	F2008E	F2009E	F2010E
Net Income	720	799	904	1,027	1,094	1,161
Plus D & A	728	763	819	845	872	902
Less Cap Ex.	(953)	(1,261)	(1,000)	(1,050)	(1,100)	(1,150)
Less Working Capital	(145)	(77)	(83)	(33)	17	67
Other	84	(135)	0	0	0	0
Free Cash Flow	**434**	**89**	**640**	**788**	**883**	**980**
Diluted Shares Outst.	232	227	223	223	223	223
FCF / Share	1.88	0.39	2.86	3.53	3.95	4.39
Air Products Share Price	$73.94	$73.94	$73.94	$73.94	$73.94	$73.94
FCF Yield	**2.5%**	**0.5%**	**3.9%**	**4.8%**	**5.3%**	**5.9%**

Note: Free-cash-flow yield is estimated to be 2.3% in fiscal 2006, excluding a $300-million tank purchase.

Source: Company reports, Banc of America Securities LLC estimates.

Air Products announced a new share repurchase program in March 2006. On Marc 22, 2006, the Air Products announced plans to purchase up to $1.5 billion of common stock under a share repurchase program approved by the company's board of directors on 16 March 2006. The program does not have a stated expiration date. The company purchased 7.7 million shares at a cost of $496 million during 2006 and expects to complete an additional $500 million of the program during fiscal year 2007. We do not include such repurchases in our model.

Portfolio Management

Health care has been the focus of recent merger-and-acquisition (M&A) activity. Air Products has been opportunistic when it comes to making acquisitions. For example, after several years of trimming its chemicals portfolio, the company purchased Sanwa Chemical in 2003 in an effort to increase its exposure to Asia. The company also acquired packaged gases businesses in Mexico (from Messer) and Europe (from Linde AG) at nearly the same time it was divesting its U.S. packaged gases business. One clear focus of Air Products' acquisition strategy has been medical gases; the company has completed 15 bolt-ons in the three years following its "anchor" acquisition of American Homecare Supply in 2002 for $165 million. By fiscal 2006, Health care was a $570 million business, but suffered from a drop in operating profits to $8 million from $82 million in fiscal 2005, prompting corporate management to initiate reorganization of health care management and sales force. Health care showed signs of improvement in first quarter of fiscal 2007 as sales increased by 15% and margins grew sequentially. Electronics historically has been another focus of acquisitions for Air Products, the latest being Ashland's electronics chemicals business in August 2003.

Air Products has divested several large chemical businesses. The company has made progress over the last year, selling underperforming chemical businesses. Air Products sold its $325-million polyvinyl alcohol business in September 2000 and graphics acrylic resins in January 2003. In 2004, as chemical margins declined, the company sold off its uncompetitive European methylamines business and restructured its U.S. methylamines business by shutting domestic methanol production and importing low-cost methanol from Trinidad. In 2006, Air Products sold its amines

business and reaffirmed its commitment in performance products through its $115 million acquisition of Tomah3. Air Products made a strategic decision to exit the U.S. packaged gas market, selling the business in January 2002 to industry leader Airgas for $270 million. In 2007, Air Products bought the Polish business of BOC from Linde for $482 million.

Table 3

Air Products and Chemicals Inc.
Selected Portfolio Transactions, 1999—Present
($ millions)

Year	Mo.	Transaction	Property	Segment	Business	Counterparty	Value
1999	2	Acquisition	Hanyang Technology	Gases	Specialty gas equipment	Hanyang Technology	NA
1999	12	Acquisition	Purchased 50% interest	Gases	Sells hydrogen, helium	Korea Industrial Gases	NA
2000	9	Divestiture	Polyvinvyl alcohol business	Chem	Produces PVAl	Celanese AG	325
2000	10	Acquisition	Industrial gas business, NthInds	Gases	Distributes gases	Linde AG	NA
2001	8	Acquisition	German homecare business	Gases	Respiratory therapy	Messer Group	NA
2001	12	Acquisition	Industrial gas business, Mexico	Gases	Distributes gases	Messer Group	NA
2002	1	Divestiture	U.S. packaged gas business	Gases	Distributes gases	Airgas, Inc.	270
2002	7	Acquisition	San Fu Gases Company Ltd.	Gases	Specialty gases	San Fu Gases Company	NA
2002	10	Divestiture	American Homecare Supply	Gases	Respiratory therapy	American Homecare Supply	165
2003	1	Divestiture	Graphic Arts business	Chem	Graphics acrylic resins	UCB SA	NA
2003	2	Acquisition	Sanwa Chemical Industry Co.	Chem	Polyamide, amines	Sanwa Chemical Co.	NA
2003	3	Divestiture	E. Canada packaged gases	Gases	Distributes gases	The BOC Group	41
2003	5	Divestiture	W. Canada packaged gases	Gases	Distributes gases	Praxair, Inc.	NA
2003	8	Acquisition	Ashland Specialty Chemical Co.	Gases	Ultra-pure specialty chems	Ashland Inc.	293
2004	2	Divestiture	MDI business	Chem	Produces MDI	Illinois Tool Works, Inc.	NA
2004	4	Divestiture	European methylamines	Chem	Supplies methylamines	Taminco	NA
2004	7	Acquisition	Horizon Health Care Systems	Gases	Homecare services	Horizon Health Care	NA
2004	8	Acquisition	Rx Healthcare Group, Inc.	Gases	Homecare services	Rx Healthcare Group, Inc.	NA
2004	12	Acquisition	Ultra Care, Inc.	Gases	Homecare services	Ultra Care, Inc.	NA
2005	10	Acquisition	Nightingale Medical of Indiana	Gases	Homecare services	Nightingale Medical	NA
2005	10	Divestiture	North American SVS business	Chem	Distributes sodium vinyl sul.	Proviron Fine Chemicals	NA
2006	3	Acquisition	Surfactants and processing aids	Chem	Tomah3 Products	Tomah Products	115
2006	4	Acquisition	Nanotechnology	Chem	Nanoparticle Dispersion	Nanogate Advanced Matl's	NA
2006	8	Divestiture	Amines business	Chem	Amines business	Taminco	211
2007	1	Acquisition	Polish industrial gases business	Gases	BOC Gazy Sp	Linde AG	482

Source: Company reports, Banc of America Securities LLC estimates.

The company failed to acquire BOC in 2000. In the late 1990s, The BOC Group was talking to several parties about a potential sale. After negotiations with Praxair broke down, Air Products and Air Liquide stepped in with an $11.2-billion joint bid. Air Products proposed to pay $5.9 billion to acquire BOC's Southeast Asia business and a part of its U.S. operations. The transaction would have increased Air Products' global gases market share from fourth to second and added to Air Products' global market share in metals, health care, food, specialty gases, and refinery hydrogen. However, the Federal Trade Commission (FTC) rejected the combination in May 2000 on antitrust grounds. Although it was a setback for management, investors reacted positively to the news of the rejection, sending the shares up 11% the day following the announcement.

Company Description

Brief History of Air Products and Chemicals

In 1940, Leonard P. Pool founded Air Products in Detroit, Michigan, based on the concept of producing and selling gases "on-site." At the time, most oxygen was sold in cylinders; Air Products proposed building oxygen gas-generating facilities adjacent to large-volume gas users, thereby reducing distribution costs.

In 1941, the company leased its first oxygen gas generator to a small Detroit steel company. Four years later, Air Products secured a contract with Weirton Steel Company to lease three generators to produce six tons per day of oxygen. Air Products built and operated the air separation units, supplying gas "over the fence" to Weirton on a take-or-pay basis.

The 1950s brought more industrial business and new government and military contracts. During this period, Air Products started to design and manufacture liquid oxygen and nitrogen plants to support the military's missile and space programs, making the company a leading player in the U.S. industrial gas industry. Air Product also began "piggy-backing" on some of its onsite capacity, adding liquefaction capacity to existing on-site plants to serve local merchant customers.

In the 1960s, Air Products began manufacturing chemicals, initially converting refinery byproducts into oxo-alcohols for use in producing plasticizers. In 1969, the company acquired Escambia Chemical, which manufactured amines, polyurethane intermediates, polyvinyl chloride resins, and fertilizers. Air Products expanded its chemical business further in the 1970s with the acquisition of Airco, which added polyvinyl acetate emulsions, polyvinyl alcohol, acetylenic chemicals and fabricated plastics to the portfolio.

The company continued to expand and diversify its base businesses in the 1980s and 1990s. In Asia, the company took minority positions in industrial gas companies in Korea, Japan, Malaysia, Hong Kong, China, Thailand, and Taiwan. Air Products formed a joint venture with Showa Denko to manufacture specialty gases for semiconductor manufacturers. In the United States, the company expanded by acquiring Separex, a manufacturer of membrane gas separation systems, and the J. C. Schumacher Company, a leading supplier of high purity chemicals for the semiconductor industry.

In 2000, after a failed attempt to acquire 50% of the assets of The BOC Group, management refocused the company on improving returns through portfolio changes and process improvements and by driving organic growth. From 1998 to 2004, the company divested several underperforming chemicals businesses and sold its U.S. packaged gases business. The company concentrated investment on its growth businesses—medical, hydrogen and electronics. In August 2003, the company began implementation of the SAP software planning system, completing the project in the United States in May 2005. In 2006, Air Products divested from several chemical businesses. We present a corporate timeline on Table 4.

Table 4

Air Products and Chemicals Inc.
Corporate Timeline, 1940—2007

Year	Event
1940	Company formed to provide onsite oxygen.
1941	Leased first oxygen generator to a Detroit steel company.
1945	Secured on-site contract with Weirton Steel Company.
1957	Entered international market with UK joint venture.
1982	Acquired engineering firm Streams-Rodger.
1999	Company makes joint bid for BOC Group with Air Liquide.
2000	FTC blocks BOC deal.
2000	Divested polyvinyvl alcohol business.
2000	John Jones becomes CEO.
2001	Forms electronics joint venture with DuPont called DA Nanomaterials.
2002	Sells US packaged gases business.
2002	Company enters health care market with AHS acquisition.
2003	SAP implementation begins.
2006	Sells several chemicals businesses and acquires Tomah3.
2007	Acquires BOC's Polish operations from Linde.

Source: Company reports.

Sales and Profitability by Segment

Air Products now reports six segments. In fourth quarter of fiscal 2006, Air Products increased its segments to six, thereby providing more reporting granularity than in the past. The new reporting structure includes merchant gases, tonnage gases, electronics and performance materials, equipment and energy, as well as chemicals. In Table 5, we summarize estimated sales and operating profits for fiscal 2007. We project a minor margin expansion to 12.9% in fiscal 2007 versus 12.5% in fiscal 2006. We expect a combination of higher prices and lower energy cost pass throughs supporting margin expansion this year. Air Products announced price increases for North American liquid-bulk oxygen (up 10%), nitrogen (up 10%), argon (up 20%), helium (up 20%) and hydrogen (up 10%), effective October 1, 2006, for merchant and government customers. Given that most merchant buyers are on a three to five-year contract, it takes some time until these increases materialize.

Table 5

Air Products and Chemicals Inc.
Profitability Profile, Estimated Fiscal 2007

	Sales	Sales %	Growth	EBIT	EBIT %	Margin
Merchant Gases	$3,207	32%	18%	$558	42%	17.4%
Tonnage Gases	2,521	25%	13%	367	28%	14.6%
Electronics & Performance Matl's	2,202	22%	16%	207	16%	9.4%
Health Care	639	6%	12%	27	2%	4.2%
Equipment & Energy	637	6%	19%	92	7%	14.4%
Gas Sub-Total	**9,206**	**91%**	**16%**	**$1,251**	**95%**	**13.6%**
Chemicals	872	9%	-4%	63	5%	7.2%
Total	**10,079**	**100%**	14%	**$1,313**	**100%**	**13.0%**
Corporate & Other	0			($15)		
Consolidated Total	**10,079**			**1,299**		**12.9%**

Source: Banc of America Securities LLC estimates.

Trends for Fiscal 2007

We expect Air Products to continue to raise prices in fiscal 2007. We expect business trends across Air Products' diverse portfolio to be mixed next year. The company aggressively is raising prices on its bulk gases (nitrogen, oxygen and argon), in an attempt to improve margins. The markets for hydrogen, argon, as well as atmospheric gases, are tight in certain regions, supporting recent price announcements. We expect gases volume growth to slow in fiscal 2007. We also expect continued strong equipment sales, based on the surge in LNG heat exchanger demand.

Table 6

Air Products and Chemicals Inc.
Volume and Pricing Trends, Estimated 2007 Versus 2006

	Volume	Price/Mix	Sales
Gases	+	++	++
Chemicals	-	+	-
Equipment	++	++	++
Total	+	+	+

Note: 0 equals minimal change; +/- equals mid-single digit change; ++/– equals double-digit change.

Source: Banc of America Securities LLC estimates.

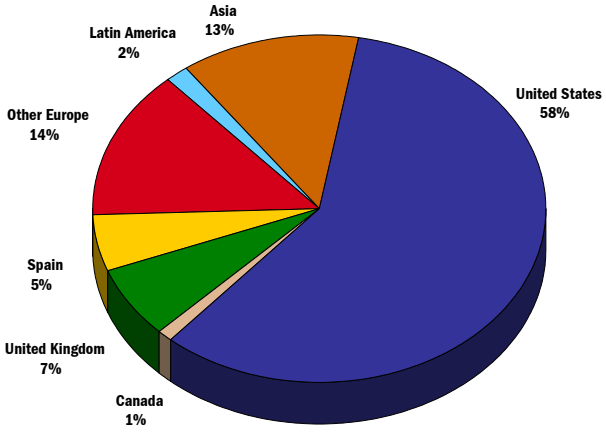
Sales by Geography

International markets account for half of sales.

Air Products is geographically diverse. Excluding Air Products' foreign affiliates, approximately 58% of sales are derived from markets outside the Unites States. Inclusion of affiliates brings Air Products' international business up to approximately 50% of sales. The company derives 13% of sales from fast-growing Asian markets, with number-one positions in Korea and Taiwan. Including affiliates, exposure to Asia is estimated at 15% of sales. Europe accounts for 26% of the mix, excluding affiliates. Unlike its competitors, Air Products runs its business on a global basis, with a single account manager for every region.

Figure 23

Air Products and Chemicals Inc.
Sales by Geography, Estimated Fiscal 2007



*Excludes affiliate sales.

Source: Company reports, Banc of America Securities LLC estimates.

We like Air Products' geographic mix at this juncture. The company also derives 13% of sales from fast-growing Asian markets, with leading market positions in Korea and Taiwan, as well as 26% of sales from a recovering European market, where the company's exposure is increasing in Eastern Europe. In January 2007, Air Products acquired Linde's industrial gas business in Poland. We see the transaction as a good strategic fit that will enhance exposure to faster-growing markets. The former BOC property was required to be sold by Linde as a result of its purchase of BOC in September 2006. The transaction value of €370m (US$481 million) represents multiples of 2.94x fiscal 2006 sales of €126 million (US$164 million) and 9.7x associated EBITDA of €38 million (US$50 million). Sales mix is packaged gases (43%), liquid bulk (35%) and onsite (22%). EBITDA multiple is similar to Air Products' own, but as low as 7.4x following synergies, which should permit EPS accretion in fiscal 2008 after neutral impact in fiscal 2007.

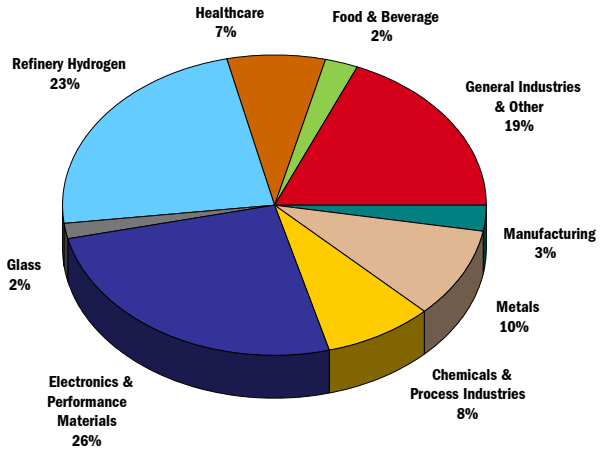
Industrial gas markets are generally more regional than global. Unlike many commodity chemicals, industrial gas markets are regional in nature. As a result, profitability tends to be well insulated from prospective capacity additions in Asia and the Middle East that could precipitate an eventual cyclical downturn in the markets for ethylene and chlorine derivatives.

Sales by Market

Refinery hydrogen and electronics are the two largest gases markets. Air Products has built leading positions in two of the fastest-growing gases end markets, electronics (26% of gases sales) and refinery hydrogen (23%). The electronics segment includes performance materials, estimated at $600 million in sales, or 7% of gases sales. The company has smaller positions in slower-growing applications, such as manufacturing (an estimated 3% of gases sales) and metals (10%).

Figure 24

Air Products and Chemicals Inc.
Sales by End Use, Estimated Fiscal 2007



Source: Company reports, Banc of America Securities LLC estimates.

Merchant Gases (42% of Estimated Fiscal 2007 EBIT)

The Merchant Gases segment sells industrial gases such as oxygen, nitrogen and argon (primarily recovered by the cryogenic distillation of air), hydrogen and helium (purchased or refined from crude helium), and certain medical and specialty gases worldwide to customers in many industries, including metals, chemical processing, food processing, medical gases, steel, general manufacturing and petroleum industries. Products are delivered by one of the following three methods:

- **Liquid bulk.** Product is delivered in bulk (in liquid or gaseous form) by tanker or tube trailer and stored usually in its liquid state, in equipment designed and installed by Air Products at the customer's site for vaporizing into a gaseous state as needed. Liquid bulk sales are typically governed by three to five-year contracts.
- **Small onsite plants.** Customers receive product through small on-site facilities (cryogenic or noncryogenic generators) either by a sale of gas contract or the sale of the equipment to the customer).
- **Packaged gases.** Small quantities of product are delivered in either cylinders or dewars. Air Products operates packaged gas businesses in Europe, Asia and Brazil; in the United States, Air Products sold its packaged business to Airgas in 2002. The company's present packaged gas business in the United States is limited to the electronics and magnetic resonance imaging (principally helium) industries.

Air Products is running its merchant business for immediate returns. Recognizing that it is a mature business, Air Products is focused on maximizing returns at the expense of growth. To this end, Air Products has been shedding low-margin, high-cost-to-serve customers located significant distances away from Air Products' production sites. Merchant transportation costs rise as the distance from an air separation unit increases. Air Products also has been actively converting merchant customers to onsite customers. Like competitor Praxair, Air Products is focused on growing its share of onsite business, which offers longer-term contracts and higher returns than merchant gases.

Table 7

Air Products and Chemicals Inc.
Merchant Gases Quarterly Trends
($ millions)

	2QF06	3QF06	4QF06	1QF07	2QF07E
Sales	**$669.2**	**$699.5**	**$722.0**	**$740.0**	**$803.0**
Sales Change (Year to Year)	8%	10%	17%	19%	20%
Sales Change (Sequential)	8%	5%	3%	2%	9%
EBIT	**115.1**	**121.3**	**128.3**	**139.2**	**142.7**
EBIT Change (Year to Year)	4%	23%	34%	32%	24%
EBIT Change (Sequential)	9%	5%	6%	8%	3%
EBIT Margin	**17.2%**	**17.3%**	**17.8%**	**18.8%**	**17.8%**

Source: Company reports, Banc of America Securities LLC estimates.

Tonnage Gases (28% of Estimated Fiscal 2007 EBIT)

Tonnage gases are sold on 15-20 year contracts. The tonnage gases segment provides hydrogen, CO_2, nitrogen and oxygen principally to the petroleum refining, chemical and metallurgical industries worldwide. Gases are produced at large facilities located adjacent to customers' facilities or by pipeline systems from centrally located production facilities and are generally governed by contracts with 15 20-year terms. Air Products is the world's largest provider of hydrogen, which is used by oil refiners to facilitate the conversion of heavy crude feedstock and lower the sulfur content of gasoline and diesel fuels to reduce smog and ozone depletion. The metallurgical industry utilizes nitrogen for inerting and oxygen for the manufacture of steel and certain non-ferrous metals, and the chemical industry uses hydrogen, oxygen, nitrogen, carbon monoxide and syngas (a hydrogen-carbon monoxide mixture) as feedstocks in the production of many basic chemicals.

Pipelines are an important delivery mechanism. Air Products delivers product through pipelines from centrally located facilities in the Texas Gulf Coast; Los Angeles, California; Baton Rouge and New Orleans, Louisiana; Alberta, Canada; Rotterdam, the Netherlands; Ulsan, Korea; Tangshan, China; Kuan Yin, Taiwan; Singapore; and Camaçari, Brazil. The Company owns less than controlling interests in pipelines located in Thailand, Singapore and South Africa.

Energy costs are mitigated with pass-through pricing. Electric power is the largest cost component in the production of atmospheric gases. Natural gas is also an important energy source. Air Products mitigates energy and natural gas prices through long-term cost pass-through contracts. Natural gas is the principal raw material for hydrogen, carbon monoxide and syngas production. During fiscal year 2006, no significant difficulties were encountered in obtaining adequate supplies of energy or raw materials.

Air Products is the global leader in refinery hydrogen. We estimate that refinery hydrogen will be a $2.2 billion business for Air Products, the largest end use complemented by premium growth prospects. Air Products is the global leader in refinery hydrogen, with an estimated global market share of approximately 33%. The company has one of the largest, hydrogen pipeline networks in the world, with pipeline "basins" in Texas, Louisiana, California and Europe.

Air Products has a growing position in western Canada. Refiners are investing to extract and refine oil from the tar sands of Alberta, Canada. Air Products seeks to provide the oxygen and hydrogen to upgrade the substrate into lighter fuels. The company already supplies 71 million scf per day of hydrogen to Imperial Oil and PetroCanada in Edmonton, to refine syncrude from the tar sands to the north. The company sees a growing market in hydrogen for refiners of tar sands syncrude but, more important, an upstream opportunity to supply hydrogen for conversion of the tar sands bitumen into syncrude via hydro-treating. To date, companies mining tar sands have chosen to make rather than buy hydrogen, but Air Products is betting that as output increases, companies such as Suncor will outsource the production of hydrogen over time, with a potential market of up to 750 million to one billion scf per day (estimated $550-700 million) by 2015.

Table 8

Air Products and Chemicals Inc.
Tonnage Gases Quarterly Trends
($ millions)

	2QF06	3QF06	4QF06	1QF07	2QF07E
Sales	**$531.1**	**$546.8**	**$613.6**	**$604.5**	**$582.0**
Sales Change (Year to Year)	34%	24%	34%	13%	10%
Sales Change (Sequential)	0%	3%	12%	-1%	-4%
EBIT	**78.2**	**85.3**	**104.0**	**88.8**	**92.2**
EBIT Change (Year to Year)	40%	28%	66%	20%	18%
EBIT Change (Sequential)	6%	9%	22%	-15%	4%
EBIT Margin	**14.7%**	**15.6%**	**16.9%**	**14.7%**	**15.8%**

Source: Company reports, Banc of America Securities LLC estimates.

Electronics and Performance Materials (16% of Estimated Fiscal 2007 EBIT)

The segment supplies gases, consumables and equipment to the electronics industry. The electronics and performance materials segment provides the electronics industry with specialty gases (such as nitrogen trifluoride, silane, arsine, phosphine, white ammonia, silicon tetrafluoride, carbon tetrafluoride, hexafluoromethane, critical etch gases and tungsten hexafluoride), as well as specialty and bulk chemicals, services and equipment for the manufacture of silicon and compound semiconductors, thin film transistor liquid crystal displays and photovoltaic devices. These products are delivered through various supply chain methods, including bulk delivery systems or distribution by pipelines such as those located in California's Silicon Valley; Phoenix, Arizona; Tainon, Taiwan; Gumi and Giheung, Korea; and Tianjin and Shanghai, China.

Performance materials account for estimated sales of $600 million. The segment also provides performance materials for a wide range of products, including coatings, inks, adhesives, civil engineering, personal care, institutional and industrial cleaning, mining, oil refining and polyurethanes, and it focuses on the development of new materials aimed at providing unique functionality to emerging markets. Principal performance materials include polyurethane catalysts and other additives for polyurethane foam, epoxy amine curing agents and auxiliary products for epoxy

systems and specialty surfactants. To enhance its performance materials capabilities, the Company recently acquired Tomah3 Products, a producer of specialty surfactants and processing aids used primarily in the institutional and industrial cleaning, mining and oil field industries. Performance materials were previously part of chemicals and were consolidated in this segment as part of the redefinition of segments in fourth-quarter of fiscal 2006.

Shift to smaller nodes is increasing electronic gas demand. Demand for electronic gases and chemicals has increased, as semiconductor manufacturing line width has decreased. Chip line widths have decreased from 180 nanometers (nm) in 2000 to 65 nm today. Today's advanced wafers have 25 or 30 layers versus 15 layers five years ago. More layers have translated into greater demand for consumables used in the photolithography and etching (which uses specialty gases and chemicals), chemical mechanical planarization (CMP pads and slurries) and cleaning (nitrogen triflouride or NF_3) processes.

Electronics and performance materials sales represented 21% of Air Products' consolidated sales in fiscal year 2006, 22% in fiscal year 2005 and 23% in fiscal year 2004.

Table 9

Air Products and Chemicals Inc.
Electronics and Performance Materials Quarterly Trends
($ millions)

	2QF06	3QF06	4QF06	1QF07	2QF07E
Sales	**$469.7**	**$490.0**	**$522.1**	**$509.9**	**$534.9**
Sales Change (Year to Year)	12%	14%	20%	22%	14%
Sales Change (Sequential)	13%	4%	7%	-2%	5%
EBIT	**46.8**	**48.9**	**61.1**	**50.9**	**52.6**
EBIT Change (Year to Year)	38%	33%	41%	32%	12%
EBIT Change (Sequential)	22%	4%	25%	-17%	3%
EBIT Margin	**10.0%**	**10.0%**	**11.7%**	**10.0%**	**9.8%**

Source: Company reports, Banc of America Securities LLC estimates.

Health Care (2% of Estimated Fiscal 2007 EBIT)

The health care segment provides respiratory therapies, home medical equipment and infusion services to more than 500,000 patients in their homes. Air Products operates in 15 countries, including the United States, and is the market leader in Spain, Portugal, the United Kingdom and Mexico. Its serves patients whose conditions range from chronic lung disease, asthma and emphysema to sleep apnea and diabetes by providing oxygen therapy, pharmacist-managed direct-shipped respiratory medications, home nebulizer therapy, sleep management therapy, anti-infection therapy, enteral nutrition, beds and wheelchairs.

Recent performance prompted changes in management. The health care segment in fiscal 2006 suffered from a drop in operating profits to $8 million from $82 million in fiscal 2005, prompting corporate management to initiate reorganization of health care management and sales force. Health care showed signs of improvement in first quarter of fiscal 2007 as sales increased by 15% and margins grew sequentially. Results in first quarter of fiscal 2007 were encouraging but it is premature to tell if restructuring efforts are successful.

Air Products has grown to a fifth-ranked market share in medical gases since 2002. Air Products' acquisition of America Homecare Supply (AHS) acquisition in 2002 was the company's entry point into the health care market. Since then, Air Products has acquired 15 regional companies to fill various geographies in the Northeast and through the Midwest to Chicago. We believe that Air Products is the fifth-largest U.S. respiratory services company, behind Praxair, Lincare, Apria and Rotech. Respiratory gas represents 45% of health care sales; equipment is the remaining 55%. Air Products also sells helium for magnetic resonance imaging (MRI) equipment and oxygen for respiratory tanks to hospitals. Hospitals account for 25% of Air Products' health care sales. This business is highly competitive and the margins are lower than homecare.

The government recently cut Medicare reimbursement rates. Medicaid reimburses 25% of Air Products' gas sales (8% of total health care, or $50 million). The government recently cut Medicaid reimbursements in fiscal 2005, hurting Air Products EPS by $0.01-0.02 per share. Future Medicaid cuts are a risk.

Regional health care multiples tend to be attractive. The recent change in Medicaid reimbursement and turnaround in the economy have prompted local, "mom & pop" distributors to sell. Many health care deals are not competitively bid as overlap often eliminates potential national buyers. Air Products' strategy is to acquire regional companies at a competitive price and realize significant synergies through integration. Working capital and back-office billing function are the two areas of significant cost savings.

Table 10

Air Products and Chemicals Inc.
Health Care Quarterly Trends
($ millions)

	2QF06	3QF06	4QF06	1QF07	2QF07E
Sales	**$136.3**	**$149.1**	**$149.9**	**$155.8**	**$156.7**
Sales Change (Year to Year)	-1%	7%	11%	15%	15%
Sales Change (Sequential)	1%	9%	1%	4%	1%
EBIT	**(1.8)**	**8.7**	**(16.5)**	**9.4**	**5.8**
EBIT Change (Year to Year)	-108%	-61%	-198%	-48%	NM
EBIT Change (Sequential)	-110%	NM	-290%	NM	-39%
EBIT Margin	**-1.3%**	**5.8%**	**-11.0%**	**6.0%**	**3.7%**

Source: Company reports, Banc of America Securities LLC estimates.

Equipment and Energy (7% of Estimated Fiscal 2007 EBIT)

Equipment is a global market. The segment designs and manufactures cryogenic and gas processing equipment for air separation, hydrocarbon recovery and purification, natural gas liquefaction (LNG) and helium distribution (cryogenic transportation containers). Equipment is sold globally to the chemical and petrochemical sectors, oil and gas recovery and processing and steel and primary metals processing industries. The segment also provides a broad range of plant design, engineering, procurement and construction management services to its customers.

Equipment sales and margin have rebounded. Sales increased by 45% in fiscal 2006, and we forecast sales growth of 19% in fiscal 2007. First quarter of fiscal 2007 recorded year-over-year sales growth of 109%. Operating profit jumped to $27 million in first-quarter of fiscal 2007 versus $15 million one year earlier. Strong demand for LNG heat exchangers has driven the turnaround over the last 12. Assuming equipment sales continue to grow at double-digit rates over the next several years, we see potential for margins to exceed the previous peak level of 15-16% over time.

Figure 25

Air Products and Chemicals Inc.
Equipment Sales by Type, Estimated 2007

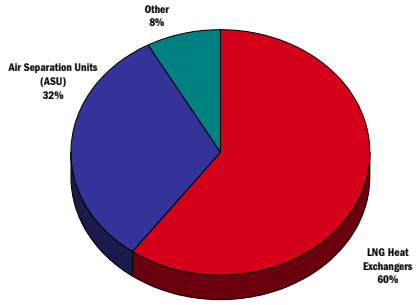
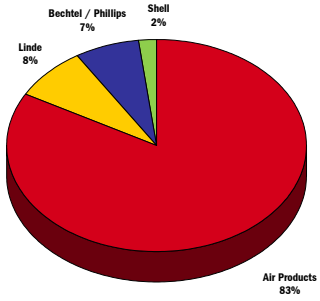


Figure 26

Air Products and Chemicals Inc.
LNG Equipment Market Share, Estimated 2007

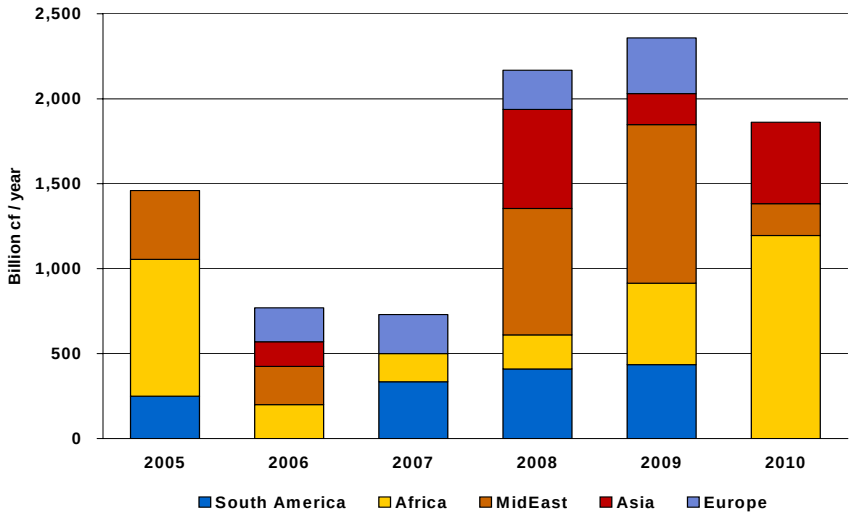


Source: Company reports, Air Products, Banc of America Securities LLC estimates.

Backlog is a key measure of future segment performance. The backlog of equipment orders was approximately $446 million on September 30, 2006 versus $577 million a year ago to date. Approximately 30% of the current backlog is for cryogenic air separation equipment and 62%, of which is for liquefied natural gas heat exchanges. Air Products expects that approximately $357 million of the backlog September 30, 2006 will be completed during fiscal 2007. At the end of first-quarter of fiscal 2007, backlog came down further to $403 million.

Figure 27

Liquefied Natural Gas
Global Liquefaction Capacity Growth, 2005–Estimated 2010

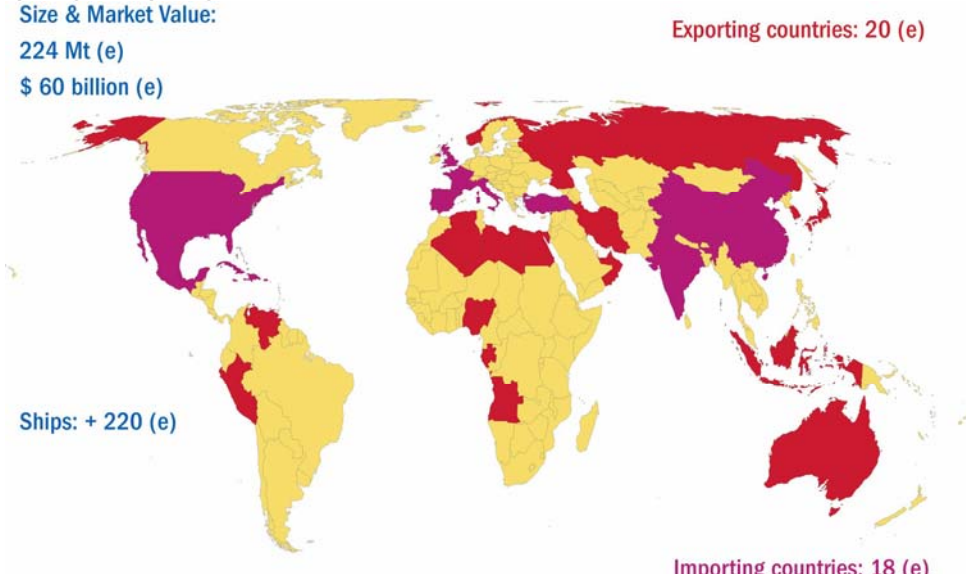


Source: Company reports, Banc of America Securities LLC estimates.

High U.S. natural gas prices are driving interest in LNG. Demand for LNG equipment has increased significantly with the upward trend in U.S. energy prices. Record natural gas prices have created a strong incentive to liquefy cheap remote, stranded gas and deliver it to the U.S. market. Air Products has manufactured approximately 80 LNG heat exchangers over the last 35 years, making it the global leader in LNG equipment.

Figure 28

Liquefied Natural Gas
Importing and Exporting Countries, Estimated 2010



Source: Tractebel, Suez, company reports.

Proprietary *AP-X*® technology offers an increase of 50% in capacity. Although still the leader in LNG equipment, Air Products has lost some share to competitors Linde, Shell and Bechtel/Phillips over the last 10 years. The company hopes to recover lost ground with the introduction of its patented *AP-X LNG* heat exchangers. *AP-X* plants provide eight million tons per year of capacity (50% more than conventional LNG exchangers) on the same footprint, offering significant economies of scale. Air Products recently announced that it will supply *AP-X* equipment and technology to RasGas, a 70/30 joint venture between Qatar Petroleum and ExxonMobil. Total, Conoco Phillips and Shell have plans to use *AP-X* equipment and technology in Qatar. We believe that *AP-X* is a big step that will allow Air Products to grow faster than the overall market.

Figure 29

Liquefied Natural Gas
North American Import Terminals

Source: Cambridge Energy Research Associates, company reports.

ASU equipment outlook is improving. Gas-to-liquids (GTL) projects and methanol/ammonia plants are driving demand for ASU capacity. The high price of oil and natural gas by historical standards has renewed interest in coal gasification. Although high-capital intensity makes gasification unfeasible for most companies, those projects that move forward will require an onsite cryogenic oxygen plants.

Table 11

Air Products and Chemicals Inc.
Equipment and Energy Quarterly Trends
($ millions)

	2QF06	3QF06	4QF06	1QF07	2QF07E
Sales	**$174.8**	**$138.3**	**$129.6**	**$195.6**	**$147.5**
Sales Change (Year to Year)	108%	34%	30%	109%	-16%
Sales Change (Sequential)	86%	-21%	-6%	51%	-25%
EBIT	**20.0**	**14.8**	**19.6**	**26.8**	**22.1**
EBIT Change (Year to Year)	525%	151%	13%	85%	11%
EBIT Change (Sequential)	38%	-26%	32%	37%	-17%
EBIT Margin	**11.4%**	**10.7%**	**15.1%**	**13.7%**	**15.0%**

Source: Company reports, Banc of America Securities LLC estimates.

Chemicals (5% of Estimated Fiscal 2007 EBIT)

Air Products has been reducing exposure to chemicals. Historically, Air Products' chemical business included four elements: (1) polymer emulsions; (2) performance solutions/products; (3) polyurethane intermediates; and (4) amines. Air Products undertook a major effort to trim its chemicals segment, including sale of its polyurethane intermediates production facility in Geismar, Louisiana, in March 2006 to BASF, and divestment from amines in September 2006 to Taminco. The remaining chemicals portfolio consists of the polymer emulsions business, which is currently being marketed to potential buyers, and its remaining polyurethane intermediates business, which is being restructured. The performance products portion of chemicals has been reclassified and now is part of the electronics and performance materials segment. Air Products reaffirmed it commitment to retain performance products through its acquisition of Tomah3 in March 2006. Tomah3 is also part of electronics and performance materials as a result of the segment reclassification that was announced in fiscal fourth quarter 2006.

The remaining chemicals portfolio has little overlap with industrial gases. Excluding performance materials, which has been reclassified into the electronics and performance materials segment, Air Products' chemicals business has shrank from $1.32 billion in fiscal 2005 (17% of consolidated sales) to an estimated $872 million in fiscal 2007 (9% of sales). This move has made Air Products more of a pure play in industrial gases, similar to competitor Praxair whose chemicals portfolio amounts to only 6% of estimated 2007 sales. Focusing on the industrial gas business will improve overall margins and returns and will likely result in valuation multiple expansion as well.

Table 12

Air Products and Chemicals Inc.
Chemicals Quarterly Trends
($ millions)

	2QF06	3QF06	4QF06	1QF07	2QF07E
Sales	**$248.4**	**$222.0**	**$222.2**	**$226.7**	**$221.8**
Sales Change (Year to Year)	3%	-6%	-11%	5%	-11%
Sales Change (Sequential)	16%	-11%	0%	2%	-2%
EBIT	**25.3**	**15.0**	**14.8**	**18.9**	**14.5**
EBIT Change (Year to Year)	57%	-46%	-57%	112%	-43%
EBIT Change (Sequential)	184%	-41%	-1%	28%	-23%
EBIT Margin	**10.2%**	**6.8%**	**6.7%**	**8.3%**	**6.5%**

Source: Company reports, Banc of America Securities LLC estimates.

Air Products and Chemicals Inc.

Annual Sales and Operating Income Statement, Fiscal 1998—Estimated Fiscal 2011

($ millions)

Net Sales	F1998	F1999	F2000R	F2001R	F2002	F2003	F2004	F2005	F2006	F2007E	F2008E	F2009E	F2010E	F2011E	01-06E	06-11E
Merchant Gases	$2,950	$2,996	$3,608	$4,084	$2,007	$2,133	$2,230	$2,468	$2,713	$3,207	$3,382	$3,489	$3,579	$3,673		6%
Tonnage Gases					875	1,244	1,530	1,740	2,224	2,521	2,623	2,747	2,874	3,008		6%
Electronics & Performance Materials					1,062	1,235	1,604	1,701	1,899	2,202	2,478	2,626	2,758	2,896		8%
Healthcare					187	329	438	545	571	639	684	732	776	822		7%
Equipment & Energy	430	366	229	250	266	258	346	369	537	637	656	695	730	759		7%
Gas Sub-Total	3,380	3,363	3,837	4,335	4,397	5,200	6,148	6,823	7,943	9,206	9,822	10,290	10,717	11,158	14%	6%
Chemicals	1,539	1,657	1,773	1,523	718	758	884	945	908	872	896	878	887	896	-4%	0%
Segment Totals	4,919	5,020	5,610	5,858	5,115	5,957	7,032	7,768	8,850	10,079	10,718	11,169	11,604	12,054	10%	6%
Discontinued Operations (amines) / Other	0	0	0	0	286	340	379	375	244	0	0	0	0	0		
Consolidated Total	4,919	5,020	5,610	5,858	5,401	6,297	7,411	8,144	9,095	10,079	10,718	11,169	11,604	12,054	11%	5%
Annual Change	6%	2%	12%	4%	-8%	17%	18%	10%	12%	14%	6%	4%	4%	4%		
Sequential Change																
Operating Income Before Items																
Merchant Gases	565	549	699	724	640	677	405	414	470	558	627	652	675	691		8%
Tonnage Gases							232	252	341	367	403	424	442	460		6%
Electronics & Performance Materials							140	146	195	207	238	255	265	276		8%
Healthcare							74	82	8	27	30	34	36	41		29%
Equipment & Energy	59	37	17	12	21	7	(2)	29	69	92	95	98	102	105		7%
Gas Sub-Total	624	586	716	736	661	683	848	923	1,084	1,251	1,393	1,462	1,521	1,573	9%	7%
Chemicals	247	208	198	141	177	125	67	86	64	63	69	64	61	55		-3%
Segment Totals	871	794	913	877	838	809	915	1,009	1,148	1,313	1,462	1,526	1,582	1,628	6%	7%
Discontinued Operations (amines) / Other	1	1	0	0	0	0	(29)	(13)	(9)	0	0	0	0	0		
Segment Totals	872	795	913	877	838	809	886	996	1,139	1,313	1,462	1,526	1,582	1,628	6%	7%
Other	(26)	(26)	(33)	(16)	(32)	(52)	(7)	19	1	(15)	(14)	(11)	(5)	(4)		
Consolidated Total	846	769	880	861	806	757	880	1,014	1,140	1,299	1,447	1,515	1,578	1,624	7%	7%
Annual Change	18%	-9%	14%	-2%	-6%	-6%	16%	15%	12%	14%	11%	5%	4%	3%		
Operating Margin																
Merchant Gases	19.2%	18.3%	19.4%	17.7%	31.9%	31.7%	18.2%	16.8%	17.3%	17.4%	18.6%	18.7%	18.9%	18.8%		18.3%
Tonnage Gases							15.2%	14.5%	15.3%	14.6%	15.4%	15.4%	15.4%	15.3%		15.2%
Electronics & Performance Materials							8.7%	8.6%	10.3%	9.4%	9.6%	9.7%	9.6%	9.5%		9.7%
Healthcare							16.8%	15.0%	1.5%	4.2%	4.4%	4.7%	4.7%	4.9%		4.0%
Equipment & Energy	13.8%	10.2%	7.3%	4.8%	7.8%	2.6%	-0.6%	7.9%	12.8%	14.4%	14.4%	14.0%	14.0%	13.8%		13.9%
Gas Sub-Total	18.5%	17.4%	18.7%	17.0%	15.0%	13.1%	13.8%	13.5%	13.6%	13.6%	14.2%	14.2%	14.2%	14.1%	14.4%	14.0%
Chemicals	16.1%	12.5%	11.2%	9.3%	24.7%	16.5%	7.6%	9.1%	7.1%	7.2%	7.7%	7.3%	6.9%	6.1%		7.0%
Discontinued Operations (amines) / Other	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%		0.0%
Consolidated Total	17.2%	15.3%	15.7%	14.7%	14.9%	12.0%	11.9%	12.5%	12.5%	12.9%	13.5%	13.6%	13.6%	13.5%	13.1%	13.3%
Annual Change	1.7%	-1.9%	0.4%	-1.0%	0.2%	-2.9%	-0.2%	0.6%	0.1%	0.3%	0.6%	0.1%	0.0%	-0.1%		
EBITDA																
Merchant Gases	950	952	1,155	1,187	1,114	1,210	635	638	696	802	880	912	945	970		6%
Tonnage Gases							391	421	532	573	616	643	669	695		5%
Electronics & Performance Materials							299	307	359	379	416	438	455	473		6%
Healthcare							125	138	68	90	95	102	106	113		9%
Equipment & Energy	67	47	23	18	26	13	7	39	79	103	106	109	114	117		7%
Gas Sub-Total	1,017	999	1,178	1,205	1,140	1,223	1,457	1,543	1,734	1,948	2,112	2,205	2,289	2,368	9%	6%
Chemicals	359	337	326	261	286	235	171	193	176	182	192	191	193	192		2%
Segment Totals	1,376	1,336	1,504	1,466	1,426	1,457	1,628	1,735	1,909	2,130	2,304	2,397	2,482	2,560	6%	6%
Discontinued Operations (amines) / Other	(25)	(21)	(30)	(13)	(29)	(46)	(5)	20	3	(13)	(12)	(9)	(3)	(2)		
Consolidated Total	1,351	1,315	1,474	1,453	1,397	1,412	1,623	1,756	1,912	2,117	2,292	2,387	2,480	2,557	6%	6%
Annual Change	8%	-3%	12%	-1%	-4%	1%	15%	8%	9%	11%	8%	4%	4%	3%		
Segment Assets																
Merchant Gases	5,108	5,436	6,236	6,333	6,473	7,600	3,022	2,993	3,283	3,635	3,753	3,868	3,979	4,084		4%
Tonnage Gases							2,091	2,386	2,803	3,103	3,204	3,303	3,397	3,486		4%
Electronics & Performance Materials							2,105	2,153	2,335	2,584	2,669	2,751	2,829	2,904		4%
Healthcare							676	790	857	948	979	1,009	1,038	1,065		4%
Equipment & Energy	279	265	237	189	187	172	245	272	304	337	348	359	369	379		4%
Gas Sub-Total	5,387	5,701	6,473	6,521	6,660	7,772	8,139	8,595	9,582	10,607	10,954	11,289	11,611	11,918	8%	4%
Chemicals	1,527	1,626	1,505	1,436	1,454	1,528	683	689	580	642	663	683	703	721		4%
Segment Totals	6,915	7,327	7,978	7,958	8,114	9,300	8,822	9,284	10,161	11,249	11,617	11,972	12,314	12,639	5%	4%
Other	213	387	293	127	381	132	312	227	279	309	319	328	338	347		
Consolidated Total	7,128	7,714	8,271	8,084	8,495	9,432	9,134	9,511	10,440	11,557	11,936	12,301	12,652	12,986	5%	4%
Annual Change	7%	8%	7%	-2%	5%	11%	-3%	4%	10%	11%	3%	3%	3%	3%		

Note: Fiscal year ends September

Source: Company reports, Banc of America Securities LLC estimates.

Air Products and Chemicals Inc.

Quarterly Sales and Operating Income Statement, Fiscal 2006–Estimated Fiscal 2007

($ millions)

	F2006					F2007E				
Net Sales	1Q (Dec.)	2Q (Mar.)	3Q (Jun.)	4Q (Sep.)	F2006	1Q (Dec.)	2QE (Mar.)	3QE (Jun.)	4QE (Sep.)	F2007E
Merchant Gases	$622.1	$669.2	$699.5	$722.0	$2,712.8	$740.0	$803.0	$821.8	$841.7	$3,206.5
Tonnage Gases	532.6	531.1	546.8	613.6	2,224.1	604.5	582.0	653.6	681.1	2,521.2
Electronics & Performance Materials	416.8	469.7	490.0	522.1	1,898.6	509.9	534.9	553.4	604.2	2,202.4
Healthcare	135.5	136.3	149.1	149.9	570.8	155.8	156.7	160.0	166.8	639.3
Equipment & Energy	93.8	174.8	138.3	129.6	536.5	195.6	147.5	147.2	146.6	637.0
Gas Sub-Total	1,800.8	1,981.1	2,023.7	2,137.2	7,942.8	2,205.8	2,224.1	2,336.0	2,440.5	9,206.4
Chemicals	215.0	248.4	222.0	222.2	907.6	$226.7	$221.8	$212.4	$211.6	872.5
Segment Totals	2,015.8	2,229.5	2,245.7	2,359.4	8,850.4	2,432.5	2,445.9	2,548.4	2,652.1	10,078.9
Discontinued Operations (amines) / Other	82.8	87.7	73.9	0.0	244.4	0.0	0.0	0.0	0.0	0.0
Consolidated Total	2,098.6	2,317.2	2,319.6	2,359.4	9,094.8	2,432.5	2,445.9	2,548.4	2,652.1	10,078.9
Annual Change	5%	16%	12%	14%	12%	21%	10%	13%	12%	14%
Sequential Change	1%	10%	0%	2%		3%	1%	4%	4%	
Operating Income										
Merchant Gases	105.3	115.1	121.3	128.3	470.0	139.2	142.7	138.8	137.0	557.7
Tonnage Gases	73.8	78.2	85.3	104.0	341.3	88.8	92.2	92.8	93.5	367.3
Electronics & Performance Materials	38.5	46.8	48.9	61.1	195.3	50.9	52.6	51.8	51.7	207.0
Healthcare	18.0	(1.8)	8.7	(16.5)	8.4	9.4	5.8	5.8	5.7	26.7
Equipment & Energy	14.5	20.0	14.8	19.6	68.9	26.8	22.1	21.2	21.6	91.8
Gas Sub-Total	250.1	258.3	279.0	296.5	1,083.9	315.1	315.4	310.5	309.6	1,250.5
Chemicals	8.9	25.3	15.0	14.8	64.0	18.9	14.5	14.7	14.5	62.5
Segment Totals	259.0	283.6	294.0	311.3	1,147.9	334.0	329.9	325.1	324.1	1,313.1
Discontinued Operations (amines) / Other	(5.5)	(1.0)	(2.1)	0.0	(8.6)	0.0	0.0	0.0	0.0	0.0
Segment Totals	253.5	282.6	291.9	311.3	1,139.3	334.0	329.9	325.1	324.1	1,313.1
Other	(10.8)	12.0	6.2	(6.3)	1.1	(1.7)	(1.6)	(5.6)	(5.6)	(14.5)
Consolidated Total	242.7	294.6	298.1	305.0	1,140.4	332.3	328.2	319.5	318.5	1,298.5
Annual Change	2%	17%	13%	17%	12%	37%	11%	7%	4%	14%
Operating Margin										
Merchant Gases	16.9%	17.2%	17.3%	17.8%	17.3%	18.8%	17.8%	16.9%	16.3%	17.4%
Tonnage Gases	13.9%	14.7%	15.6%	16.9%	15.3%	14.7%	15.8%	14.2%	13.7%	14.6%
Electronics & Performance Materials	9.2%	10.0%	10.0%	11.7%	10.3%	10.0%	9.8%	9.4%	8.6%	9.4%
Healthcare	13.3%	-1.3%	5.8%	-11.0%	1.5%	6.0%	3.7%	3.6%	3.4%	4.2%
Equipment & Energy	15.5%	11.4%	10.7%	15.1%	12.8%	13.7%	15.0%	14.4%	14.8%	14.4%
Gas Sub-Total	13.9%	13.0%	13.8%	13.9%	13.6%	14.3%	14.2%	13.3%	12.7%	13.6%
Chemicals	4.1%	10.2%	6.8%	6.7%	7.1%	8.3%	6.5%	6.9%	6.8%	7.2%
Discontinued Operations (amines) / Other	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Consolidated Total	11.6%	12.7%	12.9%	12.9%	12.5%	13.7%	13.4%	12.5%	12.0%	12.9%
Year-Year Change	-0.4%	0.1%	0.2%	0.3%	0.1%	2.1%	0.7%	-0.3%	-0.9%	0.3%
EBITDA										
Merchant Gases	158.5	172.3	181.2	184.2	696.2	200.4	203.1	199.9	198.8	802.2
Tonnage Gases	120.4	124.0	135.6	151.8	531.8	138.5	143.7	145.0	146.3	573.4
Electronics & Performance Materials	79.4	87.3	90.9	100.9	358.5	93.0	95.5	95.3	95.6	379.4
Healthcare	32.8	12.8	24.5	(1.9)	68.2	25.1	21.5	21.7	21.9	90.2
Equipment & Energy	17.0	22.5	17.3	22.1	79.1	29.5	24.9	23.9	24.4	102.7
Gas Sub-Total	408.1	419.0	449.5	457.1	1,733.8	486.4	488.7	485.8	486.9	1,947.9
Chemicals	36.8	53.2	42.9	42.7	175.5	48.8	44.4	44.6	44.4	182.2
Segment Totals	444.9	472.2	492.4	499.8	1,909.3	535.3	533.2	530.4	531.3	2,130.1
Discontinued Operations (amines) / Other	(10.4)	12.4	6.6	(5.9)	2.7	(1.3)	(1.2)	(5.2)	(5.1)	(12.8)
Consolidated Total	434.5	484.6	499.0	493.9	1,912.0	534.0	531.9	525.2	526.2	2,117.3
Year-Year Change	4%	13%	15%	4%	9%	23%	10%	5%	7%	11%
Segment Assets										
Merchant Gases	2,884	3,222	3,287	3,283	3,283	3,430	3,459	3,547	3,635	3,635
Tonnage Gases	2,527	2,583	2,759	2,803	2,803	2,784	2,953	3,028	3,103	3,103
Electronics & Performance Materials	2,219	2,283	2,305	2,335	2,335	2,358	2,459	2,522	2,584	2,584
Healthcare	802	824	868	857	857	878	902	925	948	948
Equipment & Energy	296	300	287	304	304	346	321	329	337	337
Gas Sub-Total	8,729	9,211	9,506	9,582	9,582	9,795	10,094	10,351	10,607	10,607
Chemicals	699	564	562	580	580	546	611	626	642	642
Segment Totals	9,427	9,775	10,068	10,161	10,161	10,341	10,705	10,977	11,249	11,249
Other	287	309	277	279	279	393	294	301	309	309
Consolidated Total	9,714	10,083	10,345	10,440	10,440	10,734	10,999	11,278	11,557	11,557
Annual Change	0%	3%	10%	10%	10%	11%	9%	9%	11%	11%

Note: Fiscal year ends September

Source: Company reports, Banc of America Securities LLC estimates.

Air Products and Chemicals Inc.

Annual Income Statement, Fiscal 1998—Estimated Fiscal 2011

($ millions)

	F1998	F1999	F2000R	F2001R	F2002	F2003	F2004	F2005	F2006	F2007E	F2008E	F2009E	F2010E	F2011E	Growth 01-06E	Growth 06-11E
Net Sales	$4,919	$5,020	$5,610	$5,858	$5,401	$6,297	$7,411	$8,144	$9,095	$10,079	$10,718	$11,169	$11,604	$12,054	11%	5%
Cost of Products Sold	3,317	3,482	3,927	4,210	3,814	4,613	5,464	6,000	6,775	7,561	8,012	8,355	8,687	9,051	12%	6%
Gross Profit	1,602	1,538	1,683	1,647	1,587	1,684	1,948	2,144	2,320	2,518	2,706	2,814	2,917	3,003	8%	5%
Gross Margin	32.6%	30.6%	30.0%	28.1%	29.4%	26.7%	26.3%	26.3%	25.5%	25.0%	25.3%	25.2%	25.1%	24.9%		
Selling & Administrative	660	667	715	699	701	833	969	1,028	1,092	1,127	1,162	1,197	1,232	1,267	11%	3%
Selling & Administrative/Sales	13.4%	13.3%	12.7%	11.9%	13.0%	13.2%	13.1%	12.6%	12.0%	11.2%	10.8%	10.7%	10.6%	10.5%		
S&A/Gross Profit	41.2%	43.3%	42.5%	42.4%	44.2%	49.4%	49.8%	48.0%	47.1%	44.8%	42.9%	42.5%	42.2%	42.2%		
Research & Development	112	122	124	121.8	120	121	127	133	152	157	162	167	172	177	4%	3%
R&D/Sales	2.3%	2.4%	2.2%	2.1%	2.2%	1.9%	1.7%	1.6%	1.7%	1.6%	1.5%	1.5%	1.5%	1.5%		
R&D/Gross Profit	7.0%	7.9%	7.4%	7.4%	7.6%	7.2%	6.5%	6.2%	6.5%	6.2%	6.0%	5.9%	5.9%	5.9%		
Operating Expenses	772	789	839	821	821	954	1,096	1,161	1,244	1,284	1,324	1,364	1,404	1,444	10%	3%
Operating Expenses/Sales	15.7%	15.7%	15.0%	14.0%	15.2%	15.1%	14.8%	14.3%	13.7%	12.7%	12.4%	12.2%	12.1%	12.0%		
Operating Expenses/Gross Profit	48.2%	51.3%	49.9%	49.8%	51.8%	56.6%	56.3%	54.2%	53.6%	51.0%	48.9%	48.5%	48.1%	48.1%		
Other Income (Expense)	16	20	36	34	40	27	28	31	65	65	65	65	65	65		
Operating Income	846	769	880	861	806	757	880	1,014	1,140	1,299	1,447	1,515	1,578	1,624	7%	7%
Operating Margin	17.2%	15.3%	15.7%	14.7%	14.9%	12.0%	11.9%	12.5%	12.5%	12.9%	13.5%	13.6%	13.6%	13.5%		
Equity Income	38	62	88	81	76	84	93	105	108	116	124	128	132	134		
Interest Expense	163	159	197	191	122	124	121	110	119	135	119	95	68	36	-7%	-21%
Income Before Taxes	721	672	771	751	760	717.9	851	1,009	1,129	1,279	1,452	1,547	1,642	1,722	9%	9%
Income Taxes	232	206	231	227.2	222.7	203.2	227	267	300	343	392	418	443	465		9%
Tax Rate	32.1%	30.6%	30.0%	30.3%	29.3%	28.3%	26.6%	26.5%	26.6%	26.8%	27.0%	27.0%	27.0%	27.0%		
Minority Interest	(1)	(15)	(8)	(5)	(18)	(18)	(21)	(23)	(30)	(32)	(34)	(36)	(38)	(40)		
Net Income from Operations	489	451	532	518	519	497	604	720	799	904	1,027	1,094	1,161	1,218	10%	9%
Non Recurring Items	58	(0)	(408)	(54)	7	(99)	0	(8)	(75)							
Reported Net Income	547	451	124	465	525	397	604	712	724	904	1,027	1,094	1,161	1,218	11%	10%
Diluted Earnings Per Share:																
Earnings From Operations	$2.22	$2.09	$2.46	$2.36	$2.33	$2.23	$2.64	$3.11	$3.51	$4.05	$4.60	$4.90	$5.20	$5.45	9%	9%
Change	17%	-6%	18%	-4%	-1%	-4%	19%	18%	13%	15%	14%	7%	6%	5%		
Nonrecurring Items	0.26	(0.00)	(1.89)	(0.24)	0.03	(0.45)	0.00	(0.03)	(0.33)	0.00	0.00	0.00	0.00	0.00		
Reported Earnings Per Share	2.49	2.09	0.57	2.12	2.36	1.78	2.64	3.07	3.18	4.05	4.60	4.90	5.20	5.45		
Shares Outstanding (Millions)	220.0	216.0	216.2	219.3	222.7	223.0	228.9	231.5	227.5	223.4	223.4	223.4	223.4	223.4	1%	0%
Sequential Change (Millions)	(4.9)	(4.0)	0.2	3.1	3.4	0.3	5.9	2.6	(4.1)	(4.0)	0.0	0.0	0.0	0.0		
Reported Option Expense					0.18	0.17	0.13	0.13								
Diluted EPS (FAS123R Options Adjusted)					$2.15	$2.06	$2.51	$2.98	$3.51	$4.05	$4.60	$4.90	$5.20	$5.45		9%
Change						-4%	22%	19%	18%	15%	14%	7%	6%	5%		
Calendar Diluted EPS																
Earnings From Operations	$2.24	$2.10	$2.53	$2.26	$2.39	$2.22	$2.78	$3.16	$3.78	$4.19	$4.75	$5.07	$5.38	$5.64		
Change	12%	-6%	20%	-11%	6%	-7%	25%	14%	20%	11%	14%	7%	6%	5%		
Nonrecurring Items	0.11	(0.37)	(1.56)	(0.24)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
Reported Earnings Per Share	2.35	1.73	0.96	2.01	2.39	2.22	2.78	3.16	3.78	4.19	4.75	5.07	5.38	5.64		
Calendar Diluted EPS (FAS123R Options Adjusted)					$2.21	$2.05	$2.65	$3.03	$3.78	$4.19	$4.75	$5.07	$5.38	$5.64		
EBITDA	1,381	1,361	1,554	1,529	1,455	1,478	1,667	1,825	1,981	2,202	2,382	2,479	2,574	2,652	6%	6%
Growth in EBITDA/Share	13%	0%	14%	-3%	-6%	1%	10%	8%	10%	13%	8%	4%	4%	3%		
EBITDA Margin	28%	27%	28%	26%	27%	23%	22%	22%	22%	22%	22%	22%	22%	22%		
EBITDA/Share	6.28	6.30	7.19	6.97	6.53	6.63	7.28	7.88	8.71	9.85	10.66	11.10	11.52	11.87	5%	6%
Calendar Year EBITDA	1,386	1,359	1,604	1,453	1,479	1,474	1,721	1,837	1,994	2,216	2,397	2,495	2,590	2,669		

Note: Fiscal year ends September

Source: Company reports, Banc of America Securities LLC estimates.

Air Products and Chemicals Inc.

Quarterly Income Statement, Fiscal 2006—Estimated Fiscal 2007
($ millions)

	F2006					F2007E				
	1Q (Dec.)	2Q (Mar.)	3Q (Jun.)	4Q (Sep.)	F2006	1Q (Dec.)	2QE (Mar.)	3QE (Jun.)	4QE (Sep.)	F2007E
Net Sales	$2,098.6	$2,317.2	$2,319.6	$2,359.4	$9,094.8	$2,432.5	$2,445.9	$2,548.4	$2,652.1	$10,078.9
Cost of Products Sold	1,571.3	1,739.0	1,709.5	1,755.4	6,775.2	1,788.5	1,829.0	1,913.8	2,029.9	7,561.2
Gross Profit	527.3	578.2	610.1	604.0	2,319.6	644.0	616.9	634.6	622.2	2,517.7
Gross Margin	25.1%	25.0%	26.3%	25.6%	25.5%	26.5%	25.2%	24.9%	23.5%	25.0%
Selling & Administrative	254.6	275.5	284.0	278.0	1,092.1	284.4	277.3	286.1	279.3	1,127.1
Selling & Administrative/Sales	12.1%	11.9%	12.2%	11.8%	12.0%	11.7%	11.3%	11.2%	10.5%	11.2%
S&A/Gross Profit	48.3%	47.6%	46.5%	46.0%	47.1%	44.2%	45.0%	45.1%	44.9%	44.8%
Research & Development	37.8	37.7	39.1	37.2	151.8	34.8	40.9	40.4	40.7	156.8
R&D/Sales	1.8%	1.6%	1.7%	1.6%	1.7%	1.4%	1.7%	1.6%	1.5%	1.6%
R&D/Gross Profit	7.2%	6.5%	6.4%	6.2%	6.5%	5.4%	6.6%	6.4%	6.5%	6.2%
Operating Expenses	292.4	313.2	323.1	315.2	1,243.9	319.2	318.3	326.5	319.9	1,283.9
Operating Expenses/Sales	13.9%	13.5%	13.9%	13.4%	13.7%	13.1%	13.0%	12.8%	12.1%	12.7%
Operating Expenses/Gross Profit	55.5%	54.2%	53.0%	52.2%	53.6%	49.6%	51.6%	51.5%	51.4%	51.0%
Other Income (Expense)	7.8	29.6	11.1	16.2	64.7	7.5	29.6	11.4	16.2	64.7
Operating Income	242.7	294.6	298.1	305.0	1,140.4	332.3	328.2	319.5	318.5	1,298.5
Operating Margin	11.6%	12.7%	12.9%	12.9%	12.5%	13.7%	13.4%	12.5%	12.0%	12.9%
Equity Income	27.8	24.3	25.9	29.7	107.7	30.1	29.0	28.1	28.6	115.8
Interest Expense	26.3	25.3	29.5	38.3	119.4	39.1	35.6	32.1	28.6	135.4
Income Before Taxes	244.2	293.6	294.5	296.4	1,128.7	323.3	321.6	315.5	318.5	1,278.9
Income Taxes	64.2	79.4	77.8	78.6	300.0	85.1	86.8	85.2	86.0	343.1
Tax Rate	26.3%	27.0%	26.4%	26.5%	26.6%	26.3%	27.0%	27.0%	27.0%	26.8%
Minority Interest	(6.2)	(10.2)	(6.4)	(7.1)	(29.9)	(7.9)	(7.9)	(7.9)	(7.9)	(31.6)
Net Income from Operations	173.8	204.0	210.3	210.8	798.8	230.3	226.9	222.4	224.6	904.2
Non Recurring Items	6.9	0.5	0.0	(82.4)	(74.9)	0.0	0.0	0.0	0.0	0.0
Reported Net Income	180.7	204.5	210.3	128.4	723.9	230.3	226.9	222.4	224.6	904.2
Diluted Earnings Per Share:										
Earnings From Operations	$0.77	$0.89	$0.92	$0.94	$3.51	$1.03	$1.02	$1.00	$1.01	$4.05
Change	7%	19%	12%	14%	13%	35%	14%	9%	7%	15%
Nonrecurring Items	0.03	0.00	0.00	(0.37)	(0.33)	0.00	0.00	0.00	0.00	0.00
Reported Earnings Per Share	0.80	0.89	0.92	0.57	3.18	1.03	1.02	1.00	1.01	4.05
Shares Outstanding (Millions)	227.1	228.5	229.2	225.0	227.5	223.4	223.4	223.4	223.4	223.4
Sequential Change (Millions)	0.1	1.4	0.7	(4.2)		(1.6)	0.0	0.0	0.0	
Reported Option Expense	0.03	0.00	0.00	0.00	0.03					0.00
Diluted EPS (FAS123R Options Adjusted)	$0.77	$0.89	$0.92	$0.94	$3.51	$1.03	$1.02	$1.00	$1.01	$4.05
Change	11%	24%	16%	20%	18%	35%	14%	9%	7%	15%
EBITDA	451	498	516	517	1,981	556	553	545	547	2,202
Growth in EBITDA/Share	5%	13%	16%	8%	10%	25%	14%	8%	7%	13%
EBITDA Margin	21%	21%	22%	22%	22%	23%	23%	21%	21%	22%
EBITDA/Share	$1.98	$2.18	$2.25	$2.30	$8.71	$2.49	$2.48	$2.44	$2.45	$9.85

Note: Fiscal year ends September

Source: Company reports, Banc of America Securities LLC estimates.

Air Products and Chemicals Inc.

Annual Sales Detail by Segment, Fiscal 2000R—Estimated Fiscal 2011
($ millions)

	F2000R	F2001R	F2002	F2003	F2004	F2005	F2006	F2007E	F2008E	F2009E	F2010E	F2011E	Growth 01-06E	Growth 06-11E
Gases														
Manufacturing	$192	$163	$147	$161	$169	$179	$211	$241	$241	$241	$243	$245	6%	2%
Metals	401	408	367	488	574	641	730	825	858	883	901	919	14%	4%
Chemicals & Process Industries	469	531	441	355	418	524	628	716	752	789	829	870	4%	6%
Electronics & Performance Materials	722	817	772	888	1,201	1,282	1,899	2,202	2,478	2,626	2,758	2,896	19%	8%
Glass	72	82	73	89	104	117	126	133	135	136	136	136	11%	1%
Refinery Hydrogen	505	572	514	888	1,044	1,165	1,531	2,006	2,176	2,307	2,445	2,592	24%	10%
Healthcare	325	327	367	444	627	757	571	639	684	732	776	822	16%	7%
Food & Beverage	144	163	147	178	209	175	189	201	205	209	211	213	4%	2%
General Industries & Other	779	1,021	810	904	833	937	1,523	1,606	1,638	1,671	1,688	1,705	7%	2%
Total Gases	3,609	4,084	3,639	4,393	5,180	5,776	7,407	8,569	9,166	9,595	9,987	10,399	14%	6%
Chemicals														
Performance Polymers (Emulsions)	628	473	427	480	549	575	599	620	639	626	632	639	7%	1%
Performance Solutions/Products	415	435	485	475	549	575	0	0	0	0	0	0		
Subtotal - Performance Materials	1,043	908	912	955	1,097	1,151	599	620	639	626	632	639	-3%	1%
Polyurethane Intermediates	439	335	255	311	366	384	309	252	257	252	255	257	3%	-3%
Amines	290	280	285	325	366	384	244	0	0	0	0	0	1%	
Subtotal - Industrial Chemicals	729	615	540	636	732	767	553	252	257	252	255	257	2%	-10%
Total Chemicals	1,773	1,523	1,452	1,591	1,829	1,918	1,152	872	896	878	887	896	-1%	-3%
Equipment & Energy	229	250	266	258	346	369	537	637	656	695	730	759	16%	7%
Total Net Sales	5,610	5,858	5,357	6,243	7,355	8,063	9,095	10,079	10,718	11,169	11,604	12,054	11%	5%

Source: Company reports, Banc of America Securities LLC estimates.

Air Products and Chemicals Inc.

Annual Sales by Geographic Region, Fiscal 2000R–Estimated Fiscal 2011
($ millions)

Net Sales	F2000R	F2001R	F2002	F2003	F2004	F2005	F2006	F2007E	F2008E	F2009E	F2010E	F2011E	01-06E	06-11E
United States	3,675	3,871	3,302	3,631	4,224	4,668	5,187	5,906	6,291	6,492	6,661	6,825	8%	5%
Canada	124	117	108	96	74	72	102	106	110	114	119	124	-6%	4%
North America	3,799	3,988	3,410	3,727	4,298	4,740	5,289	6,012	6,401	6,607	6,780	6,949	8%	5%
United Kingdom	526	479	459	499	660	590	654	673	694	714	736	758	8%	3%
Spain	320	314	332	366	438	468	519	529	540	550	562	573	11%	2%
Other Europe	584	608	707	925	1,083	1,212	1,344	1,398	1,453	1,512	1,572	1,635	18%	4%
Total Europe	1,430	1,401	1,498	1,790	2,180	2,269	2,516	2,600	2,687	2,777	2,869	2,966	13%	3%
Latin America	123	134	116	132	171	174	162	170	178	187	197	207	7%	5%
Asia	257	335	377	648	763	961	1,128	1,297	1,453	1,598	1,758	1,933	29%	11%
Total	5,610	5,858	5,401	6,297	7,411	8,144	9,095	10,079	10,718	11,169	11,604	12,054	11%	5%
Sales Growth														
United States	14%	5%	-15%	10%	16%	10%	11%	14%	7%	3%	3%	2%	6%	7%
Canada	35%	-6%	-7%	-11%	-23%	-2%	41%	4%	4%	4%	4%	4%	-2%	10%
North America	14%	5%	-14%	9%	15%	10%	12%	14%	6%	3%	3%	2%	6%	7%
United Kingdom	-15%	-9%	-4%	9%	32%	-11%	11%	3%	3%	3%	3%	3%	5%	4%
Spain	0%	-2%	6%	10%	20%	7%	11%	2%	2%	2%	2%	2%	9%	3%
Other Europe	3%	4%	16%	31%	17%	12%	11%	4%	4%	4%	4%	4%	15%	5%
Total Europe	-5%	-2%	7%	20%	22%	4%	11%	3%	3%	3%	3%	3%	10%	5%
Latin America	12%	8%	-14%	14%	29%	2%	-7%	5%	5%	5%	5%	5%	6%	3%
Asia	196%	30%	12%	72%	18%	26%	17%	15%	12%	10%	10%	10%	29%	12%
Total	12%	4%	-8%	17%	18%	10%	12%	11%	6%	4%	4%	4%	9%	7%
Sales Breakdown														
United States	66%	66%	61%	58%	57%	57%	57%	59%	59%	58%	57%	57%	59%	58%
Canada	2%	2%	2%	2%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%
North America	68%	68%	63%	59%	58%	58%	58%	60%	60%	59%	58%	58%	61%	59%
United Kingdom	9%	8%	8%	8%	9%	7%	7%	7%	6%	6%	6%	6%	8%	7%
Spain	6%	5%	6%	6%	6%	6%	6%	5%	5%	5%	5%	5%	6%	5%
Other Europe	10%	10%	13%	15%	15%	15%	15%	14%	14%	14%	14%	14%	14%	14%
Total Europe	25%	24%	28%	28%	29%	28%	28%	26%	25%	25%	25%	25%	28%	25%
Latin America	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%
Asia	5%	6%	7%	10%	10%	12%	12%	13%	14%	14%	15%	16%	10%	14%
Total	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%

Note: Fiscal year ends September

Source: Company reports, Banc of America Securities LLC estimates.

Air Products and Chemicals Inc.
Matrix of Key Industrial Gas Metrics, Estimated 2007
($ millions)

	Merchant	Tonnage	Electronics	Healthcare	Equipment	Chemicals	Other	Total
Sales	3,207	2,521	2,202	639	637	872	0	10,079
% of Total Sales	32%	25%	22%	6%	6%	9%	0%	100%
EBIT	558	367	207	27	92	63	101	1,414
% Margin	17%	15%	9%	4%	14%	7%	NA	14%
% of Total Sales	39%	26%	15%	2%	6%	4%	7%	100%
Allocated Financials								
Interest	43	36	30	11	4	8	4	135
Pretax Income	515	331	177	16	88	55	98	1,279
Taxes	138	89	47	4	24	15	26	343
Net Income	377	242	129	11	64	40	71	936
NOPAT	408	269	151	20	67	46	74	1,035
Assets	3,635	3,103	2,584	948	337	642	309	11,557
% Assets	31%	27%	22%	8%	3%	6%	3%	100%
ORONA	15%	12%	8%	3%	27%	10%	33%	12%
Market Share	14%	22%	23%	38%	NA	NA	NA	13%
Geography ($)								
N.A.	1,074	2,387	1,037	352	365	694		5,908
Europe	1,523	54	452	288	169	178		2,664
Asia	513	50	713	0	55	0		1,331
LatAm	96	30	0	0	49	0		175
Total	3,207	2,521	2,202	639	637	872		10,079
Geography (%)								
N.A.	33%	95%	47%	55%	57%	80%		59%
Europe	48%	2%	21%	45%	26%	20%		26%
Asia	16%	2%	32%	0%	9%	0%		13%
LatAm	3%	1%	0%	0%	8%	0%		2%
Total	100%	100%	100%	100%	100%	100%		100%

Source: Company reports, Banc of America Securities LLC estimates.

Air Products and Chemicals Inc.

Balance Sheet, Fiscal 2000R–Estimated Fiscal 2011

($ millions)

													Growth	
Assets:	F2000R	F2001	F2002	F2003	F2004	F2005	F2006	F2007E	F2008E	F2009E	F2010E	F2011E	01-06E	06-11E
Cash & Equivalents	$94	$66	$254	$76	$146	$56	$35	$35	$35	$35	$35	$35	-18%	0%
Accounts Receivable	983	914	981	1,189	1,455	1,507	1,565	1,664	1,737	1,786	1,810	1,809	13%	3%
Inventories	389	385	393	483	506	495	701	810	909	998	1,077	1,146	11%	10%
Contracts in Progress, Less Progress Billings	93	93	68	83	71	82	0	0	0	0	0	0		
Other Current Assets	224	227	214	237	239	275	299	299	299	299	299	299	6%	0%
Total Current Assets	1,783	1,685	1,909	2,068	2,417	2,415	2,600	2,808	2,981	3,119	3,221	3,289	9%	5%
Property Plant & Equipment at Cost	10,311	10,227	10,880	11,723	12,202	12,913	13,590	14,590	15,640	16,740	17,890	19,090	6%	7%
Less: Accumulated Depreciation	5,054	5,108	5,502	6,086	6,499	7,045	7,428	8,247	9,092	9,964	10,866	11,800	8%	10%
Fixed Assets, Net	5,257	5,119	5,378	5,637	5,702	5,869	6,162	6,343	6,549	6,776	7,024	7,291	3%	3%
Goodwill	746	772	431	726	932	920	989	989	989	989	989	989	11%	0%
Investments and Advances	467	500	484	554	630	664	728	728	728	728	728	728	9%	0%
Other			293	448	360	542	689	689	689	689	689	689		
Total	8,253	8,074	8,495	9,432	10,040	10,409	11,169	11,557	11,936	12,301	12,652	12,986	7%	3%
Liabilities and Shareholders' Equity:														
Accounts Payable & Accrued Liabilities	936	854	839	1,124	1,320	1,378	1,644	1,768	1,907	2,061	2,231	2,415	15%	8%
Accrued Income Taxes	10	48	73	116	106	118	188	188	188	188	188	188	26%	0%
Short Term Debt	250	256	117	166	35	310	570	570	570	570	570	570	17%	0%
Current Portion of LTD	180	195	227	176	245	137	0	0	0	0	0	0		
Total Current Liabilities	1,375	1,352	1,256	1,581	1,706	1,943	2,401	2,525	2,665	2,819	2,988	3,173	13%	6%
Long Term Debt	2,616	2,028	2,041	2,169	2,114	2,053	2,280	1,946	1,476	923	285	(430)	2%	NM
Other Noncurrent Liabilities	569	677	827	1,006	820	822	654	654	654	654	654	654	-1%	0%
Deferred Income Taxes	759	784	726	706	788	835	732	732	732	732	732	732	1%	0%
Minority Interests	116	118	184	188	169	181	178	178	178	178	178	178	6%	0%
Shareholders' Equity	2,819	3,115	3,460	3,783	4,444	4,576	4,924	5,523	6,232	6,996	7,815	8,680	10%	12%
Total	8,253	8,074	8,495	9,432	10,040	10,409	11,169	11,557	11,936	12,301	12,652	12,986	7%	3%
Financial Leverage Analysis														
Change in Net Cash (Debt)	170	(539)	(280)	303	(187)	197	371	(334)	(470)	(553)	(638)	(714)		
Net Cash (Debt)	(2,951)	(2,412)	(2,131)	(2,435)	(2,247)	(2,444)	(2,815)	(2,481)	(2,010)	(1,457)	(819)	(105)	3%	-1%
Net Cash (Debt) Per Share	(13.65)	(11.00)	(9.57)	(10.92)	(9.82)	(10.56)	(12.37)	(11.10)	(9.00)	(6.52)	(3.67)	(0.47)	2%	-1%
Book Value Per Share	$13.04	$14.20	$15.54	$16.96	$19.41	$19.76	$21.65	$24.72	$27.89	$31.32	$34.98	$38.85	9%	12%
L.T. Debt/(L.T. Debt + Equity)	48%	39%	37%	36%	32%	31%	32%	26%	19%	12%	4%	-5%	35%	14%
Net Debt/(Net Debt + Equity)	51%	44%	38%	39%	34%	35%	36%	31%	24%	17%	9%	1%	38%	20%
Total Debt/EBITDA	2.0	1.6	1.6	1.7	1.4	1.4	1.4	1.1	0.9	0.6	0.3	0.1		
Interest Coverage (EBIT/Interest Exp.)	4.5	4.5	6.6	6.1	7.3	9.2	9.6	9.6	12.2	15.9	23.4	45.6		
Interest Coverage (EBITDA/Interest Exp.)	7.9	8.0	11.9	12.0	13.8	16.6	16.6	16.3	20.1	26.0	38.1	74.4		
Cash per Share	0.44	0.30	1.14	0.34	0.64	0.24	0.15	0.16	0.16	0.16	0.16	0.16		
Working Capital Analysis														
Trade Working Capital	436	445	534	548	641	623	622	706	739	723	656	539	7%	-3%
Current Ratio	1.3	1.2	1.5	1.3	1.4	1.2	1.1	1.1	1.1	1.1	1.1	1.0		
Accounts Receivable Days Outstanding	61	59	64	63	65	66	62	58	58	58	57	55	63	58
Inventory Cost of Sales Days Outstanding	46	42	45	41	38	35	34	36	39	42	44	45	39	40
Inventory Turnover	8.0	8.8	8.1	9.0	9.6	10.4	10.6	10.0	9.3	8.8	8.4	8.1		
Accounts Payable Days Outstanding	86	78	81	78	82	82	81	82	84	87	90	94	80	86
Sales/Assets	68%	72%	65%	70%	76%	80%	84%	89%	91%	92%	93%	94%	75%	91%
Return on Capital														
Return on Assets (ROA)	8%	8%	7%	7%	7%	8%	8%	9%	9%	10%	10%	10%		
Return on Avg. Shareholders' Equity (ROE)	18.4%	17.5%	15.8%	13.7%	14.7%	16.0%	16.8%	17.3%	17.5%	16.5%	15.7%	14.8%		
Cash Return on Invested Capital (CROC)	11.9%	11.9%	10.9%	9.9%	10.7%	11.7%	12.0%	12.7%	13.7%	13.9%	14.2%	14.3%	11.2%	13.5%
ORONA	11.1%	11.0%	10.4%	8.9%	9.5%	10.3%	11.1%	12.1%	13.0%	13.2%	13.3%	13.3%		
Shares Outstanding Year End (Mil.)	216.2	219.3	222.7	223.0	228.9	231.5	227.5	223.4	223.4	223.4	223.4	223.4	1%	0%

Note: Fiscal year ends September

Source: Company reports, Banc of America Securities LLC estimates.

Air Products and Chemicals Inc.

Cash Flow Statement, Fiscal 2000R—Estimated Fiscal 2010

($ millions)

	F2000R	F2001R	F2002	F2003	F2004	F2005	F2006	F2007E	F2008E	F2009E	F2010E	F2011E	Growth 01-06E	Growth 06-11E
Operating Activities														
Net Income	$123.8	$465	$525	$397	$604	$712	$724	$904	$1,027	$1,094	$1,161	$1,218	11%	10%
Depreciation	576	573	591	655	715	728	763	819	845	872	902	934	6%	4%
Amortization	18	19												
Deferred Income Taxes	(6)	39	65	27	86	98	(71)							
Termination of Liabilities of Int. Rate Swaps														
Unremitted Earnings of Affiliates	(50)	(46)	(44)	(7)	(45)	(40)	(39)							
Gain on Sale of Assets	(139)	(105)	(67)	(8)	(5)	(8)	(80)							
Gain on Sale of Currency Options to BOC Transaction														
Loss on Sale of Currency Options to BOC Transaction	706													
Other	101	112	48	57	24	45	77							
Special Charge				41			24							
Funds from Operations	1,330	1,057	1,119	1,162	1,380	1,534	1,399	1,723	1,871	1,966	2,063	2,151	7%	8%
Change	26%	-21%	6%	4%	19%	11%	-9%	23%	9%	5%	5%	4%		
Working Capital Changes:														
Accounts Receivable	(159)	64	(13)	(88)	(253)	(61)	(94)	(99)	(74)	(49)	(24)	1		
Inventories	(57)	3	55	(53)	(28)	(10)	(104)	(109)	(99)	(89)	(79)	(69)		
Accounts Payable	92	(76)	(75)	13	5	(75)	109	124	139	154	169	184		
Income Taxes and Other							0							
Other Noncurrent Liabilities	(15)						0							
Other		83	(11)	17	(18)	2	12							
Subtotal	(139)	74	(45)	(111)	(294)	(145)	(77)	(83)	(33)	17	67	117		
Operating Activities	1,192	1,131	1,074	1,051	1,086	1,390	1,322	1,640	1,838	1,983	2,130	2,268	5%	11%
Change	9%	-5%	-5%	-2%	3%	28%	-5%	24%	12%	8%	7%	6%		
Investing Activities														
Capital Expenditures	(768)	(708)	(628)	(613)	(706)	(953)	(1,261)	(1,000)	(1,050)	(1,100)	(1,150)	(1,200)	13%	1%
Acquisitions	(170)	(59)	(115)	(530)	(85)	(97)	(127)							
Investments and Advances to Uncons. Affiliates	(6)	(38)	(39)	(6)	(19)	(11)	(23)							
Subtotal	(944)	(806)	(782)	(1,149)	(809)	(1,061)	(1,411)	(1,000)	(1,050)	(1,100)	(1,150)	(1,200)	10%	-1%
Asset Sales	383	497	293	102	46	60	215							
Other	(666)	31	(5)	(0)	0	4	47							
Investing Activities	(1,227)	(278)	(494)	(1,047)	(763)	(997)	(1,149)	(1,000)	(1,050)	(1,100)	(1,150)	(1,200)	29%	2%
Operating Less Investing	(36)	853	581	4	323	393	173	640	788	883	980	1,068		
Financing Activities														
Short Term Debt, Net	(182)	8	(171)	38	(135)	0	0							
Long Term Debt, Net	403	(676)	(142)	(108)	(49)	(123)	134							
Commercial Paper, Net	0	0	0	0	0	269	105							
Proceeds from Stock Options	0	87	104	77	146	147	103							
Dividends	(156)	(165)	(176)	(189)	(219)	(276)	(294)	(306)	(318)	(330)	(342)	(354)	13%	4%
Other	15	0	0	0	0	0	18							
Repurchase of Common Stock	0	(87)	0	0	0	(500)	(482)							
Subtotal	80	(833)	(385)	(183)	(257)	(483)	(416)	(306)	(318)	(330)	(342)	(354)		
Foreign Exchange	6	(1)	2	16	4	(0)	3							
Net Cash Flow	51	19	198	(163)	70	(91)	(241)	334	470	553	638	714		
Per Share:														
Total Sources	6.15	4.82	5.02	5.21	6.03	6.63	6.15	7.71	8.38	8.80	9.23	9.63	6%	8%
Total Uses	(4.19)	(2.89)	(3.02)	(3.25)	(4.37)	(4.74)	(5.88)	(4.85)	(4.85)	(4.85)	(4.85)	(4.85)	16%	-3%
Net	1.96	1.93	2.00	1.96	1.66	1.89	0.27	2.86	3.53	3.95	4.39	4.78		
Change in Cash & Equivalents	51	19	198	(163)	70	(91)								
Cash at Beginning of Period	62	94	66	254	76	146								
Cash at End of Period	112	113	264	91	146	56								
Analysis:														
Capex to Sales	13.7%	12.1%	11.6%	9.7%	9.5%	11.7%	13.9%	9.9%	9.8%	9.8%	9.9%	10.0%	11%	11%
Funds from Operations/Sales	24%	18%	21%	18%	19%	19%	15%	17%	17%	18%	18%	18%		
Change in Working Capital To Change In Sales	24%	-30%	-10%	12%	26%	20%	8%	8%	5%	-4%	-15%	-26%	5%	-4%
Reinvestment Rate	7.4%	6.9%	5.8%	5.2%	5.8%	7.4%	9.3%	6.9%	6.7%	6.6%	6.4%	6.3%	6.7%	7.1%
D&A Less Capital Expenditures	(174)	(116)	(37)	42	9	(225)	(498)	(181)	(205)	(228)	(248)	(266)		
Cash From Operations Less Capex	424	423	446	438	380	437	61	640	788	883	980	1,068		
Cash From Operations Less Capex Less Dividends	268	257	271	249	162	161	(233)	334	470	553	638	714		
Conversion of Net Income to Free Cash Flow Before Dividend	342%	91%	85%	110%	63%	61%	8%	71%	77%	81%	84%	88%	70%	68%
Dividend Payout Ratio	126%	36%	33%	47%	36%	39%	41%	34%	31%	30%	29%	29%	39%	32%
Depreciation	(576)	(573)	(591)	(655)	(715)	(728)	(763)	(819)	(845)	(872)	(902)	(934)	6%	4%
Discretionary Capex	(768)	(708)	(628)	(613)	(706)	(953)	(1,261)	(1,000)	(1,050)	(1,100)	(1,150)	(1,200)	13%	1%

Note: Fiscal year ends September

Source: Company reports, Banc of America Securities LLC estimates.

Air Products and Chemicals Inc.
Discounted-Cash-Flow Valuation
($ millions)

DCF Growth/Discount Assumptions		Equity Assumptions		Debt Assumptions		Profitability	
First Stage EBIT Compound Annual Growth (Yrs 1-4)	6.5%	Risk Free Rate %	4.6%	Pre- Tax Cost of Debt	5.6%	CROC (2006E)	12.0%
Second Stage EBIT Compound Annual Growth (Yrs 5-10)	6.0%	Market Risk Premium %	6.9%	Marginal Tax Rate	38.0%	WACC	9.6%
Terminal Value Growth Rate	3.0%	Adjusted Beta	0.90	After Tax Cost of Debt	3.5%	CROC-WACC	2.4%
WACC	9.6%	Cost of Equity %	10.8%	Market Value of Debt	3,302	Capital Employed	$7,379
Spec. Chemical Average Unlevered Beta	0.80	Current Stock Price	$73.94			Economic Value Added (EVA)	$177
		Shares Outstanding	223.4				
		Market Value of Equity	16,518				

Year	1 F2007E	2 F2008E	3 F2009E	4 F2010E	5 F2011E	6 F2012E	7 F2013E	8 F2014E	9 F2015E	10 F2016E	Growth 07E-11E	Growth 12E-16E	Terminal Value
Sales	$10,079	$10,718	$11,169	$11,604	$12,300	$13,038	$13,821	$14,650	$15,529	$16,461	5.1%	4.8%	
Operating Profit	1,299	1,447	1,515	1,578	1,672	1,773	1,879	1,992	2,111	2,238	6.5%	4.8%	
Operating Margin	12.9%	13.5%	13.6%	13.6%	13.6%	13.6%	13.6%	13.6%	13.6%	13.6%			
Equity Income	116	124	128	132	140	148	157	167	177	187	4.8%	4.8%	
Minority Interest	(32)	(34)	(36)	(38)	(40)	(42)	(45)	(47)	(50)	(53)	6.0%	4.8%	
Plus Depreciation	819	845	872	902	956	1,015	1,076	1,142	1,212	1,286	4.0%	4.9%	
Plus Amortization of Goodwill	0	0	0	0	0	0	0	0	0	0			
Less Capital Expenditures	(1,000)	(1,050)	(1,100)	(1,150)	(1,219)	(1,260)	(1,302)	(1,346)	(1,391)	(1,437)	5.1%	2.7%	
Net Capital Expenditures	(181)	(205)	(228)	(248)	(263)	(245)	(226)	(203)	(179)	(151)			
Deferred Taxes	0	0	0	0	0	0	0	0	0	0			
Less Cash Taxes	(261)	(291)	(304)	(317)	(336)	(356)	(377)	(400)	(424)	(449)	6.5%	4.8%	
"Cash" Tax Rate	20%	20%	20%	20%	20%	20%	20%	20%	20%	20%			
Working Capital Requirements	(83)	(33)	17	67	71	75	79	84	89	94			
Free Cash Flow to the Firm (FCFF)	857	1,008	1,092	1,174	1,244	1,352	1,468	1,591	1,724	1,865	9.8%	6.6%	29,049
NPV of FCFF in Years 1-10	7,864	40%											
NPV of Terminal Value	11,601	60%											
Total Enterprise Value	19,464	100%											
Less Total Debt	3,150												
Less Funded Status of Pension and OPEB, Net of Taxes	615												
Plus Total Cash On Hand	65												
Plus PV Adjustment (DCF discounts to 9/30/06)	868												
Total Equity Value	16,632												
Equity Value Per Share	**$74**												

Sensitivity Analysis

		Terminal Growth Rate				
		2.0%	2.5%	3.0%	3.5%	4.0%
WACC	7.6%	100	108	118	130	145
	8.1%	90	96	104	113	124
	8.6%	81	86	92	99	108
	9.1%	73	77	82	88	95
	9.6%	67	70	**$74**	79	85
	10.1%	61	64	67	71	76
	10.6%	56	58	61	64	68
	11.1%	51	53	56	59	62
	11.6%	47	49	51	54	56

E = Banc of America Securities Equity Research Estimates

Source: Company reports, Banc of America Securities LLC estimates.

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April 3, 2007

ARG

$41.89

12-Month Target:
$47.00

Total Return To Target:
12.9%

Buy

Market Cap.	Volatility
$3,481.1 MM	Medium

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Changes at a glance

(Please see page 2 for additional detail)

Rating?	Target Price?
No ◀▶	No ◀▶
Maintain Buy	Maintain $47.00 Target

Revenue (MM)			Prev	Curr	
FY07E	No		–	$3,175.0	
FY08E	No		–	$3,854.0	

EPS**			Prev	Curr	P/E
FY07E	No	◀▶	–	$1.98	21.2
FY08E	No	◀▶	–	$2.41	17.4
FY09E	No	◀▶	–	$2.69	15.6

* No Previous Values

▲ = Up; ▼ = Down; ◀▶ = No Change. ** These estimates adjusted to account for FAS 123r, Expensing of Employee Stock Options.

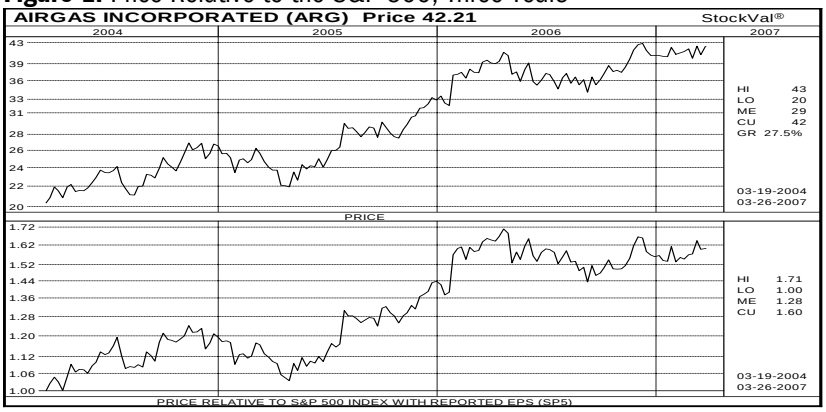
Chemicals

Airgas, Inc.

Our Favorite Way To Play Industrial Gases

- **We recently upgraded Airgas to Buy.** Given our outlook for still solid same-store growth of 5% in fiscal 2008, ongoing margin expansion and two major accretive acquisitions, we upgraded our rating to **Buy** from Neutral on March 8 and subsequently raised our fiscal 2008 estimate again on April 2, to $2.41 from $2.37. Our target price of $47 suggests 13% upside remains.
- **We project solid sales growth for five reasons.** These are (1) several factors depressed gases volume by about 200 basis points, to 3% in third quarter of fiscal 2007 as reported from about 5% pro forma; (2) expected nonresidential construction (15-20% of sales) to rebound in second half 2007-2008; (3) pending price increases for April 1, 2007 should gain at least partial traction; (4) fourth quarter of fiscal 2007 off to a good start; and (5) safety-related products (now one third of hardgoods) that should cushion the slowdown in welding-related product sales.
- **Ongoing acquisitions enhance organic margin expansion.** We expect margins to expand as mix shifts to gases (70% gross margin) from hardgoods (27%). In addition, the Linde ASU acquisition and the pending acquisition of Linde's U.S. packaged gases business are both accretive within the first 12 months. Our fiscal 2008 estimate of $2.41 incorporates 90 basis points of EBIT margin expansion, $0.03 of EPS from product swaps not included in the $0.07 accretion put forth by Airgas management for the Linde ASU deal and $0.01 of EPS associated with the Linde U.S. packaged gases deal.
- **Valuation is attractive given our sustainable EPS growth outlook.** At a multiple of 15.7x our calendar 2008 estimate of $2.67, Airgas shares trade at a discount to Praxair and in line with Air Products (see Table 6) with premium growth prospects.
- **Valuation and Target Price Analysis:** Our DCF-based target price of $47 suggests that shares merit a multiple of 20.5x our calendar 2007 EPS estimate of $2.29.

Figure 1: Price Relative to the S&P 500, Three Years



Source: StockVal.

Airgas, Inc.

Company Data

52-Week Range	$43-33
Market Capitalization (MM)	$3,481.1
Shares Outstanding (MM)	83.1
Float (MM)	70.7
Short Interest	1.3%
Average Daily Volume	465,464
Dividend/Yield	$0.28/0.7%
12/06 ROE/ROIC	14.7%/10.3%
Exchange-Traded Funds	IYM,PYZ,PRFM
Convertibles	NO
Proj. 3-Yr. EPS Growth Rate	11%

Balance Sheet (12/06)

Net Cash/Share	($10.35)
Book Value/Share	$12.99
Price/Book Value	3.2x
Debt/Cap.	45.0%

Estimates (FYE Mar)	2007E	2008E Prev	2008E Curr	2009E Prev	2009E Curr
EPS*					
1Q (Jun)	$0.46A	–	$0.55	–	
2Q (Sep)	0.49A	–	0.60	–	
3Q (Dec)	0.50A	–	0.61	–	
4Q (Mar)	0.53E	–	0.65	–	
Fiscal Year	**$1.98**	–	**$2.41**	–	**$2.69**
First Call Mean	$1.99		$2.38		
Calendar Year	**$2.29**	–	**$2.67**	–	**$2.94**
P/E	18.3		15.7		14.2
P/E/G	166%		143%		130%
Revenue (MM)					
1Q (Jun)	$773.0A	–	$894.4	–	
2Q (Sep)	791.0A	–	988.7	–	
3Q (Dec)	787.0A	–	978.7	–	
4Q (Mar)	824.0E	–	992.2	–	
Fiscal Year	**$3,175.0**	–	**$3,854.0**	–	**$4,083.0**
First Call Mean	$3,183.9		$3,631.1		$3,844.3

* These estimates adjusted to account for FAS 123r, Expensing of Employee Stock Options. First Call Mean estimates might not have been similarly adjusted.

Top Picks

Celanese Corporation
(CE, $30.65, B, $35.00 Target)

Airgas, Inc.
(ARG, $41.89, B, $47.00 Target)

Least Favorites

NOVA Chemicals Corporation
(NCX, $31.53, N, $26.00 Target)

Albemarle Corporation
(ALB, $41.70, N, $39.50 Target)

Company Description

▶ Airgas, Inc. and its subsidiaries distribute industrial, medical and specialty gases, as well as welding, safety, and related products in the United States. The company's principal products and services include packaged and small bulk gases, gas cylinder and welding equipment rental, process chemicals and hardgoods.

Sector View

▶ Market-weight.

Summary and Investment Conclusion

Our target price of $47 suggests upside of 13%.

We view Airgas as the best way to play the industrial gases sector. We recently upgraded Airgas shares to **Buy** from Neutral. Following a pullback after third quarter of fiscal 2007 results, we believe valuation offers sufficient compensation for deceleration of (still attractive) growth in same-store sales (SSS). Looking ahead, we expect three factors to support sustainable EPS growth of 11%: (1) stable, mid-single-digit growth in SSS; (2) margin expansion as Airgas' mix shifts to gas/rent from hardgoods; and (3) external growth via pending, accretive acquisitions in a still fragmented industry.

We view Airgas as a high-quality, well-managed industrial gas distributor. In our view, Airgas has above-average growth prospects and attractive defensive qualities relative to chemical industry peers. Given our outlook for sustainable mid-single-digit sales growth, margin expansion and accretive acquisitions, we increased our fiscal 2008 estimate to $2.41 from $2.37 in the past 30 days. Our DCF-based target increased to $47 from $43 over the same time frame on higher EPS and two accretive deals with Linde. Although sales momentum in Airgas' industrial end-markets is slowing, we expect healthy earnings growth (up 22%) in fiscal 2008, based on solid non-residential construction (up 13.5% year over year in January), estimated accretion of $0.11 from the two Linde acquisitions and higher prices as a function of tight regional markets for industrial gases. With limited new air separation capacity being added over the near term, we expect packaged gases to remain tight in 2007 in most regions of the country. Barring a significant slowdown in the industrial economy, suppliers like Airgas should continue to have the upper hand on price.

We expect sales growth to remain solid. While we acknowledge some deceleration in the U.S. industrial economy, we expect still healthy sales growth from Airgas for five reasons: (1) several factors depressed third quarter gases volume by about 200 basis points, to 3% as reported from about 5% pro forma; (2) we expect nonresidential construction (15-20% of sales) to rebound in 2007-2008 after stabilization of residential-linked components; (3) proposed double-digit price increases pending for April 1, 2007 should gain at least partial traction given the sold-out nature of several regional markets; (4) the March quarter appears to be off to a good start with competitor Praxair reporting sales growth of 9-10% in packaged gases for January; and (5) safety-related products (now one third of hardgoods) should cushion the slowdown in welding-related product sales as the cycle matures.

We expect pending acquisitions to enhance organic margin expansion. We expect margins to expand organically as growth shifts to gases (about 70% gross margin) from hardgoods (about 27% gross margin). In addition, the acquisition of ASUs from Linde (closed March 9, 2007) carries operating margin of about 23% versus Airgas' average of 11% in fiscal 2007. Our fiscal 2008 estimate of $2.41 also incorporates EPS accretion from product swaps not included in estimated EPS accretion of $0.07 put forth by Airgas management.

Fiscal 2007 was a record year for Airgas acquisitions, only to be surpassed by fiscal 2008.

Acquisitions still play a major role. Airgas has completed about 350 deals in 25 years as management continues to consolidate the fragmented U.S. packaged gas industry. Fiscal 2007 was a record year of activity for Airgas. Following closure of the Linde ASU deal closes in March (Linde#1), Airgas acquired businesses with annual sales of $325 million in fiscal 2007, with the majority of those sales added in the latter half of the fiscal year (Linde#2). On the heels of its March 9, 2007, acquisition of eight air separation units (ASUs) from Linde (Linde#1), Airgas announced an encore with the same dance partner: a definitive agreement to purchase Linde's U.S. packaged gas

business for $310 million in cash (Linde#2). Financial leverage appears manageable as adjusted for the pending Linde deal, although pro forma leverage increases toward the high end of management's range. On a pro forma basis, the second Linde deal increases Airgas' ratio of adjusted debt/EBITDA to about 3.4x versus our March 31, 2007, estimate of 3.1x pre-deal (but post-Linde#1) and 2.4x at year-end 2006 prior to Linde#1. This compares with Airgas' target "comfort zone" of 2.5-3.5x.

Valuation is attractive given our sustainable EPS growth outlook. We view valuation of 18.3x our calendar 2007 estimate of $2.29 as reasonable given the company's impressive long-term track record, including substantial margin improvement in recent years. We note that FCF generation remains subpar at this juncture in the cycle, as high capital commitments to fund growth plus greater working capital needs limit near-term FCF generation. We forecast FCF of $142 million in fiscal 2008 which translates to a modest FCF yield of 4.1%.

Figure 2

Sales by Segment, Estimated Fiscal 2008

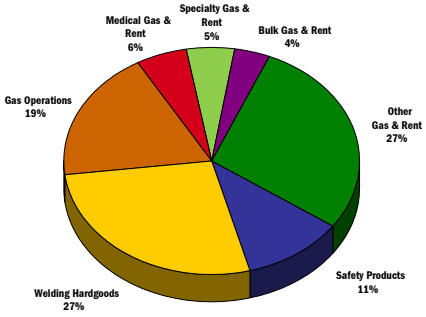
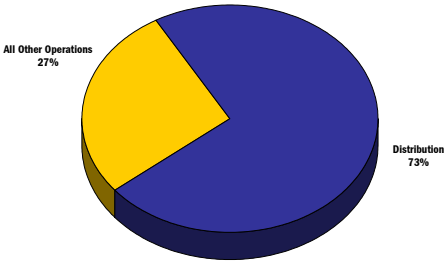


Figure 3

EBIT by Segment, Estimated Fiscal 2008



Source: Banc of America Securities LLC estimates, company reports.

Figure 4

Sales by Geography, Estimated Fiscal 2008

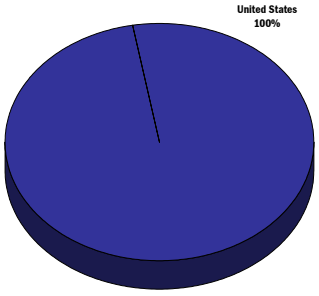
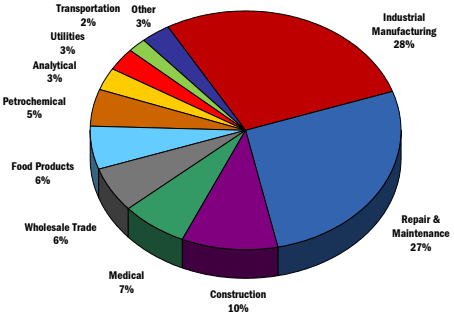


Figure 5

End-Use Markets, Estimated Fiscal 2008



Source: Banc of America Securities LLC estimates, company reports.

Investment Positives

Airgas ranks first in the fragmented U.S. packaged gases market.

- **Airgas is the industry leader in packaged gases.** With market share of 26%, Airgas leads the $10 billion U.S. market for packaged gases and hardgoods, ahead of integrated majors Praxair, Linde and Air Liquide (see Figures 6 and 7). Airgas has the only national footprint, created via 350 acquisitions over more than 20 years. The packaged gases industry remains highly fragmented; the top three companies account for only 38% of the market. Integrated industrial gas producer Praxair is Airgas' nearest competitor with a market share of 11%. Relative to smaller peers, we believe larger players like Airgas have significant advantages including higher ROC derived from greater geographic density (concentration of sites in a region), and higher sales growth via cross-selling opportunities.

Figure 6

U.S. Industrial Gases Market
Market Share, Estimated 2007

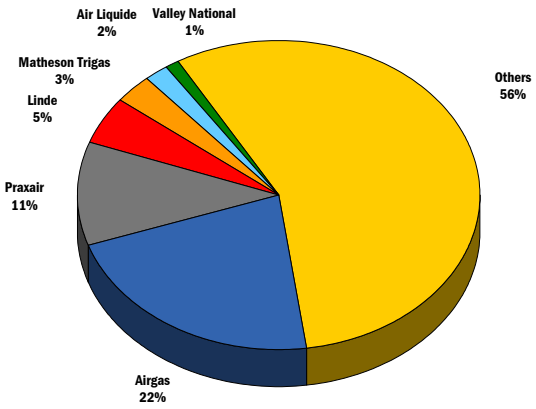
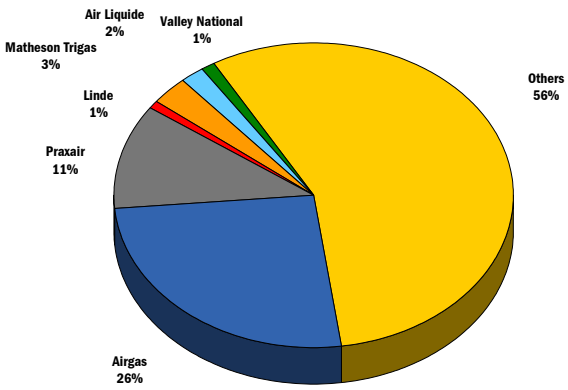


Figure 7

U.S. Industrial Gases Market
Market Share PF for the Linde U.S. Packaged Gases Deal, Estimated 2007



Source: Company reports, Banc of America Securities LLC estimates.

Linde ASU deal increases Airgas' bulk capacity by more than 2.5x.

- **We like the Linde bulk assets deal, which closed on March 9, 2007.** Based on a cash purchase price of $495 million, we estimate that Airgas paid 2.8x calendar 2007 sales or 7.7x calendar 2007 EBITDA. **Sale of these assets was mandated by the U.S. Department of Justice as a necessary divestment after Linde's acquisition of BOC in September 2006.** We expect EPS accretion of $0.10 in the first year, based on $180 million in incremental fiscal 2008 sales. As shown in Table 1, current bulk capacity of 1,800 tons per day (TPD) will increase to 6,370 TPD (more than a 2.5 times increase), along with supporting assets (about 90% more gas delivery vehicles, about 40% more bulk tanks and 50% more bulk gas specialists). The assets should help support long-term growth. In certain regions, argon and increasingly oxygen are tight, to the point that limited supply could constrain Airgas' future growth. Rather than rely on suppliers to build new capacity, Airgas will now own more substantial production capacity. We estimate average utilization rates for the Linde assets of 85-90%, so the deal provides some spare capacity to support sales growth. We expect Airgas to gain further flexibility by expanding regional product swaps with integrated producers like Praxair and Air Products.

Table 1

Airgas, Inc.
Air Separation Units To Be Acquired From Linde
(tons per day)

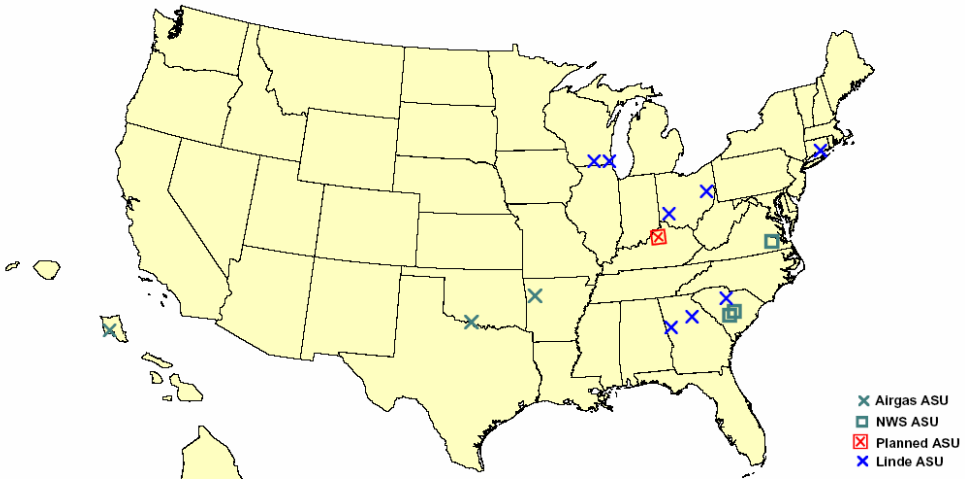
City	State	Supply Region	Capacity
Bozrah	CT	East	975
Canton	OH	Great Lakes	1,215
Dayton	OH	Great Lakes	650
Madison	WI	North Central	575
Waukesha	WI	North Central	205
Carrolton	GA	South	250
Jefferson	GA	South	550
Rock Hill	SC	NWS	150
Subtotal – Linde Plants			**4,570**
Existing Capacity			**1,800**
Total Capacity			**6,370**

Source: Company reports.

Figure 8 shows the location of Linde's eight ASUs versus the six already owned by Airgas. The eight new ASUs (located in Ohio, Wisconsin, Georgia and South Carolina) will be combined with existing ASUs and centrally managed as part of "Airgas Merchant Gases," a new business unit.

Figure 8

Airgas, Inc.
Location of Bulk Gas Assets Pro Forma for the Linde Deal



Source: Company data.

The Linde packaged gases deal is the largest packaged gases deal in Airgas' history.

- **We consider the Linde U.S. packaged gases deal an excellent strategic fit.** Linde's packaged business is spread across the Midwest, Mid-Atlantic and Southeastern Unites States. The purchase includes 130 locations in 18 states and more than 1,400 employees. Airgas expects EPS accretion of up to $0.02 in the first year. One knock: Linde's EBITDA margin of 10.4% in calendar 2006 was 350 basis points below Airgas' own 13.9% despite a similar, 50/50 mix of gas and rent versus hardgoods, compared with 52% gas and rent and 48% hardgoods for Airgas. However, we expect this margin gap to narrow over time as synergies are realized. We estimate the transaction will increase Airgas' share of the U.S. packaged gas market to 27% from 22%, widening the gap between Airgas and the number-two player, Praxair (PX, $62.96, **Neutral**, Target Price: $61.00), with estimated share of 11%.

Table 2

Airgas, Inc.
Linde Deal Accretion Analysis, Fiscal 2008—Estimated 2010
($ millions)

Calendar Year	FY2008	FY2009	FY2010
Sales	37.8	40.1	42.5
EBITDA Pre-Synergies	37.8	40.1	42.5
EBITDA Margin Pre-Synergies	10.4%	10.4%	10.4%
Total Synergies	8.4	10.4	13.5
Less Incremental Integration Costs	7.0	4.0	-
EBITDA Post-Synergies	39.1	46.4	55.9
EBITDA Margin Post-Synergies	10.8%	12.1%	13.7%
Less D&A	15.5	15.5	15.5
EBIT	23.6	30.9	40.4
Interest	21.7	21.7	21.7
EBT	1.9	9.2	18.7
Taxes	0.7	3.5	7.0
Net Income	1.2	5.8	11.7
Diluted Shares	83.1	83.4	83.7
EPS Accretion	**0.01**	**0.07**	**0.14**

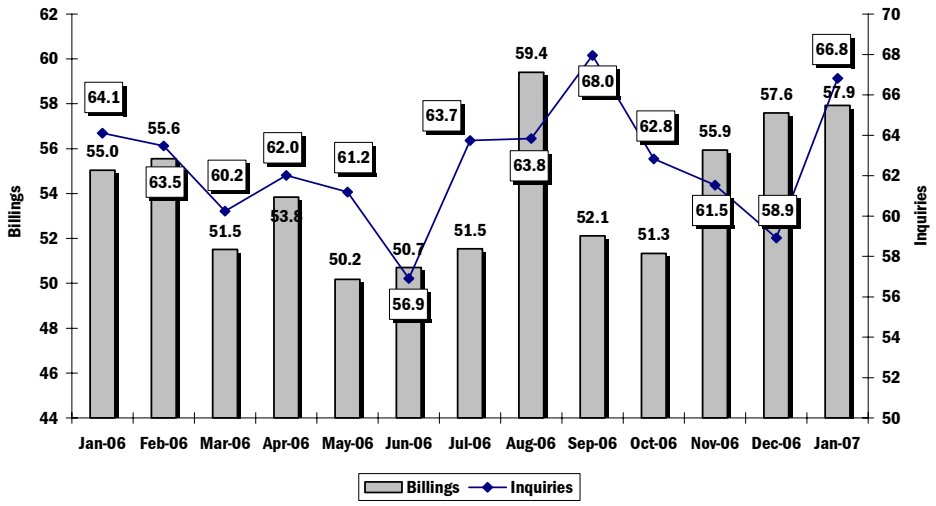
Source: Company reports, Banc of America Securities LLC estimates.

The AIA sees nonresidential construction growing 6.8% in 2007 versus 5.9% in 2006.

- **Nonresidential construction growth could accelerate.** Nonresidential construction is one of two key drivers of Airgas' demand along with nontechnology U.S. industrial production. We expect nonresidential construction (15-20% of sales) to rebound in second half 2007-2008 after stabilization of residential-linked components. Airgas management expects strength in many nonresidential categories including bridges, roads, pipelines, LNG facilities, pressure vessels, ethanol plants, shipbuilding, stadiums, hospitals, water-related infrastructure, coal-fired power generation and nuclear power plants. The American Institute of Architects (AIA) forecasts growth in nonresidential construction end markets of 6.8% in 2007 versus 5.9% in 2006. Categories accounting for above-average growth include hotels (up 13.1%), office buildings (up 9%), amusement/recreation (up 9.9%) and hospitals/health care (up 6.8%). The forecast is consistent with a strong January reading in the Architectural Billings Index (ABI), a leading indicator (R^2 = 75% with 10-11-month lag) of the U.S. government's numbers for nonresidential construction put in place.

Figure 9

American Institute of Architects
Architectural Billings Index, January 2006—January 2007



Source: American Institute of Architects.

- **The company has improved efficiency and cut costs.** Since the packaged gas business is more about managing costs than assets, Airgas has taken a harder look at its operations in recent quarters. Management promoted Mike Molinini to chief operating officer in January 2005 and elevated Mike Rohde to senior vice president of distribution in April 2005. The company has streamlined its supply chain, consolidated purchasing locations (from 32 to four), implemented Manugistics supply-chain management tools and reduced inventory days. The next step is enterprise resource planning. We expect Airgas to commence standardization of operations and integration of its operating companies around a common database (SAP or Oracle), starting in 2008. SG&A expenses have been steadily decreasing from 39.1% of sales in fiscal 2003 to 36.1% in fiscal 2006. We project SG&A to drop to 35.7% in fiscal 2007 and stabilize around this level.

Stable CF can support substantial leverage.

- **Rental income generates reliable cash flow.** From fiscal 2001 to fiscal 2006, Airgas has increased cash from operations by a compounded growth of 8% per year, with much of that growth coming from rental income. We estimate Airgas generated total rental income of $400 million per year from $1.24 billion in gas and rent sales for fiscal 2006. Airgas' inventory of more than 7 million cylinders generates about $275-300 million each year, based on 80% utilization and rent of $48-50 per year per cylinder. The company also generates roughly $70 million per year of rent on its fleet of 24,000 Red-D-Arc welding machines. We estimate additional rental income of about $30 million per year from bulk tanks. Airgas derives revenues from the sale of gas in the cylinder and the collection of daily rent on the cylinder. Steady cash flow from rental income allows Airgas to de-leverage its balance sheet following substantial acquisitions.

Five growth platforms are medical, specialty gases, bulk gases, safety and dry ice.

- **Strategic platforms are driving growth.** Airgas has focused its growth strategy on five platforms: Medical, Specialty Gases, Bulk Gases, Safety Products and CO_2/Dry Ice. We estimate these five platforms will account for a combined $1.21 million, or about 38% of total fiscal 2007 sales estimate. For example, Medical

generates $220 million in packaged respiratory gas sales to hospitals and clinics and is growing faster than 10% per year. We believe Airgas has been successful taking share from competitors by improving service, establishing new locations and deploying its proprietary Walk-O-Bout units. Airgas is looking to increase its share at major homecare providers Apria (AHG, $32.42, **Sell**, Target Price: $23, covered by BAS analyst Gary Taylor) and Lincare (LNCR, $36.76, **Neutral**, Target Price: $35, covered by BAS analyst Gary Taylor), leveraging their national network of customers and their expertise at billing and collection.

Table 3

Airgas, Inc.
Strategic Growth Platforms
($ million)

	F2007E Sales	% of Total Sales	LT Growth Rate	Strategy
Safety Products	$440	14%	> 10%	Product extensions - #3 U.S. player
Bulk Gases	145	5%	> 10%	Grow with customers
Specialty Gases	185	6%	8 – 10%	Leverage broad presence and capabilities
Medical Sales	220	7%	> 10%	Continue to broaden product line / distribution channels
CO_2 / Dry Ice	220	7%	6 – 8%	Leverage leading positions - #1 in dry ice, #3 in liquid CO_2
Subtotal	**1,210**	**38%**	**~10%**	
Other Distribution	1,456	46%		
Total Distribution	**2,666**	**84%**		
All Other Operations	570	18%		
Eliminations	(61)	-2%		
Total Sales	**$3,175**	**100%**		

Source: Company reports, Banc of America Securities LLC estimates.

Price increases have been largely successful.

- **Airgas enjoys significant pricing power.** The company recently switched from a regional to a national approach to pricing and has moved aggressively on price to offset higher operating costs and energy price inflation. The company has proposed several price increases, effective April 1, 2007: 10-15% for packaged and bulk industrial gases, acetylene and other fuel gases, specialty gases, process chemicals and rare gases, medical gases, nitrous oxide, carbon dioxide, hydrogen and dry ice; and 15-25% for helium. We believe Airgas is slightly ahead of the game with respect to cost recovery, with positive implications for near-term margins, as reflected in our margin improvement of 120 basis points in fiscal 2007, followed by 90 basis points in fiscal 2008. In November 2005 and July 2006, the company announced price increases in carbon dioxide, packaged oxygen and nitrogen and packaged hydrogen and acetylene. We believe the company's historical success in realization runs at about 50% because of differences in regional capacity utilization rates and competitive intensity.

Table 4

Airgas, Inc.
Recent Announcements of Price Increases for Industrial Gases

Effective Date	Scope of Increase
4/1/07	▶ 10%-15% for packaged and bulk industrial gases, including oxygen, nitrogen, and argon; acetylene and other fuel gases; specialty gases; process chemicals and rare gases; medical gases; nitrous oxide, carbon dioxide, hydrogen, and dry ice ▶ 15%-25% for helium
6/26/06	▶ 10%-15% for packaged and bulk industrial gases, including oxygen and nitrogen; specialty gases, medical gases, nitrous oxide, carbon dioxide, and dry ice ▶ 15%-20% for argon, hydrogen, helium, acetylene, and other fuel gases
11/21/05	▶ 6%-8% for carbon dioxide, dry ice, specialty gases and medical gases ▶ 8%-10% for certain packaged and bulk industrial gases, including oxygen and nitrogen ▶ 12%-15% for hydrogen, helium, acetylene and other fuel gases.

Source: Company data.

Capacity utilization is tight in certain regional markets.

- **Regional markets are gasping for oxygen...and argon.** Unlike commodity chemical businesses, industrial gas markets are regional in nature. This is because it is usually uneconomical to transport gas cylinders more than 200 miles. As a result, it makes little sense to discuss global or even national capacity utilization. However, with little new capacity having been built in recent years, it is also true that capacity utilization is precariously tight in certain regional markets like the northern Midwest, Georgia and Florida. These markets are therefore candidates for new air separation units (ASUs), which typically take two years to build. New ASUs would increase availability of atmospheric gases: nitrogen, oxygen and argon.

Management is committed to growing the dividend at 10% per year.

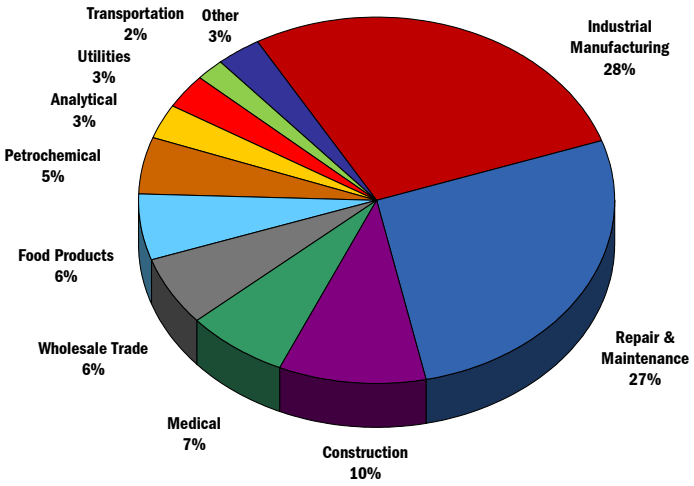
- **Airgas is committed to dividend growth.** Airgas management has committed to returning cash to shareholders in the form of dividend increases and share repurchases. Airgas declared its first dividend of $0.16 in May 2003. Management has increased the dividend three times since then, the latest increase of 17% from $0.24 per share to $0.28 in June 2006, which equates to a dividend yield of 0.7%. Company management is committed to growing the dividend at about 10% per year, commensurate with earnings growth. However, we believe dividend growth most likely will be balanced against acquisition growth, as the company will continue to need cash flow to pay down acquisition-related debt. Based on $28 million in fiscal 2007 FCF, we believe the company can accomplish both tasks, maintaining an active acquisition pipeline and a stable share count. The company initiated a $150 million share buyback program in November 2005, but suspended it in June 2006, while the company executes acquisitions. We have assumed modest share increases each year (up 1%) and included no additional acquisitions (beyond those already announced) in our estimates through fiscal 2010.

Airgas has about 1 million customers spread across diverse end-use markets.

- **Business mix is diverse.** Airgas has 1,000,000 customers, the largest of which represents less than 0.5% of sales. Such a diverse customer base insulates Airgas from specific issues at any single customer. The company's national footprint combined with its varied end-market mix provides further protection from a downturn in a region or industrial sector. Figure 10 shows the diversity of Airgas' end-use market mix.

Figure 10

Airgas, Inc.
End-Use Market Mix

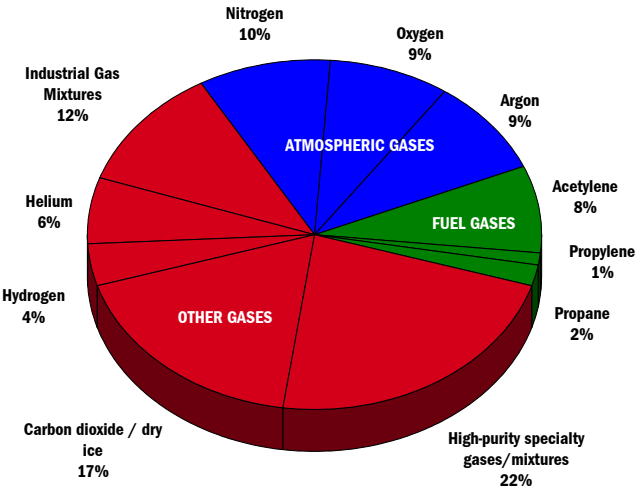


Source: Company Reports, Banc of America Securities LLC estimates.

- **Product mix is likewise diverse.** Gas and rent account for 52% of estimated fiscal 2007 distribution sales, while hardgoods, such as welding supplies, account for 48%. As shown in Figure 11, the mix of gases is quite diverse with atmospheric gases (nitrogen, oxygen and argon) accounting for only 28% of total gases. High-purity specialty gases, carbon dioxide, mixtures, acetylene and helium also account for a substantial portion of the total gas sales mix.

Figure 11

Airgas, Inc.
Gases Sales Mix, Estimated Fiscal 2007



Note: Figures exclude rent.
Source: Company Reports, Banc of America Securities LLC estimates.

Airgas share price has grown at a CAGR of nearly 20% for 20 years.

- **Airgas has an excellent long-term track record.** In June 1981, Peter McCausland, Airgas' founder and chief executive officer, left Messer Greisheim, an industrial gas manufacturer where he was general counsel, to form his own firm. Mr. McCausland founded the company, then known as U.S. Airgas, with the acquisition of Connecticut Oxygen Corporation on February 23, 1982. Since then, the company has made more than 350 acquisitions (average 14 per year), and annual sales have grown from $3 million to approximately $3.2 billion in fiscal 2007. Today, Airgas has 11,000 associates in more than 900 locations, providing gases, supplies and safety products to more than 1 million customers. Airgas completed its initial public offering of 600,000 shares on December 19, 1986, closing at $8.72, or $1.09 as adjusted for stock splits. **Based on a recent price of $40, the shares have compounded at an annual rate of nearly 20% for 20 years.**
- **Management still has skin in the game.** Mr. McCausland sold 1 million shares in September 2005, but has retained significant equity ownership in the company. He and his family owned 7.2 million shares as of December 31, 2006, or 9.2% of the company. Among companies we cover, Airgas has one of the highest insider ownership (10.1%) rates along with PPG Industries (PPG, $70.59, **Buy**, Target Price: $76).

Investment Risks

- **Airgas has high exposure to U.S. manufacturing.** Although Airgas has exposure to various cyclical and non-cyclical end-markets, manufacturing (i.e., welding and cutting) is the largest end market for Airgas' products. While industrial production has recovered over the last three years, the secular trend toward moving manufacturing from the U.S. offshore to Asia could hurt Airgas' sales over the longer term. While the U.S. industrial economy grew by 4.1% year over year in 2006, the recent surge in energy prices, weaker consumer spending and a flatter yield curve also has created greater macroeconomic uncertainty. With the recovery entering its 19th quarter, it is likely in our view Airgas has passed the midpoint in the upturn of the current industrial cycle. A slowdown in the industrial sector could have a significant impact, as 46% of the company's sales are tied to cyclical end-markets like manufacturing, wholesale trade and transportation.
- **Fourth quarter of fiscal 2007 will be another difficult comparison.** Same-store sales grew by 12% in fourth quarter of fiscal 2006, boosted in part by elevated post-hurricane sales in January as well as a strong March in 2006.

Figure 12

Airgas, Inc.
Same-Store Sales Growth Versus U.S. Industrial Production

Source: Company reports, Federal Reserve data, Banc of America Securities LLC estimates.

- **Airgas has only limited operations overseas.** The company's concentration of sales in the U.S. market leaves it dependent upon the pace of U.S. industrial growth. Same store sales growth has slowed from 13% in second quarter of fiscal 2006 to 7% in third quarter of fiscal 2007 on slower growth in price (up 4%) and volume (3%).
- **Higher fuel and electricity cost inflation could depress margins.** Diesel and electricity are two major operating expense items for Airgas. The company buys diesel to keep its 3,000 delivery vehicles on the road and uses electricity to run its six air separation units (ASU), eight carbon dioxide plants and more than 200 fill

plants. We estimate Airgas spends about $30 million per year on diesel fuel, but the company incorporates a fuel pass-through clause in the contracts of customers who take delivery via Airgas trucks. While the company has implemented surcharges, Airgas may face additional utility and diesel inflation in fiscal 2008.

Airgas could build new ASUs, either alone or in partnership with its gas suppliers.

- **Airgas and others are investing in new production capacity.** As a distributor, Airgas relies on its gas suppliers like Air Products and BOC Group (now Linde) to provide oxygen, nitrogen and argon in its 12 regions. In some regions of the country, argon and increasingly oxygen has become tight, to the point Airgas is struggling to find enough gas to fill its cylinders. Rather than rely on its suppliers to build new capacity, the company is building an air separation unit (ASU) in Carrolton, Kentucky, and is considering a second unit in an unspecified location. We estimate a capital commitment of $25-35 million given production capacity of 350 tons-per-day (TPD). We estimate construction would take two years, so construction could be finished in late 2008. Regional markets are likely to remain tight in the interim, in our view.

Table 5

U.S. Industrial Gases
Capacity Additions—Air Separation Units (ASUs) for Merchant Liquid Sales, Estimated 2007—Estimated 2009
(tons per day)

Company	Location	2007E	2008E	2009E	Total
Matheson	Los Angeles, CA	600			600
Linde (formerly BOC)	Cartersville, GA	175	525		700
	Beloit, WI		700		700
	Subtotal - Linde	175	1,225	-	1,400
Air Liquide	Salt Lake City, UT		300		300
Airgas	Carrollton, KY		88	263	350
Air Products	Ashland, KY		113	338	450
	Reidsville, NC		200	200	400
	Subtotal - Air Products		313	538	850
Total		**775**	**1,925**	**800**	**3,500**
Percent Increase		1.2%	2.9%	1.2%	5.3%

Source: Company reports, Banc of America Securities LLC estimates.

- **Expensing of options remains a drag on EPS in fourth quarter of fiscal 2007.** Upon implementation of FAS123R accounting for expensing of options, we estimate an earnings headwind of $0.10 per share in fiscal 2007, or 6% versus fiscal 2006 EPS of $1.62. We note that Airgas adopted new options accounting later than most other companies because Airgas has a March fiscal year.
- **Airgas' chief financial officer resigned in September 2006.** Airgas announced the resignation of Chief Financial Officer Roger Millay effective September 20, 2006. Mr. Millay pursued a position as senior executive vice president and chief financial officer of Discovery Communications, Inc. His financial acumen may be missed in connection with future acquisition activity. However, we view Airgas Chief Executive Officer Peter McCausland as a highly capable leader.

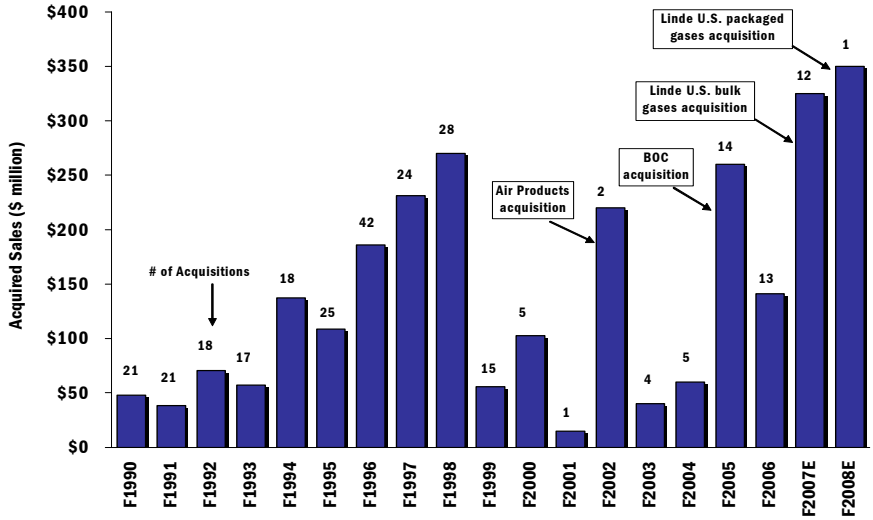
Airgas is on track for a record acquisition year in fiscal 2007.

- **Pressure to grow could lead to acquisition missteps.** Although management suggests there are plenty of acquisition opportunities, finding the right strategic fit

at the right time could be problematic. In the late 1990s, the company diversified into the tools business, which led to slower earnings growth and a significant decline in the shares. Airgas sold its last tool business, Rutland Tool, in December 2005 at a significant loss ($1.9 million after-tax).

Figure 13

Airgas, Inc.
Acquisition History, Fiscal 1990—Estimated Fiscal 2008



Source: Company reports.

- **New ethanol capacity could depress carbon dioxide prices.** New gasoline blending requirements under the Renewable Fuels Standard and more favorable production economics are driving investment in ethanol capacity. The expected ethanol expansion could lead to a surge in carbon dioxide supply, as CO_2 is a major coproduct in the production of ethanol. We note, however, that CO_2 is generally a regional business and much of the ethanol capacity is located in the Midwest, away from Airgas' positions on the east coast.

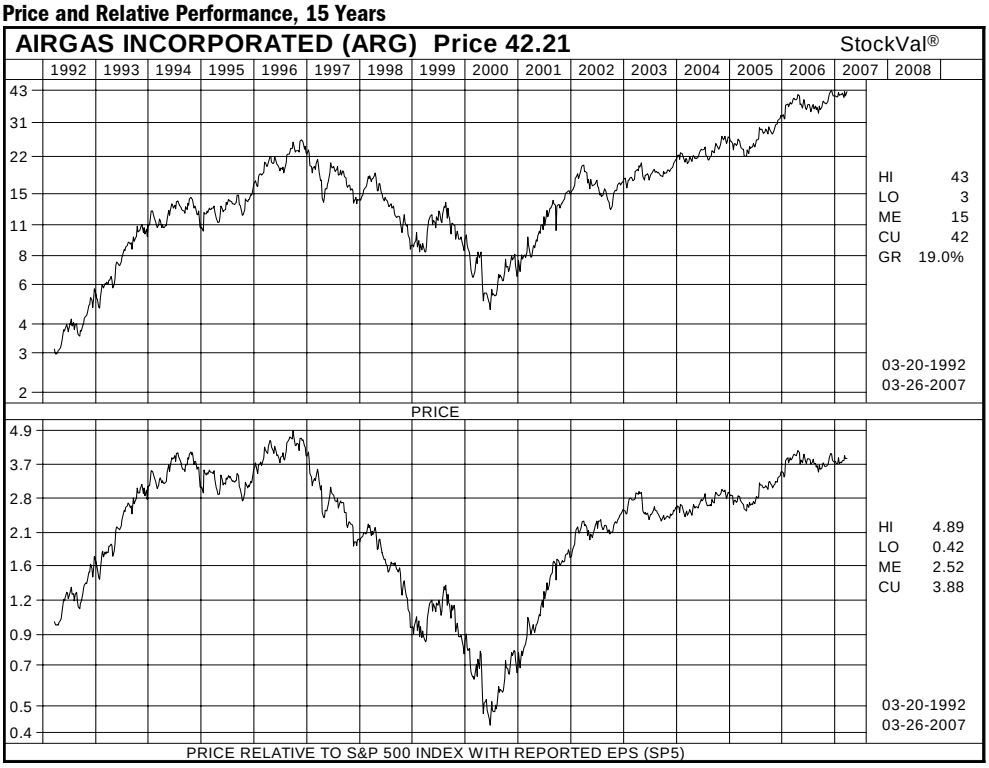
Valuation

Performance and Relative Performance

Airgas shares have outperformed since 2000. Figure 14 depicts Airgas' share price performance and the performance relative to the S&P 500 over the past 15 years. Over the past 15 years, Airgas shares have returned 19.4% including dividends versus 11.1% for the S&P 500 index. During the last economic cycle (from 1995-2000), the shares climbed to a peak of $26, but underperformed the market as investors flocked to high technology and telecommunications. The shares outperformed the market as investors rotated out of technology in late 2000, but pulled back in 2002 when an expected quick economic turnaround never materialized. The shares reached an all-time high of $43.43 in December 2006 on the prospect of improving returns tied to packaged gases volume growth and higher prices.

Figure 14

Airgas, Inc.
Price and Relative Performance, 15 Years



Source: FactSet, Banc of America Securities LLC.

P/E and Relative P/E Analysis

Airgas stock trades at a multiple of 18.3x calendar 2007 EPS estimate of $2.29, at parity with its average 15-year forward P/E average of 18.4x. On a normalized or midcycle basis, Airgas shares trade at 18.3x EPS, or a premium of 8% to the median of 16.9x for our chemicals coverage universe, which we view as modest given the company's superior long-term growth prospects.

Figure 15

Airgas, Inc.
Forward P/E and Relative Forward P/E Multiples, 15 Years

Source: FactSet, Banc of America Securities LLC.

Relative Valuation

Based on comparable company multiples, we view Airgas shares as reasonably valued. On a P/E multiple basis, Airgas stock trades at a multiple of 18.3x calendar 2007 estimates, a premium of 1% to the median of comparable companies as outlined in Table 6. Likewise, Airgas stock trades at a multiple of 8.8x estimated calendar 2007 EBITDA of $584 million, on par with the median of comparable companies.

Table 6

Airgas, Inc.
Comparable Company Analysis

Company	Ticker	CY06 P/E	CY07E P/E	CY08E P/E	CY2007E EV/EBITDA	CY2008E EV/EBITDA
Industrial Gases						
Air Products and Chemicals	APD	20.1	17.6	15.5	8.9	8.2
Praxair	PX	21.1	18.5	16.8	9.6	8.9
Industrial Distributors						
W.W. Grainger	GWW	18.6	16.1	14.2	8.7	7.9
MSC Industrial Direct Co.	MSM	21.2	18.5	16.3	10.7	9.4
Fastenal Company	FAST	26.3	23.0	19.5	6.5	5.6
Interline Brands	IBI	16.0	14.1	12.4	8.6	7.6
Mean		**20.6**	**18.0**	**15.8**	**8.8**	**7.9**
Median		**20.6**	**18.1**	**15.9**	**8.8**	**8.1**
Airgas	**ARG**	**22.0**	**18.3**	**15.7**	**8.8**	**7.3**

Source: FactSet, Banc of America Securities LLC estimates, First Call.

Discounted-Cash-Flow Analysis

Our DCF analysis suggests that Airgas shares have upside potential of 13%.

Our DCF-derived valuation of $47 suggests potential for a 12-month total return of 13%. We favor discounted-cash-flow (DCF) analysis as the valuation method of choice for specialty chemical companies. Our 10-year, three-stage DCF valuation models incorporate many aspects of companies' economic value not always captured via simple P/E and EV/EBITDA multiples. These include timing of fluctuations in the earnings cycle, financial leverage, cost of capital, working capital management, capital efficiency, tax efficiency, pension plan funded status, significant investments and extraordinary cash flows. Our estimate of Airgas's weighted-average cost of capital (WACC) of 9.7% is based on an estimated pretax cost of debt of 7.2%, and a cost of equity of 11.0%, which incorporates a levered beta of 0.80. Please see our DCF model at the end of this report for more detailed model inputs.

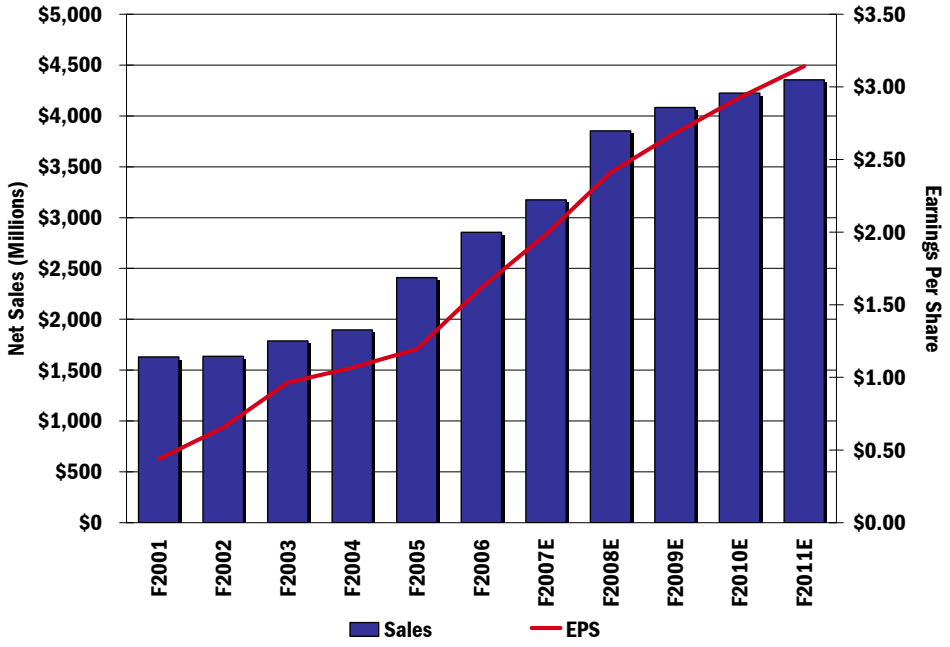
Income Statement

Productivity measures should support earnings growth.

We project long-term earnings growth of 11%. We project a long-term growth rate of 11%, better than the growth rate of 12% for the specialty chemical industry. Acquisition-driven growth, favorable sales mix and growth in strategic platforms such as medical should help to offset potential for weaker manufacturing demand tied to slower growth in the overall economy. Airgas is relatively insulated from energy price volatility, which we believe will support continued earnings growth and reduce earnings volatility. Acquisitions also will drive earnings, as will be the case with the acquisition of Linde's U.S. bulk business ($0.07-0.10 per share accretion in fiscal 2008) and Linde's U.S. packaged gas business ($0.01-0.02 per share in fiscal 2008).

Figure 16

Airgas, Inc.
Income Statement, Fiscal 2001—Estimated Fiscal 2011



Source: Company reports, Banc of America Securities LLC estimates.

Chief Executive Officer Peter McCausland owns 9% of the shares.

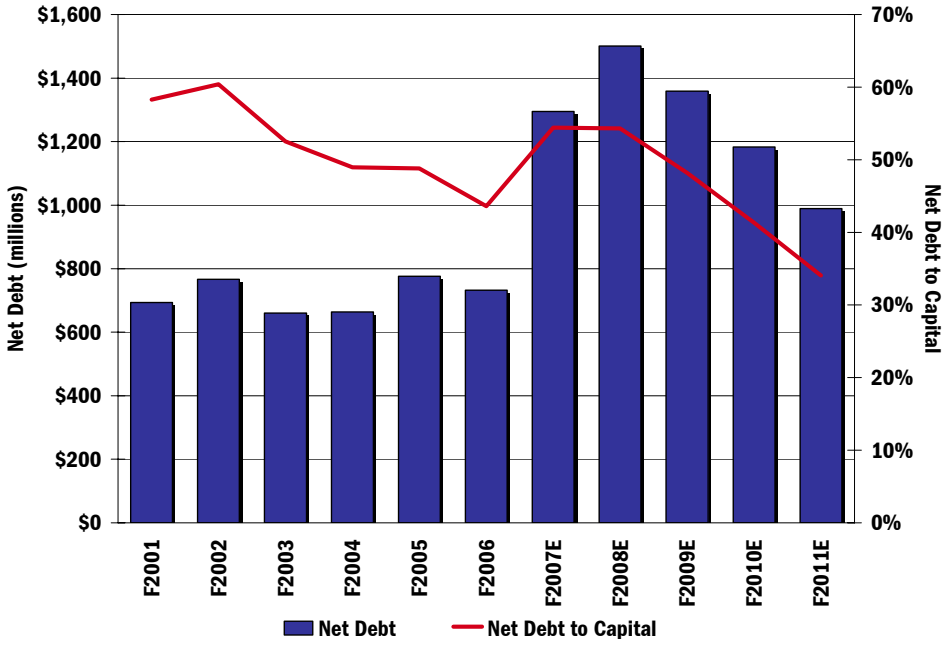
Compensation is measured against sales and earnings targets. Like many companies, management compensation is measured against annual sales, EBITDA, earnings and return on capital targets. For Airgas, senior management has an even stronger incentive to hit these targets, as bonus and option grants account for 50-70% of total compensation. In general, the company tries to pay a higher percentage of compensation through its at-risk bonus and stock options. As a result, insiders own a significant (10.0% shares, or 12.1% fully diluted shares) share of Airgas stock, including Chief Executive Officer Peter McCausland's stake of 9.2%.

Balance Sheet

Pro forma financial leverage is near the high end of management's range. Airgas makes use of its balance sheet to fund acquisitions. The acquisition of Linde's U.S. bulk gases business (Linde#1) added an estimated $495 million to debt and the pending acquisition of Linde's U.S. packaged gases business (Linde#2) will add another $310 million to debt upon completion. On a pro forma basis, the "Linde#2" deal increases Airgas' ratio of adjusted debt/EBITDA to approximately 3.4x versus our March 31, 2007, estimate of 3.1x pre-deal (but post-Linde#1), and 2.4x at year-end 2006 prior to Linde#1. This compares with Airgas' target "comfort zone" of 2.5-3.5x. We believe the current leverage will slow Airgas' acquisition activity through the remainder in fiscal 2008. S&P rates Airgas "BB+" with a stable outlook, while Moody's rates Airgas "Ba1" with a negative outlook.

Figure 17

Airgas, Inc.
Balance Sheet, Fiscal 2001—Estimated Fiscal 2011



Source: Company reports, Banc of America Securities LLC estimates.

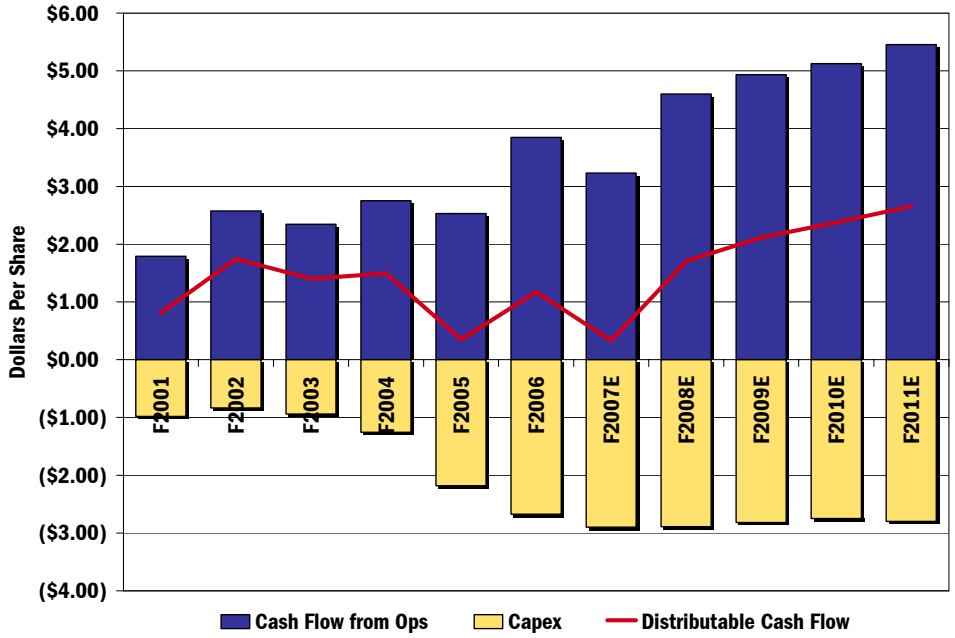
Financing for the acquisition of Linde's U.S. packaged gas business is in place. Airgas increased its credit facility in August 2006 to $1.6 billion, including a $500-million term loan "to finance certain contemplated acquisitions". The facility expires in May 2007. The company also suspended its share repurchase program to enhance financial flexibility.

Cash Flow

We expect cash flow to improve. Free cash flow (FCF) is expected to fall to $28 million in fiscal 2007 on increases in capital expenditures, which is well below the average of $83 million in fiscal 2001 to fiscal 2006. We project an increase in FCF to $142 million in fiscal 2008 fueled by higher net income and somewhat lower working capital. Deferred taxes also can be a significant source of cash following large acquisitions. Depreciation on acquired cylinders is much longer under Generally Accepted Accounting Practices (GAAP) accounting (30 years) than for taxes purposes (five years), giving rise to significant deferred taxes. Figure 18 shows our cash flow forecast through fiscal 2011.

Figure 18

Airgas, Inc.
Sources and Uses of Funds, Fiscal 2001—Estimated Fiscal 2011



Source: Company reports, Banc of America Securities LLC estimates.

Working capital has declined from 19% of sales in fiscal 2005 to 15% in fiscal 2006.

Sales growth is likely to drive an increase in working capital. Historically, Airgas has kept good control of working capital in upturns and downturns in the industrial economy. In fiscal 2001-2002, the company reduced receivables and inventories following the acquisition of the Air Products packaged gas business, which contributed $160 million to FCF during the period. More recently, working capital has increased from 17% of sales in fiscal 2003 to 19% in fiscal 2005 and back down to 15% in fiscal 2006. We project a disciplined working capital level of 14-16% for the balance of the decade.

Table 7

Airgas, Inc.
Free-Cash-Flow Yield Calculation
($ millions)

	F2006E	F2007E	F2008E	F2009E	F2010E	F2011E
Net Income	127	158	200	224	245	265
Plus D & A	128	147	183	198	208	217
Less Cap Ex.	(214)	(240)	(240)	(235)	(230)	(245)
Less Working Capital	(7)	(70)	(42)	(37)	(24)	(19)
Other	47	33	25	17	4	5
Free Cash Flow	**81**	**28**	**127**	**167**	**203**	**223**
Diluted Shares Outst.	80.1	82.8	83.1	83.4	83.7	84.0
FCF / Share	**$1.01**	**$0.33**	**$1.53**	**$2.00**	**$2.43**	**$2.66**
Airgas Share Price	$41.84	$41.84	$41.84	$41.84	$41.84	$41.84
FCF Yield	**2.4%**	**0.8%**	**3.7%**	**4.8%**	**5.8%**	**6.3%**

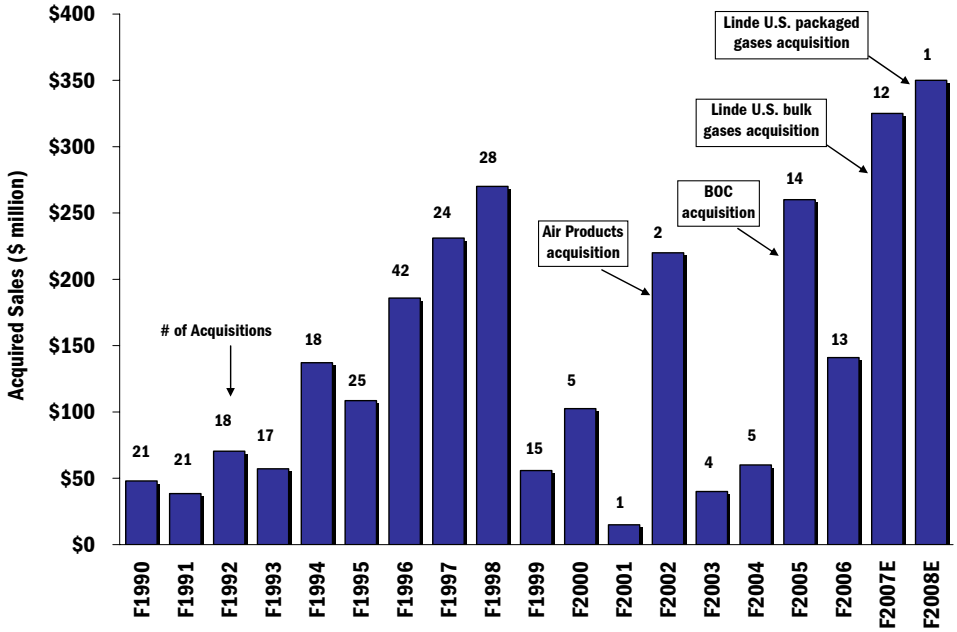
Source: Company reports, Banc of America Securities LLC estimates.

Portfolio Management

Airgas has completed about 350 acquisitions. Chief Executive Officer Peter McCausland built Airgas from $1.4 billion in sales in 1998 to an estimated $3.2 billion in fiscal 2007, primarily via acquisitions. Airgas is the largest U.S. packaged gas company, with an estimated market share of 26%. Although the majority of deals involve small "mom and pop" distributors with less than $50 million in sales, the company also has pursued larger deals as attested by the two Linde deals: the acquisition of Linde's U.S. bulk gases business (Linde#1) has been the largest overall deal in Airgas' history ($495 million) and the pending acquisition of Linde's U.S. packaged gases business (Linde#2) will be the largest packaged gas deal ($310 million). We believe that current leverage will slow the pace of acquisitions in fiscal 2008.

Figure 19

Airgas, Inc.
Acquisition History, Fiscal Year 1990—Estimated Fiscal 2008



Source: Company reports.

Airgas sold Rutland at a loss.

Rutland is an example of an unsuccessful deal. Airgas had been looking for a buyer for its Rutland Tool & Supply business since 2001. In November, the company reached an agreement with Lawson Products to sell Rutland for $15 million. Rutland, which generated sales of $47 million in fiscal 2005, distributes metalworking tools, machine tools and maintenance, repair and operation (MRO) supplies, primarily on the West Coast and in the Southwest. The company was part of Airgas' attempt to build out its Industrial Distribution Division in the late 1990s. Airgas bought Rutland in September 1996 with stock, exchanging 3.4 million shares valued at about $80 million. Rutland had an estimated $65 million in sales in 1996.

Company Description

Brief History of Airgas

Chief Executive Officer Peter McCausland founded Airgas in 1982 with an idea for "rolling up" the highly fragmented packaged gas business. The company earned $182,000 on sales of $3.6 million during its first full year of operations, but by March 1986, it had quickly grown to $25 million in sales through a series of successful acquisitions.

In 1986, U.S. Airgas merged with Werco, a privately owned Wilmington, Delaware-based company, which manufactured protective gear and steel cylinders. Werco was nearly twice the size of Airgas. The Werco deal created a company of such size that

Airgas undertook an initial public offering (IPO) in December 1986. A secondary offering was completed in September 1987.

From 1986 to 2003, Airgas made more than 300 acquisitions. The company was particularly active in the periods from 1989-90 and fiscal 1996-1998. By the late 1990s, the company ran into problems managing growth and with its new safety products and cutting tools businesses. Earnings faltered and the company missed projections. In 1999, the company began to reposition, diversifying its products and regionalizing, consolidating into 12 regional companies from 40 separate business units.

In May 2001, Airgas began its Project One initiative to complete this repositioning and transform into a leader in the distributed gas business. Project One created a scalable infrastructure focused on driving cost and inefficiency from what had become over many years a national system.

In February 2002, Airgas purchased the packaged gas business of Air Products and Chemicals, making Airgas the leading U.S. gas distributor. The acquisition added 88 locations and more than $223 million in sales.

In April 2004, Airgas completed another major deal with an integrated producer, acquiring BOC Group's $240-million U.S. packaged gas business for $200 million.

Table 8

Airgas, Inc.
Corporate Timeline, 1982—2005

Year	Event
1982	CEO Peter McCausland acquires Connecticut Oxygen and changes name to Airgas Inc.
1984	Acquires three Michigan distributors.
1986	Merges with Werco, launches IPO.
1996	Acquires Red D Arc welder rental company.
1999	Company widens distribution through catalogs, telesales and Internet.
2000	Acquires Puritan Medical Products and divests foreign operations.
2001	Launches Project One initiative.
2002	Acquires Air Products U.S. packaged gas business.
2004	Acquires BOC's U.S. packaged gas business.
2007	Acquires Linde's U.S. bulk business.
2007	Agress to acquire Linde's U.S. packaged gases business.

Source: Company reports.

In calendar 2007, Airgas has undertaken the two largest deals in the company's history: the acquisition of Linde's U.S. bulk gases business (Linde#1) has been the largest overall deal in Airgas' history ($495 million) and the pending acquisition of Linde's U.S. packaged gases business (Linde#2) will be the largest packaged gas deal ($310 million). We believe Airgas will slow down the pace of acquisitions, to work down its leverage and also integrate the acquired companies.

Sales by Segment

We expect sales growth to moderate.

Acquisitions account for the majority of reported sales growth. Distribution is by far the largest operating segment, accounting for 82% of estimated fiscal 2007 company sales, excluding eliminations. Distribution sales growth historically has tracked the pace of acquisitions. From fiscal 1994-1997, during which the company made 109 acquisitions, Distribution reported sales increase of 30% on average per year. Same-store sales, the measure of organic growth, increased on average by only 3% during this three-year period. Clearly, acquisitions historically have accounted for the majority of top-line growth. In fiscal 2005, Distribution grew sales by 27%, of which 18% was because of acquisitions (BOC's U.S. packaged gases business) and 9% was organic growth. We expect strong acquisition growth in fiscal 2008 as Airgas will benefit from the sales of the two Linde acquisitions, with combined sales contribution estimated at $550 million. We believe organic growth is around 1.5 times the industrial production index (IPI).

Profitability by Segment

Other Operations enjoys higher profit margins. The difference in operating margin between Distribution and All Other Operations reflects the two different business models of each segment.

As a producer of carbon dioxide and atmospheric gases (oxygen, nitrogen and argon), Airgas enjoys mid-teens operating margins on sales in Other Operations. As a distributor of purchased gas, Airgas is faced with margins of 9%-10% in its Distribution business. As Distribution is the larger segment (82% of total sales, excluding eliminations), company margins (10.7% estimated for fiscal 2007) are closer to Distribution operating margins. Other Operations sales and profitability are also highly seasonal. Carbon dioxide and dry ice sales peak in the summer months, showing up in the first fiscal (ending June) and second fiscal (ending September) quarters.

Table 9

Airgas, Inc
Sales and Profitability Profile, Estimated Fiscal 2007

	Sales	Sales %	Sales Growth	EBITDA	EBITDA %	EBITDA Margin
Distribution	2,666	84	10%	378	78	14.2%
All Other Operations	570	16	16%	108	22	18.9%
Total*	**3,175**	**100%**	**11%**	**486**	**100%**	**15.3%**

*Excludes $56 million in intercompany sales.

Source: Banc of America Securities LLC estimates.

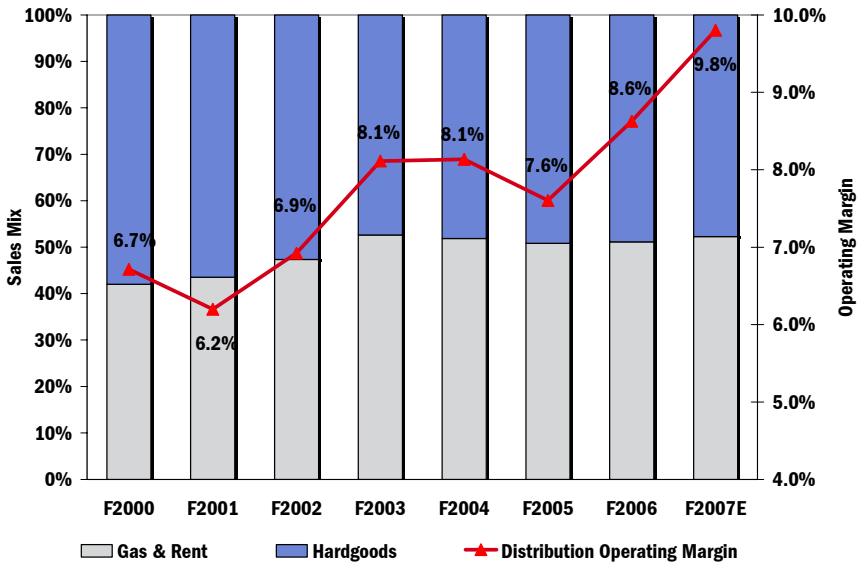
Higher growth in gas and rent should support margins.

Distribution mix affects profitability. The sales mix between gas and hardgoods is a key determinant of profitability. Gases margins (gross margin of about 70%) are much higher than for hardgoods (gross margin of about 28%). Hardgoods sales typically grow at a faster pace than gases in the early stages of an industrial recovery. This was the case in fiscal 2005, as EBITDA margin fell by 50 basis points as Airgas' sales mix shifted toward hardgoods (year-to-year sales growth of 12%-14%) and away from gases (year-to-year sales growth of 2%-5%). This trend reversed towards the end of fiscal 2005 quarters, with gases growth accelerating to 9%-11%, resulting in an

improvement of 20 basis points in EBITDA margin in second quarter of fiscal 2006. To support secular margin and earnings growth, the company has focused, through acquisitions, on increasing the portion of gases in its overall sales mix (see Figure 20).

Figure 20

Airgas, Inc.
Sales Mix and Operating Margin, Fiscal 2000—Estimated Fiscal 2007



Source: Company reports, Banc of America Securities LLC estimates.

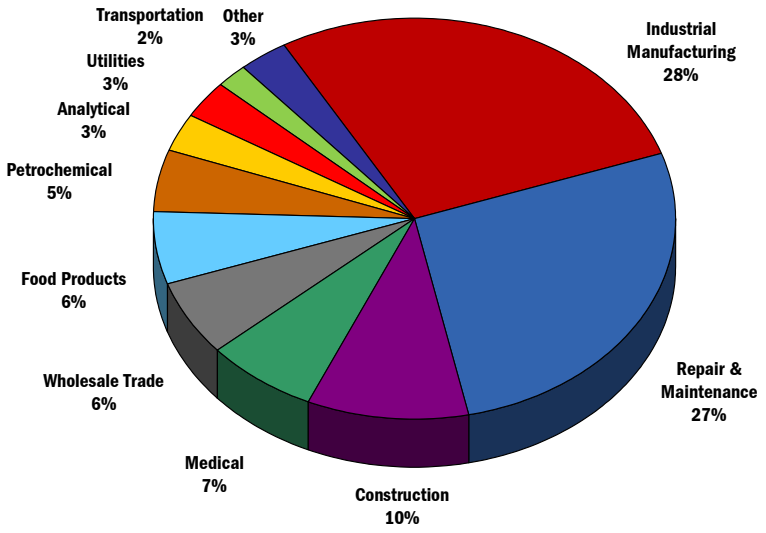
Sales by Market

MRO is a steady market through economic cycles.

Airgas has high exposure to U.S. manufacturing. Although Airgas has exposure to various cyclical and noncyclical end markets, manufacturing (such as welding and cutting) is the largest end market for Airgas' products. While industrial production has recovered over the last 18 months, we believe that the secular trend toward moving manufacturing from the United States offshore to Asia could hurt Airgas' sales over the longer term. Airgas' exposure to MRO could offset some of this slow decline. Although lower growth, MRO is much less cyclical. Airgas has exposure to relatively high-growth markets such as medical (7% of sales), construction (10%) and petrochemicals (5%), which account for a combined 22% of sales.

Figure 21

Airgas, Inc.
Sales by End Market, Estimated Fiscal 2008



Source: Company reports, Banc of America Securities LLC estimates.

Distribution (78% of Estimated Fiscal 2007 EBITDA)

Sales are expected to increase 10% in fiscal 2007. Distribution, led by Michael E. Rohde, senior vice president of distribution operations, is expected to generate fiscal 2007 sales of $2,666 million, or 82% of consolidated sales, excluding eliminations. EBITDA is expected to increase by 22% in fiscal 2007, to $378 million, or 78% of total EBITDA.

Distribution's primary products include packaged and small bulk gases, cylinder and welding equipment rental, process chemicals and hardgoods. Gas sales include industrial, medical and specialty gases such as nitrogen, oxygen, argon, helium, acetylene, hydrogen and custom blends. Airgas sources its industrial gases from national and regional producers as well as its own production. The Linde U.S. bulk gases deal increased Airgas' capacity from 1,800 ton -per day (TPD) to 6,370 TPD (more than a 2.5 times increase), but about 80% of the acquired capacity already is sold to legacy Linde customers, so Airgas can utilize only about 20% of the newly purchased capacity of 4,570 TPD for its packaged gases business. In February 2002, the company entered into a 15-year take-or-pay contract with Air Products for 35% of its gas requirements. BOC (now Linde) became a major gas supplier to Airgas following Airgas' acquisition of BOC's U.S. packaged gas business in April 2004. Rent is derived from gas cylinders, cryogenic liquid containers (dewars), bulk storage tanks and welding equipment. Hardgoods consist of welding supplies, safety products and industrial tools, which it purchases from major manufacturers. Airgas sells hardgoods and gases through its more than 1,000 locations (including the pending acquisition of the Linde locations), catalog, distributors, and telesales and via the Internet.

Figure 22

U.S. Packaged Gas Market, Estimated 2007

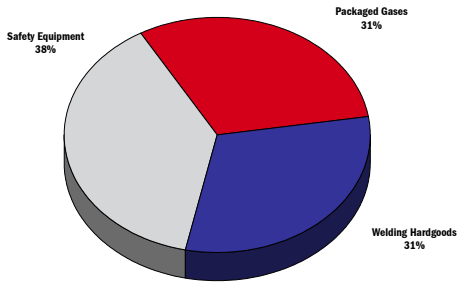
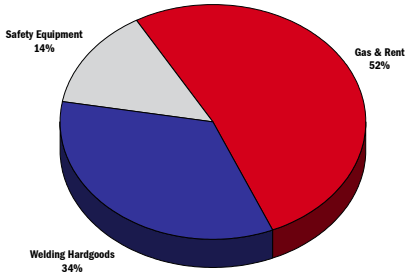


Figure 23

Distribution Sales by Product, Estimated 2007



Source: Company reports, Banc of America Securities LLC estimates.

A majority of Airgas sales are to small companies of less than 50 employees.

Airgas is number one in the fragmented packaged gas market. With an estimated market share of 26% (pro forma for the pending Linde U.S. packaged gases acquisition), Airgas is the clear leader in the nearly $5-billion U.S. packaged gas market (see Figure 25). Despite years of consolidation by Airgas and others, the packaged gas market remains highly fragmented. Small, independent distributors (mom and pop) account for an estimated 56% of the market. Most of these distributors have less than 10 branches and serve local customers, with less than 50 employees (see Figure 24). These small, local customers account for a majority (65%) of the packaged gas market. Although small customers are the largest market opportunity, they have the highest cost to serve and therefore lower margins. The challenge for Airgas in

acquiring these independents is maintaining the local service their small customers require, while achieving the economies of scale and cost efficiencies inherent in Airgas' national network.

Figure 24

Industry Sales by Customer Size, Estimated 2007

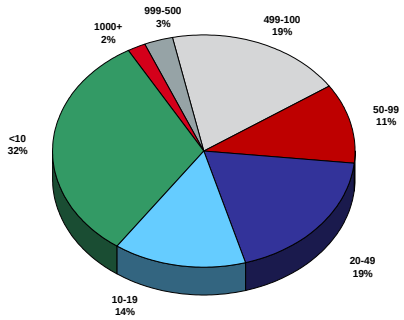
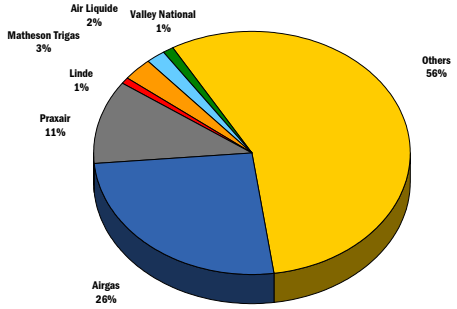


Figure 25

U.S. Packaged Gas Market Share, Estimated 2007



Source: Company reports, Banc of America Securities LLC estimates.

Hardgoods sales complement gases. Packaged gas companies are typically "one-stop shops" for welders and small manufacturers. Customers expect cylinder gas suppliers to offer welding machines, torches, regulators and welding rods, as well as other welding consumables along with the gas in the cylinder. Hardgoods sales tend to lead a recovery in the industrial cycle, as small manufacturers add capacity in the form of new equipment ahead of a pickup in welding and cutting activity. However, hardgoods have lower margins (gross margin of about 28%) than gases (about 70%) and are more cyclical. Cost control and supply chain management is key to profitability in hardgoods. The company recently focused on building its complementary safety product distribution business, which now ranks third in the United States behind W.W. Grainger and Hagemeyer N.V. (the Netherlands). In 1999, Airgas introduced the *Radnor*® line of hardgoods and safety products to increase brand awareness and achieve a higher price points.

Table 10

Distribution Quarterly Trends
($ millions)

	4QF06	1QF07	2QF07	3QF07	4QF07E
Sales	**637.3**	**649.3**	**657.3**	**665.4**	**694.0**
Sales Change (year-year)	11%	9%	10%	12%	9%
Sales Change (sequential)	8%	2%	1%	1%	4%
EBITDA	**86.8**	**87.8**	**92.0**	**97.1**	**100.9**
EBITDA Change (year-year)	28%	20%	29%	24%	26%
EBITDA Change (sequential)	11%	1%	5%	6%	4%
EBITDA Margin	**13.6%**	**13.5%**	**14.0%**	**14.6%**	**14.5%**

Source: Company reports, Banc of America Securities LLC estimates.

Five growth platforms are Medical, Specialty Gases, Bulk Gases, Safety and Dry Ice.

Strategic platforms are driving growth. Airgas has focused its growth strategy on five platforms: Medical, Specialty Gases, Bulk Gases, Safety Products and Dry Ice. We estimate these five platforms will account for a combined $1.21 million or about 38% of total estimated fiscal 2007 sales. For example, Medical generates $220 million in packaged respiratory gas sales to hospitals and clinics and is growing faster than 10% per year. We believe Airgas has been successful taking share from competitors by improving service, establishing new locations and deploying its proprietary Walk-O_2-Bout units. Airgas is looking to increase its share at major homecare providers Apria and Lincare, leveraging their national network of customers and their expertise at billing and collection.

Table 11

Airgas, Inc.
Strategic Growth Platforms
($ million)

	F2007E Sales	% of Total Sales	LT Growth Rate	Strategy
Safety Products	$440	14%	> 10%	Product extensions - #3 U.S. player
Bulk Gases	145	5%	> 10%	Grow with customers
Specialty Gases	185	6%	8 – 10%	Leverage broad presence and capabilities
Medical Sales	220	7%	> 10%	Continue to broaden product line / distribution channels
CO_2 / Dry Ice	220	7%	6 – 8%	Leverage leading positions - #1 in dry ice, #3 in liquid CO_2
Subtotal	**1,210**	**38%**	**~10%**	
Other Distribution	1,456	46%		
Total Distribution	**2,666**	**84%**		
All Other Operations	570	18%		
Eliminations	(61)	-2%		
Total Sales	**$3,175**	**100%**		

Source: Company reports, Banc of America Securities LLC estimates.

Medical is an attractive growth opportunity. Medical gases is the most compelling growth opportunity, in our view, given growth in the homecare market (estimated at 9% per year) and Airgas' leading market position (see Figure 20). Airgas sells directly to hospitals and clinics, and it does not sell into the home, preferring to sell to homecare providers such as Apria and Lincare to avoid added regulations and Medicare payment processing.

Airgas became a leader in medical gases with the January 2000 acquisition of Puritan Medical. The company has grown Puritan to $146 million in sales, with 280 fill locations servicing 14-million small oxygen cylinders for more than 60,000 customers. In 2001, Airgas introduced *Walk-O_2-Bout* integrated oxygen tanks and regulator units for hospital patients, with more than 160,000 units in service.

Figure 26

Medical Packaged Gas Market, Estimated 2007

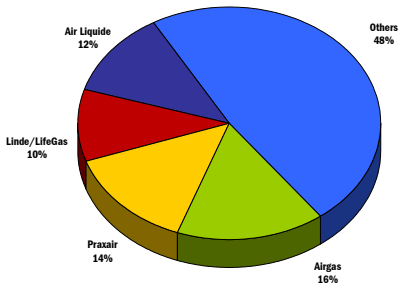
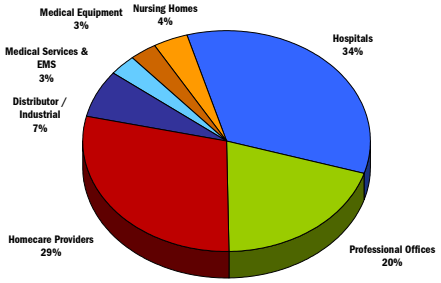


Figure 27

Airgas Medical Sales by Customer, Estimated 2007



Source: Company reports, Banc of America Securities LLC estimates.

Airgas is dense in the Northeast and Midwest.

Airgas has the only national footprint. Including the pending acquisition of Linde's U.S. packaged gases, Airgas has more than 1,000 U.S. locations servicing about 8.2 million cylinders. Airgas is the only national distributor of packaged gases, with the highest density in the Northeast and Midwest. The company leverages its unique industry position by focusing on large, national strategic accounts such as Tyson Foods, Textron, Burlington Northern Railways and Snap-On Tools. Airgas utilizes regional strategic account managers to service these accounts, which helps Airgas increase its "share of wallet" through additional sales of safety and hardgoods.

Other Operations (22% of Estimated Fiscal 2007 EBITDA)

Sales are expected to increase by 16% in fiscal 2007. Other Operations, headed by Division President Ted Shulte, are expected to generate $570 million of consolidated sales in fiscal 2007, or 18% of sales, excluding eliminations. Other Operations consists of the Gas Operations division and Airgas' National Welders joint venture. EBITDA is expected to increase by 23% in fiscal 2007, to $108 million, or 22% of total EBITDA.

- **Gas Operations.** Gas Operations produces and distributes dry ice, liquid carbon dioxide (CO_2), nitrous oxide and specialty gases. Gas Operations also operates two air separation units (ASUs) that produce oxygen, nitrogen and argon, which are sold to onsite customers and to Distribution.
- **National Welders.** National Welders is a producer and distributor of industrial gases. The joint venture operates three ASUs, two acetylene plants and a specialty gas lab, and it distributes packaged gases and hardgoods through its 46 branches. Airgas owns 100% of the common stock of National Welders, but has a voting interest of only 50%.

Table 12

Other Operations Quarterly Trends
($ millions)

	4QF06	1QF07	2QF07	3QF07	4QF07E
Sales	**125.0**	**139.8**	**148.1**	**137.1**	**145.5**
Sales Change (year-year)	29%	25%	12%	10%	16%
Sales Change (sequential)	0%	12%	6%	-7%	6%
EBITDA	**20.0**	**26.1**	**28.5**	**26.0**	**27.3**
EBITDA Change (year-year)	29%	24%	21%	11%	36%
EBITDA Change (sequential)	-15%	30%	9%	-9%	5%
EBITDA Margin	**16.0%**	**18.6%**	**19.2%**	**19.0%**	**18.7%**

Source: Company reports, Banc of America Securities LLC estimates.

Airgas is a leader in carbon dioxide (CO_2) and nitrous oxide. Airgas is the third-largest U.S. marketer of liquid CO_2, with a market share of 14% of the $500-million U.S. liquid CO_2 market. The company is also the largest converter of liquid CO_2 into dry ice, with 12 dry ice U.S. plants. The company produces CO_2 at eight plants and purchases additional liquid CO_2 on long-term, take-or-pay contracts. The largest consumer of liquid CO_2 and dry ice are in the highly seasonal food and beverage market, which accounts for 70% of CO_2 sales. Airgas is also the largest manufacturer of nitrous oxide in North America, with four U.S. plants. Nitrous oxide is used as an anesthetic in the medical and dental fields, packaged foods and in electronics.

Specialty gases supports Distribution. Airgas has seven national specialty gas laboratories and a specialty equipment center to blend and test gas mixtures for specialty applications. These labs provide quality and technical support to the 50 regional labs operated by the Distribution segment. Although most (80-90%) specialty gas sales are sold via the Distribution segment, third-party customers include government agencies such as the Environmental Protection Agency (EPA), electronics manufacturers, petroleum refiners and pharmaceutical companies. Generally, research labs are the largest users of specialty gas mixtures, accounting for 40% of the specialty market. To improve quality and consistency to its customers, Airgas recently introduced *AcuGrav*™, a computerized precision filling and blending system.

Airgas consolidated its National Welders joint venture in fourth quarter of fiscal 2004. The company elected to consolidate the joint venture under provision of FIN 46R, Consolidation of Variable Interest Entities, starting January 1, 2004. National Welders is a joint venture between Airgas and the Turner family, which owns 100% of the preferred shares, giving the family a voting interest of 50%. Consolidation of the National Welders joint venture added $39 million to fourth quarter of fiscal 2004 sales in Other Operations and $167 million in fiscal 2005. Airgas previously accounted for National Welders using the equity method, so consolidation had no impact on earnings. However, the holders of National Welders' convertible preferred stock have the option to tender their shares for cash or in exchange for 2.3 million shares of Airgas common stock. Airgas includes these shares on a converted basis in the diluted share count.

Airgas, Inc.

Quarterly Sales and Operating Income by Segment, Fiscal 2007—Estimated 2008
($ millions)

	F2007E					F2008E				
Net Sales:	1Q (Jun.)	2Q (Sep.)	3Q (Dec.)	4QE (Mar.)	F2007E	1QE (Jun.)	2QE (Sep.)	3QE (Dec.)	4QE (Mar.)	F2008E
Distribution	$649.3	$657.3	$665.8	$694.0	$2,666	$716.6	$802.2	$802.3	$815.5	$3,137
All Other Operations	139.8	148.1	137.1	145.5	570.4	191.9	202.2	192.2	192.7	778.9
Eliminations	(16.0)	(14.7)	(15.4)	(15.4)	(61.5)	(14.0)	(15.7)	(15.7)	(16.0)	(61.5)
Total	773.0	790.7	787.4	824.1	3,175.3	894.4	988.7	978.7	992.2	3,854.0
Increase	12%	11%	12%	10%	11%	16%	25%	24%	20%	21%
Sequential Change	4%	2%	0%	5%		9%	11%	-1%	1%	
EBITDA										
Distribution	87.8	92.0	97.1	100.9	377.8	109.7	113.2	116.3	119.0	458.2
All Other Operations	26.1	28.5	26.0	27.3	107.9	40.5	42.9	40.5	43.5	167.4
Total	113.8	120.4	123.2	128.2	485.6	150.1	156.1	156.8	162.5	625.6
Increase	21%	27%	21%	20%	22%	32%	30%	27%	27%	29%
Sequential Change	7%	6%	2%	4%		17%	4%	0%	4%	
Operating Income:										
Distribution	60.6	63.7	66.6	70.4	261.4	73.8	77.4	79.7	81.9	312.8
All Other Operations	18.3	20.6	18.7	19.6	77.2	28.1	30.4	28.8	31.3	118.6
Total	78.9	84.3	85.3	90.0	338.5	101.8	107.7	108.6	113.2	431.4
Increase	25%	33%	24%	22%	26%	29%	28%	27%	26%	27%
Sequential Change	7%	7%	1%	6%		13%	6%	1%	4%	
EBITDA Margins										
Distribution	13.5%	14.0%	14.6%	14.5%	14.2%	15.3%	14.1%	14.5%	14.6%	14.6%
All Other Operations	18.6%	19.2%	19.0%	18.7%	18.9%	21.1%	21.2%	21.1%	22.6%	21.5%
Total	14.7%	15.2%	15.6%	15.6%	15.3%	16.8%	15.8%	16.0%	16.4%	16.2%
Margin Change	1.1%	1.9%	1.2%	1.3%	1.4%	2.1%	0.6%	0.4%	0.8%	0.9%
Operating Margins										
Distribution	9.3%	9.7%	10.0%	10.1%	9.8%	10.3%	9.6%	9.9%	10.0%	10.0%
All Other Operations	13.1%	13.9%	13.6%	13.5%	13.5%	14.6%	15.0%	15.0%	16.3%	15.2%
Total	10.2%	10.7%	10.8%	10.9%	10.7%	11.4%	10.9%	11.1%	11.4%	11.2%
Margin Change	1.0%	1.8%	1.0%	1.1%	1.2%	1.2%	0.2%	0.3%	0.5%	0.5%
Breakdown of Sales Growth:										
US Industrial Production	112.6	113.7	114.6	115.4	114.1	116.3	117.4	118.5	118.5	117.7
US IPI Growth	4.6%	5.2%	4.7%	4.2%	4.7%	3.3%	3.3%	3.4%	2.7%	3.2%
Airgas Volume Index (F1998 = 100)	132.6	135.5	129.0	141.6	133.1	142.8	158.6	150.0	162.0	151.0
Airgas Volume Index/US IPI	1.18	1.19	1.13	1.23	1.17	1.23	1.35	1.27	1.37	1.28
Same Store Sales	9.0%	11.0%	7.0%	3.8%	7.7%	7.7%	17.0%	16.3%	14.4%	13.9%
Acquisitions & Other	2.9%	-0.3%	5.1%	6.5%	3.6%	8.0%	8.0%	8.0%	6.0%	7.5%
Total	11.9%	10.7%	12.1%	10.3%	11.2%	15.7%	25.0%	24.3%	20.4%	21.4%

Fiscal Year Ends March 31

Source: Company reports, Banc of America Securities LLC estimates.

Airgas, Inc.
Quarterly Income Statement, Fiscal 2007—Estimated 2008
($ millions)

	F2007E					F2008E				
	1Q (Jun.)	2Q (Sep.)	3Q (Dec.)	4QE (Mar.)	F2007E	1QE (Jun.)	2QE (Sep.)	3QE (Dec.)	4QE (Mar.)	F2008E
Net Sales	$773.0	$790.7	$787.4	$824.1	$3,175.3	$894.4	$988.7	$978.7	$992.2	$3,854.0
Cost of Sales	383.2	386.4	378.2	407.3	1,555.0	409.4	487.8	475.7	483.2	1,856.2
Gross Profit	389.8	404.4	409.3	416.8	1,620.3	485.0	500.9	503.0	508.9	1,997.8
Gross Margin	50.4%	51.1%	52.0%	50.6%	51.0%	54.2%	50.7%	51.4%	51.3%	51.8%
Selling and Administrative	276.0	283.9	286.1	289.0	1,135.0	337.3	347.3	348.5	349.9	1,383.0
S&A/Sales	35.7%	35.9%	36.3%	35.1%	35.7%	37.7%	35.1%	35.6%	35.3%	35.9%
Depreciation and Amortization	34.9	36.2	37.8	37.8	146.8	45.8	45.8	45.8	45.8	183.4
D&A/Sales	4.5%	4.6%	4.8%	4.6%	4.6%	5.1%	4.6%	4.7%	4.6%	4.8%
Operating Profit	78.9	84.3	85.3	90.0	338.5	101.8	107.7	108.6	113.2	431.4
Operating Margin	10.2%	10.7%	10.8%	10.9%	10.7%	11.4%	10.9%	11.1%	11.4%	11.2%
Interest Expense	(13.7)	(14.7)	(14.7)	(15.9)	(59.0)	(25.2)	(24.8)	(23.9)	(22.9)	(96.9)
Discount on Securitization of Trade Receivables	(3.3)	(3.5)	(3.6)	(3.4)	(13.9)	(3.4)	(3.4)	(3.4)	(3.4)	(13.8)
Other	0.2	0.6	0.6	0.0	1.4	0.0	0.0	0.0	0.0	0.0
Joint Venture Income	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Pretax Income	62.1	66.6	67.6	70.7	267.0	73.2	79.5	81.2	86.9	320.7
Income Taxes	24.0	26.4	26.5	26.9	103.7	27.6	30.0	30.6	32.7	120.9
Tax Rate	38.7%	39.6%	39.2%	38.0%	38.9%	37.7%	37.7%	37.7%	37.7%	37.7%
Minority Interest	0.2	0.3	0.3	0.3	1.0	0.1	0.1	0.1	0.1	0.4
Income Before Gains/(Charges)	38.3	40.5	41.3	44.1	164.3	45.7	49.6	50.7	54.2	200.2
Gains/(Charges)	1.3	0.0	(7.9)	0.0	(6.6)	0.0	0.0	0.0	0.0	0.0
Net Income	39.6	40.5	33.4	44.1	157.7	45.7	49.6	50.7	54.2	200.2
EPS Before Gains/(Charges)	$0.46	$0.49	$0.50	$0.53	$1.98	$0.55	$0.60	$0.61	$0.65	$2.41
Charges	0.02	0.00	(0.10)	0.00	(0.08)	0.00	0.00	0.00	0.00	0.00
Reported Earnings Per Share	0.48	0.49	0.40	0.53	1.90	0.55	0.60	0.61	0.65	2.41
Increase Before Gains/(Charges)	22%	30%	21%	18%	22%	18%	22%	23%	23%	22%
Shares Outstanding (Mil.)	82.4	82.6	83.1	83.1	82.8	83.1	83.1	83.1	83.1	83.1
Change	4.4	3.9	1.6	0.9	2.7	0.6	0.4	0.0	0.0	0.3
Change Percent	6%	5%	2%	1%	3%	1%	1%	0%	0%	0%
Estimated Options Expense (FAS123R)	0.03	0.03	0.03	0.03	0.11	0.00	0.00	0.00	0.00	0.00
Diluted FY EPS (Options Adjusted)	0.46	0.49	0.50	0.53	1.98	0.55	0.60	0.61	0.65	2.41
Diluted CY EPS (Options Adjusted)										
EBITDA										
Fiscal	113.8	120.4	123.2	127.9	485.3	147.7	153.6	154.4	159.1	614.8
Margin	14.7%	15.2%	15.6%	15.5%	15.3%	16.5%	15.5%	15.8%	16.0%	16.0%
Fiscal Per Share	$1.38	$1.46	$1.48	$1.54	$5.86	$1.78	$1.85	$1.86	$1.92	$7.40
Change	15%	21%	22%	18%	19%	29%	27%	25%	24%	26%

Fiscal Year Ends March 31

Source: Company reports, Banc of America Securities LLC estimates.

Airgas, Inc.

Annual Sales and Operating Income By Segment, Fiscal 2000—Estimated 2011
($ millions)

													Growth (a)	
Net Sales:	F2000	F2001	F2002	F2003	F2004	F2005	F2006	F2007E	F2008E	F2009E	F2010E	F2011E	01-06	06-11E
Distribution	$1,410	$1,487	$1,494	$1,642	$1,702	$2,079	$2,421	$2,666	$3,137	$3,326	$3,436	$3,532	10%	8%
All Other Operations	132	175	174	184	236	386	493	570	779	818	851	885	25%	13%
Eliminations		(33)	(32)	(39)	(43)	(53)	(60)	(61)	(61)	(61)	(61)	(61)		
Total	1,542	1,629	1,636	1,787	1,895	2,411	2,854	3,175	3,854	4,083	4,225	4,355	12%	9%
Increase	-1%	6%	0%	9%	6%	27%	18%	11%	21%	6%	3%	3%		
EBITDA														
Distribution	171	165	165	201	211	245	309	378	458	496	526	548	13%	12%
All Other Operations	22	34	33	37	47	70	88	108	167	179	184	189	23%	17%
Total	193	198	198	238	258	315	397	486	626	675	710	737	15%	13%
Increase	-3%	3%	0%	20%	8%	22%	26%	22%	29%	8%	5%	4%		
Operating Income:														
Distribution	95	92	103	133	138	158	209	261	313	339	361	376	17%	12%
All Other Operations	9	19	22	25	31	45	60	77	119	126	129	131	26%	17%
Total	104	112	125	159	170	203	269	339	431	466	490	507	18%	13%
Increase	-7%	7%	12%	27%	7%	20%	32%	26%	27%	8%	5%	3%		
EBITDA Margins														
Distribution	12.1%	11.1%	11.0%	12.3%	12.4%	11.8%	12.8%	14.2%	14.6%	14.9%	15.3%	15.5%	12%	15%
All Other Operations	16.7%	19.2%	19.2%	20.3%	19.9%	18.1%	17.8%	18.9%	21.5%	21.9%	21.6%	21.4%	19%	21%
Total	12.5%	12.2%	12.1%	13.3%	13.6%	13.1%	13.9%	15.3%	16.2%	16.5%	16.8%	16.9%	13%	16%
Margin Change	-0.3%	-0.4%	-0.1%	1.2%	0.3%	-0.5%	0.8%	1.4%	0.9%	0.3%	0.3%	0.1%		
Operating Margins														
Distribution	6.7%	6.2%	6.9%	8.1%	8.1%	7.6%	8.6%	9.8%	10.0%	10.2%	10.5%	10.6%	8%	10%
All Other Operations	7.0%	11.1%	12.4%	13.8%	13.3%	11.7%	12.2%	13.5%	15.2%	15.4%	15.1%	14.8%	12%	14%
Total	6.7%	6.9%	7.6%	8.9%	9.0%	8.4%	9.4%	10.7%	11.2%	11.4%	11.6%	11.6%	8%	11%
Margin Change	-0.4%	0.1%	0.8%	1.2%	0.1%	-0.5%	1.0%	1.2%	0.5%	0.2%	0.2%	0.0%		
Breakdown of Sales Growth:														
US Industrial Production	100.6	103.3	99.1	100.4	101.3	105.7	109.0	114.1	113.1	115.9	118.8	121.8	1%	2%
US IPI Growth		2.7%	-4.0%	1.3%	0.8%	4.4%	3.1%	4.7%	-0.8%	2.5%	2.5%	2.5%	1%	2%
Airgas Volume Index (F1998 = 100)	99.5	102.6	102.8	101.0	102.0	111.2	123.6	133.1	151.0	160.0	165.5	170.6	3%	7%
Airgas Volume Index/US IPI	0.99	0.99	1.04	1.01	1.01	1.05	1.13	1.17	1.33	1.38	1.39	1.40	2%	5%
Same Store Sales	-1.3%	3.1%	0.2%	-1.8%	1.0%	9.0%	11.2%	7.7%	13.4%	5.9%	3.5%	3.1%	4%	7%
Acquisitions & Other	0.1%	2.5%	0.2%	11.0%	5.1%	18.2%	7.2%	3.6%	7.9%	0.0%	0.0%	0.0%	7%	3%
Total	-1.2%	5.6%	0.4%	9.2%	6.1%	27.2%	18.4%	11.2%	21.4%	5.9%	3.5%	3.1%	11%	11%

(a) Growth is computed using least squares, not compound annual, method.
Fiscal Year Ends March 31

Source: Company reports, Banc of America Securities LLC estimates.

Airgas, Inc.

Annual Income Statement, Fiscal 2000—Estimated 2011
($ millions)

	F2000	F2001	F2002	F2003	F2004	F2005	F2006	F2007E	F2008E	F2009E	F2010E	F2011E	Growth (a) 01-06	Growth (a) 06-11E
Net Sales	$1,542	$1,629	$1,636	$1,787	$1,895	$2,411	$2,854	$3,175	$3,854	$4,083	$4,225	$4,355	12%	9%
Cost of Sales	817	847	819	850	909	1,179	1,426	1,555	1,856	1,959	2,020	2,396	11%	10%
Gross Profit	726	782	817	937	987	1,232	1,428	1,620	1,998	2,124	2,205	1,959	13%	8%
Gross Margin	47.1%	48.0%	50.0%	52.4%	52.1%	51.1%	50.0%	51.0%	51.8%	52.0%	52.2%	45.0%		
Selling and Administrative	533	583	619	698	729	918	1,031	1,135	1,383	1,460	1,507	1,235	12%	5%
S&A/Sales	34.5%	35.8%	37.9%	39.1%	38.5%	38.1%	36.1%	35.7%	35.9%	35.8%	35.7%	28.4%		
Depreciation and Amortization	89	87	73	80	88	112	128	147	183	198	208	217	10%	11%
D&A/Sales	5.8%	5.3%	4.5%	4.5%	4.6%	4.6%	4.5%	4.6%	4.8%	4.9%	4.9%	5.0%		2%
Operating Profit	104	112	125	159	170	203	269	339	431	466	490	507	18%	13%
Operating Margin	6.7%	6.9%	7.6%	8.9%	9.0%	8.4%	9.4%	10.7%	11.2%	11.4%	11.6%	11.6%		
Interest Expense	(57.6)	(60.2)	(47.0)	(46.4)	(42.4)	(51.2)	(53.8)	(59.0)	(96.9)	(93.8)	(83.2)	(71.3)	-1%	7%
Discount on Securitization of Trade Receivables	0.0	(1.3)	(4.8)	(3.3)	(3.3)	(4.7)	(9.4)	(13.9)	(13.8)	(13.8)	(13.8)	(13.8)		
Other	3.0	0.2	1.4	(0.6)	0.6	1.1	2.5	1.4	0.0	0.0	0.0	1.0		
Joint Venture Income	3.4	3.3	3.8	3.8	3.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
Pretax Income	52.7	53.6	78.4	112.0	128.3	148.4	208.4	267.0	320.7	357.9	392.6	422.6	29%	15%
Income Taxes	28.8	24.1	32.6	42.2	48.3	54.6	77.9	103.7	120.9	134.2	147.2	158.5	24%	14%
Tax Rate	54.6%	45.0%	41.6%	37.7%	37.6%	36.8%	37.4%	38.9%	37.7%	37.5%	37.5%	37.5%		
Minority Interest	0.0	0.0	0.0	0.0	(0.3)	(1.8)	(0.9)	1.0	0.4	0.4	0.4	0.4		
Income Before Gains/(Charges)	23.9	29.5	45.8	69.8	79.7	92.0	129.7	164.3	200.2	224.1	245.8	264.6	32%	15%
Gains/(Charges)	(1.1)	(6.7)	(64.7)	(1.7)	0.5	0.0	(2.5)	(6.6)	0.0	0.0	0.0	1.0		
Net Income	22.9	22.7	(18.9)	68.1	80.2	92.0	127.1	157.7	200.2	224.1	245.8	265.6		
EPS Before Gains/(Charges)	$0.34	$0.44	$0.66	$0.97	$1.07	$1.20	$1.62	$1.98	$2.41	$2.69	$2.94	$3.15	27%	14%
Charges	(0.02)	(0.10)	(0.93)	(0.02)	0.01	0.00	(0.03)	(0.08)	0.00	0.00	0.00	0.01		
Reported Earnings Per Share	0.32	0.34	(0.27)	0.94	1.07	1.20	1.59	1.90	2.41	2.69	2.94	3.16		
Increase Before Gains/(Charges)	-52%	29%	49%	47%	11%	12%	35%	23%	22%	12%	9%	7%		
Calendar Earnings Per Share	$0.41	$0.61	$0.76	$1.04	$1.16	$1.48	$1.90	$2.29	$2.67	$2.94	$3.19	$3.42	25%	12%
Increase Before Gains/(Charges)	-19%	50%	24%	36%	12%	27%	29%	20%	17%	10%	8%	7%		
Shares Outstanding (Mil.)	70.6	67.2	69.9	72.3	74.7	77.0	80.1	82.8	83.1	83.4	83.7	84.0	3%	1%
Change				2.4	2.4	2.3	3.1	2.7	0.3	0.3	0.3	0.3		
Change Percent				3%	3%	3%	4%	3%	0%	0%	0%	0%		
Estimated Options Expense (FAS123R)				$0.09	$0.07	$0.09	$0.09	$0.11	$0.11	$0.11	$0.11	$0.11		
Diluted FY EPS (Options Adjusted)				$0.88	$1.00	$1.11	$1.53	$1.98	$2.41	$2.69	$2.94	$3.15		
Diluted CY EPS (Options Adjusted)				$0.95	$1.09	$1.39	$1.88	$2.29	$2.67	$2.94	$3.19	$3.42		
EBITDA														
Fiscal	$193	$198	$198	$238	$258	$315	$397	$485	$615	$664	$698	$724	15%	13%
Margin	12.5%	12.2%	12.1%	13.3%	13.6%	13.1%	13.9%	15.3%	16.0%	16.3%	16.5%	16.6%		
Fiscal Per Share	$2.74	$2.95	$2.83	$3.30	$3.45	$4.09	$4.95	$5.86	$7.40	$7.96	$8.34	$8.62	11%	12%
Change	-2%	8%	-4%	16%	5%	18%	21%	18%	26%	8%	5%	3%		
Calendar	195	195	223	246	301	372	464	584	737	793	830	859	19%	13%
Calendar Per Share	$2.76	$2.90	$3.19	$3.41	$4.03	$4.83	$5.80	$7.05	$8.87	$9.51	$9.92	$10.23		

(a) Growth is computed using least squares, not compound annual, method.
Fiscal Year Ends March 31

Source: Company reports, Banc of America Securities LLC estimates.

Airgas, Inc.

Distribution Sales Detail, Fiscal 2000– Estimated 2011
($ millions)

													Growth	
Sales	F2000	F2001	F2002	F2003	F2004	F2005	F2006	F2007E	F2008E	F2009E	F2010E	F2011E	01-06	06-11E
Gas & Rent	$592	$648	$707	$864	$883	$1,057	$1,239	$1,394	$1,655	$1,768	$1,839	$1,894	14%	9%
Welding Hardgoods	818	840	787	778	820	1,022	1,182	1,272	1,481	1,558	1,597	1,637	8%	7%
Other	0	0	0	0	0	0	0	0	0	0	0	1		
Total	1,410	1,487	1,494	1,642	1,702	2,079	2,421	2,666	3,137	3,326	3,436	3,532	10%	8%
Change		5%	0%	10%	4%	22%	16%	10%	18%	6%	3%	3%		
Sales Mix														
Gas & Rent	42%	44%	47%	53%	52%	51%	51%	52%	53%	53%	54%	54%	50%	53%
Welding Hardgoods	58%	56%	53%	47%	48%	49%	49%	48%	47%	47%	46%	46%	50%	47%
Other	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%		
Total	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%		
Sales Growth														
Gas & Rent	4%	9%	9%	22%	2%	20%	17%	13%	19%	7%	4%	3%	13%	10%
Welding Hardgoods	-2%	3%	-6%	-1%	5%	25%	16%	8%	16%	5%	2%	2%	7%	8%
Other	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM		
Total	0%	5%	0%	10%	4%	22%	16%	10%	18%	6%	3%	3%		

Breakdown of Distribution Sales Growth:									Growth
Same Store Sales									2000-Present
Gases and Rent	1.9%	5.1%	7.1%	1.0%	1.0%	5.3%	10.0%	8.3%	5%
Hardgoods	-4.2%	1.0%	-6.7%	-5.0%	1.0%	14.0%	13.0%	7.8%	3%
Total	-1.7%	2.7%	-0.6%	-2.0%	1.0%	9.3%	11.0%	8.1%	3%
Acquisitions	2.0%	2.8%	1.1%	11.9%	2.7%	13.9%	5.5%	2.0%	5%
Sales Growth	0.3%	5.5%	0.5%	9.9%	3.7%	22.1%	16.5%	10.1%	9%

E = Banc America Securities Research Estimates

Source: Company reports, Banc of America Securities LLC estimates.

Airgas, Inc.
Other Operations Sales Detail, Fiscal 2000—Estimated 2011
($ millions)

	F2000	F2001	F2002	F2003	F2004	F2005	F2006	F2007E	F2008E	F2009E	F2010E	F2011E	Growth (a) 01-06	Growth (a) 06-11E
Net Sales	$132.4	$174.9	$173.6	$183.8	$235.9	$385.6	$493.4	$570.4	$778.9	$817.9	$850.6	$884.6	20%	18%
Cost of Sales	56.5	83.2	80.5	83.0	106.2	174.4	238.3	273.5	335.0	348.7	364.6	381.6	20%	15%
Gross Profit	75.9	91.7	93.1	100.9	129.8	211.2	255.1	296.9	443.9	469.2	485.9	503.0	20%	20%
Gross Margin	57.3%	52.4%	53.6%	54.9%	55.0%	54.8%	51.7%	52.1%	57.0%	57.4%	57.1%	56.9%		
Selling and Administrative	53.9	58.1	59.8	63.6	82.9	141.2	167.1	189.0	276.5	290.3	302.0	314.0	19%	18%
S&A/Sales	40.7%	33.2%	34.5%	34.6%	35.1%	36.6%	33.9%	33.1%	35.5%	35.5%	35.5%	35.5%		
Depreciation and Amortization	12.8	14.2	11.7	11.9	15.5	24.7	27.7	30.7	48.8	52.7	55.3	57.8	11%	20%
D&A/Sales	10%	8%	7%	6%	7%	6%	6%	5%	6%	6%	7%	7%		
Operating Profit	9.2	19.4	21.6	25.3	31.3	45.2	60.3	77.2	118.6	126.2	128.7	131.2	31%	25%
Operating Margin	7.0%	11.1%	12.4%	13.8%	13.3%	11.7%	12.2%	13.5%	15.2%	15.4%	15.1%	14.8%		
Special Items	4.7	0.5	0.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
Operating Profit after Gain / Charge	13.9	19.9	22.3	25.3	31.3	45.2	60.3	77.2	118.6	126.2	128.7	131.2	23%	25%
Operating Profit Growth	3%	43%	12%	14%	24%	44%	33%	28%	54%	6%	2%	2%		
Memo Items														
Sales Growth	-15%	32%	-1%	6%	28%	63%	28%	16%	37%	5%	4%	4%		
EBITDA	22	34	33	37	47	70	88	108	167	179	184	189	22%	24%
EBITDA Margin	16.7%	19.2%	19.2%	20.3%	19.9%	18.1%	17.8%	18.9%	21.5%	21.9%	21.6%	21.4%		
Assets	227	174	197	206	409	420	453	586	662	678	693	706		
Capex	9	10	6	16	13	35	44	50	50	48	47	48		
EBITDA Return on Assets	9%	17%	18%	19%	15%	17%	20%	21%	27%	27%	27%	27%		

E = Banc America Securities Research Estimates

Source: Company reports, Banc of America Securities LLC estimates.

Airgas, Inc.
Gas Sales Detail, Fiscal 2000—Estimated 2011
($ millions)

Sales	F2007E	F2008E	F2009E	F2010E	F2011E	Growth 07-11E
Nitrogen	116	225	243	252	260	22%
Oxygen	104	201	215	222	229	22%
Argon	110	182	194	201	207	17%
Subtotal - Atmoshperic Gases	329	608	652	675	696	21%
Acetylene	97	102	108	113	116	4%
Propylene	12	13	14	14	15	5%
Propane	24	26	27	28	29	5%
Subtotal - Fuel gases	134	141	149	155	160	5%
High-purity specialty gases/mixtures	274	288	305	318	329	5%
Carbon dioxide / dry ice	219	230	244	254	264	5%
Hydrogen	49	51	54	57	59	5%
Helium	73	77	81	85	89	5%
Industrial Gas Mixtures	140	147	156	164	170	5%
Subtotal - Other gases	755	793	841	877	912	5%
Subtotal - Gases incl All Other Ops	1,218	1,542	1,641	1,708	1,768	10%
Rent incl. All Other Ops	685	830	884	920	951	9%
Subtotal - Gas & Rent incl All Other Op	1,903	2,372	2,525	2,628	2,719	9%
Hardgoods	1,272	1,481	1,558	1,597	1,637	7%
Total	3,175	3,854	4,083	4,225	4,355	8%

Source: Company reports, Banc of America Securities LLC estimates.

Airgas, Inc.
Balance Sheet, Fiscal 2000—Estimated 2011
($ millions)

	F2000	F2001	F2002	F2003	F2004	F2005	F2006	F2007E	F2008E	F2009E	F2010E	F2011E	Growth 01-06	Growth 06-11E
Assets:														
Cash & Equivalents	$0.0	$0.0	$0.0	$0.0	$25.1	$32.6	35.0	$35.0	$35.0	$35.0	$35.0	$35.0		
Accounts Receivable	212.0	143.1	88.6	71.3	107.0	148.8	132.2	162.2	190.2	219.2	249.2	280.2	5%	16%
Inventories	159.4	155.0	154.0	151.4	170.3	221.6	229.5	259.5	282.5	306.5	331.5	357.5	9%	9%
Other Current Assets	37.4	35.7	60.9	47.8	54.0	63.2	61.8	61.8	61.8	61.8	61.8	61.8	9%	0%
Total Current Assets	408.8	333.8	303.5	270.6	356.4	466.3	458.5	518.5	569.5	622.5	677.5	734.5	9%	10%
Property Plant & Equipment at Cost	1,074.4	1,073.3	1,309.0	1,329.5	1,654.2	1,971.2	2,100.0	2,910.0	3,460.0	3,695.0	3,925.0	4,160.0	15%	13%
Less: Accumulated Depreciation	320.6	368.6	416.0	460.0	620.3	701.9	701.2	838.4	1,012.1	1,200.6	1,399.0	1,606.8	16%	18%
Fixed Assets, Net	753.8	704.6	893.0	869.5	1,033.9	1,269.3	1,398.8	2,071.6	2,447.9	2,494.4	2,526.0	2,553.2	14%	11%
Goodwill	445.5	432.8	406.5	437.7	504.2	511.2	566.1	556.4	546.8	537.2	527.6	517.9	6%	-2%
Investments & Other	131.3	111.4	114.0	122.5	66.1	45.1	51.1	51.1	51.1	51.1	51.1	51.1	-19%	0%
Total	1,739.3	1,582.7	1,717.1	1,700.2	1,960.6	2,291.9	2,474.4	3,197.6	3,615.2	3,705.2	3,782.1	3,856.7	10%	8%
Liabilities and Shareholders' Equity:														
Short Term Debt	20.1	72.9	2.5	2.2	6.1	6.9	131.9	131.9	131.9	131.9	131.9	131.9	22%	
Accounts Payable	78.3	76.3	82.5	85.4	114.3	143.2	143.8	133.8	157.8	182.8	208.8	235.8	16%	12%
Accrued Expenses and Other	121.2	132.3	136.4	121.3	147.1	159.1	195.4	195.4	195.4	195.4	195.4	195.4	8%	0%
Total Current Liabilities	219.6	281.6	221.3	208.9	267.5	309.3	471.0	461.0	485.0	510.0	536.0	563.0	12%	4%
Long Term Debt	857.4	620.7	764.1	658.0	682.7	801.6	635.7	1,198.4	1,389.0	1,237.2	1,065.3	872.0	1%	
Deferred Taxes	160.8	161.2	198.2	209.1	253.5	282.2	332.5	365.6	390.8	407.9	411.9	416.9	15%	4%
Other	29.0	22.4	30.3	27.2	28.8	48.4	30.9	30.9	30.9	30.9	30.9	30.9	9%	0%
Minority Interest	0.0	0.0	0.0	0.0	36.2	36.2	57.2	57.2	57.2	57.2	57.2	57.2		
Shareholders' Equity	472.5	496.8	503.1	596.9	691.9	814.2	947.2	1,084.5	1,262.5	1,462.0	1,680.8	1,916.7	15%	15%
Total	1,739.3	1,582.7	1,717.1	1,700.2	1,960.6	2,291.9	2,474.4	3,197.6	3,615.2	3,705.2	3,782.1	3,856.7	6%	12%
Financial Leverage Analysis														
Change in Net Debt	10	(184)	73	(106)	4	112	(43)	563	191	(152)	(172)	(193)		
Net (Debt)	($877)	($694)	($767)	($660)	($664)	($776)	($733)	($1,295)	($1,486)	($1,334)	($1,162)	($969)	1%	3%
Adjusted Net Debt	($877)	($805)	($940)	($843)	($759)	($896)	($853)	($1,415)	($1,606)	($1,454)	($1,282)	($1,090)	0%	2%
Net (Debt) Per Share	(12.43)	(10.32)	(10.97)	(9.13)	(8.89)	(10.08)	(9.15)	(15.64)	(17.89)	(16.00)	(13.89)	(11.54)	-2%	2%
Book Value Per Share	$6.69	$7.39	$7.20	$8.26	$9.26	$10.57	$11.83	$13.10	$15.20	$17.54	$20.09	$22.83	9%	14%
Net Debt/(Net Debt + Equity)	65%	58%	60%	53%	49%	49%	44%	54%	54%	48%	41%	34%	52%	46%
Adj. Net Debt/(Net Debt + Equity)	65%	62%	65%	59%	52%	52%	47%	57%	56%	50%	43%	36%	56%	48%
L.T. Debt/(L.T. Debt + Equity)	64%	56%	60%	52%	50%	50%	40%	52%	52%	46%	39%	31%	51%	43%
EBITDA Interest Coverage	3.4	3.3	4.2	5.1	6.1	6.1	7.4	8.2	6.3	7.1	8.4	10.2	16%	5%
Total Debt / EBITDA	4.5	3.5	3.9	2.8	2.7	2.6	1.9	2.7	2.5	2.1	1.7	1.4	-11%	-9%
Adj. Debt / EBITDA	4.5	4.0	4.7	3.5	3.2	3.2	2.4	3.1	2.8	2.3	2.0	1.6	-10%	-9%
Sales/Capital Employed	1.15	1.28	1.33	1.41	1.45	1.64	1.75	1.56	1.50	1.47	1.50	1.52	6%	-2%
Cash / Share					0.34	0.42	0.44	0.42	0.42	0.42	0.42	0.42		-1%
Working Capital Analysis														
Trade Working Capital	293	293	294	296	326	417	408	478	505	533	562	592	8%	7%
Trade Working Capital Ratio	4.7	3.9	2.9	2.6	2.4	2.6	2.5	3.2	3.0	2.9	2.8	2.7	-7%	0%
Trade Working Capital/Sales	19%	18%	18%	17%	18%	19%	15%	16%	14%	13%	14%	14%	18%	14%
Trade Working Capital Turns	5.3	5.4	5.5	5.8	5.7	5.2	6.5	6.3	7.0	7.4	7.4	7.2	2%	3%
Accounts Receivable Days Outstanding	48.2	47.7	48.7	46.3	48.1	46.0	42.3	38.8	34.7	35.3	36.6	38.1	-2%	-2%
Inventory Days Supply	70.1	67.7	68.9	65.6	64.6	60.7	57.7	57.4	53.3	54.9	57.6	52.5	-3%	-1%
Inventory Turnover	5.2	5.4	5.3	5.6	5.6	6.0	6.3	6.4	6.8	6.6	6.3	7.0	3%	1%
Accounts Payable Days Outstanding	36.6	33.3	35.4	36.0	40.1	39.9	36.7	32.6	28.7	31.7	35.4	33.9	3%	0%
Return on Capital														
Return on Average Shareholders' Equity (ROE)	5.1%	6.1%	9.2%	12.7%	12.4%	12.2%	14.7%	16.2%	17.1%	16.5%	15.6%	14.7%	11%	16%
Cash Return on Capital (CROC)	5.6%	6.8%	6.6%	8.3%	8.5%	8.8%	10.3%	10.3%	10.5%	10.5%	10.9%	11.1%	8%	11%
Return on Assets (ROA)	2.9%	3.8%	4.4%	5.8%	5.8%	5.9%	6.9%	7.1%	7.6%	7.7%	8.0%	8.1%	5%	8%
FD Shares Outstanding (mil.)	70.6	67.2	69.9	72.3	74.7	77.0	80.1	82.8	83.1	83.4	83.7	84.0	3%	1%

Source: Company reports, Banc of America Securities LLC estimates.

Airgas, Inc.
Cash Flow Statement, Fiscal 2000—Estimated Fiscal F2011
($ millions)

	F2000	F2001	F2002	F2003	F2004	F2005	F2006	F2007E	F2008E	F2009E	F2010E	F2011E	Growth (a) 01-06	Growth (a) 06-11E
Operating Activities:														
Net Income	$23	$23	($19)	$68	$80	$92	$127	$158	$200	$224	$246	$266		
Depreciation	64	63	65	73	83	106	122	137	174	188	198	208	15%	12%
Amortization of Goodwill	26	24	8	6	5	5	5	10	10	10	10	10	-23%	9%
Special Charge	0	0	59	0	0	0								
Deferred Income Taxes	13	5	35	9	23	32	47	33	25	17	4	5		
Special Items and Other Charges	0	2	1	0	0	0	3							
Stock Issued for Employee Benefit Plan Expense	6	6	7	9	7	10	11							
Equity in Earnings of Joint Venture	(3)	(2)	(4)	(4)	(5)	2								
Gain on Sale of Plant & Equipment	(19)	(1)	(2)	(0)	(1)	(1)								
Minority Interest in Earnings	0	0	0	0	0	0								
Subtotal	109	120	151	162	192	247	315	338	409	439	458	488	20%	10%
Change (Before Net Borrowings)	-14%	9%	26%	7%	19%	28%	28%	7%	21%	7%	4%	7%		
Working Capital Changes:														
Trade Receivables, Net	(14)	(4)	9	(8)	(16)	(40)	(17)	(30)	(28)	(29)	(30)	(31)		
Inventories & Prepaid Expenses	(5)	3	(12)	22	5	(41)	(14)	(30)	(23)	(24)	(25)	(26)		
Accounts Payable & Accrued Expenses	1	8	24	(5)	26	27	23	(10)	24	25	26	27		
Other	(7)	(6)	8	(1)	(1)	1	1							
Subtotal	(25)	1	29	8	13	(52)	(7)	(70)	(27)	(28)	(29)	(30)		
Net Cash Provided by Operating Activities	85	120	180	169	205	195	308	268	382	411	429	458	16%	10%
Investing Activities:														
Capital Expenditures	(65)	(66)	(58)	(68)	(94)	(168)	(214)	(240)	(240)	(235)	(230)	(235)	31%	1%
Asset Disposals	93	52	13	7	5	6	23							
Sale of Medical	0	0	0	0	0	0								
Business Acquisitions, Net of Cash Acquired	(101)	(6)	(258)	(27)	(35)	(192)	(153)	(75)						
Investment in Uunconsolidated Subsidiaries	(0)	0	0	0	0	0								
Dividends from Uncolsolidated Affiliates	4	4	3	3	2	0								
Other	4	5	5	(2)	(1)	0	0							
Net Cash Used by Investing Activities	(65)	(11)	(295)	(87)	(123)	(353)	(345)	(315)	(240)	(235)	(230)	(235)	68%	-8%
Operating Less Investing Activities	19	109	(115)	83	83	(159)	(36)	(47)	142	176	199	223		
Financing Activities:														
Proceeds from Borrowing	169	230	741	274	418	649	644							
Repayment of Debt	(160)	(341)	(625)	(367)	(488)	(493)	(607)							
Excercise of Options & Warrants	2	1	7	10	13	20	20							
Minority interest in earnings	0	0	0	0	0	(2)								
Purchase of Treasury Stock	(47)	(11)	0	0	0	0	(13)							
Dividends	0	0	0	0	(12)	(14)	(18)	(20)	(22)	(25)	(27)	(30)		
Net Overdraft	2	5	(17)	1	(14)	6	16							
Other														
Net Cash Provided by Financing Activities	(35)	(115)	106	(83)	(83)	166	42	(20)	(22)	(25)	(27)	(30)		
Effects of Discontinued Activities, Net	0	0	0	0	0	0	0							
Increase (Decrease) in Cash & Equivalents	(15)	(5)	(9)	(0)	0	7	5	(68)	119	152	172	193		
Per Share (Fiscal) (Includes W/C Changes):														
Sources Per Share	$1.20	$1.79	$2.58	$2.34	$2.75	$2.53	$3.85	$3.23	$4.60	$4.93	$5.13	$5.46	12%	10%
Uses Per Share	(0.92)	(0.98)	(0.83)	(0.94)	(1.26)	(2.18)	(2.67)	(2.90)	(2.89)	(2.82)	(2.75)	(2.80)	26%	0%
Net Cash Flow Per Share	0.28	0.81	1.74	1.40	1.49	0.35	1.17	0.33	1.71	2.12	2.38	2.66	-8%	34%
Per Share (Fiscal) (Excludes W/C Changes):														
Sources Per Share	$1.55	$1.78	$2.16	$2.24	$2.58	$3.20	$3.93	$4.08	$4.92	$5.27	$5.47	$5.81	16%	9%
Uses Per Share	(0.92)	(0.98)	(0.83)	(0.94)	(1.26)	(2.18)	(2.67)	(2.90)	(2.89)	(2.82)	(2.75)	(2.80)	26%	0%
Net Cash Flow Per Share	0.63	0.80	1.32	1.30	1.32	1.02	1.26	1.18	2.03	2.45	2.72	3.01	4%	22%
Memo Items														
Change in Working Capital to Sales Change	-131%	-1%	NM	-5%	-12%	10%	2%	22%	4%	12%	20%	23%		
Capex to Sales	4.2%	4.0%	3.6%	3.8%	4.9%	7.0%	7.5%	7.6%	6.2%	5.8%	5.4%	5.4%		
Reinvestment Rate	6%	6%	4%	5%	6%	9%	10%	8%	7%	6%	6%	6%		
D&A Less Capital Expenditures	24	21	15	12	(6)	(56)	(87)	(93)	(57)	(37)	(22)	(18)		
Cash From Operations Less Capex	19	54	122	102	112	27	94	28	142	176	199	223		
Cash From Operation Less Capex Less Dividends	19	54	122	102	100	13	76	7	119	152	172	193		
Conversion of Net Income to Free Cash Flow	85%	239%	NM	149%	139%	29%	74%	17%	71%	79%	81%	84%		

Source: Company reports, Banc of America Securities LLC estimates.

Chemicals
Kevin W. McCarthy, CFA 212.847.5370

Airgas, Inc.
Discounted-Cash-Flow Valuation
($ millions)

DCF Growth/Discount Assumptions	
First Stage EBIT Compound Annual Growth (Yrs 1-4)	14.4%
Second Stage EBIT Compound Annual Growth (Yrs 5-10)	6.7%
Terminal Value Growth Rate	3.0%
WACC	9.7%
Industrial Gas Average Unlevered Beta	0.80

Equity Assumptions	
Risk Free Rate %	4.6%
Market Risk Premium %	6.9%
Adjusted Beta	0.93
Cost of Equity %	11.0%
Current Stock Price	$41.84
Shares Outstanding	82.6
Market Value of Equity	3,457

Debt Assumptions	
Pre- Tax Cost of Debt	7.2%
Marginal Tax Rate	38.0%
After Tax Cost of Debt	4.5%
Market Value of Debt	890

Economic Value Added	
CROC (2007E)	10.3%
WACC	9.7%
CROC-WACC	0.7%
Capital Employed	$2,030
EVA	$13

Year	1 F2007E	2 F2008E	3 F2009E	4 F2010E	5 F2011E	6 F2012E	7 F2013E	8 F2014E	9 F2015E	10 F2016E	Growth 07E-11E	Growth 11E-16E	Terminal Value
Sales	$3,175	$3,854	$4,083	$4,225	$4,355	$4,741	$5,058	$5,397	$5,758	$6,144	11.1%	5.9%	
Operating Profit	339	431	466	490	507	541	577	615	657	701	14.4%	5.5%	
Operating Margin	10.7%	11.2%	11.4%	11.4%	11.4%	11.4%	11.4%	11.4%	11.4%	11.4%			
Minority Interest	1	0	0	0	0	0	0	1	1	1			
Plus Depreciation	137	174	188	198	208	226	241	258	275	293	14.9%	5.9%	
Plus Amortization of Goodwill	10	10	10	10	10	10	10	10	10	10			
Less Capital Expenditures	(240)	(240)	(235)	(230)	(235)	(253)	(268)	(283)	(298)	(309)	-0.7%	4.7%	
Net Capital Expenditures	(93)	(57)	(37)	(22)	(18)	(17)	(17)	(15)	(14)	(6)			
Less Cash Taxes	(83)	(97)	(107)	(113)	(117)	(125)	(133)	(142)	(151)	(162)	12.1%	5.5%	
Deferred Taxes	33	25	17	4	5	5	6	6	7	7	-46.8%	5.9%	
"Cash" Tax Rate	25%	22%	23%	23%	23%	23%	23%	23%	23%	23%			
Working Capital Requirements	(70)	(27)	(28)	(29)	(30)	(33)	(35)	(37)	(40)	(42)			
Free Cash Flow to the Firm (FCFF)	126	277	311	330	348	372	399	428	459	498	40.1%	6.2%	7,677

NPV of FCFF in Years 1-10	2,051	38%
NPV of Terminal Value	3,341	62%
Total Enterprise Value	5,393	100%
Less Total Debt (Proforma for Linde acquisitions)	1,695	
Less A/R Securitization	241	
Less Funded Status of Pension and OPEB	2	
Plus Cash and Marketable Securities	30	
Plus PV Adjustment (DCF discounts to 4/1/06)	413	
Total Equity Value	$3,898	

Equity Value Per Share **$47**

Sensitivity Analysis

WACC \ Terminal Growth Rate	2.0%	2.5%	3.0%	3.5%	4.0%
8.2%	57	63	70	78	88
8.7%	51	55	61	68	76
9.2%	45	49	53	59	65
9.7%	40	43	**$47**	52	57
10.2%	35	38	42	45	50
10.7%	32	34	37	40	44
11.2%	28	30	33	35	39
11.7%	25	27	29	31	34
12.2%	22	24	26	28	30

Source: Company reports, Banc of America Securities LLC estimates.

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Volatility		Ratings		
		Buy	Neutral	Sell
Low	0%-25%	11%+	10.9%-0.1%	0% or worse
Medium	25%-35%	15%+	14.9%-(2.9)%	(3)% or worse
High	35%-55%	20%+	19.9%-(6.9)%	(7)% or worse
Extreme	55%+	32%+	31.9%-(14.9)%	(15)% or worse

Source for volatility: Bloomberg.

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Sell	36	4	Sell	30	83

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