

Catalent, Inc.

Making It Right (70 Billion Times a Year); Recently Initiated Coverage With an Outperform Rating

On September 9, we initiated coverage of Catalent with an Outperform rating and Established Growth company profile. Catalent is the leading provider of advanced delivery technologies to the biopharmaceutical industry and thus an excellent way for investors to participate in the outsourcing of manufacturing. We believe that Catalent should be a strong defensive stock for three primary reasons. First, given the high switching costs in pharmaceutical manufacturing, we view Catalent's business model as extremely stable. Second, the FDA's increased attention on Good Manufacturing Practice (GMP) compliance in the past decade has made manufacturing outsourcing increasingly attractive for large and small sponsors alike. Third, Catalent's market is quite fragmented, providing numerous opportunities for inorganic growth.

We estimate Catalent will generate EPS of \$1.82 in fiscal 2015 and \$1.97 in fiscal 2016 (year ends June 30). We believe organic revenue growth for Catalent can be sustained in the midsingle digits. This, coupled with the potential for margin leverage and accretive capital deployment, should result in longer-term low-double-digit earnings growth.

Large, fragmented market opportunity. Catalent is the largest global player in what we estimate is a \$20 billion outsourced market today across finished dose manufacturing and development services. We believe that this market is expanding in the midsingle digits and has an addressable size of \$45 billion, including work done in-house by sponsors. With 10% market share today and roughly 50% of the market still in the hands of niche and undercapitalized players, we believe that Catalent has abundant opportunities to extend its leadership through acquisition.

Pharmaceutical spending and outsourcing trends poised to improve. Following the peak of patent expirations in 2012, we believe that biopharmaceutical drug development trends are poised to accelerate gradually. The increasing complexity of the industry's pipeline (and a more stringent FDA) should drive more outsourcing and also bolster Catalent's position given its focus on specialty delivery technologies. The company's 2012 expansion in development services should allow it to access drug candidates sooner, helping fuel growth in both facets of the business.

Key risks. We view the following items as key risks for Catalent in the next one to three years: a regulatory compliance breakdown, increasing competition from contract manufacturing organizations (CMOs) with excess capacity, and the inability to generate significant margin leverage in the absence of organic revenue growth.

Catalent is the world's leading provider of advanced delivery technologies to the pharmaceutical industry with particular expertise in softgel technologies. The company has unparalleled diversity in the industry with over 1,000 clients, 7,000 products, and 27 facilities on 5 continents.

John Kreger +1 312 364 8597 jkreger@williamblair.com Roberto Fatta +1 312 364 8797 rfatta@williamblair.com Matt Bacso +1 312 364 8996 mbacso@williamblair.com September 19, 2014

Basic Report (14-117)

Stock Rating: Outperform
Company Profile: Established Growth

Symbol: CTLT (NYSE)
Price: \$24.19 (52-Wk.: \$19-\$25)
Market Value (mil.): \$3,033
Fiscal Year End: June
Long-Term EPS Growth Rate: 10%
Dividend/Yield: None

Estimates	2014A	2015E	2016E
EPS FY	\$1.89	\$1.82	\$1.97
EPS CY	\$2.01	\$1.89	\$2.08
EBITDA (mil.)	\$432.6	\$454.5	\$483.0

Valuation			
P/E CY	12.0x	12.8x	11.6x

Trading Data	
Shares Outstanding (mil.)	125.4
Float (mil.)	50.2
Average Daily Volume (30-day)	1,125,000

Financial Data	
Long-Term Debt/Total Capital	76%
Book Value Per Share (2014E)	\$5.44
Enterprise Value (mil.)	\$4,949
CY 2015 EBITDA (mil.)	\$465.6
Enterprise Value/EBITDA	10.6x

Please refer to important disclosures on pages 46 and 47. Analyst certification is on page 46. William Blair does and seeks to do business with companies covered in its research reports. As a result, investors should be aware that the firm may have a conflict of interest that could affect the objectivity of this report. Investors should consider this report as a single factor in making an investment decision.

Contents

Executive Summary	3
Investment Highlights	
Investment Risks	
Industry Overview	
Company Overview	21
Growth Outlook and Key Modeling Assumptions	30
Valuation and Conglusion	20

Executive Summary

On September 9, we initiated coverage of Catalent with an Outperform rating and Established Growth company profile following its recent initial public offering. Catalent is the world's leading provider of finished dose manufacturing services to the pharmaceutical and consumer healthcare markets. The company specializes in advanced delivery technologies across oral, inhalation, and injectable routes of administration. It was founded on the technology for manufacturing softgel capsules developed by RP Scherer in the 1930s. RP Scherer was a publicly traded company from 1991 to 1998, and was then acquired by Cardinal Health to form the pharmaceutical technologies and services (PTS) business unit. Cardinal added a number of other assets that expanded its capabilities into packaging, injectable formulations, and biologics. In 2007, Cardinal sold PTS to The Blackstone Group, creating the cornerstone of what today is Catalent, Inc.

We believe that Catalent should be a strong defensive stock for investors looking to participate in pharmaceutical outsourcing from a manufacturing perspective. The stability in the business model comes from the fact that sponsors do not like to change a product's manufacturing process once it has navigated the regulatory inspection and approval process. Therefore, once Catalent secures a contract to produce the finished dose of a compound, it will likely retain that mandate through the life of the product. The growth in the business model comes from ongoing expansion in prescription consumption as people age, as well as a shift to greater outsourcing of manufacturing thanks to the increased regulatory burden and complexity of the pipeline. Catalent produces 175 products that were approved and launched last year, up from 97 in 2013 and 59 in 2012, and the company has another 480 products in the pipeline that are undergoing testing by clients. We expect Catalent to be able to supplement organic growth with M&A activity, given the highly fragmented nature of contract manufacturing and development.

With no other competitor offering a comparable degree of global scale, quality, and expertise, we believe that Catalent is well positioned to gain share. The company has more than 1,000 customers, including at least 80% of the top branded pharmaceutical, generic, biotech, and consumer health companies. Several of these relationships have lasted 25 years. The company produces 70 billion doses annually in 10 different dosage forms through production facilities on five continents. Revenues now approach \$1.9 billion, with \$1.2 billion (65%) derived from the core oral technologies segment (softgel and modified release formulations), 12% from medication delivery solutions (sterile injectable solutions/blow-fill-seal technology, and biologics), and the remaining 23% from development solutions (clinical trial supply, development, and analytical services). The oral technologies segment is the most profitable with a 27% EBITDA margin, while medication delivery and development solutions both generate roughly 20%.

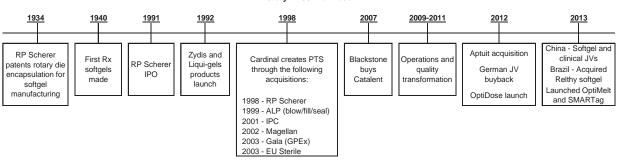
Over the next several years, we assume Catalent will be able to increase earnings (exclusive of tax rate changes) at a rate of about 10%-12%, driven by 5% organic revenue growth, 2% from margin leverage, and 3%-4% from balance sheet deleveraging and share repurchases. M&A activity should add further to this total, but we do not include any future deals in our model (see exhibit 1, on the following page, for a summary of our earnings buildup assumptions). We view revenue as having the most upside potential relative to our assumptions, particularly with the help of M&A activity. Conversely, we view margin leverage as the portion of the model with the most risk, given mix shift and competitive dynamics.

Exhibit 1 Catalent, Inc.

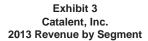
Estimated Earnings Build – Adjusted EPS								
	2013A	2014A	2015E	2016E	2017E	2018E	2019E	2020E
End of Product Life Cycle	-1.5%	-1.5%	-1.5%	-1.5%	-1.5%	-1.5%	-1.5%	-1.5%
Inflation	0.5%	1.0%	1.0%	1.3%	1.6%	2.0%	2.0%	2.0%
Organic Unit Growth	7.2%	2.0%	4.3%	6.0%	4.6%	4.3%	4.4%	4.4%
Revenue	6.2%	1.5%	3.8%	5.8%	4.7%	4.8%	4.9%	4.9%
Gross Margin	-3.5%	2.4%	-0.3%	-0.2%	0.5%	0.4%	0.4%	0.6%
Expense Leverage	3.5%	0.9%	1.6%	0.7%	2.2%	2.3%	1.2%	0.9%
EBITDA Growth	6.3%	4.8%	5.0%	6.3%	7.5%	7.6%	6.4%	6.3%
Depreciation	-2.4%	4.5%	1.0%	-1.7%	1.4%	1.3%	1.0%	1.3%
Interest Expense	-11.9%	58.5%	45.8%	6.5%	2.8%	2.4%	1.8%	1.8%
Tax	9.4%	5.2%	3.0%	-0.6%	-11.2%	-10.0%	0.0%	0.0%
Adjusted Net Income	1.3%	73.0%	54.9%	10.4%	0.5%	1.3%	9.2%	9.4%
Share Count	0.0%	-0.8%	-58.7%	-2.2%	1.9%	1.9%	2.1%	2.0%
Adjusted EPS	1.3%	72.2%	-3.8%	8.2%	2.3%	3.2%	11.3%	11.3%

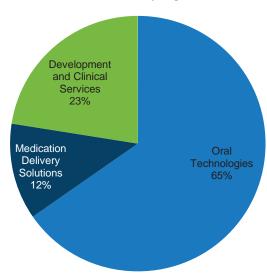
Sources: Company reports and William Blair & Company, L.L.C. estimates

Exhibit 2 Catalent, Inc. History – 1934 to Present



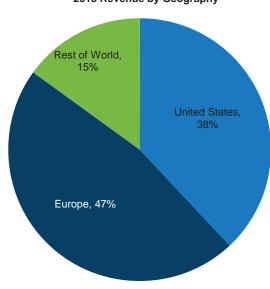
Sources: Company reports and William Blair & Company, L.L.C. estimates



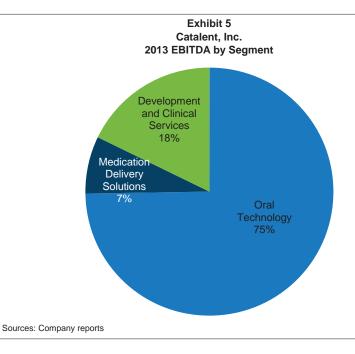


Sources: Company reports and William Blair & Company, L.L.C. estimates

Exhibit 4 Catalent, Inc. 2013 Revenue by Geography



Source: Company reports



Valuation and Stock Thoughts

Since fiscal 2010, the company has generated a top-line CAGR of 5% through a combination of organic growth and acquisitions and an EBITDA CAGR of 8%. Our adjusted EPS estimates for Catalent are \$2.01 in calendar 2014, \$1.89 in calendar 2015, and \$2.08 in calendar 2016. These targets are based on an average of 4.3% organic revenue growth from calendar 2013 to 2016 and 64 basis points of annual operating margin leverage for the next three years (we do not build future M&A transactions into our estimates). We view the core oral technology business as the slow-growing, cash-generating business that should drive growth in the fast-growing (but lower-margin) development solutions business as well as the biologics business. In addition, given Catalent's strong cash flows (free cash flow of roughly \$190 million in calendar 2015), we believe that the company should be able to make accretive tuck-in acquisitions or fund buybacks and/or dividends. In aggregate, we believe that Catalent offers the potential for sustainable low-double-digit earnings growth.

Exhibit 6 Catalent, Inc. Projected Fiscal-Year Income Statement Summary									
	2012	2013	2014	2015E	2016E	2017E	2018E	2019E	2020
Oral Technologies Revenue Growth	\$1,220 5.3%	\$1,186 <i>-2.8%</i>	\$1,180 <i>-0.5%</i>	\$1,215 3.0%	\$1,269 <i>4.5%</i>	\$1,317 3.8%	\$1,370 <i>4.0%</i>	\$1,424 <i>4.0%</i>	\$1,481
Medication Delivery Solutions Revenue	\$224	\$219	\$246	\$240	\$252	\$264	\$275	\$288	4.0% \$301
Growth Development & Clinical Services Revenue	-5.2% \$268	<i>-2.1%</i> \$405	12.2% \$412	<i>-2.4%</i> \$451	<i>5.0%</i> \$496	<i>4.5%</i> \$530	<i>4.5%</i> \$568	<i>4.5%</i> \$607	<i>4.5%</i> \$650
Growth	71.0%	50.8%	1.8%	9.3%	10.0%	7.0%	7.0%	7.0%	7.0%
Total Revenue Growth	\$1,695 <i>10.6%</i>	\$1,800 <i>6.2%</i>	\$1,828 1.5%	\$1,897 3.8%	\$2,007 5.8%	\$2,102 <i>4.7%</i>	\$2,204 4.8%	\$2,311 <i>4.</i> 9%	\$2,423 4.9%
EBITDA Growth Margin	\$388 22.9%	\$413 22.9%	\$433 23.7%	\$454 24.0%	\$483 24.1%	\$519 24.7%	\$559 25.4%	\$595 25.7%	\$632 26.1%
Growth	9.7%	6.3%	4.8%	5.0%	6.3%	7.5%	7.6%	6.4%	6.3%
Adjusted Net Income	\$81	\$82	\$142	\$221	\$244	\$245	\$248	\$271	\$296
Growth		1.3%	73.0%	54.9%	10.4%	0.5%	1.3%	9.2%	9.4%
Adjusted EPS Growth	\$1.09	\$1.10 <i>1.</i> 3%	\$1.89 <i>72.2%</i>	\$1.82 -3.8%	\$1.97 <i>8.2%</i>	\$2.02 2.3%	\$2.08 3.2%	\$2.32 11.3%	\$2.58 11.3%

Note: Fiscal year ends June 30

Sources: Company reports and William Blair & Company, L.L.C. estimates

We believe that Catalent will trade in relation to pharmaceutical outsourcing peers focused on research and development, such as the contract research organizations (CROs), as well as manufacturing and pharma services providers such as IMS Health, West Pharmaceutical Services, and Perrigo. We believe that the most useful approach to valuing the company is using an enterprise-value-to-EBITDA multiple, given a leveraged balance sheet and shifting tax rate. We believe the tax rate, in particular, will confuse valuation using price-to-earnings multiples.

Since the July IPO, the stock is up 18%, resulting in an enterprise value of 10.6 times projected 2015 EBITDA. The stock trades at 12.8 times using our adjusted calendar 2015 EPS estimate and 19.2 times using a normalized EPS estimate that is fully burdened with a 30% tax rate and amortization expenses (those two items account for \$0.63 in EPS in calendar 2015).

Exhibit 7			
Catalent, Inc.			
EPS Using Normalized Tax Rates			

Adjusted EBITDA	\$465.6	\$498.1
Ocali tavarata		,
Cash tax rate Normalized tax rate	14.2% 30.0%	14.5% 30.0%
Adjusted net income (cash tax rate) Adjusted net income (normalized tax rate) Adjusted net income (normalized tax rate incl. amortization exp.)	\$236.2 \$192.7 \$158.2	\$255.2 \$208.9 \$172.7
Adjusted EPS (cash tax rate) Adjusted EPS (normalized tax rate) Adjusted EPS (normalized tax rate incl. amortization exp.)	\$1.89 \$1.54 \$1.26	\$2.08 \$1.70 \$1.41
Value of NOL/share	\$0.35	\$0.38
EV/EBITDA	10.6x	9.9x
P/E multiple Normalized P/E multiple Normalized P/E multiple (incl. amortization exp.)	12.8x 15.7x 19.2x	11.6x 14.2x 17.2x

In comparison, the global CRO peer group now trades at an enterprise value of 10.6 times projected 2015 EBITDA and 18.6 times estimated 2015 EPS (19.1 times excluding WuXi). The pharmaceutical and manufacturing services peer group now trades at an enterprise value of 11.2 times projected EBITDA and 19.4 times estimated EPS.

Sources: Company reports and William Blair & Company, L.L.C. estimates

We view Catalent's valuation as reasonable with some room for multiple expansion (perhaps one turn) in light of the company's attractive risk profile and potential for M&A-driven upside. Exhibit 8, on the following page, shows our assessment of Catalent's risk/reward profile in the coming year. Overall, we believe that investors will be rewarded with steadier performance and lower volatility with Catalent than with its peers in pharmaceutical services. We believe the stock has upside of roughly 11% from current levels.

Exhibit 8
Catalent, Inc.
Probability-Weighted 12-Month Outlook (Using 2016 Estimates)

	Scenario 1 (A)	Scenario 2 ^(B)	Scenario 3 ^(C)
Earnings Per Share	\$458.68	\$498.06	\$525.69
Implied Current P/E Multiple	10.8x	9.9x	9.4x
Estimated Multiple	8.0x	11.0x	14.0x
Implied Price	\$3,669	\$5,479	\$7,360
Price Relative to Current Level	-26%	11%	49%
Probability	20%	60%	20%
Probability-Weighted Return		11.0%	

⁽A) Scenario 1 assumes a 3.5% increase in revenue and flat operating leverage for 2014-2016

Sources: FactSet and William Blair & Company, L.L.C. estimates

Investment Highlights

We believe that Catalent should be a strong defensive stock for investors looking to participate in pharmaceutical outsourcing from a manufacturing perspective. The reasons for this view are summarized below.

Durable Long-Term Contracts

Once a sponsor chooses how and where it produces a product, switching costs are quite high since it forces the sponsor to secure a new regulatory review. For example, a change in manufacturing plant requires prior approval by the FDA, which in turn requires a lengthy list of validation work and a new inspection to be conducted. All told, this process can take two to three years to complete and thus is generally avoided by sponsors if possible. Thus, once a company such as Catalent is tapped to produce a product, assuming that quality and execution remain high, it will likely produce that product for many years—often for the entire life cycle of the product. Seventy percent of manufacturing revenues (referred to as advanced delivery technologies) are covered by long-term contracts ranging from 3 to 10 years. Some of Catalent's manufacturing engagements have been running for more than 20 years. Thus, we perceive the 77% of revenues and 82% of EBITDA that come from dose manufacturing to be essentially locked in, making Catalent perhaps the lowest variability name on our coverage list.

Regulatory Scrutiny Driving More Outsourcing

The FDA's increased vigilance of GMP compliance in the past decade has made manufacturing harder to do in-house, particularly for smaller sponsors with more limited product portfolios, and particularly for injectables because of contamination risk. The increased regulatory burden and increased risk from a failure to comply (including a plant shutdown in extreme cases) are driving more manufacturing to be outsourced, just as we have seen across many other areas in the biopharmaceutical industry. For outsourcing partners with excellent safety records, we believe this regulatory burden will be a key driver of new contract wins in the coming years. We believe that about 30% of dose manufacturing is outsourced today; we expect the percentage to trend steadily higher over the next several years.

⁽B) Scenario 2 is our base case and assumes 5.85% revenue growth and 87 basis points of margin leverage for 2014-2016

⁽C) Scenario 3 assumes a 8.0% increase in revenue and 120 basis points of operating margin leverage for 2014-2016

Large, Fragmented Market

Catalent is the largest global player in what we estimate is a \$20 billion outsourced market today across finished dose manufacturing and development services. We believe this market is growing in the midsingle digits, driven by moderate annual increases in drug utilization (1%-2%), pricing (1%-2%), and outsourcing penetration (1%-2%). If we include the work done in-house, we believe that Catalent's addressable market is about \$45 billion. With 10% market share today and roughly 50% of the market still in the hands of niche and undercapitalized players, we believe that Catalent has abundant opportunities to extend its leadership through acquisition. We calculate that the company could access as much as \$540 million in debt plus \$160 million in annual free cash flow to fund potential deals in 2015, before bumping up against any debt covenants.

Strong Competitive Position

We believe that Catalent is well positioned to capture a growing share of the market given its specialty technology focus, global footprint, and clean regulatory record. It is estimated that the portion of the pharmaceutical industry's pipeline that requires some form of advanced delivery will rise from about 50% today to more than 60% over time, which should play to Catalent's strengths. While we believe that there are more than 200 companies that compete for dose manufacturing work for the 4,000 or so products currently in the biopharmaceutical pipeline, only about 20% have multinational capabilities and multiple dose offerings such as Catalent (Catalent offers a dozen different dosing platforms).

Moving Upstream

In 2012, Catalent doubled its exposure to the CMC (chemistry, manufacturing, and controls) and development solutions market with the acquisition of the clinical trial supply business of Aptuit. Catalent now offers services to optimize drug formulation and production, analytical testing, clinical trial quantities of drugs and comparators, and regulatory consulting. Drug companies spend an estimated 14% of their R&D budgets on CMC, or about \$15 billion overall, of which \$6 billion is outsourced. This strategy to move upstream in the R&D process enables the company to build relationships with sponsors about two years before they select a commercial manufacturer. This approach of following the molecule appears to be working well, with the number of new product introductions jumping from 59 in fiscal 2012 to 97 in 2013 and 175 in 2014. The commercial manufacturing backlog (as of June 30) includes another 480 products, and the development services backlog increased by 37% in the past year.

Investment Risks

Safety Concerns

The most significant risk to Catalent, in our view, would be a quality-assurance problem with the FDA or another regulator. The consequences of an error in the manufacturing process are substantial, as a tainted batch of product can generate significant constraints for the sponsor. It can take several days or even several months to identify and correct a contamination problem, potentially harming the manufacturer's reputation with other clients in the process. While a safety stumble is perhaps the largest potential risk for Catalent, we also view it as a low-probability event considering the company's excellent record for quality and compliance.

Increasing Competition

The marketplace for outsourced manufacturing services is rather fragmented, with a few hundred small, niche players making up roughly half the market. We believe that these niche players have expertise in a particular discipline or local geography. In some cases, tax incentives from local governments could allow niche players to undercut global players on price, or could swing the math in the eyes of a sponsor back to keeping production in-house. In addition, there are a number of

larger players competing for business and long-term relationships. We view the recently created DPx (the combination of DSM and Patheon) and Aenova as the two most credible threats as the market consolidates.

Mix Shift Could Limit Margin Leverage

Catalent's most profitable business, softgels, is also its slowest-growth business at present. As a result, the company will have to contend with a negative mix shift for the next two years and perhaps longer. Catalent dominates the softgel category, producing 90% of prescription drugs approved using this delivery technology over the past 25 years. Softgels account for about 46% of revenues and carry margins that are roughly 400 basis points above the consolidated average, but are trailing the company's overall revenue growth by about 1-3 percentage points. As the lower-margin businesses, such as sterile injectables and development solutions, gain a larger portion of the total revenue of the company, we calculate an annual EBITDA margin headwind of about 40-60 basis points. We believe that management should be able to offset this pressure primarily through margin improvement in the medication delivery (sterile injectables) unit, which should be able to gain as much as 500 basis points of margin improvement in the next few years through improved capacity utilization. The company's pipeline of 480 compounds suggests that softgels and other similar formats (like hot melt extrusion) should eventually experience a rebound in revenue growth once these compounds reach the market. So we do not expect this mix shift to be a chronic problem for Catalent. Overall, we forecast adjusted EBITDA margin to improve from 23.7% in fiscal 2014 to 26.1% by fiscal 2020.

Biologics Positioning

Biologics are underrepresented in Catalent's revenue stream today, accounting for only 10% of the company's total. Given that specialty biologics are expected to represent a growing percentage of the overall biopharmaceutical industry's pipeline and end-market sales, we believe that Catalent will need to invest further to fully participate in this shift.

Private-Equity Ownership Overhang

Following the IPO, Catalent's private-equity sponsors retain a 58% ownership stake in the company. While neither Blackstone (52% owner) nor Genstar Capital (6% owner) sold any stock on the IPO—a bullish sign, in our view—we expect both to at least begin to liquidate their positions over the next one to two years.

Exhibit 9 Catalent, Inc. Ownership Statistics

	Ownership Prior to Offering	Ownership Following Offering*
Blackstone	86%	52%
Genstar Capital	9%	6%
Directors & Executives as Group (14 persons)	3%	2%
Total	98%	60%

^{*} Assumes underwriters' option is exercised in full

Source: Company reports

Industry Overview

Catalent serves the advanced delivery portion of the dose manufacturing market as well as the portion of R&D that is directed at chemistry, manufacturing, and controls (CMC). CMC service providers assist with formulation and manufacturing process development, analytical and stability testing, and production of clinical trial quantities of new drug candidates. Contract manufacturers typically focus on the production of active pharmaceutical ingredients (APIs) or a product's finished dose. Across the spectrum of manufacturing services, we believe outsourcing penetration today is about 30%. We anticipate that this will increase to roughly 50%, following a similar adoption curve to that of CROs over the past decade.

As pharmaceuticals have become more complex to manufacture, production methods and formulations that were optimal for simple compounds have proved less effective. Given the relatively straightforward production process for simple orally dosed compounds, there are a number of players with the capability to produce tablets. Yet relatively few companies have the capabilities to provide outsourced services for more complex compounds requiring advanced delivery mechanisms or formulations to be properly absorbed by the human body. We believe that the market for CMO services in aggregate is poised to expand 5% or more over the next five to seven years. Furthermore, we expect the market for products that require more advanced delivery—Catalent's target market—to expand slightly faster at 7%-8%, thanks to a shifting industry pipeline. Below we discuss our assumptions for both the development services market (Catalent's development solutions segment) and the commercial dose manufacturing market (the company's oral technologies and medication delivery solutions segments) in more detail.

Development Solutions Market

In an attempt to quantify the opportunity for Catalent's development solutions business, we look at three factors: 1) current spending and growth trajectory of sponsor R&D spending; 2) the component of that spending focused on the optimization of the compound's formulation and manufacturing process, stability and analytical testing of the compound, and the manufacturing of the compound for clinical trial use; and 3) the percentage of this spending that is outsourced.

We believe that new product investment at biopharmaceutical companies is beginning to pick up after contracting in response to the recession and a 2012 peak in generic erosion. This rebound should eventually lead to improved sales growth for the industry over the next several years and, assuming that R&D spending remains relatively constant as a percentage of sales, we believe this should lead to a return to growth for aggregate R&D spending as well. We estimate that global R&D spending is roughly \$107 billion, with annual growth trending in line with industry sales in the low-single-digit range. According to our data, global R&D spending typically accounts for 15.3% of sales, fluctuating from 14% to 17% over the past 10 years. We model that percentage to remain consistent at 14% of sales in the future.

Catalent's services are most applicable to the CMC portion of R&D, which we understand represents 14% of global R&D spending, or \$14.9 billion. This market includes formulation and manufacturing process optimization, stability and analytical testing, and clinical trial drug supplies and logistics. Of the total addressable market, industry data suggest that roughly 40% of CMC work is outsourced, resulting in a market of \$6.1 billion. We expect penetration to increase moderately over time. In our view, this represents an attractive opportunity for Catalent, given the strategic benefit of engaging clients earlier in a product's life cycle. Catalent's development and analytical services business accounts for \$412 million of revenue, or 2.8% of the total addressable market and about 7% of the currently outsourced market, by our estimates.

We believe it is reasonable to assume that CMC penetration rates could max out near 60%, which is similar to peak penetration expectations for the clinical component of the CRO market and below expectations for preclinical outsourcing. As summarized in exhibit 10, if penetration reaches 44% by 2020, and global pharma sales increase 4.0% compounded annually, the CMC market should expand at a 5.5% compound annual rate.

As mentioned above, we believe that the growing focus on more-complex diseases could also lead to a higher percentage of molecules—perhaps as much as 60%-90% of the pipeline, compared with 50% today—that require some sort of advanced delivery mechanism. Given the increasing complexity of compounds, we believe that this portion of the market, which is where Catalent focuses, could expand slightly faster than the broader market.

Exhibit 10
Catalent, Inc.
CMC Market Model

	2013	2014	2015	2016	2017	2018	2019	2020
Global R&D spending	\$103,168	\$106,779	\$111,050	\$115,492		. ,	\$129,913	\$135,110
% growth		3.5%	4.0%	4.0%	4.0%	4.0%	4.0%	4.0%
Developmt., clinical trial supplies, and logistic spending	\$14,444	\$14,949	\$15,547	\$16,169	\$16,816	\$17,488	\$18,188	\$18,915
% of global R&D spending	14.0%	14.0%	14.0%	14.0%	14.0%	14.0%	14.0%	14.0%
% growth		3.5%	4.0%	4.0%	4.0%	4.0%	4.0%	4.0%
CMC market	\$5,777	\$6,069	\$6,405	\$6,759	\$7,130	\$7,520	\$7,930	\$8,361
% penetration rate	40.0%	40.6%	41.2%	41.8%	42.4%	43.0%	43.6%	44.2%
% growth		5.1%	5.5%	5.5%	5.5%	5.5%	5.5%	5.4%

Sources: Company reports, FactSet, and William Blair & Company, L.L.C. estimates

Exhibit 11 Catalent, Inc. 10-year CMC CAGR

rate			<u>10-</u>	year pharm	na sales CA	<u>GR</u>	
=	_	2.00%	2.75%	3.50%	4.25%	5.00%	5.75%
etration	40%	2.0%	2.8%	3.5%	4.3%	5.0%	5.8%
ətra	44%	3.0%	3.7%	4.5%	5.2%	6.0%	6.8%
bene	48%	3.9%	4.6%	5.4%	6.2%	6.9%	7.7%
	52%	4.7%	5.5%	6.3%	7.0%	7.8%	8.6%
2024	56%	5.5%	6.3%	7.0%	7.8%	8.6%	9.4%

Sources: Company reports and William Blair & Company, L.L.C. estimates

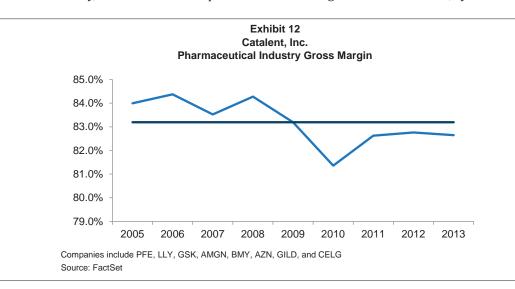
Commercial Dose Manufacturing Market

We believe that the market for dose manufacturing is best estimated as a percentage of biopharma industry cost of goods sold. Further, we expect market growth will be driven by: 1) drug consumption on a unit basis, 2) inflation (CPI rather than branded drug inflation), and 3) the percentage of production that is outsourced.

Based on IMS data, global spending on medicines totaled roughly \$965 billion in 2012, with an expectation that it will reach \$1.2 trillion by 2017 (a CAGR of 4%). We estimate total unit growth will accelerate from 1% last year to 3.5% by the end of the decade. We also believe that inflation will contribute about 1.6% annually over that same seven-year period. We note that contract manufacturers do not reap the benefits of the much higher level of branded drug inflation; rather, price increases are tied to broader metrics such as the CPI.

We estimate that dose manufacturing costs account for about 5% of total industry sales (translating to roughly one-third of a branded sponsor's cost of goods sold). When applying this total to IMS sales figures for the pharma industry, we arrive at a total addressable market for dose manufacturing near

\$50 billion. Catalent's strategy is to focus on the portion of the market that requires specialized dosing, rather than simple, immediate oral delivery, where price competition for new contracts can be most intense. We believe that about half of the industry's marketed products currently require specialized dosing, but more than 60% of the pipeline under development is estimated to require some form of advanced delivery. According to data published in the *American Pharmaceutical Review* earlier this year, it is estimated that as much as 90% of the industry's new drugs in development have poor solubility and thus will require advanced delivery tools to achieve commercial success (see exhibit 13). Assuming the company's focus remains on the advanced delivery subset, this reduces the addressable market to close to \$30 billion in 2014. Based on our market model (exhibit 14), we estimate the present outsourcing penetration rate to be 28% of the aggregate \$50 billion market, translating to a \$14 billion market opportunity. We envision that penetration rate rising gradually to nearly 34% by 2020. This increase in penetration, coupled with an estimate that 70% of compounds by that time will require advanced delivery, should lead to a compound annual market growth rate of 5%-6%, by our estimates.



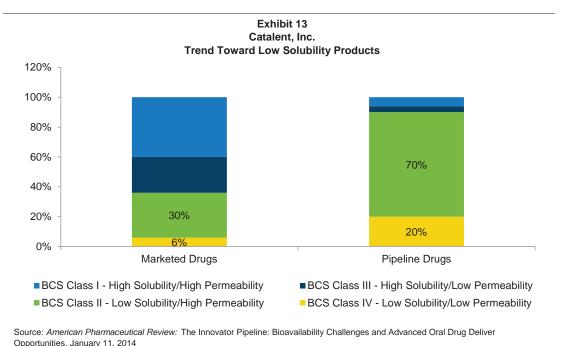


Exhibit 14
Catalent, Inc.
CMO Market Model

	2012	2013	<u>2014</u>	2015	2016	2017	2018	2019	2020
Total global spending on medicines	\$965,000	\$979,475	\$1,008,859	\$1,049,214	\$1,093,805	\$1,151,777	\$1,215,125	\$1,281,956	\$1,352,464
% growth		1.5%	3.0%	4.0%	4.3%	5.3%	5.5%	5.5%	5.5%
% inflation		0.5%	1.0%	1.0%	1.3%	1.6%	2.0%	2.0%	2.0%
% unit growth		1.0%	2.0%	3.0%	3.0%	3.7%	3.5%	3.5%	3.5%
Total addressable manufacturing market	\$48,250	\$48,974	\$49,953	\$50,952	\$52,099	\$53,453	\$55,057	\$56,709	\$58,410
% dose inflation		1.5%	2.0%	2.0%	2.3%	2.6%	3.0%	3.0%	3.0%
Requiring advanced delivery	\$26,538	\$27,793	\$29,223	\$30,699	\$32,301	\$34,076	\$36,062	\$38,137	\$40,303
% spend requiring ADT	55.0%	56.8%	58.5%	60.3%	62.0%	63.8%	65.5%	67.3%	69.0%
% growth		4.7%	5.1%	5.1%	5.2%	5.5%	5.8%	5.8%	5.7%
Not requiring advanced delivery	\$21,713	\$21,181	\$20,731	\$20,254	\$19,798	\$19,377	\$18,995	\$18,572	\$18,107
% not requiring ADT	45.0%	43.3%	41.5%	39.8%	38.0%	36.3%	34.5%	32.8%	31.0%
% growth		-2.4%	-2.1%	-2.3%	-2.3%	-2.1%	-2.0%	-2.2%	-2.5%
Outsourced manufacturing market	\$13,028	\$13,468	\$13,987	\$14,649	\$15,395	\$16,223	\$17,260	\$18,345	\$19,480
Penetration rate	27.0%	27.5%	28.0%	28.8%	29.6%	30.4%	31.4%	32.4%	33.4%
% growth		3.4%	3.9%	4.7%	5.1%	5.4%	6.4%	6.3%	6.2%
Compressed tablet market	\$5,211	\$5,065	\$4,954	\$4,938	\$4,956	\$5,001	\$5,197	\$5,377	\$5,539
% of outsourced manufacturing market	40.0%	37.6%	35.4%	33.7%	32.2%	30.8%	30.1%	29.3%	28.4%
% outsourced	24.0%	23.9%	23.9%	24.4%	25.0%	25.8%	27.4%	29.0%	30.6%
% growth		-2.8%	-2.2%	-0.3%	0.4%	0.9%	3.9%	3.5%	3.0%
ADT market	\$7,817	\$8,403	\$9,033	\$9,710	\$10,439	\$11,222	\$12,063	\$12,968	\$13,941
% of outsourced market	60.0%	62.4%	64.6%	66.3%	67.8%	69.2%	69.9%	70.7%	71.6%
% outsourced	29.5%	30.2%	30.9%	31.6%	32.3%	32.9%	33.5%	34.0%	34.6%
% growth		7.5%	7.5%	7.5%	7.5%	7.5%	7.5%	7.5%	7.5%
Outsourced softgel market	\$1,000	\$1,025	\$1,053	\$1,074	\$1,095	\$1,117	\$1,139	\$1,162	\$1,185
% growth		2.5%	2.7%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%
% of ADT	12.8%	12.2%	11.7%	11.1%	10.5%	10.0%	9.4%	9.0%	8.5%

Sources: Company reports and William Blair & Company, L.L.C. estimates

Unlike other areas of the pharmaceutical supply chain, we do not believe that generic conversions have a significant impact on dose manufacturing market size. This is because we believe the dollars spent on manufacturing are roughly equivalent for both branded and generic manufacturers, producing a cost of goods sold of roughly 15% for branded pharma and 75% for generics. Therefore, the impact of a generic event on a CMO is driven by any potential net changes in unit volume for the product in aggregate, rather than the typical compression in end-market pricing for the drug. Revenues for a contract manufacturer can remain relatively stable if the manufacturer is able to partner with the generic sponsors making the product. Exhibit 15 shows a hypothetical example of a brand-to-generic conversion, with sponsor gross margins declining, but unit pricing for dose manufacturing remaining stable. For this example to be valid, the branded dose manufacturer needs to secure production contracts from the bulk of generic producers as well. In reality, we believe that Catalent's overall portfolio typically suffers a unit loss of 1%-2% annually from declining market share of older products through therapeutic substitution.

Exhibit 15 Catalent, Inc. Branded Vs. Generic

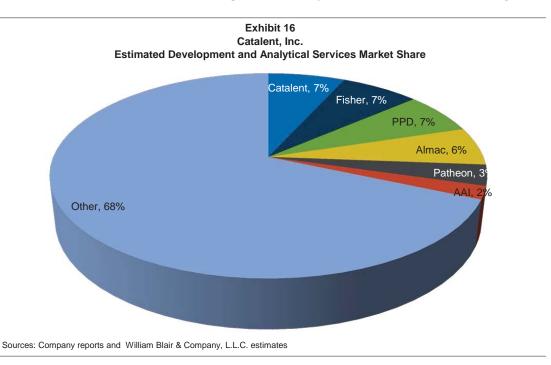
	Branded	Generic
Revenue per Rx	\$120.0	\$24.0
COGS	\$18.0	\$18.0
Gross margin	\$102.0	\$6.0
% gross margin	85%	25%
Dose formulation sales	\$6.00	\$6.00
% of sales	5%	25%
% of COGS	33%	33%

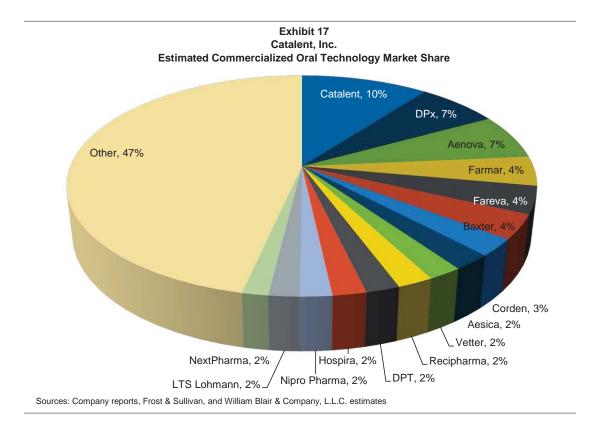
Source: William Blair & Company, L.L.C. estimates

Overall, we believe that the market dynamics for dose manufacturing and CMC development services are attractive, offering a sustainable growth opportunity of 5%-6% or better. Relationships tend to last for a relatively long time, with unit growth mirroring the life cycle of any given product. As unit volumes and outsourcing penetration rates increase overall, we believe this market can grow from a total outsourced opportunity of \$20 billion today (development and dose manufacturing) to nearly \$28 billion by 2020, a CAGR of 5.6%.

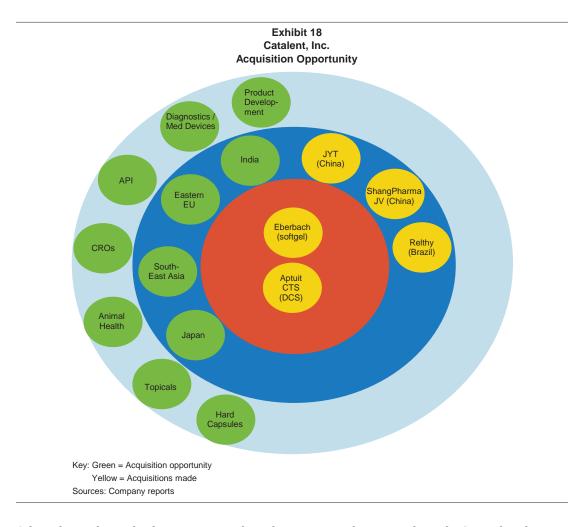
Competition

We believe that the competitive landscape for contract dose manufacturing is quite fragmented, with a few hundred small, niche players making up roughly half the market. In both dose manufacturing and CMC, we believe the top five players control roughly 30% of the market. Although many of the smaller CMOs have expertise in a particular dosage form or local geography, similar to the dynamics in the CRO market, we believe larger players with geographic diversification and a wide breadth of dosage capabilities are likely to win a disproportionate share of the market, particularly as the industry's pipeline shifts toward products requiring more-complex formulations to address poor solubility. In other areas of outsourcing, sponsors have consolidated spending with a more limited number of full-service vendors, and we expect a similar dynamic in contract manufacturing.





In response to this opportunity, there has been a pickup in consolidation in the market over the past several years. Catalent has completed five transactions in the past three years, expanding into emerging markets like Latin America and Asia and adding scale in CMC. As noted, we believe that management will increase its focus on M&A activity following the IPO's completion. We believe the company could borrow as much as \$540 million of debt, and access another \$160 million of free cash flow over the next 12 months, before bumping into any covenant restrictions. Management has highlighted further geographic expansion as a priority (Japan, India, Southeast Asia, and Eastern Europe). In addition, the company has noted adjacent markets that might make sense to consider, such as CROs, API production, animal health production (it has a small animal health business ramping up in Europe already), topical production, and hard-capsule production. We also believe that the company will look to further invest in services targeted at biologics, given the tilt in the industry's pipeline toward biotech. Exhibit 18 summarizes management's acquisition priorities.



Other players have also been active, such as the recent combination of Royal DSM and Patheon to create DPx, the second-largest player in the market. Patheon had previously purchased Banner Pharmacaps in December 2012 and has since acquired Gallus BioPharmaceuticals. Aenova, the third-largest player in the market by our estimates, has made two large acquisitions in the past three years, Temmler in 2012 and Haupt at the end of 2013. The creation of competitors with broad capabilities creates a credible threat to Catalent, albeit with a more limited geographic footprint. Exhibits 19 and 20, on the following pages, list the notable transactions dating to 2008.

Exhibit 19 Catalent, Inc. Select Acquisitions and Joint Ventures in Contract Manufacturing Market

nounced	Target	Business Description	Acquirer
Aug-14	Gallus Biopharmaceuticals	CMO that supplies clinical and commercial bulk biologics to the biopharmaceutical industry	DPx Holdings B.V.
Aug-14	Corvette Pharmaceutical Services	Provides lyophilisation, API, and finished dose form development and manufacturing services	Recipharm AB
Jul-14	Penn Pharmaceutical	Provides pharmaceutical drug development, clinical trial supply, and manufacturing services	Packaging Coordinators, In
Jul-14	InnoPharma, LLC	Develops niche generic and specialty pharmaceutical/bio-pharmaceutical products	Pfizer Inc.
Jun-14	OSO BioPharmaceuticals Manufacturing	Contract manufacturer of injectable pharmaceutical products	Albany Molecular
Mar-14	Cedarburg Pharmaceuticals	Contract developer and manufacturer of technically complex APIs	Albany Molecular
Mar-14	Patheon, Inc.	Combines Patheon's expertise in commercial manufacturing, proprietary products business, and pharmaceutical development services and biologics with DSM's API and chemicals business	Royal DSM
Jan-14	JHP Pharmaceuticals	Acquires, develops, manufactures, and sells sterile injectable products	Par Pharmaceuticals
Oct-13	Relthy Laboratórios	Provides soft gelatin capsules, commercialized products, and packing services	Catalent
Oct-13	Cambridge Chemical Company	Provides pest control services emphasizing termite treatments and repair of structural damage	Albemarle Corporation
Oct-13	Cambridge Major Laboratories, Inc.	Provides chemistry outsourcing services for pharmaceutical and biotechnology industries	AAIPharma Services Corp
Oct-13	Laureate Biopharmaceutical Services	Specializes in the development of protein drug products produced from mammalian cell culture Provides sterile manufacturing and production of special active	Gallus BioPharmaceuticals
Oct-13	Haupt Pharma	ingredients, such as hormones, antibiotics, and cytostatics. Expands geographic footprint from 8 to 21 sites including facilities in Europe and Japan	The Aenova Group
Sep-13	Bend Research Inc.	Develops pharmaceutical technologies and formulations	Capsugel, Inc.
Jul-13	Santa Cruz Nutritionals, Inc.	Provides confection-based nutritional delivery systems for functional food and nutraceutical markets	RoundTable Healthcare Management
Mar-13	Althea Technologies	Engages in cGMP manufacturing, aseptic filling, and protein delivery technology	Ajinomoto Co., Inc.
Mar-13	Zhejiang Jiang Yuan Tang Biotechnology Co., Ltd.	Manufactures nutritional softgel products for Chinese and Asia- Pacific markets	Catalent
Mar-13	Joint Venture with ShangPharma	JV will be called Catalent Clinical Trial Supplies Co., Ltd. and will provide clinical trial supplies, comparator sourcing, primary and secondary packaging and labeling, and storage and distribution services	Catalent
Feb-13	Strides Arcolab (Agila Specialties)	Manufactures pharmaceutical products offering oral presentation forms and therapeutic categories	Mylan Inc.
Feb-13	Rosemont Pharmaceuticals Limited	Develops, manufactures, and supplies liquid medicines for patients with swallowing difficulties	Perrigo Co.
Jan-13	Pronova BioPharma ASA	Research, development, and manufacture of marine-originated omega-3 derived pharmaceutical products	BASF AS
Jan-13	BioVectra Inc.	Supplier of APIs, intermediates, and bioprocessing reagents	Questcor Pharmaceuticals

Exhibit 20 Catalent, Inc. Select Acquisitions and Joint Ventures in Contract Manufacturing Market - 2008 to 2012

Announced	Target	Business Description	Acquirer
Dec-12	Temmler Group	Provider of dosage forms such as salves, gels, and drops as well as clinical trial materials manufacturing, distribution logistics, and licensing	The Aenova Group
Dec-12	JHP Pharmaceuticals	Acquires, develops, manufactures, and sells sterile injectable products	Warburg Pincus
Dec-12	Cambridge Major Laboratories, Inc.	Provides chemistry outsourcing services to the pharmaceutical and biotechnology industries	American Capital, Ltd.
Oct-12	Banner Pharmacaps, Inc.	Operates as a gelatin-based drug delivery and specialty pharmaceutical company	Patheon, Inc.
Aug-12	Orchid Chemicals	Sale of APIs and finished dosage forms or formulations in India	Hospira
May-12	Alliance Medical Products, Inc.	Provides contract manufacturing and laboratory services to healthcare industries	Siegfried Holding AG
Mar-12	Euticals S.p.a.	Supplier of APIs and intermediates for generic drugs and genericables	Private Equity Partners; Clessidra
Mar-12	R.P. Scherer Eberbach	Catalent purchased the 49% of the asset it did not already own from Gelita	Catalent
Jan-12	BioReliance Corporation	Provides contract biologics safety testing, manufacturing, and clinical testing services	Sigma-Aldrich
Nov-12	UNIÓN QUÍMICO FARMACÉUTICA, SA	Manufactures active pharmaceutical ingredients and intermediates for the pharmaceutical industry	Vivimed Labs Limited
Aug-11	Aptuit CTS	Provides development soltions and clinical manufacturing expertise and capacity.	Catalent
Aug-11	International Specialty Products, Inc.	Develops and manufactures specialty chemicals and functional ingredients	Ashland Inc.
May-11	Baxter (generic injectables business)	Manufactures DEA controlled substances	West-Ward Pharmaceutical
Apr-11	Laboratório Teuto Brasileiro S/A	Provides contract manufacturing services for the production of liquids and injectables	Pfizer
Feb-11	NextPharma Technologies	Provides contract manufacturing and distribution services for healthcare industries	Sun European Partners
Jan-11	Paddock Laboratories, LLC.	Engages in the manufacture, distribution, and marketing of bioequivalent generic pharmaceuticals	Perrigo Co.
Oct-10	JSC Grindeks	Engages in the development and manufacture of generics and pharmaceutical ingredients	SIA AB.LV Private Equity
Jun-10	AMRI Burlington, Inc.	Engages in manufacturing and sterile filling parenteral drugs	Albany Molecular Research
Jun-10	Hyaluron, Inc.	Develops aseptic filler of syringes, vials, and custom containers and liquid parenterals	Albany Molecular
Apr-10	Siegfried Holding AG	Develops and produces APIs and generics	Sigamed AG; BIH SA; SE
Feb-10	Cobra Biomanufacturing	Operates as a contract manufacturer of biopharmaceuticals	Recipharm AB
Dec-09	Pharmaforce, Inc.	Develops, manufactures, and markets sterile pharmaceutical drug products	Daiichi Sankyo Company
Aug-09	Patheon, Inc. (26.21%)	Provides manufacturing and pharma development services to the pharma industry	JLL Partners
Mar-09	Matrix Laboratories	Engages in the R&D, manufacture, and sale of APIs	Mylan, Inc.
Jul-08	Sharp Corp.	Provides packaging, design, and engineering services to Rx, OTC, and personal care markets	United Drug plc
Jul-08	Zaklady Farmaceutyczne	Manufactures and markets pharmaceutical products	Gedeon Richter Plc.
May-08	Draxis Health Inc.	Provides products in the areas of sterile/non-sterile products and radiopharmaceuticals	Jubilant Organosys Ltd.
Apr-08	Khandelwal Lab, 2 Brands	Manufactures and sells bulk drugs and formulations	Piramal Healthcare
Feb-08	CMC	Provides development and manufacturing services to the global biopharmaceutical industry	Monitor Clipper Partners
Jan-08	AppTec Lab Services	Provides GLP/GMP compliant discovery, testing, and contract manufacturing services	WuXi PharmaTech
Sources: William	Blair & Company, L.L.C. estimates and cor		

We believe that Catalent is the industry's largest player, with about 10% share in the commercial dose manufacturing market and 7% share in development services. Following a number of recent acquisitions, we estimate that DPx and Aenova both hold roughly 7% share of the commercial market. Roughly 50% of spending is in the hands of smaller players that appear to be good acquisition candidates for the industry leaders, in our view. The development solutions market is even more fragmented, with 70% held by small, niche players. Exhibit 21 lists the top 30 dose manufacturer competitors by size, dose capabilities, and geographic presence.

Exhibit 21 Catalent, Inc. **Competitor Comparison**

Revenue Range		Solid/ Semisolid/			Commercial
(\$ million)	Company	Liquid	Injectable	Specialty	Manufacturing Location
\$500+	Aenova w/Tremmler & Haupt	x		Softgel	NA, EU
	Baxter		х		NA, EU
	Catalent	X	Х	Softgel, Blow-Fill-Seal	NA, EU, SA, AUS, Japan
	DPx	Х	Х	Softgel	NA, EU
	Famar	X	Х	_	EU
	Fareva	Х	х		NA, EU
\$250-499	Corden	X	х		EU
	DPT	X			NA
	Hospira		Х		NA, EU, AUS
	LTS Lohmann			Transdermal, Oral Films	NA, EU
	Nipro Pharma	X	х		Japan
	Recipharm	X	Х		EU
	Vetter		Х		EU
\$100-249	Abbvie	X			NA, EU, SA, Asia, Japan
	Aesica	X	X		EU
	Boehringer-Ingelheim	X	Х		NA, EU, SA, Asia
	Bushu	X			Japan
	CenexI	X	X		EU
	CMIC	X			NA, Japan
	Delpharm	X	X		EU
	Fertin Pharma	X			EU
	Jubilant HollisterStler	X	X		NA
	Kemwell	X	X		EU, India
	Klocke	X			EU
	Nextpharma	X			EU
	Rottendorf	X			EU
	Sanofi	Х			EU
	Synerlab	X			EU
	Takeda	X	Χ		NA, EU, SA
	Unither			Blow-fill-seal	EU

Sources: PharmSource dose CMO model and William Blair & Company, L.L.C. estimates

Company Overview

We believe that Catalent is the largest and most specialized player in the dose manufacturing market, with an opportunity to extend that position through its differentiated quality record, geographic presence, and breadth of services. We also believe that the company is primed to consolidate share through acquisition now that the IPO has partly deleveraged the balance sheet. Below we briefly discuss the company's various capabilities, financial characteristics, and growth outlook for each segment (also summarized in exhibit 22).

Exhibit 22 Catalent, Inc. Company Overview

	<u>Oral Tecl</u>	<u>ınologies</u>	Medication Delivery <u>Solutions</u>	Development and Clinical <u>Services</u>
	<u>Softgel</u>	Modified Release		
Percent of Revenue (FY 2013)	46%	20%	12%	22%
Margin (recent)	27	7%	20%	20%
Estimated Growth Rate	Midsing	le Digits	Midsingle Digits	High Single Digits
Percent Outsourced	25%-30%	15%-20%	15%-20%	40%-45%
Catalent Market Share	Poorly soluble prescrip 20%-25% Consumer softgels - 30%-40%	Less than 5%	Blow/fill/seal - 15%-20% Prefilled syringe - 5%	Development and analytical services - 5% Clinical supply solutions - 15%
Description	Use of RP Scherer technology to encase active pharmaceutical ingredient into animal- or vegetable-based gelatin to improve absorption, solubility, and bioavailability	OptiMelt - uses hot melt extrusion, an alternative production method, to achieve similar result OptiDose - controlled release tablets	delivery precision GPEx - devleopment of high-	Clinical scale manufacturing, bioavailability enhancement, dose/formulation selection, cell line engineering
		Zydis - Fast dissolving tablets	yielding cell lines to produce biologic compounds	
Competitors	Patheon/DPx Aenova Other	Pharma in-house Patheon/DPx Haupt Rottendorf	Prefilled syringe: Vetter Baxter Patheon Blow/fill/seal: Unither Holopak Rite-Dose Pharma in-house	PPD AAI Almac Thermofisher Patheon/DPx

Sources: Company reports and William Blair & Company, L.L.C. estimates

The company was founded on technology for manufacturing softgel capsules developed by RP Scherer in the 1930s. RP Scherer was a publicly traded company from 1991 until 1998, when it was the first acquisition in Cardinal Health's Pharmaceutical Technologies and Services (PTS) business unit. Cardinal added a number of other assets that expanded its capabilities in other areas of advanced delivery technologies, including those related to packaging, injectable formulations, and biologics. In 2007, Cardinal began dismantling a number of businesses that did not fit into its distribution strategy, the first of which was PTS, which was sold to The Blackstone Group and became the cornerstone of what today is Catalent, Inc.

With no other competitor offering a comparable degree of global scale, quality, and expertise, we believe that Catalent is the clear leader in manufacturing services. The company has more than 1,000 customers, including at least 80% of the top branded pharmaceutical, generic, biotech, and consumer health product manufacturers, and has relationships with a number of customers lasting

as long as 25 years. Today, the company's revenue approaches \$1.9 billion, with \$1.2 billion (65%) derived from the core oral technologies segment (softgel and modified-release formulations), 13% from medication delivery solutions (injectable solutions, blow/fill/seal technology, and biologics), and the remaining 23% from development solutions (clinical trial supply and development and analytical services). The oral technologies segment is the most profitable at a 27% EBITDA margin, while medication delivery and development solutions both generate roughly 20%.

Oral Technologies

Oral technologies is the company's largest segment, accounting for 65% of revenue and 75% of adjusted EBITDA in fiscal 2014. This segment can be separated into two subsegments: softgel technology and modified release technology. We believe that this segment is a key differentiator for the company, given its dominance and lengthy record in softgels. Catalent has produced 90% of new chemical entities approved with a softgel dose over the last 25 years. The company's strategy has been, and continues to be, to focus on products that require something other than simple immediate release of the active ingredient. This has historically accounted for about half of the market because of factors such as the form of the active ingredient (liquid or oil), the potency of the active ingredient (cytotoxic compounds, hormones), or poor solubility of the active ingredient (the body does not absorb the active ingredient efficiently). This specialty focus has helped keep competitive pricing pressures in check and allowed oral technologies to generate an EBITDA margin of 27%, the highest across the company. Below we discuss each subsegment in greater detail.

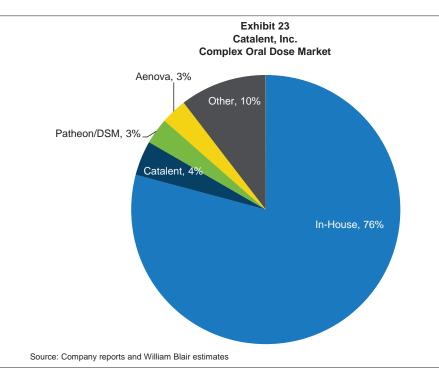
• Softgel technology. This subsegment of the oral technologies division makes up 46% of total revenue and is the cornerstone of Catalent's differentiation in the marketplace. Softgel technology can be defined as the encapsulation in a gelatin-based shell of a liquefied API. It is used to improve the bioavailability (and solubility) of the API, as well as improve the safety profile for high-potency drugs. Softgels are also used to extend the life cycle of products, given their perceived ease of use by consumers (easier to swallow). The process by which a shell is formed, filled, and sealed (called rotary die encapsulation) was developed and patented by RP Scherer in 1934.

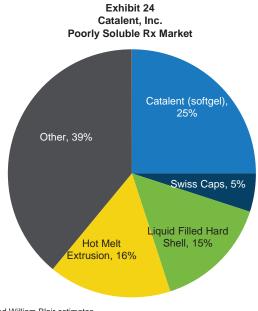
The company has developed additional technologies, including OptiGel and OptiShell technology, which has a higher melting point and therefore allows for a semi-solid API, expanding the range of potential molecules for which this process is appropriate. We believe that Catalent has ramped up internal investment in softgels in recent years, which could allow for improved revenue growth over the longer term.

We believe that Catalent has significant share in the softgel segment, in excess of 80% for pharmaceutical products and about 33% for consumer products. But given a large number of poorly soluble drugs coming to market and the lack of internal softgel capacity even at large pharma companies, we believe that Catalent is well positioned to maintain share in this segment over the next several years. Although growth will likely be relatively modest in the next few years (low single digits), the relatively high profitability of this segment (approaching a 30% EBITDA margin) and potential for a revenue rebound make it a key part of the long-term growth story. We believe DPx (through its Banner acquisition) and Aenova are the key competitors to watch in softgels.

• *Modified release*. Roughly 20% of total revenue derives from modified-release technologies, which included immediate absorption, extended, delayed, pulsed, or sustained-release oral formulations. These various absorption profiles help optimize therapeutic effects and improve adherence because of increased convenience. We believe that the company has differentiated technology in this area as well, particularly Zydis fast-dissolve technology, which allows for nearly instant oral dispersion of the API (as fast as three seconds, or 10 times faster than competing products). Much of the work with complex oral dosages that require some sort of modified release is done in-house at pharma today, allowing for a significant opportunity for growth as outsourcing in this area increases.

Today, we believe that Catalent has less than 5% market share in modified release (excluding softgels), although it has increased its presence in alternative technologies such as hot melt extrusion (an attractive alternative to softgels in the eyes of many clients). Based on Catalent estimates, softgel technology is used in 25%-30% of the poorly soluble pharmaceutical market, 10%-15% use liquid-filled hard shells, 15%-20% use hot melt extrusion, and 35%-40% use other technologies (see exhibit 23 and 24). Over time, we expect Catalent to become indifferent to which dosage form a client opts to use to optimize the performance of a given drug. The strategy will be to offer the broadest suite of dosing alternatives, making Catalent the partner of choice for manufacturing process development, analytical support, clinical trial scale production, and commercial production.





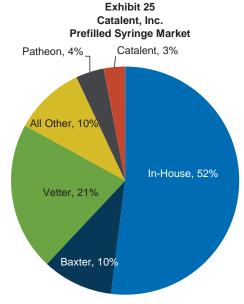
Source: Company reports and William Blair estimates

We expect modified release to increase in the mid- to high-single digits with expanding margins as new capacity at the Winchester, Kentucky, facility is filled. We believe this segment can grow in the 3%-4% range over the long term and generate modest margin expansion from 27.5% in fiscal 2014 to 28.4% by fiscal 2020.

Medication Delivery Solutions

The medication delivery solutions segment accounts for 13% of revenue and 11% of adjusted EBITDA in fiscal 2014. It can be separated into three subsegments: blow/fill/seal technologies, injectables, and biologics. Given the increasing importance of biologics in the pharmaceutical pipeline, we believe this segment should be an important growth driver for the company. Still, we believe that biologics make up only 10% of revenue today and is still in investment mode, with most activity at the company's facility in Madison, Wisconsin. We forecast long-term growth of 4%-5% and annual margin leverage of about 70-100 basis points beginning in fiscal 2015 for the segment, as excess capacity in the sterile fill and blow/fill/seal subsegment improves from 20% today to 23.5% by fiscal 2020. We believe the medication delivery solutions segment will be the primary source of margin leverage over the next three to five years and our longer-term EBITDA target could be understated by 100-200 basis points.

- Blow/fill/seal. This capability provides sterile manufacturing and container-filling solutions for complex products with liquid API. In this process, known as ADVASEPT Technology, a plastic container is molded, filled with the product, and sealed in as fast as 12 seconds, which helps maintain an aseptic and sterile procedure that reduces particulate contamination by more than 95% compared with standard filling. This capability can be used for biologic injectable products and is also popular for ophthalmics. We view the blow/fill/seal, located in the Woodstock, Illinois, facility, as a small but differentiated capability for Catalent. We believe that there are three or four other players of size in this segment, including Unither, Holopak, and Rite-Dose.
- Prefilled syringes. This business fills syringes with injectable drugs, a relatively commoditized
 process, in our view. Catalent has well-developed capabilities that offer some differentiation
 with regard to speed, formulation, and integrated fill/finish services, but we believe this is a
 relatively low-priority area of the market. We believe that Catalent is a relatively small player
 in this segment, and we would be surprised by significant acquisition activity here.



Source: Company reports and William Blair estimates

• **Biologics.** This subsegment makes up 10% of total revenue and is primarily based in the newly renovated Madison, Wisconsin, facility. The key areas of differentiation are the GPEx cell line technology and the SMARTag antibody-drug conjugate (ADC) technology. GPEx is a high-speed generator of mammalian cell lines for use in monoclonal antibody and protein production that claims to offer faster turnaround (3-12 months) and greater efficiency than other expression technologies. Catalent acquired GPEx in 2003, and to date it has been used to produce over 460 monoclonal antibodies and 50 recombinant proteins for more than 75 sponsors.

Catalent acquired an exclusive license to the SMARTag technology in 2013, along with a minority ownership stake in Redwood Bioscience, the developer of the technology. Catalent can in turn offer sub-licenses to the SMARTag technology to customers, and is working with Redwood to co-market and support the offering to optimize monoclonal antibodies in oncology by improving the precision of the cytotoxic agent. Specifically, the ADC links a monoclonal antibody to a toxic chemical, which is then released only when the antibody binds to a cancer cell. Creating an effective conjugate with a balanced drug-to-antibody ratio can be difficult, and this is one of the problems that SMARTag technology helps solve. We believe this is a fast-growing area of the drug development market and that Catalent could generate upside to our revenue growth targets if it can gain traction with these two technologies.

Given the surging spending on specialty biologics in the broader pharmaceutical market, we expect Catalent to look for ways to further invest and gain scale in this category. We expect M&A efforts to therefore be focused on this segment.

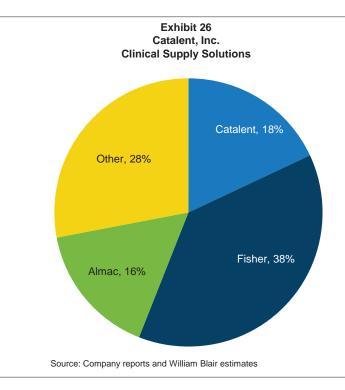
Development and Clinical Services

The development and clinical services segment accounts for 23% of revenue and 14% of adjusted EBITDA in fiscal 2014. This segment can be separated into two subsegments: development and analytical services and clinical supply services. Catalent significantly increased its footprint in this segment through the acquisition of certain Aptuit assets in 2012 and more recently through the expansion of inhalation capabilities and capacity in North Carolina.

We like the strategy behind the expansion of the development services business. It opens up a large market in its own right, which we peg at \$6 billion today. But more importantly, it allows the company to interact with clients further upstream by two to three years compared with when a decision would typically be made by a sponsor about commercial manufacturing. We believe this "follow the molecule" strategy should allow for improved cross-selling of the commercial business over the next several years. The 37% growth in the backlog for this segment in the past year, along with the improved commercial manufacturing pipeline (480 products at June 30), is an encouraging sign that this strategy is resonating with clients. We believe that this will be the fastest-growing segment for the company, in the high-single digits. Following the fiscal 2015 expansion of inhalation capabilities in North Carolina (160 basis point headwind), we forecast 7% longer-term revenue growth and 40 basis points of annual margin leverage, increasing EBITDA margin to 21.7% by fiscal 2020.

• **Development and analytical services.** Similar to what it offers in the commercial business, Catalent offers services that help optimize the formulation, manufacturing process, stability, and dose form selection of compounds while they are still in the very early stages of development. Similar to discovery services offered by other CROs, these capabilities are aimed at not only optimizing the drug, but also shortening the time to market. The company has a broad range of services for both small and large molecules that help streamline this process, with particular expertise in inhalation. We believe this is a fragmented market with ample room for share gains from small competitors. Outside of Catalent, we believe the key players in this space include PPD, Patheon/DPx, AAI, and Almac (exhibit 16).

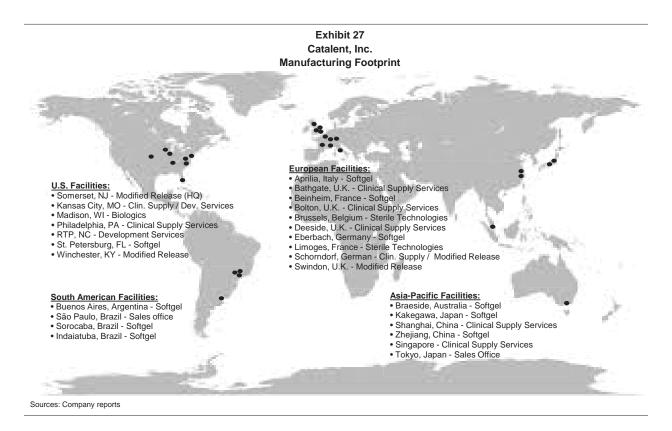
• Clinical supply solutions. This business manufactures drug supply for use in clinical trials. Compared with commercial quantities, the volume is quite low, but familiarity with the product at this stage increases the likelihood that Catalent's services will be retained for commercial production if the drug is approved. With supply manufacturing sites in the United States, Europe, and Asia, we believe Catalent is among the most geographically diversified participants in the market. We believe the key competitors are Fisher and Almac, who combined make up roughly 50% of the clinical supply market.



In summary, we believe that Catalent has an impressive set of capabilities and expertise across a broad array of complex dose manufacturing and geographies, helping set it apart from the peer group. Creating a market-leading offering in both development and commercial manufacturing offers a compelling value proposition for clients and an important foot in the door for Catalent as it can build a relationship early in the development phase.

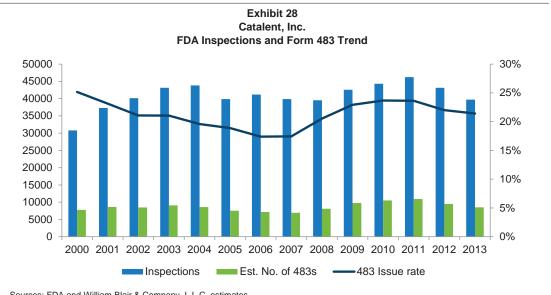
Other Differentiators

While we believe that no competitor offers as broad a set of capabilities and expertise in such specialties as softgel manufacturing and blow/fill/seal, there are two other key differentiators that set Catalent apart: 1) geographic reach and 2) a record of quality. First, we believe that Catalent has the broadest footprint, with 27 facilities on 5 continents (see exhibit 27). Although based in the United States, the company has an impressively balanced presence in the United States and Europe, and an expanding footprint in rapidly growing markets in Asia and South America. Although consolidation has created some large competitors with diverse footprints as well, we believe that Catalent's reach leads the industry. This is particularly attractive in the manufacturing space since it simplifies logistics and creates a valuable presence in local markets.

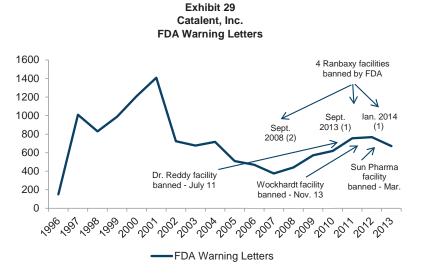


Second, and perhaps more importantly, we believe that Catalent's safety record since the new management team has taken over is impressive and a potential differentiator. Loss of trust in a product's safety standards can take a long time to rebuild, even after only a single issue. Over the past 10 to 15 years, regulatory requirements for the pharmaceutical manufacturing process have arguably become among the strictest of any product manufacturing industry. In the early 2000s, the U.S. FDA introduced a new set of current Good Manufacturing Practice (cGMP) rules, which have been refined numerous times since. In addition, regulators inspect facilities with increasing frequency and they more recently turned their attention to foreign facilities following a number of significant violations in recent years.

As shown in exhibits 28 and 29, on the following page, after surging in 2001, the number of warning letters issued by the FDA troughed in 2007 and began increasing again through 2012. In addition, although the number of inspections and form 483s (observations during inspection, not necessarily violations) has remained fairly consistent over time, the number of inspections of foreign facilities has increased significantly following a number of violations by foreign manufacturers, especially in India. We understand that the FDA is reducing inspections of U.S. facilities by 40% in 2014 (591 expected, down from 967), but increasing foreign inspections by 30% (843 expected, up from 604). We believe that increased scrutiny on foreign facilities should bode well for larger players, particularly Catalent, whose facilities have a consistent look and layout around the globe. Since management assumed control in 2009, the company has not received any warning letters from the FDA, and the company estimates it has received 60% fewer regulatory observations than its peers.



Sources: FDA and William Blair & Company, L.L.C. estimates



Sources: FDA and William Blair & Company, L.L.C. estimates

Management Overview

In our view, Catalent has a strong management team that is relatively new to the company but has brought significant healthcare experience and fostered a culture of quality and reinvigorated innovation since taking control in 2007. Several members of the senior management team have previous experience with GE, including President and CEO John Chiminski, Senior Vice President of Global Operations Steve Leonard, Senior Vice President of Global Quality and Regulatory Affairs Sharon Johnson, and Senior Vice President of Global Marketing and Sales William Downie. We believe that this group brings a high level of operational discipline and focus on quality and consistency throughout the manufacturing process, which has led to a very good safety record and significantly improved margins.

In addition to this operational discipline and focus on execution, we believe that the remainder of the management group, as well as the next level of managers with whom we interacted throughout the IPO process, bring significant experience in their respective areas of expertise. In the softgel

business, which accounts for nearly 50% of Catalent's revenue base, Dr. Aris Gennadios was named president roughly one year ago, but has held a number of positions of increasing responsibility in the softgel group since joining the firm in 2002. Barry Littlejohns and Scott Houlton, presidents of advanced delivery solutions and development and clinical services, respectively, both have significant industry experience. Mr. Littlejohns spent time as senior vice president of operations and business development at a Europe-based biotechnology company. Mr. Houlton was COO of competitor Aptuit and vice president of Quintiles's clinical trial supply business before that.

We believe that this mix of industry-specific expertise and excellent operational focus brought from the GE culture creates a differentiated management team that can execute as well as or better than any in the industry on the numerous organic and inorganic growth opportunities available.

Exhibit 30 Catalent, Inc. Management Biographies	
•	
Name Title Experience Mr. Chiminski was appointed president and CEO of Catalent in March 2009. Befo	nre-
John Chiminski President and Chief Executive Officer President and CEO of GE Medical Diagnostics. From 2007 to 2009, Mr. Chiminski was president and CEO of GE Medical Diagnostics. From 2005 to 2007, he serve as vice president and general manager of GE Healthcare's global magnetic resonance business.	
Mr. Walsh was appointed CFO of Catalent in April 2008. Before joining Catalent, Mr. Walsh served as CFO of Escala Group, Inc., a global collectibles network and Executive Vice President, precious metals trader. From 1996 to 2006, Mr. Walsh worked at GenTek, Inc., holding positions of increasing responsibilities in corporate development, accounting, and finance, before being named vice president and CFO.	b
Mr. Houlton was appointed group president of development and clinical services i August 2009. Previously, Mr. Houlton served as COO of Aptuit, Inc. Before Aptuit Mr. Houlton held a variety of leadership roles in other companies, including vice president of clinical supplies at Quintiles Transnational Corporation.	
Mr. Littlejohns was named president of advanced delivery technologies in July 2013. Previously, Mr. Littlejohns led Catalent's medication delivery solutions business from July 2011 to July 2013. Before joining Catalent, Mr. Littlejohns was senior vice president of operations and business development at Genmab, a Danish biotechnology company.	3
Dr. Aris Gennadios President, Softgel Technologies Dr. Gennadios was named president of softgel technologies in September 2013. He previously served as vice president and general manager of softgel technologies. Mr. Gennadios joined Catalent's predecessor company, Cardinal Health, in 2002 and has held several key leadership posts in the softgel technologies business.	
Mr. Leonard was appointed senior vice president of global operations in June 200 Previously, Mr. Leonard was general manager of global operations for GE Healthcare's medical diagnostics business, responsible for more than 10 sites in Europe, Asia, and the Americas.	
Sharon Johnson has served as senior vice president, global quality and regulator affairs since August 2009. Previously, Ms. Johnson was most recently vice Sharon Johnson Global Quality and Regulatory Affairs Regulatory Affairs Sharon Johnson has served as senior vice president, global quality and regulatory affairs affairs since August 2009. Previously, Ms. Johnson was most recently vice president, global quality and regulatory affairs affairs since August 2009. Previously, Ms. Johnson was most recently vice president, global quality and regulatory affairs affairs since August 2009. Previously, Ms. Johnson was most recently vice president, global quality and regulatory affairs affairs since August 2009. Previously, Ms. Johnson was most recently vice president, global quality and regulatory affairs affairs since August 2009. Previously, Ms. Johnson was most recently vice president of quality and regulatory affairs since August 2009. Previously, Ms. Johnson was most recently vice president of quality and president of quality for GE Healthcare, medical diagnostics. Before GE, she was quality director for Baxter Healthcare's European operations for four years.	у
William Downie has served as senior vice president, global sales and marketing since June 2010. Before joining Catalent, Mr. Downie served as vice president an global leader of molecular imaging at GE Healthcare. Before GE Healthcare, Mr. Downie worked for Innovex UK Limited, where he held several positions in operations and sales/marketing.	nd
Sources: Company reports	

Growth Outlook and Key Modeling Assumptions

We believe that Catalent can generate midsingle-digit organic revenue growth over the next several years as a result of steady utilization and pricing improvements, increased penetration of services with existing clients, and increased outsourcing. In addition, we believe that management can supplement organic growth with acquisitions given the highly fragmented market in which it participates. We do not include acquisitions in our model, but we believe that 100 to 200 basis points of top-line growth can be acquired annually, given the company's strong free cash flow. Through a combination of margin leverage and accretive capital deployment, we believe this midsingle-digit organic revenue growth can be leveraged to generate 10%-12% EPS growth over the longer term. Given that we do not include acquisitions in our model, we assume 40% of free cash flow is used to buy back stock each year, rather than accruing on the balance sheet. This adds 1%-2% to annual EPS growth. Exhibit 1, on page 4, breaks down our earnings growth assumptions. Below we discuss in more detail the drivers of this double-digit earnings growth.

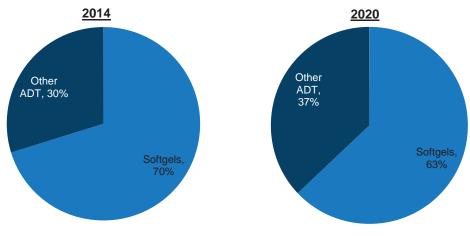
Revenue

Over the next six years, we estimate the global contract dose manufacturing market will grow between 5% and 6%. Given Catalent's scale and expertise, we believe it can gain market share organically and through industry consolidation. Also, given Catalent's focus on more-complex products, we believe the increasing product pipeline requiring the use of advanced delivery systems should provide a tailwind, since that market segment is expected to grow in the high-single digits.

Management has articulated a medium-term goal to generate revenue growth near 5%. While we acknowledge that Catalent's significant market share in the softgel business could be a headwind to growth in the next few years (we expect this business to grow in the low-single digits), we believe there are several potential drivers of revenue upside. As shown in exhibit 31, softgels accounts for roughly 70% of segment revenue, with the remaining 30% coming from faster-growing advanced delivery dosage forms. On a consolidated basis, we estimate oral technology revenue growth of 4% compounded over the next six years, with softgels growing 2% and other ADT offerings growing slightly faster than the market at 8% (exhibit 32). While the softgel market looks to be growing in the low-single digits, industry participants believe a disproportionate number of poorly soluble drugs will enter the market in three to five years. Following the Cardinal Health divestiture, Catalent has steadily increased softgel research, allowing it to enhance existing capabilities and expand into new markets. Historically softgels have proved to be the optimal delivery mechanism for poorly soluble APIs, which should position Catalent favorably once the pipeline matures. While we do not model softgel revenue acceleration following 2016, we believe upside is possible.

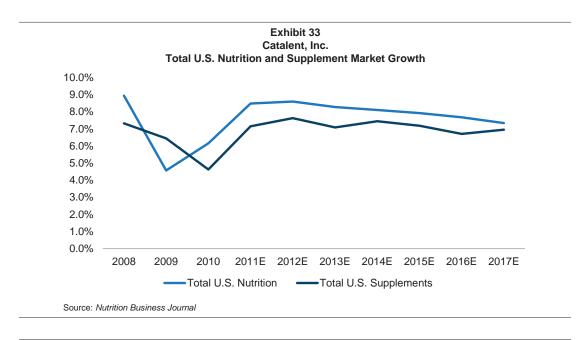
Catalent also participates in the vitamin, supplement, and mineral (VSM) consumer market, which has demonstrated consistent high-single-digit growth dating back to 2001. As detailed in exhibits 33 and 34, on page 32, consumer OTC and VSM generate roughly 23% of total company revenues and are expected to grow in the 7% range through 2017.

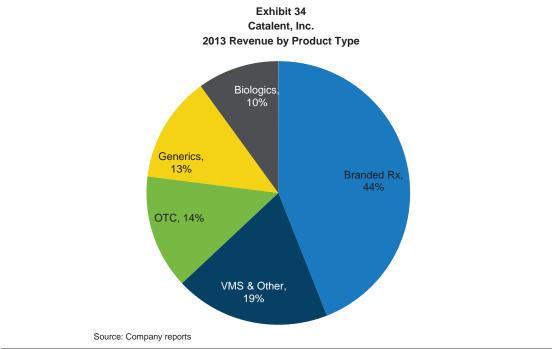




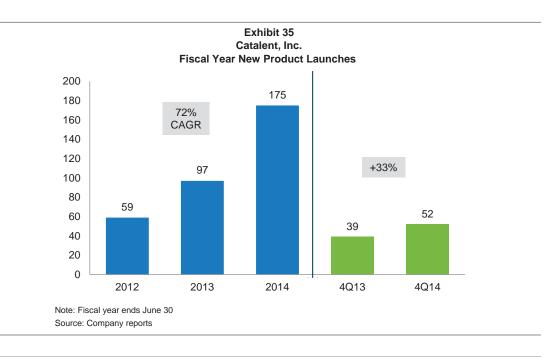
Sources: Company reports and William Blair & Company, L.L.C. estimates

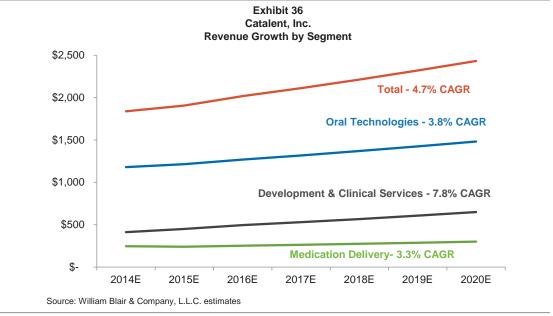
Exhibit 32 Catalent, Inc. **Oral Technology Revenue Growth** \$1,600 \$1,400 **Total Oral Tech - 4% CAGR** \$1,200 \$1,000 \$800 Softgels - 2% CAGR \$600 \$400 Other ADT - 8% CAGR \$200 \$-2014E 2015E 2016E 2017E 2018E 2019E 2020E Sources: Company reports and William Blair & Company, L.L.C. estimates





The pipeline of products Catalent has signed in the last few years has shown impressive growth. In fiscal 2014, the company expanded revenue backlog for the development and clinical services segment by 37%, to \$374 million (as of June 30). Similarly, in the ADT business, new product introductions have climbed from 59 in fiscal 2012 to 97 in 2013 and 175 in 2014, with another 480 products under contract (but still being tested by clients). New business improvements will not show up in revenue growth immediately, but they improve our conviction that management's 5% medium-term revenue growth goal is reasonable.





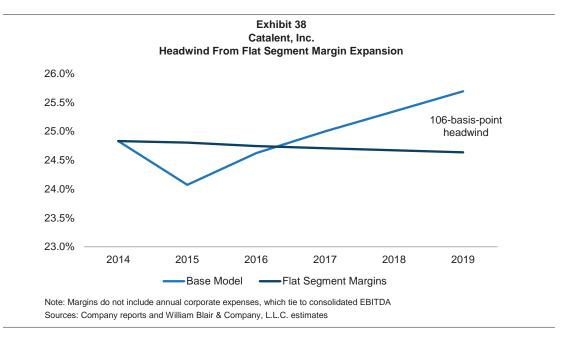
Margin Trend

Since 2009, Catalent has implemented a number of efficiency initiatives that have expanded the adjusted EBITDA margin by more than 400 basis points, to 23.7% for fiscal 2014. In our view, much of the low-hanging fruit has been picked through the divestiture of unprofitable businesses, procurement activity improvements, and Lean Six Sigma initiatives. We believe further margin improvements will be driven by increased utilization of manufacturing capacity, disciplined spending, and a more value-based approach to pricing. As capacity fills, management has indicated there is as much as 300 basis points of additional leverage in the model, particularly in the sterile injectables business (the medication delivery solutions segment).

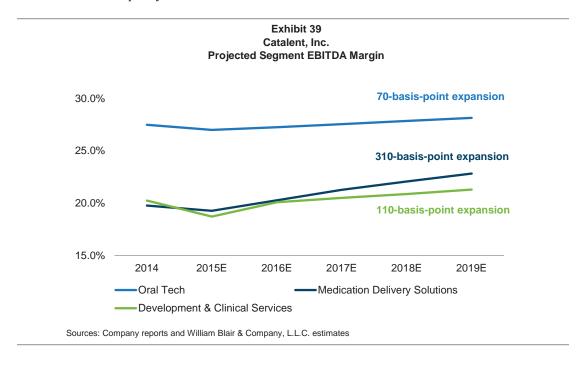
More specifically, for a manufacturing business like Catalent, we believe the drop-through rate of incremental revenue to adjusted EBITDA is relatively high. In exhibit 37, we provide a range of 2019 EBITDA margins, using five-year revenue growth rates and drop-through rates. Over the next five years, our base model assumes annual revenue growth of 4.8% and a 33.5% drop-through rate, which translates to a 2019 EBITDA margin of 25.7%. Because of Catalent's diversified client base and long-term revenue visibility, we believe annual revenue growth of 4% to 6% is highly likely and could even prove too low. At a 35% drop-through rate, each 100 basis points of revenue outperformance is worth 40 basis points to operating margin, by our math. If the drop-through rate is 40%, each 100 basis points of revenue results in 60 basis points of margin expansion. As shown in exhibit 37, assuming a drop-through rate of 40% and 5% revenue growth, we believe that the margin can expand 350 basis points by fiscal 2019, to 27.2%.

	2	Exhibit Catalent 019 EBITD	, Inc.		
Through		Five-Year	Revenue C	CAGR	
on	3.00%	4.00%	5.00%	6.00%	7.00%
	23.2%	23.0%	22.9%	22.7%	22.6%
© 25.0% © 30.0%	23.9%	23.9%	24.0%	24.0%	24.1%
	24.5%	24.8%	25.0%	25.3%	25.5%
9 35.0%	25.2%	25.7%	26.1%	26.5%	26.9%
ই 40.0%	25.9%	26.6%	27.2%	27.8%	28.4%
97 35.0% 97 40.0% 98 45.0%	26.6%	27.5%	28.3%	29.1%	29.8%
× 50.0%	27.3%	28.4%	29.4%	30.3%	31.2%

Although capacity filling will be a key lever for margin expansion, the long-term growth of development and clinical services and medication delivery solutions will be a negative mix driver for consolidated EBITDA margins, given their lower profile. In exhibit 38, we calculate the potential headwind to consolidated EBITDA margins if each segment's margin profile remained at fiscal 2014 levels, while maintaining each unit's revenue trajectory through fiscal 2019. If this low-probability event plays out, a potential headwind of 106 basis points would result over the five-year window.

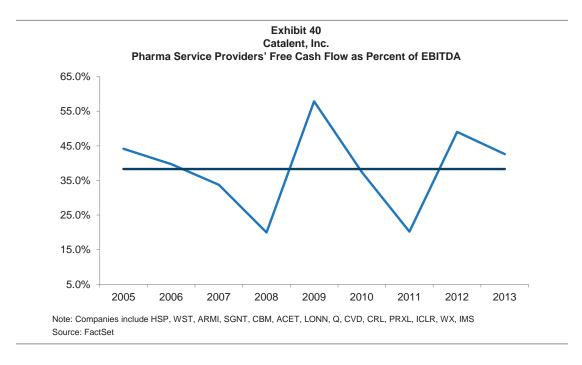


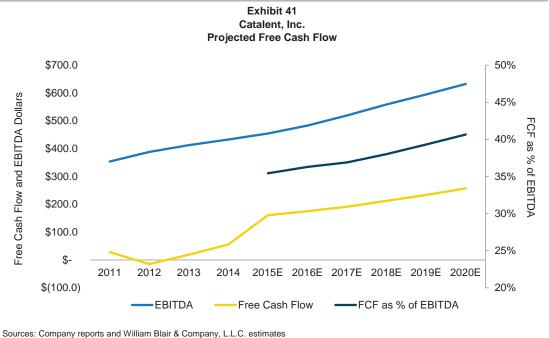
Because of oral technology's industry-leading position in softgels, we believe this is Catalent's most efficient and profitable business unit. Thus, we do no anticipate that this business can generate meaningful margin leverage. As shown in exhibit 39, we estimate oral technology segment margins will increase 70 basis from fiscal 2014 to 2019, with medication and delivery services and development and clinical solutions increasing 310 and 110 basis points, respectively. Management recently said that medication and delivery services has the longest runway for margin expansion because of its level of idle capacity.



Cash Flow

Catalent has generated varying levels of operating cash flow since 2009, as it has freed working capital, shed noncore businesses, and executed a number of debt refinancings. With the majority of operational changes behind it, we believe that Catalent is in a position to generate more consistent free cash flow to support growth via acquisitions. As a proxy, we looked at similar pharma service providers' free cash flow as a percentage of EBITDA. Exhibit 40, on the following page, shows that over the last eight years, the group's weighted average free cash flow ranged from 20% to 58% of EBITDA. We believe that Catalent will trend in the low-40% range, as free cash flow slightly outpaces EBITDA growth (exhibit 41). Catalent has a net-debt-to-EBITDA ratio of 4.09 times, and management has stated that it plans to naturally deleverage the capital structure through EBITDA growth rather than prepaying debt.





With the expectation that annual capital expenditures stay constant at 6% of sales, we believe Catalent is capable of generating sufficient free cash flow to fund a significant number of acquisitions. Specifically, we calculate that the company could access up to \$540 million in capital combined with \$160 million in fiscal 2015 free cash flow, without violating debt covenants. On a pro forma basis, Catalent is required to keep its leverage ratio below 4.5 times EBITDA. Assuming a target price of 10 times EBITDA, this could add as much as \$70 million in incremental EBITDA—a boost of 15%. We have not assumed any M&A in our model and would expect management to focus on smaller, tuck-in deals; therefore, we view M&A to be a notable source of potential upside.

Exhibit 42 Catalent, Inc. Fiscal 2015 Pro Forma Debt-to-EBITDA Ratio

Target EV/EBITDA multiple

			raiget L v	/LDITE/ III	aitipic			
		6.0x	8.0x	10.0x	12.0x	14.0x		
	\$0	3.57	3.57	3.57	3.57	3.57	0%	
_	\$10	3.62	3.66	3.71	3.75	3.79	2%	
DA	\$20	3.67	3.75	3.84	3.92	4.01	4%	%
EBITI	\$30	3.72	3.84	3.97	4.09	4.21	7%	шД
Ш	\$40	3.76	3.93	4.09	4.25	4.41	9%	crease BITDA
eţ	\$50	3.81	4.01	4.20	4.40	4.60	11%	Ŋ.
Target	\$60	3.85	4.08	4.32	4.55	4.78	13%	Рe
Ë	\$70	3.89	4.16	4.43	4.69	4.96	15%	ō
	\$80	3.93	4.23	4.53	4.83	5.13	18%	

Note: Purchase price utilizes free cash flow (\$161m) prior to debt financing

Note: Current debt covenants require pro-forma debt-to-EBITDA ratio be 4.5x or lower

Source: William Blair & Company, L.L.C. estimates

Although it seems clear that management is not focused on paying down debt, should the acquisition environment or management's strategy change, we believe Catalent could drive EPS growth through deleveraging. Interest expense accounts for an EPS drag of \$0.54 in our model (based on a 30% tax rate). Exhibit 43 demonstrates that if Catalent uses 40% of annual free cash flow to reduce debt from 2016 to 2018, it could increase EPS by \$0.02 in 2016, \$0.03 in 2017, and \$0.06 in 2018, with a resulting debt-to-EBITDA ratio of 3.6) times by the end of fiscal 2018, by our calculations.

Exhibit 43
Catalent, Inc.
Potential EPS Benefit From Reduced Interest Expense

*
Е
₹
0
Se
\supset
. 0

	2016	2017	2018	Debt-to-EBITDA
20%	\$0.01	\$0.02	\$0.03	3.4x
40%	\$0.02	\$0.03	\$0.06	3.1x
60%	\$0.02	\$0.05	\$0.08	2.9x
		-		

Sources: Company reports and William Blair & Company, L.L.C estimates

Share repurchase. Using the same free cash flow modeling projections, we estimate a share-repurchase program could add 1.1% to 3.2% to EPS growth annually. If we assume a 10% annualized return to share price and interest on cash approaching 1% in fiscal 2020, management can increase EPS 2.0% on average if it repurchases stock with 40% of annual free cash flow beginning in fiscal 2017. Because our model does not explicitly account for acquisition growth, we believe that this is an accurate way to simulate EPS growth from redeployment of the business model's free cash generation. Our base model assumes 40% of free cash flow is allocated to share repurchases.

Exhibit 44
Catalent, Inc.
Annual Percent EPS Benefit From Share Repurchase

4 _		2017	2018	2019	2020
о ъ L	20%	1.05%	1.02%	1.00%	0.97%
Use	40%	2.12%	2.07%	2.01%	1.96%
% _	60%	3.21%	3.14%	3.06%	2.97%

Sources: Company reports and William Blair & Company, L.L.C estimates

Sensitivity of Key Assumptions

Operating margin. Despite some of the negative mix drivers noted previously, we believe that Catalent can improve its EBITDA margin, on average, by 40 basis points per year until 2020. Based on our fiscal 2015 estimate, every 15 basis points of operating leverage results is a \$0.02 swing to EPS annually.

Revenue. We project constant-currency organic revenue growth of 3.8% in fiscal 2015. Every 100 basis points in 2015 revenue growth is equivalent to roughly \$18.3 million in sales. Assuming our margin assumptions remain unchanged, every 100-basis-point change in revenue growth yields a change of \$0.02 to EPS annually.

We project a compound annual growth rate in organic revenue of 4.8% from fiscal 2014 to 2019 and annual operating margin leverage of 41 basis points. In exhibit 45, we provide a range of normalized 2019 EPS estimates, using an effective 30% tax rate, annual revenue growth between 3.25% and 6.25%, and operating leverage of 10 to 80 basis points annually. We believe the most likely range of outcomes is from a minimum of 3.75% annual revenue growth and 30 basis points of annual margin leverage and a maximum of 5.75% annual revenue growth and 50 basis points of annual margin leverage. This results in a potential EPS range of \$1.77 to \$2.15, or a five-year CAGR of 9.2%-13.5%. Our model results in normalized 2019 EPS of \$1.97, an 11.6% CAGR.

Exhibit 45 Catalent, Inc. 2019 EPS Range Based on Revenue CAGR and Operating Leverage Variations Five-Year Revenue CAGR 3.25% 3.75% 5.25% 4.25% 4.75% 5.75% 6.25% Annual EBITDA Margin Change 0.10% \$1.59 \$1.64 \$1.70 \$1.75 \$1.80 \$1.86 \$1.92 0.20% \$1.65 \$1.71 \$1.76 \$1.82 \$1.87 \$1.93 \$1.99 0.30% \$1.72 \$1.77 \$1.83 \$1.89 \$1.95 \$2.00 \$2.06 0.40% \$1.78 \$1.84 \$1.96 \$2.08 \$1.90 \$2.02 \$2.14 0.50% \$1.85 \$1.91 \$1.96 \$2.03 \$2.09 \$2.15 \$2.21 0.60% \$1.91 \$1.97 \$2.03 \$2.09 \$2.16 \$2.22 \$2.29 \$1.98 \$2.04 \$2.16 \$2.23 \$2.36 0.70% \$2.10 \$2.29 0.80% \$2.04 \$2.10 \$2.17 \$2.23 \$2.30 \$2.37 \$2.44 Sources: Company reports and William Blair & Company, L.L.C. estimates

Valuation and Conclusion

Shares of Catalent are up 18% since the IPO price of \$20.50 in early August. Over the same period, the S&P 500 is up 4%. We believe that the stock's improved performance of late is due to investor rotation within healthcare stocks toward lower-risk, defensive names and a narrowing of the valuation discount relative to its peer group.

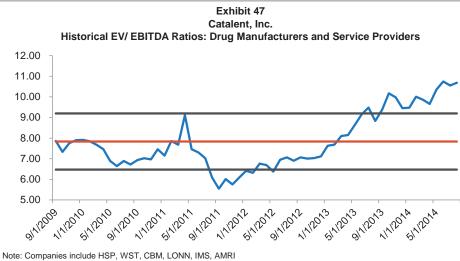
We assess Catalent's valuation using enterprise-value-to-forward-EBITDA and forward earnings multiples. We believe that investors will gravitate toward a comparable EV/EBITDA multiple given a leveraged capital structure and possible confusion about varying tax rate assumptions as the company uses previous net operating losses for the next few years. We believe the most appropriate comparable companies are outsourcing and service providers to the pharmaceutical industry with similar growth and risk profiles. Exhibit 46 shows the peer group we are using to value Catalent, including IMS Health, West Pharmaceuticals, Perrigo, Quintiles, and Covance.

Catalent trades at 10.6 times our calendar 2015 EBITDA estimate, which compares with 11.2 times for the comparable manufacturer and service providers and 10.6 times for the public CROs. On a P/E basis, we suggest investors compare Catalent to its peers using a normalized longer-term tax rate of 30%, rather than the 14%-15% expected for the coming year, and an estimate that is fully burdened by amortization. The tax rate adjustment reduced adjusted EPS by about 34 cents in calendar 2015, and the inclusion of amortization reduces adjusted EPS by another 28 cents. On this apples-to-apples basis, Catalent trades at 19.2 times fully taxed projected calendar 2015 EPS (when applying a normalized tax rate of 30% and considering amortization expense), compared with 19.4 times for the manufacturer and service providers and 18.6 times for the CROs (19.1 excluding WuXi).

Exhibit 46 Catalent, Inc. Comparison Table

Company	Ticker	Net Debt /	Fwd 2015 P/E	Fwd 2015 EV/EBITDA	Fwd 3-Yr Revenue CAGR	Return on Invested Capital	Cal. 2015 Free Cash Flow Yield
Hospira, Inc.	HSP	1.19	22.2x	12.2x	5.8%	8.5%	2.7%
West Pharmaceutical Services	WST	0.40	21.4x	10.6x	6.5%	10.2%	4.1%
Cambrex Corporation	CBM	0.60	16.5x	8.1x	13.2%	11.4%	6.6%
Aceto Corporation	ACET	-	18.8x	11.8x	8.5%	9.2%	4.1%
Albany Molecular Research, Inc.	AMRI	-	20.1x	9.7x	16.9%	7.9%	3.6%
Perrigo Company	PRGO	1.66	18.6x	15.1x	9.3%	7.7%	4.9%
Lonza Group	LONN	2.68	17.3x	10.3x	4.4%	6.8%	6.4%
IMS Health Holdings, Inc.	IMS	3.74	20.0x	11.7x	5.7%	6.6%	6.9%
Manufacturer and Service Providers		1.71	19.4x	11.2x	8.8%	8.5%	4.9%
Quintiles Transnational Holdings Inc.	Q	1.84	19.5x	11.3x	8.9%	24.3%	5.8%
Covance Inc.	CVD	-	19.3x	9.3x	7.0%	12.0%	6.3%
PAREXEL International Corporation	PRXL	0.19	21.2x	10.4x	11.6%	14.9%	5.0%
ICON plc	ICLR	-	18.1x	10.8x	11.1%	18.1%	5.1%
Charles River Laboratories International, Inc.	CRL	2.12	17.2x	11.0x	7.2%	11.9%	8.0%
WuXi PharmaTech Inc.	WX	-	16.4x	10.8x	14.6%	16.2%	3.1%
CRO Avg.		1.38	18.6x	10.6x	10.1%	16.3%	5.6%
Catalent, Inc.	CTLT	4.09	19.2x	10.6x	6.0%	10.8%	6.3%

Exhibits 47 and 48 show the trends in forward EV/EBITDA ratios for the comparable groups dating to September 2009. Historically, the manufacturers and service providers have collectively traded between 6.9 and 9.2 times forward EBITDA, with an average EBITDA multiple of roughly 7.8 times. The CRO group has traded between 7.6 and 10.3 times forward EBITDA, with an average multiple of roughly 8.9 times. As shown in exhibit 46, we believe that Catalent is trading at a slight discount on an EV/EBITDA basis because of slightly lower EPS growth rate in the low-double digits compared with midteens for the group. As mentioned previously, we believe there could be upside to the growth story, particularly on the revenue side through increased outsourcing penetration and tuck-in acquisitions.



Note: Companies include HSP, WST, CBM, LONN, IMS, AMRI Source: FactSet

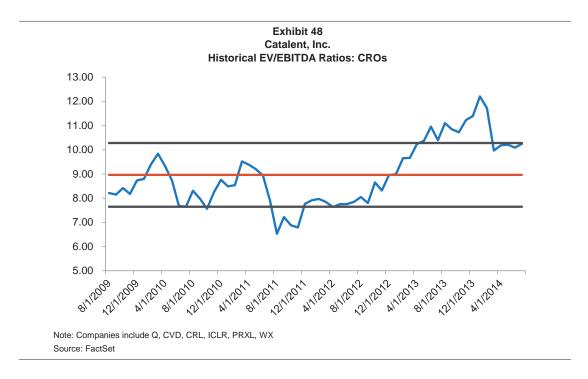
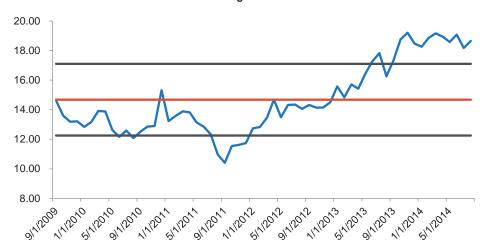
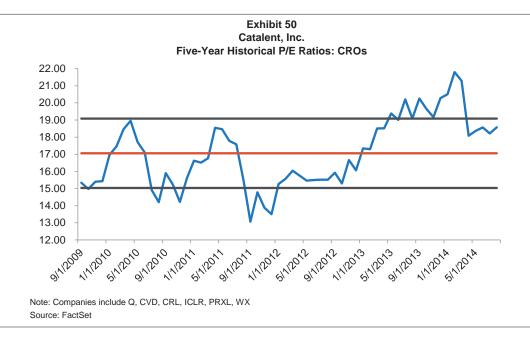


Exhibit 49
Catalent, Inc.
Five-Year Historical P/E Ratios: Drug Manufacturers and Service Providers



Note: Companies include HSP, WST, CBM, LONN, ACET, IMS, AMRI

Source: FactSet



Tax rate and NOLs. We expect Catalent to have an effective tax rate for adjusted EPS of 14% in fiscal 2015, gradually increasing to 30% by 2018, at which point we expect tax credits to be fully depleted. This significant difference in tax rate produces an EPS swing of about \$0.30 on an annualized basis. Thus, we suggest investors use 30% when calculating EPS to value the stock, while also considering the present value of NOLs.

We quantify the present value of the NOLs on a per-share basis at just over \$0.70. In the analysis, we estimate a non-discounted after-tax cash benefit of \$109 million because of a lower tax rate in 2014, lasting through 2017. By subtracting \$0.73 from the current stock price and applying our fully taxed calendar 2015 EPS estimate of \$1.26, Catalent is valued at 18.6 times forward earnings. Considering the potential for the stock in the coming year, we believe it is reasonable to expect another turn in the multiple to perhaps 20 times assuming solid execution and some M&A activity.

	_	Exhibit 51 Italent, Inc	·.			
	Present Val	lue of Cata	alei	nt NOL		
		2H14		2015	2016	2017
Calendar pretax income	\$	67	\$	275	\$ 298	\$ 333
Tax spread		18.7%		15.8%	15.5%	2.0%
After-tax benefit	\$	12.48	\$	43.63	\$ 46.26	\$ 6.57
WACC		4.3%		4.3%	4.9%	5.4%
Shares		96		125	122	120
NOL/share		0.13		0.35	0.38	0.05
Discount periods		0.5		1.0	2.0	3.0
PV	\$	0.13	\$	0.33	\$ 0.34	\$ 0.05
Present value of NOL	\$	0.73				
Current share price	\$	24.19				
PV of NOL	\$	0.73				
Adjusted share price	\$	23.46				
2015 EPS multiple		18.6x				

William Blair & Company, L.L.C.

We also valued Catalent using a discount free cash flow analysis, using our model assumptions and applying a long-term perpetuity growth rate after 2019. We assumed Catalent's after-tax cost of debt was 3.3%, along with a cost of equity of 9.4%. Exhibits 52 and 53 show Catalent's annual free cash flow discounted to 2015 using long-term growth rates between 3.75% to 6.25% and discount rates between 8.0% and 13.0%. Based on our calculations, we believe a reasonable 2015 year-end valuation using a DCF analysis is in the mid- to high-\$20 range.

Exhibit 52 Catalent, Inc. Discount Free Cash Flow

	2016	2017	2018	2019
Free cash flow per share	\$ 1.28	\$ 1.60	\$ 1.74	\$ 1.64
% debt	74%	65%	58%	52%
% equity	26%	35%	42%	48%
WACC	4.9%	5.4%	5.9%	6.2%
Discount periods	1.0	2.0	3.0	4.0
Present value	\$ 1.22	\$ 1.44	\$ 1.47	\$ 1.29

Cost of debt (after tax)	3.3%
Cost of equity	9.4%

Source: William Blair & Company, L.L.C. estimates

Rate

Discount

Exhibit 53 Catalent, Inc. Discount Free Cash Flow

Long-Term Growth Rate 4.25% 4.75% 5.25% 37.65 \$ 8.00% 43.00 \$ 50.28 \$ \$ 33.57 60.81 77.35 9.00% 32.77 49.04 27.10 29.64 \$ \$ 36.75 \$ 41.95 10.00% 35.88 22.73 24.44 26.48 28.96 32.01 \$ 11.00% 19.59 20.82 \$ 25.90 28.30 12.00% \$ 17.24 \$ 18.15 \$ 19.19 \$ 20.38 \$ 21.77 \$ 23.39 13.00% \$ 15.41 \$ 16.11 \$ 16.90 \$ 17.79 19.96 18.80

Source: William Blair & Company, L.L.C. estimates

In summary, we believe that Catalent carries a reasonable valuation relative to its peers and arguably the most durable business model on our coverage list. In exhibit 8, on page 8, we examine the stock's risk-adjusted upside and downside using pessimistic and optimistic scenarios alongside our current model and arrive at risk-adjusted potential upside of 11% in the coming year. Given the defensive nature of the business model and relatively low expected volatility compared with other stocks on our list, along with the opportunity for industry consolidation, we view shares as attractive and are initiating coverage with an Outperform rating.

	2011	2012	2013	2014	01'15E	02'15E	O3'15F	04'15E	2015E	2016E	2017E	2018E	2019E	2020E
Net revenue	\$1,531.8	\$1,694.8	\$1,800.3	\$1,827.7	\$407.0	\$450.2	\$484.1	\$555.9	\$1,897.1	\$2,006.7	\$2,101.9	\$2,203.6	\$2,310.5	\$2,422.9
Cost of revenue	\$954.0	\$1,056.1	\$1,143.8	\$1,145.7	\$273.7	\$286.3	\$299.2	\$332.4	\$1,191.6	\$1,261.9	\$1,317.9	\$1,378.2	\$1,442.1	\$1,507.5
Gross profit	\$577.8	\$638.8	\$656.5	\$682.0	\$133.3	\$163.9	\$184.9	\$223.5	\$705.5	\$744.8	\$784.0	\$825.4	\$868.4	\$915.5
Selling, general and administrative expense	\$224.0	\$250.4	\$243.8	\$249.3	\$55.8	\$69.8	\$68.0	\$57.5	\$251.1	\$261.8	\$264.8	\$266.6	\$273.6	\$283.2
ЕВІТDА	\$353.8	\$388.3	\$412.7	\$432.6	\$77.5	\$94.1	\$116.9	\$165.9	\$454.5	\$483.0	\$519.3	\$558.8	\$594.8	\$632.2
Depreciation	286.7	2365.7	\$108.8	\$100.4	\$24.8	\$26.6	\$25.7	\$25.0	\$102.1	\$114.4	\$117.8	\$121.4	\$125.0	\$127.0
EBITA	\$267.1	\$292.6	\$303.9	\$332.2	\$52.7	\$67.5	\$91.3	\$140.9	\$352.4	\$368.5	\$401.5	\$437.3	\$469.8	\$505.3
Interest and other income (expense), net	(\$165.5)	(\$183.2)	(\$203.3)	(\$163.4)	(\$32.1)	(\$21.5)	(\$21.3)	(\$21.1)	(\$36.0)	(\$83.7)	(\$83.4)	(\$83.2)	(\$83.1)	(\$82.3)
Pretax income	\$101.6	\$109.4	\$100.6	\$168.9	\$20.6	\$46.1	\$70.0	\$119.8	\$256.5	\$284.8	\$318.1	\$354.1	\$386.7	\$422.9
Income tax expense	\$27.7	\$28.2	\$18.3	\$26.5	\$2.88	\$6.45	\$9.8	\$16.8	\$35.9	\$41.3	\$73.5	\$106.2	\$116.0	\$126.9
Adjusted Net Income	\$73.9	\$81.2	\$82.3	\$142.4	\$17.7	\$39.6	\$60.2	\$103.0	\$220.5	\$243.5	\$244.6	\$247.9	\$270.7	\$296.0
Minority Interest	\$3.9	\$1.2	(\$0.1)	(\$1.0)	(\$0.2)	(\$0.2)	(\$0.2)	(\$0.3)	(\$0.9)	(\$1.2)	(\$1.5)	(\$1.9)	(\$2.4)	(\$3.0)
Nonrecurring items	(82.0)	(58.1)	(81.1)	(6.73)	\$3.2	(\$0.3)	(\$3.5)	(\$3.2)	(3.8)	(5.6)	(8.4)	(8.4)	(8.4)	(8.4)
Tax adjustment Nonrecurring items (net of tax)	(78.1)	(46.4)	(83.8)	(23.0)	(\$3.1) \$0.1	\$0.4 \$0.1	\$3.8 \$0.3	\$10.8	11.9	15.3	45.5 37.1	78.2	88.0 79.6	98.9
Net income from continuing operations (GAAP)	(29.1)	2.1	(6.03)	18.0	\$7.4	\$28.7	\$48.6	\$99.2	184.0	205.8	231.8	265.0	294.6	329.4
Income from Discontinued Operations	21.0	41.3	(1.2)	2.7	\$0.5	\$0.5	\$0.5	\$0.5	2.0	2.0	0.0	0.0	0.0	0.0
Net income	(\$50.1)	(\$39.2)	(\$49.7)	\$15.3	\$6.9	\$28.2	\$48.1	\$38.7	\$182.0	\$203.8	\$231.8	\$265.0	\$294.6	\$329.4
EPS (excl. nonrecurring items, incl. options beg Q105)	\$0.99	\$1.09	\$1.10	\$1.89	\$0.17	\$0.32	\$0.48	\$0.82	\$1.82	\$1.97	\$2.02	\$2.08	\$2.32	\$2.58
EPS (excl. nonrecurring items, excl. options)	\$0.95	\$1.02	\$0.94	\$1.57	\$0.13	\$0.26	\$0.39	\$0.67	\$1.48	\$1.61	\$1.84	\$2.08	\$2.32	\$2.58
EPS (as reported)	(40.67)	(\$0.04)	(\$0.0p)	\$0.20	\$0.06	\$0.23	\$0.38	\$0.78	\$1.50	\$1.03	91.91	\$2.23	2C.2¢	\$2.81
Weighted average shares outstanding (diluted)	74.8	74.8	74.8	75.2	107.4	125.4	125.6	125.9	121.1	123.5	121.3	119.1	116.8	114.7
									•			•	•	
MARGIN ANALYSIS:	701 100	701 10	i co	2040	200	00	700	70 00	700 200	707 400	200	100	700 200	700
Gross prom SG&A	14.6%	14.8%	13.5%	13.6%	13.7%	15.5%	14.1%	10.4%	13.2%	13.0%	12.6%	12.1%	11.8%	11.7%
ЕВПОА	23.1%	22.9%	22.9%	23.7%	19.1%	20.9%	24.2%	29.9%	24.0%	24.1%	24.7%	25.4%	25.7%	26.1%
Depreciation	5.7%	5.6%	6.0%	5.5%	6.1%	5.9%	5.3%	4.5%	5.4%	5.7%	5.6%	5.5%	5.4%	5.2%
MINITERATION & amortization	7.5%	2.0%	2.4% 8.5%	7.8%	8.6%	8.3%	7.4%	6.5%	7.5%	8.0%	7.9%	7.8%	7.2%	7.5%
Operating income	17.4%	17.3%	16.9%	18.2%	13.0%	15.0%	18.9%	25.4%	18.6%	18.4%	19.1%	19.8%	20.3%	20.9%
Tax rate (adjusted) Net income	27.2%	25.8%	18.2%	15.7%	14.0%	14.0%	14.0%	14.0%	14.0%	14.5%	23.1%	30.0%	30.0%	30.0%
ODOMITU DATES.														
Revenue	3.5%	10.6%	6.2%	1.5%	-5%	2%	%4	7%	3.8%	5.8%	4.7%		4.9%	4.9%
Gross profit	12%	11%	3%	4%	-3%	1%	%8	%9	3%	%9	2%		2%	2%
SG&A	10%	12%	-3% 6.3%	2%	2% -5.7%	%0 % 2	4%	-3% • •	1%	4%	7 5%		3%	4%
EBITA	18%	10%	4%	%6	%9-	1%	11%	10%	%9	2%	%6		4.2	%8
Net income (excl. non-recurring items)	56.2%	9.9%	1.3%	73.0%	-1322.2%	41.8%	54.7%	33.8%	54.9%	10.4%	0.5%		9.2%	9.4%
Net income (WB Calculation)	55.6%	7.7%	-8.0%	67.8%	36.9%	82.8%	69.0%	37.4%	51.9%	11.1%	11.7%		9.2%	9.4%
EPS (as reported)	%5'-06 %6'-	-22%	27%	-131%	244%	-13.4%	355%	121%	-3.0% 639%	10%	16%	16%	13%	14%
Diluted shares outstanding	%0	%0	%0	%0	44%	%89	%89	%59	61.09%	2.02%	-1.82%	•	-1.92%	-1.76%
Sources: Company reports and William Blair & Company, L.L.C. estimates														

	2000	2010	2011	2012	2013	2014	01'15E	02'15E	O3'15F	04'15F	2015E	2016F	2017E	2018F	2019E	2020E
Cash and cash equivalents Accounts Receivable			\$205	\$139	\$106	\$74 \$404	\$359	\$432	\$473	\$484	\$484	\$583	\$698	\$825 \$430	\$952	\$1,091
Inventory Other current assets Total current assets			\$131 <u>\$160</u> \$758	\$119 \$109 \$705	\$125 \$89 \$678	\$135 <u>\$75</u> \$688	\$122 <u>\$78</u> \$875	\$127 \$82 \$942	\$133 <u>\$86</u> \$1.015	\$148 <u>\$91</u> \$1,124	\$148 \$91 \$1,124	\$157 <u>\$110</u> \$1,261	\$155 \$134 \$1,411	\$162 <u>\$163</u> \$1,580	\$156 <u>\$198</u> \$1,742	\$149 \$241 \$1,906
PP & E., net Goodwill, net Inragibles Other asses Total assets			\$721 \$906 \$287 \$160 \$2,831	\$810 \$1,030 \$418 \$177 \$3,139	\$815 \$1,023 \$372 \$169 \$3,057	\$873 \$1,097 \$358 \$75 \$3,090	\$890 \$1,097 \$359 \$76 \$3,298	\$907 \$1,097 \$361 \$3,384	\$925 \$1,097 \$363 \$377 \$3,478	\$943 \$1,097 \$365 \$3,607	\$943 \$1,097 \$365 \$385 \$3,607	\$1,018 \$1,097 \$372 \$3,830	\$1,100 \$1,097 \$380 \$85 \$4,072	\$1,188 \$1,097 \$387 \$4,340	\$1,283 \$1,097 \$395 \$4,608	\$1,385 \$1,097 \$403 \$955 \$4,887
Accounts payable Current proprior of long term debt Other current labilities Total current labilities			\$124 \$29 <u>\$233</u> \$386	\$134 \$43 \$262 \$439	\$151 \$35 \$225 \$410	\$148 \$25 <u>\$280</u> \$453	\$76 \$25 <u>\$280</u> \$381	\$111 \$25 \$280 \$416	\$136 \$25 <u>\$280</u> \$441	\$151 \$25 \$280 \$456	\$151 \$25 <u>\$280</u> \$456	\$157 \$25 <u>\$280</u> \$462	\$155 \$25 \$280 \$460	\$158 \$25 <u>\$280</u> \$463	\$156 \$25 \$280 \$461	\$149 \$25 \$280 \$454
Deferred tax liability Pension itability Orber liabilities Long term debt			\$193 \$79 \$66 \$2,318	\$220 \$140 \$50 \$2,640	\$219 \$134 \$47 \$2,657	\$103 \$155 \$61 \$2,685	\$103 \$155 \$62 \$1,965	\$103 \$155 \$62 \$1,965	\$103 \$155 \$63 \$1,965	\$103 \$155 \$64 \$1,965	\$103 \$155 \$64 \$1,965	\$103 \$155 \$66 \$1,965	\$103 \$155 \$69 \$1,965	\$103 \$155 \$72 \$1,965	\$103 \$155 \$75 \$1,965	\$103 \$155 \$78 \$1,965
Paid-in capital Retiring (deficit) Other Total stockholder's equity			\$0 \$0 (\$210) (\$210)	\$0 \$0 (\$351) (\$351)	\$0 \$0 (\$410) (\$410)	\$1,032 (\$1,403) \$3.9 (\$367)	\$1,032 (\$1,396) \$996 \$632	\$1,032 (\$1,368) <u>\$1,018</u> \$682	\$1,032 (\$1,320) \$1,038 \$750	\$1,032 (\$1,221) \$1,053 \$863	\$1,032 (\$1,221) \$1,053 \$863	\$1,032 (\$1,017) \$1,064 \$1,079	\$1,032 (\$786) \$1,073 \$1,319	\$1,032 (\$521) \$1,071 \$1,582	\$1,032 (\$226) \$1,043 \$1,849	\$1,032 \$103 \$996 \$2,131
Total liabilities and stockholder's equity			\$2,831	\$3,139	\$3,057	\$3,090	\$3,298	\$3,384	\$3,478	\$3,607	\$3,607	\$3,830	\$4,072	\$4,340	\$4,608	\$4,887
Kev Metrics: Debt-to-capital ratio Net Debt-to-Capital ratio Working capital reck. cash) Working Capital exc. cash Total Debt / EBITDA			110% 100% \$167 11% 6.6x	115% 109% \$126 77% 6.9x	118% 113% \$161 9% 6.5x	116% 112% \$160 9% 6.3x	76% 62% \$136 6.4x	74% 58% \$93 5.3x	73% 55% \$101 4.3x	70% 53% \$184 3.0x	70% 53% \$184 10%	65% 46% \$217 11%	60% 39% \$253 12% 3.8x	56% 33% \$292 13% 3.6x	52% 27% \$328 14% 3.3x	48% 22% \$360 15% 3.1x
A/P days (calculated) DIOH A/R DSO (calculated on net revenue) A/R DSO (reported)			44 47 56	37 64	44 36 64	43 39 70	25 40 70	8 4 9	41 40 60	41 40 65	41 40 65	40 40 63	38 38 62	37 38 60	35 35	32 32 54
ROE (excluding one time items) ROA (excluding one time items) ROIC (excluding one time items)				-29.0% 2.7% 8.9%	-21.6% 2.7% 9.6%	-36.6% 4.6% 10.9%	53.6%	24.1% 4.7% 11.2%	33.6% 7.0% 11.3%	51.1% 11.6% 11.5%	88.9% 6.6% 11.5%	25.1% 6.5% 11.5%	20.4% 6.2% 10.7%	17.1% 5.9% 10.2%	15.8% 6.0% 10.4%	14.9% 6.2% 10.7%
Cash per share Tangible book value per share Book value per share (including goodwill)	a copie		\$2.74 (\$14.92) (\$2.81)	\$1.86 (\$18.46) (\$4.69)	\$1.42 (\$19.17) (\$5.49)	\$0.99 (\$19.48) (\$4.89)	\$3.34 (\$4.33) \$5.88	\$3.45 (\$3.31) \$5.44	\$3.77 (\$2.76) \$5.97	\$3.84 (\$1.86) \$6.86	\$4.00 (\$1.93) \$7.13	\$4.72 (\$0.15) \$8.74	\$5.75 \$1.83 \$10.88	\$6.93 \$4.07 \$13.29	\$8.15 \$6.44 \$15.83	\$9.51 \$9.01 \$18.58

Exhibit 56
Catalent, Inc.
Cash Flow Model
(\$n intousands, except per share data)
Fiscal year ends June 30

										-						
	2009	2010	2011	2012	2013	2014	Q1'15E	Q2'15E	Q3'15E	Q4'15E	2015E	2016E	2017E	2018E	2019E	2020E
ash flow from operating activities:	(\$197.4)	(\$237.2)	(\$50.1)	(\$39.2)	(\$49.7)	\$15.2	86.9	\$28.2	\$48.1	\$98.7	\$182.0	\$203.8	\$232	\$265	\$295	\$329
Net loss from discontinued operations	:		(\$21.0)	(\$41.3)	(\$1.2)	\$2.7	\$0.5	\$0.5	\$0.5	\$0.5	\$2.0	\$2.0	\$0.0	\$0.0	\$0.0	\$0.0
ignification of the case of the control of the cont	\$87.3	\$87.8	\$86.7	\$95.7	\$108.8	\$100.4	\$24.8	\$26.6	\$25.7	\$25.0	\$102.1	\$114.4	\$117.8	\$121.4	\$125.0	\$127.0
Amortization of Intangibles	\$37.2	\$29.9	\$28.8	\$34.0	\$43.3	\$42.5	\$10.2	\$10.8	\$11.6	\$11.1	\$43.7	\$46.2	\$48.4	\$50.8	\$53.2	\$54.1
Amortization of Debt Financing Costs	\$0.0	\$9.6	\$10.0	\$14.7	\$19.0	\$14.0	\$0.0	\$0.0	\$0.0	30.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0
Change in working capital Other operating items	0.76%	\$306.6 \$306.6	(321.5)	(\$54.0)	(\$25.3)	(\$7.5)	(\$5.0)	(\$5.0)	(85.0)	(\$82.7)	(\$23.5)	(\$33.0)	(\$26.1)	(\$30.1)	(\$35.0)	(\$32.1) (\$40.2)
Net operating cash flow (continuing ops.)	(\$15.4)	\$233.8	\$111.6	\$87.7	\$138.5	\$177.5	\$61.5	\$102.8	\$72.9	\$47.2	\$284.3	\$308.5	\$335	\$368	\$402	\$438
% of Net Income	-472%	494%	151%	108%	168%	125%	347%	259%	121%	46%	129%	127%	137%	148%	148%	148%
Y/Y Growth	MA	Ā	-52% 400.7	-21%	58%	28%	34%	-2425%	36%	-44%	%09	%6307.1	%6334.0	*01 *366 4	%6	%6 8436.8
Y/Y Growth			NA NA	6.700		0.0		4.001.	9/2.0	0.0	\$2026	1. 1000	0.450	4300.4	9400.7	4450.0
ash flow from investing activities:	0.400	(F) (C)	000		0	ĺ	()	000	ĺ	000	0	0	9	6	0	6
Vestment in PP&E (CAPEX)	(\$84.3)	(4.9.4)	(\$83.3)	(\$702.0)	(\$119.6)	(\$121.5)	(\$26.45)	(\$28.2¢)	(47.124)	(\$36.13)	(\$123.3)	(\$133.2)	(\$143.8)	(\$155.3)	(8.70T¢)	(2.1814)
ther	0.09	80.0	9 6	\$21	(80.0)	(f 09)	9 6	9 6	9 6	9 6	9 6	9 6	9 6	9 6	9 6	9 6
Net cash used in investing activities (cont. ops.)	(\$84.3)	(\$79.4)	(\$83.3)	(\$538.2)	(\$122.1)	(\$175.2)	(\$26)	(\$29) (\$29)	(\$31)	(\$36)	(\$123)	(\$133)	(\$144)	(\$155)	(\$168)	(\$181)
et sale (purchase) of investments	\$0.0	\$0.0	\$0.0	\$0.0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	80	\$0	80
GAAP net cash used in investing activities	(\$84.3)	(\$79.4)	(\$83.3)	(\$538.2)	(\$122.1)	(\$175.2)	(\$26)	(\$29)	(\$31)	(\$36)	(\$123)	(\$133)	(\$144)	(\$155)	(\$168)	(\$181)
scontinued Operations	\$0.0	\$0.0	\$32.9	\$43.7	\$0.0	\$4.0	80	8	80	80	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0
Net cash used in investing activities	(\$84.3)	(\$79.4)	(\$50.4)	(\$494.5)	(\$122.1)	(\$171.2)	(\$26.5)	(\$29.3)	(\$31.5)	(\$36.1)	(\$123.3)	(\$133.2)	(\$143.8)	(\$155.3)	(\$167.8)	(\$181.2)
ash flow from financing activities:																
suance of debt	\$0	80	(\$27.4)	\$352	(\$20.5)	(\$42.3)	(\$720)	\$0.0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
oceeds from issuance of stock	\$0	\$0	80.0	\$0	\$0.0	\$0.0	\$1,000	8	80	\$0	\$1,000	(\$75)	(\$76)	(\$84)	(\$105)	(\$117)
ther	08	ଞା	81.3	- N	\$1.2	\$0.2	(830)	ଞା	ଥା	% ((\$30)	ၛၟ႞	S) {	တြန်	80	S) {
Net cash generated in financing activities	04	04	(\$26.1)	\$352.9	(\$49.3)	(\$42.1)	\$250	0,4	20	04	\$250	(\$/\$)	(9/4)	(\$84)	(cnr¢)	(>114)
et increase (decrease) in cash and equiv.	(\$99.7)	\$154.4	\$20.1	(\$110.0)	(\$31.8)	(\$36.8)	\$285.0	\$73.5	\$41.4	\$11.0	\$411.0	\$100.7	\$116.1	\$128.8	\$128.6	\$140.2
AAP Net increase (decrease) in cash and equiv.	(266\$)		\$41.1	(\$66.1)	(\$32.6)	(\$32.0)	\$284.7	\$73.2	\$41.1	\$10.7	\$409.6	\$99.3	\$114.7	\$127.4	\$127.2	\$138.8
fect of foreign currency on cash			\$17.9	(\$12.4)	\$1.1	\$3.0										
eginning cash (including short-term investments)	N A	A	\$164.0	\$205	\$139	\$106	\$74	\$329	\$432	\$473	\$74	\$484	\$583	\$69\$	\$825	\$952
et sale (purchase) of investments	\$0	\$0	\$0.0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
hange in short-term investments	A A	¥.	\$0.0	\$0	\$0	\$0	\$0	80	\$0	0\$	\$0	80	\$0	80	\$0	\$0
nding cash (including short-term investments)	¥	\$164.0	\$205.1	\$139.0	\$106.4	\$74.4	8328	\$432	\$473	\$484	8484	8583	8698	\$825	<u>\$952</u>	\$1.091
ee cash flow (=op. cash fl capex)	(\$99.7)	\$154.4	\$28.3	(\$14.3)	\$18.9	\$56.0	\$35.0	\$73.5	\$41.4	\$11.0	\$161.0	\$175.3	\$192	\$212	\$234	\$257
% of Adj Net income	NN	NN	38%	-18%	23%	39%	198%	186%	%69	11%	73%	72%	%82	%98	%98	87%
Y/Y Growth	NN	NN	-82%	NN	NN	196%	30%	NN	%	-25%	188%	%6	%6	11%	40%	10%
ree Cash Flow per Share	(\$1.33)	\$2.06	\$0.38	(\$0.19)	\$0.25	\$0.74	\$0.33	\$0.59	\$0.33	\$0.09	\$1.33	\$1.42	\$1.58	\$1.78	\$2.00	\$2.24

William Blair & Company, L.L.C.

IMPORTANT DISCLOSURES

William Blair & Company, L.L.C. was a manager or co-manager of a public offering of equity securities within the prior 12 months.

William Blair & Company, L.L.C. is a market maker in the security of this company and may have a long or short position.

William Blair & Company, L.L.C. intends to seek investment banking compensation in the next three months from the subject company covered in this report.

Within the past 12 months William Blair & Company, L.L.C. has provided or is providing investment banking services to or has an investment services relationship with the subject company covered in this report.

Additional information is available upon request.

This report is available in electronic form to registered users via R*Docs™ at www.rdocs.com or www.williamblair.com.

Please contact us at +1 800 621 0687 or consult williamblair.com/Research-and-Insights/Equity-Research/Coverage.aspx for all disclosures.

John Kreger attests that 1) all of the views expressed in this research report accurately reflect his personal views about any and all of the securities and companies covered by this report, and 2) no part of his compensation was, is, or will be related, directly or indirectly, to the specific recommendations or views expressed by him in this report. We seek to update our research as appropriate, but various regulations may prohibit us from doing so. Other than certain periodical industry reports, the majority of reports are published at irregular intervals as deemed appropriate by the analyst.

DJIA: 17,265.99 S&P 500: 2,011.36 NASDAQ: 4,593.43

The prices of the common stock of other public companies mentioned in this report follow:

The Blackstone Group L.P.	\$33.15
Cardinal Health, Inc. (Outperform)	\$75.42
Covance Inc. (Outperform)	\$85.91
General Electric Company (Market Perform)	\$26.21
IMS Health Holdings, Inc. (Restricted)	\$27.97
Perrigo Company (Outperform)	\$146.64
Quintiles Transnational Holdings Inc. (Outperform)	\$57.00
West Pharmaceutical Services, Inc.	\$44.89

Current Ratings Distribution (as of 8/31/14)

Coverage Universe	Percent	Inv. Banking Relationships*	Percent
Outperform (Buy)	66%	Outperform (Buy)	16%
Market Perform (Hold)	31%	Market Perform (Hold)	3%
Underperform (Sell)	1%	Underperform (Sell)	0%

^{*} Percentage of companies in each rating category that are investment banking clients, defined as companies for which William Blair has received compensation for investment banking services within the past 12 months.

The compensation of the research analyst is based on a variety of factors, including performance of his or her stock recommendations; contributions to all of the firm's departments, including asset management, corporate finance, institutional sales, and retail brokerage; firm profitability; and competitive factors.

OTHER IMPORTANT DISCLOSURES

Stock ratings, price targets, and valuation methodologies: William Blair & Company, L.L.C. uses a three-point system to rate stocks. Individual ratings and price targets (where used) reflect the expected performance of the stock relative to the broader market (generally the S&P 500, unless otherwise indicated) over the next 12 months. The assessment of expected performance is a function of near-, intermediate-, and long-term company fundamentals, industry outlook, confidence in earnings estimates, valuation (and our valuation methodology), and other factors. Outperform (0) – stock expected to outperform the broader market over the next 12 months; Market Perform (M) – stock expected to perform approximately in line with the broader market over the next 12 months; Underperform (U) – stock expected to underperform the broader market over the next 12 months; not rated (NR) – the stock is not currently rated. The valuation methodologies used to determine price targets (where used) include (but are not limited to) price-to-earnings multiple (P/E), relative P/E (compared with the relevant market), P/E-to-growth-rate (PEG) ratio, market capitalization/revenue multiple, enterprise value/EBITDA ratio, discounted cash flow, and others.

Company Profile: The William Blair research philosophy is focused on quality growth companies. Growth companies by their nature tend to be more volatile than the overall stock market. Company profile is a fundamental assessment, over a longer-term horizon, of the business risk of the company relative to the broader William Blair universe. Factors assessed include: 1) durability and strength of franchise (management strength and track record, market leadership, distinctive capabilities); 2) financial profile (earnings growth rate/consistency, cash flow generation, return on investment, balance sheet, accounting); 3) other factors such as sector or industry conditions, economic environment, confidence in long-term growth prospects, etc. Established Growth (E) – Fundamental risk is lower relative to the broader William Blair universe; Core Growth (C) – Fundamental risk is approximately in line with the broader William Blair universe.

The ratings, price targets (where used), valuation methodologies, and company profile assessments reflect the opinion of the individual analyst and are subject to change at any time.

Our salespeople, traders, and other professionals may provide oral or written market commentary or trading strategies—to our clients and our trading desks—that are contrary to opinions expressed in this research. Certain outstanding reports may contain discussions or investment opinions relating to securities, financial instruments and/or issuers that are no longer current. Always refer to the most recent report on a company or issuer before making an investment decision. Our asset management and trading desks may make investment decisions that are inconsistent with recommendations or views expressed in this report. We will from time to time have long or short positions in, act as principal in, and buy or sell the securities referred to in this report. Our research is disseminated primarily electronically, and in some instances in printed form. Electronic research is simultaneously available to all clients. This research is for our clients only. No part of this material may be copied or duplicated in any form by any means or redistributed without the prior written consent of William Blair & Company, L.L.C.

THIS IS NOT IN ANY SENSE A SOLICITATION OR OFFER OF THE PURCHASE OR SALE OF SECURITIES. THE FACTUAL STATEMENTS HEREIN HAVE BEEN TAKEN FROM SOURCES WE BELIEVE TO BE RELIABLE, BUT SUCH STATEMENTS ARE MADE WITHOUT ANY REPRESENTATION AS TO ACCURACY OR COMPLETENESS OR OTHERWISE. OPINIONS EXPRESSED ARE OUR OWN UNLESS OTHERWISE STATED. PRICES SHOWN ARE APPROXIMATE.

THIS MATERIAL HAS BEEN APPROVED FOR DISTRIBUTION IN THE UNITED KINGDOM BY WILLIAM BLAIR INTERNATIONAL, LIMITED, REGULATED BY THE FINANCIAL CONDUCT AUTHORITY (FCA), AND IS DIRECTED ONLY AT, AND IS ONLY MADE AVAILABLE TO, PERSONS FALLING WITHIN COB 3.5 AND 3.6 OF THE FCA HANDBOOK (BEING "ELIGIBLE COUNTERPARTIES" AND "PROFESSIONAL CLIENTS"). THIS DOCUMENT IS NOT TO BE DISTRIBUTED OR PASSED ON TO ANY "RETAIL CLIENTS." NO PERSONS OTHER THAN PERSONS TO WHOM THIS DOCUMENT IS DIRECTED SHOULD RELY ON IT OR ITS CONTENTS OR USE IT AS THE BASIS TO MAKE AN INVESTMENT DECISION.

"William Blair" and "R*Docs" are registered trademarks of William Blair & Company, L.L.C. Copyright 2014, William Blair & Company, L.L.C. All rights reserved.

Equity Research Directory

John F. O'Toole, Partner Manager and Director of Research +1 312 364 8612 Kyle Harris, CFA, Partner Operations Manager +1 312 364 8230

CONSUMER

Sharon Zackfia, CFA, Partner +1 312 364 5386

Group Head-Consumer

Apparel and Accessories, Leisure, Restaurants

Jon Andersen, CFA, Partner +1 312 364 8697

Consumer Products

Daniel Hofkin +1 312 364 8965

Hardlines, Specialty Retail

Mark Miller, CFA, Partner +1 312 364 8498

E-commerce, Broad Assortment and Hardlines, Health and Beauty

Amy Noblin +1 415 248 2874

Apparel and Accessories

FINANCIAL SERVICES AND TECHNOLOGY

Adam Klauber, CFA +1 312 364 8232

Co-Group Head-Financial Services and Technology Insurance Brokers, Property & Casualty Insurance

Robert Napoli, Partner +1 312 364 8496

Co-Group Head–Financial Services and Technology
Business Development Companies, Financial Technology, Specialty
Finance

Christopher Shutler, CFA +1 312 364 8197

Asset Management, Financial Technology

GLOBAL INDUSTRIAL INFRASTRUCTURE

Nick Heymann +1 212 237 2740

Co-Group Head–Global Industrial Infrastructure *Multi-industry*

Larry De Maria, CFA +1 212 237 2753

Co-Group Head–Global Industrial Infrastructure Capital Goods

Nate Brochmann, CFA +1 312 364 5385

Commercial Services, Logistics/Transportation

Brian Drab, CFA, Partner +1 312 364 8280

Filtration and Water Management, Industrial Technology

Chase Jacobson +1 212 237 2748

Engineered Equipment, Engineering and Construction

Ryan Merkel, CFA +1 312 364 8603

Commercial Services, Industrial Distribution

GLOBAL SERVICES

Brandon Dobell, Partner +1 312 364 8773

Group Head-Global Services

Energy Services, Information Services, Marketing Services, Real Estate Services and Technology, Education Services and Technology

Timothy McHugh, CFA, Partner +1 312 364 8229

Consulting, HR Technology, Information Services, Staffing

HEALTHCARE

Ben Andrew, Partner +1 312 364 8828

Group Head-Healthcare

Medical Devices

Ryan Daniels, CFA, Partner +1 312 364 8418

Healthcare Information Technology, Healthcare Services

Margaret Kaczor +1 312 364 8608

Medical Devices

John Kreger, Partner +1 312 364 8597

Distribution, Outsourcing, Pharmacy Benefit Management

Tim Lugo +1 415 248 2870

Therapeutics

Amanda Murphy, CFA +1 312 364 8951

Diagnostic Services, Life Sciences, Pharmacy Benefit Management

Matthew O'Brien +1 312 364 8582

Medical Devices

John Sonnier, Partner +1 312 364 8224

Biotechnology

Brian Weinstein, CFA +1 312 364 8170

Diagnostic Products

Y. Katherine Xu, Ph.D. +1 212 237 2758

Biotechnology

TECHNOLOGY, MEDIA, AND COMMUNICATIONS

Jason Ader, CFA, Partner +1 617 235 7519

Co-Group Head–Technology, Media, and Communications $IT\ Systems$

Bhavan Suri, Partner +1 312 364 5341

Co-Group Head–Technology, Media, and Communications IT Services, Software, Software as a Service

Jim Breen, CFA +1 617 235 7513

Internet Infrastructure and Communication Services

Anil Doradla +1 312 364 8016

IT Services, Technical Software, Semiconductors and Wireless

Justin Furby, CFA +1 312 364 8201

Software as a Service

Jonathan Ho +1 312 364 8276

Cybersecurity, Security Technology

Dmitry Netis +1 212 237 2714

Communications Equipment

Ralph Schackart III, CFA, Partner +1 312 364 8753

Digital Media, Internet

EDITORIAL

Steve Goldsmith, Head Editor +1 312 364 8540 Beth Pekol Porto +1 312 364 8924 Kelsey Swanekamp +1 312 364 8174 Lisa Zurcher +44 20 7868 4549

