



CFA Institute

CFA Institute Research Challenge

hosted by

CFA Society of St. Louis

Team A

Team A

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**Express Scripts
Holding Company**

NASDAQ: ESRX
Date: 1/22/2015

Current Price: \$84.99 (Jan 22, 2015)
Target Price: \$83.61

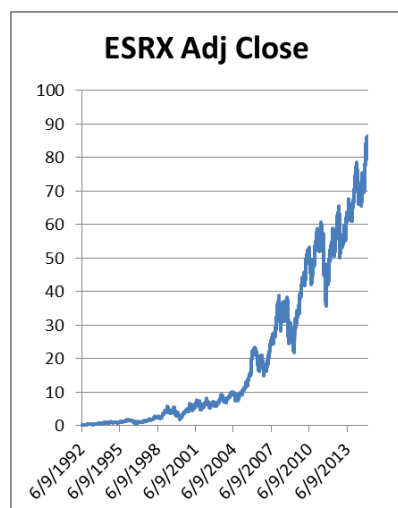
Recommendation: SELL
Downside: -1.62%

Company Profile	
Sector	Healthcare
Industry	Healthcare Plans
Market Cap	\$62.35 B
52 Wk High	\$86.64
52 Wk Low	\$64.64
Dividend	
Yield	0.00%
Shares	
Outstanding	733.9 M
ROE	8.95%
Debt/Equity	0.57

Source: Morningstar Direct

Valuation Summary	
Current Price:	\$84.99
DCF (FCFF):	\$83.94
Monte Carlo:	\$83.27
Average	
Valuation:	\$83.61

Source: Team Estimates



Source: Yahoo! Finance

Highlights

1. Maturing Business Model Threatens Growth

In the past, Express Scripts derived significant growth and efficiency gains from acquisitions. With the recent acquisition of Medco, Express Scripts now has a market share of 26% in the Pharmacy Benefit Management (PBM) industry. Inorganic growth will be unlikely at this point due to antitrust issues and market dominance. Likewise, organic growth will be slowing. This is due to Express Scripts' core business reaching an efficiency frontier, threatening the company's ability to continue negotiating superior discounts. Express Scripts is in a transitioning phase and is likely to experience slower growth without the presence of meaningful new initiatives to provide additional streams of revenue.

2. Lacking a Compelling Valuation

Using a FCFF model with a base case set of assumptions representing the team's expected values for key inputs we have determined an intrinsic valuation of \$83.94. Additionally, a Monte Carlo sensitivity simulation led to an average intrinsic valuation of \$83.27. Our primary target price is represented by the average of these two models, \$83.61. Express Scripts is currently trading in this price range and is therefore at fair value.

3. Price Wars and Intensifying Competition

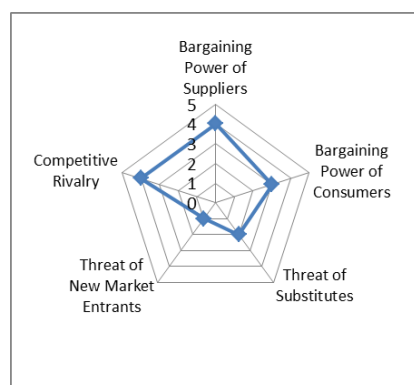
Intensifying competition and the emergence of biotech companies are likely to lead to price wars in the pharmaceutical and PBM industry. Recently, Express Scripts set a controversial precedent by choosing AbbVie's Hepatitis C drug over Gilead Sciences' slightly more expensive but higher quality treatment. Due to such events and given the drug pipeline of new biotech companies with high price points, we are skeptical that Express Scripts will be able to continue their aggressive tactics in driving down blockbuster drug prices. Their aggression may also add the expense of alienating developers of future drugs.

4. Opportunity to Exit at a Reasonable Price

Express Scripts has had a great run up in the past two decades. Entering a transitioning phase with slower sustainable growth should prompt investors to realize gains. Even if Express Scripts continues to grow in the single digits, the company faces significant uncertainties in their ability to make meaningful additions following the massive Medco acquisition and the risk of increased regulatory scrutiny. Critical mass for a company accustomed to abnormally high rates of growth has been reached and investors should not continue to price such lofty assumptions into Express Scripts' valuation. Overall, industry wide catalysts that will likely fuel the growth of many companies in the Healthcare industry may not have an amplified impact on Express Scripts' business. Thus, we are issuing a SELL recommendation.

Business Description

Express Scripts is currently the largest pharmacy benefit management (PBM) organization in the United States. Express Scripts was founded in 1986 in St. Louis, Missouri. They manage prescription benefits for 87 million Americans utilizing home delivery services and retail pharmacies. Express Scripts works with a variety of groups to generate revenues. ESRX is paid directly by insurance plans to obtain



Source: Team Estimates

access to prescription drugs for insurance clients, manage the system, interface with pharmacies and drug companies, and provide other services.

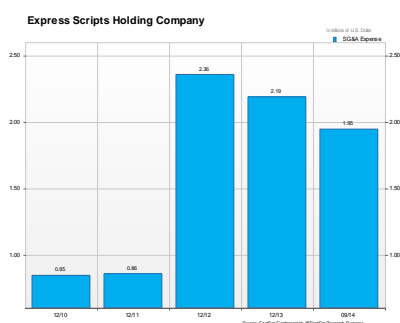
PBM companies combine retail pharmacy claims processing, formulary management (determining the mix of prescription drugs that Express Scripts makes available to patients), utilization management and home delivery pharmacy services to create an integrated product offering to manage the prescription drug benefit for payers. Some PBMs also offer specialty medication services that deliver a more effective solution than many retail pharmacies in providing treatments for diseases that rely upon high-cost injectable, infused, oral or inhaled drugs. PBMs have also broadened their service offerings to include compliance programs, outcomes research, drug therapy management programs, sophisticated data analysis and other distribution services.

Express Scripts also indirectly generates revenue and profits from drug companies and pharmacies by offering these firms access to their unprecedented number of clients. Express Scripts negotiates drug discounts with manufacturers for insurance clients and profits by collecting a portion of the discounts. Express Scripts makes deals with pharmacies to encourage certain formularies (groups of prescription drug offerings), and sends clients to these businesses. Express Scripts does provide other services such as mail-order pharmacy and benefit design consultation, but ultimately these are trumped by their revenue streams derived from insurance companies, drug companies and pharmacy contracts.

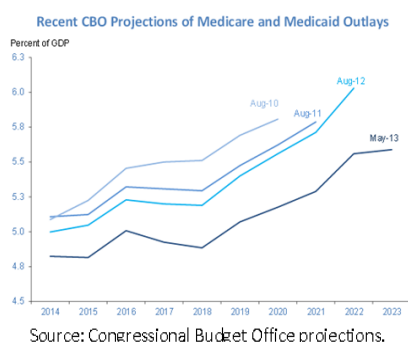
In April 2012, Express Scripts dramatically changed the structure of their operations with the acquisition of Medco Health Solutions, the largest PBM in the United States. The newly formed Express Scripts Holding Company exists today as the largest PBM with a \$62 billion market capitalization. This solidified Express Script's dominating market position and allowed their operations to touch diverse areas of healthcare in America from processing pharmacy claims to home delivery pharmacy services to analyzing medical and drug data.

Company Strategies

5 Yr ESRX SG&A Expense Trend



Source: FactSet



Source: Congressional Budget Office projections.

- Supplier Pricing Advantages:** The ability to obtain discounts and rebates from retail pharmacies, distributors, and manufacturers.
- Drug Plan Development:** The most effective combination of treatment coverage, premiums, copayments, preferred drugs, dependent care, authorizations, and other items considering the demographics of a specific membership pool
- Pharmacy Network and Administration:** The ability to build a robust and efficient network of retail and mail pharmacies. Additionally, the infrastructure is in place to adjudicate claims between all value chain parties.
- Plan Cost Management Tools:** Capabilities to drive savings by efficiently managing plan costs through clinical management activities, prior authorization, step therapies, preferred-drug lists, prescription optimization checks, and other activities.
- Cost and Administrative Scale:** The capability to drive centralized cost scale across a large number of prescription claims and efficiently implement the administrative functions of a drug benefit plan.

Industry Overview & Competitive Positioning

Industry Overview

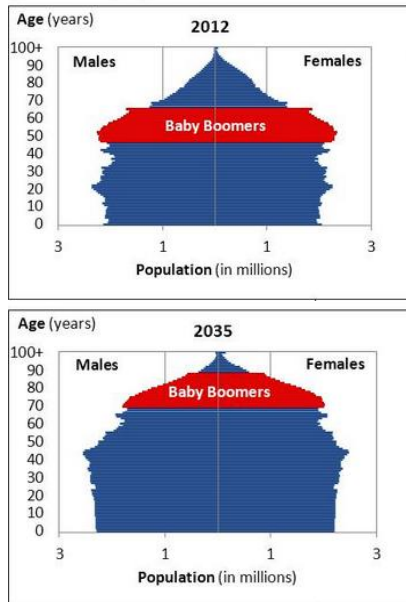
Recession Proof

The healthcare industry continues to improve and innovate with a stable outlook. Also known as one of the "safe-heavens," the healthcare sector is often resilient

through downturns or pullbacks compared to more cyclical or discretionary areas. Even though unemployment rates increase during recessions, layoffs mostly happen in industries with little health care coverage. Even if people will forgo discretionary health procedures or treatments, there is little impact on the pharmaceutical and biotechnology industries. Medication for chronic conditions and other widespread illnesses must be taken, no matter the state of the economy.

Aging Population and the Affordable Care Act

In the long-term, the US healthcare industry benefits from an aging population as well as an increase in health care coverage. Despite slowing population growth rates, aging baby boomers will more than compensate for this trend. During the baby boom from 1946 to 1964, fertility rates in the US were between 1.5 and 2 times the average of the 20th century (3,724 births per 1,000 women in 1957, compared with 2,123 in 2007) (Source: Congressional Budget Office). Baby boomers make up close to a quarter of the population and are currently reaching the age where medical treatment and chronic conditions require significant medical expenses. These expenses will increase as baby boomers continue to age.



Source: Congressional Budget Office

At the same time, the Obama administration has enacted the Patient Protection and Affordable Care Act (PPACA) in 2010 that expanded healthcare coverage through public and private insurance. It stipulates broader Medicaid eligibility and Medicare coverage and subsidized regulated private insurance. Due to the PPACA's health insurance mandate effective 2014, health care coverage has widely increased in the last year. However, the PPACA is a mixed blessing for PBMs. Despite increasing coverage, the PPACA also aims at decreasing healthcare costs and imposes new regulations on the industry. Patients now must personally contribute to the payment of medical costs and are encouraged to try cheaper options first. In turn, profits for PBMs will be smaller when less expensive drugs are prescribed.

Competitive Positioning

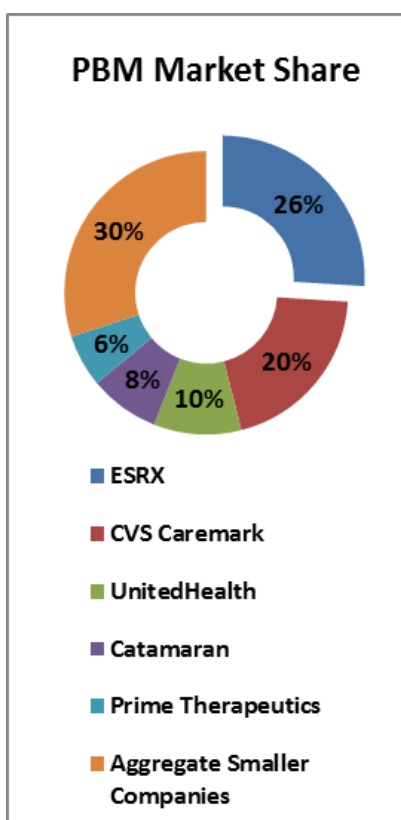
Prescription drugs play a significant role in healthcare today and constitute the first line of treatment for many medical conditions. For millions of people, prescription drugs provide the hope of improved health and quality of life. Total medical costs for employers continue to outpace the rate of overall inflation. National health expenditures as a percentage of Gross Domestic Product are expected to increase to 19.9% in 2022 from an estimated 18.0% in 2013 according to the Centers for Medicare & Medicaid Services ("CMS"). In response to cost pressures being exerted on health benefit providers such as managed care organizations, health insurers, employers and unions, pharmacy benefit management ("PBM") companies work to develop innovative strategies designed to keep medications affordable.

Consolidated Competition

In recent years, competition has become consolidated in the PBM industry. As seen in the adjacent graph, 46% of the PBM market share is controlled by the two biggest players: Express Scripts (26%) and CVS Caremark (20%). However, there are new entrants in the PBM space who have strong capital bases capable of supporting a PBM division. For example, Costco launched a PBM program in 2013.

Limited Growth Prospects for Express Scripts

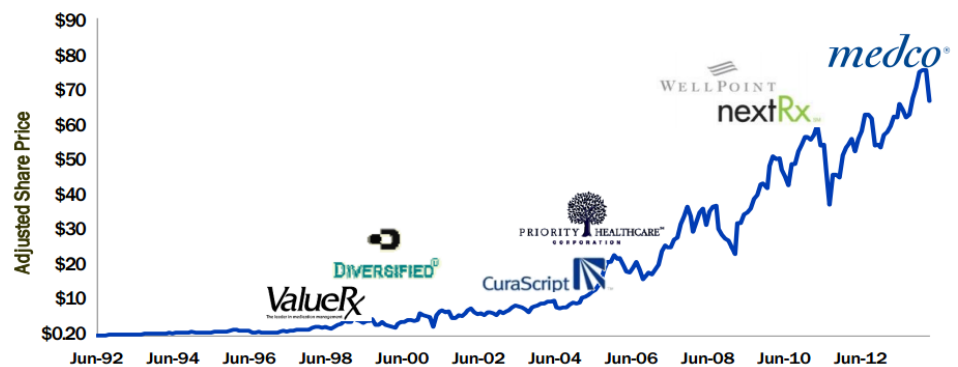
In the past, Express Scripts amassed significant scale from acquisitions as seen in the PBM Market Share graph. With the recent acquisition of Medco, Express Scripts now has a market share of 26%. As a result, inorganic growth will be unlikely at this point due to antitrust issues and market dominance (see historic share price graph next page). Similarly, the rate of organic growth is slowing since Express Scripts' core business has matured. In the past, Express Scripts' continuous growth led to increasing economies of scale. This allowed Express Scripts to negotiate even larger discounts and pass on savings to its clients. Since specialty drugs are becoming increasingly expensive, the need for drug cost reductions is paramount. Overall, Express Scripts' size and negotiating power has allowed the company to rapidly increase its customer base and achieve double-digit growth. However, Express Scripts has reached an efficiency frontier, and its ability to receive even larger discounts is questionable. Express Scripts is in a transitioning phase and is likely to



Source: Morningstar Direct

experience slower growth. This hypothesis is supported by the ongoing stock buy-back program, the increased focus on cost cutting policies and the company's continued initiatives to develop new product lines.

Historical Stock Price & Company Acquisitions



Source: Express Scripts Company Presentations



Gilead Sciences Pipeline Drugs (Stage 3, Near Release)

- HIV/Aids
- Liver Disease
- Leukemia
- Lymphoma
- Cardiovascular Sodium Inhibitor

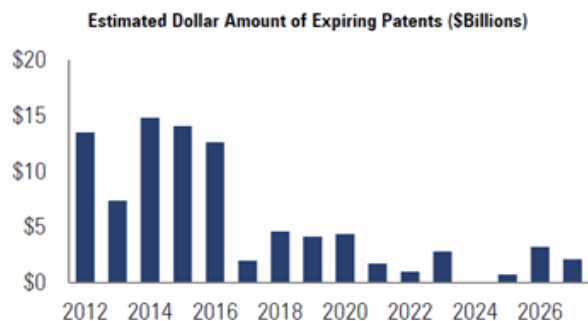
Source: Gilead Sciences

Growing Power and Influence of Biotech Companies

The innovation pipeline for the healthcare sector is full, especially in the biotechnology, medical devices, and life sciences industries. This is also shown by the fact that biotech companies like Gilead Sciences have seen annual earnings per share growth of 59% CAGR from 2011-2014. Gilead Sciences have now developed a hepatitis C drug that was recently approved by the FDA. Drugs like these are in high demand and PBMs are going to benefit as patients will be eager to use new drug programs for breakthrough treatments. However, competition is tough among PBMs which can dilute profits. To compensate, Express Scripts appears to be stirring up a price war with new and emerging biotech companies that are debuting new drugs. Due to the fact that new biotech companies like Gilead, Celgene and Regeneron have put huge amounts of money into research and development, they may not be willing to lower the cost of their drugs and may look to make deals with Express Scripts' competitors like CVS and UnitedHealth, threatening Express Scripts' market position. The emphasis on low price contracts with drug providers could prove detrimental as other PBM's may be willing to accommodate higher priced contracts. Evidence of this movement is already emerging as Gilead has signed exclusive deals in early 2015 to provide their hepatitis C drug exclusively to Anthem and CVS after being shunned by Express Scripts.

Peak of Generics and Maturing Industry

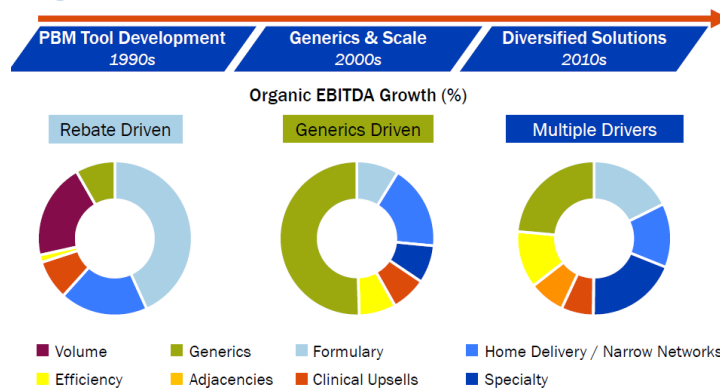
Over the course of the next few years, the number and dollar value of patent expirations will decrease materially. This dynamic has concerned some market participants that Express Scripts will no longer have the opportunity to easily ride the generic wave. Additionally, the value of Express' services may diminish as consumers gain wider access to drugs once generic versions hit shelves.



Source:
Congressional
Budget Office

Express Scripts has an opportunity to exploit this trend as generic migration will start to slow down over the next several years. With the threat of rising prescription costs, consumers will need to use other cost-management tools PBMs offer to push the growth of pharmaceutical costs lower. Express Scripts is among the market leaders in innovative cost management tools, but more significant progress is needed to find promising solutions to long term cost management.

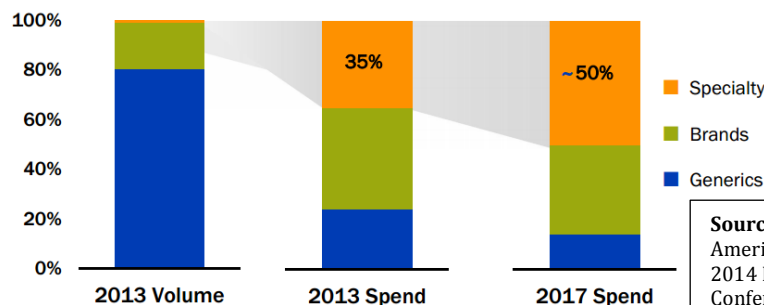
Organic Growth Driver Evolution



Source:
Express Scripts
Company
Presentation,
October 2014

Increasing Specialty Drug Market

The specialty drug market is forecast to be one of the fastest-growing segments of the health-care industry in the foreseeable future. We believe the use and importance of these pharmaceutical products will grow at a quick rate because they will be utilized as a key tool for physicians looking to implement more targeted treatment regimens for narrowly defined ailments. Combining this trend with the higher cost of specialty drugs makes this market niche a major driver of expected health-care cost inflation. As a result, payers are targeting these expenses to keep the overall growth of their health-care costs in check. Given its core services, Express Scripts has the necessary tools to assist clients with this mandate. However, they have yet to make meaningful progress toward becoming the premiere provider of specialty drugs or fostering profitable relationships with biotechnology companies that provide them.



Source: Bank of America Merrill Lynch
2014 Health Care
Conference

Benefits of Mail Order Pharmaceuticals

Client Savings
4% average

Member Savings
29% average over retail

Medical Costs Avoided
Due to Higher Adherence

Source: Company Presentation to CFA
Research Challenge Participants,
October 2014

Increasing Mail-Orders

The continuing shift toward mail-order pharmacy deliveries is expected to increase prescription volumes for Express Scripts in the long-term. Mail-order prescriptions are more profitable since they cut out pharmacies with physical locations and are more cost-effective, providing higher margins. However, increasing mail-orders are not a significant growth driver in the short-term and are unlikely to drive Express Scripts' share price in the near term.

Long-Term Opportunity, Short-Term Uncertainty

Express Scripts benefits from long term growth drivers including the continuing shifts towards mail-order pharmacy delivery, demand for higher-cost specialty drugs, desires by consumers to reduce prescription medication costs, and aging Baby Boomers. In the short-term, Express Scripts' prospects for meaningful discovery of growth catalysts are uncertain.

Investment Summary

Looking at stock price movements, coupled with significant events in the healthcare space we recommend a SELL for Express Scripts. We believe the company has had tremendous growth, has surpassed our price target of \$83.61 and is reaching all-time highs. The past 10 years have seen price appreciation of ~700%, reaching a market capitalization of more than \$62 billion and placing Express Scripts among the elite growth companies of the 21st century. Today, we believe that the time has

Top 10 Conditions by Claims Cost

HEALTH EXCHANGE	
HIV	
Diabetes	
Hepatitis C	
Inflammatory Conditions	
Multiple Sclerosis	
Cancer	
Depression	
Pain	
High Cholesterol	
Hypertension/Heart Disease	

Source: Exchange Pulse - Public Health Exchange and Off-Exchange Report | OCTOBER 2014

come for investors to temper their growth expectations and consider exiting their positions. Express Scripts faces tremendous challenges in the PBM space as competition with companies like CVS intensifies in the future. This will be a significant threat to their market share. Coupled with this, we believe there will be increasing price wars between PBMs and biotech companies producing new drugs. As these new companies reach the market with their blockbuster drugs, a shift in bargaining power is likely to move in favor of the suppliers. The rise of biotech leaves Express Scripts with continually declining margins and potential loss of volumes should suppliers look to competitors to bring their drugs to market.

Evidence of these price wars can be seen with the recent events surrounding the Hepatitis C drug between Gilead, AbbVie, and Express Scripts. Express Scripts recently dropped Gilead's hepatitis C drug for a cheaper option that is being offered by AbbVie. In terms of drug quality, Gilead's hepatitis C drug is superior with higher success rates and fewer side effects than AbbVie's counterpart. Thus, consumers are likely to choose Gilead's drug even if the price point is higher. Given the fact that Express Scripts is the largest PBM with significant bargaining power in determining what drugs consumers have access to, Express Scripts opted to go for the lower priced drug to benefit consumers. However Gilead recently finalized a deal with CVS for their hepatitis C drug. Anthem also broke away from Express Scripts to ink a deal with Gilead for their Hepatitis C drug. Due to such events and given the massive drug pipeline that new biotech companies will be debuting in coming years, we are not optimistic that Express Scripts is well positioned to attract blockbuster drugs in the coming years. This sentiment from biotech firms could even be aggravated by Express Scripts' recent announcement of 66 drugs that will be dropped from their formulary in 2015. We think biotech companies will more frequently be looking to Express Scripts' competitors and significant market share could be lost. Given all these events, we think Express Scripts growth will slow down from its double digit growth to single digit growth sooner rather than later. Thus, significant downside exists and we believe selling in the \$80-\$85 price range is justifiable.

Express Scripts' core business is focused on the efficient delivery of pharmaceuticals to consumers at the lowest price. Among the numerous players in this competitive arena, Express Scripts stands out as a profitable giant. However, they are facing serious threats from competitors and plateaus in organic growth potential. To return to their impressive history of growth, inorganic growth appears to be the only outlet. Unfortunately, the likelihood that they will make a significant acquisition like that of Medco is low because they will have significant hurdles to gain regulatory approval with antitrust laws in the healthcare space. Given the historic share price appreciation of Express Scripts and the stable arena in which Express Scripts operates, we believe that over the next year the company will not have the high growth it has seen in the past and significant pullback in share price is likely.

Valuation

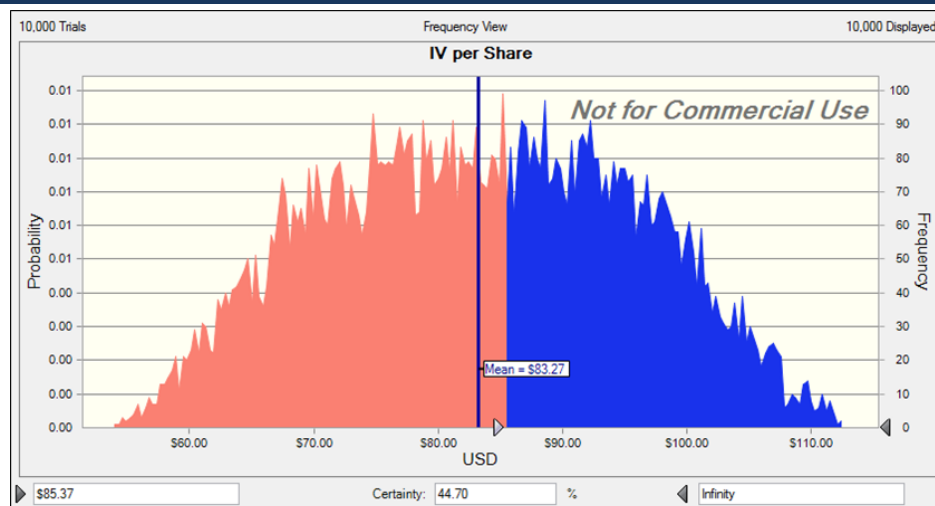
FCFF Model

Valuation of ESRX was conducted using a Free Cash Flow to the Firm model which begins with a firm wide valuation. This firm valuation is reduced by the value of debt, leaving value attributable to common shareholders. This value attributable to shareholders is divided by shares outstanding to reach an intrinsic value per share. This model is suitable for ESRX as it is less sensitive to changes in capital structure and interest payments. This is important as the firm will likely see a transition in capital structure as their debt levels recede to more normal levels in coming years following the Medco acquisition. The FCFF model for ESRX was created with a base case set of assumptions representing the team's expected values for key inputs, resulting in an intrinsic valuation of \$83.94. Additionally, a Monte Carlo sensitivity simulation was applied to the FCFF model to test variable growth rates' impact on intrinsic valuation. Following a 10,000 trial Monte Carlo simulation, the average intrinsic valuation of ESRX was measured to be \$83.27. Our primary target price is represented by the average of these two models, \$83.61.

FCFF Model Summary	
PV FCFF	\$77,570.88
MV of Debt	15,967
Intrinsic Value	\$61,604.12
Shares Outstanding	733.9
IV per Share	\$83.94

Source: Team Estimates

Monte Carlo Analysis Summary



Free Cash Flow Calculation		
	2013A	2014E
CFO	4768.9	4204
Interest Expense	554.2	540
Tax Rate	36.4%	37.8%
CapEx	423.0	507
FCFF	4698.4	4032.9

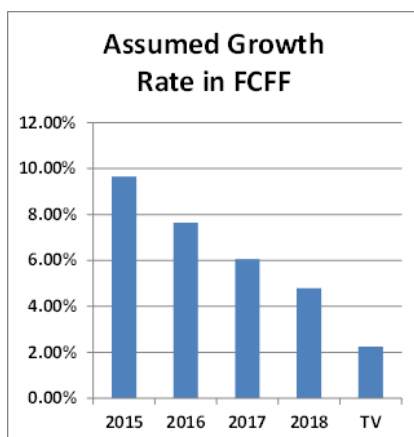
Source: Team Estimates

FCFF Baseline

Baseline estimates of 2014 annual free cash flow to the firm were computed to reflect actual results through Q3 2014, with an adjustment for growth in Q4 2014 in line with company guidance and historical seasonality. This team estimate of \$4,032.9 in 2014 provides the baseline for growth in FCFF over the next 4 years. The core elements of cash flow from operations, interest expense, tax rate, and net capital expenditure were all derived to estimate FCFF for 2014.

High Growth Rate

The initial growth rate of FCFF in 2015 was determined to be 9.64%, reflecting Express Scripts' Q3 2014 derived sustainable growth rate implied from Return on Equity and current levels of reinvestment. This assumption is rooted in the improvements in performance stemming from the completion of the Medco merger and the bulk of new customers obtaining medical coverage from the Affordable Care Act. This presents the first rate in the 4 year projection that will undergo linear reductions at the transitional rate before arriving at the terminal growth rate assumption. In conducting the Monte Carlo simulation, a triangular distribution was used to sensitize this high growth rate. We used a high estimate of 11.16% (indicative of the 4 year average of ROIC) and a low estimate of 4.76% (indicative of continued decline in ROIC at the 4 year CAGR of ROIC).



Source: Team Estimates

Transitional Growth Reductions

The model assumes that firm is in a transitioning phase approaching stable growth. This assumption is reflected in gradually declining growth rates of FCFF over the 4 year forecast period. This assumption is built upon the aforementioned inflection point that Express Scripts has reached following the Medco acquisition and the implementation of the Affordable Care Act. We believe that the lack of any foreseeable future growth catalysts tantamount to the impact of those two events over the past 3 years leave Express Scripts approaching maturity and slowed growth in the near future. This trend can be witnessed in the declining ROE, ROA, and ROIC metrics the firm has produced over the past 5 years. Our FCFF model reduces annual growth rate in FCFF by 20.79% each period (the average CAGR of ROA, ROE, and ROIC from 2010 through Q3 2014), forecasted out to 2018.

Terminal Value

Terminal Value for the model was derived following the 4 year forecast period at a perpetual rate of 2.25%. The Gordon Growth Model philosophy was used, incorporating the terminal value of the company with a constant growth rate to value the company's operations perpetually following the 4 year growth period. The team's 2.25% estimate is indicative of forecasted long run US GDP growth according to the Federal Open Market Committee reports from September 2014. The terminal growth rate was also used as a variable in the Monte Carlo simulation defined with a triangular probability distribution. The simulation assumed a high estimate of 3.69% (3Q ESRX internal growth rate derived from ROA) and a low estimate of 0% indicating complete stagnation in growth for the long run.

WACC Calculation	
RF Rate (20 YR AAA Corp Bond)	3.47%
ERP (January 2015, Damodaran)	5.78%
Beta (regressed historical 3 year monthly returns over NASDAQ composite with 3mo Treasury)	1.08
Cost of Equity (Using CAPM)	9.71%
Pre-Tax Cost of Debt (Kd Computation)	3.60%
Marginal Tax Rate (2013 10-k)	37.80%
After Tax Cost of Debt	2.24%
MV of Debt	15,967
MV of Equity	61,838
Wd (1-7-2015)	20.52%
We (1-7-2015)	79.48%
WACC	8.18%

Source: Team Estimates/ Company

Weighted Average Cost of Capital

Weighted average cost of capital (WACC) was assumed as a constant in the discounting process for the FCFF model for Express Scripts. It was formulated using Express Scripts' current capital structure of 20.52% debt and 79.48% equity, utilizing the Capital Asset Pricing Model (CAPM) for cost of equity estimation and a weighted average of outstanding company bond rates for cost of debt assumptions. Our team's analysis resulted in a WACC of 8.18% which was used as the discount rate for FCFF forecasts. See the appendix for a breakdown of all assumptions used in formulating WACC.

Financial Analysis

Steady Free Cash Flow

Express Scripts' free cash flow has dramatically accelerated over the past five years, allowing the company to dedicate their cash to strategic initiatives to improve shareholder wealth and provide strategic positioning. The CAGR of free cash flow of 20.29% represents benefits from scale (due to acquisition) and industry expansions (due to increased coverage and healthcare utilization). To support shareholder increases in wealth, the ability to initiate share repurchases will be a primary benefit (described below). Strategically, these free cash flows will allow for unique ability of Express Scripts to adapt to rigorous regulatory demands expected in the PBM industry. Smaller companies could be suffocated by the immense costs of maintaining compliance, but Express Scripts should be able to overcome these hurdles and continue growth and innovation initiatives.

Increase in Volume of High Margin Specialty Products

Specialty medications have been identified as a key expansion in the healthcare industry and Express Scripts stands as a key beneficiary of this development. Specialty medications represented 1.3% of claim volumes in 2013, but their share of revenues rose to 38% in 2013. The timely rise of specialty drugs has meant that ESRX is more able to sustain the one-time decline in volumes from the UnitedHealth Group contract runoff. 3Q 2014 YoY Revenues for ESRX decreased 4.8%; however, margins increased 4 bpts to 3.85%. The decline in revenues due to the runoff of UnitedHealth Group transactions was expected and non-recurring, thus, the overall performance of margins is expected to rise and provide increased financial health for the company.

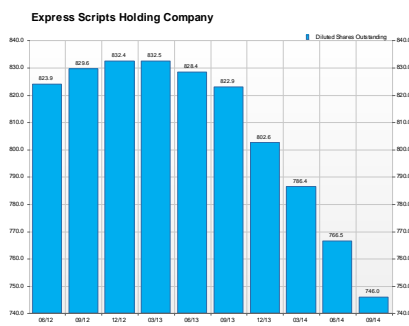
Share Repurchases

The absence of a dividend for Express Scripts shareholders has largely been overcome over the past two years as significant share buybacks have provided nice returns on a per share basis. A \$1.5 billion share repurchase agreement was completed in Q2 2014. This large scale repurchase was identified in correspondence with Express Scripts as one of the top 4 priorities for capital allocation in the long term. 2013 Shares outstanding stood at 822 million, but 2014 guidance puts that figure at 755 million. We estimate that shareholders could expect an annual 2-3% return from share repurchases over the next 3-5 years if current repurchase rates continue. See the Quarterly Shares Outstanding chart for evidence of growing share repurchases since 2004.

Emphasized Reductions in SG&A

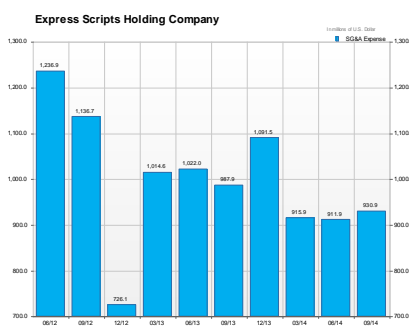
Company executives have indicated their intentions to cut costs and increase company efficiency stemming from the 2012 Medco acquisition. Their own estimates indicate a 7-11% reduction in SG&A costs from 2013-2014. The sheer scale of the combination of the #1 and #3 largest PBM's in the US has proven to be a large undertaking, and the efficiency gains will take 2-3 more years by team estimates to fully take effect. While these efficiency gains could prove to compensate for potential losses in margin from generic losses or volume in missed specialty drug contracts, meaningful growth will not come from SG&A reductions alone. In addition, executive turnover (including the appointment of a third CFO in two years) could signal weakness in Express Scripts' ability to manage the massive undertaking of exploiting the Medco merger's potential efficiency gains.

Quarterly Shares Outstanding Since June 2012



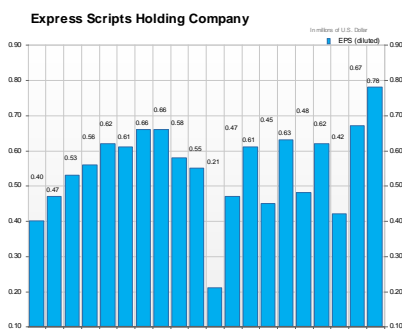
Source: FactSet

Quarterly SG&A Expense Since June 2012



Source: FactSet

Quarterly EPS since Q1 2010



Source: FactSet

Abnormally High Growth in EPS

EPS growth from 2013 to 2014 is expected to range between 17%-19% according to company guidance, with longer term figures expected in the range of 8%-10% in the next 2-3 years respectively. This growth is unusual for companies with such size, but the expansion of the enterprise through the acquisition of Medco and future prospects of growth focused on organic growth and expanded volumes due to increased prescription coverage allow for justifiable high rates of growth. Our estimates fluctuate between 7% and 9% growth calculated through the sustainable growth rate and internal growth rate computations for 2015.

Investment Risks

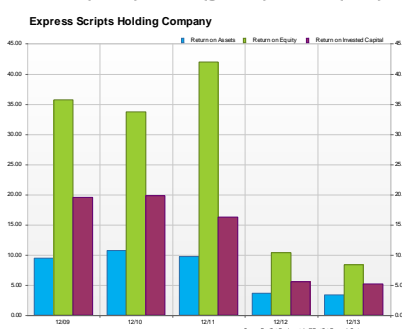
Unpopular Formulary Reductions May Create Patient Outcry

In 2015, Express Scripts is looking to exclude 66 brand name drugs from its formulary drug section, an increase from the 48 drugs it excluded in 2014 (Source: Bloomberg). The reduction in formulary drugs will limit customer choice for people in need of high quality drugs who are accustomed to a specific medication. Many drugs being removed by Express Scripts are the ones being produced by the rising biotech companies. For example, Express Scripts recently scrapped Amgen's red blood cell-boosting drugs Epogen and Aranesp from its formulary in 2015, a decision affecting millions of patients in the US. In the next 3 years, looming cholesterol drugs coming from biotech firm Regeneron and Amgen's leukemia drug will be looking for coverage for their drugs with other PBMs. These developments demonstrate the adverse impact of Express Scripts' aggressive formulary management and cutthroat contract negotiations. We believe that these tactics will pose a threat to their market share in the near future and rival CVS may benefit with their more sound relationships with biotech companies like Amgen and Regeneron.

Threat of Regulation

PBM's lack transparency and are therefore exposed to increasing regulations. As the Federal District Court in Maine explained, PBMs "introduce a layer of fog to the market that prevents benefits providers from fully understanding how to best minimize their net prescription drug costs." States such as Maine have begun to regulate the practices of PBMs by imposing contract transparency and conflict of interest requirements, to establish a state fiduciary duty owed by PBMs to client health plans, and to require that savings based on volume discounts be passed through to client health plans and thence to consumers. The PBM industry's request to consider the constitutionality of this law was rejected by the Supreme Court on June 5, 2006. Since Maine's law will be enforced now, other states have followed suit including the District of Columbia. Also the D.C. statute was upheld based on the 1st Circuit Court's decision which reversed an earlier decision. Moreover, some states already enacted a Pharmacy Bill of Rights which seeks transparency but is less stringent (Source: Prescription Policy Choices - PBM Fiduciary Duty and Transparency). Expectations of new legislation include the creation a regulatory approval pathway for biosimilars (alternatively known as generics) for biological products and provide that an innovator biological product will be granted 12 years of exclusivity. This will create 12 years of high margin returns for Express Scripts before lower margin generics emerge.

5 Year Trends ROA (blue), ROE (green), ROIC (red)



Source: FactSet

Slowing Drivers in Earnings Growth

The catalysts of earnings for Express Scripts in the short term are driven primarily by expanding healthcare coverage with the Affordable Care Act. There is also an increase in specialty drug spending for certain diseases like Hepatitis which require a full program of medication. As previously explained, these specialty drugs are coming from new biotech companies that will be looking to negotiate the highest prices for their emerging drugs. Unfortunately, we do not believe that there will be meaningful growth in Express Scripts' earnings stemming from the increase in demand for specialty drugs. This is due to the aggressive price reductions that Express Scripts is demanding from new biotech companies. This has cast a cloud on Express Scripts' earnings in terms of generating increased revenues from the biotechnology space. There are significant treatments emerging in oncology and multiple sclerosis from biotech firms and we believe Express Scripts will not be as

successful in using their bargaining power to secure huge discounts like they have in the past. Finally, the Medco acquisition in 2012 is near full integration. Growth from efficiency gains will no longer be a cushion for poor performance elsewhere. Thus, we expect modest growth in the single digits rather than the abnormally high sustained growth of the past decade.

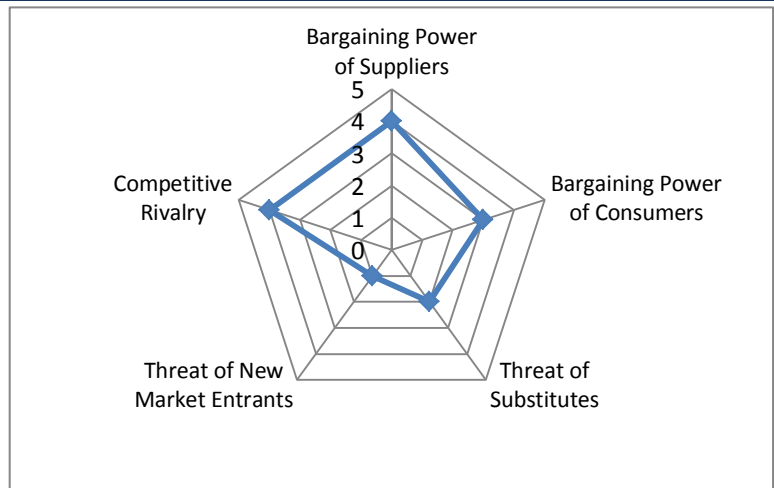
Industry Risks

Industry acquisitions by Express Scripts' competitors can result in the loss of managed care (insurance provider) clients. As such, acquisitions of significant clients by competitors could have severely adverse impacts on Express Scripts' business. Industry regulation also poses a threat to the existing framework of the services provided by Express Scripts. Strenuous regulations could diminish already thin margins, inhibit the acquisition of new clients, cause the loss of existing clients, or incur costly restructuring of existing contracts. Strong competition in the PBM marketplace has generated greater client demand for lower pricing, increased revenue sharing and enhanced product and service offerings.

Financial and Stock Related Risk: Express Scripts has fairly high leverage and operates with an asset light balance sheet. Cash flow to equity holders still remains a concern as they have used a lot of cash to acquire companies and will have high carrying levels of debt. According to Seeking Alpha, Express Scripts' Money Index is neutral. Their company guidance for growth in recent quarters has been slowing and some analysts think growth is peaking. The company experienced significant turnover among account managers that made it easier for competitors like CVS Caremark to win away Express Scripts' customers. This turnover has had a negative impact on revenues and may be detrimental to cash flows in the future. Express Scripts specifically suggested that it had fallen short in key customer service metrics following the merger. This is due to the acquisition of Medco. Should Express Scripts manage to fund future acquisitions, shareholders are likely to see increased risk as Express Scripts tries to integrate another newly acquired company.

Appendix 1: Porter's Five Forces

Our Porter's Five Forces analysis operates on a continuum from 1 to 5, with 1 representing Low and 5 representing High exposure to the force in question.



Bargaining Power of Suppliers

4- Medium-High

- Express Scripts is the largest PBM in the US and operates amongst a small pool of collective market makers that command great power in negotiating drug prices. However, the recent developments of cutthroat price negotiations and exclusive contracts being offered to biotechnology drug manufacturers may backfire and lead high quality producers of breakthrough specialty drugs away from agreements with Express Scripts. Additionally, this may create an opening for competitors like CVS, UnitedHealth and Catamaran to develop more appealing formularies with higher quality drugs in exclusive contracts with leading drug manufacturers.
- Suppliers (drug manufacturers) depend on PBM's to act as intermediaries for distribution of their products. Healthcare laws and health insurance providers ensure that the need for PBM services will not evaporate. Without PBM's, drug companies would be unable to attain the volumes that they need to recover their R&D costs.

Bargaining Power of Customers

3- Medium

- Express Scripts' contracts with health insurance providers make their role as drug distributor for the individual consumer non-negotiable. However, the bargaining power of these insurance providers may surface in the next few years if Express Scripts continues their aggressive formulary management practices in limiting the availability of breakthrough and specialty drugs stemming from steep discount demands with manufacturers.
- The essential function of PBM's in the eyes of the insurance companies they service lies in the ability to secure discounts on prescription medications that their individual volumes would not allow. By pooling volumes with those of other companies, health insurance providers and pharmacies are able to attain lower prices for their customers. This ensures that the bargaining power will not be drastically shifted from PBM's like Express Scripts.

Threat of Substitutes

2- Medium-Low

- Two companies (Express Scripts and CVS) account for 46% of the market share in the PBM sphere. This consolidation demands potential substitutes to provide some level of specialization to draw customers away from the two giants in the industry. The scale advantage that Express Scripts has over all other PBM's makes substitution relatively unlikely.
- Switching costs are very high in changing PBM's, therefore turnover of customers is likely to only come from huge strategic shifts in a customer's strategy (Ex- UnitedHealth).

Threat of New Market Entrant

1- Low

- PBM's operate in a sophisticated industry governed by strict and increasing government regulation. New entrants would be faced with a saturated market and huge costs in compliance that are likely to stifle meaningful new entrants to the industry.

Competitive Rivalry

4- Medium-High

- Existing PBM's are very competitive in acquiring discounts from drug companies. Lower prices make them more attractive to their customers. These discounts drive their value proposition. Additionally, formulary offerings (which drugs the PBM's can provide to their customers) will continue to differentiate PBM's that are able or unable to form contracts with specialty drug providers in upcoming blockbuster drug offerings like cholesterol and cancer treatments currently filling up the pipeline of companies seeking FDA approval.

Appendix 2: Base Case DCF Analysis

Debt Analysis		
Maturity	Value	Rate
2018	1358.6	7.125%
2019	498.1	7.250%
2015	504.9	2.750%
2020	506.3	4.125%
2016	1497.6	3.125%
2016	1250	3.500%
2021	1241.7	4.750%
2014	899.9	2.750%
2041	698.4	6.125%
2017	1492.1	2.650%
2015	999	2.100%
2022	982.8	3.900%
2019	997.6	2.250%
2024	992.8	3.500%
2017	499.8	1.250%
2016	1684.2	1.900%
Total BV	\$ 16,104	
WA Cost	3.60%	
Cost Debt	2.24%	
WA Time to MAT:	3.82	

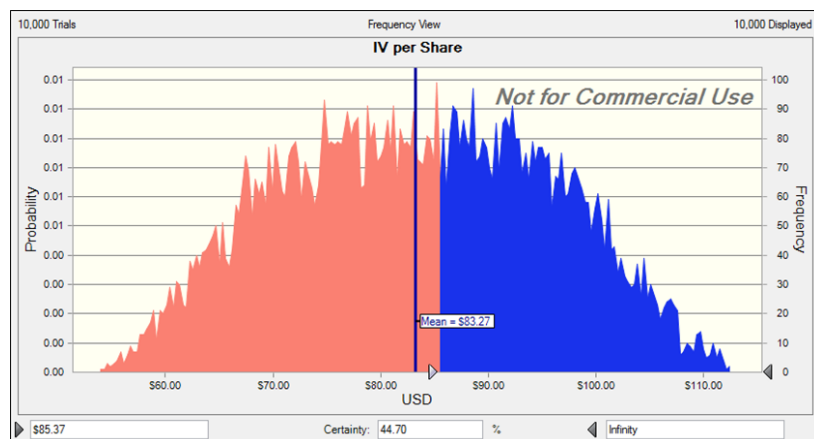
WACC Calculation	
RF Rate (20 YR AAA Corp Bond)	3.47%
ERP (January 2015, Damodaran)	5.78%
Beta (regressed historical 3 year monthly returns over NASDAQ composite with 3mo Treasury)	1.08
Cost of Equity (Using CAPM)	9.71%
Pre-Tax Cost of Debt (Kd Computation)	3.60%
Marginal Tax Rate (2013 10-k)	37.80%
After Tax Cost of Debt	2.24%
MV of Debt	15,967
MV of Equity	61,838
Wd (1-7-2015)	20.52%
We (1-7-2015)	79.48%
WACC	8.18%

Free Cash Flow Calculation		
	2013A	2014E
CFO	4768.9	4204
Interest Expense	554.2	540
Tax Rate	36.4%	37.8%
CapEx	423.0	507
FCFF	4698.4	4032.9

Growth Assumptions		Base	High	Low
Reinvestment Rate	87.16%			
g High for Forecast	9.64%	9.64%	11.16%	4.76%
g High transition rate	-20.79%	-20.79%		
g Long term for TV	3.69%	2.25%	3.69%	0.00%

Discounted FCFF						
	Base 2014	2015	2016	2017	2018	TV
FCFF	4032.9	4421.6	4759.3	5047.1	5288.9	91214.9
Growth Rate		9.64%	7.64%	6.05%	4.79%	2.25%
PV FCFF	\$77,570.88					
MV of Debt	15,967					
Intrinsic Value	\$61,604.12					
Shares Outstanding	733.9					
IV per Share	\$83.94					

Appendix 3- DCF Monte Carlo Sensitivity Analysis



Forecast Name	IV per Share
Trials	10,000
Mean	\$83.27
Median	\$83.31
Mode	---
Standard Deviation	\$12.40
Variance	\$153.77
Skewness	-0.0044
Kurtosis	2.17
Coeff. of Variation	0.1489
Minimum	\$52.92
Maximum	\$113.79
Mean Std. Error	\$0.12

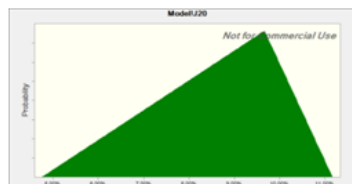
Growth Assumptions		Base	High	Low
Reinvestment Rate	87.16%			
g High for Forecast	9.64%	9.64%	11.16%	4.76%
g High transition rate	-20.79%	-20.79%		
g Long term for TV	3.69%	2.25%	3.69%	0.00%

The above Monte Carlo Analysis was applied to the FCFF model in Appendix 3 in order to examine the impact of fluctuating high rates of growth and long term growth assumptions. The following triangular distributions were used in the sensitivity analysis:

High Growth Rate:

Triangular distribution with parameters:

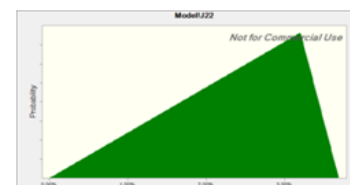
Minimum	4.76%
Likeliest	9.66%
Maximum	11.16%



Long Term Growth Rate:

Triangular distribution with parameters:

Minimum	0.00%
Likeliest	3.20%
Maximum	3.69%



The resulting output produced a mean valuation of \$83.27, very near to our base case scenario of \$83.94. Thus, our primary intrinsic valuation discussed throughout this report is the average of these two valuations, \$83.61.

Appendix 4: US Economic Performance Review

Strong GDP Growth

Despite international economic uncertainties, the US economy grew by 3.5% in the 3rd quarter of 2014, following a 4.6% increase in the 2nd quarter. This offset the negative growth of the first quarter which is attributed to unusually rough winter weather which had disrupted factory production and had kept consumers away from shopping malls. This stable growth indicates the US economy is gaining momentum and leaving the recession behind.

Positive Economic Indicators

Analysts expect the US to finally enter a period of above-trend growth in 2015 supported by falling unemployment levels and growing payrolls which should translate into stronger consumer spending. The unemployment rate has decreased to 5.9% in November 2014 and is close to pre-recession levels. At the same time, job openings steadily increased while the average length of unemployment continually decreased. Also consumer sentiment and the manufacturing PMI have increased since their temporary low in October 2013. Disposable income has gone up by roughly \$360 Billion from Q1 2014 and the Manufacturing PMI has been continually above 50, indicating a strengthening US economy. Even though economic indicators may still be volatile, there is a clear trend that US economy is recovering and growing at a steady pace. Since most health care benefits are purchased by employers, steady economic growth is expected to positively impact PMBs such as ESRX.

Impact of International Markets

The international economic outlook is currently rather worrisome. China's growth is expected to decline whereas most of Europe is fighting deflation while also being impacted by geopolitical crises in the Ukraine and the Middle East. The IMF stated that both advanced and emerging economies are at risk of low potential growth in the medium term, especially regarding Europe and Japan. Overall, the US currently has one of the most stable economies in the world. In the addition, international uncertainty have a relatively small impact on expect US growth. More so, ESRX operates solely in the US which decreases the risk that current international markets pose.

Appendix 5: Equity Ownership Trends

Team analysis of institutional holdings for Express Scripts uncovered interesting trends from Q4 2014, displaying moderate momentum of decreased positions which may be a precursor to a selloff trend for Express Scripts. Although more positions were initiated than ended in the last quarter, total share count indicates movement toward a selloff.

Ownership Summary



Institutional Ownership 84.72%

Total Shares Outstanding (millions) 734

Total Value of Holdings (millions) \$53,090

Active Positions



HOLDERS SHARES

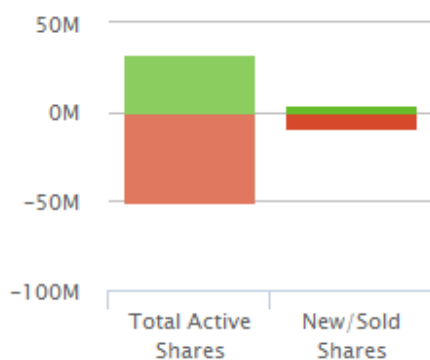
Increased Positions 481 31,987,585

Decreased Positions 540 50,629,983

Held Positions 154 539,185,702

Total Institutional Shares 1,175 621,803,270

New and Sold Out Positions



HOLDERS SHARES

New Positions 77 3,793,200

Sold Out Positions 49 9,471,730

Source: NASDAQ

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