CFA Institute

CFA Institute Research Challenge

Hosted in

St. Louis

Team B

TEAM B

Utilities Sector, Natural Gas Industry
New York Stock Exchange
Spire Inc.

Date: 1/25/2017
Ticker: NYSE: SR

Current Price: $64.65
Headquarters: St. Louis, MO

Recommendation: HOLD
Price Target: $65.96 (2% upside)

Market Information	
Closing Price	$64.65
Avg Daily Vol	270,603
Float	44.15M
Market Cap	2.95B
Forward P/E	17.66
Trailing P/E	20.11
Enterprise Value	5.43B
EV/EBITDA	12.93

Source: Yahoo Finance

Key Financials	
Gross Margin	1,045M
EBITDA	419.8M
EPS	3.42
ROE	8.63%
ROA	3.10%
Interest Coverage	3.77
Debt/Equity	1.03

Source: Company Filings

Method	Valuation	Weight
DDM	$73.49	33%
Relative Multiple	$71.05	33%
Historical Multiple	$53.34	33%

Valuation	$ 65.96
Current Price	$ 64.65
Upside	2%

Source: Team Estimates

Executive Summary

We initiate coverage on Spire Inc. (SR) with a **HOLD** rating based on a 12-month price target of $65.96 per share, 2% above current market value. This recommendation is driven by analysis of:

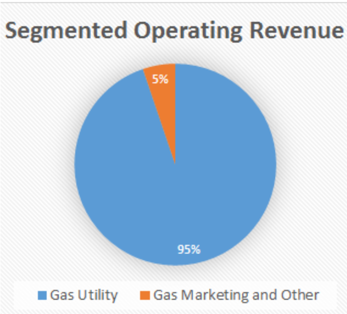
Company Strategies
Spire's primary strategy over the past five years has been to acquire gas utilities in order to achieve growth. After three large deals, management has signaled that the acquisition strategy will slow down. This will force the company to rely on other drivers including organic growth, infrastructure upgrades, and recent initiatives with compressed natural gas (CNG) fueling and the STL Pipeline.

Competitive Positioning
The two key success drivers in this industry are: (1) being able to grow a company's rate base by adding customers and (2) the rate of return a utility is allowed to earn by its regulator. Compared with other gas utilities in the US, Spire's companies operate under more favorable regulatory jurisdictions. However, they also have fewer opportunities to achieve customer growth with poor demographic and economic growth in the states that they operate in. Additionally, while Spire does not directly face competition from other gas utilities due to regulatory protection, it does encounter minor competitive pressure from electricity and other alternative heat sources.

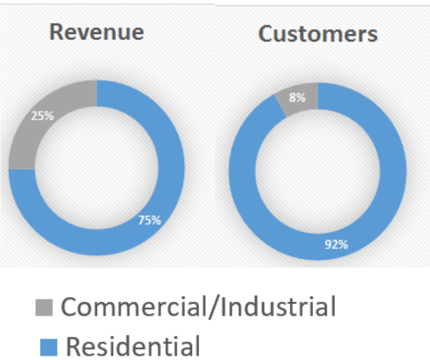
Valuation
Our price target was derived using dividend discount model (DDM), relative PE multiple, and historical PE multiple methodologies with equal weights. Due to the fact that Spire boasts powerful dividend growth, a low cost of capital, and favorable comparison to peer companies, the DDM and relative valuations resulted in bullish price targets. However, the utility sector as a whole is trading at historically expensive multiples, causing us to create a more cautious historical valuation. With just 2% upside, our price target of $65.96 does not provide a sufficient margin of safety to justify an attractive entry point.

Financial Analysis
Spire has enjoyed robust earnings growth through acquisitions and has largely used it to reward shareholders with increased dividend payments. These acquisitions have resulted in more leverage, but Spire appears well-positioned to handle that debt load with an extremely low cost of debt and strong credit metrics. Looking forward, poor opportunities for organic growth are a concern to the company that leads to slowing earnings growth in our pro forma models. We also project in our modeling that another acquisition by Spire could lead to tightening credit metrics.

Investment Risks
Spire is exposed to a number of material risks. The primary danger present is the negative impact that rising rates could have on Spire's cost of capital and profitability. Other key risks include: the possibility of paying a large premium on a future acquisition that could over lever the company, expansion into non-regulated businesses that could increase earnings volatility, and high institutional ownership that could lead to a major stock price decline if a significant shareholder decides to sell.



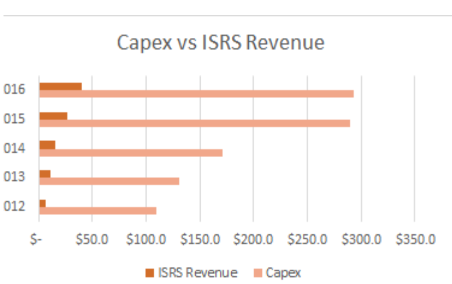
Source: Spire Website



Source: Spire Website

Company Acquired	Date Completed	Deal Value
MGE	Sept 2013	$975 million
Alagasco	Aug 2014	$1.6 billion
EnergySouth	Sept 2016	$344 million

Source: Team Analysis



Source: Team Analysis

Business Description

Spire Inc., formerly known as Laclede Group, was founded in 1857 and is a natural gas (NG) distribution company with 53,200 miles of pipeline and 1.7 million customers. Spire's market cap of nearly $3 billion makes it the 5th largest publicly traded gas utility in the US. Spire's subsidiaries include: Laclede Gas and Missouri Gas Energy (MGE) in Missouri, Alagasco and Mobile Gas in Alabama, and Willmut Gas in Mississippi.

In its regulated gas utility business, which accounts for 95% of overall company revenue, Spire serves residential, commercial , and industrial customers. The residential segment makes up 92% of Spire's customers, but the commercial and industrial customers are larger clients and account for 25% of utility revenue.

The company also engages in unregulated gas marketing which has gradually become a smaller portion of the business as management has focused on growth in other areas. Gas marketing is more successful in an environment of volatile NG prices and wide basis differentials, but these factors have not been present consistently over the past five years. As of today, gas marketing has little impact on Spire's performance when compared to the much-larger gas utility segment.

Company Strategies

Growth Through Acquisition

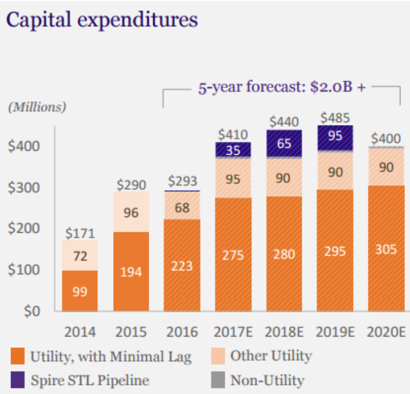
Management's growth strategy over the past few years has relied on gas utility acquisitions of MGE in 2013, Alagasco in 2014, and EnergySouth in 2016. This approach has largely been made possible by M&A experience among high-ranking Spire officials. CFO Steven Rasche has spent over 30 years creating deals in a wide range of industries and Chairman of the Board Edward Glotzbach is also a former M&A executive (Appx 1). Company executives have indicated as recently as October 2016[1] that the active purchasing strategy will slow down and that further acquisitions could over lever or overextend the company (Appx 2). Although smaller deals remain a future possibility, we believe Spire will be primarily focused and reliant on organic growth in coming years.

Organic Growth in Gas Utilities

Spire is able to stimulate organic growth through acquisition of new customers and improvement of current customer retention in its residential, commercial, and industrial segments. One recent technique to acquire customers has been to convince industrial clients to switch to NG as a fuel source from coal or other methods. We see tightening organic growth opportunities for Spire and will expand upon them in the financial analysis section.

Accelerating Infrastructure Upgrade Investment

One of Spire's core strategies to supplement revenue is to rapidly upgrade their pipeline systems through a process called Infrastructure System Replacement Surcharge (ISRS) for Missouri utilities and the Rate Stabilization and Equalization (RSE) system for Alabama utilities (see Appx 4). These regulatory mechanisms allow the company to recover a portion of their infrastructure expenditures as revenue. The reason regulators allow this is to incentivize utilities to replace aging cast-iron pipes with safer and more efficient plastic pipeline, which benefits customers in the long-run. This strategy has been especially effective in combination with recent acquisitions as Spire has accelerated pipeline replacement at MGE and Alagasco to match the more rapid rate of Laclede Gas. ISRS revenue has increased 536% since 2012 with total 2016 revenue of $40.1 million. This system has been a useful tool for incremental revenue and Spire will continue to pursue pipeline replacement with newly acquired Mobile and Willmut Gas. However, future revenue growth in this area will be limited as Spire's infrastructure becomes more and more modernized and they start to run out of cast-iron pipes to replace.



Source: Investor Presentation

Initiatives to Diversify Business

Spire has made advances to diversify outside of the gas utility business and drive additional growth. In 2013, the company announced the intent to enter the compressed natural gas (CNG) fueling business and has since built two stations that provide fuel for commercial NG vehicles. The segment has not yet turned a profit but remains a speculative growth opportunity. Additionally, the company launched the STL Pipeline project in 2016. The pipeline is an infrastructure initiative to connect customers in Eastern Missouri to low-cost NG production from the Marcellus and Utica shale fields. It is designed to further diversify Spire's supply portfolio, increase reliability, and improve gas pricing for customers. The STL Pipeline, which will be fully owned by Spire, involves total investment between $190-200 million and will be operational in 2019. According to company releases, Laclede Gas is expected to be the pipeline's primary customer[2]. It is important to note that non-regulated earnings involve more risk and volatility than regulated gas utility earnings.

Industry Overview and Competitive Positioning

Demand Drivers

$$R = B \bullet r + E + d + T$$

R: revenue requirement

B: rate base, or the amount of capital or assets a utility dedicates to providing service

r: allowed rate of return

E: operating expenses, including supplies and labor

d: annual depreciation

T: taxes

Regulation

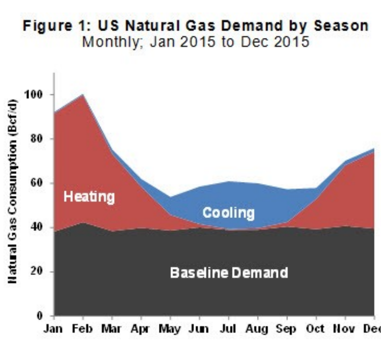
In exchange for granting the exclusive right to distribute in a given service territory, regulators determine the rate a utility is allowed to earn. The general equation, presented on the left, demonstrates that only two main factors drive a utility's profitability: allowed rate of return and rate base. Operating expense, depreciation, and tax are all essentially passed down to customers in terms of what the utility is allowed to charge them, and the remaining profit to the utility is equal to rate base times allowed return. ***Therefore, the key success drivers in this industry are: (A) being able to grow rate base by adding customers and increasing the size of the company and (B) the rate of return utilities are allowed to earn by their regulatory jurisdiction.*** Of these two factors, only the first is under the control of utility companies. Thus, the central objective of Spire's core strategies is to grow their rate base. See Appx 3 for further details on regulation.

State	5-Year Population CAGR	Weight
Missouri	0.31%	69%
Alabama	0.29%	30%
Mississippi	0.09%	1%
WA Population Growth	0.30%	

Source: US Census

Growth in Population and Housing

Spire's residential segment is directly affected by population growth and home construction. Between 1991 and 1999, 66% of new homes and 57% of multifamily buildings constructed used NG heating (according to the EIA)[3]. Additionally, the U.S. Census Bureau reported[4] an increase of over 13 million residential gas customers -- potentially 32 million gas-fired appliances -- over the past two decades. However, the states that Spire operates in all have slower 5-year annual population growth than the national average of 0.74%. This indicates that there are fewer potential customers available in those states than elsewhere in the nation. Accounting for 92% of Spire's customers in 2016 and 67% of operating revenue, the residential sector is heavily influential in Spire's business mix, so demographic growth is quite important to the company.



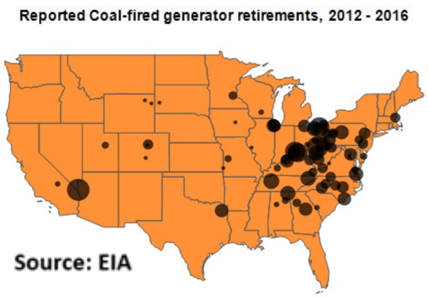
Source: EIA

Economic Growth

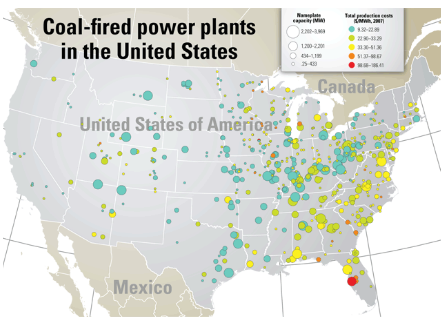
Whereas demographics drive the residential segment, economic growth is the key factor behind Spire's commercial and industrial businesses. As more buildings rise and more energy is utilized during periods of economic expansion, it creates new gas utility customers in those segments. Once again, Missouri (0.68%), Alabama (1.05%), and Mississippi (0.47%) all trail the national average of 2.25% in terms of annual growth in real GDP since 2010, providing headwinds to future expansion for Spire. See Appx 4 for further detail.

Weather

Natural gas demand fluctuates based on weather, and temperature is especially important for Spire during the winter heating season. A colder winter than normal causes higher demand for heating gas, which improves Spire's gross margin and off-system sales. However, operating expenses also increase as the company incurs higher costs to handle greater demand. This acts as a natural "hedge" on the business, because in more mild winters lower operating expenses can counter most of the negative impact of light demand. With that being said, it is not a perfect hedge-- Spire performs better financially in cold winters and worse in mild ones.



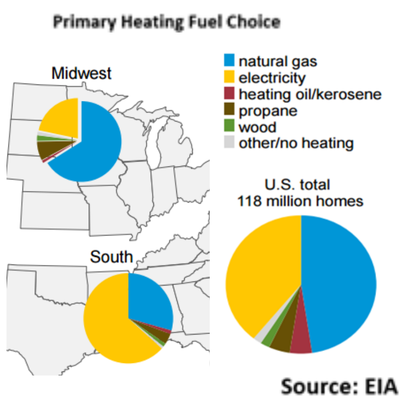
Retirement of Coal-fired Generating Capacity
Much of the existing coal capacity in the United States was built during a 40-year period from 1950 to 1990. A combination of environmental regulation, lower demand, and loss of faculties over time has prompted the retirement of coal-fired generators in recent years. Coal generators that faced retirement in 2015 were mainly built between 1950 and 1970, with an average lifespan of 54 years upon retirement. As the newer generators (those built after 1970) continue to age, they will likely face similar shutdowns. In 2015 alone, the EIA found that 80% of retired electricity generating capacity came from conventional coal methods[5]. Spire faces favorable conditions under industry change because as coal generation is retired, more industrial customers will be available to convert to NG as a fuel.



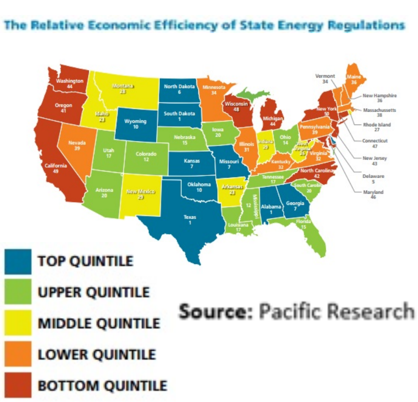
Source: Power Magazine

Competitive Positioning

Strong Market Share in Operational States
Spire's Missouri utilities Laclede Gas and MGE dominate the state's NG distribution market with 73% of customers and 87% of revenue. Spire posts another strong showing in Alabama with 48% of customers and 51% of revenue. As the market leader in both states, the company enjoys economies of scale in infrastructure and overhead costs. Spire shares their states with a collection of public and municipal utilities, but regulation dictates unique service territories for each company. With no overlap in distribution regions, there is little competitive rivalry between gas utilities (see Appx 5).



Substitutes for Gas Heating
The main substitute for NG as a heating source is electricity; nearly half of US homes in 2015 used gas as opposed to 39% using electricity. Gas systems are currently the cheapest method of heating and can also heat homes faster than electric units, a key advantage for comfort-seeking consumers. As evident in the chart on the left, NG is by far the most popular fuel choice in the Midwest, where Laclede Gas and MGE operate. However, electricity has greater use in the South with Alagasco and EnergySouth. This reflects the region's warmer temperatures, lower aggregate heating bills, and less need for rapid heating. Significant switching costs of installing a new heating system decrease the likelihood of Spire losing customers to other heating methods. See Appx 5 for further detail.



Source: Pacific Research

Regulatory Jurisdictions
Regulation is a key driver of success in the gas utility industry because companies rely on approval from Public Utility Commissions in order to raise retail distribution rates. According to the Regulatory Research Associates (RRA), the average ROE for gas utilities in 2015 was 9.60%[6]. In comparison, Spire's Missouri utilities were allowed to earn 10.45% in 2015 and their Alabama utilities earned 10.8%; both well above the national average. Additionally, Pacific Research[7] rated both Missouri and Alabama as top-quintile states in terms of energy regulatory environments. Strong regulatory terms mean that Spire will consistently be able to out-earn peers that operate in less favorable jurisdictions. The acquisition of Alagasco was particularly advantageous for Spire as it provided the company with additional geographic and regulatory diversification that they had been lacking.

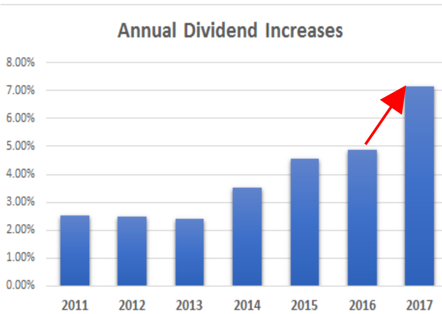
Acquirer	Target	Value
Dominion Resources	Questar	$4.4B
Southern Company	AGL Resources	$12B
Duke Energy	Piedmont Natural Gas	$6.7B
Emera	TECO Energy	$10.4B
Black Hills Corporation	Source Gas	$1.9B
WEC Energy	Integrys Energy	$9.1B

Source: Team Analysis

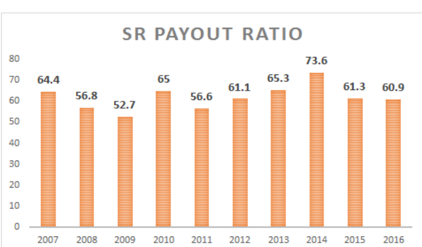
Spire Management

Name	Title
Susanne Sitherwood	President and CEO of Spire
Steve Lindsey	Executive VP and COO of Distribution Operations of Spire, CEO of Laclede Gas and Alagasco
Steven Rasche	Executive VP and CFO of Spire

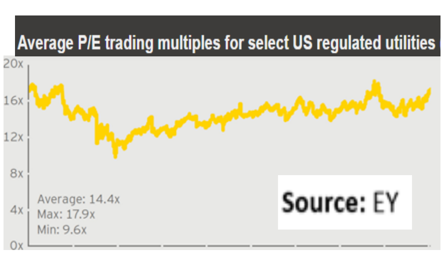
Source: Spire Website



Source: Morningstar



Source: Morningstar



M&A Climate

Slowing organic growth has caused companies in the utility industry to look outward in seeking expansion. There has been major consolidation fueled by utilities' ability to issue debt at extremely low cost to finance acquisitions. Since 2014, six major gas utility companies have closed on billion dollar deals. The majority of the deals have been strategic in nature, coordinated between two utility companies seeking to obtain synergies from their combination. One note to consider is the fact that companies have been paying large premiums in these acquisitions-- the average deal since 2014 was priced at a PE multiple 18% higher than the utility sector average (see Appx 6 for details). We believe this indicates somewhat of a sense of urgency on the part of industry management teams to achieve growth and satisfy their investors.

Corporate Governance

The company's corporate governance is highly rated overall, with a largely independent board, strong audit procedures, and closely monitored internal controls. Two areas of potential concern we identified looking forward are (A) shareholder dilution from equity financing and (B) low insider ownership that may indicate a misalignment of interests between management and shareholders. See Appx 1 for a full description of Spire's governance.

- **Governance Committees -** Established five committees: audit, corporate governance, compensation, investment review, and strategy
- **Shareholder Rights** - One vote per share policy; right to dividends, no dividend reinvestment plan, online voting
- **Oversight** - Board of Directors conducts an annual self-evaluation reported to the Corporate Governance Committee.
- **Compensation** - Compensation Committee reviews director compensation annually

Investment Summary

We issue a **HOLD** recommendation on Spire with a price target of $65.96 derived from a dividend discount model, relative multiple valuation, and historical multiple valuation. The valuations are supported by a combination of several bullish and bearish factors:

Bullish

Stable Gas Utility Business

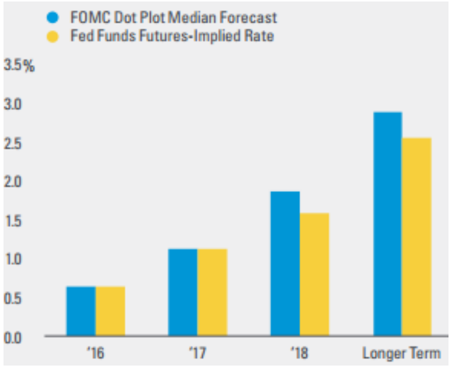
After acquisitions of MGE, Alagasco, and EnergySouth, Spire has become the dominant gas distributor in Missouri and Alabama and currently has over 1.6 million customers in their gas utility segment. Because of regulation that allows Spire to earn a set ROE upon their rate base, this portion of the business is protected from volatility in NG prices and provides a relatively consistent and low-risk source of cash flow.

Robust Dividend Growth

Spire's growing dividend, currently at a yield of 3.02%, is one of the company's most promising areas. 14 years of consecutive dividend increases have escalated into a 3.39% CAGR over the past six years and a whopping 7.14% hike announced for 2017. Spire still has room to expand their dividend while remaining within the industry norm for payout ratio, and therefore we see the possibility of further growth ahead. This potential translates into a bullish DDM valuation of $73.49 per share.

Favorable Regulatory Environments

Regulation is a key factor of success in the gas utility industry, and Spire is positioned in two of the nation's stronger jurisdictions in Missouri and Alabama. This means that Spire is allowed to earn a higher ROE than their peers, giving the company a long-term competitive advantage in terms of profitability. This edge should also translate into Spire meriting a higher market multiple than peers that operate under under less favorable regulatory conditions. We reflect strong regulatory jurisdictions in our relative valuation of $71.05 per share.



Source: Tallus Capital

Bearish

Historically High Industry Valuations

A flight to yield has caused the utility sector as a whole to trade at a 36% premium to its historical average (according to NYU data)[8]. No matter how favorable Spire may look compared to its industry, we must keep a broad scope of analysis and acknowledge the risks associated with buying into such an expensive sector. If utilities as a whole take a 20% haircut on their multiple (still leaving them trading significantly higher than their historical average), Spire will not be immune and could face a major selloff.

Significant Interest Rate Risk for Utilities

In December, the fed funds rate rose for the second time in two years, and the latest Fed dot plot[9] indicates that more hikes are expected ahead. Besides their direct impact on cost of capital, rising rates hurt utilities' profitability because of a regulatory lag (see Appx 7 for details). We believe that many investors have entered utility stocks in response to low bond yields and that if bond yields continue to rise, we could see many of those investors rotate out of the sector and a utility selloff. Our view is that with utilities trading at lofty valuations the market has clearly not priced in the negative impact that rising rates would have on utility profits and capital costs.

Margin of Safety:	SR Price Needed
15%	$ 57.36
20%	$ 54.97
25%	$ 52.77
30%	$ 50.74

Source: Team Estimates

Narrow Margin of Safety

While our price target for Spire is above current market level, it provides only a razor-thin margin of safety for investment. We do not believe a 2% margin provides enough room for error in our calculations to issue a buy recommendation. A higher margin of safety in the vicinity of at least 15-20% is needed to provide sufficient protection from the downside risk described above.

In summary, Spire compares well to its peers and may show upside with continued dividend growth potential. However, we cannot overlook overall lofty valuations in the utility sector despite the obvious macroeconomic headwind of rising interest rates. Relatively even balance between these positives and negatives justifies a HOLD rating.

Valuation

Method	Valuation	Weight
DDM	$73.49	33%
Relative Multiple	$71.05	33%
Historical Multiple	$53.34	33%

Valuation	$ 65.96
Current Price	$ 64.65
Upside	2%

Source: Team Estimates

Methodology

We valued Spire using three equally-weighted models. Because Spire has a strong history of returning cash to shareholders (paying a dividend every year since 1946) and because of the vital role dividends play upon investing in the utility sector, we decided to use a dividend discount model. Then, given the fact that regulation leads to little difference in operational performance between most NG utility companies, we applied a relative PE multiple valuation comparing Spire with nine peers, adjusting for the regulatory and growth-oriented quality of environments in which Spire operates. Finally, we added a historical PE multiple valuation to examine where Spire and other utilities have traded over the past 20 years and to estimate what multiple the company merits today. The relative model critically examines where Spire should trade relative to its peers, while the historical valuation is a more big-picture model that protects our valuation in the case that the entire utility sector is trading above or below its value. Each are equally important for determining price target.

Discounted Cash Flow Valuation

We also completed a free cash flow to firm (FCFF) valuation of Spire that we did not choose to include when forming our price target. The primary reason for this is because Spire can recover significant portions of their capital expenditure, they benefit from increased spending that causes free cash flow to be lower. This leads to FCFF valuation systematically undervaluing the company. We actually project in our model that the company's massive five-year investment plan for infrastructure upgrades and the STL Pipeline will lead to negative free cash flow over the next few years (see Appx 10) and this factor simply makes DCF valuation a poor methodology at this point in time. Also, Spire has sporadic but extreme shifts in net working capital that make it difficult to project free cash flow for future years. Both of these factors led us to a decision that the model was unfit for inclusion and that DDM and multiples valuations would provide a better picture of Spire's true value.

DDM Valuation	2016	2017E	2018E	2019E	2020E	2021E
Dividend	$1.96	$2.10	$2.17	$2.25	$2.33	$ 2.41
Terminal Value						$77.13
SR Value/Share	$73.49					
Inputs						
High Growth Rate	3.50%					
Terminal Growth Rate	1.15%					
Cost of Equity	3.97%					

Source: Team Estimates

Dividend Discount Model

Applying a 3.5% high dividend growth rate for 5 years and 1.15% terminally, the present value of Spire's future dividend payments discounted at a 3.97% cost of equity is $73.49 per share. Team assumptions and rationale are provided below:

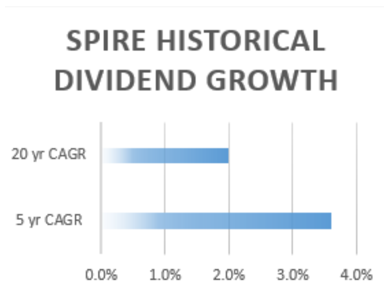
Cost of Equity

Cost of Equity Calculation	
Risk Free Rate	2.53%
Beta	0.32
Market Risk Premium	4.50%
Cost of Equity	**3.97%**

Source: Team Estimates

For risk free rate, we utilized the US 10-year treasury yield of 2.53%. MRP of 4.50% is based upon an implied ERP calculation using data provided by NYU[10]. To calculate beta, we took the regression-derived betas, tax rates, and debt/equity ratios of the ten gas utilities that form Spire's peer group and found each of their unlevered betas using Hamada's formula[11]. From the average of those unlevered betas, we relevered Spire's beta based on its 2016 tax rate and D/E and reached a final value of 0.32 (see Appx 10 for this calculation). While the beta may seem low, the regulated utility sector has always been recognized as low risk by investors and therefore enjoyed lower betas; 0.32 is not at all out of the ordinary in this industry.

High Growth Rate



Source: Morningstar

Spire's recent expansion has propelled strong increases in dividends, with payments growing at a CAGR of 3.6% over the past five years. Management recently accelerated this rate even further by announcing a 7.14% increase for 2017. The current tempo of dividend hikes is much more rapid than it has been historically; since 1996, dividend growth has been a more modest 2.0% compounded annually. Management may be reluctant to slow down the current pace, as it could suggest their growth strategy for the company was starting to lose momentum. For this reason, we model a 3.5% high growth rate for five years, nearly continuing the trajectory that dividends have been following over the past five. Even if earnings growth is lower than that rate, management has room to expand the payout ratio (currently at 60.9%) while still staying in their normal historical payout range of about 50-75%.

Terminal Growth Rate

At the five-year point, we project that dividend growth will stabilize. Spire's organic growth is dependent both upon the growth demographically and economically that drives their residential and commercial/industrial segments respectively. We took a weighted-average calculation of 5-year population growth in each of the states Spire operates weighted by number of customers the company has in each state and determined a rate of 0.30%. We averaged that with long-run US GDP growth of 2% (assuming that long-run economic growth in Missouri and Alabama will revert to the national mean) to achieve the 1.15% terminal rate.

egment	Customers	Weight	Estimated PE Multiple
aclede	647,000	39%	19.1
lagasco	420,500	25%	22.1
lobile	84,500	5%	22.1
IGE	508,000	30%	19.1
Villmut	18,500	1%	20.1
otal	1,678,500		

Source: Team Estimates

Relative Multiple Valuation

The initial step in developing a relative model was forming a nine company peer group to analyze in comparison with Spire. We searched for companies that operate in the same natural gas regulated utility business, have similar small to mid-size market capitalizations, have similar regression betas and dividend yields, and (if possible) operate in the same states as Spire. See Appx 9 for a list of the companies and their key data.

WA Estimated Multiple	20.0
SR Projected 2017 Earnings	$3.55
SR Value/Share	$71.05

Source: Team Estimates

Once the group was selected, we took their average forward PE and reached an industry multiple of 20.1. From that value, we made individual PE adjustments for Missouri and Alabama (the states that hold 99% of Spire's customers). When the result was multiplied by the company's projected 2017 earnings of $3.55, we reached a value of $71.05 per share.

	Missouri	Alabama
5-Yr Population Growth	0.31%	0.20%
5-Yr Economic Growth	0.68%	1.05%

Source: US Census, Trading Economics

- **Missouri**

We assigned Missouri a PE multiple of 19.1x, a 5% discount to the industry. This designation represents Missouri's average regulatory atmosphere and slightly below-average rate of population and economic growth. See Appx 4 for a more complete description of this rationale.

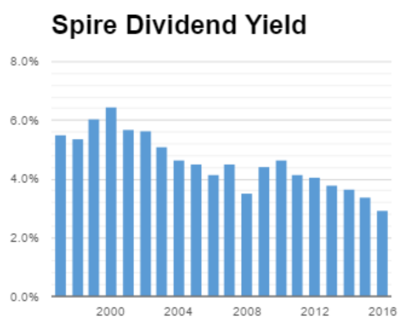
- **Alabama**

For Alabama we applied a PE multiple of 22.1x, which is 10% above the industry average. This reflects Alabama's status as one of the best regulatory jurisdictions in the nation and solid state economic growth. Limiting our upside on the multiple is below-average population growth. See Appx 4 for further detail.

(For the remaining 1% of the company, we assigned the market multiple of 20.1x earnings.)

Historical Multiple Valuation

Over the past 20 years, utilities have on average traded at just 14.8 times earnings[12]. Spire, with a bit more growth and excitement than most utilities, has averaged a 16.05 multiple over the past 20 years[13]. The utility sector today is trading at a P/E of 20.2 and Spire is at 20.0, representing 44% and 25% premiums to historical average.



Source: Morningstar

During the 30-year bull market in bonds, yield-seeking investors have migrated to dividend-paying equity sectors like utilities, consumer staples, and telecom to replace anemic yields in fixed income. This has led to the run-up in valuations of those sectors. One concerning measure of valuation for Spire is dividend yield; despite continual increases in payments, their yield in terms of percentage has come down significantly over the past 20 years. The price of the stock has risen more rapidly than dividends have been increased.

We do not see any reason for utilities to continue to be 36% more expensive than historical levels. While bond yields and interest rates remain low for now, there is significant risk of continued rate hikes from the Fed that will make the yield on dividend-paying equities less attractive in comparison to bonds. If the pendulum swings back, there could be major losses in utility stocks and in Spire. With that risk in mind, we choose to be conservative in our historical model, valuing Spire at the average of the 20-year Spire PE and the 20-year utility PE resulting in a multiple of 15.03. This translates into a bearish valuation at $53.34 per share.

yr Average E for Utilities	14	Estimated Multiple	15.03
20 yr verage PE	16.05	SR Projected 2017 Earnings	$3.55
		Value/Share	$53.34

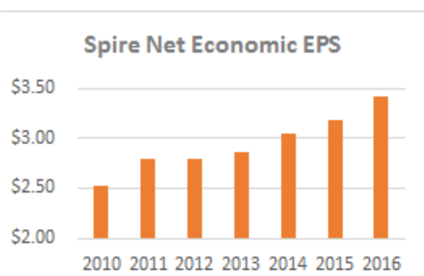
Source: Team Estimates

Financial Analysis

Earnings Growth Trending Up from Acquisitions

Since Spire began making acquisitions in 2012, net income has grown at a 17.61% compound annual rate-- well above management's stated 4-6% target rate for earnings growth. This is largely a result of earnings from MGE and Alagasco accruing to Spire's bottom line in 2014-2015. Adjusted for share dilution and one-off items, growth in terms of net economic earnings* has been a robust 5.22% annually since 2010. In the long run, the performance Spire has enjoyed over the past three years is unsustainable unless the company continues to make large acquisitions (which management is not signaling and we do not anticipate). Future earnings performance will be reliant primarily on organic growth within Spire's segments.

* In 2010, the company began reporting in terms of non-GAAP "Net Economic Earnings" to measure performance (see graph on left). For our long-run historical analysis, we gauge in terms of net income for the sake of consistency.



Source: Company Filings

Weak Organic Growth

Adding customers and increasing rate base are the key drivers of organic growth in the gas utility industry. While Spire's total utility customers have increased by 167% since 2012, the majority of those added customers were purchased through Spire's three major acquisitions. When we exclude customers added through acquisition, adjusted growth becomes a mere 1.37% annually

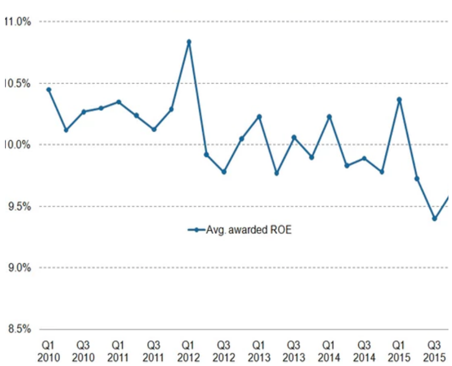
Gross Margin Expected Growth		Operating Income Expected Growth	
2017	2.4%	2017	2.4%
2018	1.4%	2018	1.4%
2019	4.5%	2019	-3.2%
2020	4.5%	2020	12.9%
2021	4.5%	2021	6.4%

Source: Team Estimates

Projected Debt/Equity		Projected Interest Coverage Ratio	
2017	1.01	2017	3.65
2018	1.01	2018	3.65
2019	1.04	2019	3.38
2020	1.04	2020	3.65
2021	1.04	2021	3.72

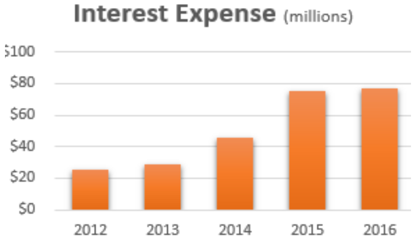
Source: Team Estimates

Average ROE of US Utilities



Source: Market Realist

Interest Expense (millions)



Source: Morningstar

since 2012. This is not surprising considering that the company has WA demographic growth of 0.30% in their states and WA economic growth of 0.79% in them (see Appx 4). Rating agency Fitch also sees slow customer growth ahead for Spire, projecting 0.5% growth annually through 2020[14] in their models.

Pro Forma Income Statement

Spire's management has been vigorously pursuing other earnings drivers such as infrastructure upgrades, CNG fueling, and the STL pipeline in order to find alternative ways to meet their 4-6% growth target. However, we do not anticipate that these projects will be enough. The fueling stations have yet to prove any level of profitability, and the STL pipeline will be a major cash draw in the next couple of years before contributing to earnings in 2019. Upgrading infrastructure has worked for Spire, but the company cannot rely on that alone because they have a finite amount of pipeline in the ground and recognizable revenue is limited to the amount of pipeline Spire can justifiably replace. In our pro forma income statement (see Appx 10), we project that operating income will be 2.5% in 2017 and 1.4% in 2018 to reflect slow organic growth. In 2019-2021, we predict that management will look to spark growth with another minor acquisition. We model 5.15% CAGR in operating income for those three years.

Acquisitions Lead to More Debt in Capital Structure

Spire's three major acquisitions have been financed with an aggregate mix of 52% debt and 48% equity. The recent debt issuances involved have driven Spire to holding a higher level of debt than the company has historically carried at a debt/equity of 1.03. In spite of this, over-leveraging does not appear to be a concern with Spire's interest coverage and financial leverage ratios little changed from their historical averages. Moody's downgraded Spire's credit in 2014 at the parent level to Baa2[15] in response to increased consolidated debt, but now has a stable outlook at that level. Spire's issuance of parent-level debt at extremely low interest rates and in the range of 2-4% also aids in making interest expense more manageable.

Pro Forma Key Ratios

The downside of pursuing another acquisition is that Spire would be forced to issue additional debt and/or equity financing, tightening their credit ratios. We projected the company's key ratios five years out based on our pro forma income statement and balance sheet, and the most problematic year is 2019 due to our anticipation of a minor acquisition. We project that because of acquisition costs and an increased debt load, Spire's interest coverage ratio will fall from 3.65x from 3.38x in 2019. This could be a large enough drop for credit agencies to take notice and issue another downgrade (see Investment Risks for the impact this could have). Other key ratios remain fairly stable in our model through five years.

Decreasing Allowed Returns Tied to Lower Interest Rates

Spire's ROE has been falling over the past ten years; however, this is not a concern for the company. The reason for the ROE downtrend is that regulators across the nation have been decreasing their allowed returns to reflect lower costs of capital for utilities. Therefore, while Spire's profitability in terms of ROA and ROE looks to be deteriorating on the surface, the company is earning similar real returns when adjusted for cost of capital.

Investment Risks

Rising Interest Rates

Higher interest rates have a direct impact on Spire's financial performance. An increased cost of capital resulting from rate increases might weigh on the company's capital-intensive strategies, especially infrastructure upgrades and the STL Pipeline development. It could also be a burden upon Spire's higher debt load and make future acquisition financing more difficult. Besides their direct impact on cost of capital, rising rates hurt utilities because while regulators attempt to lower allowed rates of return in line with falling interest rates, they are not perfectly efficient and typically lag behind reality. This causes lower profits for utilities when rates are rising (see Appx 7).

Potential Return to M&A Market

With modest organic growth opportunities, a consolidating industry, and a management team with a history of M&A transactions, Spire may be tempted to make another $1 billion+ acquisition. Given expensive recent M&A valuations (see Appx 6), this could occur at a steep premium and would likely involve both debt and equity financing to keep Spire around their target long-term capitalization. Higher debt levels associated with another acquisition could lead to a credit downgrade or to Spire's management and resources becoming overextended. Management's patience in conference calls and press releases is a factor to watch closely.

Spire (Parent Level) Long-Term Debt

Maturity	Value (millions)	Rate
2019	$125	2.6%
2021	$35	2.5%
2022	$144	2.0%
2022	$25	3.3%
2026	$130	3.1%
2044	$250	4.7%
Total LTD	**$708.8 million**	
WA Cost	**3.33%**	

Credit Rating

Moody's	Baa2
Fitch	BBB+

Sources: Fitch and Moody's

Credit Downgrade

As discussed in prior sections of the report, Spire carries risk of receiving a credit downgrade if they go through with another acquisition. A downgrade would increase cost of debt, meaning that when Spire has to refinance or issue new debt, they will be forced to do so at a higher rate. Higher interest expense could be a drag on company profitability, as it is not eligible to be passed down to customers in the regulatory system. An investment grade credit rating is important for a regulated utility to maintain and we do not expect Spire to take on enough leverage to fall below that threshold.

Expansion into Non-Regulated Businesses

While Spire's regulated gas utility business is currently generating 95% of company revenue, the company has announced[16] an intent to be more innovational and expand into non-regulated businesses. The first example of this has been their CNG fueling initiative. While non-regulated operations have the potential to improve growth, they also carry a higher level of risk than the regulated business and could increase the volatility of future company performance.

Alabama Market

Customers	839,614.00
Residential	768,568
Commercial	67,746
Industrial	3,300

Source: American Gas Association

STL Pipeline Backlash

Other recent pipeline development projects, particularly the Dakota Access pipeline in South Dakota[17], have faced protests from environmentalists and from people who inhabit land that the pipelines are traveling through. It is a risk worth considering that the STL Pipeline may face some similar backlash that could lead to delays in its development. However, in an attempt to mitigate this risk, Spire management has been working with and engaging communities that the pipeline will traverse in addition to extensive work with Missouri regulators to ensure as smooth a process as possible.

Missouri Market

Customers	1,513,652.00
Residential	1,369,204
Commercial	141,216
Industrial	3,232

Source: American Gas Association

High Institutional Ownership

Approximately 80.9% of Spire's shares are owned by institutions, including 27.8% ownership by the top five institutional holders. The risk with high institutional ownership is that if any major owners decide to exit Spire, it could trigger a major selloff in the stock. A total of 4.6 million shares were sold by funds in Q4 2016 against 3.3 million acquired in the quarter, which indicates downward momentum. See Appx 11.

Lack of Access to Shale Gas Resources

The past decade has seen a boom in NG production from unconventional shale gas resources, which providers have been able to reach due to technological advancements in drilling and hydraulic fracturing. In 2013, shale gas production accounted for nearly 40% of total gas production in the continental US. Currently, Spire lacks the necessary infrastructure and technology to tap into shale gas. However, the STL Pipeline aims to give Spire access to shale gas fields in Ohio, Pennsylvania, and West Virginia through a 60 mile connection to the existing Rockies Express and Panhandle Eastern Pipeline.

Appendix 1: Management and Corporate Governance

Key Management Profiles

Name	Title	Career with Spire	Other Experience
Susanne Sitherwood	President and CEO of Spire	- President and CEO since February 2012 - President since September 2011	- Prior to Spire career, was president of three utilities at AGL resources serving over 1.6 million customers. - Over 30 years of experience in the natural gas industry with executive positions in gas supply, storage and transportation, construction, engineering, and rates and regulatory affairs.
Steve Lindsey	Executive VP and COO of Distribution Operations of Spire, CEO of Laclede Gas and Alagasco	- Executive VP and COO of Distribution Operations since October 2012	- Before joining Spire, spent 23 years in the natural gas utility business at AGL resources, working primarily as an executive in operations. - Bachelor's in mechanical engineering from Georgia Institute of Technology.
Steven Rasche	Executive VP and CFO of Spire	-Executive VP and CFO since November 2013 -Worked with Spire since 2009	- Before joining Spire, spent nearly 30 years at TLC Vision Corporation, a diversified eye care services company, where he was CFO and oversaw numerous M&A deals. - Was previously CFO of Public Safety Equipment Inc., a manufacturer of warning and speed detection systems.

Source: Spire website, Company Filings

Board of Directors

Director	Independent	Tenure	Career Background
Edward Glotzbach, 68 (Chairman)	Yes	12 years	Former Vice Chairman, Mergers and Acquisitions, of Information Services Group.
Suzanne Sitherwood, 56	No	6 years	See Key Management Profiles.
Mark Borer, 62	Yes	3 years	Former President and CEO of DCP Midstream Partners LP.
Maria Fogarty, 57	Yes	3 years	Former Senior VP of Internal Audit and Compliance at Nextera Energy.
Rob Jones, 58	Yes	1 year	Former co-head of Bank of America Merrill Lynch Commodities. 20 years of investment banking experience working with natural gas and utility companies.
Brenda Newberry, 63	Yes	10 years	Former Chairman of the Board of The Newberry Group, a provider of IT consulting services. Co-founded the company with her husband.
John Stupp, Jr., 66	Yes	12 years	Current President of Stupp Bros., Inc., a privately owned company

			that provides infrastructure in the United States and serves the St. Louis market as a progressive community bank.
Mary Ann Van Lokeren, 69	Yes	17 years	Former Chairman and CEO of Krey Distributing Co., an Anheuser Busch wholesaler. Currently serves on the board of Masco Corporation.

Sources: Morningstar, Spire Website

Corporate Governance

We examined the Institutional Shareholder Service (ISS) Governance QuickScore in order to analyze Spire's corporate governance practices. The scores are based on a decile rank from 1-10 of other companies in the relative index or region, with 1 being lower governance risk. As of January 2017, Spire's ratings are:

Pillar	Score
Audit	2
Board	1
Shareholder Rights	9
Compensation	1
Overall	3

Source: ISS

Our evaluation of Spire's governance is in line with the ISS ratings. Team analysis of each category is provided below:

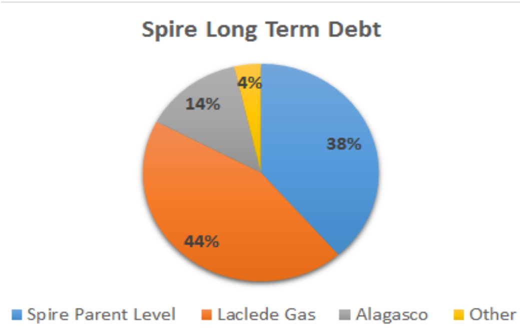
Audit
Spire's independent auditor is Deloitte and Touche, the largest accounting firm in the US. Deloitte found that Spire maintained effective internal controls as of September 30th, 2016. Spire also has an audit committee consisting of five board members that seek to preserve the integrity of company financial statements and monitor the performance of the company's internal control department. Given Spire's status as a regulated utility, regulators are also keeping a close eye on the company's financials in order to set a fair rate of return. This lowers the likelihood of any misreporting.

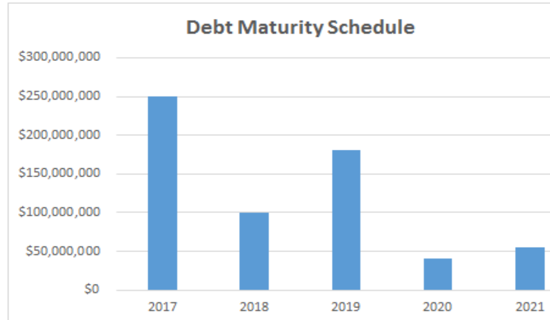
Board
With the exception of CEO Suzanne Sitherwood, the entirety of Spire's board is made up of independent members. There is a variety of tenures on the board, with four members at 1-6 years of experience and four members at a more extensive 10-17 years. We feel this provides a good mix of the independence and fresh outlook provided by new directors and the stability and experience of longer-tenured directors. Additionally, no director is over the age of 70. The board has mostly newly-retired executives who should still possess the energy and expertise to oversee a company. We do not anticipate issues or conflicts of interest with Spire's board of directors.

Shareholder Rights
Spire has a poor shareholder rights score, which we believe is attributable to two main factors. The first is that stockholders have seen a fair amount of dilution over the past five years as a result of management's aggressive acquisition strategy. Shares outstanding have doubled from 22 million in 2012 to 44 million in 2016. While Spire's acquisitions have gone smoothly so far, equity dilution is undesirable to shareholders and further share issuances are a risk to them. Second, management possesses low insider ownership of the company at only 1.4% of shares. This could create a misalignment between management and shareholder interests.

Compensation
A four-person compensation committee consisting of only independent directors is in charge of executive and director compensation. Spire utilizes a shareholder-approved equity incentive plan under which the board of directors can award stock compensation to managers for meeting performance objectives, with awards typically vesting over a three-year period. The company does not award stock options. We see no concerns with Spire's compensation system.

Appendix 2: Debt Analysis





Spire chose to issue much of their acquisition debt at the parent level because they have been able to issue it at a lower cost (a WA of only 3.33%). However, the response to more debt was a parent-level credit downgrade[18] in 2014 to Baa2 from Moody's and BBB+ from Fitch, leaving Spire with a lower rating than subsidiaries Laclede Gas and Alagasco. The company's debt retains investment grade status and credit ratings are now stable from both agencies.

Weighted Average Cost of Debt	3.95%

Spire (Parent Level) Long-Term Debt

Maturity	Value (millions)	Rate
2019	$125	2.6%
2021	$35	2.5%
2022	$144	2.0%
2022	$25	3.3%
2026	$130	3.1%
2044	$250	4.7%
Total LTD	$708.8 million	
WA Cost	3.33%	

Credit Rating

Moody's	Baa2
Fitch	BBB+

Laclede Gas Long-Term Debt

Maturity	Value (millions)	Rate
2018	$100	2.0%
2019	$50	5.5%
2023	$55	3.0%
2023	$250	3.4%
2028	$45	3.4%
2029	$25	7.0%
2030	$30	7.9%
2034	$100	6.0%
2036	$55	6.2%
2043	$100	4.6%
Total LTD	$808.3 million	
WA Cost	4.27%	

Credit Rating

Moody's	A1
Fitch	BBB+

Alagasco Long-Term Debt

Maturity	Value (millions)	Rate
2020	$40	5.2%
2021	$50	3.9%
2025	$35	3.2%
2037	$45	5.9%
2045	$80	4.3%
Total LTD	$250.0 million	
WA Cost	4.49%	

Credit Rating

Moody's	A2
Fitch	A-

Other Long-Term Debt

Maturity	Value (millions)	Rate
2018	$5	3.1%
2021	$20	4.1%
2031	$42	5.0%
Total LTD	$67 million	
WA Cost	4.60%	

Sources: Fitch and Moody's

Appendix 3: Natural Gas Utility Regulation

In exchange for granting the exclusive right to distribute in a given service territory, PUCs (Public Utility Commissions) determine how much a natural gas utility is allowed to invest and in what, how much it can charge, and what its profit margin can be. The general equation[19] is as follows:

$$R = B \bullet r + E + d + T$$

R: revenue requirement **B**: rate base, or the amount of capital or assets a utility dedicates to providing service **r**: allowed rate of return **E**: operating expenses, including supplies and labor **d**: annual depreciation **T**: taxes

As evident from this equation, two main factors drive a utility's profitability: allowed rate of return and rate base. Operating expense, depreciation, and tax are all essentially passed down to customers in terms of what the utility is allowed to charge them, and the remaining profit to the utility company is equal to the product of the rate base and the allowed return. ***Therefore, the key success drivers in this industry are: (A) being able to grow a utility's rate base by adding customers and increasing the size of the company and (B) the regulatory jurisdiction of the utility and what return they allow the company to achieve.*** Of these two factors, only the first is under the control of utility companies.

The principal advantage of rate of return regulation is that service prices can be adjusted to each company's changing conditions, creating a more stable and predictable profit stream. This stability lowers risk to investors and creditors, resulting in a low cost of capital. Utilities are notoriously sought-after by investors for predictable, safe returns.

There are a couple of downsides to rate of return regulation as well. The first of these can be observed through the structure of regulation incentivizing companies to overinvest in capital, which increases their rate base and coincidentally their profits. This concept is known as the Averch-Johnson effect[20], and punishes customers when it occurs with higher utility bills. Another disadvantage is the fact that because operating costs are passed down to consumers, there are few incentives for managers to operate efficiently. A third problem is that when inflation is high, rate cases have to be administered frequently in order to keep up with changing prices. The process can be costly and time-consuming. This may be pertinent today with some expectations of higher inflation in years to come (see Appx 7).

In Appendix 4, we will examine in more detail the regulatory jurisdictions of each state that Spire has major operations in to determine their favorability.

Appendix 4: State Profiles

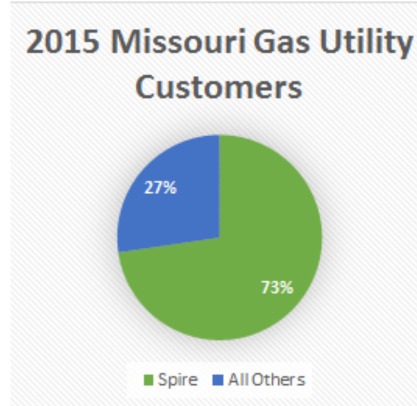
A. Missouri

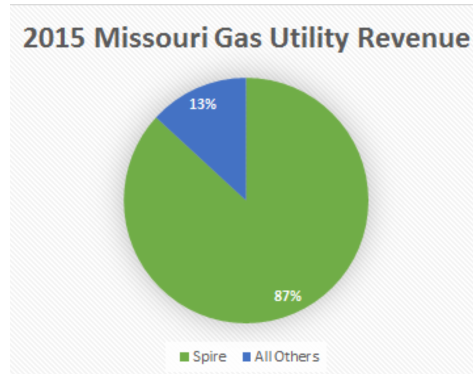
State Industry Data (as of 2015)

Missouri Market

Customers	1,513,652.00
Residential	1,369,204
Commercial	141,216
Industrial	3,232

Source: American Gas Association





Source: Company Filings

Growth Metrics

Population
Over the past five years, Missouri's population has grown at a compounded annual rate of 0.31%, well below the 0.74% CAGR of the US as a whole.

Gross Domestic Product
Between 2010 and 2015, Missouri real GDP grew at an annual rate of 0.68%, also much lower than the 2.25% CAGR of the US.

Competitive Climate:
Spire's competition in Missouri consists of several utility companies that, similarly to Spire, each have operations in multiple states.

Ameren Missouri
Ameren is a publicly traded power company with 130,000 natural gas customers in Eastern and Central Missouri. They have a much larger electricity business in Missouri, with 1.2 million customers in the state[21].

Empire District/Liberty Utilities
Empire District Electric Company was officially acquired by Liberty Utilities on January 1st, 2017. Empire has a total of 218,000 customers in Missouri, Kansas, Oklahoma, and Arkansas, which includes both electric and gas customers[22].

Summit Natural Gas
Summit was founded in 1995 and serves over 40,000 natural gas customers in Colorado, Missouri, and Maine[23].

Regulatory Environment

Summary
The regulatory body in Missouri is the Missouri Public Service Commission (MoPSC). The MoPSC regulates construction and maintenance of facilities, operations, safety, the rates that utilities may charge customers, the terms of service to their customers, and the rate of return they are allowed to realize, as well as the accounting treatment for certain aspects of their operations[24]. Officially, Missouri utilities are allowed to retain 15% to 25% of the first $6.0 million in annual income earned (depending on the level of income earned) and 30% of income exceeding $6.0 million annually[25].

Through Missouri's Infrastructure System Replacement Surcharge (ISRS) program[26], Laclede and MGE are allowed accelerated cost recovery on infrastructure investment with minimal regulatory lag. The Missouri utilities have Purchased Gas Adjustment (PGA) clauses[27] that permit them to file for rate adjustments to recover the cost of purchased gas. Changes in this cost are therefore passed on to customers, as Laclede and MGE are allowed to adjust the gas cost component of rates up to four times each year in response to changing prices. According to the January 14, 2016 edition of Regulatory Research Associates (RRA)'s Regulatory Focus, the average ROE for gas utilities in 2015 was 9.60%[26]. Another source, Concentric Energy Advisors, calculated that the average of all rate cases decided in the US in 2015 (their most recent data release) was a 9.48% ROE and the median was a 9.28% ROE[28]. Based on their 2015 SEC filings[29], Spire's Laclede and MGE segments were able to earn a 10.45% ROE. Therefore, we deem Missouri's environment to be ***more favorable than the national average*** in terms of allowing utilities to profit from their rate base. Pacific Research[30] also rates Missouri in the top quintile for energy regulatory environments, further indicating favorability.

Missouri Summary and Favorability Rating

Rating Methodology

In order to compare Spire's operating environment in Missouri and Alabama to that of other states, we are applying an analytical rating system based upon two equal-weighted criteria: demographic/economic growth and regulatory environment. Population and economic growth are extremely important for the natural gas distribution business because these factors allow companies to obtain new customers. A larger population means more potential residential customers, and rapid GDP growth fuels increases in business for the commercial and industrial segments. Regulatory environment is also vital for a utility to have success, as it has direct impact on the amount of return a company is allowed to earn from its customers. Scores are based comparatively to other states in the US. A score of 1 is very poor, 5 is average, and 10 is outstanding.

State Rating	
Demographic and Economic Growth	2.5
Regulatory Climate	7
Average	**4.75**

Source: Team Estimates

- Missouri has both population growth and GDP growth well below the national average. This makes it an unfavorable state for a company like Spire that relies on growth to generate new customers. Because of this weakness, we assigned Missouri a 2.5/10 score for growth.
- However, the state does have a better than average ROE allowed for utilities, and Spire benefits strongly from being able to recognize revenue under ISRS. Therefore, we assign an above-average 7/10 for regulatory environment.
- Overall, Missouri merits a score of 4.75/10, which is 5% below an average score.

B. Alabama

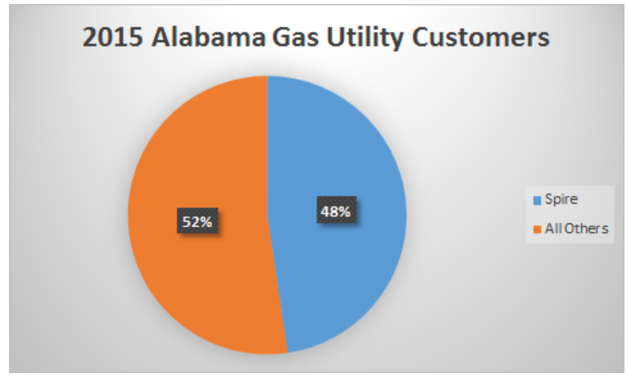
State Industry Data (as of 2015)

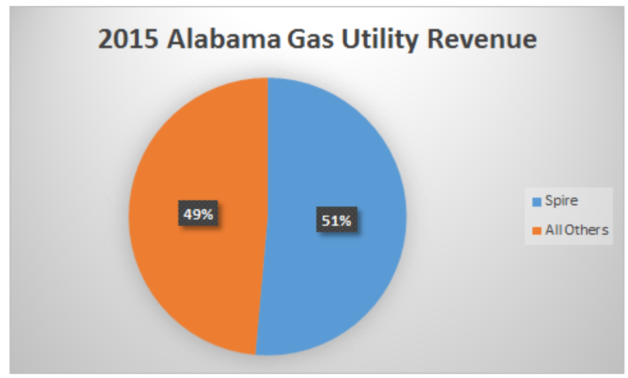
With the acquisition of EnergySouth, Spire now holds two Alabama utilities: Alagasco and Mobile Gas. While Spire does not have the market dominance they have in Missouri, they remain the number one gas utility in Alabama in terms of both customers and revenue. The market share graphics provided below only account for Alagasco's customers and revenue, as EnergySouth was not acquired until 2016. The addition of Mobile Gas will make Spire's percentages incrementally higher.

Alabama Market

Customers	839,614.00
Residential	768,568
Commercial	67,746
Industrial	3,300

Source: American Gas Association





Source: Company Filings

Growth Metrics

Population

Similarly to Missouri, Alabama's population growth has trailed that of the US over the last five years at 0.20% annually versus the national 0.74% rate.

Gross Domestic Product

From 2010 to 2015, Alabama has seen 1.05% annual growth in real GDP. This is above Missouri's growth but still well short of overall growth in the US.

Competitive Climate

Alabama has a significantly different competitive environment than Missouri. Spire's Alagasco and Mobile Gas are the only public utilities in Alabama that are monitored by the Alabama Public Services Commission[31]. Their competition in the state consists of a large number of municipal gas utilities that serve their local districts, each catering to around 10,000 customers or fewer. Most of these companies have been in operation for an extended period of time and have long-running traditions of serving their communities, which will pose a challenge for Spire to convert customers from these competitors. While municipal firms are not eligible to be owned by a corporation, further Alabama acquisitions could occur in the form of Spire buying gas segments from municipal utilities.

Regulatory Environment

Summary

The regulatory body in Alabama is the Alabama Public Service Commission (APSC). Its duties encompass rate, accounting, service, legal, and technical issues regarding the purchase, sale, transportation, and storage of natural gas by all jurisdictional companies in Alabama[32]. Utilities in the state are currently allowed to earn a return on average common equity between 10.5% and 10.95%[33].

Alabama's rate-setting process is the Rate Stabilization and Equalization (RSE), an annual process with quarterly reviews for potential rate reductions. RSE allows Alagasco to receive current recovery for planned capital spending[34]. Alagasco's tariff rate schedule contains a Gas Supply Adjustment (GSA) rider, and Mobile's has a PGA clause that allows them to file to recover the cost of purchased gas similar to what happens in Missouri. However, the Alabama utilities can adjust on a monthly basis, whereas in Missouri they can only file four times per year[35]. The APSC also established a Cost Control Mechanism (CCM) as an incentive for utilities to manage O&M costs. It allows companies to recognize a benefit for keeping O&M expense below an inflation-tied Index Range, effectively rewarding Alagasco and Mobile if they do a good job managing their costs. Alagasco recognized a $7.8 million benefit in 2016 and a $4.7 million benefit in 2015 under this program[36].

Alabama was rated the best regulatory jurisdiction in the nation by RRA[37], and Pacific Research also gave the state its best rating in terms of energy regulation[38]. The ROE earned by Alagasco and Mobile Gas is around 10.8%, which is even further above the average return allowed to Laclede and MGE. ***Alabama is an extremely favorable regulatory environment for natural gas utilities.***

Alabama Summary and Favorability Rating

Scores are based comparatively to other states in the US. A score of 1 is very poor, 5 is average, and 10 is outstanding.

Source: Team Estimates

State Rating	
Demographic and Economic Growth	2.5
Regulatory Climate	9
Average	**5.75**

- Alabama, like Missouri, has below-average demographic and economic growth compared to the US. We deem the two states to be equally poor on this criteria and assign Alabama a 2.5/10.
- However, Alabama's regulatory environment is extremely favorable and rated as one of the top jurisdictions in the nation. Therefore, we designate an excellent 9/10 score.
- These average out to give Alabama a 5.75/10, which is 15% better than an average overall score.

C. Mississippi

Spire's only utility in Mississippi right now is Willmut Gas. Since Willmut only accounts for 18,500 (1%) of Spire's customers, it does not make sense to do a complete analysis of Mississippi in this report. However, we have included a summary below because the state could be a logical area for Spire to expand into with a foothold already established in Willmut.

Mississippi Market

Customers	490,110.00
Residential	439,359
Commercial	49,821
Industrial	930

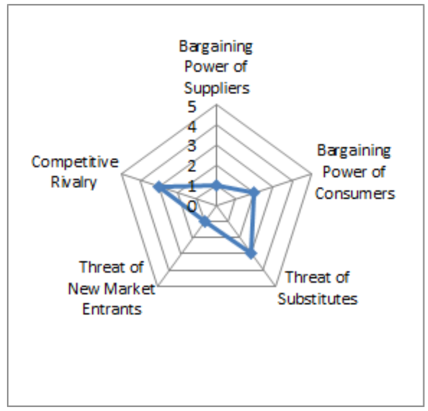
Utility Revenues (Millions)	$519.10
Residential (households)	$225.5
Commerical (businesses)	$134.4
Industrial (manufacturing, factories)	$73.9
Electric Power Generation	$85.3

Data as of 2015. Source: American Gas Association

Mississippi Key Facts:

- Five year annual population growth of 0.09%, and five year real GDP growth of 0.47% annually.
- Second-quintile regulatory ranking according to Pacific Research[39].
- The three major local gas distribution companies in Mississippi are Atmos Energy, Centerpoint Energy, and Spire's Willmut.
    - Atmos is the nation's largest gas-only distributor, serving over 3 million customers in 12 states[40].
    - Centerpoint has 3.2 million natural gas customers in Arkansas, Louisiana, Minnesota, Mississippi, Oklahoma and Texas. They also provide electric utility services[41].

Appendix 5: Porter's Five Forces Analysis



Bargaining Power of Suppliers: Low (1)

Each of Spire's segments obtains its natural gas from a collection of major suppliers in each of their respective regions. Because of the risk of supply disruptions that would impede delivery to customers, it is necessary for the company to have a diversified supply portfolio. In 2016, Laclede Gas and MGE purchased natural gas from a combined 35 suppliers[42], and Alagasco utilized another 15 companies. Additionally, Spire utilizes long-term contracts in its supply agreements that would give the company time to find new sources, should one supplier wish to stop providing to them. And while distribution is only one of numerous businesses that uses natural gas, the industry's consistent customer base, combined with Spire's monopolies or near-monopolies in each of its operating regions, make it a stable and attractive customer. Therefore, a supplier would not want to risk losing Spire as a client. For all of these reasons, we believe that suppliers in this industry have a low level of bargaining power. Furthermore, since Spire is a regulated utility and effectively passes down natural gas expense to their customers through rate adjustments, they have little incentive to engage in cutthroat supply pricing negotiations. We see little to no risk of Spire struggling to negotiate supply agreements.

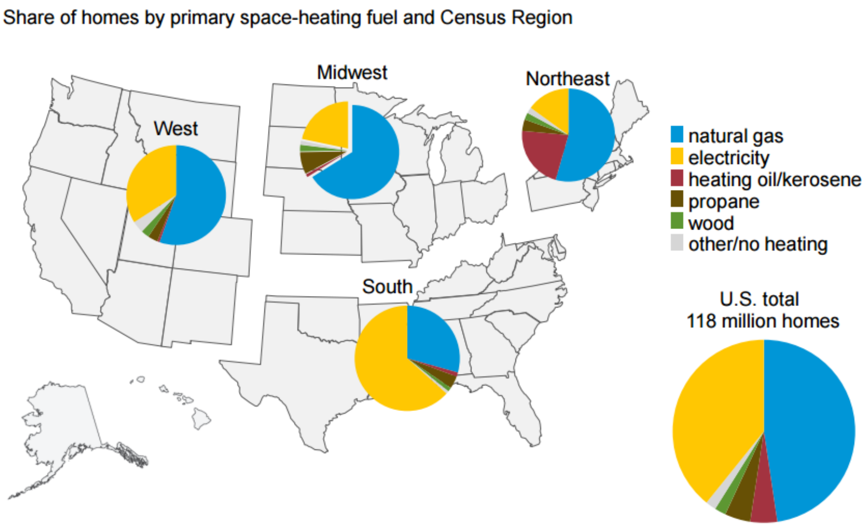
Bargaining Power of Consumers: Low to Moderate (2)

Given the regulated nature of Spire's operations, customers are price-takers. As such, they must either take the set rate they are offered or walk away. While consumers certainly watch their monthly gas bill, they have very limited options to find another distributor in their area. Customers do have the option to switch to an alternative fuel, such as electricity or propane, but the switching cost of buying a new system makes this option unattractive. Given the few choices consumers have, we judge there to be low to moderate bargaining power for customers.

Threat of Substitutes: Moderate (3)

The main substitute for natural gas as a heating source is electricity. EIA data shows that nearly half of US homes in 2015 used gas as opposed to 39% using electricity[43]. The key advantage of gas over other systems is that it is currently the cheapest method of heating; according to Diffen.com, gas heating costs about $18 per million BTU versus electricity's $32 per million BTU[44]. Additionally, gas systems can generally heat homes faster than electric units, which is a key factor for comfort-seeking consumers. One advantage of electric heating is the fact that initial investment for an electric system is usually lower than the amount needed for a gas furnace. Also, the electric units typically have a longer life and need less maintenance than gas furnaces. The third most-utilized option in Spire's operating regions is propane, at 5% market share. Many consumers use propane simply because they have no other choice to obtain heating. Percentages of US and regional heating market share for each fuel choice are provided below:

Heating fuel market shares vary across U.S. regions



Source: U.S. Energy Information Administration based on 2015 American Community Survey

As evident in the chart above, natural gas is by far the largest fuel choice in the Midwest, where Laclede Gas and MGE operate. However, electricity has greater use in the South with Alagasco and EnergySouth, a reflection of warmer temperatures, lower aggregate heating bills, and less need for rapid heating. There is some level of risk that natural gas could lose market share to other heating methods, especially if natural gas prices were to rise and make the other systems more economic in comparison. However, fairly significant switching costs dissuade consumers from making a switch. Therefore, we rate the threat of substitutes no higher than moderate.

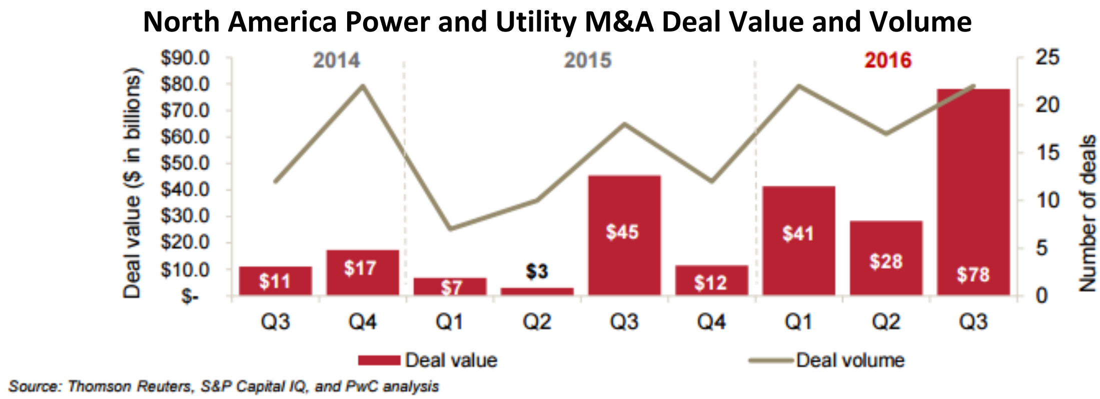
Threat of New Market Entrants: Low (1)

Aside from acquisition, there is little realistic way to break into the natural gas utility business. A new entrant would first need to build up a massive amount of infrastructure (Spire has nearly 60,000 miles of pipeline[45]) before obtaining regulatory approval and attempting to directly take customers from the existing distributor in a region. Everyone that wants gas heating likely already has it, therefore any customers for the new entrant would have to be convinced to make a provider switch. There are huge barriers to entry in the industry and there is very low threat of new market entrants.

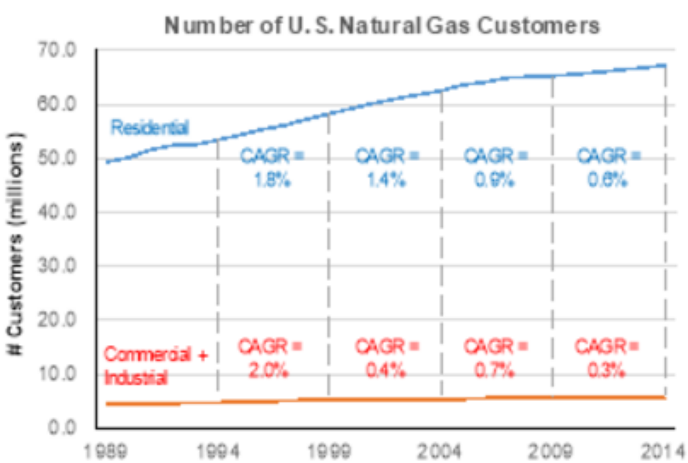
Competitive Rivalry: Moderate (3)

Laclede Gas and MGE account for the vast majority of natural gas distribution in Missouri, with 73% of customers and 87% of revenue in 2015 (Appx 11). Alagasco and Mobile Gas share Alabama with a large number of municipal gas utilities. Alagasco remains the market leader in Alabama, with 51.4% of the state's gas utility market share as of 2015 (Appx 12). Because regulators dictate unique service areas for each utility, there is no competition between companies and they each have to stay within their respective region. With electric and propane heating companies attempting to convince customers to switch fuels, we rate industry competitive rivalry at a moderate level.

Appendix 6: Industry M&A Climate



Since 2010, there has been a trend toward consolidation in the utility industry with an increasing number and size of deals. Most of these transactions have been strategic deals between industry players[46], as opposed to acquisitions by private equity firms and other purely financial entities. One of the common reasons for many of these deals is a desire for growth. As the chart below illustrates, organic growth for utilities has been slowing, putting management teams under pressure from investors to find alternative means to grow their businesses. M&A is one of the main methods companies have turned to, helped by the fact that most utilities have had the ability to issue debt at extremely low cost to finance acquisitions.



Source: Scott Madden Management Consultants

Another rationale for deals was to achieve diversification in geography or business mix. Firms obtaining operations in multiple regions can mitigate some risks related to local economies, regulatory entities, customer bases, and weather. Numerous companies also see value in diversifying to multiple parts of the wide-spread utility business (ie gas, electric, midstream, marketing, etc). Additionally, certain firms used cost synergies as reasoning for their deals.

One note to make is that since 2014, the average acquisition EV/EBITDA multiple paid was 11.78x and the average P/E multiple paid was 22.83x[47](based upon EY data). According to NYU data, the current P/E of the utility sector is 19.3[48]--companies are paying premiums for these acquisitions.

Implications for Spire

Gas utilities in established operating states are the simplest additions for the company to make because they already have set up relations with those regulatory boards and experience doing business in those states. This could mean the Missouri gas segments of Ameren, Liberty Utilities, or Summit Gas and the Mississippi segments of Atmos or Centerpoint are potential targets. There is a precedent of Spire buying up segments from large utility companies with the purchase of Alagasco from Energen and the acquisition of EnergySouth from Sempra. Another possibility is that municipal utilities in multiple businesses (ie gas, electric, and water) could sell their gas segments off to Spire in order to have greater specialization in their other segments.

An acquisition from a different state or of anything but a regulated gas utility would be more difficult for Spire to integrate into the company and is less likely in our opinion. When Spire acquired MGE, they also obtained a utility called New England Gas Company (NEGasCo), but they rapidly resold it because it was so far split geographically from the rest of Spire's operations. Following that example, it is unlikely Spire would expand far beyond their current territory in the Midwest and Southeast unless it was a large deal that merited a lot of effort from the company to integrate.

Company Acquired	Date Completed	Deal Value	EV/EBITDA Multiple Paid	Deal Rationale
MGE	Sept 2013	$975 million	12.5x	- Target of $25-34 million in synergies - Ability to accelerate pipeline replacement - Makes Spire Missouri's largest gas distributor
Alagasco	Aug 2014	$1.6 billion	9.6x	- Geographic and regulatory diversification - Growth strategy to expand natural gas LDCs, Spire's area of expertise
EnergySouth	Sept 2016	$344 million	11.3x	- Expansion into Mississippi, a highly rated regulatory environment - Further growth in gas utility business

Source: Team Analysis

At an EV/EBITDA multiple of 9.6x, Spire got a cheaper valuation on their Alagasco acquisition-- that multiple is below where a lot of utility acquisitions have been as we saw in Appendix 14. Given our overall favorable analysis of Alabama (see Appendix 12) and no major issues in Alagasco's operations, we believe that it was a shrewd purchase on Spire's behalf. The other two buyouts represent steeper valuations.

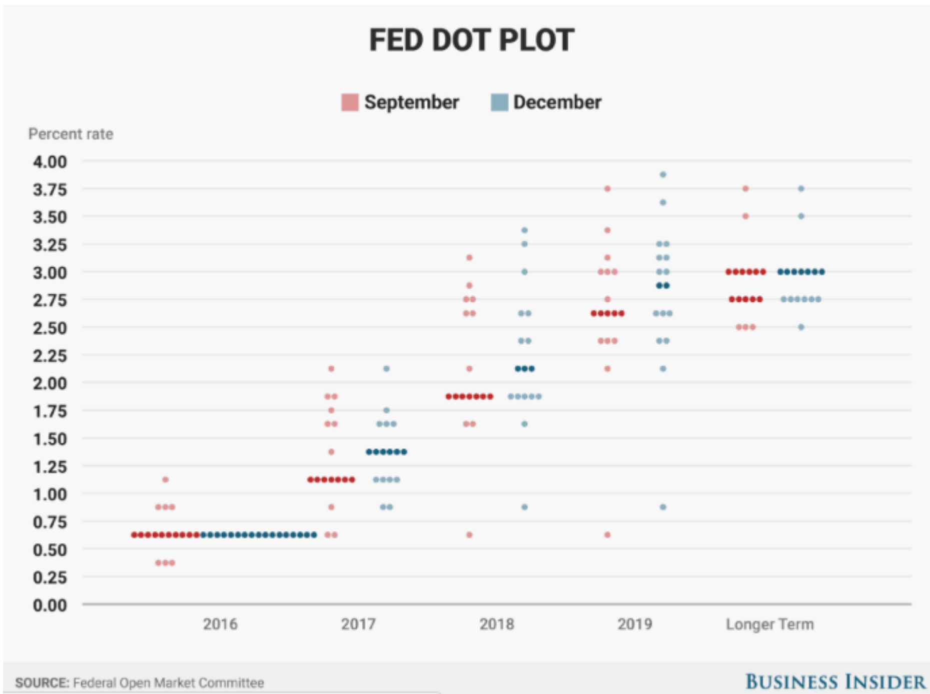
The main rationale for Spire acquisitions has been parallel to those for the rest of the industry: a search for growth and geographic/regulatory diversification. Since these three acquisitions, the company has moved from operating in one state to three and increased their utility customers by 167%.

One of the key value drivers for Spire in these deals has been the integration of information technology[49]. Running one centralized finance, supply chain, and human resources system is a lot cheaper than having separate ones for each company and it has resulted in cutting out a lot of overhead. Spire realizes value through pipeline replacement and coincidentally gaining incremental benefit under ISRS and RSE.

Appendix 7: Impact of Interest Rates

Interest Rates

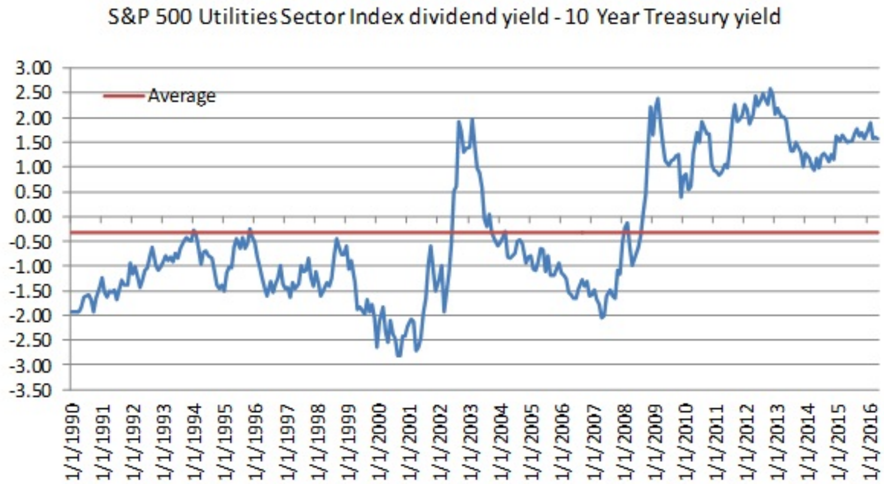
On December 14th, 2016, the US Fed increased the federal funds rate for the second time in two years, lifting it 25 basis points to 0.5%. The hike came in response to a perception of considerable economic progress in the US towards full employment and 2% inflation. According to the December Fed dot plot, which indicates where each meeting participant thinks the fed funds rate should be at the end of the year for the next three years and the longer run, more rate hikes are likely to be ahead.



Source: Business Insider

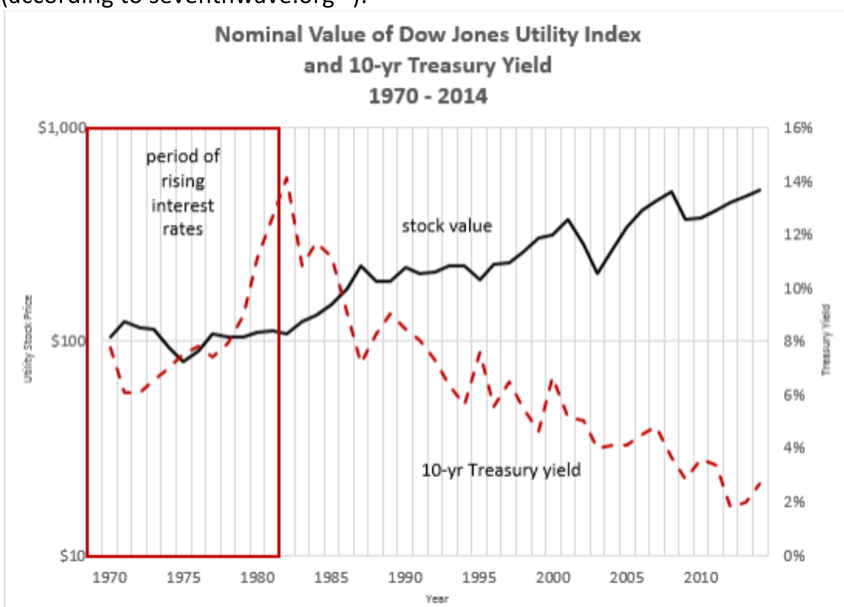
As indicated in the dot plot, the consensus expectation is that the fed funds rate will increase 75-100 bps in 2017, followed by further hikes until a long-run rate of 3% is reached. Adding to the likelihood that rates will be increased is the recent election of President Trump, who announced[50] plans to invest up to $1 trillion for spending on infrastructure and job creation. This is an inflationary policy that would lead to a more rapid tempo of hikes.

Rising interest rates negatively affect utilities. While regulators attempt to lower allowed rates of return in line with falling interest rates, they are not perfectly efficient and typically lag behind reality. This causes higher profits for utilities when rates are falling but also lower profit when rates rise. Additionally, higher rates mean higher cost of capital, which is especially harmful to levered firms. With Spire's increased borrowing to fund acquisitions, higher cost of debt could impact the company in future years. Furthermore, many investors have come to utility stocks in response to low bond yields; if bond yields start to come back up, we could see many of those investors rotate out of the sector and a resulting utility selloff. The spread between dividend yield on the S&P utility sector and 10 year treasury yield (shown on next page) is one measure of the comparative attractiveness between utility stocks and bonds.



Source: Invesco

Historically, there is some evidence of utility stocks underperforming during periods of rising interest rates, although we have to look back a long way because rates have been falling for the past 30 years. The chart below shows utility performance from 1970-1982, a period of rising rates and one during which the price/book ratio of the average utility company fell by 50% (according to seventhwave.org[51]):



Source: Seventhwave

In summary, we see rising interest rates as a major risk for investing in Spire stock moving forward. With utilities trading at a large premium to historical averages, ***the market has not priced in the impact that rising rates would have on profits and capital costs***. Continued rate hikes and their impact on companies would therefore be a shock that could result in a selloff for the entire sector.

Appendix 8: DCF Valuation

	2016	2017	2018	2019	2020	2021
Operating Income	$282	$289	$293	$283	$320	$340
After-tax Operating Income	$190	$195	$198	$191	$216	$230
Subtract CapEx	-$282	-$365	-$370	-$435	-$335	-$368
Add D&A	$137	$128	$130	$136	$142	$149
Subtract Net Change in WC	$145	-$56	-$56	-$53	-$62	-$7
FCFF	$190	-$98	-$98	-$161	-$39	$4
Terminal Value						$206
Value Today	($188.59)					
Add Cash	$5				Terminal Growth:	1.15%
Subtract Debt	$3,509					
Value of Equity	($3,692.59)					
Value per Share	($83.92)					

These are management's projections of CapEx over the next five years accounting for the STL Pipeline and continuing pipeline replacement. The extensive expenditure drives Spire into negative FCF in 2017-2020.

Spire is currently at a negative net working capital and therefore we are projecting that they need to utilize cash to expand it in upcoming years.

Inputs	
Tax Rate	33%
Number of Shares	44
Rf	2.53%
MRP	4.50%
Beta	0.32
Cost of Equity	3.97%
Cost of Debt	3.95%
Weight of Debt	50%
Weight of Equity	50%
WACC	3.32%

Assumptions

- See Appx 2 for cost of debt calculation.
- 50-50 weights of debt and equity are based upon management statements of target long-term capitalization.
- Other assumptions are the same used in our DDM valuation.

Source: Team Estimates

Beta Calculation

Company	Regression Beta (Yahoo Finance)	Debt/Equity	Unlevered Beta	Spire Relevered Beta
SR	0.22	1.03	0.13	0.32
AEE	0.25	0.92	0.16	
ATO	0.1	0.63	0.07	
CNP	0.47	2.23	0.19	
NJR	0.24	0.91	0.14	
NWN	0.34	0.68	0.24	
SWX	0.38	0.98	0.23	
WGL	0.6	1.05	0.36	
SJI	0.71	0.64	0.47	
CPK	-0.14	0.33	-0.12	
Averages	0.32	0.94	0.19	

Source: Team Analysis

Appendix 9: Spire Peer Group Selection

For use in comparing Spire to its industry, we chose nine similar companies to form a peer group. In this selection process, we identified companies that operated in the same natural gas regulated utility business as Spire, had similar small to mid-size market capitalizations, had similar reported betas and dividend yields, and (if possible) operated in the same regions as Spire. Spire's most direct competitors are Ameren in Missouri and Atmos and Centerpoint in Mississippi; all three are included in the peer group. Unfortunately, there is not room in any one state for many natural gas distributors to compete-- the operation region is the category with a lot of variation in the peer group. Much of the adjustments that we make for relative valuation to differentiate Spire from its peers are reflections of regional differences, in particular each state's regulatory environment and economic climate.

Company	Symbol	Market Cap	Region	Beta	Yield
Spire	SR	2.95B	Missouri / Alabama	0.22	3.07%
Ameren	AEE	12.88B	Missouri/Illinois	0.25	3.35%
Atmos Energy	ATO	7.79B	Midwest / Southeast	0.1	2.26%
Centerpoint Energy	CNP	10.61B	Midwest / Southeast	0.47	4.43%
New Jersey Resources	NJR	3.06B	New Jersey	0.24	3.10%
Northwest Natural Gas	NWN	1.71B	Oregon / Washington	0.34	3.11%
Southwest Gas	SWX	3.64B	Southwest	0.38	2.58%
WGL Holdings	WGL	3.91B	New England	0.6	3.11%
South Jersey Industries	SJI	2.67B	East Coast / Appalachia	0.71	3.57%
Chesapeake Utilities	CPK	1.09B	New England / Florida	-0.14	2.00%
Averages		**5.26B**		**0.32**	**3.06%**

Company	Beta	Yield	D/E	Tax Rate	Forward P/E	PEG Ratio	P/B	EV/EBITDA	P/CF
SR	0.22	3.07%	1.03	32.5%	17.6	4.36	1.6	11.38	8.7
AEE	0.25	3.35%	0.92	37.0%	17.8	3.49	1.8	8.99	6.3
ATO	0.1	2.26%	0.63	36.4%	19.9	2.89	2.2	11.21	9.8
CNP	0.47	4.43%	2.23	31.0%	18.2	3.43	2.9	8.43	5.5
NJR	0.24	3.10%	0.91	16.2%	20.6	3.45	2.5	19.91	28.7
NWN	0.34	3.11%	0.68	40.5%	24.9	6.80	2.0	9.27	6.9
SWX	0.38	2.58%	0.98	34.3%	22.0	6.16	2.1	8.37	5.6
WGL	0.6	3.11%	1.05	36.8%	21.8	2.83	2.3	10.43	13.9
SJI	0.71	3.57%	0.64	20.8%	19.8	4.20	1.9	12.7	9.8
CPK	-0.14	2.00%	0.33	39.2%	18.6	3.96	2.2	11.17	10.3
Averages	**0.32**	**3.06%**	**0.94**		**20.1**	**4.16**	**2.2**	**11.19**	**8.53**

Source: Team Analysis

In each category, Spire is comparable or favorable when compared to the industry average. Their valuation metrics, in particular the P/E and P/B, illustrate that the company is currently trading at a discount to their peers.

Appendix 10: Pro Forma Statements

Income Statement

NOTE: ***For a regulated natural gas utility, revenue is not an important financial metric to gauge company performance.*** The reason for this is that utilities are allowed to pass their natural gas expense (cost of goods sold for this industry) through to customers. Therefore, when gas price is higher, Spire has higher utility revenue AND natural gas expense in proportion to the price change. This means that when natural gas price is volatile, there are major swings in revenue for Spire without any real change in company performance. Because of this, we do not include any projections of revenue and will instead begin our model with gross margin. In the common-size statement, all items are listed as a percentage of gross margin.

	Historical Income Statement					Projected Income Statement				
($ in millions)	2012	2013	2014	2015	2016	2017E	2018E	2019E	2020E	2021E
Gross Margin	**375**	**407**	**649**	**1094**	**1045**	**1070**	**1085**	**1134**	**1185**	**1238**
% Growth		*8.5%*	*59.5%*	*68.6%*	*-4.5%*	*2.4%*	*1.4%*	*4.5%*	*4.5%*	*4.5%*
O&M Expense	23	180	288	391	378	385	391	431	426	439
D&A	41	48	82	130	137	128	130	136	142	149
Other Operating Expense	201	82	112	301	248	268	271	283	296	309
Operating Income	**111**	**96**	**166**	**273**	**282**	**289**	**293**	**283**	**320**	**340**
% Growth		*-13.5%*	*72.9%*	*64.5%*	*3.3%*	*2.5%*	*1.4%*	*-3.2%*	*12.9%*	*6.4%*
Interest Expense	25	29	46	75	77	79	80	84	88	92
Other Income (expense)	3	2	3	-1	9	6	6	6	6	7
EBT	**83**	**65**	**117**	**199**	**196**	**204**	**207**	**194**	**226**	**242**
Income Tax Expense	26	18	32	62	70	66	67	63	73	79
Net Income	**57**	**47**	**85**	**137**	**126**	**138**	**140**	**131**	**152**	**163**
% Growth		*-18%*	*81%*	*61%*	*-8%*	*9%*	*1%*	*-6%*	*16%*	*7%*

Common Size	Historical Income Statement					Projected Income Statement				
(As % of Gross Margin)	2012	2013	2014	2015	2016	2017E	2018E	2019E	2020E	2021E
Gross Margin	**100%**	**100%**	**100%**	**100%**	**100%**	**100%**	**100%**	**100%**	**100%**	**100%**
O&M Expense	6%	44%	44%	36%	36%	36%	36%	38%	36%	36%
D&A	11%	12%	13%	12%	13%	12%	12%	12%	12%	12%
Other Operating Expense	54%	20%	17%	28%	24%	25%	25%	25%	25%	25%
Operating Income	**30%**	**24%**	**26%**	**25%**	**27%**	**27%**	**27%**	**25%**	**27%**	**28%**
Interest Expense	7%	7%	7%	7%	7%	7%	7%	7%	7%	7%
Other Income	1%	0%	0%	0%	1%	1%	1%	1%	1%	1%
EBT	**22%**	**16%**	**18%**	**18%**	**19%**	**19%**	**19%**	**17%**	**19%**	**20%**
Income Tax Expense	7%	4%	5%	6%	7%	6%	6%	6%	6%	6%
Net Income	**15%**	**12%**	**13%**	**13%**	**12%**	**13%**	**13%**	**12%**	**13%**	**13%**

Source: Team Estimates

1. Gross Margin

In 2017 and 2018, we expect that management will not pursue any major acquisitions and that they will instead rely mainly on organic growth opportunities. As analyzed in the financial analysis section of the paper, there is little organic growth potential in the utility industry, and reliance upon it will cause growth in Spire's gross margin to descend. As evidence for this, observe Spire's following five-year annualized metrics: 1.37% organic customer growth (page 8), 0.30% WA population growth in the states the company operates in (page 6), and 0.79% WA growth in real GDP in those states (page 3). Without acquisitions, company growth could slow down into the 0.5-1.5% range. However, we predict that deceleration will take some time-- benefits from integrating EnergySouth, potential minor acquisitions, and continued infrastructure improvement strategies will prevent an immediate stall in growth. Our estimate is a more deliberate decline to 2.4% gross margin growth in 2017 and 1.4% in 2018.

At a certain point, we anticipate that management will be unsatisfied with slowing growth and decide to take action. There is no certainty as to what time that will be, but we expect one or two years will likely be enough to convince them to act. When they do make a move, we expect the company to make an acquisition large enough to bring them back within their target 4-6% annual growth in earnings. In our model, we estimate growth in gross margin to average 4.5% annually from 2019-2021 based on this rationale. Another factor is that the STL pipeline will be operational in 2019, bringing in some additional earning potential.

There is also the possibility that Spire makes another huge acquisition, along the lines of MGE or Alagasco, which would result in much more rapid growth. However, management has made no statements in support of another large deal happening. Therefore, we do not believe it is sound to make that explicit prediction within the next five years.

2. O&M Expense

We expect O&M expense to increase in line with gross margin in 2017 and 2018 before a larger increase in 2019 to reflect the potential costs of an acquisition. After 2019, expenses will return to a normalized rate.

3. Interest Expense

As evident on the historical common-size statement, Spire has had an extremely consistent amount of interest expense when compared to gross margin. We do not see any deleveraging occurring and our model includes a continuance of this trend.

Balance Sheet

We also completed a pro-forma balance sheet and the key ratios provided below summarize our analysis:

	Historical Ratios					Projected Ratios				
	2012	2013	2014	2015	2016	2017E	2018E	2019E	2020E	2021E
Profitability*										
ROA	3.4%	2.1%	2.1%	2.6%	2.5%	2.2%	2.2%	2.0%	2.2%	2.3%
ROE	10.7%	6.4%	6.6%	8.9%	8.6%	7.6%	7.6%	6.8%	7.6%	7.8%
Liquidity										
Current Ratio	1.36	1.35	0.77	0.62	0.49	0.48	0.48	0.50	0.50	0.50
Quick Ratio	0.73	0.69	0.32	0.29	0.20	0.20	0.20	0.21	0.21	0.21
Financial Leverage										
Debt/Equity	0.56	0.87	1.23	1.13	1.03	1.01	1.01	1.04	1.04	1.04
Financial Leverage	3.13	2.99	3.36	3.36	3.44	3.42	3.42	3.42	3.43	3.43
Interest Coverage	4.57	3.46	3.53	3.67	3.77	3.65	3.65	3.38	3.65	3.72

Source: Team Estimates

*Traditional profitability metrics such as EBITDA margin and operating margin are not effective when analyzing a regulated utility, as they are measured as a % of revenue and therefore are primarily tied to NG expenses that utilities pass along to customers. We view ROA and ROE as better measures of the returns Spire is able to achieve.

1. Profitability

Lower ROA and ROE in 2017-2018 is driven by our projections that net income will grow more slowly than Spire's asset and equity bases. Expected 2019 ROE drops again in response to a 6% decline in net income due to anticipated acquisition costs before recovering in 2020-2021. In reality, the key driver of ROA and ROE will be the rates that Spire's regulators allow them to earn. These rates are difficult to anticipate, and therefore, there is a significant degree of uncertainty in this portion of our model.

2. Liquidity

We see no liquidity concerns for Spire in the next five years as we expect ratios to remain stable around current levels.

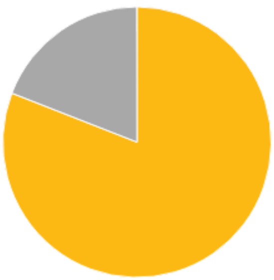
3. Financial Leverage

Our projected debt/equity and financial leverage ratios remain stable over the next five years. The item of greatest concern is interest coverage, which we project to drop to 3.38x in 2019. This reflects the lower net income in that year and higher interest expense that we projected associated with a possible acquisition in the year. An interest coverage drop of that magnitude could be enough to cause a credit downgrade. Rate hikes and higher cost of debt could result in even more trouble with interest coverage as they would increase Spire's interest expense-- this is a ratio to watch closely over the next five years.

Appendix 11: Spire Ownership

Spire has a solid percentage of institutional ownership at 80.9% of outstanding shares, indicating that buying or selling from institutional owners may be a major catalyst to future stock price movement. Although more positions were initiated than were closed in Q4 2016, total share count is a sign of movement toward a selloff with a total of 4.6 million

Institutional Summary as reported in the most recent 13F filings



Institutional Holdings	80.90%
Total Number of Holders	256
Total Shares Held	36,934,788
Total Value of Holdings	2,384,140,565
Net Activity	(200,036)

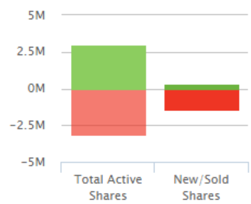
Top 5 Holders of Institutional Holdings

1.	VANGUARD GROUP INC	3,882,037
2.	BLACKROCK FUND ADVISORS	3,361,094
3.	FRANKLIN RESOURCES INC	2,525,025
4.	AMERICAN CENTURY COMPANIES INC	1,633,119
5.	FMR LLC	1,284,972

Active Positions

	HOLDERS	SHARES
Increased Positions	124	2,984,433
Decreased Positions	94	3,184,469
Held Positions	38	30,765,886
Total Institutional Shares	256	36,934,788

New and Sold Out Positions

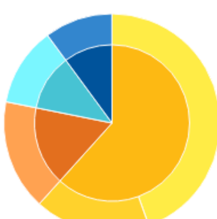


	HOLDERS	SHARES
New Positions	26	311,987
Sold Out Positions	20	1,435,047

shares sold by funds against 3.3 million acquired in the quarter.
Source: NASDAQ

Only 1.4% of Spire shares are held by insiders, meaning that the company's management may have less alignment of interests with equity shareholders. However, insider purchases within the past quarter, including buy-ins from CEO Susanne Sitherwood and CFO Steven Rasche, could show a vote of confidence in the company from top management (See Appendix 6 for key executive profiles).

Top 5 Insider Trades



SITHERWOOD SUZANNE	16,940
SITHERWOOD SUZANNE	6,570
LINDSEY STEVEN L	6,246
DARRELL MARK C	4,461
RASCHE STEVEN P	3,867

Source: NASDAQ

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