RESEARCH REPORT

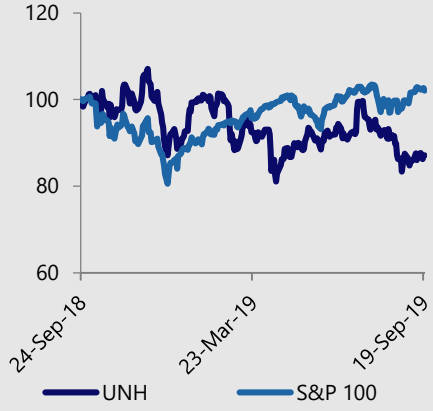
September 23, 2019

Stock Rating	BUY
Price Target	US $235.92
Current Price	US $232.85

Bear Case	Price Target	Bull Case
$212.33	$235.92	$279.54

Ticker	UNH
Market Cap (Bn)	$206.93
EV/EBITDA NTM	12.3x
CF ROIC	17.4%

52 Week Performance



UnitedHealth Group

United We Stand

The U.S. Healthcare Services industry has droned U.S. politics, media, and day-to-day life for decades. However, the U.S. population has recently exhibited an acute awareness of its characteristics, resulting in many discussions regarding the fate of the industry and its incumbents.

For this report, the QUIC Healthcare Team has analyzed UnitedHealth Group (NYSE:UNH), the largest healthcare company in the world by revenue. It operates under two distinct segments, UnitedHealthcare (its core insurance business) and Optum (its pharmacy benefit manager).

Thesis I: Economies of Scale Contribute to Buying Power

UnitedHealth Group has successfully built up cost advantages through its vast network of providers; this establishes an economic moat that is difficult to compete with

Thesis II: First Mover Consolidation Creates Higher Premiums

Optum's diversified revenue stream of value-add services allows it to command higher premiums compared to its peers

Thesis III: High Switching Costs

UnitedHealth's customers have proven to be sticky due to their reluctance to switch insurers

Valuation: BUY with a 16.5% to 26.2% return on current share price

Healthcare

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How are Healthcare Services Offered and Used?

The complexity of healthcare services in the U.S. has led to the requirement of U.S. citizens to be the "oddsmakers of their own health". While there are government-funded schemes for those in need, up to 63% of Americans have had to spend most or all of their savings to pay medical bills. In addition, over 25% of Americans with insurance have difficultly paying medical bills. In an industry with such a target on its back, the Healthcare team aspires to understand how vulnerable the big players are, and how they can withstand some large and potentially eminent macroeconomic changes.

Healthcare Services Users

Healthcare services build upon the traditional insurance model, where a premium is collected based on the risk/likelihood of an insurance claim submission. However, as healthcare has continually been an important topic in U.S. policy, various programs and social safety nets have been designed to ease the burden on the population at large. These programs (and their relevant uses) are outlined in the overview below.

Lobbying Power Within Healthcare

In order to understand the power dynamics within the healthcare services space, the power of lobbying must be analyzed. The pharmaceutical and health products industry has far outspent all other industries on lobbying, spending $3.9B in the past 20 years. Topping the list is the Pharmaceutical Research and Manufacturers of America, with Pfizer coming in as a close second. The focus of this group is to resist government-run services, as well as easier approval for drugs. The amount of funding spent here contributes heavily to the government's historic resistance to change within this space.

At $160.5MM, the insurance industry has been the most aggressive lobbyists in the recent past. Their mandate is to ensure their presence during legislative processes, looking to influence new regulations to preserve the necessity of their services amidst the backdrop of legislation such as the Affordable Care Act. This displays the influence of the industry at-large and demonstrates yet another of scale.

EXHIBIT I

Healthcare services user profiles		% of population
Privately-insured employee	Coverage is based on deductibles, copayments, coinsurance and premiums; varies between 60-90% coverage of all medical costs, and includes UNH, Aetna, Blue Cross, Cigna, etc.	56.0%
65+ citizen or <65 with certain conditions	**Medicare:** hospitalization coverage, preventive services coverage and lower deductibles/coinsurance; usually coupled with some level of private insurance	17.2%
Low-income adults	**Medicaid:** strict eligibility requirements (based on income and family size) by state; full or low-cost coverage of costs associated with medical care	19.3%
Children & teens	**CHIP:** provides medical coverage for children <19 whose parents do not quality for Medicaid but cannot buy private insurance	2.7%

Source(s): healthcare.gov, U.S. Census Bureau

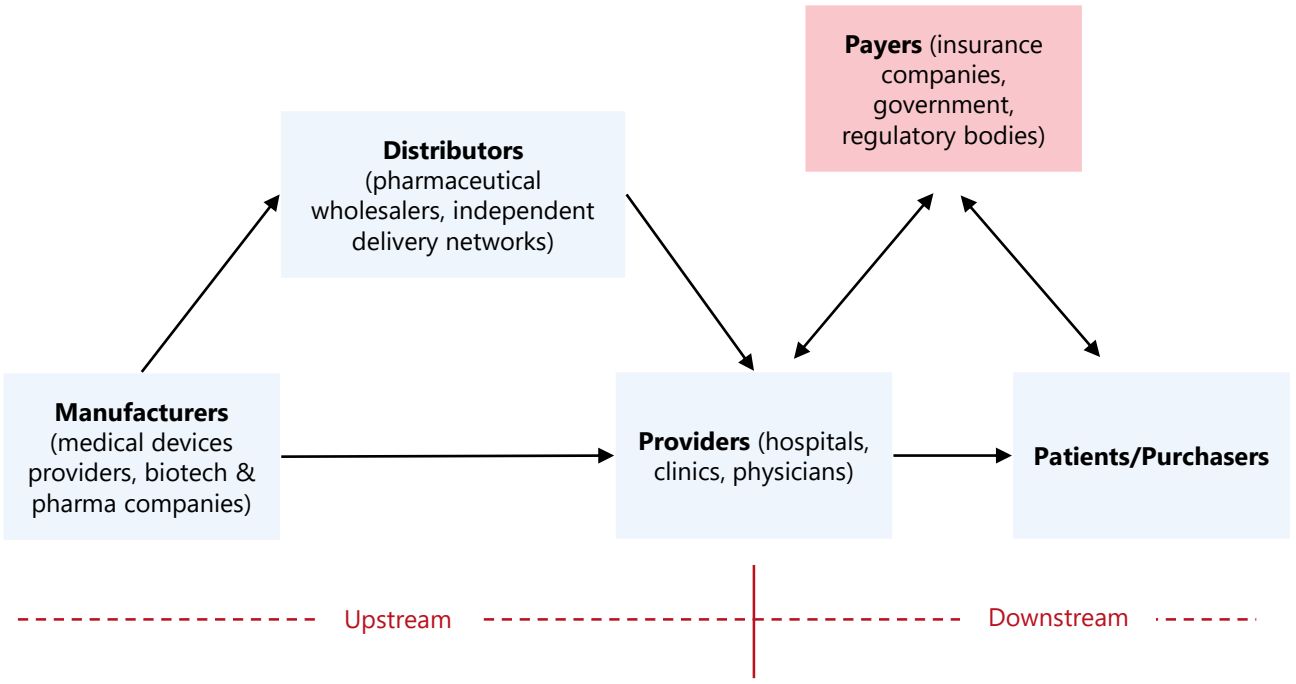
How are Healthcare Services Offered and Used?

The healthcare supply chain is comprised of a network of firms that each create a variety of services. Therefore, understanding the value chain is better understood through a comprehensive lens of the entire network, rather than analyzing an individual transaction.

The healthcare supply chain begins at the medical product manufacturer, where the majority of R&D activities are had. Depending on the type of product, these products are then either purchased by the providers directly or funneled through distributors or group purchasing organizations, which organize contracts with the manufacturers on behalf of the service provider. Afterwards, the provider transforms the "good" into one imbued with applied service, from which they can establish a price to charge the end-consumer of the good. Depending on the relationship with the providers, healthcare payers are either billed directly from the service provider or after-the-fact from the end-consumer, involving the participation of government agencies (such as Medicaid and Medicare), as well as private health insurance companies (such as UNH). If the service qualifies as reimbursable, funds flow from the payer to the end-consumer based on the exact terms of their coverage agreement.

EXHIBIT II

Healthcare Supply Chain Network



Source(s): Harvard Business School

Industry Overview: High Barriers to Entry

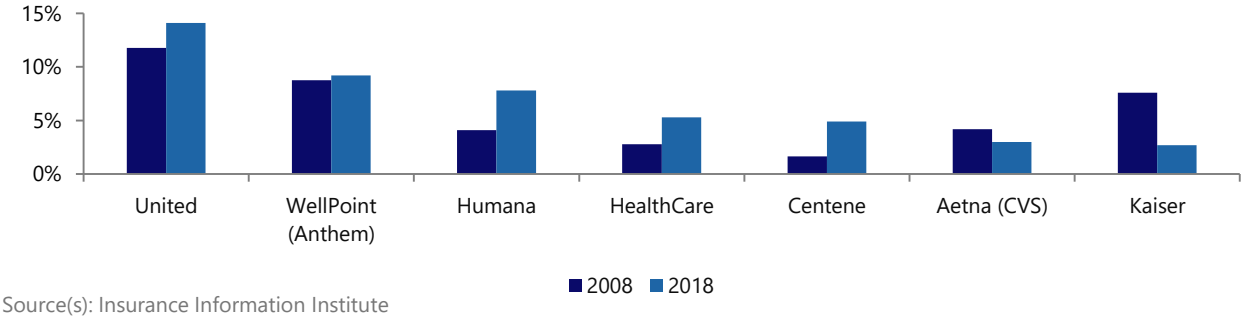
The health insurance industry has high barriers to entry, characterized by the difficulty of receiving government regulation approval, establishing distribution networks and building a good brand image. In order to successfully enter the market, the new entrant must first receive approval from all levels of government (federal, state and local) and by private organizations. Therefore, to operate throughout the country, the entrant must follow different strict regulatory rules because dynamics differ based on location (some states require providers to cover specific benefits while others regulate rates). These regulations have allowed the top two insurers in each state to gain over 80% market share in their respective locations. Furthermore, accreditation by other agencies is voluntary for health insurance companies, but because those agencies provide certifications and rankings to assess quality of care, an entrant benefits greatly from participating. Major regulatory agencies include the Centers for Medicare and Medicaid (CMS) who oversee most health care system regulations and the Health Insurance Portability and Accountability Act (HIPAA) that works to reduce health care costs and protect patients.

Next, new entrants must establish a network of healthcare providers that can offer a large quantity of services at reasonable prices. Large insurers leverage their existing bargaining power to negotiate low costs that cannot be matched by small entrants. In recent years, the top four insurers paid 21% less for physician office visits on average, in comparison to small insurers with less than 5% market share. For instance, a study revealed that small insurers paid $86 for a basic visit to the physician while market leaders only paid $70. Furthermore, negotiating prices has become even more difficult as hospital systems have retaliated with their own consolidation to maintain selling power and achieve savings. Amidst this bilateral competition, smaller insurers lack bargaining power, making it difficult for them to negotiate discounts, build a distribution network and offer affordable services to patients. On the other hand, the faster customer growth of market leaders enable them to remain competitive in negotiations against hospitals.

Furthermore, the typical health insurer customer prefers insurers with a good reputation, so unknown providers will struggle to win customers. If an unknown provider fails to get its customer to view its brand as a trusted partner, member satisfaction scores will decrease. Moreover, only 8.5% of Americans remain uninsured, spread out geographically, so entrants lack a suitable place to enter the market. This is shown by the fact that the current market leaders have relatively maintained their position for 10 years. As a result, it will be difficult to surpass existing health insurers that have built their scale for decades.

EXHIBIT III

Market Share of Top 5 Health Insurance Groups By Direct Premiums Written (2008 vs. 2018)



Source(s): Insurance Information Institute

Company Overview: Principal Actor on a Large Stage

UNH is a managed care company that offers health care products and insurance services. It is the largest healthcare company in the world by revenue, with 2018 revenue of $226.2B and 115MM customers. The organization operates with two distinct segments: UnitedHealthcare and Optum.

UnitedHealthcare

UnitedHealthcare operates as the core insurance business of UNH. Its four segments are comprised of: employer & individual, Medicare & retirement, community & state, and global. While these business lines differ by sources of funding and specific clients served, each provides a measure of insurance protection in exchange for a monthly premium.

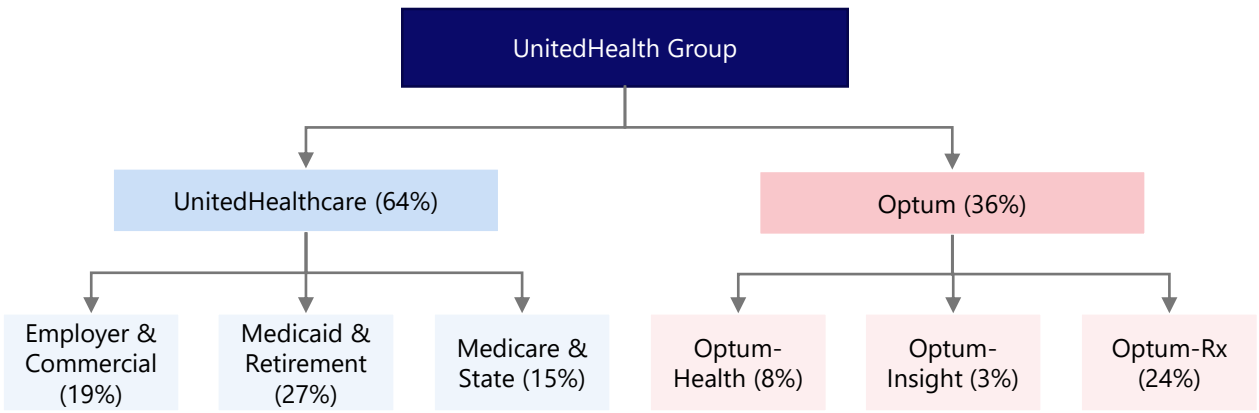
For employers and individuals, UnitedHealthcare maintains two distinct offerings. The first is the more common risk-based model, where UNH takes on the risk of all claims and completes all administrative work in exchange for a monthly premium. The second is the less profitable administration model, where the employer is large enough to assume the claims risk, and UNH completes the administration or facilitation work surrounding the claims. This private-care segment accounts for ~19% of overall revenue.

The Medicare & retirement and community & state business lines account for ~42% of revenue and focus on providing insurance benefits through Medicare and Medicaid in exchange for premiums paid by both the state and the Center for Medicare and Medicaid Services ("CMS"). UnitedHealthcare is focused on providing assistance through Medicare Advantage, Part D, Medicare Supplements, and state-based Medicaid. These state contracts are awarded through either a formal bid process or individualized contracts.

Accounting for ~4% of revenue, UnitedHealthcare's small global segment offers insurance and healthcare services predominantly in South America. Similar to its U.S. operations, this is complemented by ownership of multiple clinics, hospitals and ambulatory services within the area.

EXHIBIT IV

UNH Group's Segment Representation with Percentage of 2018 Revenue before Eliminations



Source(s): Company Filings

Company Overview: Principal Actor on a Large Stage

Optum

Optum is a pharmacy benefit manager and care services group that was established under UnitedHealth Group in 2011. It was formed by merging the company's existing pharmacy and care delivery services into the single Optum brand. Its offerings are designed to reduce costs and improve efficiency across the entire healthcare value chain. It aims to do this by improving the quality of care through OptumHealth, aggregating purchasing power for pharmaceuticals through OptumRx, and optimizing claims forecasting through the data of OptumInsights.

OptumHealth is responsible for implementing measures to improve the quality of service and patient satisfaction. It does so by providing surgical centers, ambulatory services, physicians' networks, and walk-in clinic services with the aim to decrease the cost for insurers and hospitals by providing smaller, more cost-efficient centers. These centers provide the insurer with a higher degree of control over administration costs, the largest element of waste in the U.S. system (accounting for $1.1B or 31% of overall healthcare spending in 2017). OptumHealth's margins are heavily affected by scale and as such have been increasing steadily from 6.3% in 2011 to 10.1% in 2018.

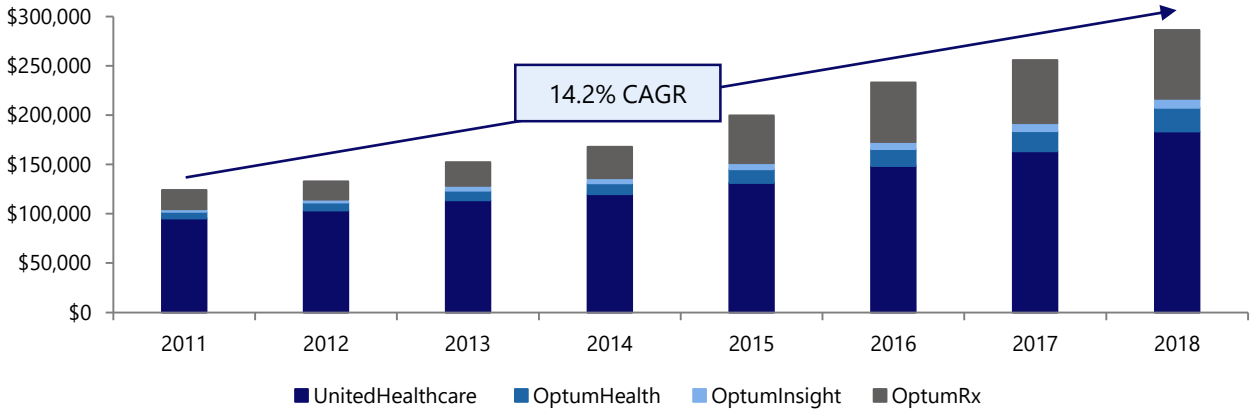
OptumRx provides PBM services to more than 30MM Americans and manages ~$40Bn in pharmaceutical spending annually. OptumRx is by far the largest revenue driver of the Optum brands, accounting for ~30% of consolidated revenue in 2018. The main revenue source from this business line is rebates and discounts from manufacturers, and as such the operating margins are quite thin at ~5.1%. The growth of this segment is largely due to the positive feedback loop that scale provides, with OptumRx operating as the second largest PBM in the U.S. market.

OptumInsights aggregates industry data including healthcare provider prices, drug prices, and other relevant healthcare data points. This data enables large health insurers to derive trends and more accurately forecast the correct claims percentages and medical costs for the coming years. The service-based nature of this segment allows it to operate with ~25% operating margins, making it the highest-profitability business line within UNH.

The Optum-UnitedHealth model of vertical integration is pointed to as having sparked a pattern of acquisition activity in the healthcare industry; most notably, mega-mergers between CVS-Aetna, Cigna-Express Scripts and Humana-Kindred.

EXHIBIT V

Segmented Revenue Excluding Eliminations ($MM)



Source(s): Company Filings

Thesis I: Economies of Scale Creates Bargaining Power

UnitedHealth Group is uniquely positioned in the healthcare sector broadly and compared with its peers in the managed-care industry. UnitedHealth's breadth of scope puts it in a league of its own and forms the underpinnings of a wide economic moat.

Managed-care offerings are better analyzed through a local market lens, given state-level regulatory requirements. A network plan is developed based on state-level requirements and the needs of the group of local providers, thus making it difficult to enter for new entrants. At the national level, the insurance industry looks relatively competitive, but when we drill down into state-level market dynamics, it's clear that much of the industry is well consolidated and there are significant market leaders in each state. We believe the leading incumbents in such industries reap the benefits of an entrenched market position, and in this regard, UNH is second to none.

Within this framework, health insurers benefit from two primary moat sources: cost advantages and network effects. Cost advantages can be thought of in two ways, but both relate to the size of an insurer's book of business. First, a larger membership base allows for greater centralized fixed-cost leverage, increasing the profit potential of the marginal member on the overall enterprise. Second, a larger membership base allows for greater negotiating leverage versus the providers that an insurer needs to create a plan network, allowing for lower medical costs per member and the opportunity to lower premiums or improve its benefits offering to secure enrollment growth. In rare instances, healthcare systems focused on building localized scale which can shift the balance of power in these relationships. As a result of much higher levels of concentration found in the managed-care industry at large, we think the scales more frequently tip in the insurers' favor.

This scale is shown through UnitedHealth's market share over its peers, but also significantly low Medical Care Ratios (MCR) compared to peers (Exhibit I) The MCR ratio is critical in healthcare insurance, as it represents medical costs as a percentage of premium revenues. In simple terms, it reflects the theoretical COGS/Revenues seen in other industries. This metric is denominated by the medical claims paid (COGS) over the total premiums received. Due to the nature of the industry's high barriers to entry, we believe the significance of UNH's scale advantage is amplified.

Looking at its largest peers, UnitedHealth's insurance operations boast the lowest per-member rate of medical claims paid, suggesting its membership base has given it sizable leverage over the healthcare providers with which it contracts. This has translated to a commercial premium monthly rate that has trended below peers, and in turn translated to steady premiums growth despite its size. In the comparables set, only Centene and Wellcare have been able to grow their premiums at a more accelerated rate through acquisition of government health plan providers, which have not translated to be accretive to EBIT margins (Exhibit VI).

As a result, UNH can benefit from higher margins, and a cost advantage that has created a well-recognized brand to further grow its enrollment base. In comparison to its peers (Exhibit VI).

Exhibit VI

Superior Financial Metrics to Peers

Company	Revenue ($Bn)	Premiums Growth	MCR	EBIT Margin
UNHealthCare	**$183**	**12.4%**	**81.6%**	**7.7%**
Anthem	$91	2.5%	84.2%	5.9%
Humana	$57	7.7%	83.7%	3.0%
Centene	$60	24.0%	85.9%	2.4%
Wellcare	$20	18.3%	86.0%	3.4%

Source(s): UNH Earnings Calls, Annual Report

Thesis I: Economies of Scale Creates Bargaining Power

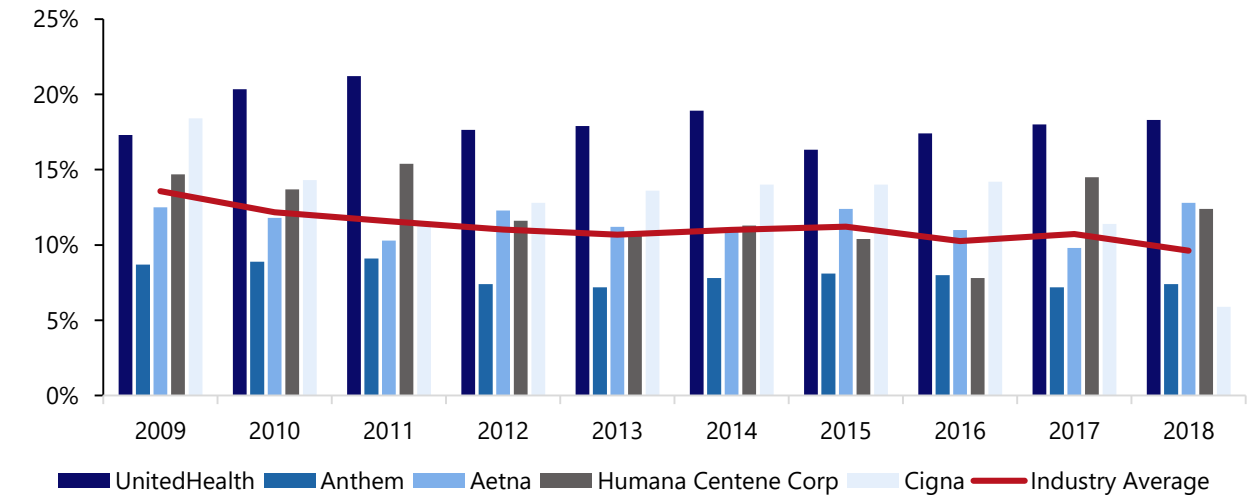
We think UNH's wide-moat insurance business differs from its peers in two key ways. First, its scale and scope is unmatched as seen on the previous page. On a state-by-state basis, UNH is positioned as either the largest or second-largest insurer in terms of premiums written in 28 states due to being a legacy business; Anthem comes in second on this metric with a number-one or -two position in only 11 states. This has translated to a best-in-class cost-per-member profile for the business, allowing UNH to price its products to ensure its position within the market.

UnitedHealth's scale has allowed cost and network advantages to take root and support its best-in-class returns on invested capital (Exhibit VI). Network effects also play an intertwined role between patient, payer, and provider. For incumbents, as a plan's enrollment grows, the relationship among these three entities becomes more valuable over time. For patients, as a plan's negotiating leverage expands, either premiums become relatively more affordable or the plan invests in a broader swath of benefits for its members. This is particularly important because a significant portion of UnitedHealth's customers are employers, where there is an increasing need to increase the scope of employee benefits packages for customers.

For payers, expanding enrollment allows for greater per-member profitability and a more attractive offering, either through better pricing or a more enticing benefits package. For providers, participating in an expanding plan network provides access to greater patient volume, a key component of profitability in a business with high fixed costs over the short run. These dynamics create barriers to entry for would-be competitors, as putting together an attractively priced provider network in a new geography is prohibitively difficult without the membership pool and vice versa. Due to limited product differentiation and transparency across healthcare insurance names, economies of scale presents itself to be a deep competitive advantage.

Exhibit VII

UNH ROIC vs Peers



Source: S&P CapitalIQ

Thesis II: First Mover Consolidation Creates Higher Premiums

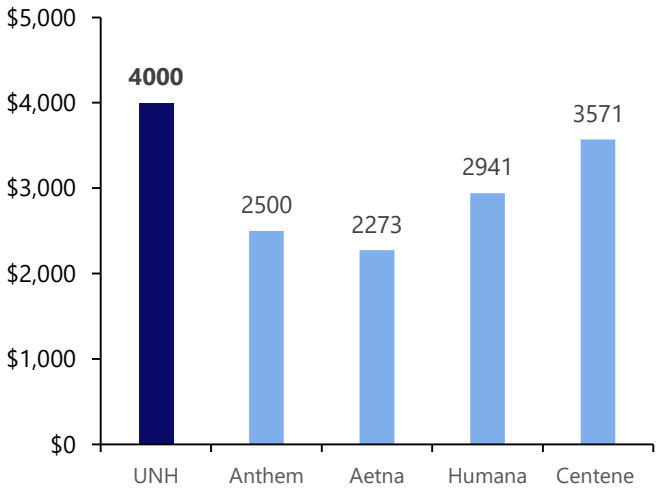
UnitedHealth's business franchises are moatworthy in its own right, but the integration of a PBM, pharmaceutical management, and an ambulatory care network strengthens the performance and durability of the entire enterprise. We're convinced that UnitedHealth's scale and cohesive service model with Optum will guarantee the company will continue to earn excess returns for shareholders over the coming two decades.

The two Optum segments that we believe most contribute to UnitedHealth's wide moat are the OptumRx pharmacy benefit manager and OptumHealth's ambulatory care business. Affiliating UnitedHealth's insurance operations with the second largest PBMs and outpatient service providers in the country makes for sizable cost benefits compared with less integrated peers. Fundamentally the firm's ownership of OptumRx PBM network allows UNH to target a lower margin on its insurance book to secure enrollment, while making up for lost profitability by cross-selling newly insured groups on its pharmacy benefit program. In our view, this strategy has been key to UnitedHealth's success in driving industry-leading medical enrollment gains since 2010, but increasing insurance premiums per head as well (Exhibit III). The previous page mentioned UNH's ability to lower premiums to gain customers, however they are still able to benefit from its vertical integration to raise premiums.

From a provider's perspective, UnitedHealth's affiliation with its OptumHealth assets allows it to better manage the care of its members and encourage use of its lower-cost-of-care sites. Operating in 13 states, management of Optum claims to service its Medicare Advantage members at a 20% discount compared to traditional Medicare in markets where its insurance business and OptumHealth assets overlap. If that is the case, it leads itself to be more robust against regulatory changes for Medicare due to cheaper costs per customer, and further displays the scale of its bargaining power (Exhibit IX). Through early integration with Optum, it has been able to expand its product offerings for its insurance business through cross-selling to Optum RX's business, resulting in a significantly more diversified product portfolio relative to peers (Exhibit IX)

Exhibit VIII

UNH Premiums Per Head ($) vs Industry Average



Source(s): Company Annual Reports

Exhibit IX

Product Diversification Between Companies

Company	Employer Market	Individual Market	Medicare	Medicaid
UNH	**18%**	**39%**	**20%**	**23%**
Anthem	42%	36%	5%	18%
Humana	-	-	100%	-
Centene	-	-	57%	43%
WellCare	-	0%	29%	71%

Source(s): UNH MD&A

Thesis II: First Mover Consolidation Creates Higher Premiums

The company manages 50MM lives under its insurance plan yielding 14% market share, 5% higher than the next closest peer. With the integration of Optum, it also has access to pharmaceutical data of 200 million lives, covering 66% of the total addressable healthcare insurance market. This permits for increased data access to drive its Net Promoter Score (NPS). Through consolidation of insurance plan data with UnitedHealthcare and Optum, UNH is able to better develop accurate services of care relative to peers. Its average NPS score is 92/100, compared to an industry average of 76. This is significant since it demonstrates the consumer is most satisfied with the care provided by UNH. Therefore, its pricing premium to peers is warranted and reflects the general satisfaction a client has with its insurance plan. According to Credit Suisse research, a client will not switch insurance plans unless they are dissatisfied, and are not wary of significant price increases. As such, this reflects significant pricing power and the higher premiums paid are justified.

Furthermore, Medicare payments have recently begun to shift from fee-for-service to a quality of care rebates model. Therefore, instead of each service being paid out on a set amount per service, reimbursements now vary based on customer NPS scores. The company with the highest NPS score, alongside other customer satisfaction reports will receive the largest share of the total national reimbursements. This change reflects well on UNH's current business model, as they have been the first mover to prepare for such change.

OptumHealth does not possess the characteristics we typically attribute to moatworthy businesses on a stand-alone basis, but can be an incredibly valuable asset when in the hands of a fully integrated healthcare services provider. OptumRx, on the other hand, has built a more advantaged franchise in the PBM industry, retaining 99% of customers YoY. Pharmacy benefit management has developed into an attractive oligopoly, with the top three PBMs now accounting for roughly 80% of claims processed nationwide. These businesses, like managed-care organizations, benefit from cost advantages afforded by the scale they've been able to amass through consolidation. Each of the three industry leaders adjudicate over a billion adjusted scripts annually, which allows for sizable operating leverage and improves the economics of the marginal script. Further, a PBM's ability to consolidate buying power helps drive value for clients through discounts received from dispensing pharmacies and drug manufacturers. Finally, these relationships have been extremely sticky over time, with retention rates for each of the three national PBMs averaging >90% year after year.

Optum has become the second largest PBM in the U.S. markets, and when combined with the largest healthcare insurance network in UNH, it results in a scale advantage that creates both cost advantages, pricing power, and diversification against regulatory headwinds.

Is the Potential Rebates Reform a Threat to Optum?

UNH has already prepared itself for HHS rebate policy changes, and has allocated 8M point-of-sale rebates in 2019.

For UNH, rebates only exist on 7% of prescriptions. Of total prescriptions, 90% of managed drugs are generic with no rebates, and 10% is allocated under branded and a subset of that is rebateable drugs. When looking in the Medicare market none of that value is held by UNH, 100% is passed on to the clients. Fully disclosed with the CMS, 100% is also passed on to the Medicaid market, within the client base. In total, 98% of discounts are passed on to general clients, meaning UHN only pockets 2% of its cost savings.

Regardless of the potential end of PBM rebates which may not occur, the impact on UnitedHealth's profitability may not be as grave as the market believes. The company has wisely insulated its earnings and cash flow by making itself almost independent of rebates.

As such, the street's fears over UnitedHealthcare may be overblown on the pricing rebates, creating room to find value in this blue-chip stock. As of September 22, 2019, United is trading at 15.3x free cash flow, under the average of UHN's average P/FCF of 17.8%.

Thesis III: High Switching Costs

UNH benefits from high switching costs due to customer reluctance to switch insurers, thus protecting them from losing existing customers to competitors. Roughly 60% of Americans are insured under employer-based health insurance, and only switch plans when moving jobs. Therefore, an individual's propensity to switch is tied closely with its company's decisions.

However, employers are unlikely to switch health insurance plans. Due to the difficulty of accessing pricing information quickly, shopping for new health insurance plans is time consuming and weighing the cost or benefits of different offerings is difficult. Factors that need to be considered include differences in quality of patient care, the countless reimbursement rates for thousands of procedures and the diverse physician networks. As a result, search frictions emerge where finding alternative plans is hard and companies are locked into transactions with their current provider. Although some employers strive to find a cheaper plan every year, this mostly occurs in smaller companies that are more flexible and can switch every five years on average. However, larger companies run their own insurance programs with provider assistance, limiting ability to switch. This resulted a gradual increase of premiums over the years.

Amongst individuals that are not tied to employer-based health insurance, they consider switching costs such as transaction costs, time lost due to paperwork, and uncertainty about quality of untested brands. Therefore, most customers do not switch suppliers unless switching costs are worth the new health plan. Considering that Americans have been generally satisfied with its services for over a decade (80% rate quality of care as good and 69% rate coverage as excellent or good), switching costs are not worth the new health plan and customers will remain with their current plan.

For Americans that consider switching health insurance, coverage, quality and price are three major factors. Higher price premiums must be justified by higher quality care or better coverage. Therefore, Americans prefer trustworthy insurers that offer a transparent enrollment experience, faster customer service and reasonable prices. The plethora of services that UNH offers through its OptumHealth platform addresses this concern.

Tools include Health Plan Manager, its interactive analytics tool for customers to check their self-funded health plans. Users can analyze what health conditions cost them the most and see what solutions and clinical

EXHIBIT X

Average Annual Worker and Employer Contributions to Health Coverage 2000-2017

Source(s): Kaiser Family Foundation

Thesis III: High Switching Costs

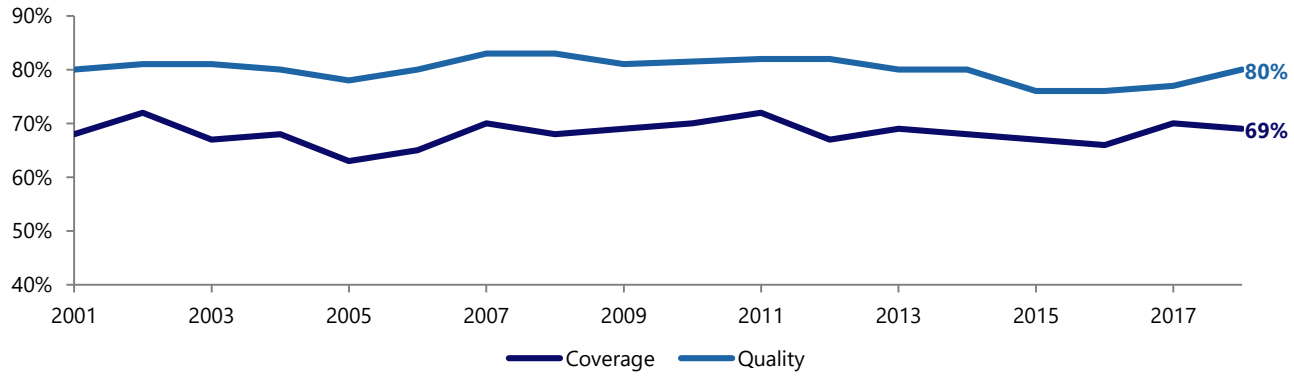
changes can be addressed to get a more valuable plan. PreCheck MyScript is an application integrated with existing electronic health records that allow patients to view their medication costs. Currently, 20,000 providers and 80% of UnitedHealth's physicians are expected to use the application by the end of 2019 to upload data on service costs. This forms a network of trustworthy physician offices where customers feel less skeptical about the prices they pay. Finally, to educate their customers further, UNH has Personalized Claims Videos, its system that provides video explanations of benefits and bills.

An analysis of UnitedHealth's major competitor, Anthem, reveals that its additional services are less developed which provides UNH a potential advantage in the future regarding quality of care. Anthem, the 2nd largest insurer in America, has an advantage in its right to market products under the Blue Cross Blue Shield Association (BCBSA) name, which is one of the most recognized names in global and American health insurance. BCBSA covers more than 106M insured Americans when counting customers of all 36 insurers. Anthem is able to utilize the provider networks of other BCBSA members to negotiate broader health benefits and cost-efficient services. However, Anthem has not focused on technology as much. Historically, they have only used technology to enhance company operations rather than customer experience. Although Anthem had a mobile application for digital doctor visit services, only last year did Anthem announce a partnership with IBM to enhance consumer digital offerings.

This can be contrasted to UNH, who has been building its digital service division for years and have already rolled out several tools. Furthermore, UNH has equal nationwide presence that allow for aggressive negotiations, broad provider networks and economies of scale. Anthem and UNH are closely matched in insurance offerings, but UnitedHealth's technological offerings provides it the ability to offer higher quality services, which make customers more reluctant to switch away to alternative insurance plans. Ultimately, many barriers exist that make switching for employers and individuals difficult. Furthermore, UnitedHealth's product offerings surpasses their competitors, allowing for high quality care at justified prices, which discourages switching even further. As a result, this enables UNH to grow smoothly without being constantly concerned about its existing customers.

EXHIBIT XI

Americans' Rating of the Coverage and Quality of Their Personal Healthcare (% Excellent/Good) 2001-2008



Source(s): Gallup

Key Risks and Catalysts

Key Risks

Dependence on Government Funded Programs
Probability: Medium, Impact: Medium

UNH provides care and services for multiple government funded health care programs through both its UnitedHealthcare and Optum platforms. In 2018, 64.8% of revenue came from programs that were government subsidized. Subsequently, the risk of a government funding decrease could materially affect the company's revenue either directly or through decreasing enrollment numbers.

Mitigation: The company has been operating under these risks for many years, and has built out multiple revenue streams, such as employer insurance and much of Optum, that do not depend on government activity.

Implementation of Medicare for All
Probability: Low, Impact: High

A macro-risk that UNH faces is the possible implementation of Medicare-for-All. Under this program, the federal government would undertake substantially all healthcare spending, creating free access to all who require it. This would have a materially adverse affect on UNH, with the majority of the company's revenue dependant on providing or supporting healthcare services.

Mitigation: While this politically-centered risk has been making large headlines, the value proposition and cost of the program remains quite unclear. Research shows that, over the next 10 years, Medicare-for-All would cost between up to $38 trillion, whereas in the fiscal year of 2018, they only spent $3.65 trillion. Thus, the likelihood of the budget for healthcare jumping this much in a small time period is very low. However, if this were to happen, UNH could look to capitalize on other streams of revenue like parts of Optum that do not have as direct ties to insurance.

Price Transparency of Pharmaceutical Products
Probability: Medium, Impact: Low

UnitedHealth's ability to charge certain premiums is contingent on the fact that consumers are oblivious to the true costs of care. In general, insurers and hospitals keep their negotiated prices well-guarded, allowing them to implement price-discrimination with different groups of customer, who are then bound by non-disclosure agreements. This creates a mirage of generous price discounts, where the cost of care could be marked up 300%, but the 20% offered discount is all the customer sees. However, there has been a push for insurers to disclose the true prices, making it more difficult for them to hide price premiums in their offerings. As a result, price hikes may be limited and competition may emerge in the stable insurance industry with different insurers offering better deals in consideration of price and quality.

Mitigation: UNH has taken advantage of the trend for transparent prices by disclosing information of over 800 common medical services regardless of plan. Doing so increases brand image and 'quality of service' provided by UNH.

Increased Taxation for Offering Premium Insurance
Probability: Low, Impact: Medium

In the past, employers were willing to take on insurance plans with high premiums due to the untaxed nature. However, the introduction of the Cadillac Tax within the Affordable Care Act means that the most generous insurance plans create tax burdens for employers. Those offering premium insurance plans can be taxed at 40% on costs above $11.2K per year for individuals or $30.2K per year for families. Although the bill is set to be implemented in 2022, employers have already been shifting towards higher-deductible plans, pushing premiums onto individuals and making it more difficult for insurers to pitch their own premium plans. Recently, the House successfully voted to repeal the Cadillac Tax but there has been no response from the Senate.

Key Risks and Catalysts

Mitigation: UNH has been bracing for this change for several years, as the bill was originally set to be implemented in 2018. Now that the House has repealed the tax, the only obstacle left is getting the Senate to repeal, which appears likely. UNH themselves commissioned a report that proved that the tax would only increase price premiums, causing many people to see the Cadillac Tax as a burden.

Key Catalysts

Potential Expansion to Other Countries

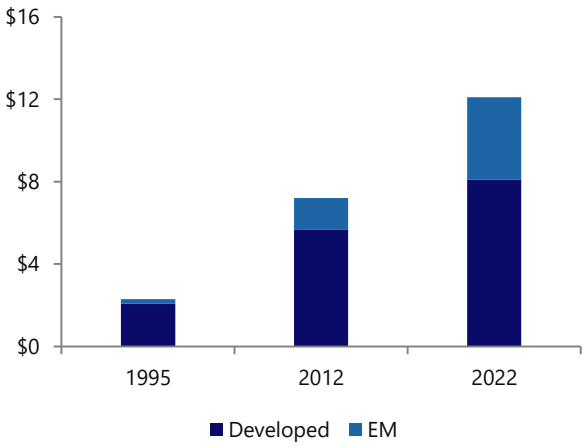
Currently, UNH aids 6.2MM people globally with medical benefits and 2.2MM people with dental benefits. The company has an expansive network of various types of health care providers that reside in over 130 countries. This emerging markets presence has allowed them to capitalize on and aid in growth in these nations, and represents a large expansion opportunity going forward.

Growth Opportunity in Underinsured Market

In 2017, there were 25.6MM people in America who did not have health insurance, rising to 27.5MM people in 2018, an increase of 0.6%. Additionally, the number of people covered by Medicaid decreased by 0.7%. This uninsured market portion represents a growth opportunity for UNH. An option to reach these patients could be to create a program for those who do not qualify for Medicaid and have more price-friendly options.

EXHIBIT XII

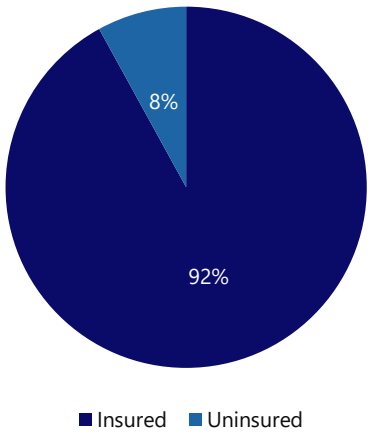
Global Health Expenditure (Trillion)



Source(s): Siemens Healthcare GmbH

EXHIBIT XIII

Number of Uninsured vs Insured People in America



Source(s): U.S. Census Bureau

Valuation: BUY with a 16.5% to 26.2% Return on Current Share Price

For valuation, our approach centered around ensuring we gleaned a thorough understanding of the business while not falling victim to false precision. The company's business lines all have separate margins, are affected by different industry trends, and are propelled by different drivers. For this reason, the first valuation option we evaluated was a sum of the parts cash flow analysis. However, the main roadblock became a lack of necessary granularity in the reporting. Due to this, our second approach aimed to assess the business as a whole by answering three fundamental questions: 1) What level of growth does the current market value imply? 2) Does the company deserve to trade at a premium to its peers, as they have historically? 3) What is the current premium and what does a reversion to the mean imply?

Evaluating the implied growth first, we used a simple perpetuity valuation to determine the implied growth rate of the company. The cost of equity was determined by adding the dividend yield and the earnings yield, to represent the investor return expectation. This was sanity checked by comparing the result to that of the CAPM calculation, with the results showing no material difference. This, along with a historical cost of debt, implied a discount rate of 6.03%, which when applied to the perpetuity formula suggests a share price only ~$3.00 above the current market price. This implies that the market is pricing in zero growth for UNH's business over the long-term.

The second question aimed to evaluate the premium that UNH has historically commanded in EV/EBITDA. To ensure we felt confident in the justification of this premium, UNH was compared to peers on its combined ratio and ROIC. The combined ratio is an important metric for insurance companies, as it measures the margins on underwriting revenue, ensuring the company is not taking undue risk. The ROIC figure uses UFCF in place of the traditional NOPAT figure to account for capital expenditures and changes in working capital, creating a better representation of management's capital allocation over time. Through both of these metrics, UNH has consistently outperformed its peers, providing our team with confidence that the company deserves its historical premium to peers, and that this premium will continue going forward.

Lastly, we looked at the current premium and the implied return for a reversion to the one-, five-, and ten-year premiums. This analysis is laid out in Exhibit XIV and reflects between a 16.5% and 26.2% return on the current share price.

While these three lanes of analysis do not provide us with an exact target price, they answer the core questions surrounding UNH's business model, and repeatedly shows the conservative nature of the current valuation.

EXHIBIT XIV

Perpetuity Analysis

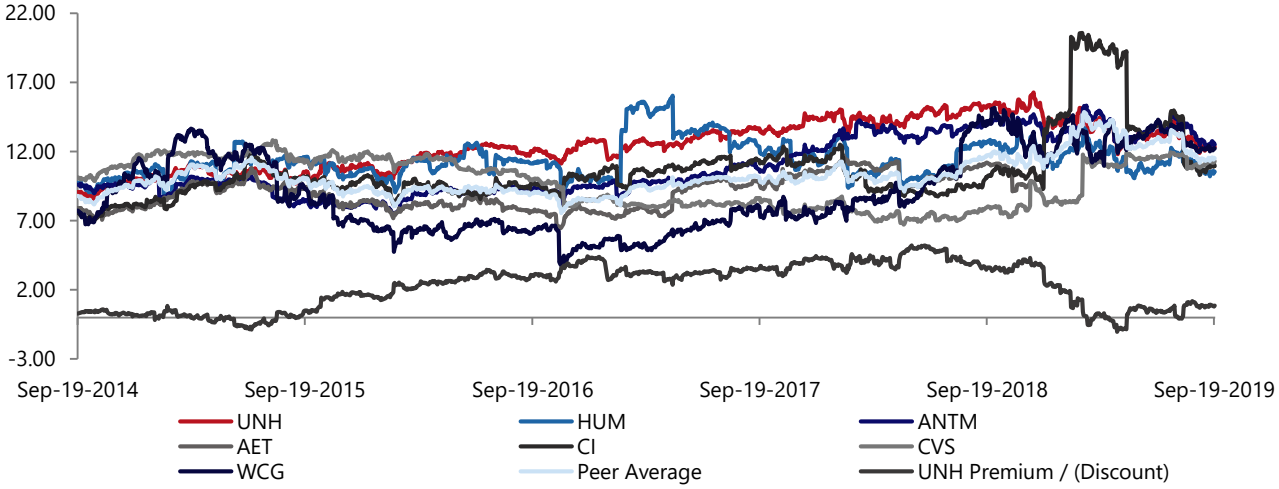
Discount Rate Calculation	
Cost of Equity Calculation	
Dividend yield	1.9%
Earnings yield	5.7%
COE	7.6%
AT COD	3.7%
Equity % of TC	59.8%
Debt % of TC	40.2%
Discount Rate	6.03%

Implied Perpetuity Valuation	
2018 UFCF	14,934
Discount Rate	6.03%
EV	247,719
Total Debt	(36,554)
Cash Balance	14,324
Minority Interest	(1,908)
Equity Value	223,581
Current S/O	947.7
Implied Share Price	$235.92
Current Share Price	$232.85

Source(s): Company Filings

EXHIBIT XV

Historical EV/EBITDA Multiples



Source(s): S&P CapitalIQ, Company Filings

EXHIBIT XVI

Combined Ratio & CF ROIC Comparison

Combined Ratio	2013	2014	2015	2016	2017	2018
UNH	6.3%	5.8%	5.1%	4.9%	5.2%	5.0%
HUM	4.9%	4.8%	4.2%	3.4%	6.2%	5.3%
ANTM	5.4%	5.9%	5.9%	5.4%	4.4%	5.5%
AET	-3.9%	-3.1%	-2.2%	-2.1%	-2.4%	n/a
CI	n/a	n/a	n/a	-2.9%	-0.7%	-6.0%
CVS	4.1%	4.0%	4.0%	3.8%	3.6%	3.5%
WCG	2.8%	0.8%	2.3%	3.6%	2.5%	2.1%
Average	3.3%	3.0%	3.2%	2.3%	2.7%	2.6%
UNH Δ	3.0%	2.8%	1.9%	2.6%	2.5%	2.4%

CF ROIC	2013	2014	2015	2016	2017	2018
UNH	13.5%	12.9%	13.6%	12.9%	17.2%	17.4%
HUM	6.1%	8.5%	7.1%	4.3%	17.2%	15.4%
ANTM	3.6%	1.5%	1.0%	0.4%	7.4%	3.9%
AET	9.4%	11.6%	12.7%	9.6%	16.7%	n/a
CI	n/a	n/a	n/a	8.9%	11.7%	3.6%
CVS	9.7%	11.3%	9.5%	12.0%	14.6%	6.5%
WCG	7.6%	0.8%	2.1%	7.5%	10.4%	7.4%
Average	8.3%	7.7%	7.7%	7.9%	13.6%	9.0%
UNH Δ	5.2%	5.1%	6.0%	5.0%	3.6%	8.3%

Source(s): S&P CapitalIQ, Company Filings

EXHIBIT XVII

Mean Reversion Analysis

Mean-reversion Analysis	
Current Share Price	$232.85
NTM EV/EBITDA	12.34x
Current Premium	0.85x
Average Premium / (Discount) to Peers	
1-year Average	1.42X
5-year Average	2.22X
10-year Average	1.25X
Implied Return	
1-year Average	*18.1%*
5-year Average	*26.2%*
10-year Average	*16.5%*

Source(s): S&P CapitalIQ, Company Filings

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