Nicolas Shannon
01/13/2021

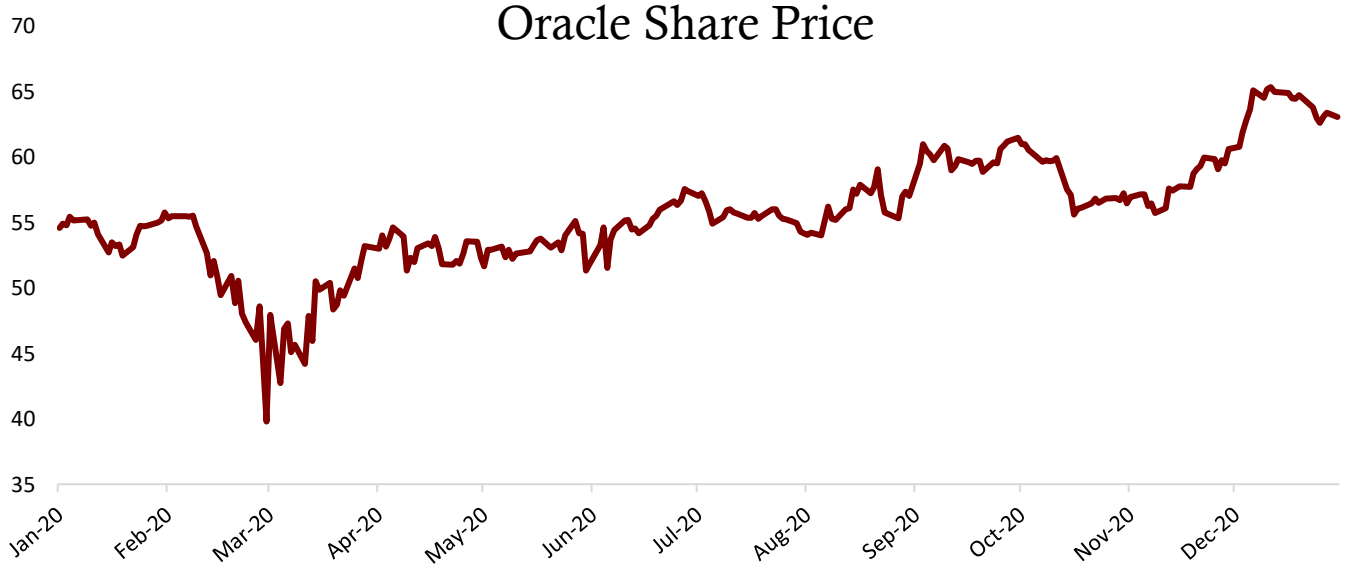
Oracle Corporation

Market Profile	
Price	$63.02
Beta	0.75
Market Cap.	$183.77B
Revenue	$39.22B
EBITDA	$16.79B
Price/Earnings	19.17
Price/Book	23.45
Dividend Yield	1.51%
Return on Assets	9.03%
Return on Equity	83.71%
Profit Margin	26.34%
Operating Margin	38.22%

Investment Thesis

I am issuing a buy recommendation on Oracle Corporation (ORCL) with a time horizon of eighteen months and a target price of $74.49. This represents an upside of 18% above the share price of $63.02, the most recent price as of the date this was written.

This recommendation is based on Oracle's consistent financial performance, improvements to its cloud infrastructure, and continual innovations and improvements to its enterprise and database software. Even amid a global pandemic that has wrecked havoc on businesses everywhere, Oracle remains strong, with its share price surpassing pre-pandemic levels. Both the enterprise software and database software industries are expected to grow as demand and private investments increase, and Oracle has already seen a large influx of new enterprise clients.



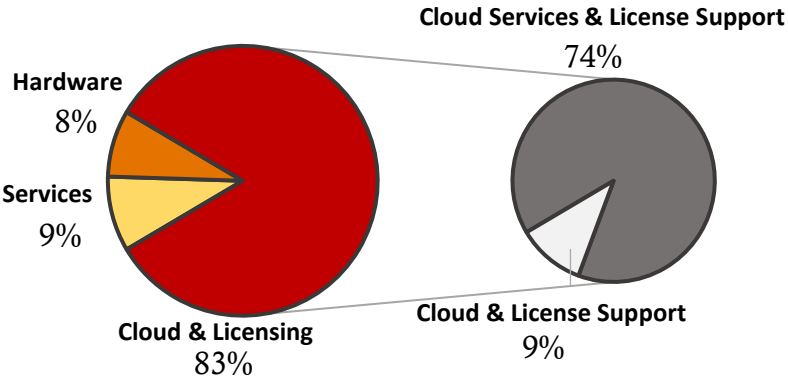
Oracle Share Price Year-to-Day, Since Nov. 11, 2020 (Source: Yahoo Finance)

Company Description

Business Operations

Oracle Corporation provides a diverse array of products and services that are tailored to the needs of corporate information technology environments. Oracle sells database software, cloud-based applications and infrastructure, as well as hardware and services to help companies improve their enterprise planning and operations. Oracle operates under three different segments: Cloud and Licensing, Hardware, and Service business. Additionally, Oracle's Cloud and Licensing segment can be further broken down as Cloud and Cloud Services.

2019-2020 Revenue by Operating Segment



Cloud and Licensing

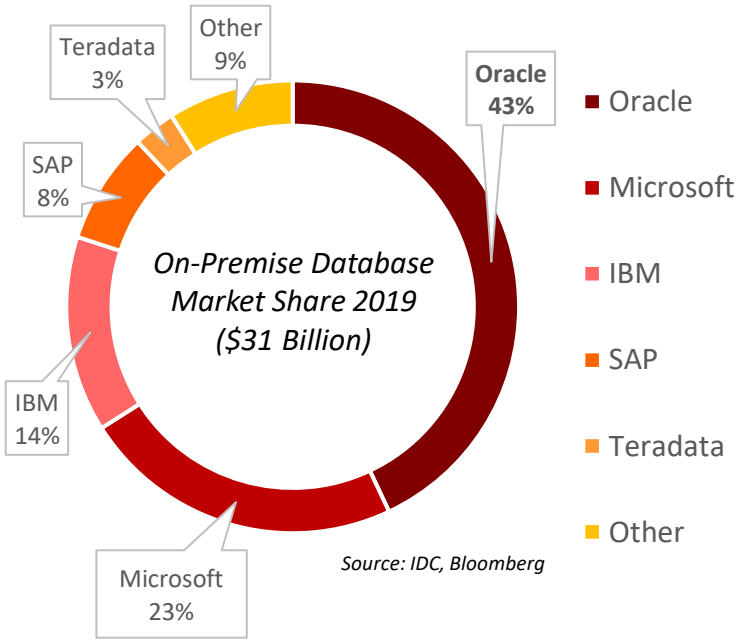
Cloud and Licensing is by far Oracle's largest segment, making up 74% of their total Q1 revenue for 2020. Oracle's Cloud and Licensing can be farther broken down into Cloud Services and License Support and Cloud and On-premise license. With the rise in demand for cloud-based solutions, Oracle delivers a wide array of products that are low-cost and easy to use.

Cloud ERP Applications

Another area that Oracle excels in is cloud financial planning software. Oracle offers enterprise resource planning (ERP), Supply Chain and Manufacturing (SCM), and Customer Experience (CX) cloud applications that it sells individually under the Oracle Cloud Fusion Applications name. Alternatively, Oracle offers a single, unified management suite called NetSuite. In Gartner's "Magic Quadrant" for cloud financial planning and solutions, Oracle was a top leader.{2} Oracle has been able to entice many new customers to migrate to their ERP Cloud ecosystem due to its easy data migration and synergy between applications.

On-premise Products

Oracle is the dominant provider of on-premise database systems. With a market share of 43% for on-premise relational databases, Oracle is leaps and bounds ahead of the competition.[1] Oracle has a large existing customer base that uses their on-premise database products, many of which were implemented in the pre-cloud era. This serves as an extremely reliable revenue stream, even amidst the economic uncertainty of 2020. On-premise Oracle products include PeopleSoft, E-Business Suite, JD Edwards, and Siebel.



Source: IDC, Bloomberg

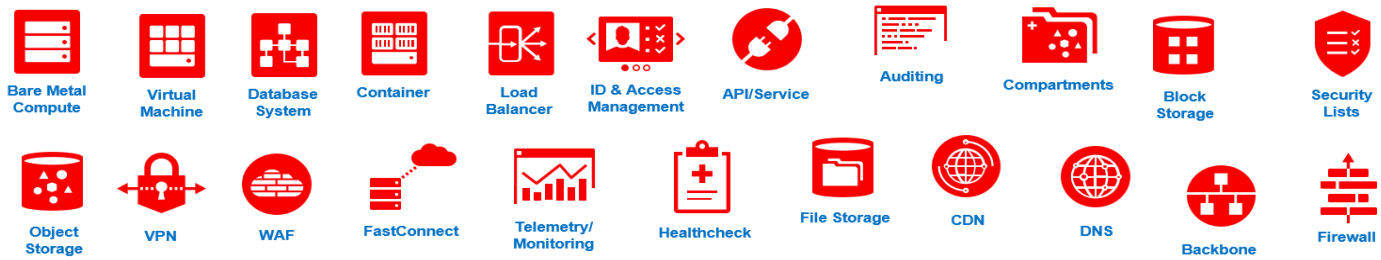
[1]Magic Quadrant for Cloud Financial Planning and Analysis Solutions
[2]*Oracle Research, November 2020 (Source: Bloomberg Intelligence*

Company Description

Oracle Cloud Infrastructure (OCI)

A key component of the Cloud and Licensing segment is Oracle's Cloud Infrastructure (OCI) that delivers on-premise computing to run cloud native and enterprise company's information technology workloads. OCL combines several IT architecture models including logging as a service (Laas) and serverless computing to provide real-time high-performance computing. OCI comes with all the tools needed for running information technology workloads. They provide secure and elastic compute power over the cloud that is run from a wide range of sources including virtual machines, servers, and HPC/GPU compute clusters. OCI provides high-performance, low-cost storage options, scalable networking, insightful analytics using embedded machine learning and artificial intelligence, and centralized front-end design and content management.

One huge advantage of OCI is its synergy with other Oracle products. The Oracle Cloud has many complimentary features with there SaaS that makes it easy to use them in conjunction with one another. OCI prioritizes security both in the cloud and on-premises and takes a layered approach when handling user-data security. OCI includes an array of easily implemented security controls, including identity protection and authentication, key management system, data encryption, security zones, web application firewalls, Cloud access security broker, and their Cloud Guard.



General Application Development

Oracle is responsible for developing and maintaining software that is used by consumers at all levels. From large corporations to individual enthusiasts, this collection of software can be used by anyone. Their software has various pricing options, with the most basic level being free for general use. Some of these software licenses include Java, MySQL, Oracle Database, and Oracle's own distribution of Linux.

Hardware & Other Services

Oracle's Hardware and Services segments collectively make up approximately 17% of total revenues. Oracle's Hardware division includes a slew of customizable engineered systems, servers, and storage. Their Exadata Database Machine is a full-stack solution that synergizes with their cloud systems. Oracle also engineers servers, storage, and other engineered systems similar to Exadata.

Innovative Technologies

Oracle employs cutting-edge new technologies in all their products. When it comes to innovation in database technology, Oracle's Autonomous Database is one of their crowning achievements. The Autonomous Database uses a combination of machine learning and AI to automate many of the tedious tasks that are essential for maintaining a database. Additionally, Autonomous Database services make it simple to monitor performance, automatically scale and update, and encrypt and secure data.[1]

Oracle has implemented blockchain technology in a couple of its products. These include a SaaS blockchain app that integrates data feeds from Oracle SaaS ERP/SCM apps to trace supply documentation and product transactions, a tool that verifies the authenticity of a product as it moves through the supply chain, and a new type of table in Oracle Database 20c that cryptographically links rows and provides increased security.[2]

[1]Oracle OpenWorld: Blockchain in the Mix, 2019 (Source: IDC)
[2]Assessment of Managed Blockchain Platform Readiness for Enterprise Use, March 2020, (Source: Everest Group Research

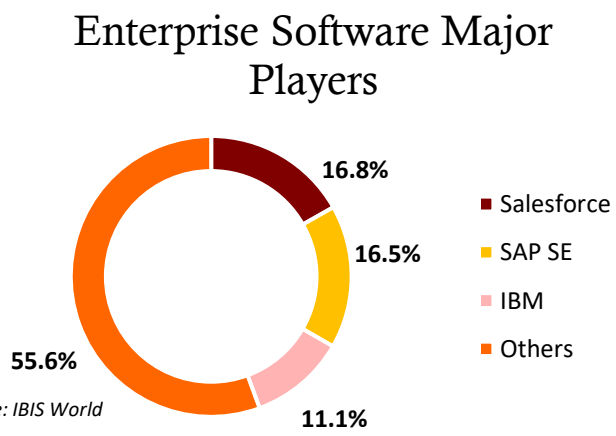
Industry Analysis

Business Analytics & Enterprise Software Industry

The Business Analytics and Enterprise Software Industry includes companies who develop and deploy any sort of enterprise or business intelligence applications. The industry has seen explosive growth over the past several years, with a current industry-wide revenue of $82.6 billion and 11.3% annual growth since 2015. The industry is projected to grow 5% year-over-year to an annual revenue of $106.05 billion by 2025.[1]

Major Players of the Enterprise Software Industry

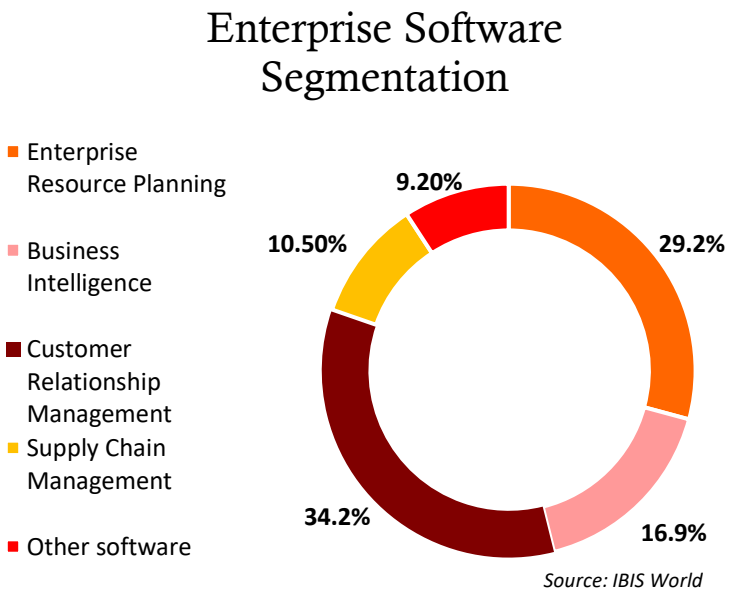
The three major players are Salesforce, SAP SE, and IBM, who collectively make up 44.4% of the total market share in the enterprise software industry. This trio of companies have several things in common that have made them successful in the enterprise software industry. They have easy to use products, they are quick to adopt new technologies, their products are priced on value rather than cost, and they all maintain high market profiles in the industry.



Source: IBIS World

Industry Trends

There are several important industry trends in Business Analytics and Enterprise Software that should be noted. First, the increased accessibility of enterprise management tools has resulted in an influx of demand from smaller firms. Previously, the shear manpower and resources required to fully utilize these enterprise products was a barrier for all but the largest firms, but now these products have become more accessible. The second trend that is common in the Enterprise Software industry, as well as in other areas of the tech sector, is the aggressive acquisition strategy used by the larger players in the industry. The industry has a relatively low barrier to entry, and it has become a popular fad for larger firms to buy up smaller start-ups that target a specific niche. Both cloud computing and the software as a service model are relatively young platforms that have a lot of room for growth, especially in the world of business analytics and enterprise software. Cloud computing offers a lot of advantages over traditional bare metal computing, especially with flexibility and accessibility.



Source: IBIS World

Oracle and Enterprise Software

If Oracle wants to become competitive in the enterprise software industry, they will need to follow the examples set by the industry leaders. Oracle's products have excellent synergy between one another, but the interoperability between Oracle's products and third-party software is clumsy and tedious. Oracle is trying to build a robust ecosystem for their enterprise software, but businesses do not want to be pigeonholed into buying from a single company. If Oracle continues to integrate new tech into their products, improves their interoperability, and works to grow their market profile, they can potentially increase their market share in the enterprise software space.

[1] *Business Analytics & Enterprise Software Publishing in the US July 2020, (Source: IBIS World)*

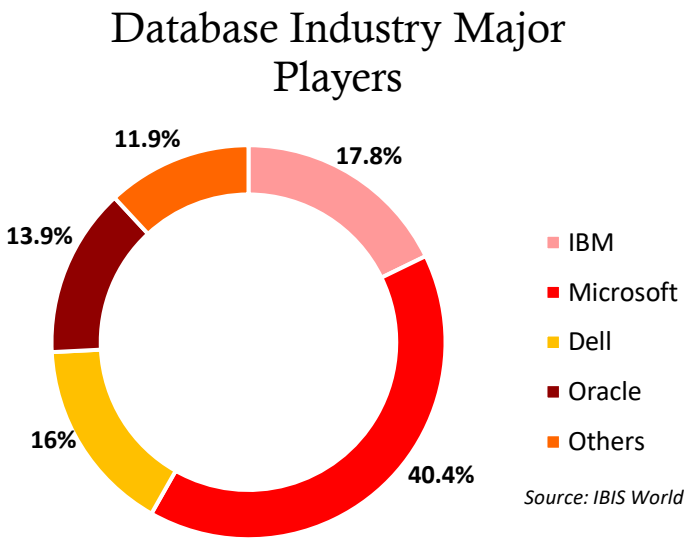
Industry Analysis

Database, Storage & Backup Software Industry

The Database, Storage, and Backup Software Industry includes firms who develop and sell database management, storage, and remote-backup systems. The industry has seen solid growth over the past few years, with a current industry-wide revenue of $48.6 billion and 3.5% annual growth since 2015. The Industry is expected to grow by 4.4% annually to an annual revenue of $60.19 billion by 2025. [2]

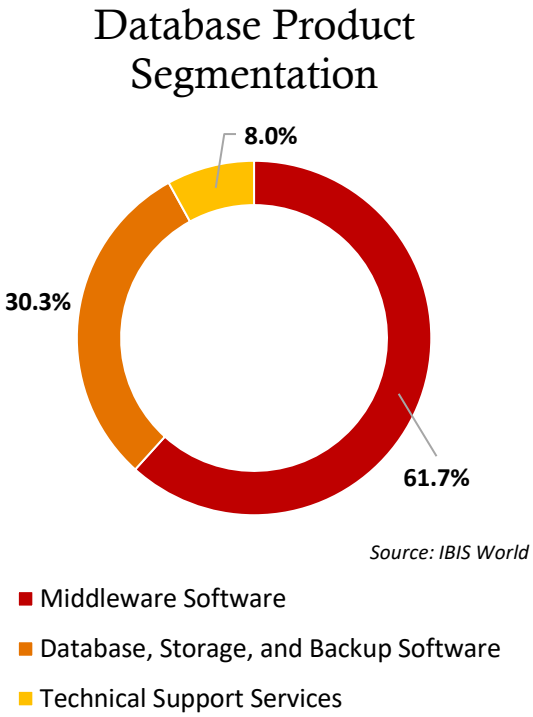
Major Players of the Database Industry

The Database Industry has a high market share concentration split among four major operators: Microsoft Corporation, Oracle Corporation, Dell Technologies, and IBM. These "core four" firms account for 88.1% of total industry revenue in 2020. There are several key pillars for success that these four firms follow. They are quick to adopt new technologies, their database software is adaptable to a wide variety of business applications, they provide related products and services, and their products are packaged under contracts that are affordable to businesses. [2]



Industry Trends

As mentioned previously, smaller firms are increasingly adopting database software. It is becoming easier and easier for smaller companies to adopt database technology due to declining costs and increased usability. Database, storage, and backup software is becoming more ubiquitous across a wide range of different industries. In an increasingly data-driven world, it is essential to have the proper tools to store and analyze data.



Oracle and the Database Industry

Oracle continues to be a top database provider, but they must continue to be proactive if they want to maintain or even increase their market share.

Oracle has a commanding presence in the on-premise database market with a majority market share of 43% in on-premise relational databases. Most of their business in this space comes from "mission-critical, pre-cloud-era applications," many of whom have highly sensitive data. As more companies migrate to the cloud, it will be important for Oracle to maintain their on-premise database clients. Oracle should focus on promoting their cloud infrastructure database tools to these companies.[3]

It will also be important for Oracle to continue to innovate, as they have done recently with the introduction of their autonomous database and blockchain features.

[1,2]Database, Storage & Backup Software Publishing n the US "Industry Outlook", October 2020 (Source: IBIS World)
[3]Oracle Research, September 2020 (Source: Bloomberg Intelligence)

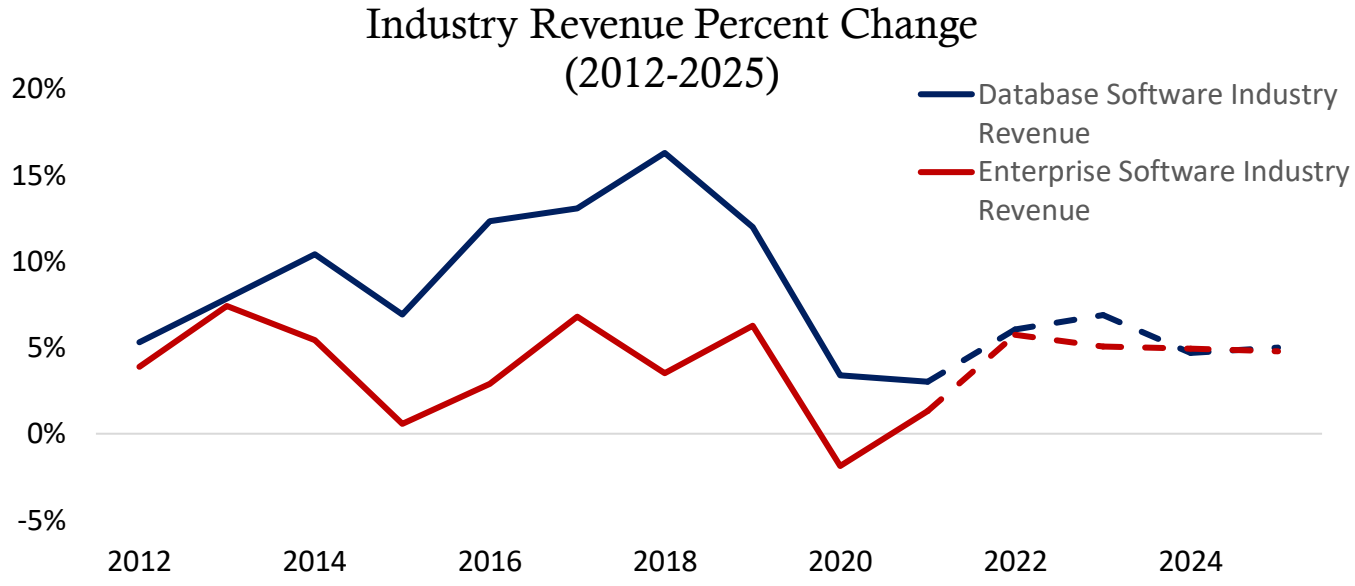
Industry Analysis

Key External Drivers

There is a myriad of external key drivers that are responsible for expansive growth in both enterprise software and database software. One important driver for growth within tech is private investments. Private investments in software and corporate profits have a huge influence on growth in the industry. When there is higher demand for information technology among organizations, private investors are more inclined to invest in enterprise software companies and expect a profit. Private investments in computers and software took a dive in 2020, but it is expected to increase by between 3% to 5% annually until 2025. [1][2]

Another reason for the expansive growth of the industry is the huge surge in demand from both hospitals and a growing number of businesses that are conducting operations remotely online. Due to recent litigations, health care companies are required to digitize records and improve the quality and transparency of their financial reporting, which has caused a sharp demand increase for enterprise software and BI tools.[2] Due to COVID-19 pandemic, a growing number of businesses are opting to conduct business remotely. This has resulted in an increase in demand for software that facilitates these business operations.

The Treasury yield has a powerful effect on corporate investments and spending. With interest rates declining recently in response to the Coronavirus pandemic, private investments in tech are likely to increase and it will be more affordable for companies to raise capital. This will provide a healthy boost to investments in operations for the industry. [3]



Source: IBIS World

Industry Outlook:

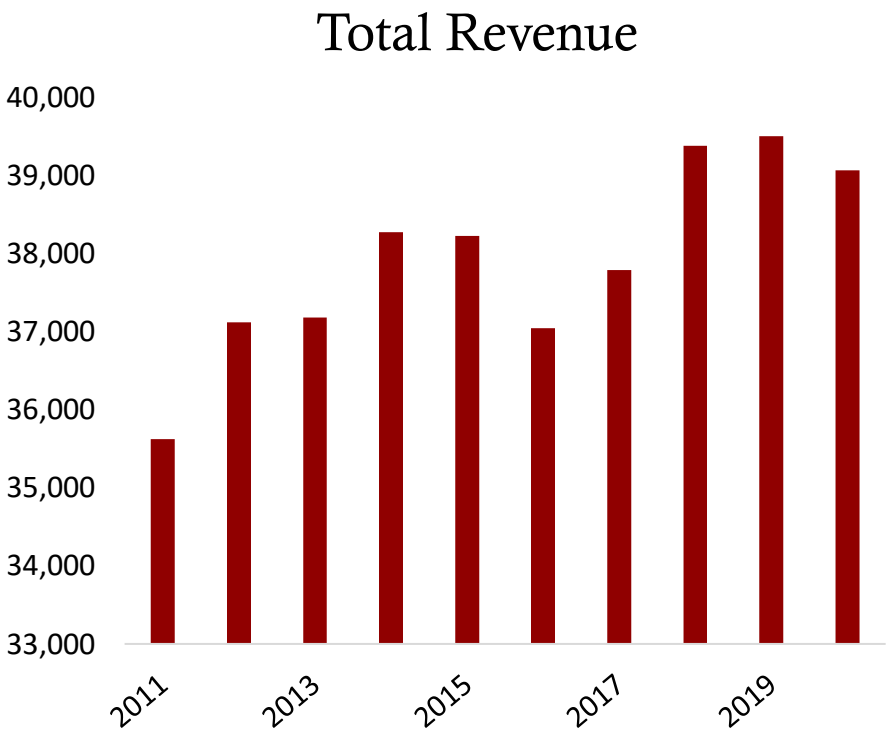
Revenues in both the database and enterprise software industries are expected to increase by an annualized rate of between 4%-6% over the next five years. [4][5] Both industries are still in the growth stages of their respective industry life cycles. The two industries have seen a high increase in demand, especially from small to mid-sized businesses who are eager to adopt software that is more accessible and affordable than ever before. With new products and markets constantly emerging, both the enterprise software industry and the database software industry are expected to continue to see expansive growth over the coming years.

[1,2,4,5]Database, Storage & Backup Software Publishing n the US "Industry Outlook", October 2020 (Source: IBIS World)
[2]Electronic health records: beyond the digitization of medical files, August 2013 (Source: NCBI)
[3]What's the Fed doing in response to the COVID-19 crisis, December 2020 (Source: Brookings Research)

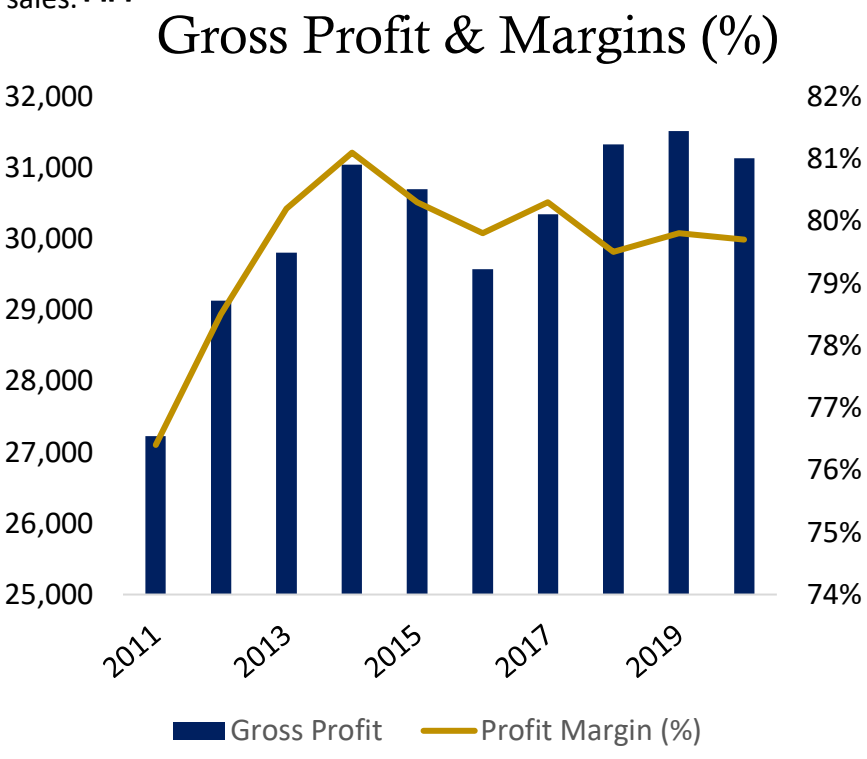
Financial Analysis

Total Revenue

Oracle has seen steady gains in revenues over the past ten years, with only a minor decrease in 2016. According to the company's form-10k for 2016, Oracle's operations were significantly affected by movements in international currencies relative to the U.S. Dollar, which resulted in decreases of 4 and 5 percentage points in 2015 and 2016, respectively. The company's revenues have trended in a positive direction in subsequent years. Revenues again decreased in 2020, this time due to the COVID-19 pandemic, which resulted in an overall decrease in sales. [1][2]



Source: Yahoo! Finance



Source: Yahoo! Finance

Gross Profits & Profit Margins

Oracle has again seen consistent increases to their gross profits over time, barring 2015 and 2016 where the company was adversely affected by movements of international currencies.

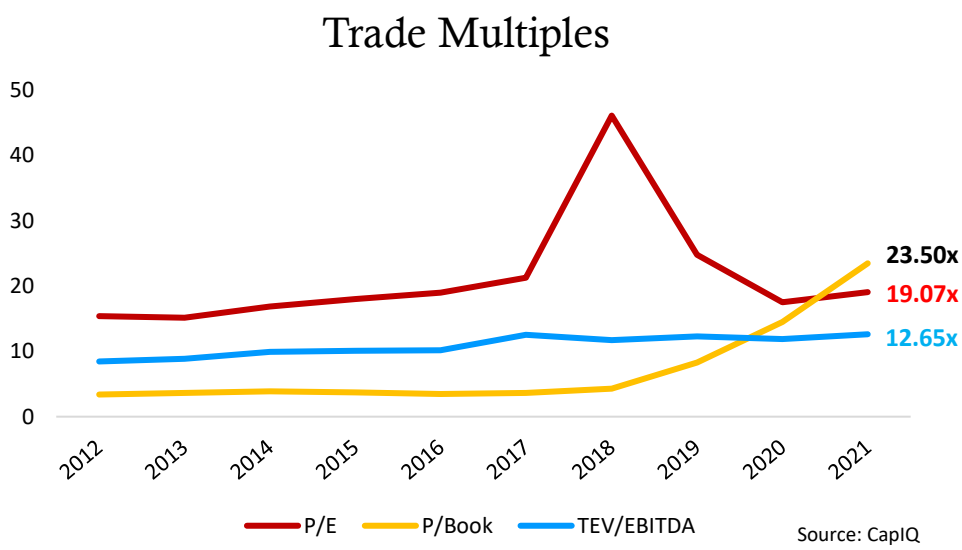
Oracle enjoys exceptionally high profit margins, with their profit margins for 2020 standing just under 80%. Oracle achieves these margins by curating software packages at a relatively low cost and marking them up based on value. Another way that Oracle is able to keep profit margins high is by avoiding physical costs. Most of their sales are software-based, which saves Oracle from purchasing hardware components. [2]

[1] *Oracle Corporation Form 10-K, Fiscal Year 2016 (Source: Securities and Exchanges Commission)*
[2] *Oracle Corporation Form 10-K, Fiscal Year 2020 (Source: Securities and Exchanges Commission)*

Financial Analysis

Trade Multiples

Oracle's trade multiples have remained relatively steady over the past 10 years, apart from a large increase in price-to-earnings for 2018. This increase was caused by an off year where Oracle's earnings-per-share deflated by 62%. The following year, earnings-per-share jumped back up by 250%, which resulted in the P/E ratio returning to where it had been in previous years. [1]



Source: CapIQ

Price-to-Earnings

When compared to several of their major competitors, Oracle's P/E ratio of 19.62 is well below average. This is likely because many investors do not expect high growth from the company in the future.

Company	P/E	P/Book	TEV/ EBITDA
Oracle	19.07	23.50	12.65
Adobe	43.76	17.15	44.80
Alphabet	34.17	5.61	20.25
Amazon	92.46	19.17	35.03
IBM	14.56	5.40	11.06
Microsoft	35.42	13.46	22.29
salesforce	58.28	5.06	70.56
SAP SE	25.99	4.35	18.25
VMware	37.63	7.01	21.48
Average:	**40.21**	**11.28**	**28.49**

Source: Yahoo! Finance

Price-to-Book

Oracle's price-to-book value on the other hand is over twice the average of its competition. This suggests that its shares are traded at a premium. The competitor average of 11.02 is still considered very high, with the current average for the S&P 500 for price-to-book only being 4.10.

The increase in Oracle's P/B ratio starting in 2018 can likely be traced back to the company's the company's excessive amount of share buybacks. Buying back large amounts of their own stock caused a decrease in the book value per share (BVPS) because the total outstanding shares decreased while the common shareholders remained the same. This rapid decrease in BVPS resulted in an inversely proportional increase to the P/B ratio because the book value decreased significantly without a proportional decrease to the company's market value.

Oracle's price-to-book of 24.32 means that its market value is over twenty-four times greater than its tangible assets, which suggests that the company's shares are highly overvalued. However, it is important to look at P/B in conjunction with other metrics to get the full picture.

TEV/EBITDA

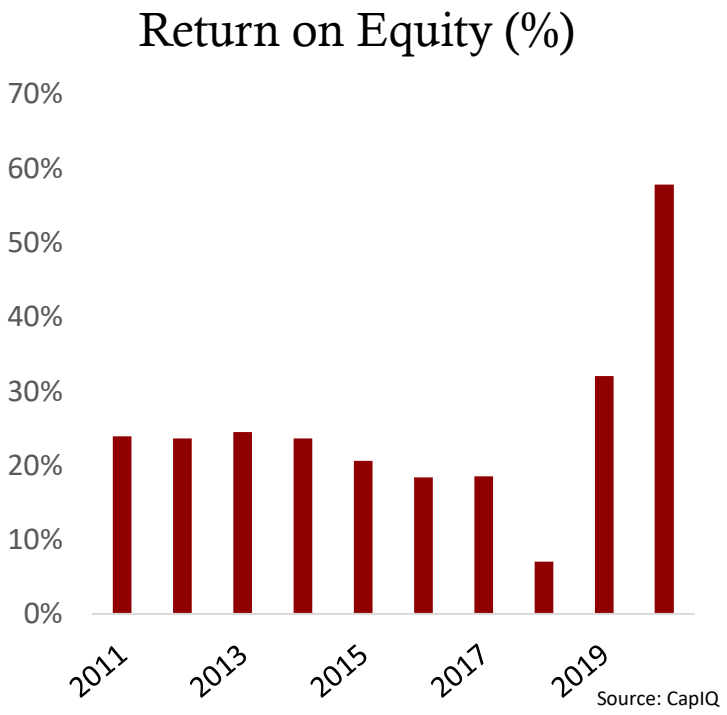
Oracle's TEV/EBITDA tells a slightly more positive story. The metric is commonly used to compare the value of a company to its earnings and is a useful tool for comparing companies of the same industry. As a baseline, a TEV/EBITDA of 10 or less is considered above average, and the S&P 500 averages between 11 and 14. When comparing Oracle to its competitors, Oracle's TEV/EBITDA is much lower than the average, which suggests that it is cheaper.

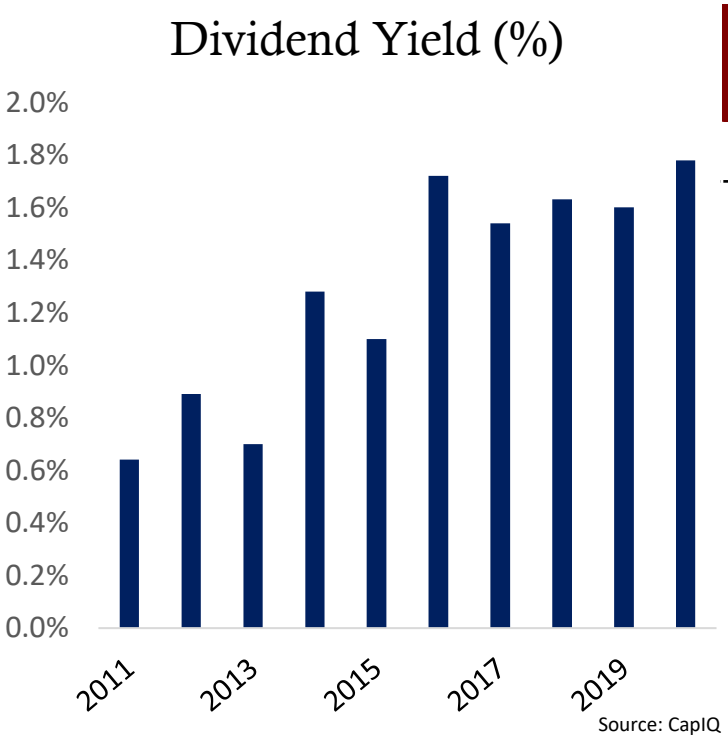
[1] *Oracle Corporation Form 10-K, Fiscal Year 2018 (Source: Securities and Exchanges Commission)*

Financial Analysis

Return on Equity

Oracle's return on equity has increased substantially over the past couple years, with the current return standing at 88.40%., far above the S&P 500 average of 14%. At first glance this seems to indicate that Oracle is extremely profitable relative to stockholder's equity. Unfortunately for Oracle, their seemingly excellent return on equity is artificially inflated by large amounts of debt and excessive share buybacks. The main issue that arises when using return on equity is that it does not account for debt. Aggressive borrowing will decrease shareholder's equity, and therefore artificially inflate return on equity. Unfortunately for Oracle, it seems that their excessive share buybacks have boosted earnings per share significantly without reflecting any meaningful increase in profitability.





Company	ROE	Dividend Yield (%)
Oracle	88.4%	1.48%
Adobe	44.21%	N/A
Alphabet	17.51%	N/A
Amazon	24.95%	N/A
IBM	40.10%	5.18%
Microsoft	41.40%	1.01%
salesforce	9.67%	N/A
SAP SE	16.74%	1.33%
VMware	22.16%	N/A
Average:	**33.90%**	**2.25%[1]**

Source: Yahoo! Finance

Dividend Yield

With a current annual dividend yield of 1.48%, Oracle's dividend yield is slightly below the S&P 500 long term average of 1.87%. However, nearly all of Oracle's major competitors (aside from outlier IBM) offer either lower yields or do not distribute dividends at all. While a 1.48% dividend yield is less than remarkable, it gives Oracle shares a slight edge for medium-to-long-term investment strategies.

[1]Dividend yield average only includes those offering a dividend

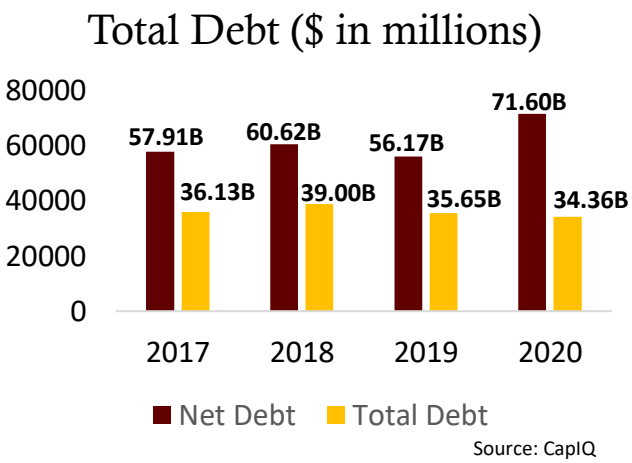
ROE/Dividend Yield charts and company comparison table (Source: CapIQ, Yahoo! Finance)

Financial Analysis

Oracle's Debt

Oracle, like many other large tech companies, has a long history of leveraging debt to finance their assets. When done responsibly, leveraging debt can significantly increase returns. The cost of capital is also cheaper to finance with debt than equity.

However, Oracle has taken a misstep recently regarding how it handles debt. The company has gone on a stock buyback binge over the past five years, with the company spending roughly $75 billion on buybacks from 2016 to 2019. [1] A large part of this purchase was financed by issuing bonds, and the company's total debt has ballooned to $71.6 billion as of 2020. [2]



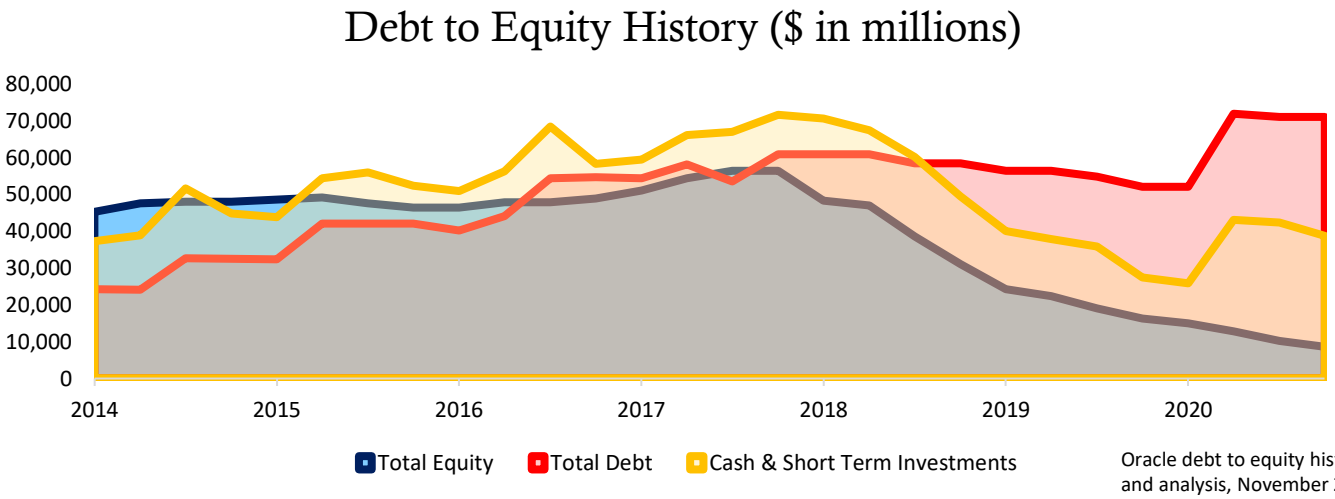
Source: CapIQ

Share repurchases can be an effective tool for increasing the value of a company's stock, but Oracle has created several problems for itself. First, Oracle now has new net debt, and its long-term issuer credit rating has dropped from AA- to A+. [3] Another side effect of Oracle's share buybacks is the padding to their balance sheet, specifically to their earnings per share. The temporary boost to earnings pads out their earnings without reflecting in any meaningful growth.

Managing Debt

Oracle has certainly put themselves in a difficult position with the massive debt they have accrued. Fortunately, Oracle seems to have slowed down with their share buybacks and they have managed to decrease net debt since 2018. Net cash flows used for financing activities decreased in fiscal 2020 to $19.2 billion in comparison to $36.1 billion in fiscal 2019.

The Debt-to-EBITDA ratio is useful for measuring the amount of income a company can generate to pay down debt. Oracle's debt-to-EBITDA ratio is 1.7, which shows that the company uses debt responsibly. The company's massive value of $191.2b means that the deficit in debt is not nearly as bad as it would seem, and the company could probably raise enough capital to amend their balance sheet if needed. Ultimately, Oracle's ability to pay interest and repay principle is heavily dependent on the company's ability to manage business operations and to generate sufficient cash flows. The company's recorded free cash flows over the last three years are worth 89% of their EBIT, which puts them in a strong position to continue paying off their debt without a hitch. [4]



Oracle debt to equity history and analysis, November 2020 (Source: Simply Wall St)

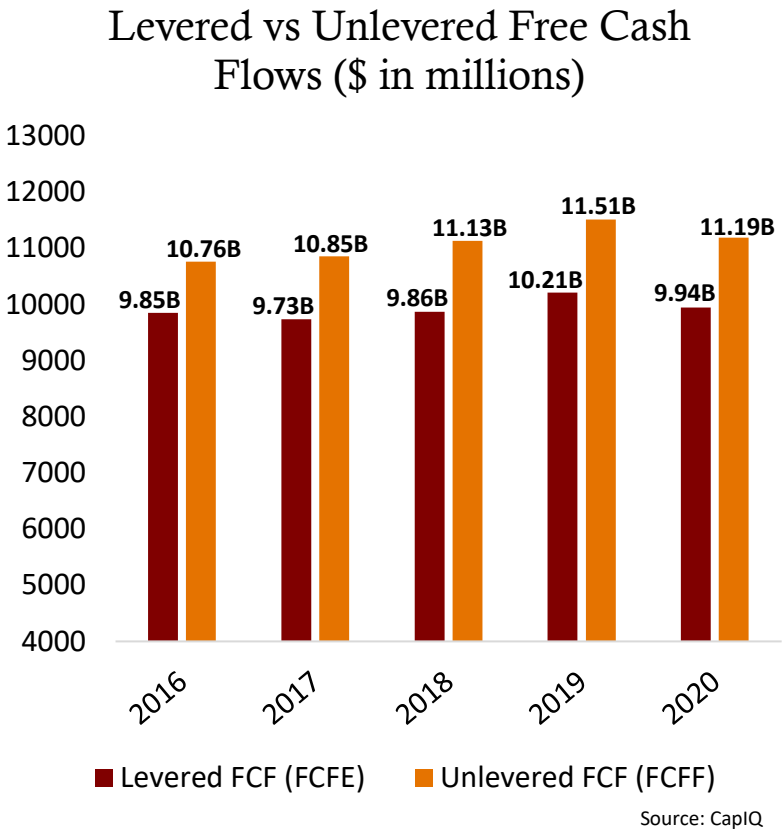
[1]Net debt and a $75 billion argument, December 2019 (Source: CNBC)
[2]Oracle Corporation Profile, January 2021 (Source: Yahoo! Finance)
[3]S&P downgrades Oracle on rising leverage, large share buybacks, December 2020 (Source: S&P Global Market Intelligence)
[4]Is Oracle using too much debt, December 2020 (Source: Simply Wall St)

Financial Analysis

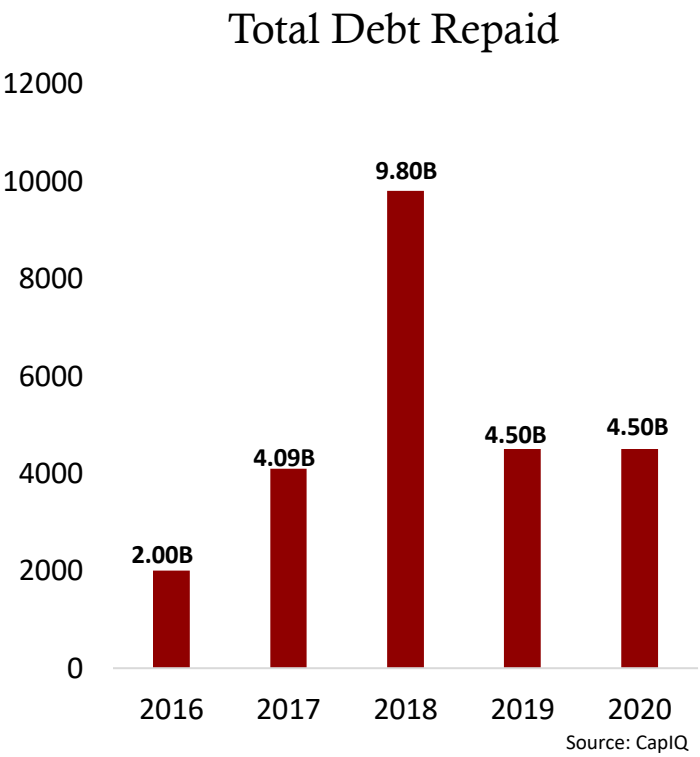
Free Cash Flows

Oracle's free cash flows suffered in 2020 primarily due to the unfavorable global economic effects of COVID-19. The global pandemic was the primary cause for Oracle's lower net income and a higher-than-expected deferment of customer payments. Oracle expects to collect nearly all these deferred customer payments in the future. [1]

In order to analyze how Oracle's high debt level influences their cash flows, it is useful to compare their levered and unlevered cash flows. Unlevered cash flow, or free cash flow to the firm (FCFF), corresponds to Oracle's enterprise value, which gives us a value of the company's core business operations. On the other hand, levered free cash flow, or free cash flow to equity (FCFE), corresponds to Oracle's equity value, or the current market value of the company's net assets to current shareholders.



Source: CapIQ



Source: CapIQ

FCFF vs FCFE

The difference in FCFF and FCFE is essentially that the former shows how much cash flow the company generates before interest expenses and debt principal is paid, whereas FCFE shows the company's discretionary cash flow after all debt-related expenses have been paid. Oracle's levered FCF is lower than their levered FCF with a consistent difference of around $1 billion. The fact that 9%-11% of their annual cash flow goes to paying down debt-related expenses may seem high, but the consistent debt payment schedule Oracle has set for themselves shows that they have a cogent, fiscally responsible plan.

It is extremely important to note that FCFE only considers mandatory repayments. Oracle has been paying back much more than their levered FCF would suggest, which again is a testament to the company's fiscal responsibility.

[1]Oracle form-10k filing, June 2020 (Source: SEC)

Valuation

Dividend Discount Model (DDM)

I chose to use the dividend discount model in my valuation because it calculates the fair value of a stock irrespective of current market conditions by considering dividend payouts and expected returns.[1] Because of the market volatility due to the COVID-19 global pandemic, it can be especially difficult to discern companies' value. Many investors are in firm agreement that the US stock market is highly overvalued. The Buffet Indicator, a ratio commonly used by investors that is simply the ratio of total US stocks to GDP, is currently two standard deviations above the mean, which has not happened since the 2000s dot-com bubble.[2]

For this reason, the Dividend Discount Model seemed like an appropriate choice for approximating Oracle's "true" value. I used a two-stage growth model, where stage 1 is 8% at 6 years; stage 2 is 4.3% terminal growth. I assumed a linear growth path with a cost of equity capital of 5%. I used Oracle's 2020 dividend payments for my dividends per share, which was $0.96. My final average price per share was $64.83.

k / terminal g	2.80%	3.30%	3.80%	4.30%	4.80%	5.30%	5.80%
3.50%							
4.00%	$100.95						
4.50%	$71.13	$98.60					
5.00%	$54.86	$69.50	$96.33				
5.50%	$44.62	$53.62	$67.91	$94.11			
6.00%	$37.59	$43.63	$52.42	$66.37	$91.96		
6.50%	$32.45	$36.76	$42.66	$51.24	$64.87	$89.87	

Average: **$64.83**

Free Cash Flow to Equity (FCFE)

Free cash flow to equity is a valuation method that gives investors an idea of how much cash is available to shareholders after all expenses are paid. I chose to use FCFE in conjunction with DDM because FCFE gives a more holistic idea of equity capital usage. FCFE considers net income, capital expenditures, working capital, and debt.[3]

I again used a two-stage growth model, where stage 1 is 2% at 5 years; stage 2 is 1% terminal growth. I used Oracle's FCFE LTM of $11.145 billion, net new debt of $15.388 billion, interest on debt of $2 billion, shares outstanding at 3.01 billion, and a corporate tax rate of 21%. My final average price per share was $113.11.

k / terminal g	-0.50%	0.00%	0.50%	1.00%	1.50%	2.00%	2.50%
3.50%	$101.54	$114.02	$130.65	$153.94	$188.87	$247.09	$363.52
4.00%	$90.19	$99.70	$111.94	$128.26	$151.10	$185.37	$242.47
4.50%	$81.11	$88.57	$97.91	$109.92	$125.92	$148.33	$181.94
5.00%	$73.68	$79.67	$87.00	$96.16	$107.94	$123.64	$145.63
5.50%	$67.49	$72.39	$78.27	$85.46	$94.45	$106.01	$121.41
6.00%	$62.25	$66.32	$71.13	$76.90	$83.96	$92.78	$104.12
6.50%	$57.76	$61.18	$65.18	$69.90	$75.57	$82.49	$91.14

Average: **$113.11**

[1]Dividend Discount Model – DDM, February 2020 (Source: Investopedia)
[2]Buffet Indicator, January 2021 (Source: Current Market Valuation CMV)
[3]Free Cash Flow to Equity – FCFE, August 2020 (Source: Investopedia)

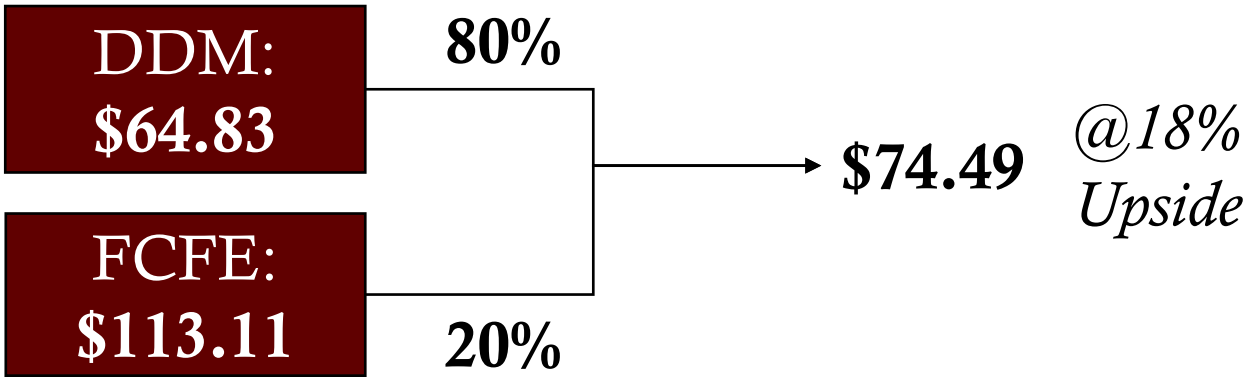
Valuation

Final Valuation

For my final valuation of Oracle's share price, I took the weighted averages of the two models and arrived at a final price per share of $74.49, an upside of 18% over the current share price of $63.02. I chose to give the dividend discount model a much higher weight, because I believe that it more accurately represents Oracle's true value.

As mentioned on the previous page, the FCFE valuation method considers a variety of factors including debt. The main issue with this is that it only accounts for net new debt issued over the last twelve months. FCFE ends up not being a totally fair representation of Oracle's debt, and it comes off as overly-generous. Another aspect of the model that is favorable to Oracle is the low corporate tax rates and interest rates paid by the company, which will inevitably increase with a change in administration. Finally, the rather low cost of equity capital of 5% due to historically low risk-free rates of return coupled with Oracle's low beta are also highly favorable. These factors, along with the absurdly high valuation of $113.11, lead me to believe that the FCFE should be less of an overall consideration than the DDM.

One important note is the discrepancy with the growth rates between the two models. For the DDM, I looked at the historical growth rates of Oracle's dividends over the past 11 years (they have only distributed dividends since 2009) and cut the growth rates in half for a conservative prediction of their future growth in dividends. I took a similar approach for the FCFE growth rates, taking past revenue growths and a slightly more conservative measure to predict future growth. I used higher growth rates for DDM because I expect the dividends to increase at a much quicker rate than revenues for the company in the short-to-medium term. This is because dividends have only been distributed for the past 11 years, and have more room to grow than revenues, which have been increasing since 1977 when the company was founded.



Investment Risks

High Debt

Oracle, like many other large tech companies, has a long history of levering debt to finance capital and investments. As previously mentioned, there are several risks associated with high debt. Oracle's indebtedness has caused their credit rating to decrease and could affect their ability to acquire future loans. Additionally, Oracle may need to refinance a portion of its outstanding debt, but there is some risk that it will not be able to do so with as favorable terms as before, if at all. If interest rates increase at the time of refinancing, Oracle may be stuck with even higher interest rates than before.

Financing share buybacks with a portion of their long-term debt has been a huge mistake for the company. The buybacks failed to kickstart any large increases to the share price and has only served to pad out the company's balance sheets. However, the company seems to have slowed down on buybacks and is paying back debt ahead of schedule.

Geopolitical Risks

The global COVID-19 pandemic has had seismic effects on all businesses, and Oracle is no exception. Despite many of the challenges the pandemic has brought, Oracle has done better than most, even managing to reach a new 52-week high share price. Despite the success the company has managed to find, they have still suffered lower revenues and cash flows this year due to a drop in demand. It may be some time before the pandemic is behind us, and Oracle still needs to find new ways to adapt to the constantly changing economic landscape.

A change in political administration could also have sizeable affects on the company's operations. The Biden administration will likely mean increased corporate taxation and tougher anti-trust laws. Increased taxes could undoubtedly hurt Oracle's bottom line, but anti-trust legislation most likely won't affect as much as larger tech giants like Google and Facebook.

Exchange Rates

Any multinational corporation faces a certain amount of currency exchange risk, and Oracle is no exception. Oracle has faced exchange issues in the past, like in 2015 and 2016, where Oracle's revenues were hurt by movements in international currencies relative to the U.S. Dollar. Oracle has entered several foreign currency contracts with their international partners to decrease foreign currency exposure and mitigate risk. The company plans to continue to realize gains or losses with respect to their foreign currency exposures.

Cyber Crime

Although Oracle has invested heavily into cybersecurity, any firm that stores user data has some level of risk associated with consumer data protection and privacy. Oracle has had some cyber security issues in the past, with the most recent incident being a data breach within their retail unit in 2016. There was also the embarrassing "unbreakable" marketing campaign in 2002, where Oracle claimed their systems were impenetrable, only for a common bug to be found their application server two weeks later that could have allowed hackers to access their system. Oracle has come a long way since then: they have introduced autonomous security in their database software and cloud infrastructure that reduces complexity, prevents human error, and lowers costs.[1]

[1]Oracle security claim to be debunked, January 2002 (Source: The Register)