



Krause Fund Analyst Report

BlackRock

Sector: Financials
Industry: Investment Management

BlackRock, Inc.

Stock Rating: BUY

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Company Overview

Black Rock Inc. (BLK) is an American global investment management company. Black Rock offers a wide range of products when it comes to managed funds and iShares ETFs. With \$7.43 Trillion in assets under management, Black Rock is the largest asset management fund in the world since 2009.

Investment Thesis

We recommend a BUY rating for BlackRock, Inc. ("BLK"- NYSE). BlackRock is currently undervalued due to COVID-19 as the pandemic has brought much uncertainty to BlackRock's future success. It is our belief that BlackRock will see growth that is higher than anticipated. This is due to their ability to take advantage of mispriced stocks, driving their performance-based fee growth, as well their dedication to continuing the growth of their technology development and innovation capabilities in an industry that's relying more on technology every day.

Key Performance Drivers:

- Continuous commitment to innovate and lead the industry in technological capabilities with Aladdin and iShares
- Highly valued and trusted brand equity that consistently grows its client base
- A leadership team that has taken them from a group of 6 people in 1989, to the largest investment management firm in the world in 2020

Current Price \$676.43
Target Price \$697.92

Stock Performance Highlights

52 week High	\$692.73
52 week Low	\$323.98
Beta Value	1.16
Average Daily Volume	635,400

Share Highlights

Market Capitalization	\$100.517 B
Shares Outstanding	152.48 M
Book Value per share	\$214.68
FYE 2019 EPS:	\$28.43
P/E Ratio	19.90
Dividend Yield	2.41%
Dividend Payout Ratio	49%

Company Performance Highlights

AUM	\$7.43 t
ROA	2.68%
Revenue	\$14.3 b

Financial Ratios

Total Asset Turnover	0.09
Debt to Equity	3.41

One Year Stock Performance



Source: Wall Street Journal

Economic Outlook

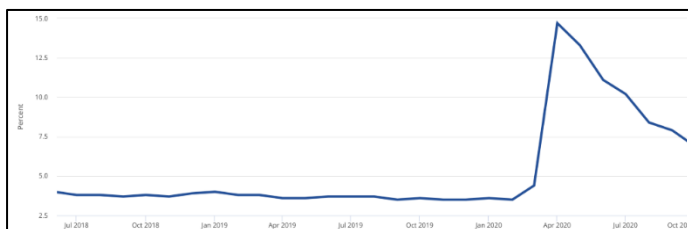
Coronavirus Pandemic 2020 (COVID-19)

After what seemed to be the beginning of a return to normal post-Covid life with the reopening of businesses and Americans returning to work in the late summer, a second wave of the virus seems inevitable. November has seen the worst numbers since the pandemic began, reaching 100,000 daily US cases for the first time. With a democratic president elect promising to take a more active stance on the prevention of the spread of the virus, the possibility of a second round of business lockdowns and restricted economic activity has not been ruled out.

Unemployment

When unemployment numbers are high it usually is correlated to the performance of the stock market doing poorly and vice versa. Unemployment numbers affect the financial industry because when consumers are unemployed, they aren't receiving any money to put back into the economy. Consumer spending is a significant factor for the financial industry growing and when there are high unemployment rates, consumer spending decreases.

The current unemployment rate is at 6.9% which has decreased substantially from the 14.8% unemployment in April due to COVID.²



Source: Bureau of Labor Statistics

In the short term (6 months) we believe unemployment will continue to decrease as

the economy starts to reopen with a vaccine being released and distributed in the coming months. In the long term (2-3 years) we predict unemployment will be around 5-6% which is slightly higher than pre-pandemic levels. The 3% unemployment rate before COVID-19 was a 50-year low and one that is likely not going to be achieved again due to the lasting impact of the pandemic. However, with COVID-19's unpredictability along with the current political climate, it is difficult to be certain with these claims.

Consumer Sentiment Index

The Consumer Sentiment Index is the measure of the degree of optimism on the state of the US economy expressed through consumer activity through savings and spending. Historically, the CSI will score low during recessions, consumers more likely to be more liberal in their finances, while during expansionary periods, the CSI will increase. This measure is helpful in gauging the overall health of the economy in how likely it will be driven by consumer spending, which has a direct effect on GDP, business investment, and economic growth.

As of the end of October 2020, the CSI was at a level of 81.8, up slightly from the month before of 80.4. October ended up 1.74% from the previous month but was still -14.35% from a year ago. On February 29th, the CPI sat at a level of 101, the highest that would be seen this year, and quickly drop to a 2020-month-end low of 71.8 by April 30th.³



Source: Federal Reserve Bank of St Louis

While the average consumer has become more confident in market conditions than earlier this year during times of lockdown and joblessness, we do not expect CSI to

return to a comfortable spending level any time soon. While the financial sector does not directly profit from the spending of consumers, we can assume that individuals and businesses alike will be less confident in taking out loans for large purchases or investments in the near future, which will diminish the sector's ability to drive any significant growth or profits.

Interest Rates

Interest rates are an important indicator for the financial sector and asset management firms. Interest rates tend to rise in economic expansionary periods and contract during recessions.

We can see the effects of the decrease in economic output due to COVID-19 in the U.S 10 Year Treasury Note. On January 1st of 2020, the 10-year yield opened at 1.588%. Since March 20th, however, the rate has not seen a yield above 1%, although it is now nearing 1% in November. The 10-year yield reached an all-time low of .318% in overnight trading following the close of the markets on March 8th. This can be directly tied to the Fed's efforts to increase consumer spending and borrowing during an unprecedented time of pandemic driven lockdowns, resulting in a crash in consumer spending and business expenditures.⁵

The unwillingness of consumers and businesses to take out loans to finance new spending has hurt banks in 2020, driving down interest rates and bank margins, severely diminishing their profitability. However, the investment management side of the financials industry has taken advantage of such conditions. While low rates have decreased AUM in fixed income products and driven low yields on money market funds, this has opened the door to new opportunities in more risk-on investment opportunities as the Fed continues to promote consumer spending through a low interest rate environment.

ETF's and equity products have seen massive flows this year. By September, ETF flows had surpassed the 2019 level of 326 billion, reaching the second highest inflow level of all time. From this, we see that Large-Cap investment managers with a variety of investment products have fared well in 2020, despite the economic downturn. For smaller fixed income or money market managers, however, 2020 has been a year of poor performance and loss in AUM.⁴

The low market rate also allows all companies to finance their growth and business activities at a historically low level through bond issuance. Credit risk has been a major worry for investors in 2020 as companies look to stay afloat amidst the COVID-19 pandemic, but this has not proven to be an issue for Large-Cap financials. This will drive down costs for companies well into the future and help to better deal with pandemic related liquidity issues that companies face.

We predict interest rates to remain low in the near future, despite spikes in early November. We predict that interest rates may not return to pre-pandemic levels until 2023, continuing to drive consumer spending and encouraging business investment to keep the economy afloat. A coronavirus vaccine will be key in the beginning of returning to normal economic conditions and a correction of the yield curve, so it is something to keep a close eye on.

GDP

Gross Domestic Product (GDP) is a useful indicator for the overall growth and health of a region's economy. It reflects the value of all goods and services produced in a region over a specific time and is often reviewed on an annual and quarterly basis to estimate an economy's size and growth rate. GDP can be limited in its ability to forecast market performance but is useful in predicting general market movements through an economy's production in comparison to the previous

year's or quarter's GDP measurement. GDP is limited in its ability to predict markets as many other market factors such as income, trade, and consumer expenditures also have a significant influence.

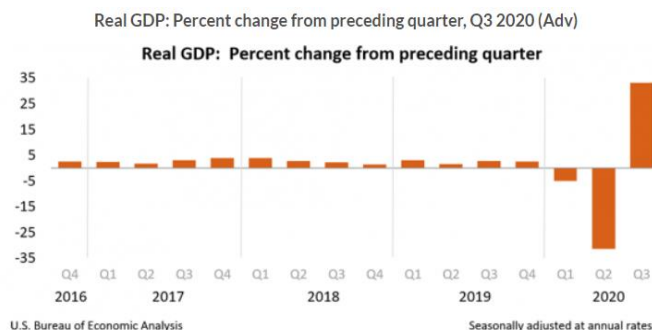
The financial sector plays a critical role in GDP as the growth of the economy and the solicitation of financial institutions have a positive relationship. GDP increases reflect a market environment that is friendly to spending and growth. As consumers become more confident in economic outlooks, they may look to invest via asset management or financial advisory firms. Also, as the economy grows, we see an increase in new businesses expansion and personal investments, in which the financial sector plays a critical role.

As expected, GDP increased during Q3 of 2020, up 33.1% from the previous quarter, according to the US Bureau of Economic Analysis. States have lifted some COVID restrictions and allowed most of the country to return to work, which explains the huge growth in GDP from Q2 of 2020. However, the level of GDP from Q3 of 2020 was still down - 2.9% YoY from 2019 Q3. This shows that, while the US economy has taken a large blow this year, especially in Q2, the resiliency of the US economy is not to be underestimated.⁶

As we prepare for what appears to be a second wave of the Coronavirus Pandemic, with daily cases in the US reaching over 100,000 in November for the first time, it is not unlikely that we may see another round of nation-wide lockdowns. With new president elect Joe Biden pledging to take a harsher stance on prevention of the spread of the virus, we see a continuation of COVID driven restrictions into 2021, further weighing on the growth of the US economy.

The potential for reentering national lockdown and economic restriction will hinder the financial sector's potential for substantial profitability or growth in the near-term. How

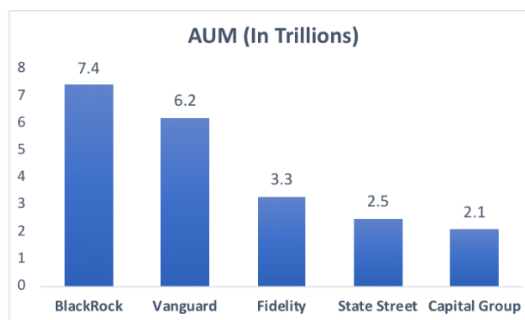
the country deals with the pandemic and what implications that has on the ability for the US economy to produce and consume will have a direct effect on how financials perform, which has struggled greatly YTD in 2020.



Source: Bureau of Economic Analysis

Industry Analysis

Competitors



Source: Company Provided Data

Vanguard Group is a privately held investment management company with an AUM of \$6.2 trillion. In terms of costs, Blackrock's ongoing charges figure is 0.17% per year compared to Vanguards of 0.22% per year. A significant difference in the approach between Blackrock and Vanguard is the approach to asset allocation. Vanguard uses a fixed approach to asset allocation making it a passive play. By using this method, fund performance and volatility will vary beyond the control of the portfolio managers. Blackrock on the other hand aims to minimize volatility through an active management philosophy.^{7, 8, 9}

Fidelity Investments is a privately held investment management company with an AUM of \$3.3 trillion. Fidelity offers a wider range of products and services such as index funds, IRA's, investment and wealth management, and financial planning. Like Blackrock, Fidelity's cap-size has allowed it to outperform smaller asset management firms such as Invesco and Franklin Resources have struggled. Fidelity offers a larger selection of mixed-asset investment opportunities. Like Vanguard, Fidelity also takes a more passive investing approach in comparison to Blackrock.^{10, 11}

State Street Corporation is a public asset management company with an AUM of \$2.5 trillion. In addition to investment management, State Street offers financial services, stock trading, and securities lending. Blackrock, Vanguard, and State Street were considered the big three of asset management, but in recent years, Blackrock and Vanguard have outpaced State Street due to State Street's institutional client focus and higher fees. With the unprecedented increase in personal trading accounts in 2020, State Street has lost clients to Blackrock and Vanguard due to fees. State Street is responding by launching lower costs versions of popular funds to capture some market share of working-class investors.^{7, 12}

Capital Group is a private investment management company with an AUM of \$2.1 trillion. Like Blackrock, Capital Group offers products focused on active management including more than 40 mutual funds. They also offer products in separately managed accounts, private equity, and investment services. According to Morningstar, Capital Group has performed well over recent years due to low fees and fund management. Portfolio Managers also invest their own money into Capital Group mutual funds, which builds trust with their clientele.^{13, 14}

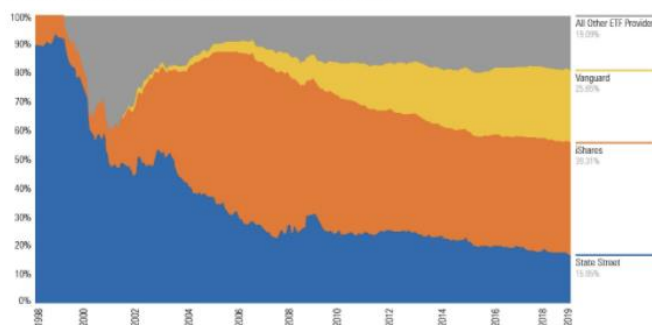
Porter's 5 Forces

Competition in the Industry

Competition in the asset management industry is strong as few companies control a large portion of the market share. Due to this, firms engage in competitive actions such as offering new products, more efficient technological services, and cutting fees to gain a larger market share. Blackrock's biggest competitors are Vanguard, Fidelity, State Street, and Capital Group. To gain an advantage over competitors, Blackrock must differentiate their products and services. One of Blackrock's strongest competitive advantages against other companies in the industry is their technology and product selection.

Blackrock (BLK) has a substantial 41% market share of the ETF market with \$1.79 trillion AUM in 379 ETFs and a 0.32% expense ratio. They are followed by Vanguard Group who has 31% of the market share, \$1.32 trillion in 80 ETFs and a 0.09% expense ratio. State Street Corp. ranks third in the ETF market with 18% of the total market share, \$0.77 trillion in 140 ETS and a 0.28% expense ratio. Blackrock has overcome fee pressure as they have continued to dominate the ETF market while growing their AUM from \$185 Billion in 2010 to \$4.6 trillion in 2015, to now \$7.1 trillion in 2020.²⁰

Market Shares of Major ETF Providers, 1998-2019



Source: Morningstar

Potential of New Entrants into the Industry

The threat of new entrants is low when looking at the asset management industry. One reason the threat of new entrants is low is due to economies of scale in the asset management industry, which allows firms like Blackrock to charge lower fees, provide better fund management, and offer a wider range of products and services. Due to this, leaders in the industry have a major cost advantage over new entrants. Another reason the threat of new entrants is low is due to high capital requirements in the asset management industry. Lastly, the threat of new entrants is low is because companies in the industry have built a long client base over many decades and hold high reputations.

Power of Suppliers

The power of suppliers in the investment management industry is low compared to other sectors, as they do not have influence over day-to-day operations. One example, however, is the power of investment platforms such as Fidelity or Charles Schwab lowering trading fees to zero, resulting in an industry wide demand for low trading and management fees.

Power of Customers

In the asset management industry, customer hold a high degree of influence over company operations, as they provide capital to fund investment products and research for new opportunities. By giving Blackrock money customers are trusting they will increase their wealth, so they demand a certain level of performance, in which failure to do so will result in fund outflows for other managers and in turn lower revenue for the company. Customers also demand low management fees in the industry today, which Blackrock is forced to meet. Large clients also have a different form of power over the company, as they may demand specific investment

products. For Blackrock to attract more customers they most focus on product innovation and differentiation through high performance and low fees.

Threat of Substitute Products

The threat of substitute products in the asset management industry is exceptionally low. It is near impossible for customers to find investment opportunities similar to those provided by mutual funds or ETFs in which a large-scale strategy such as the S&P 500 is offered on a widely available scale. The threat of substitute products within the industry is highly competitive, however, as many companies offer similar equity and fixed income investment strategies, which breeds competition to provide higher returns, lower variability, and cheaper fees.

Company Analysis

Executive Summary

We recommend a buy rating as we believe Blackrock will continue to increase its share price in the long term. Blackrock is trading at \$660/share with a price target of \$652/share by Morgan Stanley. We believe Blackrock will continue to grow its market share in the coming years using its outstanding leadership team, superior technology in Aladdin, ETF platform, and its leading iShares. Blackrock also showed its resiliency as its stock price rallied throughout the past 6 months of the Coronavirus pandemic.

Company Description

BlackRock is the largest investment management company in the world with over 16,200 employees operating in over 100 countries having \$7.43 trillion in AUM. BlackRock's substantial size of \$84.77 Billion in market cap, allows them to provide a variety of investment and risk management

services to its customers in both the institutional and retail markets.¹⁵



Source: BlackRock Website

Corporate Strategy

Global Reach: With over 8,000 employees and 40% of their AUM operating outside the United States, BlackRock has continued its goal of expanding its global reach and overall market share.

Investment Strategies: BlackRock focuses their efforts on the institutional markets with about 80% of their AUM coming from there. In regard to their active/passive investment strategy, BlackRock has about 2/3 of their AUM allocated in their passive strategy and 1/3 in their active strategy. BlackRock offers a multitude of investment platforms; however, they are most notable for their ETF platform, iShares.

Innovation: BlackRock has continued to set the bar in the asset management industry when it comes to innovation, investing in and improving their proprietary investment and risk management system, *Aladdin*®.¹⁵

Lifecycle

BlackRock has been the number one investment management company in the world since 2009. Now in the mature stage of their life cycle, BlackRock continues to grow as their cost of producing and advertising declines. It is crucial to reinforce the fact that although that BlackRock is in the growth

phase of their mature lifecycle as they have shown no signs of their revenues leveling off anytime soon due to their constant innovation, acquisitions, and reinvestment of assets.¹⁵

Products and markets

BlackRock offers a variety of investment vehicles in single and multi-asset portfolios directly and through intermediaries. These include open and close-end mutual funds, ETFs, separate accounts, and pooled investment vehicles.

iShares: iShares is a conglomeration of ETF's offered globally and managed by BlackRock. iShares is the leading ETFs platform in the world, with over 800 products offered and over \$2 trillion in AUM. In 2019, iShares fixed income provided net inflows of \$112.4 billion, and iShares equity provided net inflows of \$64.7 billion.¹⁶

iShares is offered both at the institutional level and the retail level and accounts for over 30% of BlackRock's AUM.

Aladdin: Aladdin which stands for "Asset, Liability, and Debt and Derivative Investment Network," is investment and risk management system offered institutional investors, wealth management intermediaries, and other individuals at the retail level. Aladdin helps its consumers model portfolios, manage portfolio risk, and offers technology solutions all together making their portfolio as efficient as possible. Aladdin generated \$974 million in 2019 while overseeing \$15 trillion in assets in over 30,000 different portfolios.¹⁵

The main threat to BlackRock's Aladdin is the dynamic industry in which it operates in. With a plethora of companies competing in the market, BlackRock must continue to develop and expand Aladdin's capabilities to maintain their position. We believe that BlackRock will be able to do this based on their ability to acquire companies like they recently did with

EFront, which will provide them with a new arsenal of technological ideas and improvements that they can implement in Aladdin.

Marketing Strategy: Being the leader it is in the investment management industry; BlackRock's brand name speaks for itself. Never-the-less, BlackRock allocated \$350 million (4% of total expenses) to their marketing and promotional goals, which are to maintain and grow their relationships with institutional, retail, and technology services companies and individuals across the globe.

Key Customers: BlackRock's key customers include official institutions like JP Morgan Chase and State Street Corp as well as corporate pensions, foundations and endowments, family offices, and other clients at the retail level. However, their main focus lies with institutional investors, which account for over 60% of their AUM.



Source: BLK Website

Financial Summary

BlackRock financial performance was outstanding prior to the coronavirus outbreak. However, it was not until three months after, in February of 2020, that BlackRock's stock of \$572 per share began to crash. The company reported a 13.16% increase in AUM between Q1 and Q2 of 2020, and another 6.7% increase in AUM between Q2 and Q3 of 2020. Between Q1 and Q2, BlackRock's stock had a severe drop of 28.3% from \$572 to \$410. However, during that same time the company's net income rose over 50%, going

from \$806 million to \$1.21 billion. Since BlackRock's stock dived to a 3-year low of \$352 per share in March, it has now nearly doubled to an all-time high, trading at \$670 per share. The financial resiliency that BlackRock showed through one of the worst pandemics in this country's history speaks volumes about the company's trusted reputation and their ability to innovate and perform during times of hardship.

Recent earnings releases

Q1:

BlackRock outperformed their Q1 2020 EPS and revenue consensus estimate of \$6.36 EPS and \$3.68 billion respectively, reporting \$6.60 EPS \$3.71 billion in revenue.¹⁷

Q2:

BlackRock also outperformed their Q2 2020 EPS and revenue consensus estimate of \$6.90 EPS and \$3.55 billion respectively, reporting \$7.85EPS and \$3.60 billion in revenue. Amidst the height of the global pandemic, BlackRock beat these estimates because of their ability to grow revenues and cut expenses, specifically their general and administration expense, which they reduced by approximately \$0.8 billion, going from \$1.14 billion in Q1 to \$0.34 billion in Q2.¹⁸

Q3:

BlackRock continued their pattern of outperforming their quarterly EPS estimates in Q3, reporting a \$9.22 EPS, almost 24% higher than their consensus estimates of a \$7.45 EPS. This was primarily due to their spike in investment performance fees, up 475% from Q2. BlackRock was able to take advantage of COVID-19's impact on the capital markets and it showed in their Q3 earnings report.¹⁹

Q4 Outlook:

We believe that BlackRock will outperform their Q4 EPS consensus estimate of \$8.71 per share. In the past 3 quarters, BlackRock has proven that they can withstand the

impacts of COVID-19 and beat the estimates by cutting unnecessary costs and creating a leaner structure as well as by taking advantage of market conditions to boost their performance fee revenues. With Laurance D. Fink at the helm, Aladdin and iShares constantly growing, and BlackRock's track record during COVID-19 specifically, the company will once again beat their earnings estimate next quarter.²¹

Company Guidance

BlackRock's 2019 Annual Revenue grew by 2% and technology services revenue growth made up for 24% of that growth. BlackRock's plans to continue to innovate and lead the technology services sector of the industry as the company's CEO reinforces that their "agile use of technology... differentiate(s) BlackRock" from their competitors. This in mind, our model predicts that BlackRock's technology services revenue will continue to grow, accounting for a greater portion of their revenue each year, as technology takes over the investment management industry.¹⁵

Product Distribution

BlackRock distributes its products with a third-party distribution strategy which utilizes their relationships with a variety of third-party vendors such as financial professionals and pension consultants. BlackRock also has local distribution presences around the globe to assist their clients where needed.¹⁵

Cost Structure

Employee Compensation and Benefits:
These costs are BlackRock's greatest expense, representing approximately 49.7% of their total costs at FYE 2019. Salaries, commissions, severance packages, employee stock options, and other benefits are the main components of these costs.

Distribution and Servicing Costs:

BlackRock's distribution and servicing costs accounted for approximately 18.7% of their total expenses for FYE 2019. These costs are made up of payments to the company's third-party distribution network who help distribute and service client investments in BlackRock's various products. As a result, these costs are almost entirely driven by the company's AUM.

Direct Fund Expense:

BlackRock's direct fund expense accounted for approximately 10.9% of their total expenses for FYE 2019. Direct fund expense is an accumulation of outsourced, third-party, non-advisory costs that the company incurs from their fund-related activities such as fund administration, fund accounting, transfer agent services, shareholder reporting services, legal expense, audit, and tax services, and more. These costs are directly related to BlackRock's AUM, client base, and number of products. As any of these items grow and decline, their direct fund expense will grow and decline with them.

General and Administration Expense:

G&A expense includes a plethora of costs incurred by Blackrock including but not limited to costs related to marketing and sales, company offices, technology, and more. BlackRock's profitability in their recent quarters stems from their ability to cost these general and administration expenses specifically, reducing costs from \$1.14 billion in Q1 to \$0.34 billion in Q2.¹⁵

Capital Structure

Payout Policy:

BlackRock currently has dividend payout ratio of 49%. Over the past 5 years, they have grown their dividends paid by roughly 11%. With the current uncertainty in the capital markets due to COVID-19, we predict that BlackRock will reduce that growth to 5% through the next 10 years.^{15, 16}

Calendar	2019	Current	TTM	5-Yr Avg
Dividend Per Share	13.20	14.52	14.52	10.97
Trailing Dividend Yield %	2.63	2.10	2.10	2.48

Source: Morningstar

Shareholdings:

87% of BlackRock's shares are owned by institutions while insiders hold approximately 1.24% of all company shares.

Vanguard Group has the greatest ownership of the institutions, owning roughly 8.5% of total shares. BlackRock is second, owning about 6.3% of its shares. With only 8.5% of shares, Vanguard Group does not have an active position on Blackrock.¹⁶

Debt to Maturity:

BlackRock has a sound debt to maturity structure with enough cash on hand to pay off the entirety of its debt at the current maturity dates.¹⁵

(In millions)	Maturity Amount	Carrying Value	Maturity
4.25% Notes	750	749	May 1, 2021
3.375% Notes	750	748	June 1, 2022
3.5% Notes	1,000	996	March 1, 2024
1.25% Notes	786	781	May 1, 2025
3.2% Notes	700	695	March 1, 2027
3.25% Notes	1,000	986	April 1, 2029
Total Long-term Borrowings	4,986	4,955	

Source: BLK 10k

Catalysts for Growth

Product Developments and innovation

- As the asset management sector continues to move towards a technology driven future, BlackRock has committed themselves to growing and expanding the capabilities of Aladdin, iShares, and other products in the technology services and if they continue to grow on the same trajectory, they will continue to lead and dominate in the space.

Technology Acquisitions

- A key to BlackRock's success has been their ability to acquire innovative technology companies that offer valuable additions to their current technology, and because BlackRock has the capital that it does, they have the ability to outbid their competitors when it comes to acquiring new entrants and new innovations within the sector.

Brand Trust

- Through the years, BlackRock has been able to achieve strong brand trust throughout the asset management industry by achieving high returns for its investors while minimizing risk. BlackRock has also been able to build trust because it is the largest asset management company in the world with an AUM of \$7.4 trillion. By continuing to achieve high returns for investors BlackRock will continue to gain more assets to manage and being able to build brand trust.

ESG

- ESG is a new integration tool which stands for environmental, social, and governance and allows BlackRock's portfolio managers to identify risks and opportunities within a portfolio. ESG integration will enhance portfolio managers investment process across all portfolios as well as making investment decisions that financially consider ESG material. By implementing ESG material, BlackRock will be able to attract a wider range of clients and utilize better investment strategies.²²

S.W.O.T. Analysis

Strengths:

- Well positioned to capitalize on industry trends liked fixed income ETFs

- Strong free cash flow: Able to expand and have projects
- Strong technology and products such as Aladdin and iShares
- Brand equity

Weaknesses:

- Company doesn't have strong marketing
- Low product range for consumers

Opportunities:

- New Global Markets, specifically in Asia
- ESG market space

Threats:

- Demand for low fees could drive down revenue
- Exposed to currency fluctuations especially in volatile political climate
- High inflation rates

Valuation Analysis

Revenue Decomposition

Due to Blackrock's market share and wide variety of products and services in conjunction with their consistent stance as a leader in innovation, we believe that Blackrock will maintain a consistent growth rate in the years to come. Their consistent growth through economic hardships and consistency lead us to assume an average growth rate of 4% annually through 2029.

Revenue has been broken down by global region, including North America, Europe, and Asia-Pacific. As Blackrock begins to focus their growth efforts globally in areas such as Hong Kong, their revenue generation from the Asia-Pacific region will increase to provide a higher percentage of company revenue in the future. Their North American profit share will continue to drive most of the company's

revenue, but new opportunities in Asia should outpace growth their European counterparts.

Revenue is also broken down by product and fee revenue generation. We believe that as iShares continues to grab more ETF market share, equity ETF will continue to drive revenue for Blackrock in the years to come. Blackrock will continue to drive down some fees in the future to attract more investors, dampening distribution and performance fee growth. Technology services will also continue to grow rapidly in the future as the world relies more on cloud-based solutions for security and analysis through Blackrock products. We do not predict major changes in Blackrock's overall business model, as it has provided consistent success for the company in the past.

These assumptions are consistent with managerial guidance and other analyst forecasts.

Accrued Compensation and Benefits

In projecting accrued compensation and benefits, we calculated the historical values as a percentage of total revenue. Accrued compensation and benefits historically accounted for 16% of company revenue. We assume that as revenue increases by 4% per year, Blackrock's employee compensation should grow at a similar rate. This philosophy was also used in projecting accounts payable and accrued liabilities as well as accounts receivable.

WACC

The weighted average cost of capital used to discount projected future cash flows for Blackrock was comprised from the value weighted average of our cost of equity and cost of debt. Blackrock equity accounted for 93% of company capital with a cost of 7.08%, while debt accounted for 7% of company capital with an after-tax cost of 1.01%. Using

this technique, we estimate the company's weighted average cost of capital to be 6.69%.

Cost of Equity

Using the CAPM model we were able to calculate a cost of equity for Blackrock of 7.08%. We used the 10-year US Treasury Bond rate of .877% as of 11/15/20 as a risk-free rate (WSJ). We also assumed an implied market risk premium of 5.35% as of 11/1/20 (Damodaran). Incorporating Blackrock's 5 year monthly average Beta of 1.16, we were able to assume a cost of equity of 7.08% for the company (Yahoo finance).

Cost of Debt

Using the yield on Blackrock's 2030 corporate bond of 1.293% and the company's marginal tax rate of 22%, we were able to calculate an after-tax cost of debt of 1.01% (Blackrock 10k). This low cost is reasonable for the company due to their large size, liquidity, and reputation.

Marginal Tax Rate

The marginal tax rate was calculated using a federal statutory US rate of 21%, state and local income tax rate of 2% and positive foreign tax rate effect of 1% to arrive at 22% (Blackrock 10k). Blackrock does not expect this rate to change drastically in the near future, but with a democratic incumbent president, income tax expenses and after-tax cost of debt may need revisions if corporate tax rates are increased.

DCF/EP Model

In computing implied share price through the DCF and EP models, we used our assumptions for a WACC of 6.65% to project the present value of future cash flows and economic profit. While Blackrock is projected to grow by 4% through 2029, we decreased our continuing value growth rate past 2029 to 3%, as we assume that as Blackrock gains more market share and size, it will be more

difficult to maintain growth rates in the long run. In a similar fashion, we also project ROIC to be well below 2019 (51.5%) to reach a continuing rate of 33.05% as Blackrock's growth is seen as unsustainable in the long run with consideration to the company size not being able to become larger than the market space itself and other large-cap competitors in the space.

Our model predicts an implied share price as of today (11/15/20) of \$697.92. Due to Blackrock's consistent growth in previous years, we find cash flow and profit share price driven projections to be more accurate than dividend driven. Our model shows that Blackrock is currently undervalued based on current stock price, which is consistent with our BUY rating.

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Important Disclaimer

This report was created by students enrolled in the Security Analysis (6F:112) class at the University of Iowa. The report was originally created to offer an internal investment recommendation for the University of Iowa Krause Fund and its advisory board. The report also provides potential employers and other interested parties an example of the students' skills, knowledge and abilities. Members of the Krause Fund are not registered investment advisors, brokers or officially licensed financial professionals. The investment advice contained in this report does not represent an offer or solicitation to buy or sell any of the securities mentioned. Unless otherwise noted, facts and figures included in this report are from publicly available sources. This report is not a complete compilation of data, and its accuracy is not guaranteed. From time to time, the University of Iowa, its faculty, staff, students, or the Krause Fund may hold a financial interest in the companies mentioned in this report.

BlackRock
Revenue Decomposition
In Millions

<i>Fiscal Years Ending Dec. 31</i>	2017	2018	2019	2020E	2021E	2022E	2023E	2024E	2025E	2026E	2027E	2028E	2029E
Geographic													
Americas	8798.0	9303.0	9703.0	10055.3	10457.5	10875.8	11310.8	11763.2	12233.8	12723.1	13232.0	13761.3	14311.8
Europe	4126.0	4217.0	4158.0	4162.7	4329.2	4502.4	4682.5	4869.8	5064.5	5267.1	5477.8	5696.9	5924.8
Asia-Pacific	676.0	678.0	678.0	902.7	938.8	976.4	1015.4	1056.0	1098.3	1142.2	1187.9	1235.4	1284.8
Total Revenue	13600.0	14198.0	14539.0	15120.6	15725.4	16354.4	17008.6	17688.9	18396.5	19132.3	19897.6	20693.5	21521.3
Total Revenue Growth Rate	22%	4%	2%	4%	4%	4%	4%	4%	4%	4%	4%	4%	4%
Investment advisory, administration fees and securities lending revenue:													
Equity													
Active	1654.0	1654.0	1554.0	2313.2	2405.7	2501.9	2602.0	2706.1	2814.3	2926.9	3044.0	3165.7	3292.3
iShares ETFs	3220.0	3549.0	3495.0	3501.3	3641.4	3787.0	3938.5	4096.1	4259.9	4430.3	4607.5	4791.8	4983.5
Non-ETF index	680.0	685.0	667.0	817.7	850.4	884.4	919.8	956.6	994.9	1034.7	1076.1	1119.1	1163.9
Equity subtotal	5554.0	5888.0	5716.0	6632.2	6897.5	7173.4	7460.3	7758.7	8069.1	8391.9	8727.5	9076.6	9439.7
Fixed income:													
Active	1717.0	1840.0	1918.0	1957.5	2035.8	2117.2	2201.9	2290.0	2381.6	2476.9	2576.0	2679.0	2786.2
iShares ETFs	808.0	825.0	963.0	774.5	805.5	837.7	871.2	906.1	942.3	980.0	1019.2	1060.0	1102.4
Non-ETF index	344.0	387.0	405.0	374.4	389.4	405.0	421.2	438.0	455.5	473.7	492.7	512.4	532.9
Fixed income subtotal	2869.0	3052.0	3286.0	3106.4	3230.7	3359.9	3494.3	3634.1	3779.4	3930.6	4087.8	4251.4	4421.4
Multi-asset	1157.0	1176.0	1148.0	1425.9	1483.0	1542.3	1604.0	1668.2	1734.9	1804.3	1876.4	1951.5	2029.6
Alternatives:													
Illiquid alternatives	281.0	348.0	488.0										
Liquid alternatives	358.0	384.0	413.0										
Currency and commodities (1)	91.0	98.0	108.0										
Core													
Alternatives subtotal	730.0	830.0	1009.0	986.0	1025.5	1066.5	1109.1	1153.5	1199.6	1247.6	1297.5	1349.4	1403.4
Long-term	10310.0	10946.0	11159.0	12017.8	12498.5	12998.4	13518.4	14059.1	14621.5	15206.3	15814.6	16447.2	17105.1
Cash Management	558.0	607.0	618.0	589.6	613.2	637.8	663.3	689.8	717.4	746.1	775.9	807.0	839.2
Total Base Fees	10868.0	11553.0	11777.0	12582.9	13086.2	13609.6	14154.0	14720.2	15309.0	15921.3	16558.2	17220.5	17909.3
Equity	152.0	91.0	36.0	152.4	158.5	164.8	171.4	178.3	185.4	192.8	200.5	208.5	216.9
Fixed Income	34.0	8.0	10.0	38.0	39.5	41.1	42.7	44.4	46.2	48.0	50.0	52.0	54.0
Multi-Asset	33.0	19.0	19.0	33.0	34.4	35.7	37.2	38.6	40.2	41.8	43.5	45.2	47.0
Alternatives	375.0	294.0	385.0	423.5	440.5	458.1	476.4	495.5	515.3	535.9	557.4	579.7	602.8
Illiquid alternatives	62.0	70.0	136.0										
Liquid alternatives	313.0	224.0	249.0										
Alternatives Subtotal	375.0	294.0	385.0										
Total performance fees	594.0	412.0	450.0	646.9	672.8	699.7	727.7	756.8	787.1	818.5	851.3	885.3	920.8
Technology services revenue	657.0	785.0	974.0	876.4	1068.7	1275.0	1496.1	1732.8	1986.1	2256.9	2546.1	2854.9	3184.3
Black Rock Solutions and Advisory	0.0	0.0	0.0	866.5	901.2	937.2	974.7	1013.7	1054.2	1096.4	1140.3	1185.9	1233.3
Distribution Fees:				112.3	116.8	121.4	126.3	131.3	136.6	142.0	147.7	153.6	159.8
Retrocessions	675.0	709.0	658.0	723.5	752.4	782.5	813.8	846.4	880.2	915.4	952.0	990.1	1029.7
12b-1 Fees (US mutual fund distribution fees)	466.0	406.0	358.0	315.7	278.4	245.4	216.4	190.8	168.3	148.4	130.8	115.4	101.7
Other	42.0	40.0	53.0	47.8	49.7	51.7	53.8	56.0	58.2	60.5	62.9	65.5	68.1
Total distribution fees	1183.0	1155.0	1069.0	1207.1	1255.4	1305.6	1357.8	1412.1	1468.6	1527.3	1588.4	1652.0	1718.1
Other Revenue	298.0	293.0	269.0	321.5	334.4	347.8	361.7	376.1	391.2	406.8	423.1	440.0	457.6
Total Revenue	13600.0	14539.0	14539.0	15120.6	15725.4	16354.4	17008.6	17688.9	18396.5	19132.3	19897.6	20693.5	21521.3
Total AUM	6288195.0	5975818.0	7429633.0	6478988.2	6738147.7	7007673.6	7287980.6	7579499.8	7882679.8	8197987.0	8525906.5	8866942.7	9221620.5

BlackRock

Income Statement

In Millions

Fiscal Years Ending Dec. 31	2017	2018	2019	2020E	2021E	2022E	2023E	2024E	2025E	2026E	2027E	2028E	2029E
Total investment advisory, administration fees & securities lending revenue	10893	11553	11777	12888	13404	13940	14498	15077	15681	16308	16960	17638	18344
Investment advisory performance fees	594	412	450	655	681	709	737	767	797	829	862	897	933
Technology services revenue	677	785	974	876	1069	1275	1496	1733	1986	2257	2546	2855	3184
Distribution fees	24	1155	1069	374	389	405	421	438	455	474	492	512	533
Advisory & other revenue	303	293	269	326	339	353	367	382	397	413	429	447	465
Total revenue	13600	14198	14539	15121	15725	16354	17009	17689	18396	19132	19898	20694	21521
Employee compensation & benefits	4255	4320	4470	4625	4786	4952	5124	5302	5486	5676	5874	6077	6288
Distribution & servicing costs	492	1675	1685	1768	1839	1912	1989	2068	2151	2237	2326	2420	2516
Amortization of deferred sales commissions	17	-	-	0	0	0	0	0	0	0	0	0	0
Direct fund expense	904	998	978	1057	1143	1236	1336	1444	1562	1688	1825	1973	2133
General & administration	1462	1638	1758	1978	2057	2139	2225	2314	2406	2503	2603	2707	2815
Restructuring charge	-	60	-	0	0	0	0	0	0	0	0	0	0
Amortization of intangible assets	89	50	97	132	133	133	134	135	136	136	137	138	139
Total expense	7219	8741	8988	9560	9957	10373	10808	11263	11741	12241	12765	13315	13892
Operating income (loss)	5272	5457	5551	5560	5768	5982	6201	6426	6656	6892	7133	7379	7629
Net gain (loss) on investments	161	1	342	382	387	392	397	402	407	412	417	422	427
Net gain (loss) on consolidated variable interest entities	-	-	-	0	0	0	0	0	0	0	0	0	0
Interest & dividend income	49	104	97	62	65	67	70	73	76	79	82	85	89
Interest expense	-205	-184	(203)	(153)	(153)	(153)	(153)	(154)	(154)	(154)	(154)	(154)	(155)
Total nonoperating income (expense)	5	-79	236	292	299	306	314	321	329	337	345	353	361
Total net current income tax expense (benefit)	1491	1302	1244										
Income before income taxes	5277	5378	5787	5852	6067	6288	6514	6747	6985	7228	7477	7732	7991
Income tax expense	270	1076	1261	1287	1335	1383	1433	1484	1537	1590	1645	1701	1758
Net income	5007	4302	4526	4565	4732	4905	5081	5263	5448	5638	5832	6031	6233

BlackRock
Balance Sheet
In Millions

Fiscal Years Ending Dec. 31	2017	2018	2019	2020E	2021E	2022E	2023E	2024E	2025E	2026E	2027E	2028E	2029E
Cash & cash equivalents	6,894	6,302	4,829	4,182	4,783	5,583	6,561	7,520	8,694	10,085	11,697	13,531	15,591
Accounts receivable	2,699	2,657	3,179	3,245	3,375	3,510	3,650	3,796	3,948	4,106	4,270	4,441	4,619
Investments	1,981	1,796	5,489	5,557	5,626	5,696	5,767	5,839	5,912	5,985	6,060	6,135	6,211
Separate account assets	149,937	90,285	102,844	102,844	102,844	102,844	102,844	102,844	102,844	102,844	102,844	102,844	102,844
Separate account collateral held under securities lending agreements	24,190	20,655	15,466	15,466	15,466	15,466	15,466	15,466	15,466	15,466	15,466	15,466	15,466
Deferred sales commissions, net	-	-	-	-	-	-	-	-	-	-	-	-	-
Total property & equipment	1,250	1,393	1,595	1,786	1,976	2,167	2,357	2,548	2,739	2,929	3,120	3,310	3,501
Less: accumulated depreciation & amortization	658	750	880	987	1,095	1,202	1,309	1,416	1,524	1,631	1,738	1,846	1,953
Property & equipment, net	592	643	715	798	882	965	1,048	1,132	1,215	1,298	1,381	1,465	1,548
Intangible assets, net	17,389	17,839	18,369	18,468	18,568	18,668	18,769	18,871	18,973	19,075	19,178	19,282	19,386
Goodwill	13,220	13,526	14,562	14,562	14,562	14,562	14,562	14,562	14,562	14,562	14,562	14,562	14,562
Other assets (IS AN OPERATING ASSET)	1,612	2,128	3,169	3,248	3,329	3,413	3,498	3,585	3,675	3,767	3,861	3,958	4,057
Total assets	220,217	159,573	168,622	168,371	169,435	170,707	172,166	173,615	175,289	177,189	179,320	181,684	184,284
Accrued compensation & benefits	2,153	1,988	2,057	2,419	2,516	2,617	2,722	2,830	2,944	3,061	3,184	3,311	3,444
Accounts payable & accrued liabilities	1,161	1,292	1,167	1,434	1,491	1,551	1,613	1,677	1,744	1,814	1,887	1,962	2,041
Borrowings	5,014	4,979	4,955	4,959	4,959	4,959	4,959	4,959	4,959	4,959	4,959	4,959	4,959
Separate account liabilities	149,937	90,285	102,844	102,844	102,844	102,844	102,844	102,844	102,844	102,844	102,844	102,844	102,844
Separate account collateral liabilities under securities lending agreements	24,190	20,655	15,466	15,466	15,466	15,466	15,466	15,466	15,466	15,466	15,466	15,466	15,466
Deferred income tax liabilities	3,538	3,571	3,734	3,595	3,460	3,331	3,207	3,087	2,972	2,861	2,754	2,652	2,553
Other liabilities	1,564	3,263	3,470	1,951	2,029	2,110	2,195	2,282	2,374	2,469	2,567	2,670	2,777
Total liabilities	187,926	126,033	133,693	132,668	132,766	132,878	133,005	133,146	133,303	133,474	133,661	133,864	134,083
Redeemable Noncontrolling Interest	416	1,107	1,316	1,322	1,327	1,333	1,338	1,344	1,350	1,356	1,361	1,367	1,373
Total Temporary Equity	416	1,107	1,316	1,322	1,327	1,333	1,338	1,344	1,350	1,356	1,361	1,367	1,373
Common Equity	19,258	19,170	19,188	19,444	19,699	19,955	20,185	20,185	20,185	20,185	20,185	20,185	20,185
Additional paid-in capital	19,256	19,168											
Retained earnings	16,966	19,282	21,662	23,990	26,511	29,228	32,144	35,268	38,604	42,152	45,917	49,901	54,105
Retained Earnings - net of appropriated (not included in CF_F?)	16,966	19,282	21,662	23,990	26,511	29,228	32,144	35,268	38,604	42,152	45,917	49,901	54,105
Accumulated other comprehensive income (loss)	(432)	(691)	(571)	(571)	(571)	(571)	(571)	(571)	(571)	(571)	(571)	(571)	(571)
Accumulated other comprehensive income (loss)	(864)	(1,382)	(571)	(571)	(571)	(571)	(571)	(571)	(571)	(571)	(571)	(571)	(571)
Treasury stock, common, at cost	3,967	5,387	6,732	8,546	10,363	12,182	14,002	15,825	17,649	19,475	21,302	23,130	24,960
Total BlackRock, Inc. stockholders' equity	31,825	32,374	33,547	35,637	36,603	37,763	39,094	40,402	41,918	43,647	45,590	47,751	50,132
Dividends Paid	(1,662)	(1,968)	(2,096)	(2,237)	(2,211)	(2,187)	(2,165)	(2,138)	(2,113)	(2,090)	(2,068)	(2,047)	(2,028)
Nonredeemable noncontrolling interests - total	50	59	66	66	67	67	67	67	68	68	68	69	69
Total permanent equity	31,875	32,433	33,613	35,704	36,670	37,830	39,161	40,469	41,986	43,715	45,659	47,820	50,201
Total Liabilities, Temporary Equity, & Permanent Equity	220,217	159,573	168,622	168,371	169,435	170,707	172,166	173,615	175,289	177,189	179,320	181,684	184,284

BlackRock
Historical Cash Flow Statement
In Millions

Fiscal Years Ending Dec. 31	2017	2018	2019
Net income	5,007	4,302	4,526
Depreciation & amortization	240	220	405
Stock-based compensation	542	564	567
Deferred income tax expense (benefit)	(1,221)	(226)	17
Contingent consideration fair value adjustments	-	65	53
Other losses (gains)	-	(50)	(30)
Net losses (gains) within consolidated sponsored investment products	-	-	(254)
Net proceeds (purchases) within consolidated sponsored investment products	-	-	(1,746)
Assets & liabilities of consolidated variable interest entities - change in cash & cash equivalents	(81)	-	-
Assets & liabilities of consolidated variable interest entities - net losses (gains) within consolidated variable interest entities	(118)	105	-
Assets & liabilities of consolidated variable interest entities - net proceeds (purchases) within consolidated variable interest entities	(302)	(1,683)	-
Losses (earnings) from equity method investees	(122)	(94)	(116)
Distributions of earnings from equity method investees	35	30	70
Accounts receivable	(521)	4	(433)
Investments, trading	(222)	(32)	(21)
Other assets	(212)	(223)	141
Accrued compensation & benefits	276	(230)	58
Accounts payable & accrued liabilities	308	43	(111)
Other liabilities	219	280	(242)
Net cash flows from operating activities	3,828	3,075	2,884
Purchases of investments	(489)	(327)	(693)
Proceeds from sales & maturities of investments	166	449	417
Distributions of capital from equity method investees	32	24	136
Net consolidations (deconsolidations) of sponsored investment funds	(39)	(51)	(110)
Acquisitions, net of cash acquired	(102)	(699)	(1,510)
Purchases of property & equipment	(155)	(204)	(254)
Net cash flows from investing activities	(587)	(808)	(2,014)
Proceeds from long-term borrowings	697	-	992
Repayments of long-term borrowings	(700)	-	(1,000)
Cash dividends paid	(1,662)	(1,968)	(2,096)
Repurchases of common stock	(1,421)	(2,087)	(1,911)
Net proceeds from (repayments of) borrowings by consolidated variable interest entities	-	40	111
Net subscriptions received from (redemptions/distributions paid) noncontrolling interest holders	464	1,263	1,458
Other financing activities	(8)	(13)	(137)
Net cash flows from financing activities	(2,630)	(2,765)	(2,583)
Effect of exchange rate changes on cash & cash equivalents	192	(93)	54
Net increase (decrease) in cash & cash equivalents	803	-	-
Net increase (decrease) in cash, cash equivalents & restricted cash	-	(591)	(1,659)
Cash & cash equivalents, beginning of year	6,091	7,096	6,505
Cash & cash equivalents, end of year	6,894	6,505	4,846

BlackRock

Forecasted Cash Flow Statement

In Millions

<i>Fiscal Years Ending Dec. 31</i>	2020E	2021E	2022E	2023E	2024E	2025E	2026E	2027E	2028E	2029E
Net Income	4,565	4,732	4,905	5,081	5,263	5,448	5,638	5,832	6,031	6,233
Depreciation & Amortization	(107)	(107)	(107)	(107)	(107)	(107)	(107)	(107)	(107)	(107)
Change in deferred taxes	(139)	(134)	(129)	(124)	(120)	(115)	(111)	(107)	(103)	(99)
Change in A/R	(66)	(130)	(135)	(140)	(146)	(152)	(158)	(164)	(171)	(178)
Change in accounts payable	267	57	60	62	65	67	70	73	75	78
Change in accrued compensation and other liabilities	362	97	101	105	109	113	118	122	127	132
Net Cash Provided by Operating Activities	4,881	4,515	4,693	4,876	5,063	5,254	5,450	5,649	5,853	6,060
Cash from Investing Activities										
Increase(decrease) in investments	(68)	(69)	(70)	(71)	(72)	(73)	(74)	(74)	(75)	(76)
Capital expenditures (Change in Gross PPE)	24	24	24	24	24	24	24	24	24	24
Capitalization of intangible assets (Change in intangibles)	(99)	(100)	(100)	(101)	(101)	(102)	(103)	(103)	(104)	(104)
(Increase) Decrease in other assets (other assets)	(79)	(81)	(83)	(85)	(87)	(90)	(92)	(94)	(97)	(99)
Redeemable noncontrolling interests	6	6	6	6	6	6	6	6	6	6
Net Cash used for Investing Activities	(217)	(220)	(224)	(227)	(231)	(234)	(238)	(242)	(246)	(249)
Cash from Financing Activities										
Proceeds from issuance (pmt) of notes payable and S-T debt (borrowings)	4	-	-	-	-	-	-	-	-	-
Proceeds from issuance of common stock (ESOP exercises)	256	256	256	230	-	-	-	-	-	-
Repurchases of common stock	(1,814)	(1,817)	(1,819)	(1,821)	(1,822)	(1,824)	(1,826)	(1,827)	(1,828)	(1,830)
Change in other liabilities	(1,519)	78	81	84	88	91	95	99	103	107
Dividends paid	(2,237)	(2,211)	(2,187)	(2,165)	(2,138)	(2,113)	(2,090)	(2,068)	(2,047)	(2,028)
Net Cash used for Financing Activities	(5,311)	(3,694)	(3,669)	(3,671)	(3,873)	(3,846)	(3,820)	(3,796)	(3,773)	(3,751)
Total cash Flow	(647)	601	800	978	959	1,174	1,391	1,611	1,834	2,060
Beginning Cash	4,829	4,182	4,783	5,583	6,561	7,520	8,694	10,085	11,697	13,531

BlackRock
Common Size Income Statement

<i>Fiscal Years Ending Dec. 31</i>	2017	2018	2019	2020E	2021E	2022E	2023E	2024E	2025E	2026E	2027E	2028E	2029E
Total investment advisory, administration fees & securities lending revenue	80.10%	81.37%	81.00%	85.24%	85.24%	85.24%	85.24%	85.24%	85.24%	85.24%	85.24%	85.24%	85.24%
Investment advisory performance fees	4.37%	2.90%	3.10%	4.33%	4.33%	4.33%	4.33%	4.33%	4.33%	4.33%	4.33%	4.33%	4.33%
Technology services revenue	4.98%	5.53%	6.70%	5.80%	6.80%	7.80%	8.80%	9.80%	10.80%	11.80%	12.80%	13.80%	14.80%
Distribution fees	0.18%	8.13%	7.35%	2.48%	2.48%	2.48%	2.48%	2.48%	2.48%	2.48%	2.48%	2.48%	2.48%
Advisory & other revenue	2.23%	2.06%	1.85%	2.16%	2.16%	2.16%	2.16%	2.16%	2.16%	2.16%	2.16%	2.16%	2.16%
Total revenue	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%
Employee compensation & benefits	31.29%	30.43%	30.74%	30.59%	30.43%	30.28%	30.13%	29.97%	29.82%	29.67%	29.52%	29.37%	29.22%
Distribution & servicing costs	3.62%	11.80%	11.59%	11.69%	11.69%	11.69%	11.69%	11.69%	11.69%	11.69%	11.69%	11.69%	11.69%
Amortization of deferred sales commissions	0.13%			0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
Direct fund expense	6.65%	7.03%	6.73%	6.99%	7.27%	7.56%	7.86%	8.17%	8.49%	8.82%	9.17%	9.54%	9.91%
General & administration	10.75%	11.54%	12.09%	13.08%	13.08%	13.08%	13.08%	13.08%	13.08%	13.08%	13.08%	13.08%	13.08%
Restructuring charge		0.42%		0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
Amortization of intangible assets	0.65%	0.35%	0.67%	0.87%	0.84%	0.82%	0.79%	0.76%	0.74%	0.71%	0.69%	0.67%	0.64%
Total expense	53.08%	61.57%	61.82%	63.23%	63.32%	63.42%	63.54%	63.67%	63.82%	63.98%	64.15%	64.34%	64.55%
Operating income (loss)	38.76%	38.43%	38.18%	36.77%	36.68%	36.58%	36.46%	36.33%	36.18%	36.02%	35.85%	35.66%	35.45%
Net gain (loss) on investments	1.18%	0.01%	2.35%	2.53%	2.46%	2.40%	2.33%	2.27%	2.21%	2.15%	2.10%	2.04%	1.99%
Net gain (loss) on consolidated variable interest entities				0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
Interest & dividend income	0.36%	0.73%	0.67%	0.41%	0.41%	0.41%	0.41%	0.41%	0.41%	0.41%	0.41%	0.41%	0.41%
Interest expense	-1.51%	-1.30%	-1.40%	-1.01%	-0.97%	-0.94%	-0.90%	-0.87%	-0.84%	-0.80%	-0.77%	-0.75%	-0.72%
Total nonoperating income (expense)	0.04%	-0.56%	1.62%	1.93%	1.90%	1.87%	1.84%	1.82%	1.79%	1.76%	1.73%	1.71%	1.68%
Income before income taxes	38.80%	37.88%	39.80%	38.70%	38.58%	38.45%	38.30%	38.14%	37.97%	37.78%	37.58%	37.36%	37.13%
Income tax expense	1.99%	7.58%	8.67%	8.51%	8.49%	8.46%	8.43%	8.39%	8.35%	8.31%	8.27%	8.22%	8.17%
Net income	36.82%	30.30%	31.13%	30.19%	30.09%	29.99%	29.87%	29.75%	29.62%	29.47%	29.31%	29.14%	28.96%

BlackRock*Weighted Average Cost of Capital (WACC) Estimation***Cost of Equity:**

Risk-Free Rate	0.877%
Beta	1.16
Equity Risk Premium	5.35%
Cost of Equity	7.08%

Cost of Debt:

Risk-Free Rate	0.88%
Implied Default Premium	0.42%
Pre-Tax Cost of Debt	1.293%
Marginal Tax Rate	22%
After-Tax Cost of Debt	1.01%

Market Value of Common Equity:

Total Shares Outstanding	156
Current Stock Price	\$600.71
MV of Equity	93,710.76

MV Weights

92.90%

Market Value of Debt:

Leases	1908.444726
Long-Term Debt, including current portion	5254
PV of Operating Leases	1908.444726
MV of Total Debt	7,162.44

7.10%

Market Value of the Firm**100,873.20**

100.00%

Estimated WACC

6.65%

BlackRock

Dividend Discount Model (DDM) or Fundamental P/E Valuation Model

Fiscal Years Ending Dec. 31	2020E	2021E	2022E	2023E	2024E	2025E	2026E	2027E	2028E	2029E
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EPS	\$ 31.01	\$ 31.94	\$ 32.90	\$ 33.89	\$ 34.91	\$ 35.95	\$ 37.03	\$ 38.14	\$ 39.29	\$ 40.47
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Key Assumptions

CV growth of EPS	3.00%
CV Year ROE	12.09%
Cost of Equity	7.08%

Future Cash Flows

P/E Multiple (CV Year)										18.43
EPS (CV Year)										\$ 40.47
Future Stock Price										\$ 745.60
Dividends Per Share	12.32	12.92	13.54	14.17	14.86	15.57	16.29	17.04	17.79	18.56
Discounted Cash Flows	11.51	11.27	11.03	10.78	10.56	10.33	10.09	9.86	9.61	402.84

Intrinsic Value as of Last FYE	\$ 497.87
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Implied Price as of Today	\$ 516.98
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BlackRock*Relative Valuation Models*

Ticker	Company	Price	EPS		P/E 20	P/E 21	Est. 5yr			BV Equity	Tangible BV Equity	Tangible	
			2020E	2021E			EPS gr.	PEG 20	PEG 21			P/B	P/B
APO	Apollo Global Management, Inc.	\$44.38	\$1.80	\$2.57	24.66	17.27	2.4	10.25	7.18	20.00	16.00	2.22	2.77
SCHW	Charles schwab	\$41.11	\$2.30	\$0.93	2.27	44.20	1.7	1.35	26.31	20.00	16.00	2.06	2.57
EVR	Evercore	\$87.96	\$5.34	\$7.18	16.47	12.25	4.4	3.78	2.81	20.00	16.00	4.40	5.50
BEN	Franklin Resources Inc	\$20.86	\$2.68	\$2.75	7.78	7.59	2.0	3.81	3.71	20.00	16.00	1.04	1.30
IVZ	Invesco Plc	\$15.15	\$1.72	\$2.01	8.81	7.54	1.9	4.71	4.03	20.00	16.00	0.76	0.95
LAZ	Lazard Ltd.	\$37.83	\$2.56	\$3.16	14.78	11.97	3.1	4.71	3.82	20.00	16.00	1.89	2.36
TROW	T. Rowe Price Group Inc	\$139.10	\$9.05	\$9.85	15.37	14.12	14.5	1.06	0.98	20.00	16.00	6.96	8.69
BX	The Blackstone Group Inc	\$50.42	\$2.27	\$2.96	22.21	17.03	4.2	5.28	4.05	20.00	16.00	2.52	3.15
			Average		14.04	16.50		4.37	6.61			2.73	3.41

XYZ	BlackRock	\$600.71	\$29.63	\$31.08	20.3	19.3	35.7	0.6	0.5	30.00	20.00	20.02	30.04
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Implied Relative Value:

P/E (EPS20)	\$ 416.09
P/E (EPS21)	\$ 512.66
PEG (EPS20)	\$ 4,626.80
PEG (EPS21)	\$ 7,342.41
P/B	\$ 81.90
P/Tangible BV	\$ 68.25

BlackRock
Value Driver Estimation
In Millions

Fiscal Years Ending Dec 31	2017	2018	2019	2020E	2021E	2022E	2023E	2024E	2025E	2026E	2027E	2028E	2029E
NOPLAT:													
Operating Revenue:	12,491	14,198	14,539	15,121	15,725	16,354	17,009	17,689	18,396	19,132	19,898	20,694	21,521
Implied Interest On Operating Leases	8	13	13	14	16	18	20	22	25	27	30	34	38
Employee compensation & benefits	4,255	4,320	4,470	4,625	4,786	4,952	5,124	5,302	5,486	5,676	5,874	6,077	6,288
Distribution & servicing costs	492	1,675	1,685	1,768	1,839	1,912	1,989	2,068	2,151	2,237	2,326	2,420	2,516
Amortization of deferred sales commissions	17	-	-	-	-	-	-	-	-	-	-	-	-
Direct fund expense	904	998	978	1,057	1,143	1,236	1,336	1,444	1,562	1,688	1,825	1,973	2,133
General & administration	1,462	1,638	1,758	1,978	2,057	2,139	2,225	2,314	2,406	2,503	2,603	2,707	2,815
Restructuring charge	-	60	-	-	-	-	-	-	-	-	-	-	-
Amortization of intangible assets	89	50	97	132	133	133	134	135	136	136	137	138	139
EBITA:	5,280	5,470	5,564	5,575	5,784	6,000	6,221	6,448	6,681	6,919	7,163	7,412	7,667
Marginal Tax Rate:													
Federal Tax Rate	35.00%	21.00%	21.00%	21.00%	21.00%	21.00%	21.00%	21.00%	21.00%	21.00%	21.00%	21.00%	21.00%
State & Local	1.00%	2.00%	2.00%	2.00%	2.00%	2.00%	2.00%	2.00%	2.00%	2.00%	2.00%	2.00%	2.00%
Foreign	-6.00%	-2.00%	-1.00%	-1.00%	-1.00%	-1.00%	-1.00%	-1.00%	-1.00%	-1.00%	-1.00%	-1.00%	-1.00%
Marginal Tax Rate:	30.00%	21.00%	22.00%	22.00%	22.00%	22.00%	22.00%	22.00%	22.00%	22.00%	22.00%	22.00%	22.00%
Income tax Provision	270	1,076	1,261	1,287	1,335	1,383	1,433	1,484	1,537	1,590	1,645	1,701	1,758
+ Tax Shield on Restructuring Charge	-	13	-	-	-	-	-	-	-	-	-	-	-
- Tax on Investment Income	(48)	(0)	(75)	(84)	(85)	(86)	(87)	(88)	(90)	(91)	(92)	(93)	(94)
+ / - Tax Shield / Expense on Consolidated Variable Interest Entities	-	-	-	-	-	-	-	-	-	-	-	-	-
- Tax on Interest & Dividend Income	(15)	(22)	(21)	(14)	(14)	(15)	(15)	(16)	(17)	(17)	(18)	(19)	(19)
+ Tax Shield on Interest Expense	62	39	45	34	34	34	34	34	34	34	34	34	34
+ Tax Shield on Intangible Assets	27	11	21	24	24	24	24	24	24	24	24	24	24
+ tax Shield on Implied Oper Lease Interest	2	3	3	3	4	4	4	5	5	6	7	7	8
Total Adjusted Taxes	298	1,106	1,233	1,251	1,297	1,344	1,393	1,443	1,494	1,546	1,600	1,655	1,711
Change in Deferred Taxes (From I.S.)	(1,221)	(226)	17	(97)	(97)	(97)	(97)	(97)	(97)	(97)	(97)	(97)	(97)
EBITA:	5,280	5,470	5,564	5,575	5,784	6,000	6,221	6,448	6,681	6,919	7,163	7,412	7,667
Adjusted Taxes:	298	1,106	1,233	1,251	1,297	1,344	1,393	1,443	1,494	1,546	1,600	1,655	1,711
Change in Deferred Taxes:	(1,221)	(226)	17	(97)	(97)	(97)	(97)	(97)	(97)	(97)	(97)	(97)	(97)
NOPLAT	3,761	4,138	4,348	4,227	4,391	4,559	4,731	4,908	5,090	5,276	5,466	5,661	5,859
Invested Capital													
+Normal Cash	6,894	6,302	4,829	4,182	4,783	5,583	6,561	7,520	8,694	10,085	11,697	13,531	15,591
+Accounts Receivable	2,699	2,657	3,179	3,245	3,375	3,510	3,650	3,796	3,948	4,106	4,270	4,441	4,619
+ Other Current Assets	1,612	2,128	3,169	3,248	3,329	3,413	3,498	3,585	3,675	3,767	3,861	3,958	4,057
Total Operating Current Assets	11,205	11,087	11,177	10,675	11,487	12,506	13,709	14,902	16,317	17,959	19,828	21,930	24,266
- Accounts Payable	1,161	1,292	1,167	1,434	1,491	1,551	1,613	1,677	1,744	1,814	1,887	1,962	2,041
- Accrued Compensation and Benefits	2,153	1,988	2,057	2,419	2,516	2,617	2,722	2,830	2,944	3,061	3,184	3,311	3,444
Total Operating Current Liability	3,314	3,280	3,224	3,853	4,007	4,168	4,334	4,508	4,688	4,876	5,071	5,274	5,485
Intangible Assets	17,389	17,839	18,369	18,468	18,568	18,668	18,769	18,871	18,973	19,075	19,178	19,282	19,386
+ PV Operating Leases	979	1,947	1,908	2,122	2,360	2,624	2,918	3,245	3,608	4,012	4,461	4,961	5,516
Total Other LT operating Assets	18,368	19,786	20,277	20,590	20,928	21,292	21,687	22,115	22,581	23,087	23,640	24,243	24,902
Net Operating Working Capital	7,891	7,807	7,953	6,822	7,480	8,338	9,374	10,394	11,629	13,083	14,758	16,656	18,782
Property & equipment, net	592	643	715	742	784	825	867	908	950	991	1,033	1,074	1,115
Invested Capital	8,483	8,450	8,668	7,564	8,263	9,163	10,241	11,302	12,579	14,074	15,790	17,730	19,897
Free Cash Flow (FCF):													
NOPLAT	3,761	4,138	4,348	4,227	4,391	4,559	4,731	4,908	5,090	5,276	5,466	5,661	5,859
Change in IC	1,178	(33)	218	(1,104)	699	900	1,078	1,061	1,277	1,495	1,716	1,940	2,167
FCF	2,583	4,171	4,130	5,331	3,691	3,659	3,653	3,847	3,813	3,781	3,750	3,720	3,692
Return on Invested Capital (ROIC):													
NOPLAT	3,761	4,138	4,348	4,227	4,391	4,559	4,731	4,908	5,090	5,276	5,466	5,661	5,859
Begin. IC	7,305	8,483	8,450	8,668	7,564	8,263	9,163	10,241	11,302	12,579	14,074	15,790	17,730
ROIC	51.49%	48.78%	51.45%	48.77%	58.04%	55.17%	51.63%	47.93%	45.03%	41.94%	38.84%	35.85%	33.05%
Economic Profit (EP):													
Begin. IC	7,305	8,483	8,450	8,668	7,564	8,263	9,163	10,241	11,302	12,579	14,074	15,790	17,730
x (ROIC - WACC)	44.84%	42.13%	44.80%	42.12%	51.39%	48.51%	44.98%	41.27%	38.36%	35.29%	32.19%	29.20%	26.40%
EP	3,276	3,574	3,786	3,651	3,887	4,009	4,122	4,227	4,338	4,439	4,530	4,610	4,681

		Risk-Free Ratio						
		0.73%	0.78%	0.83%	0.88%	0.93%	0.98%	1.03%
CV Growth	697.37							
	2.70%	686.42	677.68	669.16	661.33	652.70	644.76	637.01
	2.80%	698.86	689.75	680.87	672.72	663.75	655.49	647.43
	2.90%	711.98	702.48	693.21	684.72	675.37	666.77	658.38
	3.00%	725.86	715.92	706.24	697.37	687.62	678.66	669.92
	3.10%	740.54	730.14	720.01	710.74	700.55	691.20	682.08
	3.20%	756.11	745.20	734.59	724.88	714.22	704.44	694.91
	3.30%	772.65	761.19	750.05	739.87	728.70	718.45	708.48

		Beta						
		0.86	0.96	1.06	1.16	1.26	1.36	1.46
Equity Risk Premium	697.37							
	4.90%	1453.63	1152.07	952.04	809.73	703.39	620.94	555.19
	5.05%	1360.34	1085.35	900.87	768.62	669.23	591.85	529.93
	5.20%	1278.03	1025.72	854.75	731.33	638.11	565.25	506.78
	5.35%	1204.88	972.12	812.98	697.37	609.65	540.85	485.48
	5.50%	1139.44	923.68	774.96	666.31	583.52	518.37	465.81
	5.65%	1080.56	879.70	740.22	637.79	559.45	497.62	447.61
	5.80%	1027.29	839.58	708.35	611.53	537.20	478.39	430.72

		Marginal Tax Rate						
		21.70%	21.80%	21.90%	22.00%	22.10%	22.20%	22.30%
Pre-tax cost of debt	697.37							
	0.69%	705.33	704.59	703.85	703.11	702.37	701.63	700.89
	0.89%	703.36	702.62	701.89	701.15	700.42	699.68	698.95
	1.09%	701.43	700.70	699.97	699.24	698.51	697.78	697.06
	1.29%	699.54	698.82	698.09	697.37	696.65	695.92	695.20
	1.49%	697.69	696.97	696.26	695.54	694.82	694.10	693.39
	1.69%	695.88	695.17	694.46	693.75	693.03	692.32	691.61
	1.89%	694.11	693.40	692.69	691.99	691.28	690.57	689.87

		Risk Free						
		0.73%	0.78%	0.83%	0.88%	0.93%	0.98%	1.03%
CV ROIC	697.37							
	31.50%	723.07	713.18	703.55	694.72	685.01	676.09	667.39
	32.00%	724.00	714.09	704.44	695.60	685.88	676.95	668.23
	32.50%	724.90	714.98	705.31	696.46	686.72	677.78	669.05
	33.05%	725.86	715.92	706.24	697.37	687.62	678.66	669.92
	33.50%	726.62	716.67	706.98	698.10	688.33	679.36	670.61
	34.00%	727.44	717.48	707.77	698.88	689.10	680.12	671.35
	34.50%	728.24	718.26	708.55	699.64	689.85	680.85	672.07

BlackRock*Present Value of Operating Lease Obligations*

In Millions

Fiscal Years Ending Dec. 31	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
Year 1	62.0	135.0	131.0	120.0	134.0	135.0	126.0	134.0	142.0	141.0	145.0
Year 2	58.0	121.0	117.0	131.0	122.0	127.0	111.0	133.0	135.0	132.0	139.0
Year 3	55.0	111.0	130.0	121.0	113.0	110.0	112.0	131.0	125.0	126.0	130.0
Year 4	50.0	108.0	115.0	110.0	104.0	109.0	111.0	125.0	120.0	118.0	121.0
Year 5	47.0	90.0	106.0	99.0	105.0	106.0	105.0	120.0	112.0	109.0	106.0
Thereafter	274.0	538.0	903.0	814.0	784.0	699.0	613.0	560.0	404.0	1580.0	1516.0
Total Minimum Payments	546.0	1103.0	1502.0	1395.0	1362.0	1286.0	1178.0	1203.0	1038.0	2206.0	2157.0
Less: Cumulative Interest	37.8	75.5	127.9	115.3	108.3	95.7	83.5	77.3	59.1	259.4	248.6
PV of Minimum Payments	508.2	1027.5	1374.1	1279.7	1253.7	1190.3	1094.5	1125.7	978.9	1946.6	1908.4
Implied Interest in Year 1 Payment		6.571	13.3	17.8	16.5	16.2	15.4	14.2	14.6	12.7	25.2
Pre-Tax Cost of Debt	1.29%	1.29%	1.29%	1.29%	1.29%	1.29%	1.29%	1.29%	1.29%	1.29%	1.29%
Years Implied by Year 6 Payment	5.8	6.0	8.5	8.2	7.5	6.6	5.8	4.7	3.6	14.5	14.3
Expected Obligation in Year 6 & Beyond	47	90	106	99	105	106	105	120	112	109	106
Present Value of Lease Payments											
PV of Year 1	61.2	133.3	129.3	118.5	132.3	133.3	124.4	132.3	140.2	139.2	143.1
PV of Year 2	56.5	117.9	114.0	127.7	118.9	123.8	108.2	129.6	131.6	128.7	135.5
PV of Year 3	52.9	106.8	125.1	116.4	108.7	105.8	107.8	126.0	120.3	121.2	125.1
PV of Year 4	47.5	102.6	109.2	104.5	98.8	103.5	105.4	118.7	114.0	112.1	114.9
PV of Year 5	44.1	84.4	99.4	92.8	98.5	99.4	98.5	112.5	105.0	102.2	99.4
PV of 6 & beyond	246.0	482.5	797.0	719.8	696.6	624.5	550.3	506.5	367.8	1343.2	1290.4
Capitalized PV of Payments	508.2	1027.5	1374.1	1279.7	1253.7	1190.3	1094.5	1125.7	978.9	1946.6	1908.4

BlackRock*Valuation of Options Granted under ESOP*

Current Stock Price	\$636.80
Risk Free Rate	0.88%
Current Dividend Yield	2.37%
Annualized St. Dev. of Stock Returns	35.42%

Range of Outstanding Options	Number of Shares	Average Exercise Price	Average Remaining Life (yrs)	B-S Option Price	Value of Options Granted
Range 1	1,941,145	\$ 513.50	3.90	\$ 444.02	\$ 861,907,203
Total	1,941,145	\$ 513.50	3.90	\$ 179.15	\$ 861,907,203

BlackRock*Effects of ESOP Exercise and Share Repurchases on Common Stock Account and Number of Shares Outstanding*

Number of Options Outstanding (shares):	1,941,145
Average Time to Maturity (years):	<u>3.90</u>
Expected Annual Number of Options Exercised:	497,729

Current Average Strike Price:	\$ 513.50
Cost of Equity:	<u>7.08%</u>
Current Stock Price:	\$636.80

Fiscal Years Ending Dec. 31	2020E	2021E	2022E	2023E	2024E	2025E	2026E	2027E	2028E	2029E
Increase in Shares Outstanding:	497,729	497,729	497,729	447,957	0	0	0	0	0	0
Average Strike Price:	\$ 513.50	\$ 513.50	\$ 513.50	\$ 513.50	\$ 513.50	\$ 513.50	\$ 513.50	\$ 513.50	\$ 513.50	\$ 513.50
Increase in Common Stock Account:	255,584,092	255,584,092	255,584,092	230,025,683	-	-	-	-	-	-
Change in Treasury Stock	1,553	1,553	1,553	1,553	1,553	1,553	1,553	1,553	1,553	1,553
Expected Price of Repurchased Shares:	\$636.80	\$ 681.89	\$ 730.16	\$ 781.86	\$ 837.21	\$ 896.49	\$ 959.96	\$ 1,027.93	\$ 1,100.70	\$ 1,178.63
Number of Shares Repurchased:	2	2	2	2	2	2	2	2	1	1
Shares Outstanding (beginning of the year)	156	154	152	151	149	147	146	144	142	141
Plus: Shares Issued Through ESOP	0.498	0.498	0.498	0.448	0.000	0.000	0.000	0.000	0.000	0.000
Less: Shares Repurchased in Treasury	2	2	2	2	2	2	2	2	1	1
Shares Outstanding (end of the year)	154	152	151	149	147	146	144	142	141	140