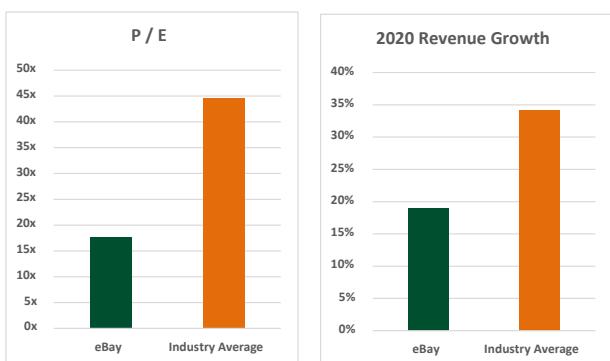
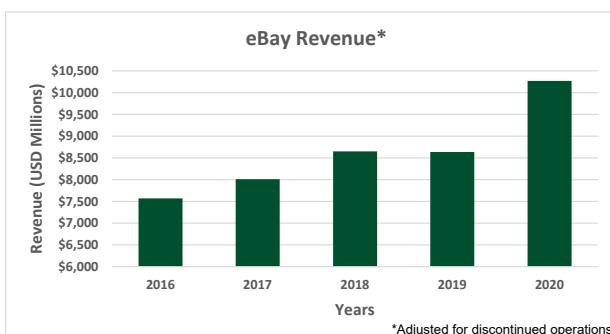


eBay Inc.**Hold**

| | |
|-----------------------|---------------|
| Target Price: | \$75.5 |
| Current Price: | \$61.6 |
| Purchase Price: | \$37.6 |
| <i>Return to Date</i> | 63.8% |

**Key Financial Data**

| | |
|----------------|---------|
| Market Cap | \$42.9B |
| P/Book | 11.8x |
| P/E | 18.9x |
| DPS Dividend | \$0.64 |
| Dividend Yield | 1.27% |

Executive Summary

According to the analysis, eBay is currently trading below its intrinsic value. The company has high-profit margins and generates lots of cash. However, considering eBay's struggle in the past and the fierce competition in the sector, driving up sales beyond the pandemic may be challenging. For this reason, a recommendation of hold is the most appropriate at the moment.

Firm Description

eBay is an American headquartered e-commerce operating a multi-category marketplace in 191 countries. The 2020 fiscal year ended with 185 million active users and \$100 billion in gross merchandise value, of which 40% came from the United States. Other relevant markets include Germany, the United Kingdom, Canada, and Australia.

Industry Standing

eBay has been losing market share to larger retailers such as Amazon and Walmart. The 2020 fiscal year ended with revenue growth of 19%, the largest since 2012 but still lagging behind the industry average of 34%. However, things can now improve for the company. The pandemic shifted consumer behavior, benefiting the e-commerce sector, and the recent sale of StubHub to Viagogo will let eBay focus on its core business.

Recent News

eBay posted Q4 and full-year 2020 earnings on February 3rd, beating EPS estimates by 4.8% at \$0.86.

In July 2020, eBay agreed to transfer their classified business to Adevinta ASA for 2.5 billion in cash and 540 million shares, which represents a 44% stake in the company. eBay is waiting for approval from the Competition and Market Authority of the UK to complete the deal.

History of eBay in SMIF

On April 25, 2019, The Category 5 Student Managed Investment Fund ("SMIF") purchased shares of eBay Inc at \$37.60 per share. The company was pitched with a price target of \$62 with the prospect that substantial changes to their sales and marketing strategy would drive them back to sector growth rates, and structural changes to their platform would increase user loyalty. eBay did not perform well in 2019 having a 20% drop in sales but with the growing demand on e-commerce platforms caused by the COVID-19 pandemic, the stock reached the price of \$62 in February 2021.

Comparable Companies Valuation

Seventeen of the global e-commerce leaders were selected to provide insights on how eBay is situated in the sector. The companies were chosen using the Bloomberg database and complemented by research in their investor relation portal. Were taken into account their main business, market cap, and countries of operation to get the most accurate results. The Asian market is represented by five companies, North America by five, Europe by five, and Latin America with two. The analysis used six value drivers but with a larger focus on revenue growth expectations.

| | CNV | EBAY | 4755 JP | VIPS | ASC LN | WISH | ZAL | JD | AMZN | 3064 JP | BTOW3 | W | ALE | THG LN | BABA | ETSY | MEU | |
|---------------------|--------|---------|---------|--------|---------|-------|--------|------|---------|---------|--------|---------|---------|--------|------|---------|---------|-----|
| Exp. Rev. Growth | 2% | 9% | 13% | 14% | 16% | 18% | 18% | 19% | 19% | 20% | 20% | 23% | 25% | 25% | 29% | 33% | 43% | |
| Gross Profit Margin | ASC LN | JD | VIPS | CNV | 3064 JP | BTOW3 | W | AMZN | ZAL | BABA | MEU | THG LN | WISH | ETSY | EBAY | 4755 JP | ALE | |
| Ebitda Margin | 0% | 15% | 21% | 21% | 28% | 28% | 29% | 40% | 42% | 43% | 43% | 45% | 63% | 73% | 76% | 82% | 94% | |
| EBITDA Margin | WISH | ASC LN | JD | CNV | W | ZAL | VIPS | MEU | 4755 JP | BTOW3 | THG LN | 3064 JP | AMZN | BABA | ETSY | EBAY | ALE | |
| EBIT Margin | -24% | 0% | 2% | 6% | 6% | 6% | 7% | 7% | 7% | 8% | 9% | 13% | 14% | 22% | 28% | 30% | 40% | |
| EBIT Margin | WISH | 4755 JP | ASC LN | THG LN | CNV | JD | ZAL | MEU | BTOW3 | W | VIPS | AMZN | 3064 JP | BABA | EBAY | ETSY | ALE | |
| OCF Margin | -25% | -3% | 0% | 0% | 2% | 2% | 3% | 3% | 3% | 3% | 5% | 6% | 6% | 12% | 16% | 24% | 25% | 28% |
| OCF Margin | THG LN | BTOW3 | WISH | ASC LN | 3064 JP | JD | CNV | ZAL | W | VIPS | AMZN | EBAY | MEU | ALE | BABA | ETSY | 4755 JP | |
| FCF Margin | -5% | -1% | 0% | 0% | 3% | 6% | 6% | 8% | 10% | 12% | 17% | 23% | 30% | 31% | 33% | 39% | 72% | |
| Counts | BTOW3 | THG LN | 3064 JP | W | 4755 JP | ZAL | ASC LN | WISH | CNV | MEU | JD | VIPS | BABA | AMZN | ALE | ETSY | EBAY | |
| Counts | 0 | 0 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 2 | 2 | 2 | 2 | 3 | 6 | |

By using the value drivers seen in the figure above, it was possible to see how eBay compares to its competitors. eBay lags behind in revenue growth expectations which demonstrates general disbelief by the market that the company will have an effective sales and marketing strategy. However, the highly profitable margins and their ability to generate cash outperform most of its peers. After carefully analyzing which companies closely reassemble eBay, six companies were selected for further evaluation: JD, Alibaba, and VIP Shop from Asia, ETSY and Amazon from the United States, and Allegro from Europe, all being multi-category marketplaces that operate in several countries. The image below shows their most recent multiples.

| Firm | Price/FCF | Price/Book | P/Earnings | EV/Sales | EV/EBITDA | EV/EBIT |
|--------------|-----------|------------|------------|----------|-----------|---------|
| JD | 24.4x | 4.5x | 126.6x | 1.0x | 41.7x | 60.2x |
| AMZN | 59.8x | 16.6x | 74.0x | 4.1x | 29.6x | 66.3x |
| VIPS | 19.5x | 6.5x | 35.7x | 1.7x | 23.4x | 28.6x |
| ETSY | 40.2x | 37.5x | 80.9x | 15.9x | 56.0x | 64.3x |
| ALE | 66.0x | 8.2x | 120.3x | 17.6x | 44.4x | 62.8x |
| BABA | 23.5x | 4.4x | 38.0x | 5.7x | 25.7x | 34.9x |
| Mean | 38.9x | 13.0x | 79.2x | 7.7x | 36.8x | 52.9x |
| Median | 32.3x | 7.4x | 77.4x | 4.9x | 35.6x | 61.5x |
| % Difference | 16.9% | 43.2% | 2.3% | 36.4% | 3.2% | 16.3% |

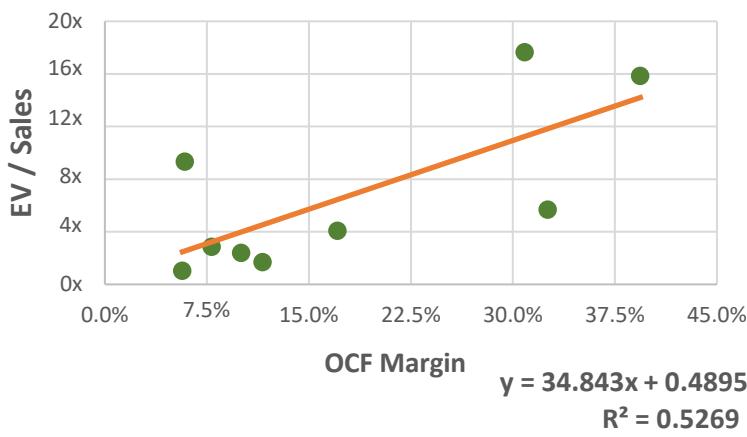
Direct Valuation

| | |
|----------------------------|----------------|
| Selected Metric | P/FCF |
| eBay FCF/Share | \$2.71 |
| Median Multiple | 32.33x |
| Implied Share Price | \$87.60 |

Of the four multiples analyzed, Price/FCF was selected to derive the share price. The median multiple of 32.33x was used with eBay FCF per share of 2.71 to find an implied share price of \$88 from the direct valuation. P/FCF was the second most consistent multiple according to the mean and the median difference. It is a better representation than P/E, the most consistent multiple, because eBay has a considerably lower P/E multiple than its six peers in the analysis.

An indirect valuation was then performed to find the share price and EV/EBITDA was selected as it was the most consistent multiple across the set of comparable firms. eBay's EBITDA along with the median multiple of 35.64x resulted in an implied enterprise value of \$118 billion. After accounting for debt, preferred shares, and cash, the market cap value was estimated to be \$113 billion. Dividing by the number of shares outstanding leads to an implied share price of \$165. Lastly, a data-driven correlation approach was performed.

EV/S as Predicted by OCF Margin



Indirect Valuation

| | |
|-----------------------------|--------------------|
| Selected Metric | EV/EBITDA |
| eBay EBITDA | \$3,315 |
| Median Multiple | 35.6x |
| Implied EV | \$118,146 |
| Less: Debt | (\$8,315) |
| Less: Preferred | (\$0) |
| Plus: Cash | \$4,112 |
| Implied Equity Value | \$113,994 |
| Divide: Shares Outstanding | 688 |
| Implied Share Price | \$165 |

Correlation Valuation

| | |
|-----------------------------|--------------------|
| Selected Metric | EV/Sales |
| eBay Revenue | \$10.713 |
| Multiple from Correlation | 8.4x |
| Implied EV | \$89,528 |
| Less: Debt | (\$8,315) |
| Less: Preferred | (\$0) |
| Plus: Cash | \$4,112 |
| Implied Equity Value | \$85,326 |
| Divide: Shares Outstanding | 688 |
| Implied Share Price | \$124 |

A correlation matrix was constructed utilizing value drivers as independent variables and trading multiples as dependent variables. Operational cash flow margins and EV/Sales showed the highest positive linear correlation in this matrix with a correlation coefficient (r) of 0.74. The regression equation was found to be $y = 34.843x + 0.4895$ with an R^2 value of 0.5269 meaning that 52.69% of the variability in EV/Sales can be justified by variation in OCF margins. eBay's 22.6% operational cash flow margin yielded an EV/Sales multiple of 8.35x and thus an enterprise value of \$89.5 billion. After performing the indirect valuation, the implied share price resulted in \$124.02.

Conclusions from Comparable Analysis

Based on the three analyses conducted, it was determined that eBay is substantially undervalued compared to its peers with a target price of \$126. eBay is a unique company in the sector due to its larger profit margins wherein most of the competitors have tight or even negative margins. This can distort multiples and generate numerous conclusions, so a discounted cash flow analysis is conducted to look at eBay from a different perspective.

Target Price

| Method | Target | Weight |
|---------------------|-----------------|----------------|
| Direct | \$87.60 | 33.33% |
| Indirect | \$165.62 | 33.33% |
| Correlation | \$124.02 | 33.33% |
| Final Target | \$125.75 | 100.00% |

Discounted Cash Flow Analysis

The table below shows historical data for eBay and its two closest competitors, Etsy and Allegro. Etsy is an American e-commerce focused on vintage products and Allegro is a Polish marketplace company with over 20 million active monthly users.

| EBAY | | | | ETSY | | | | ALE | | | | | |
|--|---------|--------------|---------|----------|-----------------|--------------|--------|--------|-----------------|--------------|---------|---------|-----------------|
| Historical Percentages: | | Date 2017 | 2018 | 2019 | Current 2020 | Date 2017 | 2018 | 2019 | Current 2020 | Date 2017 | 2018 | 2019 | Current 2020 |
| Sales | \$9,927 | \$10,746 | \$8,636 | \$10,271 | | \$441 | \$604 | \$818 | \$1,726 | \$1,662 | \$1,978 | \$2,592 | \$3,997 |
| % Sales Growth | 8.3% | 17.1% | -19.6% | 18.9% | | 36.8% | 35.6% | 110.9% | | 19.0% | 31.0% | 54.2% | |
| EBITDA | \$2,937 | \$3,005 | \$2,645 | \$3,315 | | \$57 | \$101 | \$148 | \$489 | \$644 | \$1,098 | \$1,325 | \$1,586 |
| EBITDA Margin | 29.6% | 28.0% | 30.6% | 32.3% | | 12.9% | 16.8% | 18.1% | 28.3% | 38.7% | 55.5% | 51.1% | 39.7% |
| Depreciation and Amortization | \$676 | \$696 | \$629 | \$609 | | \$27 | \$27 | \$48 | \$58 | \$383 | \$422 | \$439 | \$464 |
| D&A/Sales | 6.8% | 6.5% | 7.3% | 5.9% | | 6.2% | 4.4% | 5.9% | 3.4% | 23.0% | 21.3% | 16.9% | 11.6% |
| EBIT | \$2,261 | \$2,303 | \$2,016 | \$2,706 | | \$30 | \$75 | \$100 | \$431 | \$261 | \$676 | \$886 | \$1,122 |
| EBIT Margin | 22.8% | 21.5% | 23.3% | 26.3% | | 6.7% | 12.4% | 12.2% | 25.0% | 15.7% | 34.2% | 34.2% | 28.1% |
| Taxes (Cash Taxes excep 2020) | \$308 | \$597 | \$270 | \$520 | | \$1 | \$1 | \$2 | \$17 | \$31 | \$149 | \$163 | \$198 |
| Tax Rate | 13.6% | 25.9% | 13.4% | 19.2% | | 3.4% | 1.3% | 2.1% | 3.8% | 11.8% | 22.0% | 18.4% | 17.6% |
| EBIAT | \$1,953 | \$1,712 | \$1,746 | \$2,186 | | \$29 | \$74 | \$98 | \$414 | \$231 | \$528 | \$723 | \$924 |
| Depreciation and Amortization | \$676 | \$696 | \$629 | \$609 | | \$27 | \$27 | \$48 | \$58 | \$383 | \$422 | \$439 | \$464 |
| D&A/Sales | 6.8% | 6.5% | 7.3% | 5.9% | | 6.2% | 4.4% | 5.9% | 3.4% | 23.0% | 21.3% | 16.9% | 11.6% |
| Capex | (\$666) | (\$651) | (\$523) | (\$494) | | (\$13) | (\$21) | (\$15) | (\$7) | (\$67) | (\$117) | (\$143) | (\$231) |
| Capex/Sales | -6.7% | -6.1% | -6.1% | -4.8% | | -3.0% | -3.4% | -1.9% | -0.4% | -4.0% | -5.9% | -5.5% | -5.8% |
| Less Increase (or Plus Decrease) in NW | \$1,247 | (\$685) | (\$379) | (\$334) | | (\$5) | \$50 | \$10 | \$125 | (\$160) | (\$37) | \$72 | \$17 |
| NWC/Sales | 12.6% | -6.4% | -4.4% | -3.3% | | -1.2% | 8.3% | 1.2% | 7.2% | -9.6% | -1.9% | 2.8% | 0.4% |

Assumptions used in DCF analysis:

Sales Growth: Since 2015, sales growth has been highly volatile, fluctuating between -19.6% to 17%. CAGR was only 4%. eBay has struggled to keep up with competitors, but the pandemic changed the scenario, pushing sales in the sector and creating a better outlook for the company in the short run. The first two years were taken from Bloomberg and for the other years, it was considered a 50 bp decrease per year until CAGR was reached.

EBITDA Margin: For the past 6 years, EBITDA margins ranged from 27.2% to 33.6%. Estimates show that it will continue to grow for the next two years, so keeping margins constant at the same level as 2020 seems like a good conservative margin forecast.

Depreciation & Amortization: D&A/Sales has been historically around 100bp higher than Capex/Sales and the correlation is extremely high at 0.94. So as in Capex/sales, 10bp was subtracted every year from the previous year D&A/Sales.

Cash Taxes: Accounting for the tax increase by the new administration in the US to 28%, a constant tax rate of 25% was considered. For the first year, it was kept constant at 19.2%.

Capital Expenditures: Capex/Sales has been decreasing every year since 2015 when it was 7.7%. Today it is at 4.8% and estimates show that it is going to continue to decrease but at a slower pace, so a 10bp decrease from the previous year was considered.

Changes in Non-Cash Working Capital: NWC/Sales has been historically highly volatile ranging from -6.4% to 12.6%. So, a constant ratio was adopted using 2020 as the basis.

| Operating Scenario | 2020 | 2021 | 2022 | 2023 | 2024 | 2025 |
|-------------------------------|----------|----------|----------|----------|----------|----------|
| Sales | \$10,271 | \$11,996 | \$12,920 | \$13,566 | \$14,177 | \$14,744 |
| % Sales Growth | 18.9% | 16.8% | 7.7% | 5.0% | 4.5% | 4.0% |
| EBITDA | \$3,315 | \$3,872 | \$4,170 | \$4,379 | \$4,576 | \$4,759 |
| EBITDA Margin | 32.3% | 32.3% | 32.3% | 32.3% | 32.3% | 32.3% |
| Depreciation and Amortization | \$609 | \$699 | \$740 | \$764 | \$784 | \$800 |
| D&A/Sales | 5.9% | 5.8% | 5.7% | 5.6% | 5.5% | 5.4% |
| EBIT | \$2,706 | \$3,172 | \$3,430 | \$3,615 | \$3,792 | \$3,958 |
| EBIT Margin | 26.3% | 26.4% | 26.5% | 26.6% | 26.7% | 26.8% |
| Taxes | \$520 | \$610 | \$857 | \$904 | \$948 | \$990 |
| Tax Rate | 19.2% | 19.2% | 25.0% | 25.0% | 25.0% | 25.0% |

| Unlevered Free Cash Flow | 2020 | 2021 | 2022 | 2023 | 2024 | 2025 |
|---|---------|---------|---------|---------|---------|---------|
| EBIAT | \$2,186 | \$2,563 | \$2,572 | \$2,711 | \$2,844 | \$2,969 |
| Depreciation and Amortization | \$609 | \$699 | \$740 | \$764 | \$784 | \$800 |
| D&A/Sales | 5.9% | 5.8% | 5.7% | 5.6% | 5.5% | 5.4% |
| Capex | (\$494) | (\$565) | (\$596) | (\$612) | (\$625) | (\$635) |
| Capex/Sales | -4.8% | -4.7% | -4.6% | -4.5% | -4.4% | -4.3% |
| Less Increase (or Plus Decrease) in NWC | (\$334) | (\$390) | (\$420) | (\$441) | (\$461) | (\$479) |
| NWC/Sales | -3.3% | -3.3% | -3.3% | -3.3% | -3.3% | -3.3% |
| Unlevered Free Cash Flow to the Firm | \$1,967 | \$2,307 | \$2,297 | \$2,422 | \$2,542 | \$2,654 |

| Discounting of Annual Free Cash Flow | 2020 | 2021 | 2022 | 2023 | 2024 | 2025 |
|--|----------------|----------------|----------------|----------------|----------------|------|
| Discount Period (Mid-Year Convention) | 0.5 | 1.5 | 2.5 | 3.5 | 4.5 | |
| WACC from Bloomberg | 8.4% | 8.4% | 8.4% | 8.4% | 8.4% | |
| PVLS Factor | 0.96 | 0.89 | 0.82 | 0.75 | 0.70 | |
| Present Value of Free Cash Flow | \$2,216 | \$2,035 | \$1,980 | \$1,916 | \$1,846 | |

| Terminal (Continuing) Value | |
|------------------------------|----------------|
| Exit Year Free Cash Flow | \$2,654 |
| Long Term Normal Growth Rate | 3.5% |
| Terminal Value | \$56,063 |
| Discount Factor | 0.67 |
| Implied EV/Sales | 3.22x |
| Implied EV/Ebitda | 9.97x |
| Implied EV/Ebit | 11.99x |

| Enterprise Value: | |
|--|--------------|
| Cumulative PV of Unlevered FCF to the Firm | \$9,993 |
| Present Value of Terminal Value | \$37,457 |
| % of Enterprise Value | 78.9% |
| Enterprise Value | \$47,451 |
| Short Term Debt | (\$190) |
| Long Term Debt | (\$8,125) |
| Preferred Stock | - |
| Cash and Cash Equivalents | \$4,112 |
| Implied Equity Value of eBay Core Business | \$43,248 |
| Adevinta Stake | \$8,421 |
| Adyen Stake | \$935 |
| Implied Equity Value (Market Cap) | \$52,604 |
| Fully Diluted Shares Outstanding | \$697 |
| Implied Price Per Share | \$75 |
| Market Price (04/26/21) | \$62 |

| Investments | |
|---|----------------|
| Adevinta Stake (As of 04/26/21) | |
| Number of Shares (Mn) | 540.00 |
| Share Price (NOK) | \$152 |
| NOK / USD | \$0.1207 |
| Gross Value | \$9,907 |
| Minority Discount | (\$1,486) |
| Net Value of Stake | \$8,421 |
| Adyen Warrant Stake (As of 12/31/20) | |
| Gross Value | \$1,100 |
| Minority Discount | (\$165) |
| Net Value of Stake | \$935 |

Recommendation From Discounted Cash Flow Analysis

The discounted cash flow analysis led to a target price of \$75. It was used a two-stage Gordon growth model with a long-term growth rate of 3.5% and a WACC of 8.4%. The total enterprise value of eBay's core business was found to be \$47,451 million, of which 78.9% derived from the terminal value. After subtracting short-term and long-term debt and adding cash and cash equivalents, it led to an implied equity

value of \$43,248. Dividing for the fully diluted shares outstanding of 697 million, an implied share price for eBay's main business was found to be \$62, pretty close to the current market price of \$61.58 as of 04/26/21. After adding eBay's 44% stake in Adevinta and stake in Dutch fintech firm Adyen, an implied share price was found to be \$75. The long-term growth rate of 3.5% may appear low for a company present in 191 countries and a well-established brand, especially with the current trend of online shopping adoption around the globe. So a sensitivity analysis was conducted to observe how eBay's share price would change based on the long-term growth rate and WACC.

| Sensitivity Analysis | | | | | |
|------------------------------|---------|---------|----------------|----------|----------|
| Long-Term Normal Growth Rate | | | | | |
| | 2.5% | 3.0% | 3.5% | 4.0% | 4.5% |
| 6.9% | \$85.77 | \$94.27 | \$105.26 | \$120.05 | \$141.00 |
| 7.4% | \$77.80 | \$84.44 | \$92.78 | \$103.57 | \$118.09 |
| 7.9% | \$71.32 | \$76.62 | \$83.14 | \$91.33 | \$101.92 |
| 8.4% | \$65.93 | \$70.26 | \$75.47 | \$81.87 | \$89.90 |
| 8.9% | \$61.39 | \$64.98 | \$69.23 | \$74.34 | \$80.62 |
| 9.4% | \$57.52 | \$60.53 | \$64.05 | \$68.22 | \$73.24 |
| 9.9% | \$54.17 | \$56.72 | \$59.68 | \$63.14 | \$67.23 |

Final Recommendation

Current macroeconomic circumstances are not ideal for performing in-depth comparative valuations. Excess fiscal and monetary stimulus have distorted multiples and prices of many securities, especially the ones related to information technology. For this reason, only the result found on the discounted cash flow analysis was used in the final target price of \$75, which means a current upside of approximately 23%.

eBay is in an excellent position to use the current trend of online shopping to grow. However, considering the recent struggle and the fierce competition ahead, a hold recommendation is the most appropriate at the moment. SMIF should not buy more shares of eBay until there is concrete evidence that the company will be able to drive sustainable growth once the pandemic is gone.

| Final Price Target | | |
|--------------------|--------|---------------|
| Method | Weight | Price |
| Direct | 0.00 | \$87.6 |
| Indirect | 0.00 | \$165.6 |
| Correlation | 0.00 | \$124.0 |
| DCF | 1.00 | \$75.5 |
| Final Price | | \$75.5 |