

# American Express NYSE: AXP | Financials Sector

Price on 03/29/2021: \$142.37

Recommendation: **Buy**

Target Price: **\$173.68 (22% Upside)**

**Sydney Tan**  
 tan.948@buckeyemail.osu.edu  
 (940)304-7502



## Business Summary

American Express Company is a global financial services corporation and a leading card issuer operated in more than 40 countries. The business primarily provides charge and credit payment card products and travel-related services to its consumers and business customers. The company also operates a global payments network that processes and settles transactions.

### Investment Thesis

American Express's market expansion in China, acquisition of Kabbage, strong income growth, and promising near-term prospects combine to create a compelling investment that has been undervalued by the market. DCF model suggests a **BUY recommendation with a target price of \$173.68 and a 22% upside.**

### Overview

Industry	Consumer Finance
Market Cap	\$ 115.48 B
Beta	1.29
Dividend Yield	1.21%
52-week Range	72.61 - 151.46
Diluted Shares Outstanding	802,000,000



Source: American Express Investor Relations, <https://ir.americanexpress.com/stock-information/default.aspx>

- **Market Expansion in China:** Gain access to the \$27 trillion mobile payment market and expand its footprint in the market of 1.44 billion population
- **Acquisition of Kabbage:** Expand its core commercial card services in the small-business market. From April 2020 till August 2020, Kabbage processed over 300,000 PPP loan that amounted to over \$7 billion, where 97% of its PPP borrowers were new customers
- **Strong Income Growth:** 2021's income is projected to grow 66% compared to the prior year. Income of 2020 Q4 increased 34% versus 2020 Q3, indicating a strong growth position
- **Near-term Prospects:** Positive economic outlook contributed by the mass availability of Covid-19 vaccine, stimulus package, and improvement in GDP and unemployment rate, suggesting a significant rebound in spending and earnings

### Risks

- **Weaker-than-expected Spend Growth:** Travel restrictions and bans might still remain in place even after the outbreak has subsided, which could impact consumer spending and travel-related spending
- **Increased Competition:** An increase in customer demand for digital payment and business solutions due to the pandemic, which could a reduction in consumer usage of credit and debit cards



## Table of Contents

<b>BUSINESS SUMMARY .....</b>	<b>1</b>
<b>OVERVIEW OF AMERICAN EXPRESS COMPANY .....</b>	<b>3</b>
GLOBAL CONSUMER SERVICES GROUP .....	3
GLOBAL COMMERCIAL SERVICES .....	3
GLOBAL MERCHANT AND NETWORK SERVICES .....	4
<b>COMPETITIVE ADVANTAGE .....</b>	<b>4</b>
INTEGRATED PAYMENTS PLATFORM .....	4
SPEND-CENTRIC MODEL AND REVENUE MIX .....	5
PARTNERS AND RELATIONSHIPS .....	5
DIVERSE CUSTOMER BASE AND GLOBAL FOOTPRINT .....	5
<b>INDUSTRY COMPETITION .....</b>	<b>6</b>
<b>MARKET SHARE .....</b>	<b>7</b>
<b>GROWTH DRIVERS .....</b>	<b>7</b>
DATA ANALYTICS .....	7
INNOVATION/TECHNOLOGY .....	7
NETWORK AND PARTNERSHIPS .....	8
<b>RECENT NEWS .....</b>	<b>8</b>
CREDIT CARD DEBT IS 13% BELOW PRE-PANDEMIC HIGH .....	8
\$1.9 TRILLION U.S. STIMULUS PACKAGE .....	8
AMERICAN EXPRESS – NEW LIMITED-TIME OFFER .....	8
INVESTIGATION ON THE SALES PRACTICE OF AMERICAN EXPRESS .....	8
<b>FUNDAMENTAL DRIVERS .....</b>	<b>9</b>
NEW MARKET – CHINA .....	9
FINTECH ACQUISITION – KABBAGE .....	9
POST COVID-19 RECOVERY .....	10
<b>MACROECONOMIC ENVIRONMENT .....</b>	<b>11</b>
CONSUMER SPENDING .....	11
INTEREST RATES & NET INTEREST MARGIN .....	12
LOAN RESERVE & DELINQUENCIES .....	12
<b>FINANCIAL ANALYSIS .....</b>	<b>13</b>
PERFORMANCE IN 2020 .....	13
KEY FINANCIAL RATIOS .....	14
<b>VALUATION AND PRICE TARGET .....</b>	<b>14</b>
VALUATION MULTIPLES .....	14
PRICE TARGET .....	15
<b>RISKS .....</b>	<b>15</b>
WEAKER-THAN-EXPECTED SPEND GROWTH .....	15
INCREASED COMPETITION .....	15
<b>CONCLUSION .....</b>	<b>16</b>
<b>APPENDIX 1: INCOME STATEMENT .....</b>	<b>17</b>
<b>APPENDIX 2: DCF MODEL .....</b>	<b>18</b>
<b>APPENDIX 3: YIELD CURVES .....</b>	<b>18</b>
<b>REFERENCES .....</b>	<b>19</b>

## Company Overview



### Overview of American Express Company

American Express Company is a leading global financial services corporation founded in 1850. The company operated in more than 40 countries<sup>1</sup> and is known as a credit card issuer to consumers and businesses around the world. The business primarily provides charge and credit payment card products and travel-related services through various channels, including business partners, third-party vendors, customer referral programs, affiliate marketing, and mobile and online applications across the Americas, Europe, Africa, Middle East, and Asia Pacific.<sup>2</sup> American Express also conducts merchant acquisition, payment settlement, point-of-sale marketing, and network services. Its travel services include travel advisory and management, hotel booking, travel insurance, foreign exchange services, and traveler's cheque.<sup>3</sup> American Express engages in three business segments: Global Consumer Services Group (GCSG), Global Commercial Services (GCS), and Global Merchant and Network Services (GMNS). Other businesses and corporate functions are included in the Corporate & Other.

#### Global Consumer Services Group

GCSG offers a broad range of charge cards and revolving credit cards to consumers worldwide. The services include Card Member features and benefits, deposit products, travel services, and non-card financing products such as installment lending.

The charge cards mainly function as a method of payment with Card Members paying the full amount billed every month. A variety of factors, including a Card Member's current spending patterns, payment history, credit record, and financial resources, are considered when approving charges. Revolving credit card products offer flexibility to Card Members with the right to pay the bill in full each month or maintain a monthly balance on the cards for purchases of goods and services. Certain cards are issued with business partners under cobrand agreements, such as Delta Air Lines, as well as many other partners globally.

#### Global Commercial Services

GCS provides a range of products and services including card and payment programs, expense management tools, consulting services, business financing, and cross-border payments solutions to small businesses, mid-sized companies, and large corporations around the world. GCS carries a suite of business-to-business payment solutions to help companies to manage their spending. In addition, GCS offers local currency corporate cards and other expense management products in approximately 95 countries.

---

<sup>1</sup> "American Express Company." Encyclopædia Britannica. Encyclopædia Britannica, inc. Accessed March 5, 2021. <https://www.britannica.com/topic/American-Express-Company>

<sup>2</sup> "American Express Company (AXP) Company Profile & Facts," Yahoo! Finance (Yahoo!, March 5, 2021), <https://finance.yahoo.com/quote/AXP/profile?p=AXP>

<sup>3</sup> "American Express Co SWOT Analysis." 2020. *American Express Company SWOT Analysis*, October, 1–7. <http://search.ebscohost.com.proxy.lib.ohio-state.edu/login.aspx?direct=true&db=bth&AN=147261226&site=ehost-live>

## Global Merchant and Network Services

GMNS operates a global payments network that handles services like card transaction processing and merchant acquisition and provides products like fraud-prevention tools and marketing solutions for merchants in the United States and internationally.

GMNS aims to continue to expand the merchant acceptance of American Express cards around the world. In 2018, GMNS increased more than 1 million new merchant locations in the United States and expanded its merchant locations internationally with a double-digit growth rate.<sup>4</sup> By comparing spending on cards by merchants outside of the United States that accept American Express cards with card spending by all merchants outside of the United States, GMNS estimates that the international merchant network could accommodate more than 80% of general-purpose card spending.<sup>4</sup> GMNS also establishes relationships with third-party banks and other institutions in approximately 130 countries and territories.<sup>4</sup> According to the license arrangements, some partners serve as the merchant acquirer and processor for local merchants and some partners are licensed to issue American Express-branded cards.

GMNS also offers loyalty coalition programs. The programs allow consumers to earn rewards points for future purchases from a variety of participating merchants. Merchants in the programs are in charge of funding the consumer offers and are responsible for the cost of rewards points. By providing marketing support, American Express earns revenue from operating the loyalty platform.

## Competitive Advantage

### Integrated Payments Platform

American Express maintains direct relationships with their Card Members and merchants through their end-to-end integrated payments platform. The company is able to connect the participants and bring differentiated value across the commerce path through the card issuing, merchant-acquiring, and card network businesses. Its integrated payments platform has a closed-loop feature that distinguishes the company from the bankcard networks. A closed-loop network is created in that American Express has direct access to the information at both ends of the card transaction and that the company can analyze information on Card Member spending to underwrite risk, reduce fraud, and provide marketing information for merchants and special offers to Card Members.

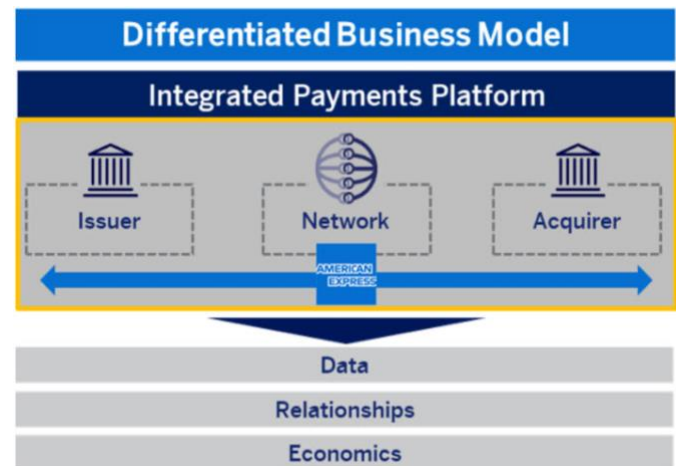


Figure 1: American Express's Differentiated Business Model  
 Source: American Express Co. Form 10-k 2020. New York, NY:  
 American Express Co. 2020

<sup>4</sup> American Express Co. Form 10-k 2018. New York, NY: American Express Co. 2018.

## Spend-Centric Model and Revenue Mix

American Express employs a spend-centric model, targeting to generate revenues primarily by driving spending on cards and secondarily through finance charges and fees. Using the revenues generated from having high-spending Card Members and the annual fee charged on many products, the company is able to invest in attractive rewards and benefits for their Card Members and targeting marketing and other programs from merchants. In this way, the company creates incentives for Card Members to spend more on their cards and offers value to merchants in the form of loyal customers and larger transactions. In 2020, American Express spent nearly 19% of total revenue (net of interest expense) on marketing and business development and an additional 26% on Card Member rewards and services. For more information, please refer to [Appendix 1](#).

## Partners and Relationships

American Express’s partnerships with the integrated payment platform form in many ways, including issuing cards under cobrand arrangement (e.g., Marriott International); developing new functions and features with digital partners (e.g., PayPal); offering innovative ways for Card Members to earn points and use them with its merchants (e.g., Pay with Points at Amazon.com); and expanding merchant acceptance with third-party acquirers (e.g., OptBlue partners).<sup>5</sup>

## Diverse Customer Base and Global Footprint

American Express has a very broad and diverse customer base around the world, from individual consumers to large corporations. While the company targets affluent customers, its customer segmentation includes both the premium and mass markets. Below are the charts summarizing the business’s customer base and broad geographic footprint in 2020:

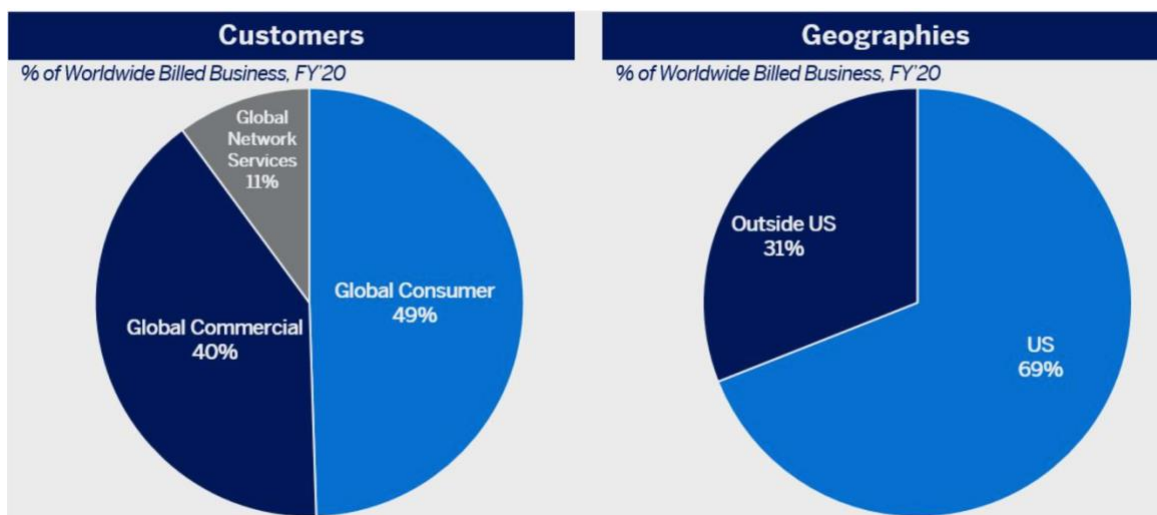


Figure 2: American Express’s Customer Base and Global Footprint in 2020  
 Source: American Express Co. Form 10-k 2020. New York, NY: American Express Co. 2020

<sup>5</sup> American Express Co. Form 10-k 2020. New York, NY: American Express Co. 2020.

## Industry Competition

The global payment card industry has a highly competitive market and is mainly dominated by a few large companies. The high investments required to enter the industry create high entry barriers and prevent new players to enter and succeed in the industry.

American Express’s primary competitors are Mastercard and Visa, whose market shares are significant in terms of the total cards in circulation. Despite that, as a result of the spend-centric business model, American Express transcends its competitors in terms of the total value of transactions made by customers. As many card issuing companies have already penetrated the market in the USA, Europe, and some other developed Asian economies, the industry’s growth in the developed markets is expected to be modest. On the other hand, emerging countries like China and India are expected to be the main sources of the industry’s future growth. As a result of the increasing propensity of consumers and the spread of financial services, the payment card industry is projected to have high growth in the emerging markets. In 2020, Asia Pacific accounted for 33% of the global cards & payments market, which was the largest region in the market, followed by Western Europe, which accounted for 23% of the market.<sup>6</sup>

Since the mid-2000s, many Silicon Valley-based companies have entered the industry and introduced online, digital, and cloud-based services that can compete with the products provided by conventional card companies. Major card companies like American Express have been facing new competition from online payment processing companies like PayPal. The difference between these two types of companies became blurred as these companies set up systems where payments can be made at physical merchant point of sale units through mobile phones. Unlike the net card fee charged by many conventional companies, the online payment processing companies usually are totally free or require a lower fee, which further increases the competition in the industry.

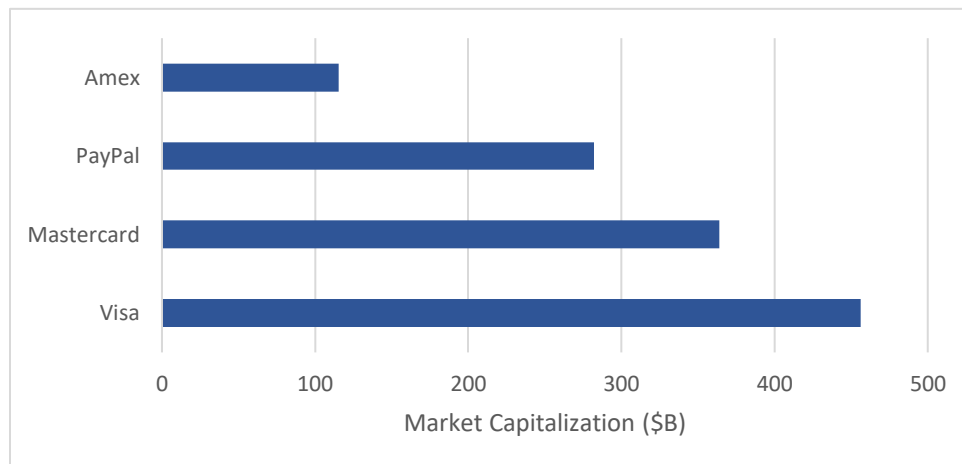


Figure 3: Market Capitalization (\$B) of American Express’s main competitors (As of Mar 27, 2021)  
 Source: Google Finance

<sup>6</sup> Research And Markets, "Global Cards & Payments Market Report 2021: A \$671.73 Billion Industry in 2020 - Major Players Are American Express, Visa, Bank of America, PayPal and Mastercard," Global Cards & Payments Market Report 2021: A \$671.73 Billion Industry in 2020 - Major Players Are American Express, Visa, Bank of America, PayPal and Mastercard, February 26, 2021, [PAGE], accessed March 28, 2021, <https://www.prnewswire.com/news-releases/global-cards--payments-market-report-2021-a-671-73-billion-industry-in-2020--major-players-are-american-express-visa-bank-of-america-paypal-and-mastercard-301236425.html>

## Market Share

According to the data from the Federal Reserve, 34.1% of all card payments in 2018 by number are credit card transactions and out of all credit card transactions, 94.1% are general-purpose credit cards.<sup>7</sup> As one of the largest card issuers in the credit card industry, American Express recorded a credit card market share of 20% in 2019 in the US.<sup>8</sup> In addition, American Express is the second top issuer of general-purpose credit cards in the US in 2020, accounting for nearly 19% of the industry's \$3.611 trillion total (as shown in figure 3).

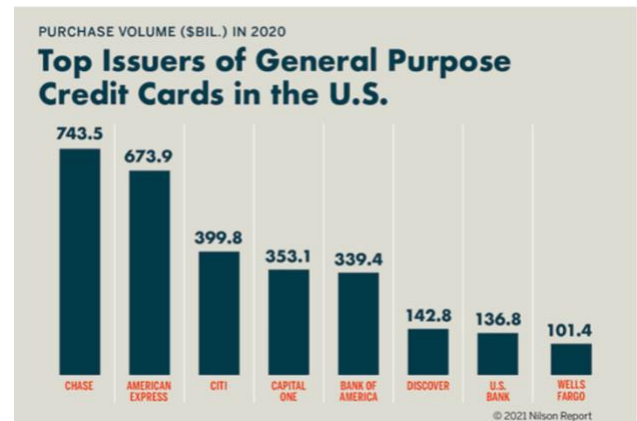


Figure 4: Top Issuers of General-Purpose Credit Cards in the U.S. Source: "Top Issuers of General Purpose Credit Cards in the U.S." Nilson Report, February, 2021, accessed March 07, 2021, [https://nilsonreport.com/publication\\_chart\\_and\\_graphs\\_archive.php?l=1&year=2021](https://nilsonreport.com/publication_chart_and_graphs_archive.php?l=1&year=2021)

## Growth Drivers

### Data Analytics

American Express operates a closed-loop integrated payments platform where payment services are provided directly to cardholders and merchants without third party intermediaries. This end-to-end platform allows the company to analyze the information on consumer spending patterns and build algorithms and other analytical tools for marketing purposes and other information services for merchants, as well as special offers to card members. Having such information can help the company grow by maintaining good relationships with merchants and building customer loyalty.

### Innovation/Technology

American Express launched the company's first proprietary automated accounts payable solution, American Express One AP™, in July 2020. The goal behind this innovation is to automate the accounts payable process and digitize payment processes. It enables businesses to process payments to suppliers more easily and efficiently. It is designed to work seamlessly with the business's existing accounting systems. The digital shift is strategic given the pandemic's disruption of office work. A recent survey by the company found that 84% of the businesses felt positive about the transition.<sup>9</sup> In addition, the account payable automation doubled in Q3 from the prior year as more small businesses utilize digital payment.<sup>10</sup>

In August 2020, American Express decided to acquire Kabbage to expand its digital cash flow offerings for small businesses. Kabbage is a leading financial technology company that specializes in small business loans. The acquisition establishes a strong structure for American Express and allows the company to

<sup>7</sup> "US Credit Card Market Share: Facts and Statistics," Fortunly, February 19, 2021, accessed March 07, 2021, <https://fortunly.com/blog/credit-card-market-share/>

<sup>8</sup> Milena and \*, "Global Credit Card Market Share in 2021," Balancing Everything, February 25, 2021, [PAGE], accessed March 07, 2021, <https://balancingeverything.com/credit-card-market-share/>

<sup>9</sup> "American Express." n.d. Americanexpress.Com. Accessed March 28, 2021. <https://www.americanexpress.com/en-us/business/payment-solutions/accounts-payable-automation/>

<sup>10</sup> N.d. Nasdaq.Com. Accessed March 29, 2021. <https://www.nasdaq.com/articles/1-reason-ill-never-sell-american-express-2020-12-05>.

become an essential partner to small businesses through a broad range of services. Notably, the purchase agreement did not include Kabbage's pre-existing loan portfolio, but rather its technology, intellectual property, and customer base. The technology Kabbage offered is a lending platform that gathers small businesses' data, such as payment processing data and accounting data. In addition to Kabbage's current products, American Express plans to offer a broader range of management tools and products to small business customers in the United States.

## Network and Partnerships

American Express successfully expanded its business and became the first foreign network to launch in mainland China in June 2020. China's central bank gave the company permission to enter the market, giving American Express greater access to many other consumers and merchants. In addition to that, the company had expanded the merchant network and added more than 3.7 million merchants globally in 2020.<sup>11</sup> The company also extended key cobrand partnerships including Marriot, British Airways, Amazon, and Lowe's.

## Recent News

### [Credit Card Debt Is 13% Below Pre-Pandemic High](#)

The news released by March 2021 states that credit card loan outstanding is 13% below the pre-pandemic high.<sup>12</sup> According to the news, delinquencies have slowly declined, and credit scores are up on average about 4 points.<sup>11</sup> This result is contributed by the low interest rates, less spending, federal supplement for unemployment, and fiscal stimulus.

### [\\$1.9 Trillion U.S. Stimulus Package](#)

On March 10, 2021, the House passed President Biden's \$1.9 trillion coronavirus relief package. Eligible recipients will receive \$1400 per person. In addition to that, the package also includes unemployment aid and expand the child tax credit for a year.

### [American Express – New Limited-Time Offer](#)

In February 2021, American Express introduced new dining and wireless offers for eligible U.S. Consumer and Business Delta SkyMiles, Hilton Honors, and Marriott Bonvoy Card Members to boost spending and incentivize consumers by earning more rewards. Eligible Card Members can enroll to earn up to \$220 through Dec 31, 2021.

### [Investigation on The Sales Practice of American Express](#)

Federal investigators are suspecting whether American Express used misleading sales tactics to boost sales numbers and harmed customers by providing wrong information about card rewards and fees. The inspectors are also examining whether there are specific employees that contributed to the alleged behaviors and if some higher-level employees supported the act.

---

<sup>11</sup> American Express Co. American Express Press Release 2020. New York, NY: American Express Co. 2020.  
[https://s26.q4cdn.com/747928648/files/doc\\_financials/2020/q4/Q4'20-Earnings-Press-Release.pdf](https://s26.q4cdn.com/747928648/files/doc_financials/2020/q4/Q4'20-Earnings-Press-Release.pdf)

<sup>12</sup> Yahoo Finance Video. 2021. "Credit Card Debt Is 13% below Pre-Pandemic High." Yahoo Finance. March 18, 2021.  
<https://finance.yahoo.com/video/credit-card-debt-13-below-193958378.html>



## Investment Thesis

### Fundamental Drivers

The outlook of American Express will be determined from three different aspects: market expansion, increasing digital business solutions, and post Covid-19 recovery. American Express currently has a positive outlook due to its market expansion in China, new technology and tools from Kabbage, and the rollout of Covid-19 vaccines, which indicate **a potential upside in American Express shares**.

### New Market – China

In June 2020, The People’s Bank of China granted license to American Express to operate and process local currency transactions through its joint venture, Express Technology Services Company. The joint venture between American Express and Lianlian DigiTech Co., a Chinese fintech services company, has built a network for domestic transactions charged on American Express cards and partnered with leading mobile wallet services providers in China. This approval will allow American Express to gain access to one of the world’s largest and well-developed markets for mobile payments, where data showed that China’s mobile transactions in 2018 reached \$27 trillion.<sup>13</sup>

Competition in this new market comes from not only China UnionPay Co., which is a monopoly state-backed card issuer, but also mobile payment company, like Alipay and WeChat Pay. By comparison, Lianlian’s market share is tiny. However, the business can still be profitable given the population of 1.44 billion people in China and increasing standard of living.<sup>14</sup> Data in September 2020 showed that out of the 8.5 billion bank cards circulated in China, over 90% of them are debit cards.<sup>12</sup> Despite the preference of using debit cards, China still has 850 million credit cards in circulation, reflecting a fairly sizable opportunity in the market.

### Fintech Acquisition – Kabbage

American Express announced the acquisition of Kabbage in August 2020. Kabbage is a FinTech company that provides loans and other financial products to small businesses. Owing to the pandemic, many small businesses are applying for loans to maintain their operation. With Kabbage’s technology, a credit line of up to \$250,000 can be approved in under 10 minutes, and this speed of access to capital is critical for small businesses during the pandemic.<sup>15</sup> Since participating in the \$349 billion Paycheck Protection Program



Figure 5: Quick Cash in China  
 Source: Washington Post (Washington, D.C.: 1974). 2020. “AmEx May Find China Can Live Life without It,” June 16, 2020. [https://www.washingtonpost.com/business/amex-may-find-china-can-live-life-without-it/2020/06/16/0685d03a-af96-11ea-98b5-279a6479a1e4\\_story.html](https://www.washingtonpost.com/business/amex-may-find-china-can-live-life-without-it/2020/06/16/0685d03a-af96-11ea-98b5-279a6479a1e4_story.html).

<sup>13</sup> Chen, Lulu Yilun. 2020. “AmEx Wins Clearing License for China’s \$27 Trillion Market.” Bloomberg Quint. June 13, 2020. <https://www.bloombergquint.com/global-economics/amex-wins-card-clearing-license-for-china-s-27-trillion-market>.

<sup>14</sup> Duberstein, Billy. 2020. “Want a Dow Jones Blue Chip? Try American Express.” The Motley Fool. August 22, 2020. <https://www.fool.com/investing/2020/08/22/want-a-dow-jones-blue-chip-try-american-express/>.

<sup>15</sup> León, Riley de. 2020. “American Express Acquiring Small Business Lender Kabbage.” CNBC. August 17, 2020. <https://www.cnbc.com/2020/08/17/american-express-acquiring-small-business-lender-kabbage.html>.

(PPP) in April, Kabbage has processed over 300,000 PPP loan that amounted to over \$7 billion, where 97% of its PPP borrowers were new customers.<sup>13,16</sup> It reflects an unprecedented demand in the market. Even before the pandemic, there were only 35% of U.S small businesses classified as “healthy” – profitable, high credit scores, and sufficient retained earnings to operate – by the Federal Reserve.<sup>17</sup> As of August 2020, Kabbage has provided more than 220,000 small businesses access to over \$9 billion of working capital.<sup>13</sup>The technology of Kabbage can help American Express to increase its footprint and expand its core commercial card services in the small-business market.

### Post Covid-19 Recovery

Health concerns associated with the pandemic and travel restrictions around the world are causing less travel and entertainment related spending. Prior to the pandemic, 30% of American Express’ spending came from travel and entertainment (T&E).<sup>18</sup> In 2020, American Express’ travel and entertainment plunged 65% year over year in the fourth quarter.<sup>19</sup> Despite that, American Express sees a recovery in the travel industry as the Covid-19 vaccine rolls out across the United States and many other countries. In addition, at least 50% of the consumers in the US stated that they would be comfortable travel this summer, according to a report by Expedia Media Solutions.<sup>17</sup> To further increase pent-up travel demand and boost consumer spending, American Express introduced more travel-related perks to eligible card members in February.

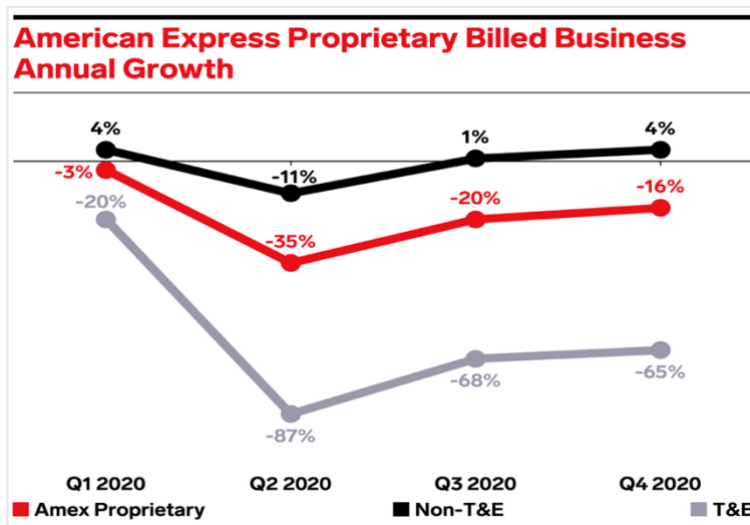


Figure 6: American Express Proprietary Billed Business Annual growth  
 Source: Nunez, Adriana. 2021. “Credit Card Issuers Anticipate Travel Bounceback with New Card Perks.” Emarketer.Com. Insider Intelligence. March 22, 2021.  
<https://www.emarketer.com/content/credit-card-issuers-anticipate-travel-bounceback-with-new-card-perks>.

<sup>16</sup> Ennis, Dan. 2020. “Deal of the Year: American Express Buys Kabbage.” Bankingdive.Com. December 9, 2020.  
<https://www.bankingdive.com/news/deal-of-year-kabbage-american-express-2020/589504/>.

<sup>17</sup> Surane, Jenny, and Bloomberg. 2020. “American Express Just Bought Most of Online Upstart Kabbage.” Fortune. August 17, 2020.  
<https://fortune.com/2020/08/17/american-express-bought-kabbage/>.

<sup>18</sup> Duberstein, Billy. 2020. “Want a Dow Jones Blue Chip? Try American Express.” The Motley Fool. August 22, 2020.  
<https://www.fool.com/investing/2020/08/22/want-a-dow-jones-blue-chip-try-american-express/>.

<sup>19</sup> Nunez, Adriana. 2021. “Credit Card Issuers Anticipate Travel Bounceback with New Card Perks.” Emarketer.Com. Insider Intelligence. March 22, 2021. <https://www.emarketer.com/content/credit-card-issuers-anticipate-travel-bounceback-with-new-card-perks>.

## Macroeconomic Environment

### Consumer Spending

The Covid-19 virus outbreak has caused a reduction in wages and a massive increase in unemployment rate. As a result, consumer spending and loan growth have declined significantly. In 2020, American spent about \$12.5 trillion on durable and non-durable goods and services, which is half a trillion less than the prior year.<sup>20</sup> However, it is worth mentioning that the personal consumption expenditures (PCE) increased 41% in the third quarter of 2020, followed by a 2.4% increase in the fourth quarter.<sup>21</sup> GDP for the fourth quarter also claimed a 4.3% increase, which follows a GDP increase of 33.4% in Q3 as businesses reopened.<sup>21</sup>

Figure 7 shows the year over year (YoY) percent change in income. As multiple stimulus checks have been distributed over the last year and this year March, overall disposable income will be supported that the overall after-tax income can keep growing strong into the first quarter. Going forward, particularly looking at YoY basis, disposable income will slowly get weakened as the stimulus will run out again in the second quarter. On the other hand, wage and salary growth will have a weak period as compared to disposable income growth. However, based on the assumption of mass availability of Covid-19 vaccine, a reverse dichotomy is likely to be observed in next year spring with the labor market improves and economic recovery, according to Moody’s Analytics. Yet, overall income growth is on the weak side as stimulus runs out.

February job report by the U.S. Labor Department shows the unemployment rate has fallen to 6.2% as compared to the pandemic-era high of 14.8%.<sup>22</sup> According to the graph by Moody’s Analytics in figure 8, a lot of job losses have been concentrated among low-income households. While roughly one third of the labor market are low wage tier, a little over half of the job losses since the start of the pandemic till October 2020 come from the low wage tier. By comparison, 25% of the labor market is in the high pay tier, but they only accounted for 10% of the job losses.



Figure 7: YoY Percent Change in Income  
 Source: “U.S. Consumer Credit Outlook: December 2020.” n.d. Moodyanalytics.Com. Accessed March 29, 2021. <https://www.moodyanalytics.com/webinars-on-demand/2020/us-consumer-credit-outlook-dec-2020>.

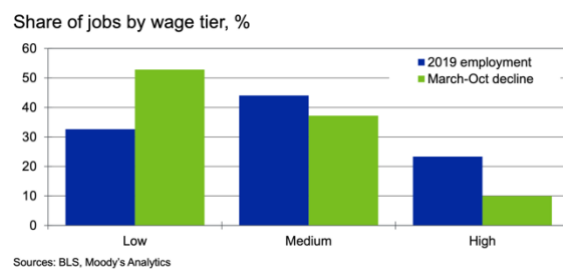


Figure 8: Share of jobs by wage tier (%)  
 Source: “U.S. Consumer Credit Outlook: December 2020.” n.d. Moodyanalytics.Com. Accessed March 29, 2021. <https://www.moodyanalytics.com/webinars-on-demand/2020/us-consumer-credit-outlook-dec-2020>.

<sup>20</sup> Mitterling, Thomas, Nirai Tomass, and Kelsey Wu. 2020. “The Decline and Recovery of Consumer Spending in the US.” Brookings. December 14, 2020. <https://www.brookings.edu/blog/future-development/2020/12/14/the-decline-and-recovery-of-consumer-spending-in-the-us/>.

<sup>21</sup> Amadeo, Kimberly. n.d. “Consumer Spending Increases 2.4% in Q4 2020.” Thebalance.Com. Accessed March 29, 2021. <https://www.thebalance.com/consumer-spending-trends-and-current-statistics-3305916>.

<sup>22</sup> McCormick, Emily. 2021. “February Jobs Report: Economy Adds 379,000 Payrolls, Unemployment Rate Falls to 6.2%.” Yahoo Finance. March 5, 2021. <https://finance.yahoo.com/news/february-jobs-report-labor-department-unemployment-pandemic-192526748.html>.

Synthesizing all information above, there are many signs indicating an improving economy and labor market, as well as an increase in consumer spending. Roughly 57% of last year’s total revenue net interest expense were derived from discount revenue, where consumer spending is the main driver for revenue growth. In addition, as the customer base of American Express is skewed more heavily towards affluent consumers and business customers, it provides the company a defensive characteristic to the pandemic-induced unemployment. From both perspectives, the information suggests a positive outlook.

### Interest Rates & Net Interest Margin

The Federal Reserve (Fed) has been keeping the federal funds rate low, at a target range of 0% to 0.25% to further spur the economy. While the federal funds rate is the rate that banks charge one another for short-term lending, it can still impact the interest rates consumers pay depending on the types of credit. American Express has both the elements of a bank by providing loans and credit cards and a payments processor by processing transactions. A lower interest rate can affect the company’s interest income on loans negatively as the net interest margin decreases. As a result of the Fed cutting rate to nearly zero, American Express’ net interest income has declined 13.5% on a YoY basis. (Refer to [Appendix 1](#) for more information)

For the past few months, yield curves started to steepen as U.S. 10-year treasury rises, indicating potential growth in net margin revenue for the upcoming quarters. (Refer to [Appendix 3](#) for yield curves graph) About 27% of total revenue net interest expense were derived from interest income on loans, showing that an increase in net interest margin can improve a good portion of the company’s earnings.

### Loan Reserve & Delinquencies

As the economic conditions are improving, there are fewer bankruptcies and defaults, which then leads to fewer credit losses. Owing to this, lower-than-expected loan defaults are allowing financial services companies to reverse expenses charged earlier in the year as loan loss reserves, which explains why the EPS increase dramatically in the graph. In addition, delinquency rates are below the level prior to the pandemic and at a historical low.<sup>23</sup>

In the fourth quarter of 2020, American Express decreased 111% of its provision for credit losses versus Q4 2020 and lower net write-offs from \$781 million to \$563 million.<sup>24</sup> Not only this would further improve the profitability of American Express, but also reduce the company’s risk. It also shows a greater possibility of new loans going to lower risk customers.



Figure 9: Loan Reserve and EPS  
 Source: “Financial Services Industry Outlook.” n.d. Rsmus.Com. Accessed March 29, 2021. <https://rsmus.com/what-we-do/industries/financial-services/industry-outlook-financial-services.html>.

<sup>23</sup> “U.S. Consumer Credit Outlook: December 2020.” n.d. Moodysanalytics.Com. Accessed March 29, 2021. <https://www.moodysanalytics.com/webinars-on-demand/2020/us-consumer-credit-outlook-dec-2020>.

<sup>24</sup> “American Express 2020 Q4 Presentation”. Accessed March 29, 2021b. [https://s26.q4cdn.com/747928648/files/doc\\_financials/2020/q4/Q4-20-Earnings-Presentation.pdf](https://s26.q4cdn.com/747928648/files/doc_financials/2020/q4/Q4-20-Earnings-Presentation.pdf).

## Financial Analysis

American Express' income projections are built based on the assumptions of a positive economic outlook and mass availability of Covid-19 Vaccine. The income statement is shown in [Appendix 1](#) with the income projections for the next three years. The projected revenue and EPS for 2021 and 2022 are very close to the consensus estimate.

Overall, non-interest revenues which include discounted revenue, net card fees, other fees and commission like T&E, and other non-interest revenue are expected to grow in the next three years as a result of the market expansion in China and economic recovery are likely to improve the revenue. Additionally, increasing digital payment solutions and steepening of yield curves can further drive the growth in interest income on loans. Similarly, provision for losses is expected to reduce over the next three years as the economy is improving and that the delinquency rates are below the pre-pandemic level. On the other hand, due to the spend-centric model, American Express is anticipated to have higher expenses for marketing and rewards programs in response to the increase in demand as the company expands its footprint around the world and to different markets.

Using the assumptions above, the income from 2021 to 2022 is projected to be \$5,208 and \$7,065 in millions, with EPS of \$6.53 and \$8.94 respectively, where consensus estimate suggests earnings per share of \$6.55 in 2021 and \$8.99 in 2022. Figure 10 presents the projected income in 10 years, where income growth slowly is likely to contract after the recovery stage from 2021 to 2023 and remain steady as the company grows.

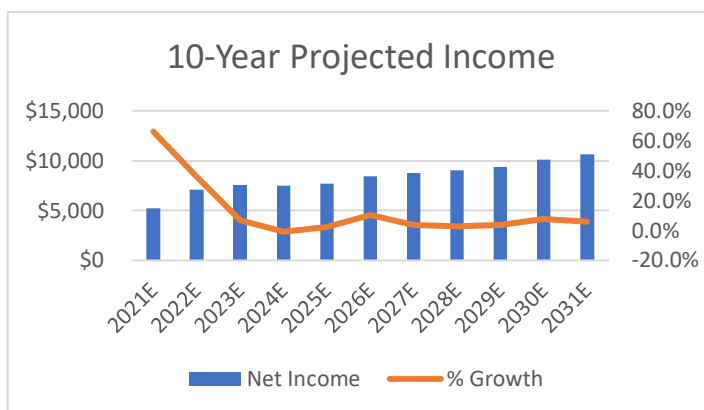


Figure 10: 10-Year Projected Income

## Performance in 2020

American Express reported earnings of \$1.4 billion, or \$1.76 per share, in the fourth quarter of 2020, down 15 percent from \$1.7 billion on a YoY basis. Q4 consolidated total revenues net of interest expense were \$9.4 billion, compared with total revenues of \$11.4 billion. The reduction was mainly contributed by declines in Card Member spending and the discount rate on average compared to the prior year. Consolidated expenses were down 9% from \$7.6 billion and \$8.4 billion, which reflected lower customer engagement costs due to low spending and usage of travel-related benefits by Card Members. In addition, a loan reserve release of \$674 million due to improving economy and strong credit performance drove a \$111 million benefit in the fourth quarter in consolidated provisions of credit losses. By business segments, GMNS's net income fell 21%, followed by a 20% decrease in GCS's earnings and a 14% decrease in net income of GCSG, where the decline in Card Member spending is the main reason causing the loss. Despite that, American Express outperformed in the fourth quarter, compared to the financials sector as a whole. American Express reflected a growth of 34% in Q4 compared to Q3's net income, indicating a positive sign of recovery in consumer spending. This was mainly contributed by an 11% increase in discount revenue and improvement in customers' credit condition.



## Key Financial Ratios

	Quarterly Revenue Growth (YoY)	Quarterly Earnings Growth (YoY)	Operating Margin	Forward Annual Dividend Yield	Return on Equity (TTM)
American Express	-8.50%	-15.10%	14.07%	1.21%	13.61%
Visa	-6.10%	-4.50%	64.97%	0.60%	29.39%
Mastercard	-6.70%	-15.00%	53.34%	0.48%	102.51%
PayPal	23.30%	209.10%	15.98%	-	22.72%

Source: Yahoo Finance

The table above shows different financial ratios, margins, and growth from American Express' competitors. While these companies have different business models, they all compete in the credit card industry. The table above shows that American Express, Visa, and Mastercard suffered losses due to the pandemic-induced recession, where, by comparison, PayPal's Q4 income is up 209.10% on a YoY basis as the company gained customer demand for digital payments. American Express has the lowest operating margin among its competitors. As compared to the prior year, American Express' operating margin decreased more than 50%, which primarily reflected a decline in revenue. The return on equity (ROE) for American Express also declined 43.6% compared to the prior year. However, American Express has the highest forward annual dividend yield among its competitors, which might indicate a good long-term investment as the dividend policy of a company is generally fixed in long run, though a higher yield is often associated with greater risk.

## Valuation and Price Target

### Valuation Multiples

	Price	Market Cap (\$B)	P/E	P/B	P/S	PEG
American Express	\$ 142.37	\$ 115.48	38.12	5.02	3.32	0.91
Visa	\$ 214.51	\$ 470.80	44.03	13.42	22	1.81
MasterCard	\$ 362.91	\$ 352.91	55.77	55.22	23.36	1.63
PayPal	\$ 235.67	\$ 285.50	68.86	14.26	13.49	2.47
Average			51.70	21.98	15.54	1.71

Source: Yahoo Finance (As of Mar 29, 2021)

As of Mar 29, 2021, American Express is priced at \$142.37 per share with a trailing P/E ratio of 38.12. By comparison, the average trailing P/E multiple of its competitors is 51.70, where according to Fidelity, the consumer finance industry's trailing P/E multiple is at 21.07. The trailing P/E ratio of American Express is at an all-time high, which reflects a decline in earnings in 2020. On the other hand, the P/B ratio of American Express is much lower than the average of its competitors. The price-to-book value is a good measure for asset-heavy companies like financial institutions as their book value would often resemble market value. Thus, the low P/B multiple compared to its main competitors could potentially signify the company is undervalued. The price-to-sales ratio of American Express is also lower than the average of its peers, suggesting a value opportunity as investors are paying less for the company's revenue. Lastly, the price-earnings-to-growth ratio of American Express reflects the stock price might be undervalued as it is less than 1. By comparing the multiples to the average of its competitors, it is likely that American Express is priced less than its intrinsic value.

## Price Target

Using DCF model, American Express is anticipated to have a target price of \$173.68, suggesting a 22% upside compared to the market price of \$142.37 on Mar 29, 2021. This implies the stock price of American Express is undervalued. The model is built based on the assumptions that the growth rate would slow down after the recovery stage and that the expenses would rise over time as a percentage of revenue as the growth slows. For the past year, American Express's stock price dropped more than 45%, from \$134.90 to \$73.60 due to the virus outbreak. According to sell-side analysts, EPS is expected to grow 73.70% based on the anticipations of an improving economy and more vaccines rolling out around the world, which would encourage more consumer and travel-related spending. This outlook would indicate higher interest rates, better credit performance, and a significant rebound from 2020 income with strong momentum in 2022. (Refer to [Appendix 2](#) for DCF Model)

Sensitivity Analysis		Terminal Discount Rate					
	\$173.68	7.5%	8.0%	8.5%	9.0%	9.5%	10.0%
<b>Terminal Growth Rate</b>	<b>3.3%</b>	\$232.49	\$207.14	\$186.66	\$169.76	\$155.58	\$143.52
	<b>3.4%</b>	\$236.54	\$210.23	\$189.07	\$171.68	\$157.14	\$144.80
	<b>3.5%</b>	\$240.78	\$213.46	\$191.58	<b>\$173.68</b>	\$158.75	\$146.12
	<b>3.6%</b>	\$245.24	\$216.83	\$194.20	\$175.75	\$160.42	\$147.48
	<b>3.7%</b>	\$249.94	\$220.36	\$196.92	\$177.90	\$162.14	\$148.88

In the DCF model, the target price is calculated based on a discount rate of 9% and a terminal growth rate of 3.5%. According to the high-risk and low-risk scenarios, the estimate of the cost of equity ranges from 7.5% to 10%. Based on the sensitivity analysis, it illustrates an implied equity price ranges from \$143.52 to \$249.94.

## Risks

### Weaker-than-expected Spend Growth

Although the current economic outlook is positive, a weaker-than-expected spend growth can have a material adverse effect on the company's earnings. American Express is very dependent upon the level of consumer spending and business activity and the demand for financial products and services. As American Express derives a good portion of its revenues from travel-related spending, its business is sensitive to health and safety concerns related to travel and tourism. As a result of the virus outbreak, travel restrictions and bans might still remain in place even after the outbreak has subsided, which could further impact spending. In addition, disruptions due to the pandemic in air travel and other forms of travel can cause an increase in claim payments under American Express' travel interruption insurance policies.

### Increased Competition

Apart from its main competitors, Visa and Mastercard, American Express is facing competition from the financial technology industry. Due to the pandemic, there is a shift in customer demand where there is an increase in consumer usage of credit cards and debit cards on other networks and adoption of alternative payment products and systems for convenience with technological solutions. Besides, the competitive



value of its closed-loop data can also diminish as competitors could adopt new data sources and technologies to obtain similar insights. To the extent American Express expands into new business areas and regions, such as China, not only that the company would face high competition, but also there is a possibility that the company will face additional regulation and compliance and regulatory risks, which in this case, would be required to dedicate more expense, time, and resources. In addition, maintaining attractive cobrand and partnership can be very competitive among card issuers and networks and that there is no assurance in whether the partnerships will remain as profitable given the disruptions of the pandemic and the current state of the economy.

## Conclusion

American Express is a high-risk business due to its cyclical nature. Despite that, its defensive characteristics help lower the risk against its cyclicity by having several revenue streams and a diverse customer base. On top of that, owing to its business expansion and the positive economic outlook, American Express' income growth and near-term prospects look promising. Combining the information above suggests that there is a significant upside in American Express shares.

American Express is the first foreign network to launch in China. It reflects an opportunity for the company to further grow and expand its footprint and gain access to the \$27 trillion mobile payment market. In addition, the expansion in China could potentially lead to a much larger addressable market given the population of 1.44 billion people in China. Besides that, the acquisition of Kabbage and its recent automated accounts payable solution – American Express One AP™ – can allow the company to compete with other fintech companies in response to the increasing demand for digital payments and financial solutions.

The positive macroeconomic outlook mainly comes from the mass availability of Covid-19 vaccine and stimulus package from the government. On top of that, the improvement in GDP and unemployment rate also contribute to the optimistic outlook. This means that we are likely to see a spike in consumer spending and travel-related spending. In addition to that, net interest margin is increasing due to the rising 10-year US treasury yield, although interest rates remain low. The improving economic condition also leads to a better credit performance, allowing the company to reduce its provisions for credit losses and reverse its loan reserve. Synthesizing all of the upsides reflects a potential revenue growth that was restrained by the decline in Card Members spending and low average discount rate last year.

In the fourth quarter of 2020, American Express outperformed the financials sector and reported 34% growth of net income compared to the third quarter as consumer spending increased when businesses reopened. When comparing American Express to its peers, the company seems to endure more losses. However, the company has the highest forward annual dividend yield among its peers, which could be an indication of a good long-term investment. Using DCF model, we derive a 22% upside of implied equity price of \$173.68. In addition, the less-than-1 price earning-to-growth ratio of American Express also implies the stock is undervalued.

Overall, American Express has a strong position for growth as high-end spending is likely to rebound sharply and the pent-up travel demand can potentially be the “unprecedented catalyst” in the second half of the year. Also, as the business expands, we believe we can see a significant upside in the American Express shares over time. In conclusion, all information above suggests a buy recommendation with a target price of \$173.68 and an implied upside of 22%.



## Appendix 1: Income Statement

### Income Statement

	FY 2023E	FY 2022E	FY 2021E	FY 2020	FY 2019	FY 2018	FY 2017	FY 2016
<b>Non-interest revenues</b>								
Discounted revenue	\$28,401	\$25,820	\$22,849	\$20,401	\$26,167	\$24,721	\$22,890	\$22,377
Net card fees	\$6,478	\$6,054	\$5,504	\$4,664	\$4,042	\$3,441	\$3,090	\$2,886
Other fees and commissions	\$3,482	\$3,109	\$2,487	\$2,163	\$3,297	\$3,153	\$2,990	\$2,718
Other	\$1,704	\$1,432	\$1,224	\$874	\$1,430	\$1,360	\$1,457	\$1,678
<b>Total non-interest revenues</b>	<b>\$40,065</b>	<b>\$36,414</b>	<b>\$32,064</b>	<b>\$28,102</b>	<b>\$34,936</b>	<b>\$32,675</b>	<b>\$30,427</b>	<b>\$29,659</b>
<b>Interest income</b>								
Interest on loans	\$12,477	\$11,241	\$10,219	\$9,779	\$11,308	\$9,941	\$8,148	7,214
Interest and dividends on investment securities	\$237	\$175	\$146	\$127	\$188	\$118	\$89	131
Deposits with banks and other	\$684	\$570	\$407	\$177	\$588	\$547	\$326	139
<b>Total interest income</b>	<b>\$13,398</b>	<b>\$11,986</b>	<b>\$10,772</b>	<b>\$10,083</b>	<b>\$12,084</b>	<b>\$10,606</b>	<b>\$8,563</b>	<b>\$7,484</b>
<b>Interest expense</b>								
Deposits	\$2,181	\$1,745	\$1,396	\$943	\$1,559	\$1,287	\$779	598
Long-term debt and other	\$2,692	\$2,281	\$1,825	\$1,155	\$1,905	\$1,656	\$1,333	1,107
<b>Total interest expense</b>	<b>\$4,872</b>	<b>\$4,026</b>	<b>\$3,221</b>	<b>\$2,098</b>	<b>\$3,464</b>	<b>\$2,943</b>	<b>\$2,112</b>	<b>\$1,705</b>
Net interest income	\$8,526	\$7,960	\$7,552	\$7,985	\$8,620	\$7,663	\$6,451	\$5,779
<b>Total revenues net of interest expense</b>	<b>\$48,591</b>	<b>\$44,375</b>	<b>\$39,615</b>	<b>\$36,087</b>	<b>\$43,556</b>	<b>\$40,338</b>	<b>\$36,878</b>	<b>\$35,438</b>
	<i>Consensus</i>	<b>Unknown</b>	<b>\$44,370</b>	<b>\$39,600</b>				
<b>Provisions for losses</b>								
Charge Card	\$1,003	\$984	\$964	\$1,015	\$963	\$937	\$795	696
Card member loans	\$2,515	\$2,465	\$2,417	\$3,453	\$2,462	\$2,266	\$1,868	1,235
Other	\$150	\$147	\$144	\$262	\$148	\$149	\$97	96
<b>Total provisions for losses</b>	<b>\$3,668</b>	<b>\$3,596</b>	<b>\$3,525</b>	<b>\$4,730</b>	<b>\$3,573</b>	<b>\$3,352</b>	<b>\$2,760</b>	<b>\$2,027</b>
<b>Total revenues net of interest expense after provisions for loss</b>	<b>\$44,923</b>	<b>\$40,779</b>	<b>\$36,090</b>	<b>\$31,357</b>	<b>\$39,983</b>	<b>\$36,986</b>	<b>\$34,118</b>	<b>\$33,411</b>
<b>Expenses</b>								
Marketing and business development	\$7,637	\$7,340	\$7,218	\$6,747	\$7,114	\$6,470	\$5,722	\$6,249
Card Member rewards	\$12,578	\$10,195	\$8,662	\$8,041	\$10,439	\$9,696	\$8,687	\$7,819
Card Member services	\$2,246	\$1,835	\$1,444	\$1,230	\$2,222	\$1,777	\$1,392	\$1,100
Salaries and employee benefits	\$6,514	\$6,117	\$6,135	\$5,718	\$5,911	\$5,250	\$5,258	\$5,259
Other,net	\$6,514	\$6,117	\$5,594	\$5,325	\$5,868	\$5,671	\$5,634	\$4,942
<b>Total Expenses</b>	<b>\$35,489</b>	<b>\$31,604</b>	<b>\$29,052</b>	<b>\$27,061</b>	<b>\$31,554</b>	<b>\$28,864</b>	<b>\$26,693</b>	<b>\$25,369</b>
<b>Pretax income</b>	<b>\$9,434</b>	<b>\$9,175</b>	<b>\$7,038</b>	<b>\$4,296</b>	<b>\$8,429</b>	<b>\$8,122</b>	<b>\$7,425</b>	<b>\$8,042</b>
Income tax provision	\$1,887	\$2,110	\$1,830	\$1,161	\$1,670	\$1,201	\$4,677	2,667
<b>Net income</b>	<b>\$7,547</b>	<b>\$7,065</b>	<b>\$5,208</b>	<b>\$3,135</b>	<b>\$6,759</b>	<b>\$6,921</b>	<b>\$2,748</b>	<b>\$5,375</b>
<b>Earnings per Common Share</b>								
Basic (in dollars per share)	\$9.66	\$8.95	\$6.53	\$ 3.77	\$ 8.00	\$ 7.93	\$ 3.00	\$ 5.63
Diluted (in dollars per share)	\$9.65	\$8.94	\$6.53	\$ 3.77	\$ 7.99	\$ 7.91	\$ 2.99	\$ 5.61
	<i>Consensus</i>	<b>Unknown</b>	<b>\$8.99</b>	<b>\$6.55</b>				
	<i>Guidance</i>			<b>Unknown</b>				
<b>Average common shares outstanding for earnings per common share:</b>								
Basic	781	789	797	805	828	856	883	933
Diluted	782	790	798	806	830	859	886	935
% buyback from prior year	-1%	-1%	-1%	-3%	-3%	-3%	-5%	
<b>Expenses as % of Sales</b>								
Marketing and business development	17.0%	18.0%	20.0%	18.7%	16.3%	16.0%	15.5%	17.6%
Card Member rewards	28.0%	25.0%	24.0%	22.3%	24.0%	24.0%	23.6%	22.1%
Card Member services	5.0%	4.5%	4.0%	3.4%	5.1%	4.4%	3.8%	3.1%
Salaries and employee benefits	14.5%	15.0%	17.0%	15.8%	13.6%	13.0%	14.3%	14.8%
Other,net	14.5%	15.0%	15.5%	14.8%	13.5%	14.1%	15.3%	13.9%
<b>Tax Rate</b>	<b>20.0%</b>	<b>23.0%</b>	<b>26.0%</b>	<b>27.0%</b>	<b>19.8%</b>	<b>14.8%</b>	<b>63.0%</b>	<b>33.2%</b>

## Appendix 2: DCF Model

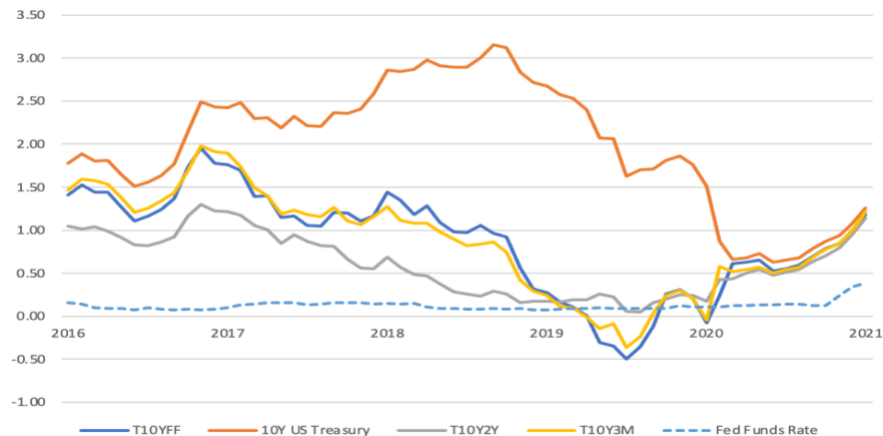
Analyst: Sydney Tan  
Date: 03/30/21  
Terminal Discount Rate: 9.0%  
Terminal FCF Growth: 3.5%

Year	2021E	2022E	2023E	2024E	2025E	2026E	2027E	2028E	2029E	2030E	2031E
<b>Non-Interest Revenues</b>	\$32,064	\$36,414	\$40,065	\$43,270	\$46,516	\$49,772	\$52,758	\$55,924	\$59,279	\$62,658	\$66,229
% Growth		13.6%	10.0%	8.0%	7.5%	7.0%	6.0%	6.0%	6.0%	5.7%	5.7%
<b>Interest Income</b>	\$10,772	\$11,986	\$13,398	\$14,496	\$15,350	\$16,425	\$16,883	\$17,896	\$18,969	\$20,051	\$21,193
% Non-Interest Revenue	33.6%	32.9%	33.4%	33.5%	33.0%	33.0%	32.0%	32.0%	32.0%	32.0%	32.0%
<b>Interest Expense</b>	\$3,221	\$4,026	\$4,872	\$4,760	\$5,117	\$5,226	\$5,540	\$5,872	\$6,224	\$6,579	\$6,954
% Non-Interest Revenue	10.0%	11.1%	12.2%	11.0%	11.0%	10.5%	10.5%	10.5%	10.5%	10.5%	10.5%
<b>Provision for losses</b>	\$3,525	\$3,596	\$3,668	\$3,755	\$4,021	\$4,303	\$4,387	\$4,651	\$4,930	\$4,962	\$5,245
% Sales	8.2%	7.4%	6.9%	6.5%	6.5%	6.5%	6.3%	6.3%	6.3%	6.0%	6.0%
<b>Expenses</b>	\$29,052	\$31,604	\$35,489	\$38,703	\$41,450	\$44,352	\$46,659	\$49,828	\$52,818	\$55,828	\$59,010
% Sales	67.8%	65.3%	66.4%	67.0%	67.0%	67.0%	67.0%	67.5%	67.5%	67.5%	67.5%
<b>Income Tax Provision</b>	\$1,830	\$2,110	\$1,887	\$3,061.59	\$3,606.78	\$3,859.25	\$4,276.63	\$4,448.34	\$4,920.25	\$5,260.25	\$5,560.08
Tax Rate	26.0%	23.0%	20.0%	20.0%	22.0%	22.0%	23.0%	23.0%	24.0%	24.0%	24.0%
<b>Net Income</b>	\$5,208	\$7,065	\$7,547	\$7,487	\$7,671	\$8,457	\$8,778	\$9,020	\$9,356	\$10,078	\$10,653
% Growth		66.1%	35.7%	6.8%	-0.8%	2.5%	10.2%	3.8%	2.8%	3.7%	5.7%

Assumption: Net Income = Free Cash Flow

<b>Free Cash Flow</b>	\$5,208	\$7,065	\$7,547	\$7,487	\$7,671	\$8,457	\$8,778	\$9,020	\$9,356	\$10,078	\$10,653
<b>NPV of Cash Flows</b>	\$53,906	39%									
<b>NPV of terminal value</b>	\$84,680	61%									
<b>Projected Equity Value</b>	\$138,586	100%									
<b>Free Cash Flow Yield</b>	4.6%										
										<b>Terminal Value</b>	\$200,467
										<b>Free Cash Yield</b>	5.3%
										<b>Terminal P/E</b>	18.8
<b>Current P/E</b>	21.8	16.1	15.1							<b>Terminal EV/EBITDA</b>	6.4
<i>Projected P/E</i>	26.6	19.6	18.4								
<b>Current EV/EBITDA</b>	6.8	5.6	5.2								
<i>Projected EV/EBITDA</i>	8.6	7.1	6.6								
<b>Shares Outstanding</b>	798										
<b>Current Price</b>	\$142.37										
<b>Implied equity value/share</b>	\$173.68										
<b>Upside/(Downside) to DCF</b>	22%										

## Appendix 3: Yield Curves



## References

- Amadeo, Kimberly. n.d. "Consumer Spending Increases 2.4% in Q4 2020." Thebalance.Com. Accessed March 29, 2021. <https://www.thebalance.com/consumer-spending-trends-and-current-statistics-3305916>.
- "American Express Co SWOT Analysis." 2020. American Express Company SWOT Analysis, October, 1–7. <http://search.ebscohost.com.proxy.lib.ohio-state.edu/login.aspx?direct=true&db=bth&AN=147261226&site=ehost-live>
- "American Express Company." Encyclopedia Britannica. Encyclopedia Britannica, inc. Accessed March 5, 2021. <https://www.britannica.com/topic/American-Express-Company>.
- American Express Co. Form 10-k 2018. New York, NY: American Express Co. 2018.
- American Express Co. Form 10-k 2020. New York, NY: American Express Co. 2020.
- "American Express." n.d. Americanexpress.Com. Accessed March 28, 2021. <https://www.americanexpress.com/en-us/business/payment-solutions/accounts-payable-automation/>
- "American Express Company (AXP) Company Profile & Facts," Yahoo! Finance (Yahoo!, March 5, 2021), <https://finance.yahoo.com/quote/AXP/profile?p=AXP>.
- Chen, Lulu Yilun. 2020. "AmEx Wins Clearing License for China's \$27 Trillion Market." Bloomberg Quint. June 13, 2020. <https://www.bloomberquint.com/global-economics/amex-wins-card-clearing-license-for-china-s-27-trillion-market>.
- Duberstein, Billy. 2020. "Want a Dow Jones Blue Chip? Try American Express." The Motley Fool. August 22, 2020. <https://www.fool.com/investing/2020/08/22/want-a-dow-jones-blue-chip-try-american-express/>.
- Ennis, Dan. 2020. "Deal of the Year: American Express Buys Kabbage." Bankingdive.Com. December 9, 2020. <https://www.bankingdive.com/news/deal-of-year-kabbage-american-express-2020/589504/>.
- "Financial Services Industry Outlook." n.d. Rsmus.Com. Accessed March 29, 2021. <https://rsmus.com/what-we-do/industries/financial-services/industry-outlook-financial-services.html>.
- León, Riley de. 2020. "American Express Acquiring Small Business Lender Kabbage." CNBC. August 17, 2020. <https://www.cnbc.com/2020/08/17/american-express-acquiring-small-business-lender-kabbage.html>.
- McCormick, Emily. 2021. "February Jobs Report: Economy Adds 379,000 Payrolls, Unemployment Rate Falls to 6.2%." Yahoo Finance. March 5, 2021. <https://finance.yahoo.com/news/february-jobs-report-labor-department-unemployment-pandemic-192526748.html>.
- Milena and \*, "Global Credit Card Market Share in 2021," Balancing Everything, February 25, 2021, [PAGE], accessed March 07, 2021, <https://balancingeverything.com/credit-card-market-share/>
- Mitterling, Thomas, Nirai Tomass, and Kelsey Wu. 2020. "The Decline and Recovery of Consumer Spending in the US." Brookings. December 14, 2020. <https://www.brookings.edu/blog/future-development/2020/12/14/the-decline-and-recovery-of-consumer-spending-in-the-us/>.
- Nunez, Adriana. 2021. "Credit Card Issuers Anticipate Travel Bounceback with New Card Perks." Emarketer.Com. Insider Intelligence. March 22, 2021. <https://www.emarketer.com/content/credit-card-issuers-anticipate-travel-bounceback-with-new-card-perks>.



Research And Markets, "Global Cards & Payments Market Report 2021: A \$671.73 Billion Industry in 2020 - Major Players Are American Express, Visa, Bank of America, PayPal and Mastercard," Global Cards & Payments Market Report 2021: A \$671.73 Billion Industry in 2020 - Major Players Are American Express, Visa, Bank of America, PayPal and Mastercard, February 26, 2021, [PAGE], accessed March 28, 2021, <https://www.prnewswire.com/news-releases/global-cards--payments-market-report-2021-a-671-73-billion-industry-in-2020---major-players-are-american-express-visa-bank-of-america-paypal-and-mastercard-301236425.html>

Surane, Jenny, and Bloomberg. 2020. "American Express Just Bought Most of Online Upstart Kabbage." Fortune. August 17, 2020. <https://fortune.com/2020/08/17/american-express-bought-kabbage/>.

"U.S. Consumer Credit Outlook: December 2020." n.d. Moodyanalytics.Com. Accessed March 29, 2021. <https://www.moodyanalytics.com/webinars-on-demand/2020/us-consumer-credit-outlook-dec-2020>.

"US Credit Card Market Share: Facts and Statistics," Fortunly, February 19, 2021, accessed March 07, 2021, <https://fortunly.com/blog/credit-card-market-share/>

Washington Post (Washington, D.C.: 1974). 2020. "AmEx May Find China Can Live Life without It," June 16, 2020. [https://www.washingtonpost.com/business/amex-may-find-china-can-live-life-without-it/2020/06/16/0685d03a-af96-11ea-98b5-279a6479a1e4\\_story.html](https://www.washingtonpost.com/business/amex-may-find-china-can-live-life-without-it/2020/06/16/0685d03a-af96-11ea-98b5-279a6479a1e4_story.html).

Yahoo Finance Video. 2021. "Credit Card Debt Is 13% below Pre-Pandemic High." Yahoo Finance. March 18, 2021. <https://finance.yahoo.com/video/credit-card-debt-13-below-193958378.html>.

N.d. Nasdaq.Com. Accessed March 29, 2021a. <https://www.nasdaq.com/articles/1-reason-ill-never-sell-american-express-2020-12-05>.

N.d. Q4cdn.Com. Accessed March 29, 2021b. [https://s26.q4cdn.com/747928648/files/doc\\_financials/2020/q4/Q4-20-Earnings-Presentation.pdf](https://s26.q4cdn.com/747928648/files/doc_financials/2020/q4/Q4-20-Earnings-Presentation.pdf).