



AMERICAN EXPRESS LONG REPORT

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American Express (NYSE: AXP) Financial | Credit Services

Key Statistics	
First Trading Date	May 18, 1977
52 Week Range	130.65 - 194.35
Market Cap	121.981B
Average Trading volume	3.19M
Basic Shares	0.751B
Diluted EPS	9.48
Profit Margin	14.83%
Forward PE	14
Beta (5Y Monthly)	1.2
Div. Yield (TTM)	2.4 (1.39%)
ROE	32.05%
Revenue Growth	8.7% (Quarterly)
Assets/Debt	4.608

Recommendation	Target Price	Current Price	Upside
BUY	236.49	147.10	43.9%

Business Performance:

- Added 9.7 million new proprietary cards.
- Grew worldwide network volumes by 24% versus the prior year, surpassing 2019 levels, with growth driven by consumer and small and mid-sized business spending.
- Sustained virtual parity coverage in the U.S., with approximately 99% of credit-card accepting merchants able to accept American Express, and remained committed to growing coverage globally, adding over 7 million merchant locations outside of the U.S.

Financial Results:

- Delivered \$42.4 billion in revenue.
- Total revenue for the year grew by 17% versus the prior year, reflecting momentum in Card Member spending and growth in card fees as Card Member acquisition increased and retention remained high.
- Diluted earnings per share (EPS) for the full year 2021 were \$10.02, up from \$3.77 the prior year.
- Return on equity (ROE) was 33.7% and returned \$9 billion of capital to our shareholders through both share repurchases and dividends.

Catalyst:

- American Express has teamed up with Microsoft to integrate AI technology into their services to improve customer experience by providing personalized and efficient services. Riding the AI catalyst trend American Express has been able to jump into the ride at an early stage with the AI focused market today.
- Berkshire Hathaway owns 20% of American Express stock, which is currently worth around \$15 billion. Buffett has long been a proponent of American Express and considers it a well-run company with a strong brand.

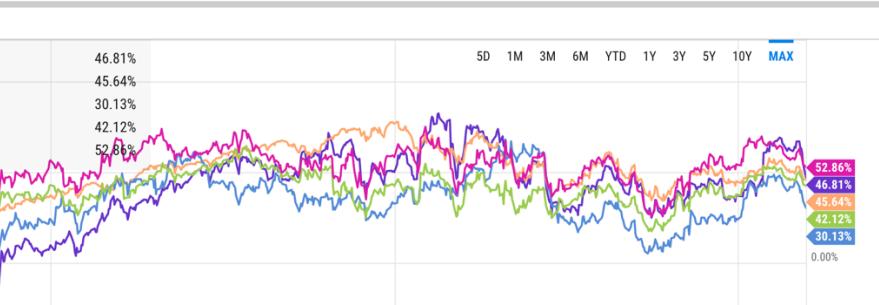


Figure 1: Total Returns vs Peers

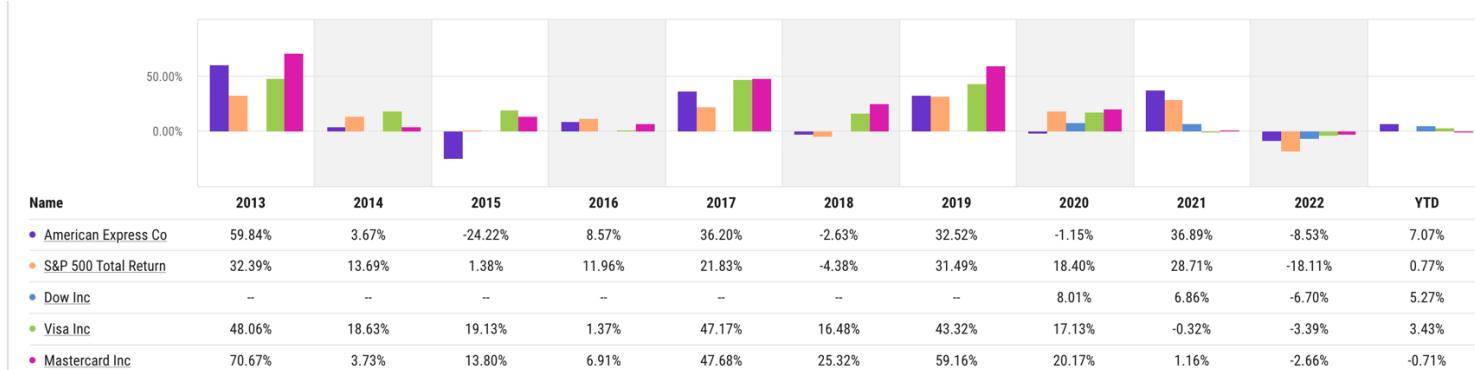


Figure 2: Annual Total Returns Versus Peers

1. EXECUTIVE SUMMARY

Leader in providing credit.

American Express is a globally integrated payments company, providing customers with access to products, insights and experiences that enrich lives and build business success.

They are a leader in providing credit and charge cards to consumers, small businesses, mid-sized companies and large corporations around the world.

Company's various products and services are offered globally to diverse customer groups through various channels, including mobile and online applications, affiliate marketing, customer referral programs, third-party service providers and business partners, direct mail, telephone, in-house sales teams and direct response advertising.

Winning business framework and sustainable future.

2021 performance has been the best in the company's history which were a result of the pre-planned strategies since the start of the pandemic. American Express significantly revved up the marketing investments to drive Card Member acquisitions, enhance our value propositions and attract new Card Members. They resumed the product refresh cycle with new cards targeting the US consumer and business sector along with acquisition of Millennial and Gen Z customers representing about 60 percent of the new consumer accounts they acquired globally in 2021.

The recovery of travel and entertainment are two additional tailwinds that present opportunities for them in the future. With an improving global economy, international consumer spending is poised to accelerate, even though it has recovered more slowly than U.S. consumer spending.

Numbers to look at.

American Express's debt to equity ratio has declined over the years from 3.06 in 2017 to 1.41 in summer 2021 and running 1.72 which are in line with the management's commitment to pronged capital allocation priorities: paying down debt, investing in business and paying dividends.

Return on Equity has increased significantly from 12.99% in Dec 2017 to 31.40% in Dec 2022.

Approval from Graham and Buffet.

American Express has a strong sustainable moat, steady growth, fair to low evaluation, competent management, strong financials, and a good track record of returning value to shareholders. The company's business is easy to understand – integrated payments company majorly in the segment of credit cards.

2. COMPANY OVERVIEW

2.1 History

In 1850, American Express was established as a freight forwarding company, building a solid reputation for reliable transportation of precious belongings entrusted to them.

Over time, American Express expanded their portfolio to encompass financial products and travel services that facilitated customers' daily needs during the late 1800s and early 1900s. In the 1950s, the company pioneered the introduction of a charge card, providing a novel and hassle-free mode of payment for their clients. Since then, American Express has continued to innovate a range of card products, services, and other offerings. Today, American Express stands as the world's largest payments network, committed to maintaining a forward-thinking approach and prioritizing the clients' needs.



Figure 3: Logo Changes

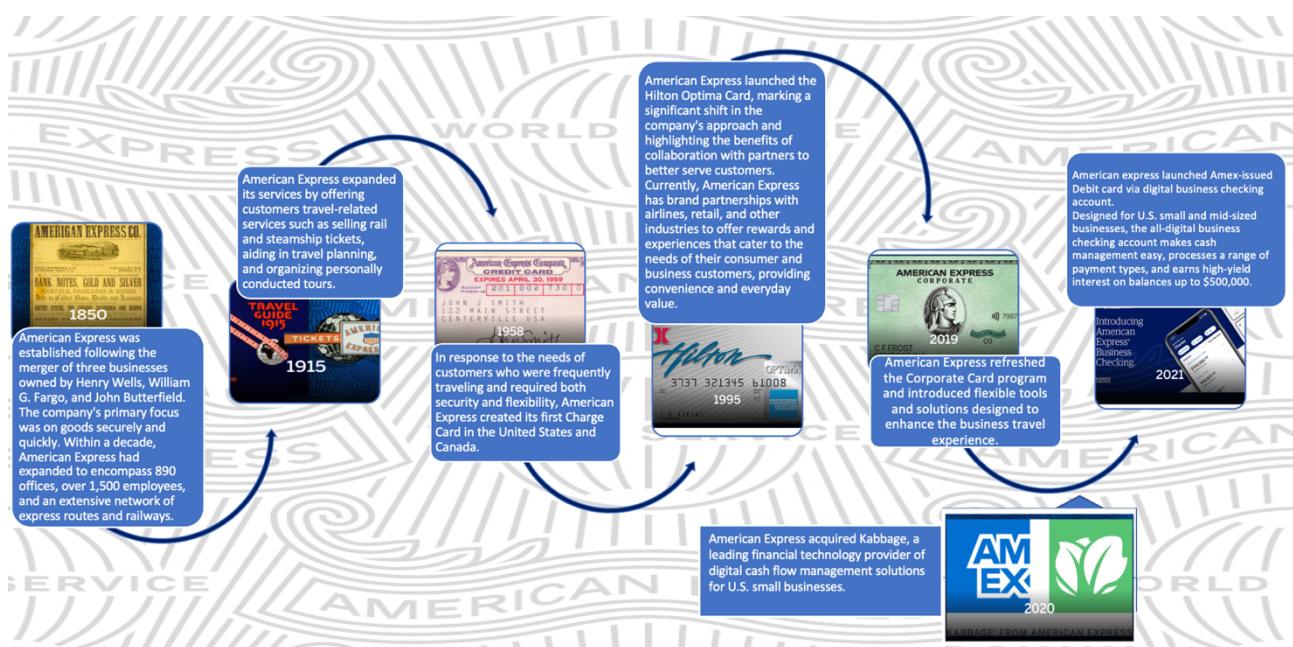


Figure 4: Important Events

Key Dates:

1850: American Express is founded by Henry Wells, William Fargo, and John Butterfield as an express delivery company in Buffalo, New York. The company delivers goods, valuables, and mail between Buffalo and New York City.

1882: American Express launches its money order business, which allows customers to send and receive money safely and quickly. The service becomes popular among immigrants and people who do not have access to traditional banking services.

1891: American Express launches its traveler's cheque business, which revolutionizes the way people travel and make purchases abroad. Traveler's cheques are a secure and convenient alternative to carrying cash, and they are widely accepted by merchants and banks around the world.

1958: American Express issues its first credit card, called the American Express Card. The card is initially targeted at business travelers and offers travel-related benefits and services.

1960: American Express introduces the first charge card, called the American Express Charge Card. Unlike credit cards, charge cards require the balance to be paid in full each month.

1977: American Express introduces the Platinum Card, aimed at high-spending customers. The card offers premium benefits and services, such as access to airport lounges, concierge services, and travel insurance.

1984: American Express introduces the Optima card, its first revolving credit card. Revolving credit cards allow customers to carry a balance from month to month, and they become increasingly popular among consumers.

1999: American Express launches its Blue card, which offers rewards and benefits for young adults. The card features a low annual fee and a rewards program that allows customers to earn points on their purchases.

2009: American Express becomes a bank holding company in order to access funds from the Troubled Asset Relief Program (TARP). The move allows American Express to receive \$3.4 billion in government funds during the financial crisis.

2018: American Express acquires the restaurant reservation platform Resy. The acquisition is part of American Express's strategy to expand its presence in the dining and hospitality industry.

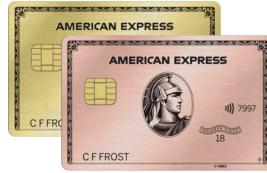
2020: American Express announces a \$1 billion investment in its digital capabilities to better compete with fintech companies. The investment includes upgrades to the company's mobile app, online services, and digital payments platform.

2.2 Products in Service



Platinum Card® from American Express

- American Express Global Lounge Collection®‡
- Platinum Travel Service‡



American Express® Gold Card

- Restaurants
- U.S. Supermarkets
- Everyday Purchases



Blue Cash Everyday® Card from American Express

- U.S. Supermarkets
- U.S. Online Retail Purchases
- U.S. Gas Stations
- No Annual Fee^x



American Express® Green Card



American Express Cash Magnet® Card



Blue Cash Preferred® Card from American Express



The Delta SkyMiles® Reserve American Express Card



The Delta SkyMiles® Platinum American Express Card



The Delta SkyMiles® Gold American Express Card



The Delta SkyMiles® Blue American Express Card



Marriott Bonvoy Brilliant® American Express® Card



Marriott Bonvoy Bevy™ American Express® Card



Hilton Honors American Express Aspire Card



Hilton Honors American Express Surpass® Card



Amex EveryDay® Credit Card



Amex EveryDay® Preferred Credit Card



Hilton Honors American Express Card

Figure 5: Products

2.3 Business Overview

American Express are a globally integrated payments company with three reportable operating segments: Global Consumer Services Group (GCSG), Global Commercial Services (GCS) and Global Merchant and Network Services (GMNS). Corporate functions and certain other businesses and operations are included in Corporate & Other.

Their range of products and services includes:

- Credit card, charge card, banking and other payment and financing products
- Merchant acquisition and processing, servicing and settlement, and point-of-sale marketing and information products and services for merchants
- Network services
- Other fee services, including fraud prevention services and the design and operation of customer loyalty programs.
- Expense management products and services
- Travel and lifestyle services

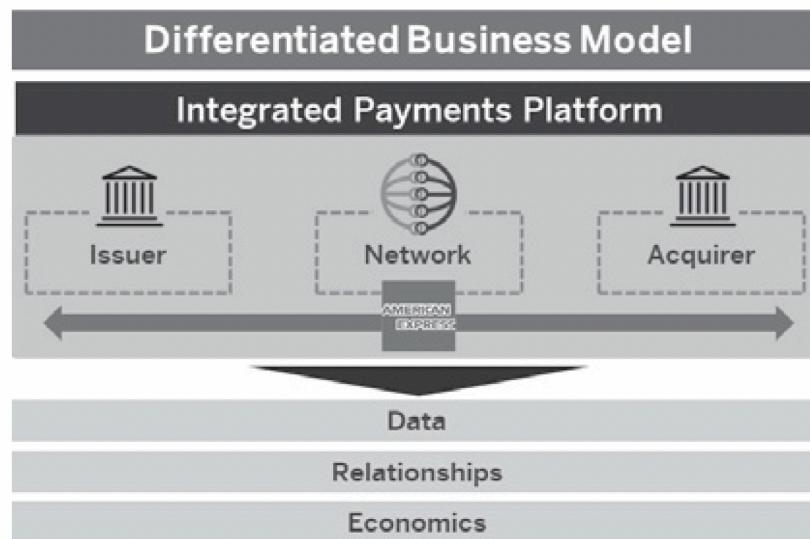


Figure 6: Business Model

American Express has 3 major business pillars: general-purpose card-issuing, merchant-acquiring and card network businesses through which they connect participants and provide differentiated value across the commerce path.

American Express sets its model apart from the bankcard networks in a unique way where the company has formed a closed loop system in which the firm have direct access to information on both the ends of the card transaction. The company uses this close loop design to maintain direct relationships with both the Card Members (as a card issuer) and merchants (as an acquirer) and handle all key aspects of those relationships which give them more control on all processes.

The closed loop framework allows the company to better analyze information on Card Member spending and build algorithms and other analytical tools that they use to underwrite risk, fraud detection mechanisms and provide targeted marketing and other information services for merchants and special offers and services to Card Members, all while respecting Card Member preferences and protecting Card Member and merchant data in compliance with applicable policies and legal requirements. Through the contractual segment of the business the company get information from third-party card issuers, merchant acquirers, aggregators and processors with whom we do business.

(i) Card Issuing Business

Global Consumer Services Group (GCSG) and Global Commercial Services (GCS) carry out the card issuing business segment of American Express. Through constant progress in designing new and innovative products and features, incentive and reward mechanism, digital payment platforms and wide relations, the company has acquired and retained creditworthy card members on its platform.

For the year ended December 31, 2021, worldwide billed business (spending on American Express cards) was **\$1.1 trillion** and on December 31, 2021, there were **71.4 million** proprietary cards-in-force worldwide.

(ii) Merchant Acquiring Business

Global Merchant and Network Services (GMNS) builds and manages relations with merchants globally. GMNS also provides fraud-prevention tools, marketing solutions, data analytics and other programs and services to merchants and other partners in business with American Express.

(iii) Card Network Business

For the year ended December 31, 2021, worldwide network services processed volume (spending on American Express cards issued by third parties) was **\$194.4 billion** and on December 31, 2021, the company had **50.3 million** cards-in-force issued by third parties worldwide.

2.4 Industrial Analysis

Payment processing value chain/Understanding the credit card business:

The credit card processing value chain includes the companies that generate revenue directly off a credit card transaction. Sometimes all the companies are known as payment processors as a general term, however, they each have very different roles.

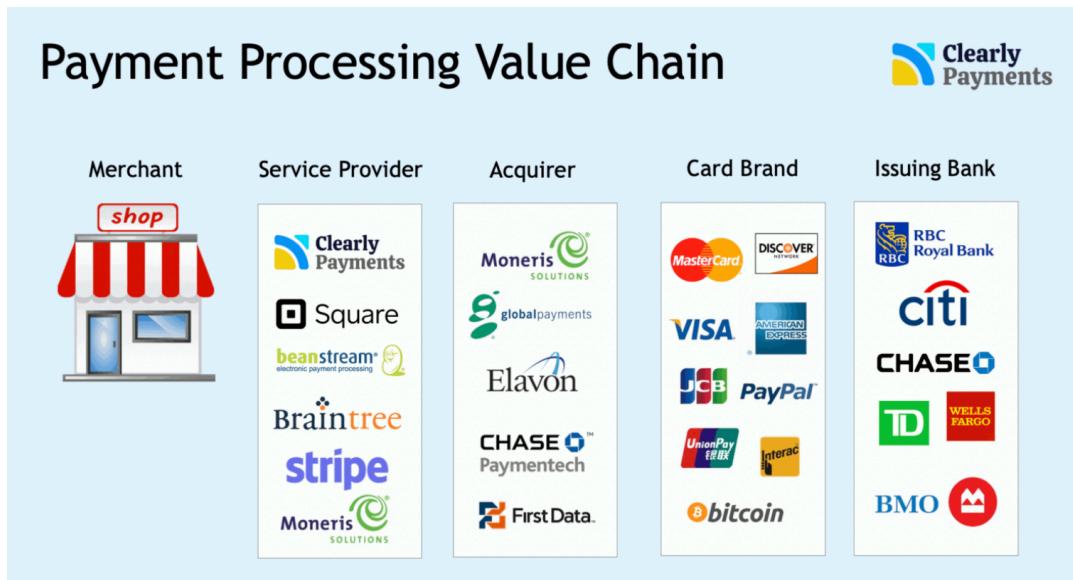


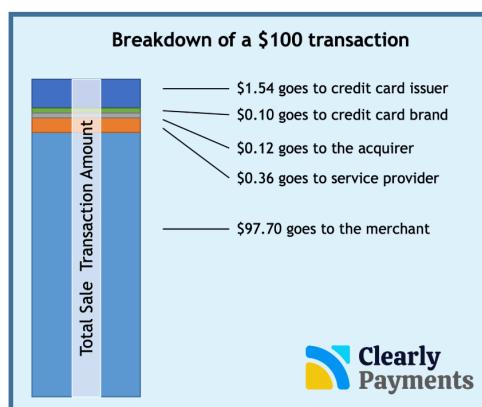
Figure 7: Value Chain

Issuing bank (or credit card issuer): The issuing bank decides things like the interest rate that cardholders pay, the limit, foreign fees, etc.

Card brand (or credit card network or card association): Sets interchange rates and govern the rules of the program.

Acquirer (or payment processor or underwriter): An acquirer (or acquiring bank) process credit card transaction, take on the underwriting risk, and hold the merchant account for merchants.

Service provider (or merchant service provider or payment processor): Merchant service providers provide the sales, support, and software to merchants.



The Global Credit Card market is anticipated to rise at a considerable rate during the forecast period, between 2022 and 2029. In 2021, the market is growing at a steady rate and with the rising adoption of strategies by key players, the market is expected to rise over the projected horizon.

Supply Chain

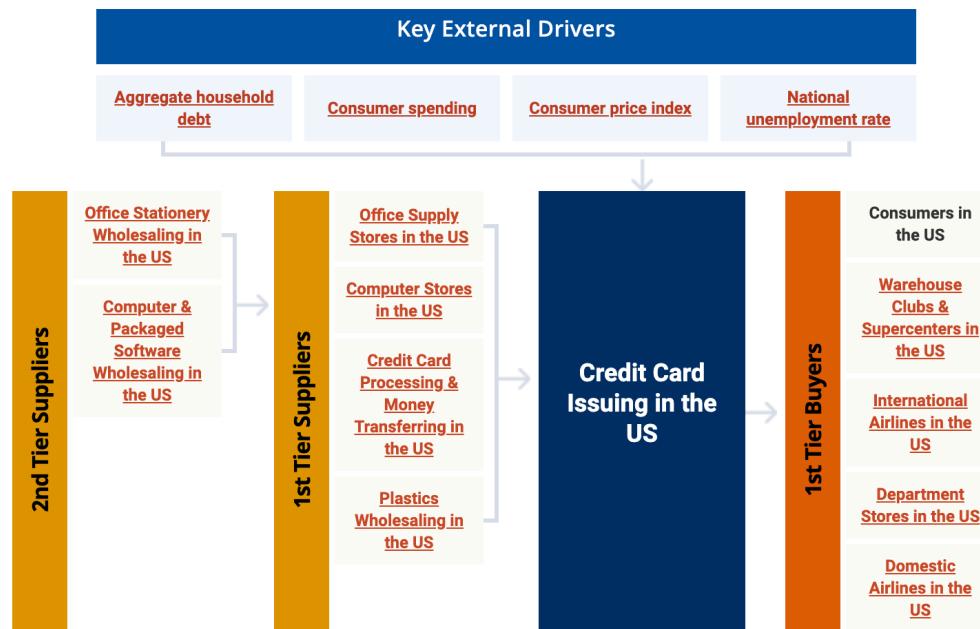
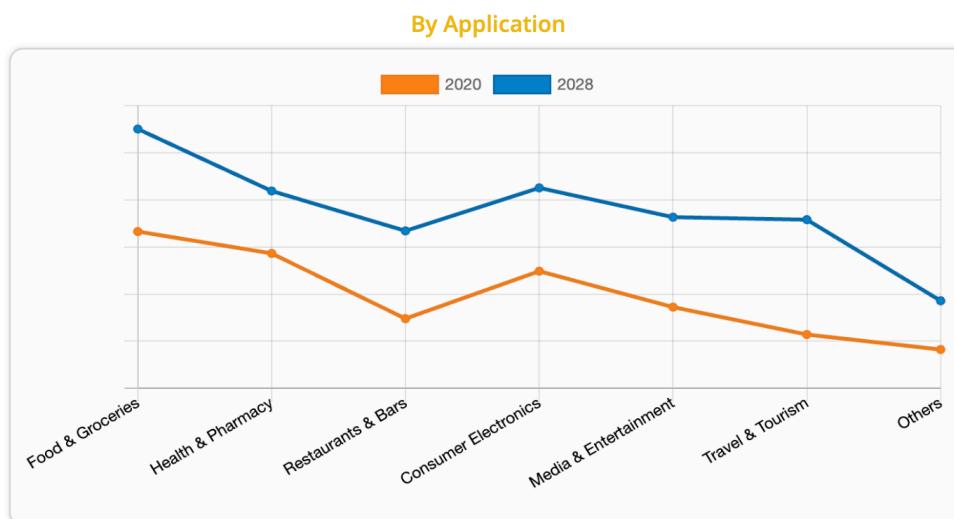


Figure 8: External Drivers

The global credit card payments market revenue was valued at **\$138.43 billion** in 2020, and is projected to reach **\$263.47 billion** by 2028, growing at a CAGR of 8.5% from 2021 to 2028.



Travel & Tourism segment will grow at a highest CAGR of 15.5% during 2021 - 2028

Figure 9: Travel Market

In the USA, there are about **40 billion** credit card transaction per year. The amount that people spend using credit cards in North America is over **\$3 trillion per year** and that is growing by about 10% per year. Payment processing fees add up to around **\$85 billion per year**.

There are more than 31 million businesses (merchants) in North America. There are roughly 29 million businesses in the USA and 2 million in Canada. Approximately 36% of all merchants accept credit cards.

3. American Express v/s Mastercard v/s VISA

VISA Market share = 52.6%

Mastercard Market share = 23.7%

American Express Market share = 19.6%

(Billion \$)	2022	2021	2020
VISA Revenue	29.310	24.105	21.846
Mastercard Revenue	22.237	18.884	15.301
American Express Revenue	52.846	42.380	36.087

What is the secret of American Express?

Visa/Mastercard are card networks. Their main role is information sharing. When you swipe your card at a POS Machine, how does your credit card issuer know which merchant to transfer the money to?

Your card doesn't individually maintain a record of all merchants who can accept credit cards. Instead, it ties up with a card network e.g., Visa/MasterCard. Any merchant that has Visa as a network service provider can accept payments from a Visa card.

When the merchant's bank (acquiring bank) is registered on the card network, the network is completed. Card networks save banks the hassle of onboarding each merchant and maintaining the infrastructure.

There are 3 steps to the payment process:
Authorization, Authentication and Settlement.

(i) Authorization

- 1) Cardholder uses their credit card to pay a merchant.
- 2) Merchant shares card details with acquiring bank
- 3) Acquiring bank forwards these details to the card network
- 4) Network sends a request to the issuing bank to authorize the payment.

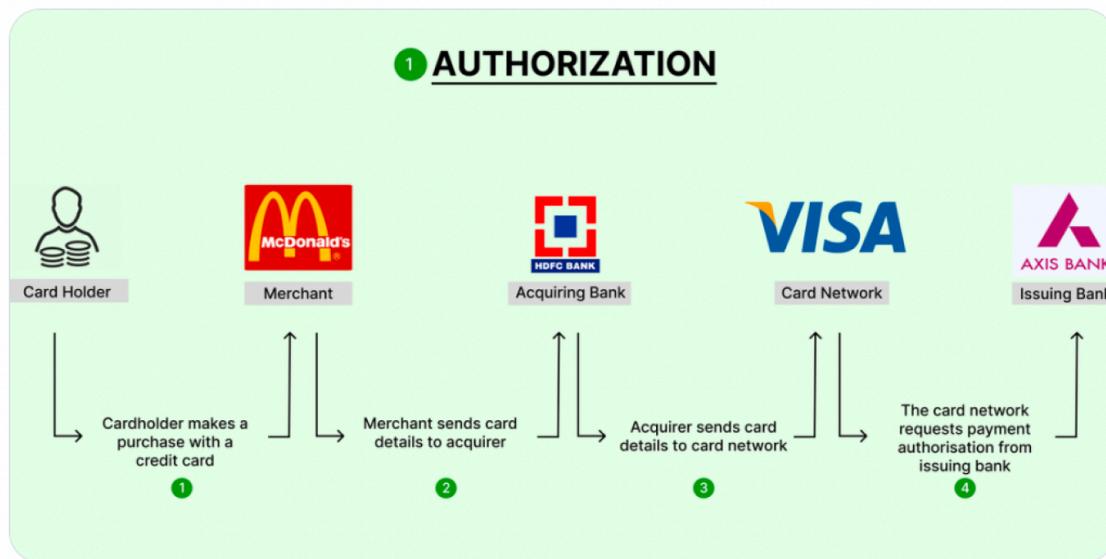


Figure 10: Authorization

(ii) Authentication

- 5) Issuer validates the details, available limit, and if everything matches, it approves the transaction.
- 6) Network sends the confirmation to the acquirer who in turn sends confirmation to the merchant.
- 7) Customer gets a receipt to confirm the payment.

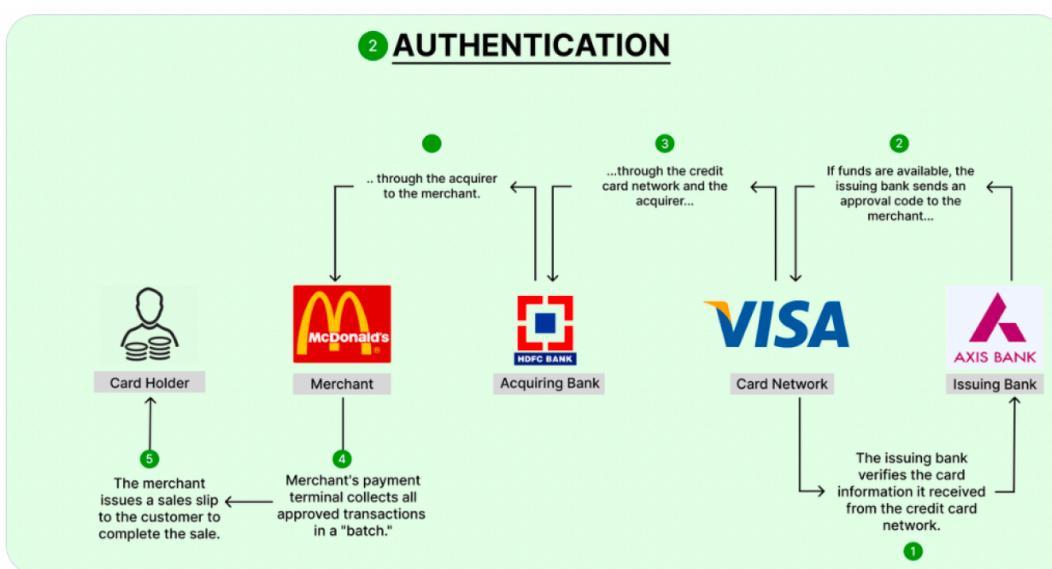


Figure 11: Authentication

(iii) Settlement

- 8) At the end of the day, merchant sends all transactions details to the acquiring bank.
- 9) Acquiring bank asks network to settle the transactions.
- 10) Network sends payment request to the issuing bank.

3 CLEARING & SETTLEMENT

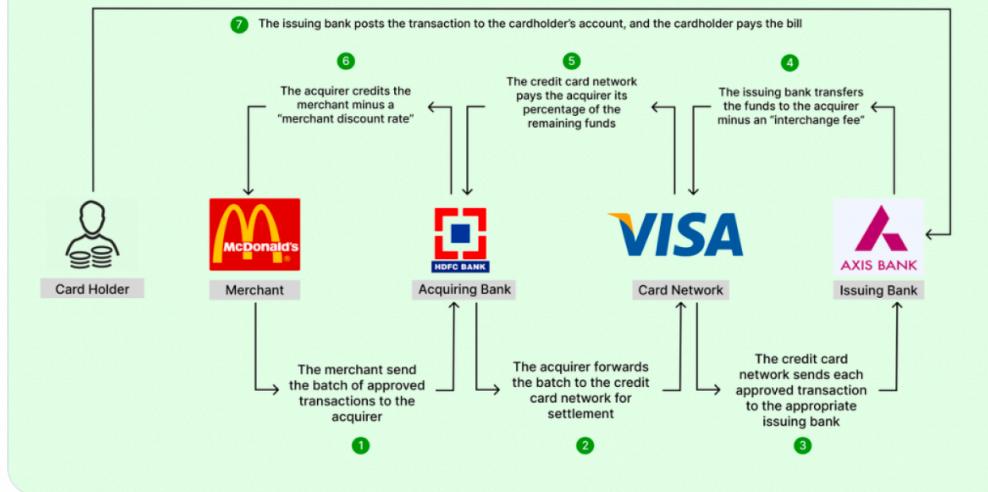


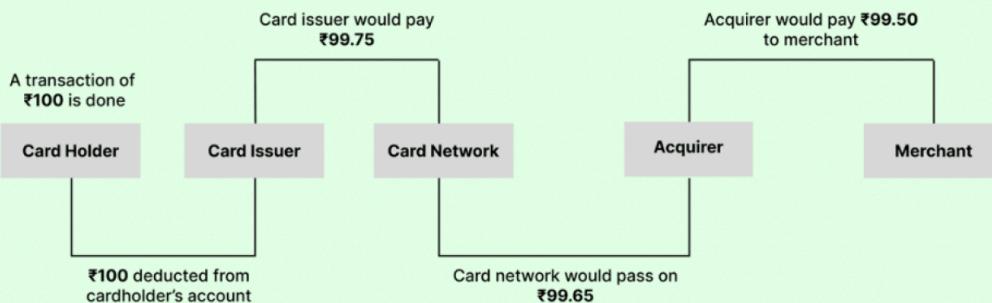
Figure 12: Clearing and Settlement

- 11) Issuing bank transfer funds minus interchange fee
- 12) Card network takes a cut and transfers funds to acquiring bank.
- 13) Acquiring bank transfers funds to merchant - merchant discount rate (MDR).

Merchants pay this MDR to receive credit card payments which increases sales, and they don't have to give credit to customers. Bulk of this MDR would go to the issuer as they provide the free credit and take the risk of customer default.

How MDR is distributed

It is assumed that MDR levied on the merchant is 0.5% of the transaction value, and that this would be distributed among the card issuer (0.25%), acquirer (0.15%) and card network (0.10%) of transaction value to the three PSPs respectively.



Source: Discussion Paper on Charges in Payment Systems, RBI

Figure 13: HMR

The acquiring bank for its own services and Visa/Mastercard will also charge a small fee for maintaining this network. Visa/Mastercard are like toll collectors where they charge a fee for transferring funds.

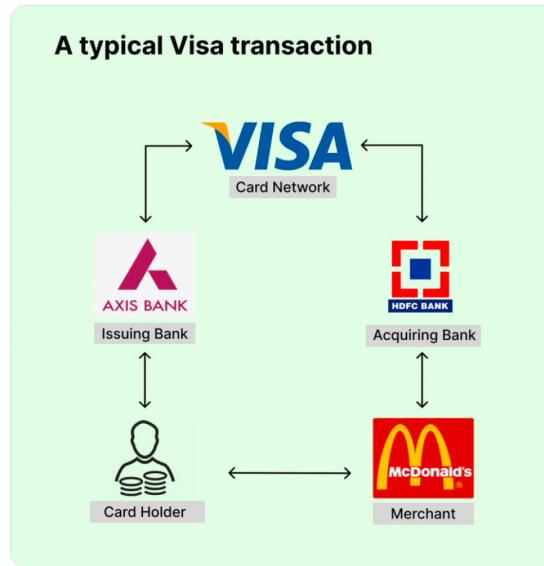


Figure 14: Transaction

How is Amex different?

The biggest cut goes to the issuer and that is Amex's secret. American Express issues its own cards to customers. It acts as an issuing bank as well as the card network. This is known as a closed loop system - where Amex controls every part of the transaction. It issues the cards, maintains the network, onboards each merchant individually and collects payments from cardholders. While Visa/Mastercard work on open loop system framework.

How does closed loop affect American Express revenues?

It earns from:

- Discount fees from merchants
- Interest income
- Annual card fees
- Other fees (default penalties/forex/rewards)

CONSOLIDATED STATEMENTS OF INCOME

Year Ended December 31 (Millions, except per share amounts)	2022	2021	2020
Revenues			
Non-interest revenues			
Discount revenue	\$ 30,739	\$ 24,563	\$ 19,435
Net card fees	6,070	5,195	4,664
Service fees and other revenue	4,521	3,316	2,702
Processed revenue	1,637	1,556	1,301
Total non-interest revenues	42,967	34,630	28,102
Interest income			
Interest on loans	11,967	8,850	9,779
Interest and dividends on investment securities	96	83	127
Deposits with banks and other	595	100	177
Total interest income	12,658	9,033	10,083
Interest expense			
Deposits	1,527	458	943
Long-term debt and other	1,236	825	1,155
Total interest expense	2,763	1,283	2,098
Net interest income	9,895	7,750	7,985
Total revenues net of interest expense	52,862	42,380	36,087

Figure 15: American Express Revenue Breakdown

Discount revenue from merchants and interest income is the main differentiator in revenues of American Express and other card service companies. Visa and Mastercard cannot earn interest income as they are just networks and not issuers.

Net Revenue

The components of net revenue were as follows:

	For the Years Ended December 31,			Increase (Decrease)	
	2022	2021	2020	2022	2021
	(\$ in millions)				
Payment network	\$ 14,358	\$ 11,943	\$ 9,897	20%	21%
Value-added services and solutions	7,879	6,941	5,404	14%	28%
Net revenue	\$ 22,237	\$ 18,884	\$ 15,301	18%	23%

Figure 16: Mastercard Revenue Breakdown

	For the Years Ended September 30,		
	2022	2021	2020
	(in millions)		
Service revenues	\$ 13,361	\$ 11,475	\$ 9,804
Data processing revenues	14,438	12,792	10,975
International transaction revenues	9,815	6,530	6,299
Other revenues	1,991	1,675	1,432
Client incentives	(10,295)	(8,367)	(6,664)
Net revenues	\$ 29,310	\$ 24,105	\$ 21,846

Figure 17: Visa Revenue Breakdown

While American Express earns from interest income, its real cash cow is merchant revenue (60%). Amex's whole main strategy revolves around getting customers to spend on its cards.

Amex earns substantial revenues from annual fees and high-spending cardholders. Amex invests these revenues in incentive programs and offers for customers. This leads to higher revenues for merchants and higher transactions.

Compared to other card networks, it charges a higher MDR, but merchants are fine with it since they get access to a very premium customer base.

4. FINANCIAL STATEMENT ANALYSIS

4.1 American Express Financial Statement Analysis

4.1.1 Revenue and Future Growth

American Express had a steady growth in revenue over the past 13 years, doubling from 2009 (\$26.54B) to 2022(\$55.63).

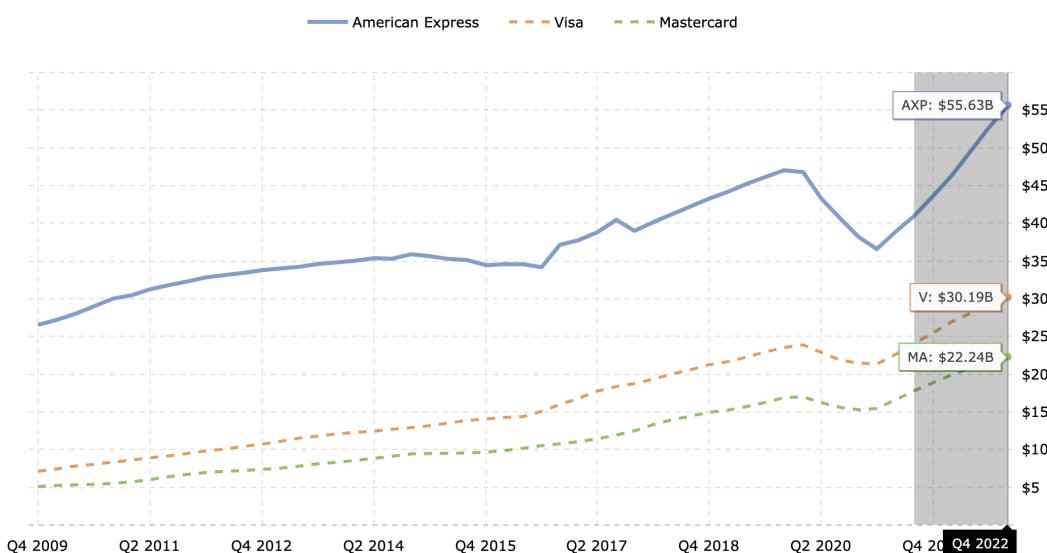


Figure 18: Revenue Growth comparison

Revenue growth is dependent on increasing consumer and business spending on American Express's cards, growing loan balances and increasing fee revenue.

The following types of revenue are generated from various products and services:

- Discount revenue, largest revenue source, primarily represents the amount earned on transactions occurring at merchants that have entered into a card acceptance agreement, or a Global Network Services (GNS) partner or other third-party merchant acquirer, for facilitating transactions between the merchants and Card Members.
- Interest income principally represents interest earned on outstanding loan balances.
- Net card fees, represent revenue earned from annual card membership fees.
- Other fees and commissions, primarily represent Card Member delinquency fees, foreign currency conversion fees charged to Card Members, loyalty coalition-related fees, service fees earned from merchants, travel commissions and fees, and Membership Rewards program fees; and
- Other revenue primarily represents revenues arising from contracts with our GNS partners.

- Total revenues net of interest expense increased 17 percent year-over-year, reflecting double digit growth in all our noninterest revenue lines.
- Discount revenue, largest revenue line, increased 26 percent year-over-year, driven primarily by growth in Card Member spending.
- Other fees and commissions and Other revenues increased year-over-year, primarily driven by higher travel-related revenues.
- Net card fees grew consistently throughout 2021 and were up 11 percent year over year, as new card acquisitions increased, and Card Member retention remained high, demonstrating the impact of investments made in premium value propositions.
- Net interest income declined 3 percent versus the prior year, primarily due to a decrease in net interest yields driven by higher paydown rates on revolving loan balances.
- Card Member loans increased 21 percent, which was lower than the growth in billed business due to higher paydown rates driven in part by the continued liquidity and financial strength of our customer base.
- Provisions for credit losses decreased and resulted in a net benefit, primarily due to a \$2.5 billion reserve release in the current year versus a reserve build in the prior year and lower net write-offs in the current year. The reserve release in the current year was driven by improved portfolio quality and macroeconomic outlook, partially offset by an increase in the outstanding balance of loans and receivables.

4.1.2 American Express 2022 breakdown

- Revenues reached all-time highs for both the quarter and the year, were up 25% for the full year, exceeding the 18% to 20% guidance they started the year with.
- Earnings per share of \$9.85 was well above the guidance of \$9.25 to \$9.65.
- Billed business reached a record quarterly high of 357 billion and was up 25% for the full year.
- Recognized once again by customers for providing industry-best products and services, ranking No. 1 in customer satisfaction in both the 2022 J.D. Power, U.S.
- New card acquisitions reached a record level, growing at 12.5 million, and nearly 70% of new accounts acquired are on fee-based products.
- Millennial and Gen Z customers continue to be the largest drivers of growth, representing over 60% of proprietary consumer card acquisitions in the quarter and for the full year.
- Full-year revenues reached an all-time high of \$52.9 billion, up 27% on an FX-adjusted basis.
- Notably, the fourth-quarter revenues of 14.1 billion also reached a record high for the third straight quarter and grew 19% on an FX-adjusted basis. This revenue momentum drove reported full-year net income of \$7.5 billion and earnings per share of \$9.85.
- American Express reported net income of \$1.6 billion and earnings per share of \$2.07, which did include a \$234 million impact from net losses in the AMEX Ventures strategic investment portfolio.
- Pre-tax pre-provision income was \$11.8 billion for the full year and \$2.9 billion in the fourth quarter, up 27% and 23%, respectively, versus the prior year, reflecting the growth momentum in underlying earnings.
- Total network volumes and build business were up 16% and 15% year over year in the fourth quarter and 24% and 25% for the full year on an FX-adjusted basis.
- Spending from international consumer and international SME and large corporate customers grew 23% and 32% year-over-year, respectively, in Q4.
- Year-over-year growth of 24% in loan balances, as well as good sequential growth.

- Discount revenue grew 16% year over year in Q4 and 27% for the full year on an FX-adjusted basis.
- Net card fee revenues continued to accelerate throughout this year, up 25% year over year in the fourth quarter and 21% for the full year on an FX-adjusted basis.
- Net interest income was up 32% year over year in Q4 and 28% for the year on an FX-adjusted basis due to the recovery of revolving loan balances.

4.1.3 2023 Strategy

- Expect revenue growth of 15% to 17%, which is higher than the long-term growth plan aspirations.
- EPS of \$11 to \$11.40.
- Increase quarterly dividend on common shares outstanding to \$0.60 a share, up from \$0.52, beginning with the first quarter of 2023 dividend Declaration.

4.1.4 Acquisitions

1. American Express acquired Nipendo in January 2023, a B2B automation company, to expand its suite of payment and financing solutions for corporate clients. Nipendo provides a cloud-based platform for businesses to automate their accounts payable and accounts receivable processes, enabling faster and more efficient payments. The acquisition is expected to enhance American Express' digital capabilities and help the company better serve its B2B customers.
2. In June 2022 American Express partnered with BodesWell, a fintech startup focused on financial planning, to expand its offerings in the financial planning space. BodesWell's technology will be integrated into American Express' platform, allowing users to access personalized financial advice and tools. The partnership is part of American Express' efforts to provide more holistic financial solutions to its customers.
3. American Express retired the Kabbage brand, which it acquired in August 2020, and launched a new product called Business Blueprint. Business Blueprint is a digital platform that provides small business owners with personalized recommendations and insights to help them manage their finances and grow their businesses. The platform integrates with a business's existing financial accounts and provides users with a dashboard that displays key metrics such as cash flow, sales, and expenses. The retirement of the Kabbage brand is part of American Express' broader efforts to expand its suite of digital financial services for small businesses.

4.1.5 Profitability Analysis

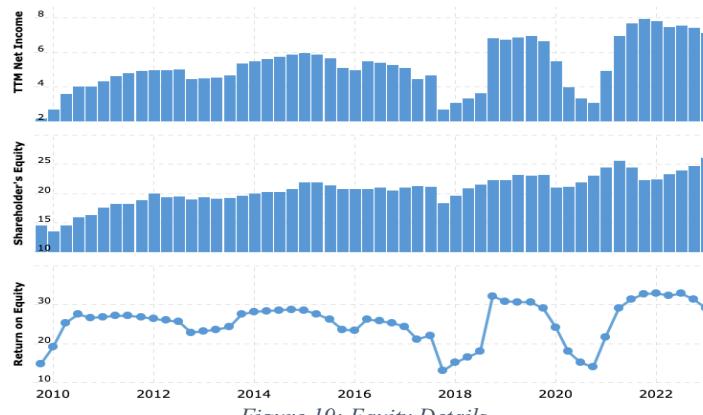


Figure 19: Equity Details

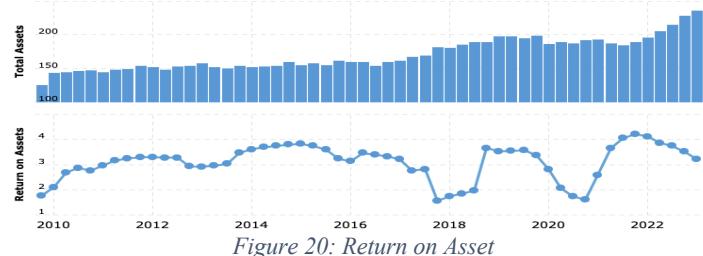


Figure 20: Return on Asset

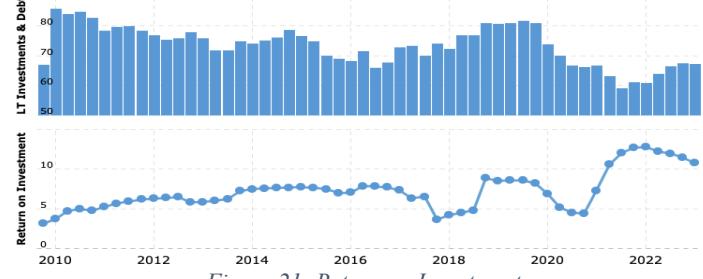


Figure 21: Return on Investment

American Express has maintained a high value in all the ratios as compared to the industrial average. The companies ROA, ROI and ROE has been on its high in comparison to the previous years. The upward trend of these ratios indicates American Express's strong potential for capitalizing on future growth with a low financial risk.

An ROE between 15% and 25% is also relatively high in the industry, indicating the high profit. The premium customer services, along with the high employee embracement is able to assure American Express's sustainability in earning profit for its shareholders.



Figure 22: Margin details

American Express has a genuinely high net overall revenue. The organization is an exceptionally esteemed organization and has solid liquidity in real money to pay other roundabout expenses or once expenses.

The operating profit margin of American Express maintained a high value which ensures the company's profitability. The company has a steady growing revenue and relatively lower operating expenses under its innovative business model.



Figure 23: Debt/Equity Ratio



Figure 24: Current Ratio

American Express held a healthy current ratio between the range of 1.5x to 2.00x. This highlights the company's ability to pay short-term obligations and reflects that American Express is appropriately financing with shareholder's equity and debt in a low-risk way.

5. VALUATION

5.1 Intrinsic value with margin of safety

Intrinsic value refers to the true or inherent value of an asset or investment. It is the value that an asset or investment would have if all the relevant information about it were known and considered.

Margin of safety is a concept developed by Benjamin Graham, known as the "father of value investing," that involves buying stocks or other investments at a discount to their intrinsic value. This provides a margin of safety in case the investment turns out to be riskier than anticipated or the market takes a downturn.

The intrinsic value with a margin of safety is a fundamental principle of value investing. Essentially, it means that an investor should only buy an investment if it is trading below its intrinsic value, and that the investor should aim to purchase the investment at a significant discount to this intrinsic value to provide a margin of safety against potential risks. By buying an asset with a margin of safety, an investor is essentially reducing the risk of loss and increasing the potential for gain.

AAA Corporate bond Yield	4.47
Margin of Safety	45%

Ticker	Company	Country	Market Cap	EPS	Growth Rate	Intrinsic Value	Price	Acceptable Buy Price	Buy/Sell
V	Visa Inc.	USA	471.07B	6.39	14.50%	235.8724832	231	129.7298658	Sell
MA	Mastercard Incorporated	USA	357.54B	10.22	18.99%	467.5867204	375	257.1726962	Sell
AXP	American Express Company	USA	126.92B	9.84	13.19%	337.8444027	178.26	185.8144215	Buy

Following the Graham model of intrinsic value propagation American Express is the only company that falls under the buy bracket in comparison to its competitors keeping a margin of safety of 45%.

5.2 Dividend Discount Model

The evaluation method is used to estimate the intrinsic value of a stock based on the present value of its expected future dividends. The DDM assumes that the true value of a stock is the sum of all its future dividend payments, discounted to their present value.

UNDERVALUED			
WACC	4%	6%	7%
Discounted Dividends	\$ 158,980.86		
Outstanding Shares	743.24		
Economy average growth	0.03		
Fair Value	\$ 213.90	\$ 184.65	\$ 171.77
Current Price	\$ 161.34		

With the Fair value well above current price of the stock. The dividend discount model suggests that the stock is a BUY at different WACC predictions.

5.3 Discounted Cash flow (simple model)

As the COGS DCF model do not fit the financial segment of markets. A naive cash flow projection technique is used to get the intrinsic value estimation using cash flow discounting.

Ticker	Company	Price Per Share	Current Price	Difference	Inference
V	Visa Inc.	269	231	0.17	Undervalued
MA	Mastercard Incorporated	123	375	0.67	Overvalued
AXP	American Express Company	213	161	0.19	Undervalued

With AXP being undervalued the naïve DCF model suggest the stock as a BUY.

5.4 Relative Evaluation

Depending on the specific attributes of the industry or company being measured there are different metrics to compare different sectors. For financial segment of the market the following metrics are used for relative evaluation.

- P/E: used to assess a company's current share price relative to its earnings per share.
- PEG: used to assess a company's current share price relative to its earnings growth potential.
- P/B: used to assess a company's market value relative to its book value.
- P/FCF: used to evaluate a company's stock price relative to its free cash flow.

Ticker	Market Cap	P/E	Fwd P/E	PEG	P/S	P/B	P/C	P/FCF
V	471.07B	32.06	23.74	2.07	15.6	13.53	29.22	32.71
MA	357.54B	36.49	25.71	1.79	16.08	56.6	44.44	46.52
AXP	126.92B	17.93	14	2.39	2.33	5.51	4.4	9.06

- American Express has a forward P/E of 14 suggesting that earnings growth is expected to be stronger than Visa and MasterCard.
- The P/B and P/C ratios are of American Express is relatively low, indicating that the company is not trading at as high a premium to its book value and cash flows as the other two competitors which looks to be overvalued.

6. RISK

As a key part in the monetary administrations industry, American Express faces a few dangers that might actually affect its tasks and monetary execution. A portion of the key dangers that American Express is confronting or could look in the future include:

1. Monetary and Market Hazard: American Express' business is intently attached to the soundness of the worldwide economy and monetary business sectors. A critical decline in the economy or disturbances in the monetary business sectors could bring about a reduction in purchaser spending and credit utilization, which could adversely affect American Express' incomes and benefit.
2. Credit Hazard: American Express is presented to credit risk, which alludes to the gamble of misfortune because of the disappointment of borrowers to reimburse their advances or meet their commitments. On the off chance that borrowers default on their Mastercard or other credit installments, American Express could encounter a decrease in its incomes and productivity.

3. Administrative Gamble: As a monetary administrations' organization, American Express is dependent upon broad guideline by different government offices. Changes in guidelines or rebelliousness with existing guidelines could bring about fines, punishments, and reputational harm, which could adversely affect the organization's monetary presentation.
4. Innovation Hazard: American Express' business is vigorously dependent on innovation to handle exchanges and oversee client accounts. Any disturbances or disappointments in the organization's innovation frameworks could bring about exchange blunders, information breaks, and different issues that could adversely affect the organization's standing and monetary exhibition.
5. Contest Hazard: American Express works in an exceptionally serious industry, with numerous other monetary administrations organizations offering comparable items and administrations. Expanded contest could bring about estimating pressure, decreased piece of the pie, and lower productivity for American Express.
6. Notoriety Hazard: American Express' standing is a basic resource for the organization, and any regrettable exposure or discernments could bring about a decrease in client steadfastness and business. The organization has confronted a few high-profile claims and administrative activities before, which have influenced its standing and monetary execution.

In reference to the Q4 2022 earnings conference the risk of recession was addressed by Jeff Campbell, Chief Financial Officer at American Express. He states that the company do not worry about recessions as they believe that there will always be a recovery after a recession. However, during a recession where there is a significant shrinkage in GDP and a huge spike in unemployment, the company's long-term aspirations may be impacted for a few quarters. The company has built a downside scenario in their CECL credit reserve accounting, which assumes 8% unemployment by the third quarter of 2023. He reiterates that despite such shocks, the company will continue to steadily grow at an excess of 10%.

7. FIELD RESEARCH

A chat with a friend who is a development head and an investor at American Express.

Q1. Why do you think American Express is a good investible stock?

Ans.

I think American Express is a decent investible organization since it has various qualities like a solid brand name and a steadfast client base, worldwide reach with tasks in north of 100 nations, great many items and administrations, including credit cards, charge cards, travel administrations, and protection.

Being working in the company for about 5 years now I can firmly say that the company has a solid history of productivity. A past filled with delivering profits to investors and a highly regarded supervisory group that is centered around development and advancement.

Q2. Do you think American Express will be able survive with the competition in the long run?

Ans.

Yes, I do think American Express will be able to survive with the competition in the long run. The company in investing heavily in advanced technologies and is creating a hub of new users. The growth of American Express has been phenomenal. With the business model in place that has totally changed the market regime I think American Express is in a very good place.

Q3. Buffet has invested hugely at American Express. Do you think that has been a major driving force for investors?

Ans.

His speculation has assisted with expanding the organization's perceivability and believability among financial backers. Buffett is a very much regarded financial backer, and his interest in American Express is an indication that he has confidence in the organization's drawn-out possibilities. This could lead different financial backers to investigate American Express and think about putting resources into the organization.

Comments: American Express has been up with the game year around and has well strategic business in place. The stock has been a BUY in many world-renowned investor portfolios who believes in American Express's management team and the overall flourishing business.

8. WHY WILL BUFFET AND GRAHAM INVEST?

Buffett once said, "You pay a high price for a cheery consensus." It is because of many disputes and short-term disadvantages that have brought reverse investment opportunities.

Berkshire's purchases of Amex were essentially completed in 1995 and, cost \$1.3billion. Annual dividends received from this investment have grown from \$41million to \$302million. Those checks, too, seem highly likely to increase.

In December in an interview with Bloomberg Buffet gave a beautiful notion on American Express. "You can't create another American Express," Buffett said. "I could create another shoe store. I could create another business publication. I could do all kinds of things with hundreds of billions of dollars. But I can't put in the minds of people what is in their minds about American Express."

<i>Shares</i>	<i>Company</i>	<i>Percentage of Company Owned</i>	<i>12/31/21</i>	
			<i>Cost*</i> <i>(in millions)</i>	<i>Market</i>
151,610,700	American Express Company	19.9	1,287	24,804
907,559,761	Apple Inc.	5.6	31,089	161,155
1,032,852,006	Bank of America Corp.	12.8	14,631	45,952
66,835,615	The Bank of New York Mellon Corp.	8.3	2,918	3,882
225,000,000	BYD Co. Ltd. **.	7.7	232	7,693
3,828,941	Charter Communications, Inc.	2.2	643	2,496
38,245,036	Chevron Corporation	2.0	3,420	4,488
400,000,000	The Coca-Cola Company	9.2	1,299	23,684
52,975,000	General Motors Company	3.6	1,616	3,106
89,241,000	ITOCHU Corporation	5.6	2,099	2,728
81,714,800	Mitsubishi Corporation	5.5	2,102	2,593
93,776,200	Mitsui & Co., Ltd.	5.7	1,621	2,219
24,669,778	Moody's Corporation	13.3	248	9,636
143,456,055	U.S. Bancorp	9.7	5,384	8,058
158,824,575	Verizon Communications Inc.	3.8	9,387	8,253
Others***			26,629	39,972
Total Equity Investments Carried at Market			\$ 104,605	\$ 350,719

Figure 25: Berkshire Hathaway 2021 letter investment details.

According to Graham's ideology:

- American Express has a P/E ($7.92*1.5 = 11.88 < 22.5$) which fits Graham's criterion and is low as compared to big players like Visa Inc and Mastercard Incorporated.
- Assets/Debt ratio of American Express is higher than 2 which is the Graham's benchmark of stock selection and is much higher than many other competitors.
- In the last 10 years, American Express has delivered positive earnings for its shareholders. Also, in the last 20 years, the company has consistently paid out dividends to shareholders.
- At a current market value of \$126.92 billion, American Express's market cap exceeds Graham's adequate enterprise size of \$2 billion.

9. REFERENCE

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APPENDIX

1. FINANCIAL STATEMENT ANALYSIS

AXP Balance Sheet <i>(USD in millions, except per share data)</i>		2014	2015	2016	2017	2018	2019	2020	2021	2022
Assets										
Cash and due from banks	2628.00	2935.00	3278.00	5148.00	3,253	3,402	2,984	1,292	5,510	
Interest-bearing deposits in other banks	19190.00	19569.00	20779.00	27709.00	24,026	20,392	29,824	20,548	28,097	
Short-term investment securities	470.00	258.00	1151.00	70.00	166	138	157	188	307	
Total cash and cash equivalents	22288.00	22762.00	25208.00	32927.00	27,445	23,932	32,965	22,028	33,914	
Card Member receivables	44386.00	43671.00	46841.00	53526.00	55,320	56,794	43,434	53,581	57,384	
Other receivables, less reserves: 2015, \$43; 2014, \$61	2614.00	3024.00	3232.00	3163.00						
Card Member loans	69184.00	57545.00	64042.00	71693.00	79,720	84,998	68,029	85,257	104,217	
Other loans, less reserves: 2015, \$20; 2014, \$12	920.00	1254.00	1419.00	2607.00	3,676	4,626	2,614	2,859	5,357	
Investment securities	4431.00	3759.00	3157.00	3159.00	4,647	8,406	21,631	2,591	4,578	
Premises and equipment, less accumulated depreciation and amortization	3938.00	4108.00	4433.00	4329.00	4,416	4,834	5,015	4,988	5,215	
Other assets	11342.00	10669.00	10561.00	9755.00	13,378	14,731	17,679	17,244	17,689	
Total assets	159103.00	161184.00	158893.00	181159.00	188,602	198,321	191,367	188,548	228,354	
Liabilities										
Customer deposits	44171.00	54997.00	53042.00	64452.00	69,960	73,287	86,875	84,382	110,239	
Travelers Cheques and other prepaid products	3673.00	3247.00	2812.00	2593.00						
Accounts payable	11300.00	11822.00	11190.00	14657.00	12,255	12,738	9,444	10,574	12,133	
Short-term borrowings	3480.00	4812.00	5581.00	3278.00	3,100	6,442	1,878	2,243	1,348	
Long-term debt	57955.00	48061.00	46990.00	55804.00	58,423	57,835	42,952	38,675	42,573	
Other liabilities	17851.00	17572.00	18777.00	22148.00	22,574	24,948	27,234	30,497	37,350	
Total liabilities	138430.00	140511.00	138392.00	162932.00	166,312	175,250	168,383	166,371	203,643	
Shareholders' Equity										
Common shares	205.00	194.00	181.00	172.00	170	163	161	153	149	
Additional paid-in capital	12874.00	13348.00	12733.00	12210.00	12,218	11,774	11,881	11,495	11,493	
Retained earnings	9513.00	9665.00	10371.00	8273.00	12499.00	13871.00	13837.00	13474.00	16279.00	
Accumulated other comprehensive income (loss)	-1919.00	-2534.00	-2784.00	-2428.00	-2597.00	-2737.00	-2895.00	-2945.00	-3210.00	
Total shareholders' equity	20673.00	20673.00	20501.00	18227.00	22,290	23,071	22,984	22,177	24,711	
Total liabilities and shareholders' equity	159103.00	161184.00	158893.00	181159.00	188,602	198,321	191,367	188,548	228,354	

Figure 26: American Express Balance Sheet

AXP Income Statement <i>(USD in millions, except per share data)</i>		2014	2015	2016	2017	2018	2019	2020	2021	2022
Revenues										
Discount revenue	19389.00	19297.00	18680.00	22890.00	24721.00	26167.00	24563.00	19435.00	30739.00	
Net card fees	2712.00	2700.00	2886.00	3090.00	3441.00	4042.00	5195.00	4664.00	6070.00	
Other fees and commissions	3626.00	2866.00	2753.00	2990.00	3153.00	3297.00	3316.00	2702.00	4521.00	
Other	2989.00	2033.00	2029.00	1457.00	1360.00	1430.00	1556.00	1301.00	1637.00	
Total non-interest revenues	28716.00	26896.00	26348.00	30427.00	23675.00	34936.00	34630.00	28102.00	42967.00	
Interest on loans	6929.00	7309.00	7205.00	8148.00	9941.00	11368.00	8850.00	9779.00	11967.00	
Interest and dividends on investment securities	179.00	157.00	131.00	89.00	118.00	188.00	83.00	127.00	96.00	
Deposits with banks and other	71.00	79.00	139.00	326.00	547.00	588.00	100.00	177.00	595.00	
Total interest income	7170.00	7545.00	7475.00	8563.00	10606.00	12084.00	9033.00	10083.00	12658.00	
Deposits	373.00	475.00	598.00	779.00	1287.00	1559.00	458.00	943.00	1527.00	
Long-term debt and other	1334.00	1148.00	1106.00	1333.00	1656.00	1905.00	825.00	1155.00	1236.00	
Total interest expense	1707.00	1623.00	1704.00	2112.00	2943.00	3464.00	1283.00	2098.00	2763.00	
Net interest income	5472.00	5922.00	5771.00	6451.00	7663.00	8620.00	7750.00	7985.00	9895.00	
Total revenues net of interest expense	34188.00	32818.00	32119.00	36878.00	40338.00	43556.00	42380.00	36087.00	52862.00	
Charge card	792.00	737.00	696.00	795.00	937.00	963.00	-7.00	1015.00	627.00	
Card Member loans	1138.00	1190.00	1235.00	1868.00	2266.00	2462.00	-1155.00	3453.00	1514.00	
Other	114.00	61.00	95.00	97.00	149.00	148.00	-191.00	262.00	41.00	
Total provisions for losses	2044.00	1988.00	2026.00	2760.00	3352.00	3573	-1419.00	4730	2182	
Total revenues net of interest expense after provisions for losses	32144	30830	30093.00	34118	36986	39983	43799	31357	50680	
Expenses										
Marketing and promotion	3216	3109	3650.00	5722	6470	7114	5291	3696	5458	
Card Member rewards	6931	6996	6793.00	8687	9696	10439	11007	8041	14002	
Business Development	-	-	-	-	-	-	3762	3051	4943	
Card Member services and other	822	1018	1133.00	1392	1777	2222	1993	1230	2959	
Salaries and employee benefits	6095	4976	5259.00	5258	5250	5911	6240	5718	7252	
Other, net	6089	6793	5162.00	5634	5671	5868	4817	5325	6481	
Total expenses	23153	22892	21997.00	26693	28864	31554	33110	27061	41095	
Pretax income	8991	7938	8096.00	7425	8122	8429	10689	4296	9585	
Income tax provision	3106	2775	2688.00	4677	1201	1670	2629	1161	2071	
Net income	5885.00	5163.00	5408.00	2748.00	6921.00	6759.00	8060.00	3135.00	7514.00	
Earnings per Common Share										
Basic	5.58	5.07	5.67	3.00	7.93	8.00	10.04	3.77	9.86	
Diluted	5.56	5.05	5.65	2.99	7.91	7.99	10.02	3.77	9.85	
Basic	1045	999	933.00	883	856	828	789	805	751	
Diluted	1051	1003	935.00	886	859	830	790	806	752	

Figure 27: American Express Income Statement

2. VALUATION

PARENT SECTOR: FINANCIAL							AAA Corporate bond Yield	4.47			
							Margin of Safety	45%			
SUBGROUP: Credit Services							Graham's formula for intrinsic value				
No.	Ticker	Company	Country	Market Cap	EPS	Growth Rate	Intrinsic Value	Price	Acceptable Buy Price	Buy/Sell	
1	V	Visa Inc.	USA	471.07B	6.39	14.50%	235.8724832	231	129.7298658	Sell	
2	MA	Mastercard Incorporated	USA	357.54B	10.22	18.99%	467.5867204	375	257.1726962	Sell	
3	AXP	American Express Company	USA	126.92B	9.84	13.19%	337.8444027	178.26	185.8144215	Buy	
4	DFS	Discover Financial Services	USA	31.00B	15.49	4.46%	265.6101834	117.93	146.0856009	Buy	
5	OMF	OneMain Holdings, Inc.	USA	5.22B	1.8	-5.78%	-5.421744966	46.55	-2.981959732	Sell	
6	ORCC	Owl Rock Capital Corporation	USA	5.19B	1.14	21.05%	56.78067114	13.19	31.22936913	Buy	
7	FCFS	FirstCash Holdings, Inc.	USA	4.16B	1.6	14.27%	58.33592841	89.46	32.08476063	Sell	
8	SLM	SLM Corporation	USA	3.76B	0.43	7.15%	9.650469799	15.94	5.307758389	Sell	
9	BFH	Bread Financial Holdings, Inc.	USA	2.08B	1.11	7.61%	25.91688591	41.49	14.25428725	Sell	

Figure 28: Graham Intrinsic Value

	TTM Dividends	2-year dividend	3-year dividend	4-year dividend	5-year dividend				
	0.52	0.43	0.43	0.39	0.35				
	0.52	0.43	0.43	0.39	0.35				
	0.52	0.43	0.43	0.39	0.35				
	0.43	0.43	0.39	0.35	0.32				
	1.99	1.72	1.68	1.52	1.37				
Growth	15.70%	2.38%	10.53%	10.95%					
Average Growth	9.89%								
Economy average	3%								
WACC (as of today)	7.00%								
Fair Value	51.2425								
P/B	5.51								
		1	2	3	4	5	6	7	8
	Dividend (2022)	2023	2024	2025	2026	2027	2028	2029	2030
Growth (3%)	1565.00	1611.95	1660.31	1710.12	1761.42	1814.26	1868.69	1924.75	1982.50
Discounted at WACC		1506.495327	1450.177745	1395.965493	1343.779867	1293.54511	1245.18828	1198.63918	1153.83024
Shareholders Equity	24711.00	25946.55	27243.88	28606.07	30036.37	31538.19	33115.10	34770.86	36509.40
Discounted	21248.80406								
P/B terminal Value	117080.9104								
Discounted Dividends	127,668,531,606.07								
Outstanding Shares	743,240,700								
	\$ 171.77								
	\$ 161.34								
	UNDERVALUED								
Shareholders Equity	2014	2015	2016	2017	2018	2019	2020	2021	2022
	20673.00	20673.00	20501.00	18227.00	22290.00	23071.00	22984.00	22177.00	24711.00
	0%	-1%	-11%	22%	4%	0%	-4%	11%	
Growth average	5%								
WACC	4%								
Firm equity value	\$ 119,914,454,538.00								
Long term debt	1348								
Short term debt	42573								
Market Debt Value	\$ 7,086,214,140,000.00								
Cost of equity	9.562000%								
Risk free rate	2.50%								
risk premium	6.00%								
beta	1.18								
Cost of debt	5%								
Corporate tax	21.60%								

Figure 29: Dividend Discount Model

No.	Ticker	Company	Country	Market Cap	P/E	Forward P/E	P/B	Total Assets	Total Debt	Assets/Debt	Debt/Assets	Div Yield	ROA	Profit Margin
1	V	Visa Inc.	USA	471.07B	32.06	23.74	13.53	85.501	22.450	3.809	0.262570028	0.78%	17.60%	49.20%
2	MA	Mastercard Incorporated	USA	357.54B	36.49	25.71	56.6	37.669	13.901	2.710	0.369030237	0.61%	26.10%	43.60%
3	AXP	American Express Company	USA	126.92B	17.93	14	5.51	188.548	40.918	4.608	0.217016357	1.18%	3.70%	13.80%
4	DFS	Discover Financial Services	USA	31.00B	7.57	8.21	2.42	17.740	3.987	4.449	0.224746336	2.05%	3.90%	34.40%
5	OMF	OneMain Holdings, Inc.	USA	5.22B	5.58	6.18	1.73	22.079	17.750	1.244	0.803931337	8.98%	4.30%	18.90%
6	ORCC	Owl Rock Capital Corporation	USA	5.19B	11.59	7.94	0.89	13.298	7.079	1.879	0.53233569	10.00%	3.40%	39.60%
7	FCFS	FirstCash Holdings, Inc.	USA	4.16B	16.42	13	2.29	3.836	N/A	N/A	N/A	1.50%	4.60%	6.50%
8	SLM	SLM Corporation	USA	3.76B	9.04	5.57	2.23	29.221	5.930	4.928	0.202936244	2.86%	2.90%	41.60%
9	BFH	Bread Financial Holdings, Inc.	USA	2.08B	9.11	3.88	0.84	27.746	7.439	3.730	0.268110719	2.07%	-	-
				16.198889	12.0255556	9.56						3%	8%	31%

Figure 30: Ratio Data 1

No.	Ticker	Market Cap	P/E	Fwd P/E	PEG	P/B	P/C	P/FCF	EPS this Y	EPS next 5Y	EPS past 5Y	Sales past 5Y	Price	Change	Volume	Dividend	ROA	ROE	ROI	LTDdeb/Eq	Debt/Eq	Gross M	Oper M	Profit M			
1	V	471.07B	32.06	23.74	2.07	15.6	13.53	29.22	32.06	24.50%	14.50%	20.10%	15.48%	9.80%	231	0.68%	2,731,172	0.78%	17.60%	44.40%	28.10%	0.59	60.40%	63.40%	49.20%		
2	MA	357.54B	36.49	25.71	1.74	16.08	50.4	44.44	36.49	17.00%	16.00%	20.34%	11.00%	11.00%	2,731,172	0.68%	2,731,172	0.78%	26.10%	18.30%	30.00%	2.13	51.30%	52.60%	43.60%		
3	AXP	126.92B	17.93	14	2.59	1.51	4.4	-	17.93	12.30%	7.50%	3.50%	1.01%	2,221,172	1.18%	3,700	32,000	5,500	1.18%	66.00%	18.40%	-	-	-	-	13.80%	
4	DFS	31.00B	7.57	8.21	1	2.41	2.42	-	5.63	396.00%	4.46%	25.40%	4.30%	117.93	0.67%	1,337,176	2.05%	3,900	34.50%	23,600	1.35	1.53	-	-	-	-	34.40%
5	OMF	5.22B	5.58	6.18	-	1.03	1.73	9.75	2.78	82.50%	4.46%	44.10%	-7.55%	5.00%	46.55	10.02%	3,295,625	8.98%	4,30%	31.40%	6.30%	6.04	82.40%	25.20%	18.90%	5.50%	
6	ORCC	5.19B	11.59	7.94	-	4.58	0.89	14.39	-	59.70%	2.10%	105.60%	-	104.10%	13.19	-0.04%	1,463,615	10.00%	3,40%	7.70%	3,700	1.23	50.00%	47.00%	39.60%	41.60%	
7	FCFS	4.16B	16.42	13	2.29	1.52	2.29	41.31	17.12	18.80%	14.27%	12.10%	7.16%	9.30%	89.46	1.35%	72,331	1.50%	4,600	9.80%	5.00%	0.76	46.30%	10.20%	6.50%		
8	SLM	3.76B	9.04	5.57	0.53	1.8	2.23	0.75	110.56	60.60%	7.15%	46.80%	17.07	10.50%	15.94	3.71%	1,991,177	2.86%	2,90%	47.30%	13.40%	3.19	-	-	-	59.60%	
9	BFH	2.08B	9.11	3.88	1.76	0.48	0.84	0.58	-	266.90%	7.61%	16.50%	5.17%	-12.50%	41.49	2.09%	500,829	2.07%	-	-	-	3.80%	2.47	7.66	91.70%	-	-

Figure 31: Ratio Data 2

No.	Ticker	Company	Country	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
1	V	Visa Inc.	USA	2450	3519	4633	2551	6652	6170	5051	8610	12220	12030	9704	17880
2	MA	Mastercard Incorporated	USA	1546	2507	2730	3073	3836	3759	4255	5241	5719	7455	6516	8649
3	AXP	American Express Company	USA	5615	7851	8579	6029	7541	9795	9365	6916	12480	7620	11990	13100
4	DFS	Discover Financial Services	USA	4163	3487	2897	3286	3681	3687	4246	4990	4937	5912	5935	5825
5	OMF	OneMain Holdings, Inc.	USA	269	171	228	675	381	741	1322	1555	2046	2362	2247	-
6	ORCC	Owl Rock Capital Corporation	USA	0	0	0	0	0	0	-945	-1333	-3172	-2527	-1560	-1227
7	FCFS	FirstCash Holdings, Inc.	USA	55	51	66	80	73	71	76	194	207	187	181	-
8	SLM	SLM Corporation	USA	-6692	3081	99.5	70	-436	-85	-199	-171	-102	-15	-182	-49
9	BFH	Bread Financial Holdings, Inc.	USA	833	937	1018	868	1185	1568	1920	2374	2555	1076	1829	1459

Figure 32: Cash Flows

Visa Inc.	44%	32%	-45%	161%	-7%	-18%	70%	42%	-2%	-19%	84%
Mastercard Incorporated	62%	9%	13%	25%	-2%	13%	23%	9%	30%	-13%	33%
American Express Company	40%	9%	-30%	25%	30%	-4%	-26%	80%	-39%	57%	9%
Discover Financial Services	-16%	-17%	13%	12%	0%	15%	18%	-1%	20%	0%	-2%
OneMain Holdings, Inc.	-36%	33%	196%	-44%	94%	78%	18%	32%	15%	-6%	2%
Owl Rock Capital Corporation	N/A	N/A	N/A	N/A	N/A	N/A	N/A	41%	138%	-38%	-21%
FirstCash Holdings, Inc.	20%	21%	-9%	-9%	-3%	7%	155%	7%	-10%	-2%	-2%
SLM Corporation	-146%	-97%	-30%	-723%	-81%	134%	-14%	-40%	-85%	1113%	-73%
Bread Financial Holdings, Inc.	12%	9%	-15%	37%	32%	22%	24%	8%	-58%	70%	-20%

Figure 33: Growth Rate

	Forecast		GDP growth	2.50%											
	Years	1	2	3	4	5	6	7	8	9					
Visa Inc.	Average	2022	2023	2024	2025	2026	2027	2028	2029	2030	Discount (WACC)	Terminal Value			
Mastercard Incorporated		31%	2340.6456	30704.4268	40236.2719	52727.1715	69095.7308	90545.7258	118654.6311	155489.6311	9.45%	3005088.283			
American Express Company		18%	10240.6031	12125.0955	14356.3754	16998.2589	20126.3062	23829.9819	28215.214	33407.4237	8.50%	675733.1664			
Discover Financial Services		4%	6049.3116	6282.26017	6524.17967	6775.41508	7036.32516	7307.28246	7588.67387	7880.90121	8184.38174	8.98%	12945.742		
OneMain Holdings, Inc.		35%	3027.67276	4079.57381	5496.93569	7406.73006	9980.04221	13447.3974	18119.412	24414.6196	32896.9643	6.10%	936649.6767		
Owl Rock Capital Corporation		20%	-1470.1194	-1761.4107	-2110.4189	-2528.58	-3029.5961	-3629.8842	-4349.1141	-5210.8532	-6243.3383	5.77%	-19570.9713		
FirstCash Holdings, Inc.		16%	210.138086	243.966934	283.241682	328.383903	381.776822	434.236744	514.590723	693.608403	70.00%	15798.85808			
SLM Corporation		-4%	-47.166427	-45.401467	-43.70255	-42.067207	-40.493059	-38.977814	-37.51927	-36.115305	-34.763875	7.42%	-724.2474053		
Bread Financial Holdings, Inc.		11%	1619.25205	1797.10569	1994.49423	2213.56331	2456.69426	2726.52997	3026.00359	3358.37048	3727.24351	6.00%	109154.9885		

Figure 34: Cash Flow Forecast

Visa Inc.	2022	2023	2024	2025	2026	2027	2028	2029	2030	Sum	Cash Equivalents	Total Debt	Equity Value	Shares Outstanding	Price per Shd	Current Price	Difference	Inference
Mastercard Incorporated	9438.4384	10295.7765	11269.7225	12265.5065	13384.9079	14066.4700	15939.5179	17394.2248	18981.6944	123,550	7,408	13,901	117,057	948	123	375	0.67	Oversold
American Express Company	13972.976	149																