

VISA INC (V) September 17, 2023

### Information Technology - Financial Services

### **Investment Thesis**

We recommend a HOLD rating for Visa Inc (V) with a target price of \$260-275, representing an upside of up to 14%. We believe Visa is well-positioned within the growing digital payments industry as a market leader, along with having the potential to capitalize on emerging trends, such as open banking.

#### **Drivers of Thesis**

- Visa is currently the dominant market leader in digital payments, with 48% market share among its core peer group. Paired with Mastercard, Visa has an effective duopoly over the payment processing market.
- The digital payments market is expected to grow by 11.8% over our forecast horizon, driven by increased demand for digital payments from consumers, increased use by businesses, and for use in cross-border transactions.
- Visa's continued expansion into additional value-added services, including open banking, positions the company to capitalize on significant growth in emerging trends in the future.

#### **Risks to Thesis**

- Visa's performance is closely tied to global macroeconomic conditions. In the event of a recession, decreased consumer spending will lead to lower payment and transaction volumes, reducing Visa's revenues.
- Regulatory pressures, such as the Credit Card Competition Act, may threaten Visa's market share the payments processing industry through mandating banks offer merchants a network other than Visa/Mastercard.

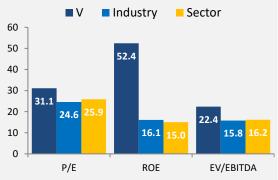
Earnings Estimates								
Year	Year 2020 2021 2022 2023E 2024E 2025E							
EPS	\$4.90	\$5.63	\$7.01	\$8.67	\$9.85	\$11.31		
HF est.				\$9.51	\$11.15	\$12.77		
growth	-7.9%	14.9%	24.5%	30.4%	16.6%	14.3%		



HOLD

Target Price	\$260-275
Henry Fund DCF	\$263
Henry Fund DDM	\$194
Relative Multiple	\$142
Price Data	
Current Price	\$241
52wk Range	\$174 – 250
Consensus 1yr Target	\$280
Key Statistics	
Market Cap (B)	\$490.7
Shares Outstanding (M)	2,086
Institutional Ownership	97.4%
Beta	0.95
Dividend Yield	0.70%
LT Consensus Growth	15.8%
Price/Earnings (LTM)	31.1
Price/Earnings (FY1)	24.6
Price/Sales (Current)	15.8
Profitability	
Operating Margin	67.38%
Profit Margin	49.91%
Return on Assets	9.50%
Return on Equity	52.40%

Stock Rating



**Company Description** 

Visa Inc (V) is the world's largest payment processor, engaging in the provision of digital payment services, having processed over \$14 trillion in total volume in fiscal year 2022. Visa facilitates payments across more than 200 countries among a global set of consumers, merchants, financial institutions, government entities, and other businesses<sup>4</sup>. In addition, Visa's core product offerings include credit, debit, and prepaid cards. Visa was founded in 1958 and is headquartered in San Francisco, CA.



### **COMPANY DESCRIPTION**

Visa Inc. (V) is the world's largest payments processor by market capitalization, as shown below, which engages in the provision of digital payment services and operating across over 200 countries and territories.

Company	Ticker	Market Cap (\$B)
Visa Inc.	V	490.7
Mastercard Incorporated	MA	390.2
American Express Company	AXP	120.6
Discover Financial Services	DFS	22.4

Source: FactSet

Visa facilitates secure and efficient money movement via their global processing network VisaNet, Visa's advanced transaction processing network. Visa facilitates secure and efficient money movement among a variety of clients, including consumers, issuing and acquiring financial institutions, and merchants<sup>1</sup>.

During fiscal year 2022, 258 billion total transactions were made with Visa's brand, equating to an average of 707 million transactions per day<sup>1</sup>. Of the 258 billion total transactions, 193 billion (about 75%) were processed by Visa. As for the remaining 25%, this is likely due to Visa transactions passing through multiple entities, including issuing banks, acquiring banks, and merchants. Additionally, Visa's total payments and cash volume was \$14 trillion.

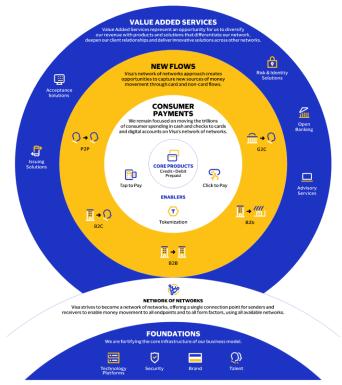
Visa's overall business model can be visualized using the figure below. To summarize, at the heart of Visa's growth <sup>1</sup>is their core product offerings: credit, debit, and prepaid cards<sup>1</sup>.

To capture new flows of money movement, Visa utilizes a "network of networks" approach to unify the payments ecosystem, facilitating person-to-person (P2P), business-to-consumer (B2C), business-to-business (B2B), business-to-small business (B2b), government-to-consumer (G2C), and consumer-to-business (C2B) payments<sup>1</sup>.

Lastly, Visa also incorporates value-added services into its business model, which include issuing solutions, acceptance solutions, risk & identity solutions, open banking, and advisory services<sup>1</sup>. While not listed as its own revenue segment, Visa's value-added services account for roughly 20% of its net revenues<sup>2</sup>, and in our view is where



Visa has significant room to grow and differentiate itself from its competition.



Source: Visa

The figure below highlights Visa's core business in a typical consumer-to-business (C2B) transaction.



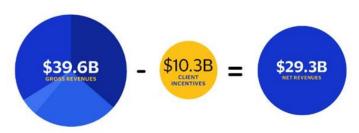
Source: Visa 10-K

In this example, the consumer makes a purchase using a Visa card, with the merchant then presenting the transaction data to an acquirer (usually a bank or third-party processing firm) that accepts Visa cards, which then forwards this data to Visa via VisaNet. Visa then contacts the card issuer to confirm the consumer's account for authorization. Once authorized, the issuer the acquirer the transaction amount minus an interchange reimbursement fee and posts it to the consumer's account. The acquirer pays the merchant the purchase amount minus a merchant discount rate (MDR)<sup>1</sup>.



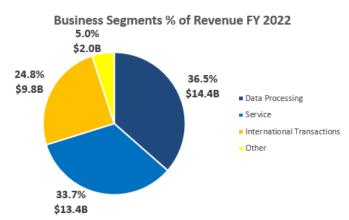
A key point to note is that Visa is not a financial institution, and does not issue cards, extend credit, or set rates and fees for account holders of Visa products. Rather, Visa partners with financial institution clients<sup>1</sup>. Unlike American Express or Discover, Visa does not have credit risk exposure, resulting in Visa trading at different multiples compared to these two firms. In addition, Visa notes that they do not experience any pronounced seasonality in their business<sup>1</sup>, so we opt to forecast revenues annually.

Visa reports across five main revenue segments: Data Processing, Service, International Transactions, Other, and Client Incentives. As shown in the figure below, Client Incentives is treated as a negative revenue segment, and is subtracted from the others to arrive at Visa's ending net revenues.



Source: Visa 10-K

The fiscal year 2022 total revenue breakdown (excluding Client Incentives) by segment is shown below:



Source: FactSet, Visa 10-K

Historically, Data Processing has remained Visa's top revenue segment, which we do not expect will change over our 10-year forecast horizon. This is likely driven by factors such as Visa's high transaction volume, growth in digital payments, and growth in Visa's value-added services. These trends are shown in the figure, excluding Client Incentives:



**Business Segments % of Revenue FY 2016-22** 



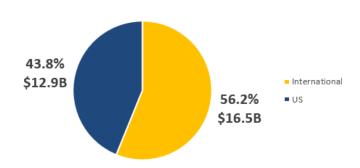
Source: FactSet

For all of our following forecasts, years past FY 2022 are our estimates.

# **Geographic Segments**

Visa reports across two key geographical segments: US and International. As of fiscal year 2022, revenue from the International segment made up 56.2% of total revenues, while domestic revenues accounted for the remaining 43.8%. Given Visa's significant international revenues, cross-border payment trends will be important to monitor moving forward. In FY 2020, international transactions fell significantly, due in large part to travel restrictions imposed during the outbreak of the pandemic. However, this segment has experienced recovery recently as cross-border travel has increased.

Geographic Segments % of Revenue FY 2022



Source: Visa 10-K

# **Data Processing**

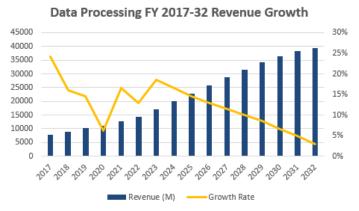
Visa's data processing segment is the largest by revenue as of fiscal year 2022, totaling \$14.4 billion in revenues. Visa earns revenue in this segment for authorization, clearing, settlement, value-added services, network access, and





other maintenance and support services that facilitate transaction and information processing among clients<sup>1</sup>.

The primary driver for Visa's data processing revenues is the number of processed transactions<sup>1</sup> by Visa, totaling almost 193 billion as of fiscal year 2022. We forecast this using the pre-pandemic growth as a baseline, taking an average of the first four years in our historical period, and growing it by a growth rate roughly in-line with the growth of the digital payments space, which expected to have a CAGR of 12.3% from 2023-2027<sup>5</sup>, decreasing gradually to a CV growth rate of 2.75%, as digital commerce continues to increase.



Source: FactSet, HF Estimates

The initial higher growth rate is driven by favorable factors impacting the digital payments. These factors include digital payments becoming a preferred method of payment for consumers due to their convenience and speed, use by businesses to streamline transactions and reduce costs, and an increased need for payment systems that can facilitate cross-border transactions efficiently<sup>5</sup>.

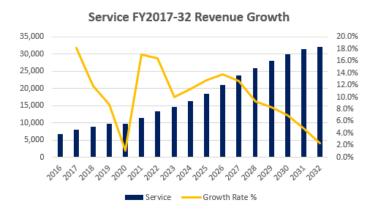
However, fintech startups and blockchain integration into payment systems have contributed to growth in the digital payments market<sup>5</sup>. As new entrants enter the payments space, we expect them to have a negative impact on Visa and Mastercard's market shares over the long-term, paired with the likelihood of increased regulation surrounding these companies, motivating our lower growth rate over time.

### **Service**

The Service segment is Visa's second-largest segment, totaling \$13.4 billion in revenues in fiscal year 2022. Visa earns revenue in this segment for services provided in support of client usage of Visa payment services<sup>1</sup>.

The primary driver for Service revenues is nominal payments volume, totaling \$14 trillion in fiscal year 2022. This represents the aggregate dollar amount of purchases made with Visa-branded cards<sup>1</sup>. The nominal payment volume can be further broken down into three categories: consumer credit, consumer debit, commercial, and cash. As with data processing, we use the average pre-pandemic growth rate as a baseline for each category except cash, gradually increasing due to the previously mentioned growth in the digital payments market and reaching a CV growth rate of 2.5%.

Historically, cash remained highly volatile year-to-year, we use the pre-pandemic average as a baseline, gradually decreasing to 0%.



Source: FactSet, HF Estimates

### **International Transaction**

The International Transaction segment is Visa's third-largest segment, generating \$9.8 billion in revenue in fiscal year 2022. Revenue is earned for cross-border transaction processing and currency conversion activities<sup>1</sup>. Visa witnessed a significant decline in this segment in 2020, driven by starkly decreased cross-broader transaction volume due to the COVID-19 pandemic.

Similarly, we take a pre-pandemic average estimate for this segment, especially given the tailwinds experienced during fiscal year 2022 as travel recovered, with the growth rate gradually declining to a CV growth rate of 2.0%. This is to account for this segment's heightened exposure towards geopolitical events and regulations, and uncertainty surrounding currency activities.







Source: FactSet, HF Estimates

### Other

Visa's Other segment consists of primarily value-added services, license fees for use of the Visa brand or technology, and fees for account holder services, certification, and licensing<sup>1</sup>. Given this segment's relatively minor contribution to overall net revenues, paired with a lack of concrete guidance from Visa, we expect this segment to maintain around the same level percentage of sales, albeit with a slight upward trend to account for historical behavior.

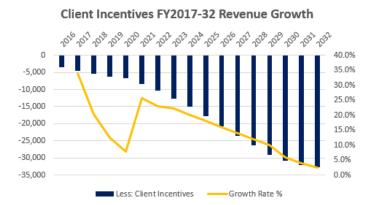


Source: FactSet, HF Estimates

### **Client Incentives**

Lastly, Client Incentives is Visa's negative revenue segment, which is paid to financial institution clients, merchants and strategic partners to grow payments volume, increase Visa product acceptance, and win merchant routing transactions over to Visa's network<sup>1</sup>. Growth in this segment is primarily driven by payments volume and transaction volume, card issuance and card conversion<sup>1</sup>. It should be noted that this segment may vary based on changes in performance expectations, actual

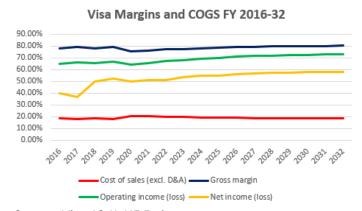
client performance, amendments to existing contracts, or execution of new contracts<sup>1</sup>. As such, outcomes may deviate from trends in payments volume. We forecast this segment to gradually decline towards a CV growth rate of 2.5%.



Source: FactSet, HF Estimates

# **Cost Structure Analysis**

The figure below shows Visa's gross margin, operating margin, cost of revenue, and net margins over both the historical period and our forecast horizon:



Source: Visa 10-K, HF Estimates

Visa has experienced relative stability in their margins, with very slight fluctuation. We forecast these trends to generally continue moving forward as Visa continues to scale and expand its offerings of value-added services. We implement a negative growth factor into are model to our expenses as a percent of total revenue, as Visa continues to scale.



# **Debt Maturity Analysis**

The figure below shows Visa's debt maturity schedule as of FY2022:

**Five-Year Debt Maturity Schedule** 

Fiscal Year	Payment (\$M)
2023	\$2,250
2024	0
2025	0
2026	5,325
2027	2,750
Thereafter	12,620
Total	\$22,945

Source: Visa 10-K

The figure below shows Visa's bond rating relative to its peers in the payment processing industry. S&P gives Visa an AA- rating, which is considered investment-grade. Among its peers, Visa has the highest credit rating with AA-. Its peers, namely AXP and DFS, either have adequate capacity to meet their commitments (BBB) or are considered the lowest investment-grade by market participants<sup>6</sup>.

Company	Rating
Visa Inc (V)	AA-
Mastercard Incorporated (MA)	A+
American Express Company (AXP)	BBB+
Discover Financial Services (DFS)	BBB-

Source: S&P Global

In terms of liquidity ratios, Visa has a quick ratio and a current ratio of 1.45 as of fiscal year 2022. As a result of all these factors, we do not anticipate Visa having issues repaying their debt.

## **ESG Analysis**

ESG, standing for Environment, Social, and Governance, is a framework to assess the sustainability and ethical impact of companies based on those three metrics. We find Visa to be well-positioned among its peers, having an ESG risk rating of 16.68, the lowest in its peer group. In the table below, a lower ESG risk rating is considered better.



Company	ESG Risk Rating		
Visa (V)	16.68	Low	
Mastercard (MA)	17.07	Low	
American Express (AXP)	18.61	Low	
Discover Financial Services (DFS)	22.50	Medium	

Source: Morningstar Sustainalytics

In addition, Visa ranks highly in terms of its ESG scores relative to its industry group and the global universe of companies covered by Morningstar:



Source: Morningstar Sustainalytics

This is driven by Visa's relatively strong ESG initiatives, measured across five clusters, with highlights from the fiscal year 2022 outlined below<sup>3</sup>:

- Visa has digitally enabled 40M small and micro businesses through solutions, education, partnerships, and initiatives towards their 50M goal set in 2020.
- Prevented \$27 billion in fraud-related losses, including a \$10 billion investment over the last five years to reduce fraud and increase network security.
- \$10 million continued investment in Visa Black Scholars and Jobs program.
- 89% reduction in scope 1 & 2 greenhouse gas emissions since fiscal year 2018, paired with 100% renewable electricity use maintained for operations.

### RECENT DEVELOPMENTS

# **Q3 FY 2023 Earnings Announcement**

Visa announced their third quarter earnings for fiscal year 2023 on July 25, 2023. They reported an EPS of \$2.16 and a revenue of \$8.12 billion, beating consensus estimates by 2.03%, and revenue by 0.73%, respectively. This was primarily driven by a continued recovery in international travel, thereby increased cross-border volume, as well as consumer spending remaining resilient, which drove growth in both payments volume and processed transactions<sup>9</sup>.



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Looking forward, Visa is anticipating fiscal year 2023 revenue growth to be in the low double-digits, which we factor into our short-term forecast. Visa views transaction growth as being stable in the US<sup>2</sup>, which we factor into our forecasts in the short-term.

## **COVID-19 Impact**

At the onset of the COVID-19 pandemic in 2020, Visa experienced a -4.6% fall in annual revenue, as consumers spent less resulting in a decreased payment volume -1.02% year over year, relative to ~10% increases from years prior. However, in 2021 and 2022, as consumer spending recovered to over pre-pandemic levels, with annual revenue growth rates of 10.3% and 21.6%, respectively. In the US, this was aided by stimulus check spending and Visa's partnership with the U.S. Treasury Department, where stimulus funds were distributed via Visa prepaid debit cards<sup>3</sup>.

### Russia-Ukraine War

In March 2022, Visa suspended all its operations in Russia following U.S, European Union, and UK economic sanctions. As a result, Visa no longer generates revenue from domestic and cross-border activities related to Russia. During quarter ended March 31, 2022, Visa additionally deconsolidated their Russian subsidiary. For fiscal year 2022 and 2021, total net revenues from Russia, including those from cross-border and domestic activities, consisted of about 2% and 4% of net revenues, respectively<sup>1</sup>.

## **Recent Acquisitions**

### Currencycloud

On December 20, 2021, Visa acquired Currencycloud, a global platform enabling financial institutions and fintechs to provide cross-border foreign exchange solutions for \$893 million<sup>1</sup>.

In September 2023, Visa and Currencycloud launched Visa Cross-Border Solutions, delivering cross-border money movement solutions to banks, fintechs, FX brokers, and other payment institutions. This is expected to improve Visa's cross-border capabilities and improve end-user experience in this capacity<sup>22</sup>.

#### **Tink**

On March 10, 2022, Visa acquired Tink, a Swedish open banking platform for \$1.9 billion. Tink currently connects to more than 3,400 banks that reach over 250 million bank customers across Europe<sup>27</sup>.

Open banking, or open bank data, refers to the system of allowing access and control of consumer banking and financial accounts through third-party applications<sup>16</sup>. This trend will be described further under our "Industry Trends" section.

We view this acquisition as being beneficial for Visa, as the open banking market size is expected to reach \$135.17 billion by 2030, with a CAGR of 27.2% from 2023 to 2030<sup>15</sup>. This expected growth is largely driven by factors such as enhanced customer involvement via open banking APIs, favorable government regulations, and increased adoption of related services and applications<sup>15</sup>. In particular, Visa expects this acquisition to accelerate the adoption of open banking globally<sup>3</sup>.

#### **Pismo**

On June 28, 2023, Visa announced plans to acquire Pismo, a Brazilian fintech company which develops cloud-based platform-as-a-service solutions which include core banking, payments, digital wallets, marketplace, and financial management functionalities<sup>14</sup> with operations in Latin America, Asia Pacific, and Europe for \$1 billion in cash<sup>3</sup>. The deal is expected to close by the end of 2023, pending regulatory approval.

If Visa successfully acquires Pismo, Visa will be able to expand its core banking and issuer processing capabilities across credit, debit, and commercial cards, as well as provide support for emerging payment platforms for financial institution clients<sup>3</sup>.

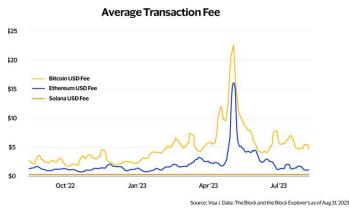
### Solana Blockchain Pilot

On September 5, 2023, Visa announced that they will be expanding its stablecoin settlement capabilities to the Solana blockchain to increase the efficiency of cross-border payment transactions<sup>3,19</sup>, as a part of its stablecoin settlement pilot. For reference, stablecoins are a subset of cryptocurrencies with prices pegged to an external asset, typically the US dollar<sup>19</sup>.





Visa has the capacity to execute approximately 65,000 transactions per second (TPS) off the blockchain, with Mastercard having the capacity to execute 5,000. While not at the scale of Visa, Solana executes an average of 1,954 TPS, with the ability to process 65,000°. This is significantly higher than its competitors Ethereum and Bitcoin, which average 12 and 7 TPS, respectively³. Additionally, Solana has low and predictable transaction costs, shown in the figure below, as well as much lower blockchain network transaction confirmation times³.



Source: Visa

Through this pilot, Visa plans to test if Solana can meet the demands of modern corporate treasury operations<sup>3</sup>. Overall, we expect this to have the potential to benefit Visa, given the significance of cross-border payments towards Visa's revenues and the prospects of this technology.

## **INDUSTRY TRENDS**

# **Growth of Open Banking**

In essence, open banking allows a consumer to share their financial data with a third-party service provider, which may include fintechs, currency exchanges, merchants, and other digital platforms<sup>18</sup>. Open banking has the potential to change the competitive dynamics and consumer experience of the banking industry<sup>16</sup>, through increasing competition, mandating adaptation from traditional banks, and granting consumers greater control over their financial data.

Open banking has a variety of applications that could be beneficial towards consumers, including aggregating one's financial data, providing insights into budgeting and money management, offering more suitable financial products or services, and assisting small businesses with accounting and fraud detection 16,18.

In a global consumer survey conducted by Mastercard, they found that open banking is already widely used, through popular financial apps such as Robinhood (a stock trading app) and Rocket Mortgage (a mortgage-brokering app)<sup>18</sup>.



Source: Mastercard 2022 New Payments Index

In a consumer survey conducted by Visa, it was found that 87% of U.S. consumers utilize open banking, most commonly through applications offering payment, personal finance, and buy-now-pay-later and other services<sup>3</sup>. There is a gap in awareness however, with only 34% being aware that these application connections are facilitated through open banking<sup>3</sup>. According to a survey conducted by Discover, 45% of respondents are uncomfortable with sharing their information with third parties in regarding open banking, citing expected increases in adoption as fintechs partner with trusted financial institutions<sup>28</sup>.

However, as data is shared more widely, this may pose potential risks towards consumers, due to potential security risks with open banking APIs, the possibility of data breaches, and the potential for market consolidation in the open banking space<sup>16</sup>.

As mentioned previously, open banking is expected to see significant growth over our forecast horizon. With Tink's acquisition, we believe that Visa is in a better position to capitalize on the growth of open banking as a value-added service, given Tink's significant reach across Europe and with Europe accounting for 37.0% of market revenue share in 2022, which is the majority<sup>15</sup>.





## **Credit Card Competition Act**

The Credit Card Competition Act of 2023 is a bipartisan bill proposed in the US that would require banks with greater with \$100 billion in assets to allow at least two credit card networks to be used on merchant credit cards rather than just one. While one could be Visa/Mastercard, the other must be a different network<sup>24</sup>. Opponents of the bill argue that retailers/merchants would be disproportionately benefited, as lower fees would mean decreased funding for credit card rewards programs<sup>25</sup>.

If this bill were to pass, it would likely pose a significant threat to the Visa/Mastercard duopoly, as it would likely decrease their market share as merchants choose alternatives with lower fees. However, the likelihood of this bill passing is uncertain, as it failed in 2022 when it was previously proposed. Regardless, legislation in this regard will be a key point to monitor moving forward. This would potentially benefit fintechs offering payment solutions or companies such as American Express and Discover.

## **PEER COMPARISONS**

Visa competes against all forms of payment, including both paper-based and electronic payments. In the electronic payments space, Visa's primary competitors are Mastercard, American Express, and Discover, which we use as our comparison set. These four companies dominate the electronic payments industry and are responsible for handling most the world's card payments<sup>16</sup>.

# **Metric Comparisons**

As shown in the tables below, Visa is the leader among its peers in terms of market capitalization and industry-specific measures such as payments volume and total transactions, making it one of the largest retail electronic funds transfer networks used in the world<sup>1</sup>.

In addition, Visa maintains a higher operating and net margin relative to its peers. One key difference to note is that American Express and Mastercard have credit risk exposure in their business model, while Visa and Mastercard do not.

### **Market Valuation & Dividend Yield**

Company	Market Cap (B)	P/E (LTM)	Div. Yield
V	490.7	31.1	0.70%
MA	390.2	38.8	0.60%
AXP	120.6	16.6	1.5%
DFS	22.4	6.2	3.1%

Source: FactSet

### **Profitability Ratios**

Company	Oper.	Net	Net ROA (%)	
	Margin	Margin		
٧	67.38%	49.91%	17.38%	39.99%
MA	56.63%	44.69%	26.00%	145.92%
AXP	23.60%	13.40%	3.60%	32.00%
DFS	48.83%	36.83%	3.63%	31.37%

Source: FactSet

As shown below, Visa dominates across critical industry metrics including payments volume, total transactions, and cards in circulation, which directly contribute to Visa's revenues.

# **Industry-specific metrics**

Company	Payments Vol. (\$B)	Total Vol. (\$B)	Total Trans. (B)	Cards (M)
V	10,894	13,508	244	3,936
MA	5,975	7,723	140	2,579
AXP	1,274	1,284	9	122
DFS	207	219	3	66

Source: Visa 10-K

Company	Revenue (\$M)	Revenue per Trans.
V	29,310	\$0.12
MA	22,237	\$0.15

Source: Visa, Mastercard 10-K

# **Mastercard Incorporated (MA)**

Mastercard Incorporated (MA) is the second-largest payment processor in the world behind Visa, processing close to \$8 trillion in transactions during fiscal year 20228. Together with Visa, they have an effective duopoly over the payments industry, facilitating over 75% of credit card transactions in the US<sup>29</sup>. The company has one reportable operating segment, Payment Solutions<sup>18</sup>. Mastercard was founded in 1966 and is headquartered in Purchase, NY.





Mastercard's business model is similar to Visa's, in that both offer credit, debit, and prepaid cards, offer value-added services, and are the two largest players in the payments processing industry. Like Visa, Mastercard does not issue cards directly, but rather partners with financial institutions<sup>16</sup>.

A key difference between Visa and Mastercard is their service fees. Visa charges service fees to the issuer based on card volume, while Mastercard negotiates service fees and calculates them as a percentage of global dollar volume<sup>16</sup>.

Along with this, currently Visa is the dominant player in the industry, being larger in terms of payments volume, transaction, and cards in circulation. Nonetheless, differences between the two companies can emerge regarding their value-added services, with a key point to monitor being how these firms capitalize on emerging trends in the payments and banking industries.

# **American Express Company (AXP)**

American Express Company (AXP) is a global financial institution engaging in the provision of charge and credit card products, as well as travel-related services<sup>4</sup>. The company operates through the following segments: U.S Consumer Services, Commercial Services, International Card Services, Global Merchant and Network Services, and Corporate and Other. American Express was founded in 1850 and is headquartered in New York, NY<sup>4</sup>.

Like Visa and Mastercard, American Express is a global payment network, meaning that the facilitate payment transactions globally<sup>20</sup>. However, the key difference is that American Express is both a bank and a credit card issuer, as well as offering checking and savings accounts, loans, and business lines of credit<sup>20</sup>. As such, American Express is exposed to additional risk factors such as default risk and increases in interest deposit costs<sup>21</sup>.

Due to the differences in business models, as well as the dominance of Visa and Mastercard in the payments industry, we do not anticipate them being a threat to Visa's market share in the short or long term.

# **Discover Financial Services (DFS)**

Discover Financial Services (DFS) is an American financial services company which operates under two business segments: Digital Banking and Payment Services. The company was founded in 1960 and is headquartered in Riverwoods, IL.

Unlike Visa or Mastercard, Discover issues credit and debit cards and provides other consumer banking products including deposit accounts, student loans, and other personal loans<sup>8</sup>, similar to American Express.

Along with American Express, we do not see Discover posing a significant threat to Visa or Mastercard's market share in the short or long term, due to Discover's small relative market share and differences in business models.

### **Relative Performance**

Over a one-year period (9/14/2022 – 9/14/2023), Visa outperformed both the market and most of its peer group, beaten only by Mastercard over this period, outlined in the figure below. It should be noted that relative performance depends significantly on the timeframe used, so this should not be used as the sole indicator of Visa's competitive positioning and overall performance. A key point to note here is the similarity between the price movements of Visa and Mastercard, further supporting the similarity in business models and exposures. As for Mastercard's slight outperformance over this one year period, we expect that this is part due to Mastercard's larger international presence and appealing long-term prospects.



Source: Yahoo Finance, quantmod R package

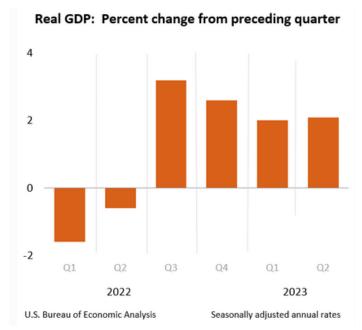
## **ECONOMIC OUTLOOK**

## **Real GDP Outlook**

In Q1 and Q2 of 2023, the real gross domestic product (GDP), increased at an annual rate of 2.0% and 2.1%,



respectively<sup>10</sup>. Looking forward, the Conference Board forecasts real GDP growth to be 1.3% in Q4 2023, then contracting in the first half of 2024<sup>23</sup>.



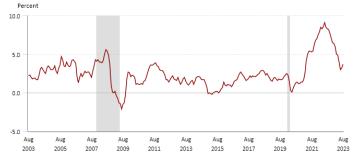
Source: U.S. Bureau of Economic Analysis

A slowing GDP would have an adverse effect on Visa, as decreased consumer spending would result in fewer transactions and payment volume. In addition, if travel decreases, cross-border transactions will likely decrease as well. Given current consumer resilience, expectations of a soft landing among financial institutions, and Visa's current guidance, we opt to keep our forecast in-line with management expectations.

### **Fed Funds Rate & Inflation**

The Fed Funds rate has ripple effects throughout the economy, impacting longer-term interest rates, such as mortgages, loans, and savings, which significantly impact consumer wealth and confidence. As for inflation, the US CPI inflation rate has decreased from 9.1% in June 2022 to 3.7% in August 2023.





Source: U.S. Bureau of Labor Statistics

As for Fed Fund rate hikes, consensus estimates are pointing towards an end to further rate hikes, with rate cuts expected in 2024<sup>26</sup>. We expect interest rates to remain higher for longer as the inflation rate approaches the Fed's 2% target.

A regime of higher or rising interest rates will have a negative impact on Visa in the sense of decreased consumer confidence and thereby spending. This would directly impact payments volume and the number of processed transactions, which would decrease Visa's earnings. However, we do not expect this to decline as much as the consumer discretionary sector, for instance, as there will still be demand for consumer durables product. However, Visa also benefits in an increased rate environment, as in the float of payments, Visa can invest these funds and earn interest before transferring the money to the merchant. As of right now, Visa maintains confidence in consumer resilience, macroeconomic conditions will have to be closely monitored as they will have a direct impact on Visa's future earnings.

# **VALUATION**

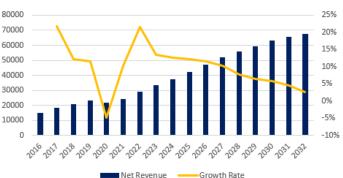
### **Revenue Growth**

Our growth assumptions are based on Visa's individual business segments, with a forecasted CAGR of 7.7% from FY2022-FY2032. For fiscal year 2023, we forecast revenue growth in-line with management expectations of low double digit growth year over year, arriving at 13.6%. Our largest growth expectations come from the Data Processing and Service segments, with Data Processing expected to make up most of Visa's revenue over our forecast horizon. Historical revenue growth and our estimates are shown in the figure below:









Source: FactSet, HF Estimates

## **Earnings Estimates**

Compared to consensus estimates, we forecast higher expected earnings for 2023, 2024, and 2025, which we believe are driven by differences in growth assumptions and our derivation for our forecasted EPS. Based on our observations, the reported earnings per share were derived from the diluted number of shares outstanding. As we derived ours using the basic number of shares outstanding, our EPS estimates will likely differ from the consensus on this basis as such. As for our growth assumptions,

# **Operating Expenses**

Visa's operating expenses as a percentage of sales have been generally decreasing over time, starting from 13.62% and decreasing by an average of around 4% over our historical period. As we expect this trend to continue, we similarly see a decline in operating expense as a percentage of sales over our forecasted period as Visa continues to scale.

# **WACC Assumptions**

We calculated a weighted average cost of capital (WACC) of 9.23% for Visa, slightly lower than consensus estimates. This is largely due to lower assumptions for Visa's beta and

the equity risk premium. For this calculation, we used the following assumptions:

**Risk-Free Rate:** We used 4.26%, the 10-year US Treasury bond yield as of September 8, 2023

**Beta:** We used 0.95, equal to both the 5yr monthly beta and the average of the 1yr, 2yr, and 3yr betas from Bloomberg.

**Equity Risk Premium:** We used the Henry Fund consensus estimate of 5.50%.

**Pre-tax Cost of Debt:** We used 4.71%, equal to FactSet's estimate based on the bond securities Visa has issued.

**Tax Rate:** We used 19.00% for our forecast horizon, equal to the implied marginal tax rate of FY 2022.

We opted to use the book value of debt as a proxy for the market value of debt, given the difficulty of accurately estimating this value for Visa.

## DCF / Economic Profit (EP)

Our discounted cash flow (DCF) and economic profit (EP) models both yielded an implied price today of \$263.18, representing an upside of  $^{\sim}9\%$  from the current price. We opt to use this as our primary model driving our recommendation, as the model considers more company-specific factors and allows us to incorporate growth assumptions per business segment. Our assumption for our CV growth of NOPLAT is 2.69%, equal to our final year NOPLAT growth rate.

# Relative Valuation (P/E and PEG)

For our relative valuation models, we considered Visa's primary competitors in the electronic payments industry, including Mastercard, American Express, and Discover Financial Services, as well as other fintech providers.

Our relative P/E valuation models yielded an implied price today of \$138.14 and \$142.18 based on forecasted 2023 and 2024 EPS figures, implying that it is overvalued relative to its peers. Our relative PEG valuation models yielded and implied price today of \$196.91 and \$209.46 based on forecasted 2023 and 2024 EPS figures, respectively. Capital One was omitted from this calculation due to having a negative 5-year EPS growth estimate. However, given Visa's dominance in the payments industry alongside



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Mastercard and differences in business models among peers, we do not believe these prices reflect Visa's intrinsic price.

# **Dividend Discount Model (DDM)**

Our dividend discount model (DDM) yielded an implied price of \$217.83, representing a baseline for the stock price based on the company's dividend payments. As Visa has been growing their dividend over our historical period, we estimate dividend growth to be at an average of 14%, equal to the 3-year average. However, we do not believe this reflects Visa's intrinsic value, as it fails to consider other company-specific growth factors.

## **KEYS TO MONITOR**

For Visa, key points to monitor will be their competitive positioning relative to Mastercard, such as through its value-added services and future acquisitions, as well as the regulatory, geopolitical, and macroeconomic environments moving forward.

With Visa's acquisitions, namely that of Tink, will be important to monitor as given the emergence and growth of open banking, as well as future acquisitions Visa makes to capture growth in emerging trends in the payments industry.

In both the short and long term, Visa's key revenue drivers of payments volume, transactions will be dependent on the level of consumer spending and inflation. As such, updates surrounding Fed Fund rates, consumer confidence, and the outlook surrounding a recession will be critical to monitor.

Lastly, Visa releases its fiscal year 2023 annual report on September 30, 2023. Upon the release of that report, our assumptions and outlook regarding Visa's may be subject to change.

## **Summary**

We recommend a HOLD rating for Visa Inc, with a target price range of \$260-275 based on our DCF, EP, and relative P/E models. This represents a current upside of up to 5.8% from the current price of \$241.07. Given Visa's market leadership in the payment processing industry and the

optimistic expected growth rates of digital payments, Visa is poised to deliver strong growth in the future.

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## **DISCLAIMER**

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Visa Inc. Sensitivity Tables

					Beta			
	263.19	0.80	0.85	0.90	0.95	1.00	1.05	1.10
	3.21%	371.53	351.63	333.69	317.45	302.67	289.17	276.79
Risk-free Rate	3.71%	333.68	317.44	302.66	289.16	276.77	265.37	254.84
	4.21%	302.65	289.15	276.76	265.36	254.83	245.08	236.02
ree	4.71%	276.75	265.35	254.82	245.07	236.01	227.57	219.70
sk-f	5.21%	254.81	245.05	236.00	227.56	219.68	212.32	205.41
S.	5.71%	235.98	227.55	219.67	212.31	205.40	198.91	192.80
	6.21%	219.66	212.29	205.39	198.90	192.79	187.03	181.59

				Pre-f	ax Cost of I	Debt		
	263.19	4.11%	4.31%	4.51%	4.71%	4.91%	5.11%	5.31%
	504	266.71	266.26	265.81	265.36	264.90	264.46	264.01
	604	265.99	265.53	265.08	264.63	264.18	263.73	263.29
×	704	265.26	264.81	264.36	263.91	263.46	263.01	262.56
CapEx	804	264.54	264.08	263.63	263.18	262.74	262.29	261.84
o	904	263.81	263.36	262.91	262.46	262.01	261.56	261.12
	1,004	263.09	262.64	262.19	261.74	261.29	260.84	260.40
	1,104	262.36	261.91	261.46	261.01	260.57	260.12	259.67

					rax Rate			
	263.19	13%	15%	17%	19%	21%	23%	25%
Ε	4.25%	320.50	312.94	305.37	297.79	290.19	282.58	274.96
Premium	4.50%	307.14	299.88	292.60	285.32	278.02	270.71	263.39
re	4.75%	294.81	287.83	280.83	273.82	266.80	259.77	252.73
RISK	5.00%	283.41	276.68	269.94	263.19	256.42	249.65	242.87
2	5.25%	272.83	266.33	259.83	253.32	246.80	240.27	233.72
Equity	5.50%	262.98	256.71	250.43	244.14	237.84	231.53	225.22
<u> </u>	5.75%	253.80	247.74	241.66	235.58	229.49	223.39	217.28

				CV Gr	owth of NO	PLAT		
- 1	263.19	2.09%	2.29%	2.49%	2.69%	2.89%	3.09%	3.29%
	3.66%	248.62	253.17	258.02	263.19	268.70	274.61	280.95
	3.76%	248.62	253.17	258.02	263.19	268.70	274.61	280.95
	3.86%	248.62	253.17	258.02	263.19	268.70	274.61	280.95
	3.96%	248.62	253.17	258.02	263.19	268.70	274.61	280.95
	4.06%	248.62	253.17	258.02	263.19	268.70	274.61	280.95
	4.16%	248.62	253.17	258.02	263.19	268.70	274.61	280.95
	4.26%	248.62	253.17	258.02	263.19	268.70	274.61	280.95

CV Growth of EPS

ROI %

			Long-t	erm inflatio	n rate		
263.19	1.70%	1.90%	2.10%	2.30%	2.50%	2.70%	2.90%
2.42%	262.79	262.72	262.65	262.58	262.52	262.45	262.38
3.42%	262.97	262.91	262.84	262.77	262.70	262.64	262.57
4.42%	263.17	263.11	263.04	262.97	262.90	262.84	262.77
5.42%	263.39	263.32	263.25	263.19	263.12	263.05	262.98
6.42%	263.62	263.55	263.48	263.42	263.35	263.28	263.21
7.42%	263.86	263.80	263.73	263.66	263.59	263.53	263.46
8.42%	264.13	264.06	263.99	263.93	263.86	263.79	263.72





Visa Inc. Revenue Decomposition

Fiscal Years Ending Sep. 30	2020	2021	2022	2023E	2024E	2025E	2026E	2027E	2028E	2029E	2030E	2031E	2032E
Revenue by Business Segment													
Data Processing	10,975	12,792	14,438	17108	19758	22424	25113	27748	30243	32509	34294	36009	37089
Growth Rate	6.2%	16.6%	12.9%	18.5%	15.5%	13.5%	12.0%	10.5%	9.0%	7.5%	5.5%	5.0%	3.0%
% of Total Revenue	50.2%	53.1%	49.3%	51.4%	52.7%	53.3%	53.5%	53.6%	54.2%	54.7%	54.5%	54.7%	55.0%
Service	9,804	11,475	13,381	14693	16362	18466	21021	23699	25891	28048	29996	31409	32153
Growth Rate	1.1%	17.0%	16.4%	10.0%	11.4%	12.9%	13.8%	12.7%	9.2%	8.3%	6.9%	4.7%	2.4%
% of Total Revenue	44.9%	47.6%	45.6%	44.1%	43.6%	43.9%	44.8%	45.8%	46.4%	47.2%	47.6%	47.7%	47.6%
International Transaction	6.299	6.530	9.815	11721	13764	15886	18019	20077	21969	23599	24879	25731	26245
Growth Rate	-19.3%	3.7%	50.3%	19.4%	17.4%	15.4%	13.4%	11.4%	9.4%	7.4%	5.4%	3.4%	2.0%
% of Total Revenue	28.8%	27.1%	33.5%	35.2%	36.7%	37.8%	38.4%	38.8%	39.4%	39.7%	39.5%	39.1%	38.9%
Other	1.432	1,675	1,991	2346	2718	3094	3460	3801	4099	4338	4555	4669	4786
Growth Rate	9.1%	17.0%	18.9%	17.8%	15.8%	13.8%	11.8%	9.8%	7.8%	5.8%	5.0%	2.5%	2.5%
% of Total Revenue	6.6%	6.9%	6.8%	7.0%	7.2%	7.4%	7.4%	7.3%	7.3%	7.3%	7.2%	7.1%	7.1%
Less: Client Incentives	-6,684	-8,387	-10,295	-12581	-15097	-17815	-20665	-23558	-26385	-29024	-30765	-31996	-32796
Growth Rate	8.0%	25.6%	23.0%	22.2%	20.0%	18.0%	16.0%	14.0%	12.0%	10.0%	6.0%	4.0%	2.5%
% of Total Revenue	-30.5%	-34.7%	-35.1%	-37.8%	-40.3%	-42.4%	-44.0%	-45.5%	-47.3%	-48.8%	-48.9%	-48.6%	-48.6%
		24,105	29,310										
Net Revenue	21,846 -4.9%	10.3%	29,310	33288 13.6%	37504 12.7%	42055 12.1%	46948 11.6%	51767 10.3%	55817 7.8%	59471 6.5%	<b>62959</b> 5.9%	65822 4.5%	67478 2.5%
Growth Rate	-4.9%	10.3%	21.6%	13.6%	12.7%	12.1%	11.6%	10.3%	7.8%	6.5%	5.9%	4.5%	2.5%
Barrana ha Garranahia Garrana													
Revenue by Geographic Segment	44.704	40.045	40.450	10205	20021	22220	25004	20522	20005	22005	24042	26422	27244
International	11,721	12,945	16,459	18285	20831	23229	26004	28633	30895	32906	34842	36423	37341
Growth Rate	-7.7%	10.4%	27.1%	11.1%	13.9%	11.5%	11.9%	10.1%	7.9%	6.5%	5.9%	4.5%	2.5%
% of Total Revenue	53.7%	53.7%	56.2%	54.9%	55.5%	55.2%	55.4%	55.3%	55.4%	55.3%	55.3%	55.3%	55.3%
United States	10,125	11,160	12,851	15003	16674	18826	20944	23134	24922	26565	28117	29399	30137
Growth Rate	-1.5%	10.2%	15.2%	16.7%	11.1%	12.9%	11.3%	10.5%	7.7%	6.6%	5.8%	4.6%	2.5%
% of Total Revenue	46.3%	46.3%	43.8%	45.1%	44.5%	44.8%	44.6%	44.7%	44.6%	44.7%	44.7%	44.7%	44.7%
Payments Volume (US & International, billions)													
Consumer Credit	3879	4039	4732	5264	5961	6870	7986	9203	9940	10735	11594	12173	12478
Growth rate	-3.63%	4.12%	17.16%	11.2%	13.2%	15.2%	16.2%	15.2%	8.0%	8.0%	8.0%	5.0%	2.5%
% total nominal payments volume	44.5%	40.5%	41.3%	41.3%	41.3%	41.3%	41.4%	41.6%	40.7%	40.2%	40.3%	40.3%	40.3%
Consumer Debit	3824	4828	5309	5840	6541	7457	8576	9692	10758	11727	12431	13052	13379
Growth rate	6.94%	26.26%	9.96%	10.0%	12.0%	14.0%	15.0%	13.0%	11.0%	9.0%	6.0%	5.0%	2.5%
		48.4%	46.3%			44.8%	44,4%			43.9%		43.2%	
% total nominal payments volume Commerical	43.9% 1010	1104	1423	45.8% 1657	45.3% 1945	2303	2750	43.8% 3229	44.0% 3727	43.9%	43.3% 4709	43.2%	43.2% 5141
Growth rate	-0.49%	9.31%	28.89%	16.4%	17.4% 13.5%	18.4% 13.8%	19.4% 14.2%	17.4%	15.4% 15.3%	13.4% 15.8%	11.4%	6.0%	3.0%
% total nominal payments volume	11.6%	11.1%	12.4%	13.0%	201070	201070		14.6%	201010	201070	16.4%	16.5%	16.6%
Total nominal payments volume	8713	9971	11464	12761	14448	16631	19313	22124	24425	26689	28734	30217	30998
Growth rate	1.14%	14.44%	14.97%	11.31%	13.22%	15.11%	16.13%	14.56%	10.40%	9.27%	7.66%	5.16%	2.58%
Cash Volume	2620	2559	2562	2663	2727	2753	2753	2753	2753	2753	2753	2753	2753
Growth rate	-7.6%	-2.3%	0.1%	3.9%	2.4%	0.9%	0%	0%	0%	0%	0%	0%	0%
Total nominal volume	11333	12530	14025	15424	17175	19383	22066	24877	27178	29442	31486	32970	33751
Growth rate	-1.02%	10.56%	11.93%	9.97%	11.36%	12.86%	13.84%	12.74%	9.25%	8.33%	6.95%	4.71%	2.37%
Number of processed transactions (millions)													
Number of processed transactions (millions):												400477	
Visa Processed Transactions	140839	164734	192530	228133	263475	299023	334882	370017	403289	433504	457312	480177	494582
Growth Rate	1.81%	16.97%	16.87%	18.49%	15.49%	13.49%	11.99%	10.49%	8.99%	7.49%	5.49%	5.00%	3.00%
Average Revenue per Transaction	0.16	0.15	0.15	0.15	0.14	0.14	0.14	0.14	0.14	0.14	0.14	0.14	0.14
Growth Rate	-6.6%	-5.7%	4.0%	-4.15%	-2.45%	-1.20%	-0.32%	-0.21%	-1.07%	-0.88%	0.35%	-0.43%	-0.47%
Growth Nate	-0.0%	-3.7%	4.076	-4.13%	-2.43%	-1.20%	-0.32%	-0.21%	-1.07%	-0.00%	0.33%	-0.43%	-0.47%
Payment Volume per Transaction	0.08	0.08	0.07	0.07	0.07	0.06	0.07	0.07	0.07	0.07	0.07	0.07	0.07
Growth Rate	-2.8%	-5.5%	-4.2%	-7.19%	-3.58%	-0.56%	1.65%	2.04%	0.07	0.07	1.38%	-0.27%	-0.61%
DELINIO BATE	-/ X%	-3 326	-0. 7%						11 / 5%				





Visa Inc. Income Statement

Fiscal Years Ending Sep. 30	2020	2021	2022	2023E	2024E	2025E	2026E	2027E	2028E	2029E	2030E	2031E	2032E
Net revenues	21846	24105	29310	33288	37504	42055	46948	51767	55817	59471	62959	65822	67478
Personnel expenses	3785	4240	4990	5763	6492	7240	8112	8939	9631	10269	10869	11362	11649
Network & processing expenses	727	730	743	747	752	757	763	770	775	781	787	793	799
Cost of sales (excl. D&A)	4512	4970	5733	6511	7244	7997	8875	9709	10406	11050	11656	12155	12449
Depreciation	687	721	771	862	834	811	798	794	790	781	774	768	765
Amortization of Intangibles	80	83	90	76	74	59	42	40	68	68	68	68	68
Depreciation & amortization expenses	767	804	861	938	908	870	840	834	858	849	842	836	833
Gross margin	16567	18331	22716	25839	29353	33188	37232	41224	44552	47572	50462	52831	54196
Marketing expenses	971	1136	1336	1491	1685	1859	2054	2247	2395	2527	2649	2741	2782
Professional fees	408	403	505	555	601	665	721	774	815	846	873	890	889
General & administrative expenses	1096	985	1194	1164	1155	1144	1154	1189	1188	1193	1201	1212	1224
Total operating expenses	2475	2524	3035	3210	3441	3668	3929	4210	4398	4565	4722	4843	4895
Operating income (loss)	14092	15807	19681	22629	25912	29520	33303	37015	40154	43006	45739	47988	49301
Interest expense	516	513	538	1060	1106	1333	1323	1243	1282	1320	1428	1435	1410
Investment income & other income (expense)	225	772	-139	417	498	295	514	539	528	611	632	653	680
Total non-operating income (expense)	-291	259	-677	-643	-609	-1038	-810	-704	-754	-709	-795	-782	-730
Income (loss) before income taxes	13790	16063	18136	21987	25303	28482	32493	36311	39400	42297	44944	47206	48572
Income tax provision (benefit)	2924	3752	3179	4177	4808	5412	6174	6899	7486	8036	8539	8969	9229
Net income (loss)	10866	12311	14957	17809	20496	23071	26319	29412	31914	34261	36405	38237	39343
Weighted average class A shares outstanding - basic	1697	1691	1651	1872	1838	1806	1777	1751	1726	1703	1681	1661	1642
Year end shares outstanding	1939	1932	1890	1,854	1,822	1,791	1,763	1,738	1,714	1,692	1,671	1,651	1,633
Net earnings per class A share - basic	4.90	5.63	7.01	9.51	11.15	12.77	14.81	16.80	18.49	20.12	21.65	23.02	23.95
Cash dividends per common share	1.37	1.45	1.69	1.80	2.05	2.34	2.67	3.04	3.46	3.95	4.50	5.13	5.85





Visa Inc. Balance Sheet

Fiscal Years Ending Sep. 30	2020	2021	2022	2023E	2024E	2025E	2026E	2027E	2028E	2029E	2030E	2031E	2032E
Cash and cash equivalents	16289	16487	15689	17749	27565	43621	56548	71091	90099	110456	133815	156009	177624
Restricted cash - litigation escrow	901	894	1449	1528	1610	1698	1790	1887	1989	2097	2210	2330	2456
Investment securities (current)	3752	2025	2833	2987	3148	3319	3499	3689	3889	4099	4321	4556	4803
Settlement receivable	1264	1758	1932	2183	2555	2798	3134	3476	3729	3979	4215	4403	4515
Accounts receivable	1618	1968	2020	2492	2818	3069	3490	3839	4120	4407	4661	4870	4996
Prepaid and other current assets	2607	3116	5010	4086	5288	6093	6395	7283	7848	8276	8824	9213	9431
Current portion of client incentives	1214	1359	1272	1724	1895	2042	2361	2578	2766	2966	3132	3273	3359
Total Current Assets	27645	27607	30205	32748	44880	62641	77216	93842	114439	136280	161178	184653	207184
Property, equipment, and technology, gross	7161	7674	8881	9714	10537	11360	12182	13004	13826	14648	15470	16292	17115
Less: Accumulated depreciation & amortization	4424	4959	5658	6596	7504	8374	9214	10048	10907	11755	12597	13433	14266
Property, equipment and technology, net	2737	2715	3223	3118	3034	2985	2967	2956	2919	2893	2873	2859	2849
Investment securities, available-for-sale (long-term)	231	1705	2136	2252	2374	2502	2638	2781	2932	3091	3258	3435	3621
Client incentives	3175	3245	3348	4374	4754	5220	5982	6528	7026	7521	7942	8304	8520
Goodwill	15910	15958	17787	17787	17787	17787	17787	17787	17787	17787	17787	17787	17787
Intangible assets, net	27808	27664	25065	24989	24915	24856	24814	24774	24706	24638	24570	24502	24434
Other assets	3350	3922	3650	4889	5427	5833	6733	7365	7896	8468	8943	9344	9590
Deferred tax assets, net	63	80	87	88	88	89	89	90	91	91	92	92	93
Total Assets	80919	82896	85501	90244	103258	121914	138227	156122	177796	200768	226644	250977	274078
Accounts payable	174	266	340	340	410	459	502	562	604	641	681	711	729
Settlement payable	1736	2443	3281	3248	3886	4390	4782	5347	5759	6112	6490	6781	6947
Customer collateral	1850	2260	2342	2867	3248	3541	4020	4425	4750	5079	5372	5613	5758
Accrued compensation and benefits	821	1211	1359	1489	1767	1937	2158	2401	2575	2745	2911	3040	3117
Client incentives	4176	5243	6099	6843	7891	8748	9765	10809	11625	12391	13126	13715	14062
Accrued liabilities	1706	2009	3361	3064	3626	4253	4536	5081	5505	5816	6182	6464	6617
Income Taxes Payable	134	325	365	395	428	463	501	542	587	635	688	744	806
Deferred purchase consideration	0	0	0	0	0	0	0	0	0	0	0	0	0
Current maturities of long-term debt	2999	999	2250	0	0	4000	2750	0	0	0	1500	1000	0
Accrued litigation	914	983	1456	1528	1682	1943	2115	2349	2542	2695	2859	2990	3063
Total current liabilities	14510	15739	20853	19773	22938	29735	31130	31516	33948	36116	39809	41059	41100
Long-term debt	21071	19978	20200	22499	23491	24298	25349	26389	27217	28029	28809	29474	29935
Deferred tax liabilities	5237	6128	5332	5570	5819	6080	6352	6636	6932	7242	7566	7904	8258
Deferred purchase consideration	0	0	0	0	0	0	0	0	0	0	0	0	0
Other liabilities	3891	3462	3535	3727	3929	4142	4366	4603	4852	5115	5392	5685	5993
Total liabilities	44709	45307	49920	51569	56177	64255	67197	69143	72949	76502	81576	84121	85285
Preferred stock	5086	3080	2324	2324	2324	2324	2324	2324	2324	2324	2324	2324	2324
Treasury stock	0	0	0	0	0	0	0	0	0	0	0	0	0
Common stock and additional paid-in capital	16721	18855	19545	19693	19841	19988	20136	20284	20432	20445	20445	20445	20445
Right to recover for covered losses	-39	-133	-35	-35	-35	-35	-35	-35	-34	-34	-34	-34	-34
Accumulated income (deficit)	14088	15351	16116	19062	27320	37750	50974	66775	84494	103900	124702	146490	168428
Total accumulated other comprehensive loss / income, net	354	436	-2369	-2369	-2369	-2369	-2369	-2369	-2369	-2369	-2369	-2369	-2369
Total stockholder's equity	36210	37589	35581	38675	47081	57659	71030	86979	104847	124266	145067	166856	188794
Total Liabilities and Stockholders' Equity	80919	82896	85501	90244	103258	121914	138227	156122	177796	200768	226644	250977	274078





Visa Inc. Historical Cash Flow Statement

Fiscal Years Ending Sep. 30	2016	2017	2018	2019	2020	2021	2022
Net income (loss)	5991	6699	10301	12080	10866	12311	14957
Client incentives	3409	4565	5491	6173	6664	8367	10295
Fair value adjustment for the Visa Europe put option	-255	4303	5491	01/3	0004	0307	10295
Share-based compensation	221	235	327	407	416	542	602
Excess tax benefit for share-based compensation	-63	233	327	407	410	342	002
Depreciation & amortization of property, equipment, technology & intangible assets	502	556	613	656	767	804	861
Deferred income taxes	-764	1700	-1277	214	307	873	-336
Right to recover for covered losses recorded in equity	-704	-209	-11	214	307	6/3	-330
VE territory covered losses incurred	-9	-209	-11	-172	-37	-147	-43
Losses (gains) on equity investments, net				-1/2	-5/	-712	264
Charitable contribution of Visa Inc. shares		192				-/12	204
Litigation provision	4	152					
Other adjustments	64	50	-74	-271	-145	-109	-94
Settlement receivable	391	94	-223	-1533	1858	-468	-397
Accounts receivable	-65	-54	-70	-333	-43	-343	-97
Client incentives	-3508	-4628	-4682	-6430	-8081	-7510	-9351
Other assets	-315	-252	-160	-310	-402	-147	-666
Accounts payable	-313 43	-232	-100	-24	21	-147	-000
Settlement payable	-302	-176	262	1931	-2384	679	1256
Accrued & other liabilities	277	465	1761	627	923	929	1055
Accrued & other liabilities Accrued litigation	-47	405	452	-231	-290	70	476
Net cash flows from operating activities	5574	9208	12713	12784	10440	15227	18849
	-523	-707	-718	-756	-736	-705	-970
Purchases of property, equipment & technology Proceeds from sales of property, equipment & technology	-323	12	14	-730	-730	-703	-970
Purchases of investment securities		12	14	-2653	-2075	-5111	-5997
Proceeds from maturities & sales of investment securities				3996	4510	5701	4585
Purchases of investment securities, available-for-sale	-28004	-3238	-5772	3990	4510	3701	4303
Proceeds from maturities & sales of investment securities, available-for-sale	26697	5012	3636				
Acquisitions	-9082	-302	-196	-	-	-	
·	-9062	-302	-196	-699	-77	-75	-1948
Acquisitions, net of cash & restricted cash acquired Purchases of or contributions to other investments	-10	-46	-50	-501	-267	-73	-1340
Purchases of other investments	-10	-40	-30	-301	-207	-/1	-86
Proceeds / distributions from other investments	6	4	2	12			-00
Other investing activities	0	4	2	10	72	109	128
Net cash flows from investing activities	-10916	735	-3084	-591	1427	-152	-4288
Repurchase of class A common stock	-6987	-6891	-7192	-8607	-8114	-8676	-11589
Repayments of debt	-	-	-1750	-	-	-3000	-1000
Treasury stock - class C common stock	-170		1730			3000	1000
Dividends paid	-1350	-1579	-1918	-2269	-2664	-2798	-3203
Payment of deferred purchase consideration related to the Visa Europe acquisition	1330	2373		-1236	2004	2730	3203
Proceeds from issuance of senior notes	15971	2488		1230	7212		3218
Debt issuance costs	-98	-15			7212		3210
Deposit into U.S. litigation escrow account - U.S. retrospective responsibility plan	-30	-13	-600				
Payments from (return to) U.S. litigation escrow account - U.S. retrospective responsibility plan	45		150				
Cash proceeds from issuance of common stock under employee equity plans	95	149	164	162	190		
Cash proceeds from issuance of class A common stock under employee equity plans	93	149	104	102	190	208	
Cash proceeds from issuance of class A common stock under equity plans						200	196
Restricted stock & performance-based shares settled in cash for taxes	-92	-76	-94	-111	-160	-144	-120
Excess tax benefit for share-based compensation	63	-76	-34	-111	-100	-144	-120
Payments to settle derivative instruments	63	-	-	_	-333	-	
Other financing activities	-		_		-99	-	-198
Net cash flows from financing activities	7477	-5924	-11240	-12061	-3968	-14410	-12696
HEL COST HOUS HAVE HIGHER	7477	-3324	-11540	-12001	-3508	-14410	-12090
Effect of exchange rate changes on cash & cash equivalents	-34	236	-101	-277	440	-37	-1287
Increase (decrease) in cash & cash equivalents	2101	4255	-1712	-145	8339	628	578
	2.01						
Cash & cash equivalents at beginning of year	3518	5619	9874	10977	10832	19171	19799
and the same of th	3340	5525	30. 4	20011			23.33
Cash & cash equivalents at end of year	5619	9874	8162	10977	10832	19171	19799





Forecasted Cash Flow Statement

Fiscal Years Ending Sep. 30	2023E	2024E	2025E	2026E	2027E	2028E	2029E	2030E	2031E	2032E
Cash & cash equivalents at beginning of period	15689	17749	27565	43621	56548	71091	90099	110456	133815	156009
Net Income	17809	20496	23071	26319	29412	31914	34261	36405	38237	3934
Adjustments to reconcile net income to cash generated by operating activities:										
Depreciation & amortization	938	908	870	840	834	858	849	842	836	833
Changes in Operating Activities:										
Accounts receivable	-472	-326	-251	-421	-349	-282	-286	-254	-209	-12
Settlement receivable	-251	-373	-243	-335	-342	-253	-249	-237	-187	-11
Prepaid expenses and other current assets	924	-1201	-806	-301	-889	-564	-429	-548	-389	-21
Current portion of client incentives	-452	-171	-148	-319	-217	-188	-429	-165	-141	-21
Non-current portion of client incentives	-1026	-380	-466	-762	-546	-499	-495	-421	-362	-21
Deferred Tax Assets	-1026	-360	-400	-762	-340	-499	-495	-421	-302	-21
	-1	71	49	43	60	42	38	40	30	18
Accounts payable	-33	638	504	43 392	565	412	353	40 378	291	16
Settlement payable									57	
Income Taxes Payable	30	33	35	38	41	45	48	52		6:
Customer collateral	525	381	294	479	404	325	329	293	241	14
Accrued compensation and benefits	130	278	171	221	243	174	170	165	129	7
Client incentivites (current liability)	744	1047	858	1017	1044	816	766	734	590	34
Accrued liabilities	-297	562	627	283	545	425	311	366	282	15
Accrued litigation	72	155	261	172	234	193	153	164	131	7.
Deferred tax liabilities	238	249	260	272	284	297	310	324	338	353
Right to recover for expected losses	0	0	0	0	0	0	0	0	0	(
Net cash flows from operating activities:	18878	22366	25084	27938	31323	33715	35927	38138	39872	40812
Changes in Investing Activities:										
Investment securities (current)	-154	-162	-171	-180	-190	-200	-211	-222	-234	-24
Restricted cash - litigation escrow	-79	-83	-87	-92	-97	-102	-108	-114	-120	-126
Property, equipment, and technology, gross	-833	-824	-822	-822	-822	-822	-822	-822	-822	-82
Investment securities, available-for-sale (long-term)	-116	-122	-129	-136	-143	-151	-159	-168	-177	-18
				42	40	68	68	68	68	6
Intangible assets net							00			
Intangible assets, net Other assets	76 -1239	74 -538	-406			-531	-572	-475	-402	-24
Intangible assets, net Other assets Net cash flows from investing activities	-1239 - <b>2343</b>	-538 -1655	-406 - <b>1556</b>	-900 -2088	-632 - <b>1844</b>	-531 - <b>1738</b>	-572 -1803	-475 - <b>1732</b>	-402 - <b>1686</b>	
Other assets Net cash flows from investing activities	-1239	-538	-406	-900	-632					
Other assets  Net cash flows from investing activities  Changes in Financing Activities:	-1239 -2343	-538 - <b>1655</b>	-406 - <b>1556</b>	-900 - <b>2088</b>	-632 - <b>1844</b>	-1738	-1803	-1732	-1686	-156
Other assets Net cash flows from investing activities	-1239	-538	-406	-900	-632					-156
Other assets  Net cash flows from investing activities  Changes in Financing Activities:	-1239 -2343	-538 - <b>1655</b>	-406 - <b>1556</b>	-900 - <b>2088</b>	-632 - <b>1844</b>	-1738	-1803	-1732	-1686	-156 -100
Other assets Net cash flows from investing activities Changes in Financing Activities: Current maturities of long-term debt	-1239 -2343 -2250	-538 - <b>1655</b>	-406 - <b>1556</b> 4000	-900 - <b>2088</b> -1250	-632 - <b>1844</b> -2750	- <b>1738</b>	- <b>1803</b>	- <b>1732</b>	- <b>1686</b>	-156 -100 46
Other assets  Net cash flows from investing activities  Changes in Financing Activities:  Current maturities of long-term debt  Long-term debt	-1239 -2343 -2250 2299	-538 -1655 0 993	-406 -1556 4000 807	-900 -2088 -1250 1051	-632 -1844 -2750 1040	- <b>1738</b> 0 828	-1803 0 812	- <b>1732</b> 1500 781	-1686 -500 664	-156 -100 46
Other assets  Net cash flows from investing activities  Changes in Financing Activities:  Current maturities of long-term debt  Long-term debt  Deferred purchase consideration	-1239 -2343 -2250 2299 0	-538 -1655 0 993 0	-406 - <b>1556</b> 4000 807 0	-900 -2088 -1250 1051 0	-632 -1844 -2750 1040 0	-1738 0 828 0	-1803 0 812 0	-1732 1500 781 0	-1686 -500 664 0	-156 -100 46:
Other assets  Net cash flows from investing activities  Changes in Financing Activities:  Current maturities of long-term debt  Long-term debt  Deferred purchase consideration  Other liabilities	-1239 -2343 -2250 2299 0 192	-538 -1655 0 993 0 202	-406 -1556 4000 807 0 213	-900 -2088 -1250 1051 0 224	-632 -1844 -2750 1040 0 237	-1738 0 828 0 249	-1803 0 812 0 263	-1732 1500 781 0 277	-1686 -500 664 0 292	-156 -100 46.
Other assets  Net cash flows from investing activities  Changes in Financing Activities:  Current maturities of long-term debt  Long-term debt  Deferred purchase consideration  Other liabilities  Common Stock & APIC	-1239 -2343 -2250 2299 0 192 148	-538 -1655 0 993 0 202 148	-406 -1556 4000 807 0 213 148	-900 -2088 -1250 1051 0 224 148	-632 -1844 -2750 1040 0 237 148	-1738 0 828 0 249 148	-1803 0 812 0 263 13	-1732 1500 781 0 277	-1686 -500 664 0 292	-1560 -1000 46: ( 308 (
Other assets  Net cash flows from investing activities  Changes in Financing Activities:  Current maturities of long-term debt Long-term debt Deferred purchase consideration Other liabilities Common Stock & APIC Dividends Paid Share Repurchases	-1239 -2343 -2250 2299 0 192 148 -3274	-538 -1655 0 993 0 202 148 -3402	-406 -1556 4000 807 0 213 148 -3805	-900 -2088 -1250 1051 0 224 148 -4260	-632 -1844 -2750 1040 0 237 148 -4775	-1738 0 828 0 249 148 -5358	-1803 0 812 0 263 13 -6019	-1732 1500 781 0 277 0 -6768	-500 664 0 292 0 -7613	-1560 -1000 461 ( 308 ( -8570 -8836
Other assets  Net cash flows from investing activities  Changes in Financing Activities:  Current maturities of long-term debt  Long-term debt  Deferred purchase consideration  Other liabilities  Common Stock & APIC  Dividends Paid	-1239 -2343 -2250 2299 0 192 148 -3274 -11589	-538 -1655 0 993 0 202 148 -3402 -8836	-406 -1556 4000 807 0 213 148 -3805 -8836	-900 -2088 -1250 1051 0 224 148 -4260 -8836	-632 -1844 -2750 1040 0 237 148 -4775 -8836	-1738 0 828 0 249 148 -5358 -8836	-1803 0 812 0 263 13 -6019 -8836	-1732 1500 781 0 277 0 -6768 -8836	-1686 -500 664 0 292 0 -7613 -8836	-246 -1560 -1000 461 0 308 0 -8570 -17636





Common Size Income Statement

Fiscal Years Ending Sep. 30	2020	2021	2022	2023E	2024E	2025E	2026E	2027E	2028E	2029E	2030E	2031E	2032E
Net revenues	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%
Personnel expenses	17.33%	17.59%	17.02%	17.31%	17.31%	17.22%	17.28%	17.27%	17.25%	17.27%	17.26%	17.26%	17.26%
Network & processing expenses	3.33%	3.03%	2.53%	2.96%	2.84%	2.78%	2.86%	2.83%	2.82%	2.84%	2.83%	2.83%	2.83%
Cost of sales (excl. D&A)	20.65%	20.62%	19.56%	19.56%	19.31%	19.02%	18.90%	18.76%	18.64%	18.58%	18.51%	18.47%	18.45%
Depreciation & amortization expenses	3.51%	3.34%	2.94%	2.82%	2.42%	2.07%	1.79%	1.61%	1.54%	1.43%	1.34%	1.27%	1.23%
Gross margin	75.84%	76.05%	77.50%	77.62%	78.27%	78.91%	79.31%	79.63%	79.82%	79.99%	80.15%	80.26%	80.32%
Marketing expenses	4.44%	4.71%	4.56%	4.48%	4.49%	4.42%	4.37%	4.34%	4.29%	4.25%	4.21%	4.16%	4.12%
Professional fees	1.87%	1.67%	1.72%	1.67%	1.60%	1.58%	1.54%	1.49%	1.46%	1.42%	1.39%	1.35%	1.32%
General & administrative expenses	5.02%	4.09%	4.07%	4.17%	3.91%	3.85%	3.78%	3.65%	3.57%	3.48%	3.39%	3.31%	3.22%
Total operating expenses	11.33%	10.47%	10.35%	9.64%	9.17%	8.72%	8.37%	8.13%	7.88%	7.68%	7.50%	7.36%	7.25%
Operating income (loss)	64.51%	65.58%	67.15%	67.98%	69.09%	70.19%	70.94%	71.50%	71.94%	72.32%	72.65%	72.91%	73.06%
Interest expense	2.36%	2.13%	1.84%	3.18%	2.95%	3.17%	2.82%	2.40%	2.30%	2.22%	2.27%	2.18%	2.09%
Investment income & other income (expense)	1.03%	3.20%	-0.47%	1.25%	1.33%	0.70%	1.09%	1.04%	0.95%	1.03%	1.00%	0.99%	1.01%
Total non-operating income (expense)	-1.33%	1.07%	-2.31%	-0.86%	-0.70%	-1.29%	-0.95%	-0.98%	-1.07%	-1.00%	-1.02%	-1.03%	-1.01%
Income (loss) before income taxes	63.12%	66.64%	61.88%	66.05%	67.47%	67.73%	69.21%	70.14%	70.59%	71.12%	71.39%	71.72%	71.98%
Income tax provision (benefit)	13.38%	15.57%	10.85%	12.55%	12.82%	12.87%	13.15%	13.33%	13.41%	13.51%	13.56%	13.63%	13.68%
Net income (loss)	49.74%	51.07%	51.03%	53.50%	54.65%	54.86%	56.06%	56.82%	57.18%	57.61%	57.82%	58.09%	58.31%





Common Size Balance Sheet

Fiscal Years Ending Sep. 30	2020	2021	2022	2023E	2024E	2025E	2026E	2027E	2028E	2029E	2030E	2031E	2032E
Cash and cash equivalents	74.6%	68.4%	53.5%	53.3%	73.5%	103.7%	120.4%	137.3%	161.4%	185.7%	212.5%	237.0%	263.2%
Restricted cash - litigation escrow	4.1%	3.7%	4.9%	4.3%	4.3%	4.5%	4.4%	4.4%	4.4%	4.4%	4.4%	4.4%	4.4%
Investment securities	17.2%	8.4%	9.7%	9.0%	8.4%	7.9%	7.5%	7.1%	7.0%	6.9%	6.9%	6.9%	7.1%
Settlement receivable	5.8%	7.3%	6.6%	6.6%	6.8%	6.7%	6.7%	6.7%	6.7%	6.7%	6.7%	6.7%	6.7%
Accounts receivable	7.4%	8.2%	6.9%	7.5%	7.5%	7.3%	7.4%	7.4%	7.4%	7.4%	7.4%	7.4%	7.4%
Prepaid and other current assets	11.9%	12.9%	17.1%	12.3%	14.1%	14.5%	13.6%	14.1%	14.1%	13.9%	14.0%	14.0%	14.0%
Current portion of client incentives	5.6%	5.6%	4.3%	5.2%	5.1%	4.9%	5.0%	5.0%	5.0%	5.0%	5.0%	5.0%	5.0%
Total Current Assets	126.5%	114.5%	103.1%	98.4%	119.7%	148.9%	164.5%	181.3%	205.0%	229.2%	256.0%	280.5%	307.0%
Property, equipment, and technology, gross	32.8%	31.8%	30.3%	29.2%	28.1%	27.0%	25.9%	25.1%	24.8%	24.6%	24.6%	24.8%	25.4%
Less: Accumulated depreciation and amortization	20.3%	20.6%	19.3%	19.8%	20.0%	19.9%	19.6%	19.4%	19.5%	19.8%	20.0%	20.4%	21.1%
Property, equipment and technology, net	12.5%	11.3%	11.0%	9.4%	8.1%	7.1%	6.3%	5.7%	5.2%	4.9%	4.6%	4.3%	4.2%
Investment securities, available-for-sale	1.1%	7.1%	7.3%	6.8%	6.3%	6.0%	5.6%	5.4%	5.3%	5.2%	5.2%	5.2%	5.4%
Client incentives	14.5%	13.5%	11.4%	13.1%	12.7%	12.4%	12.7%	12.6%	12.6%	12.6%	12.6%	12.6%	12.6%
Goodwill	72.8%	66.2%	60.7%	53.4%	47.4%	42.3%	37.9%	34.4%	31.9%	29.9%	28.3%	27.0%	26.4%
Intangible assets, net	127.3%	114.8%	85.5%	75.1%	66.4%	59.1%	52.9%	47.9%	44.3%	41.4%	39.0%	37.2%	36.2%
Other assets	15.3%	16.3%	12.5%	14.7%	14.5%	13.9%	14.3%	14.2%	14.1%	14.2%	14.2%	14.2%	14.2%
Deferred tax assets	0.3%	0.3%	0.3%	0.3%	0.2%	0.2%	0.2%	0.2%	0.2%	0.2%	0.1%	0.1%	0.1%
Total Assets	370.4%	343.9%	291.7%	271.1%	275.3%	289.9%	294.4%	301.6%	318.5%	337.6%	360.0%	381.3%	406.2%
Accounts payable	0.8%	1.1%	1.2%	1.0%	1.1%	1.1%	1.1%	1.1%	1.1%	1.1%	1.1%	1.1%	1.1%
Settlement payable	7.9%	10.1%	11.2%	9.8%	10.4%	10.4%	10.2%	10.3%	10.3%	10.3%	10.3%	10.3%	10.3%
Customer collateral	8.5%	9.4%	8.0%	8.6%	8.7%	8.4%	8.6%	8.5%	8.5%	8.5%	8.5%	8.5%	8.5%
Accrued compensation and benefits	3.8%	5.0%	4.6%	4.5%	4.7%	4.6%	4.6%	4.6%	4.6%	4.6%	4.6%	4.6%	4.6%
Client incentives	19.1%	21.8%	20.8%	20.6%	21.0%	20.8%	20.8%	20.9%	20.8%	20.8%	20.8%	20.8%	20.8%
Accrued liabilities	7.8%	8.3%	11.5%	9.2%	9.7%	10.1%	9.7%	9.8%	9.9%	9.8%	9.8%	9.8%	9.8%
Deferred purchase consideration	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Current maturities of long-term debt	13.7%	4.1%	7.7%	0.0%	0.0%	9.5%	5.9%	0.0%	0.0%	0.0%	2.4%	1.5%	0.0%
Accrued litigation	4.2%	4.1%	5.0%	4.4%	4.5%	4.6%	4.5%	4.5%	4.6%	4.5%	4.5%	4.5%	4.5%
Total current liabilities	66.4%	65.3%	71.1%	59.4%	61.2%	70.7%	66.3%	60.9%	60.8%	60.7%	63.2%	62.4%	60.9%
Long-term debt	96.5%	82.9%	68.9%	67.6%	62.6%	57.8%	54.0%	51.0%	48.8%	47.1%	45.8%	44.8%	44.4%
Deferred tax liabilities	24.0%	25.4%	18.2%	16.7%	15.5%	14.5%	13.5%	12.8%	12.4%	12.2%	12.0%	12.0%	12.2%
Deferred purchase consideration	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Other liabilities	17.8%	14.4%	12.1%	11.2%	10.5%	9.8%	9.3%	8.9%	8.7%	8.6%	8.6%	8.6%	8.9%
Total liabilities	204.7%	188.0%	170.3%	154.9%	149.8%	152.8%	143.1%	133.6%	130.7%	128.6%	129.6%	127.8%	126.4%
Preferred stock	23.3%	12.8%	7.9%	7.0%	6.2%	5.5%	5.0%	4.5%	4.2%	3.9%	3.7%	3.5%	3.4%
Treasury stock	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Common stock and additional paid-in capital	76.5%	78.2%	66.7%	59.2%	52.9%	47.5%	42.9%	39.2%	36.6%	34.4%	32.5%	31.1%	30.3%
Right to recover for covered losses	-0.2%	-0.6%	-0.1%	-0.3%	-0.3%	-0.2%	-0.3%	-0.3%	-0.3%	-0.3%	-0.3%	-0.3%	-0.3%
Accumulated income (deficit)	64.5%	63.7%	55.0%	57.3%	72.8%	89.8%	108.6%	129.0%	151.4%	174.7%	198.1%	222.6%	249.6%
Total accumulated other comprehensive loss / income, net	1.6%	1.8%	-8.1%	-7.1%	-6.3%	-5.6%	-5.0%	-4.6%	-4.2%	-4.0%	-3.8%	-3.6%	-3.5%
Total stockholder's equity	165.8%	155.9%	121.4%	116.2%	125.5%	137.1%	151.3%	168.0%	187.8%	209.0%	230.4%	253.5%	279.8%
Total Liabilities and Stockholders' Equity	370.4%	343.9%	291.7%	271.1%	275.3%	289.9%	294.4%	301.6%	318.5%	337.6%	360.0%	381.3%	406.2%





Visa Inc. Value Driver Estimation

Fiscal Years Ending Sep. 30	2020	2021	2022	2023E	2024E	2025E	2026E	2027E	2028E	2029E	2030E	2031E	2032E
NOPLAT:													
Total Revenue	21846	24105	29310	33288	37504	42055	46948	51767	55817	59471	62959	65822	67478
Less: Cost of sales (excl: D&A)	4512	4970	5733	6511	7244	7997	8875	9709	10406	11050	11656	12155	12449
Less: Depreciation & Amortization of Intangibles	767	804	861	938	908	870	840	834	858	849	842	836	833
Less: SG&A	2475	2524	3035	3210	3441	3668	3929	4210	4398	4565	4722	4843	4895
EBITA	14092	15807	19681	22629	25912	29520	33303	37015	40154	43006	45739	47988	49301
Implied Marginal Tax Rate	19.00%	19.00%	19.00%	19.00%	19.00%	19.00%	19.00%	19.00%	19.00%	19.00%	19.00%	19.00%	19.00%
Implied Marginal Tax Rate	19,00%	19,00%	19,00%	19,00%	19,00%	19,00%	19,00%	19,00%	19,00%	19,00%	19,00%	19,00%	19,00%
Income tax provision (benefit)	2924	3752	3179	4177	4808	5412	6174	6899	7486	8036	8539	8969	9229
Plus: Tax Shield on Interest Expense	98	97	102	201	210	253	251	236	244	251	271	273	268
Less: Tax effect on investment & other income	43	147	-26	79	95	56	98	102	100	116	120	124	129
Less: Tax effect on total non-operating income	-55	49	-129	-122	-116	-197	-154	-134	-143	-135	-151	-149	-139
Total Adjusted Taxes	3035	3654	3436	4422	5039	5806	6481	7167	7773	8306	8842	9266	9506
Deferred Tax Liabilities	5237	6128	5332	5570	5819	6080	6352	6636	6932	7242	7566	7904	8258
Deferred Tax Assets	63	80	87	88	88	89	89	90	91	91	92	92	93
Change in Deferred Taxes	391	874	-803	238	248	260	271	283	296	309	323	338	353
NOPLAT	11448	13027	15442	18446	21121	23973	27093	30132	32677	35010	37221	39059	40148
NOFEAT	11440	13027	13442	10440	21121	239/3	2/093	30132	32077	33010	3/221	39039	40140
Invested Capital (IC):													
Plus: Normal Cash	7452	8223	9998	11355	12794	14346	16015	17659	19040	20287	21477	22454	23018
Plus: Accounts Receivable, Net	1618	1968	2020	2492	2818	3069	3490	3839	4120	4407	4661	4870	4996
Plus: Other Receivables	1264	1758	1932	2183	2555	2798	3134	3476	3729	3979	4215	4403	4515
Plus: Prepaid Expenses & Other Current Assets	3821	4475	6282	5810	7182	8136	8756	9861	10613	11243	11955	12486	12790
Plus: Client Incentives	3175	3245	3348	4374	4754	5220	5982	6528	7026	7521	7942	8304	8520
Less: Accounts Payable	174	266	340	340	410	459	502	562	604	641	681	711	729
Less: Settlement Payable	1736	2443	3281	3248	3886	4390	4782	5347	5759	6112	6490	6781	6947
Less: Customer Collateral	1850	2260	2342	2867	3248	3541	4020	4425	4750	5079	5372	5613	5758
Less: Client Incentives	4176	5243	6099	6843	7891	8748	9765	10809	11625	12391	13126	13715	14062
Less: Accrued Litigation	1706	2009	3361	3064	3626	4253	4536	5081	5505	5816	6182	6464	6617
Less: Income Tax Payable	134	325	365	395	428	463	501	542	587	635	688	744	806
Less: Accrued Compensation & Benefits	821	1211	1359	1489	1767	1937	2158	2401	2575	2745	2911	3040	3117
Net Operating Working Capital	6733	5912	6433	7968	8848	9778	11112	12195	13124	14015	14801	15448	15802
Plus: Net Property, Plant & Equipment	2737	2715	3223	3118	3034	2985	2967	2956	2919	2893	2873	2859	2849
Plus: Intangible Assets (excl. Goodwill)	27808	27664	25065	24989	24915	24856	24814	24774	24706	24638	24570	24502	24434
Plus: Other assets	3350	3922	3650	4889	5427	5833	6733	7365	7896	8468	8943	9344	9590
Less: Other liabilities	3891	3462	3535	3727	3929	4142	4366	4603	4852	5115	5392	5685	5993
Invested Capital (IC)	36737	36751	34836	37237	38294	39311	41260	42687	43793	44899	45795	46468	46682
Free Cash Flow (FCF):	11110	12027	15440	10445	21121	22072	27002	20122	22677	25010	27224	20050	40140
NOPLAT	11448	13027	15442	18446	21121	23973	27093	30132	32677	35010	37221	39059	40148
Change in IC	2592	14	-1914	2401	1057	1016	1950	1427	1106	1106	896	674	214
FCF	8856	13014	17356	16045	20064	22957	25143	28704	31572	33904	36325	38386	39935
Return on Invested Capital (ROIC):													
NOPLAT	11448	13027	15442	18446	21121	23973	27093	30132	32677	35010	37221	39059	40148
Beginning IC	34145	36737	36751	34836	37237	38294	39311	41260	42687	43793	44899	45795	46468
ROIC	33.53%	35.46%	42.02%	52.95%	56.72%	62.60%	68.92%	73.03%	76.55%	79.94%	82,90%	85.29%	86.40%
Economic Profit (ED):													
Economic Profit (EP):	34145	36737	36751	34836	37237	38294	39311	41260	42687	43792	44899	45795	46469
Economic Profit (EP):  Beginning IC  x (ROIC - WACC)	34145 24.76%	36737 26.70%	36751 33.25%	34836 44.18%	37237 47.96%	38294 53.84%	39311 60.15%	41260 64.26%	42687 67.78%	43793 71.18%	44899 74.13%	45795 76.53%	46468 77.63%





Weighted Average Cost of Capital (WACC) Estimation

Market Value of the Firm	478,072.30	100.00%
MV of Total Debt	22,450.00	4.70%
Long-Term Debt	20200	
Current Portion of LTD	2250	
Short-Term Debt	0	
Market Value of Debt:		
MV of Equity	455,622.30	95.30%
Current Stock Price	\$241.07	
Total Shares Outstanding	1890	
Market Value of Common Equity:		MV Weights
After-Tax Cost of Debt	3.82%	
Marginal Tax Rate	19%	
Pre-Tax Cost of Debt	4.71%	FactSet estimate based on Visa's issued bonds
Implied Default Premium	0.45%	
Risk-Free Rate	4.26%	10 Yr US Treasury bond as of 9/8/2023
Cost of Debt:		
Cost of Equity	9.01%	
Equity Risk Premium	5.00%	Henry Fund estimate
Beta	0.95	5Y monthly estimate from Bloomberg
Risk-Free Rate	4.26%	*10YR Treasury Rate as of 9/8/2023
Cost of Equity:		ASSUMPTIONS:





Discounted Cash Flow (DCF) and Economic Profit (EP) Valuation Models

### Key Inputs:

CV Growth of NOPLAT 2.69%
CV Year ROIC 86.40%
WACC 8.77%
Cost of Equity 9.01%

scal Years Ending Sep. 30	2023E	2024E	2025E	2026E	2027E	2028E	2029E	2030E	2031E	2032E
CF Model:										
Free Cash Flow (FCF)	16044.7	20064.1	22957.4	25143.0	28704.4	31571.9	33904.1	36324.9	38385.5	39934.7
Continuing Value (CV)	10044.7	20004.1	22337.4	23143.0	20704.4	313/1.3	33304.1	30324.3	30303.3	640190.8
PV of FCF	14751.6	16960.3	17841.9	17965.7	18857.4	19069.6	18827.8	18546.3	12012.0	300517.1
PVOLLCL	14/31.0	10900.3	17041.5	1/303./	10037.4	19009.0	10027.0	10340.3	10010.9	300317.1
Value of Operating Assets:	461356.5									
Non-Operating Adjustments										
Plus: Excess Cash	5691									
Plus: ST Investments	2833									
Plus: LT Investments	2136									
Plus: Other Assets	3650									
Plus: Litigation cash	1449									
Less: Litigation liability	-1456									
Less: PV of ESOP	-735									
Less: Total Debt	-22450									
Value of Equity	452474									
Shares Outstanding	1854									
Intrinsic Value of Last FYE	\$ 244.01									
Implied Price as of Today	\$ 263.19									
Model:										
Economic Profit (EP)	15391.7	17857.2	20616.6	23646.6	26514.8	28935.4	31170.9	33285.2	35044.9	36074.9
Continuing Value (CV)										593722.3
PV of EP	14151.2	15094.8	16022.7	16896.4	17418.9	17477.1	17309.9	16994.4	16450.7	278704.0
Total PV of EP	426520.2									
Invested Capital (last FYE)	34836.3									
Value of Operating Assets:	461356.5									
Non-Operating Adjustments	401330.3									
Plus: Excess Cash	5691									
Plus: ST Investments	2833									
Plus: LT Investments	2136									
Plus: Other Assets	3650									
Plus: Litigation cash	1449									
Less: Litigation liability	-1456									
Less: PV of ESOP	-735									
Less: Total Debt	-22450									
	-22450 452474									
Value of Equity Shares Outstanding										
Snares Outstanding	1854									
Intrincia Value of Loot EVE	C 244.04									
Intrinsic Value of Last FYE Implied Price as of Today	\$ 244.01 \$ 263.19									





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

Fiscal Years Ending Sep. 30	2023E		2024E	2025E	2026E	2027E	2028E	2029E	2030E	2031E	2032E
EPS	\$ 9.51	\$	11.15	\$ 12.77	\$ 14.81	\$ 16.80	\$ 18.49	\$ 20.12	\$ 21.65	\$ 23.02	\$ 23.95
Key Assumptions											
CV growth of EPS	3.96%										
CV Year ROE	23.58%										
Cost of Equity	9.01%										
Future Cash Flows											
P/E Multiple (CV Year)											16.48
EPS (CV Year)											\$ 23.95
Future Stock Price											\$ 394.68
Dividends Per Share	1.80		2.05	2.34	2.67	3.04	3.46	3.95	4.50	5.13	5.85
Discounted Cash Flows	1.88		1.97	2.06	2.15	2.25	2.35	2.46	2.57	2.69	181.57
Intrinsic Value as of Last FYE	\$ 201.96										
Implied Price as of Today	\$ 217.83	l									





Relative Valuation Models

			EPS	EPS			Est. 5yr		
Ticker	Company	Price	2023E	2024E	P/E 23	P/E 24	EPS gr.	PEG 23	PEG 24
MA	Mastercard Incorporated Class A	\$414.84	\$12.15	\$14.54	34.14	28.53	17.5	1.96	1.64
AXP	American Express Company	\$157.43	\$11.08	\$12.30	14.21	12.80	14.8	0.96	0.86
DFS	Discover Financial Services	\$89.57	\$12.94	\$13.05	6.92	6.86	6.9	1.00	0.99
COF	Capital One Financial Corp	\$99.92	\$11.70	\$13.45	8.54	7.43	-6.6	(1.29)	(1.13)
PYPL	PayPal Holdings, Inc.	\$60.98	\$4.95	\$5.64	12.32	10.81	17.4	0.71	0.62
FIS	Fidelity National Information Services	\$55.33	\$6.03	\$6.45	9.18	8.58	2.0	4.54	4.25
FI	Fiserv, Inc.	\$121.60	\$7.44	\$8.54	16.34	14.24	14.4	1.14	0.99
			1	Average	14.52	12.75		1.72	1.56
V	Visa Inc.	\$241.07	\$9.51	\$11.15	25.3	21.6	12.0	2.1	1.8

## Implied Relative Value:

P/E (EPS23)	\$ 138.14
P/E (EPS24)	\$ 142.18
PEG (EPS23)	\$ 196.91
PEG (EPS24)	\$ 209.46





Visa Inc. Key Management Ratios

Fiscal Years Ending Sep. 30	2016	2017	2018	2019	2020	2021	2022E	2023E	2024E	2025E	2026E	2027E	2028E	2029E	2030E	2031E	2032E
Liquidity Ratios:																	
Current Ratio (CA/CL)	1.78	1.90	1.61	1.56	1.91	1.75	1.45	1.66	1.96	2.11	2.48	2.98	3.37	3.77	4.05	4.50	5.04
Quick Ratio (CA - Inv) / CL	1.78	1.90	1.61	1.56	1.91	1.75	1.45	1.66	1.96	2.11	2.48	2.98	3.37	3.77	4.05	4.50	5.04
Cash Ratio (Cash + Mkt. Sec.) / CL	1.11	1.34	1.04	0.90	1.38	1.18	0.89	1.05	1.34	1.58	1.93	2.37	2.77	3.17	3.47	3.91	4.44
Asset-Management Ratios:																	
Asset Turnover (Net Sales / Avg. Total Assets)		0.28	0.30	0.32	0.28	0.29	0.35	0.38	0.39	0.37	0.36	0.35	0.33	0.31	0.29	0.28	0.26
Accounts Receivable Turnover (Sales / Avg. AR)		16.9	17.6	16.7	13.8	13.4	14.7	14.8	14.1	14.3	14.3	14.1	14.0	13.9	13.9	13.8	13.7
Financial Leverage Ratios:																	
Debt-to-Equity Ratio (ST debt + LT debt / TSE)	0.48	0.56	0.49	0.48	0.66	0.56	0.63	0.58	0.50	0.49	0.40	0.30	0.26	0.23	0.21	0.18	0.16
Interest Coverage Ratio (EBIT / Int. exp)	22.9	21.6	22.2	28.9	27.3	30.8	36.6	21.4	23.4	22.1	25.2	29.8	31.3	32.6	32.0	33.4	35.0
Debt-to-Asset Ratio (ST debt + LT debt / Assets)	0.25	0.27	0.24	0.23	0.30	0.25	0.26	0.25	0.23	0.23	0.20	0.17	0.15	0.14	0.13	0.12	0.11
Profitability Ratios:																	
Return on Equity (NI/Beg TSE)		20.35%	31.44%	35.52%	31.33%	34.00%	39.79%	50.05%	52.99%	49.00%	45.65%	41.41%	36.69%	32.68%	29.30%	26.36%	23.58%
Return on Assets (NI / Total Assets)	9.36%	9.85%	14.88%	16.65%	13.43%	14.85%	17.49%	19.73%	19.85%	18.92%	19.04%	18.84%	17.95%	17.06%	16.06%	15.24%	14.35%
Operating Profit Margin (Opr. Profit / Sales)	64.73%	66.25%	65.80%	67.03%	64.51%	65.58%	67.15%	67.98%	69.09%	70.19%	70.94%	71.50%	71.94%	72.32%	72.65%	72.91%	73.06%
Net Profit Margin (Net Income / Sales)	39.72%	36.49%	49.98%	52.57%	49.74%	51.07%	51.03%	53.50%	54.65%	54.86%	56.06%	56.82%	57.18%	57.61%	57.82%	58.09%	58.31%
Payout Policy Ratios:																	
Dividend Payout Ratio (Dividend/EPS) Total Payout Ratio ((Divs. + Repurchases)/NI)	25.42% 139.2%	27.16% 126.4%	21.38% 88.4%	21.61% 90.0%	28.04% 99.2%	25.72% 93.2%	24.18% 98.9%	18.92% 68.7%	18.40% 61.7%	18.31% 56.8%	18.00% 51.7%	18.09% 48.3%	18.73% 46.5%	19.62% 45.5%	20.78% 45.2%	22.28% 45.5%	24.41% 47.0%





**Visa Inc.**Present Value of Operating Lease Obligations

Fiscal Years Ending Sep. 30	2015	2016	2017	2018	2019	2020
Year 1	95.0	126.0	155.0	180.0	143.0	108.0
Year 2	63.0	103.0	119.0	123.0	121.0	103.0
Year 3	57.0	82.0	68.0	102.0	106.0	95.0
Year 4	39.0	61.0	64.0	89.0	96.0	82.0
Year 5	31.0	57.0	57.0	75.0	82.0	70.0
Thereafter	107.0	190.0	163.0	178.0	250.0	163.0
Total Minimum Payments	392.0	619.0	626.0	747.0	798.0	621.0
Less: Cumulative Interest	60.3	100.5	93.1	109.5	132.7	97.4
PV of Minimum Payments	331.7	518.5	532.9	637.5	665.3	523.6
Implied Interest in Year 1 Payment		15.6	24.4	25.1	30.0	31.3
Pre-Tax Cost of Debt	4.71%	4.71%	4.71%	4.71%	4.71%	4.71%
Years Implied by Year 6 Payment	3.5	3.3	2.9	2.4	3.0	2.3
Expected Obligation in Year 6 & Beyond	31	57	57	75	82	70
Present Value of Lease Payments						
PV of Year 1	90.7	120.3	148.0	171.9	136.6	103.1
PV of Year 2	57.5	93.9	108.5	112.2	110.4	93.9
PV of Year 3	49.6	71.4	59.2	88.8	92.3	82.7
PV of Year 4	32.4	50.7	53.2	74.0	79.9	68.2
PV of Year 5	24.6	45.3	45.3	59.6	65.1	55.6
PV of 6 & beyond	76.8	136.7	118.6	130.9	181.1	120.0
Capitalized PV of Payments	331.7	518.5	532.9	637.5	665.3	523.6





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

Number of Options Outstanding (shares): 6
Average Time to Maturity (years): 6.09
Expected Annual Number of Options Exercised: 1

Current Average Strike Price: \$ 145.92
Cost of Equity: 9.01%
Current Stock Price: \$241.07

Fiscal Years Ending Sep. 30	2023E	2024E	2025E	2026E	2027E	2028E	2029E	2030E	2031E	2032E
Increase in Shares Outstanding:	1	1	1	1	1	1	0	0	0	0
Average Strike Price:	\$ 145.92 \$	145.92 \$	145.92 \$	145.92 \$	145.92 \$	145.92 \$	145.92 \$	145.92 \$	145.92 \$	145.92
Increase in Common Stock Account:	148	148	148	148	148	148	13	-	-	-
Share Repurchases (\$)	8,836	8,836	8,836	8,836	8,836	8,836	8,836	8,836	8,836	8,836
Expected Price of Repurchased Shares:	\$ 241.07 \$	261.10 \$	282.80 \$	306.30 \$	331.75 \$	359.32 \$	389.18 \$	421.52 \$	456.55 \$	494.49
Number of Shares Repurchased:	37	34	31	29	27	25	23	21	19	18
Shares Outstanding (beginning of the year)	1,890	1,854	1,822	1,791	1,763	1,738	1,714	1,692	1,671	1,651
Plus: Shares Issued Through ESOP	1	1	1	1	1	1	0	0	0	0
Less: Shares Repurchased in Treasury	37	34	31	29	27	25	23	21	19	18
Shares Outstanding (end of the year)	1,854	1,822	1,791	1,763	1,738	1,714	1,692	1,671	1,651	1,633





Valuation of Options Granted under ESOP

Current Stock Price \$241.07 Risk Free Rate 4.26%

Current Dividend Yield 0.70% \*FactSet

Annualized St. Dev. of Stock Returns 15.63%

		Average	Average	B-S	Value
Range of	Number	Exercise	Remaining	Option	of Options
Outstanding Options	of Shares	Price	Life (yrs)	Price	Granted
N/A	6.169	145.92	6.09 \$	119.18 \$	735
Total	6 \$	145.92	6.09 \$	129.04 \$	735