

# Mastercard



Current Price

\$352

Price Objective

\$445

Implied Upside

+26%

# COMPANY OVERVIEW

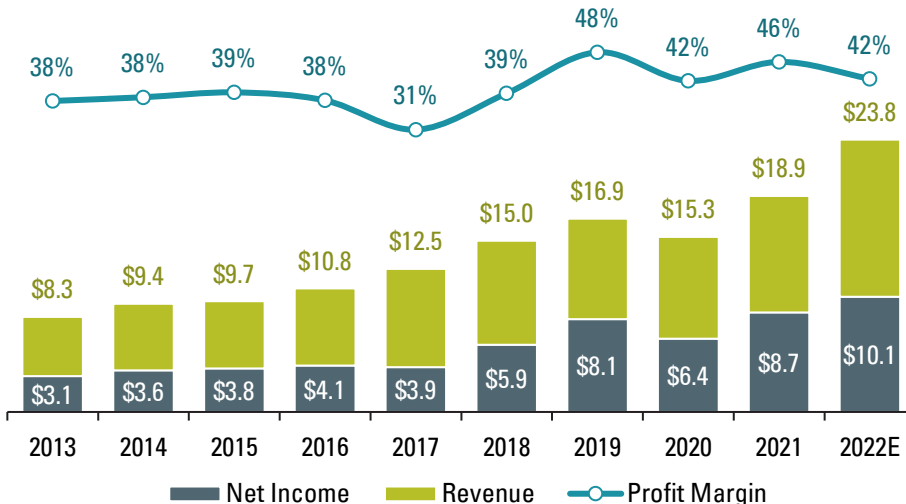


## Company Summary

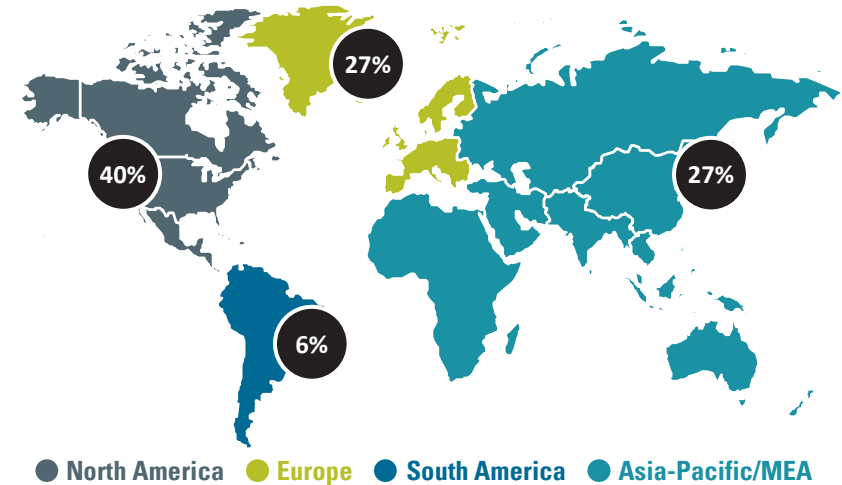
- Mastercard Incorporated is a financial technology firm that connects financial institutions, consumers, governments and businesses across the world
- Mastercard offers services such as consumer credit and debit cards as well as integrated offerings such as cyber, intelligence and analytics services
- With over 1.4 billion debit card users and 1.3 billion credit card users in over 210 countries, Mastercard is one of the world's largest digital payments networks
- Mastercard's range of payment solutions are offered under the brands MasterCard, Cirrus and Maestro

<b>Stock Price</b>	<b>Market Cap</b>	<b>Enterprise Val</b>	<b>Dividend Yield</b>
\$352	\$323B	\$330B	0.6%
<b>52 Wk Range</b>	<b>LTM Revenue</b>	<b>Net Debt</b>	<b>Target Price</b>
\$306 – \$401	\$19B	\$15B	\$445

## Net Income and Revenue Growth (US\$B)



## Geographic Breakdown



## Key Investment Themes

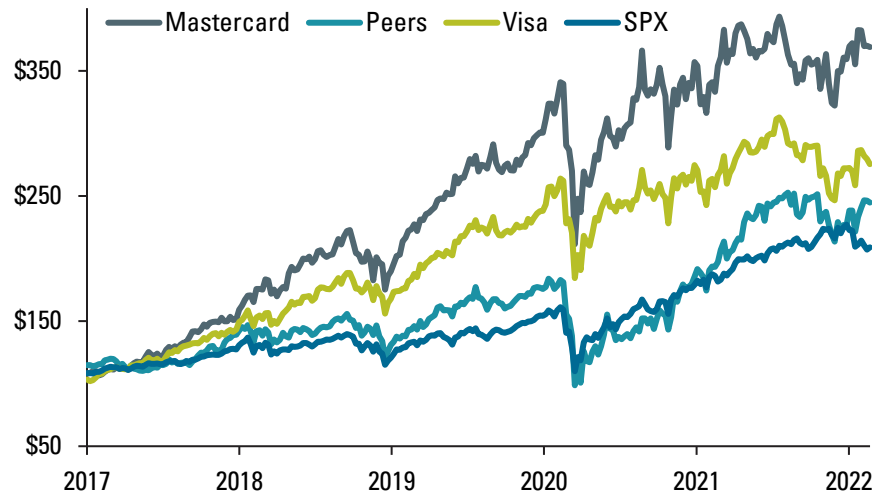
- Leading the industry with innovative payment strategies
- Expanding into new digital segments and geographies
- Leveraging differentiated data analytics to serve customers
- Adding value through cybersecurity and intelligence services
- Generating new payment flows in the B2B landscape

Mastercard has grown to be one of the largest payment technology companies in the world through their global presence and consistent performance

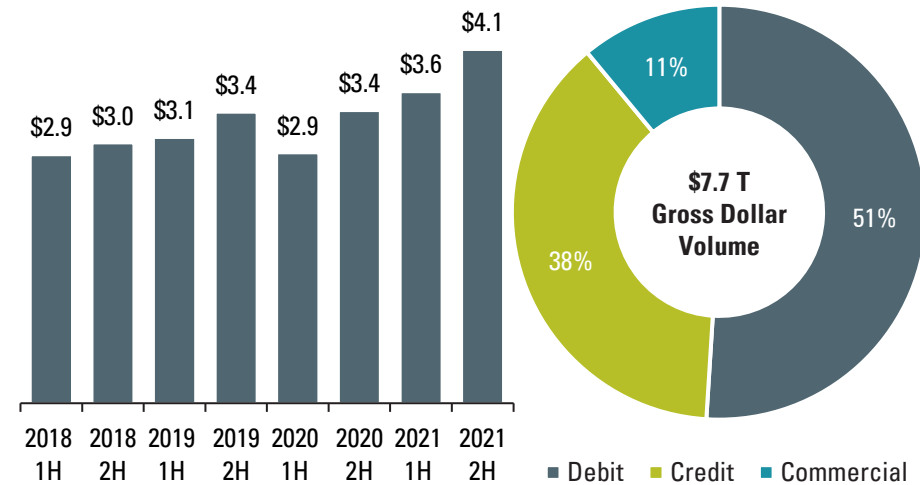
# FURTHER ANALYSIS



## Stock Price (5 Year)

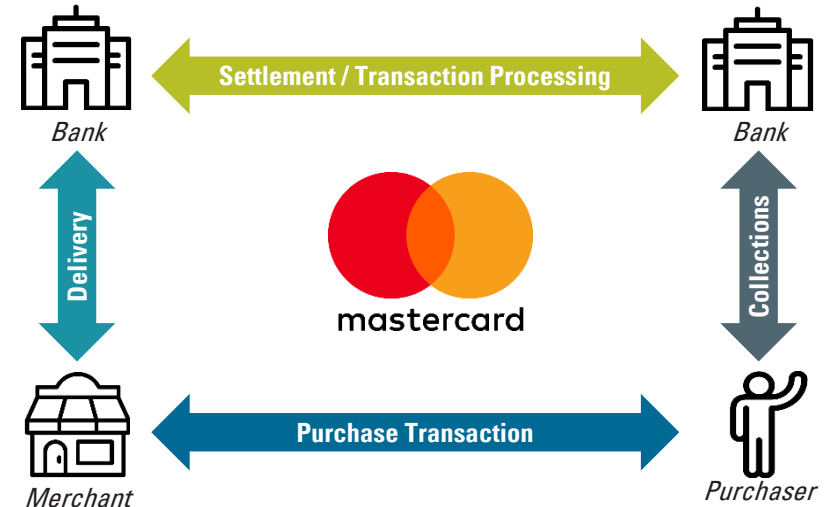


## Mastercard GDV (US\$T)



## Mastercard's Business Overview

Segment	Description	Rev. (%)
Collections	Collect funds from account holders at point of purchase <i>Cross border transaction and currency exchange fees</i>	
Settlements	Process transactions between financial institutions <i>Flat rate % of sales and institutional fees</i>	
Value Added Services	Incentives, analytics, consulting, security, intelligence <i>Rates charged depending on services selected</i>	



Mastercard's value added services offer a platform for growth, supported by a successful business model in payments processing

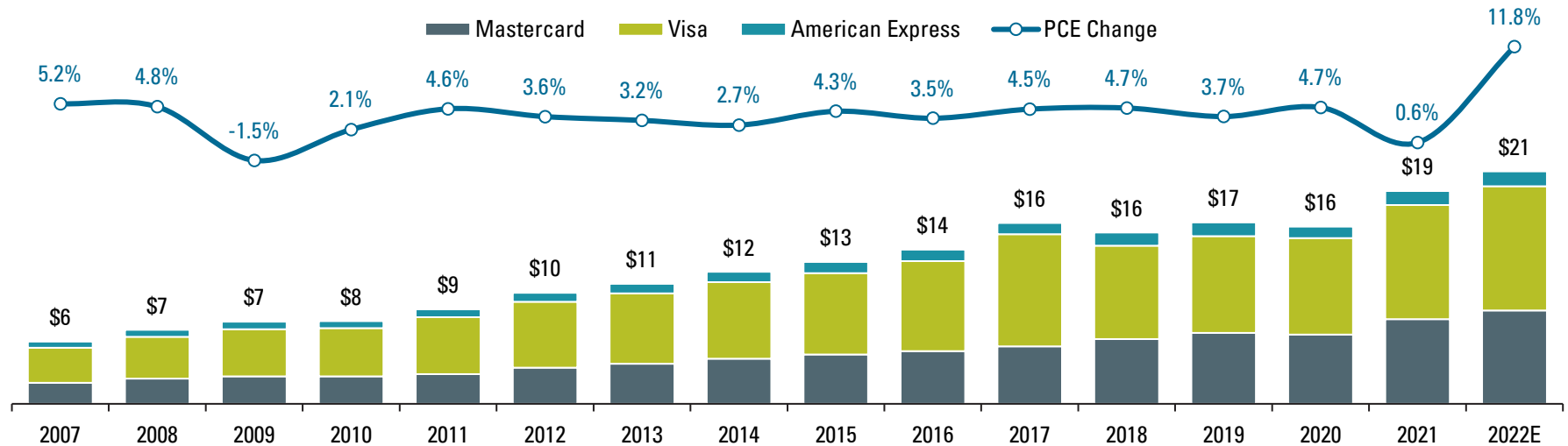
Source: Bloomberg, Mastercard

Note: All Figures in USD; Stock Price Peer Average Includes: Visa, American Express, Capital One, Discover, Global Payments, Fidelity NIS

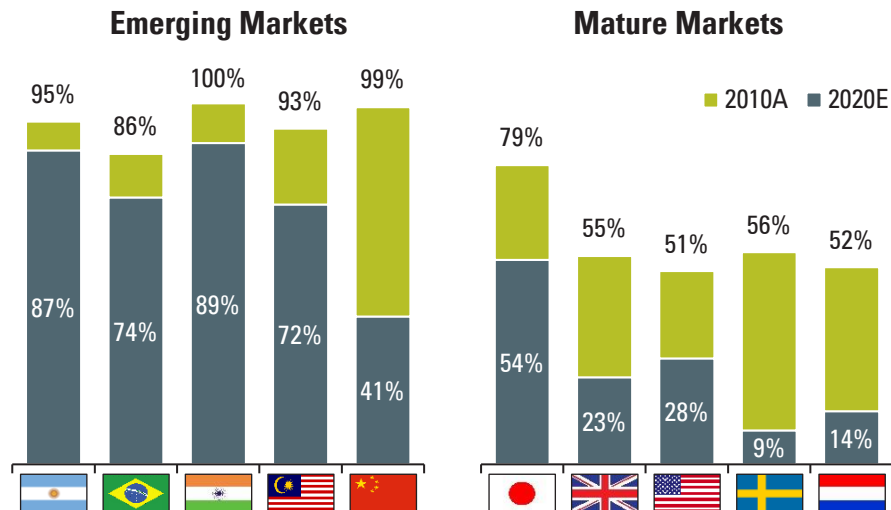
# INDUSTRY OVERVIEW



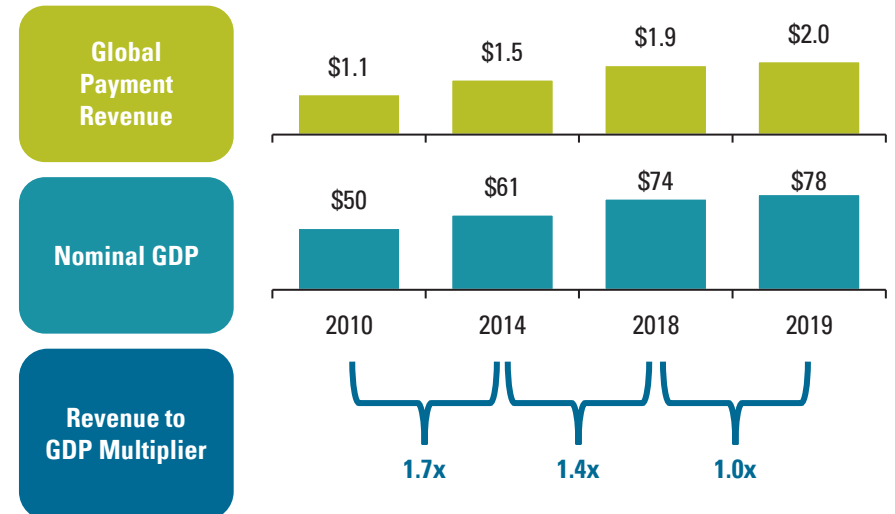
## GDV Growth & PCE Change (US\$T)



## Cash Used in Total Transactions



## Payment Revenue & GDP Growth (US\$T)

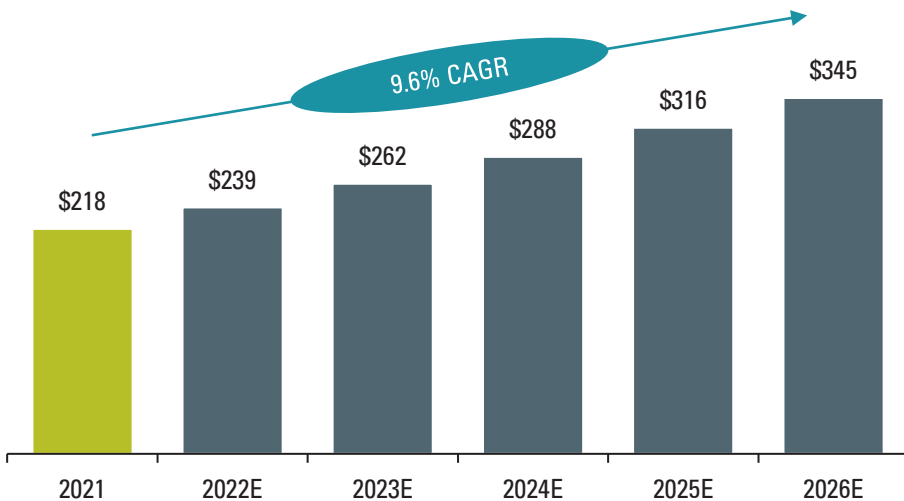


The digital payments industry is expected to grow steadily in the coming years, driven by global transaction growth and technological developments

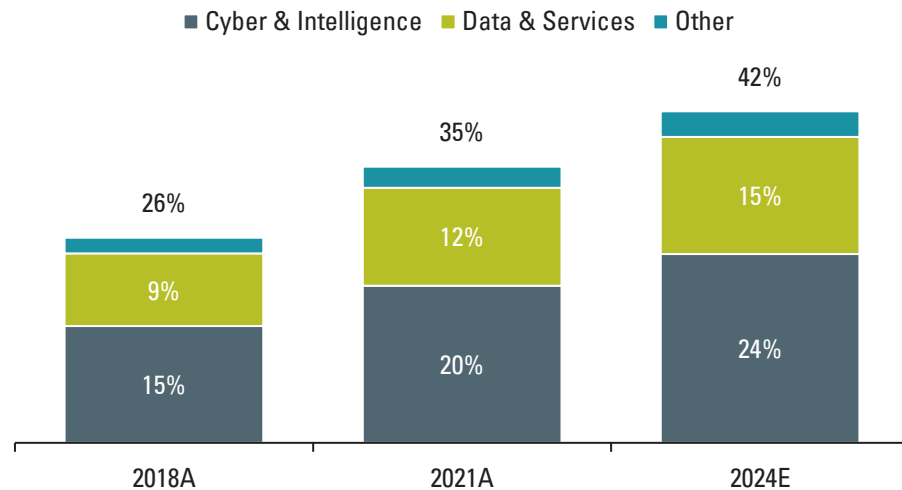
# THESIS 1: VALUE ADDED SERVICES



## Cybersecurity Annual Market Worldwide (US\$B)



## Services Portion of Total Revenue



## Acquisition Contribution to Services (US\$B)



2021 – Aiaa: Open-Banking Provider

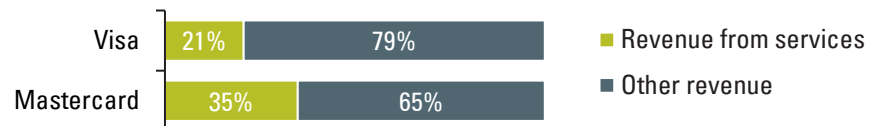
2021 – Net Group A/S: Instant Payment Solutions

2021 – Ekata: Digital Identity Verification

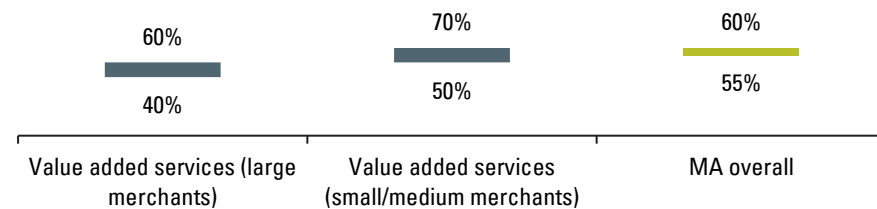
2020 – Finicity: Open-Banking Provider

2019 – RiskRecon: AI / Data Analytics Solutions

## Attractive Gross Profit Margin Segment



## Gross Profit Margin Comparison



Continuous investment into a high growth and high margin segment indicate a lucrative opportunity for Mastercard

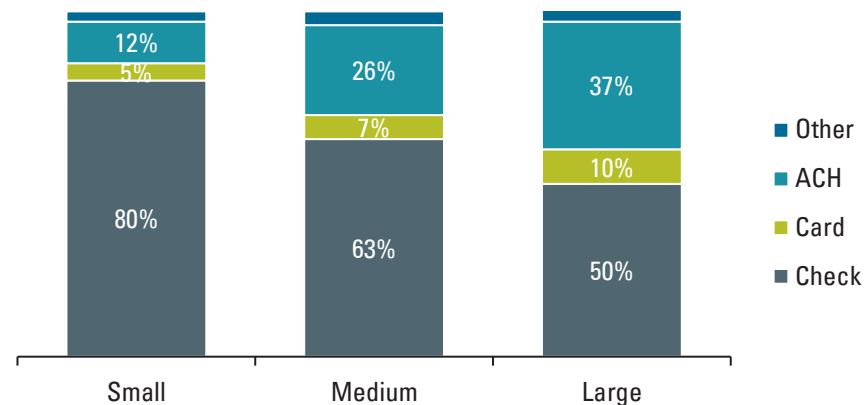
# THESIS 2: NEW PAYMENT FLOWS



## Global Total Addressable Market from New Flows

US\$T	Payment Flow	Yield	Share
5	Business to Business (Small)	0.13%	15%
10	Cross Border B2B	0.35%	20%
10	Government to Consumer	0.05%	5%
20	Business to Business (Card)	0.18%	20%
20	Peer to Peer	0.05%	5%
30	Business to Consumer	0.13%	20%
90	Business to Business (Domestic)	0.05%	20%

## B2B Payments by Firm Size (North America, 2018)



Limited B2B volumes conducted using cards present a vast revenue growth opportunity for payment networks such as Mastercard

## Revenue Opportunity for Mastercard (US\$B)

		Market Share (%)						
		7.5	10.0	12.5	15.0	17.5	20.0	22.5
Average Yield (bps)	3.5	4.9	6.5	8.1	9.7	11.3	13.0	14.6
	6.0	8.3	11.1	13.9	16.7	19.4	22.2	25.0
	8.5	11.8	15.7	19.7	23.6	27.5	31.5	35.4
	11.0	15.3	20.4	25.4	30.5	35.6	40.7	45.8
	13.5	18.7	25.0	31.2	37.5	43.7	50.0	56.2
	16.0	22.2	29.6	37.0	44.4	51.8	59.2	66.6
	18.5	25.7	34.2	42.8	51.3	59.9	68.5	77.0

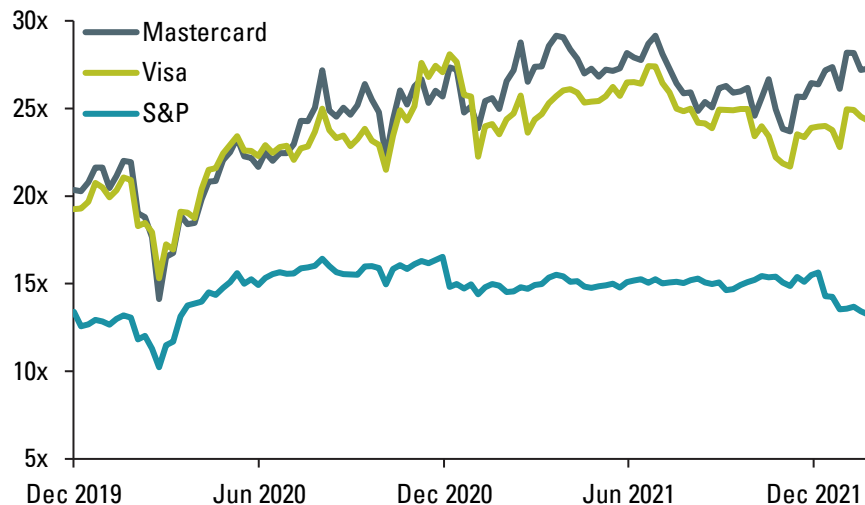
New payment flows offer Mastercard the opportunity to capture greater transaction volume and revenue

# COMPARABLES ANALYSIS

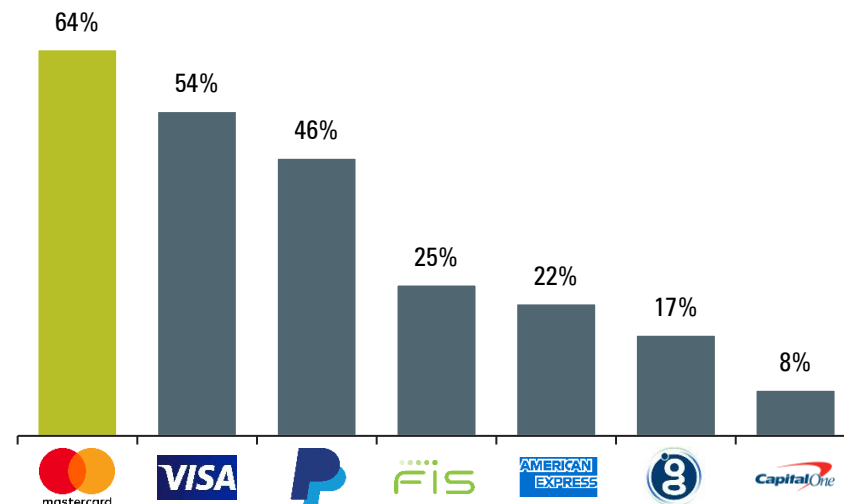


Company	Mkt Cap	Ent Val	EBITDA	EV/EBITDA	Price/CF	Rev CAGR	EBITDA Margin		Capex %	FCF Yld	ND/EBITDA	Div Yld
	\$B	\$B	NTM \$B	3Y Avg	3Y Avg	3Y	2022	2025	3Y Avg	3Y Avg	Current	Current
Visa	433.5	440.1	20.1	19x	23	15%	70%	71%	4%	4%	-0.1x	0.7%
American Express	131.3	150.2	10.1	13x	11	14%	25%	22%	15%	7%	1.8x	1.0%
Capital One	55.5	81.7	12.1	8x	NA	8%	53%	26%	NA	13%	1.3x	1.8%
Discover	31.4	43.9	5.5	8x	NA	6%	56%	35%	NA	12%	1.7x	1.8%
PayPal	116.4	115.7	7.6	12x	12	18%	28%	28%	15%	7%	-0.1x	NA
Global Payments	36.1	47.0	4.1	11x	10	9%	47%	49%	14%	7%	2.9x	0.8%
Fidelity NIS	55.1	74.2	6.7	10x	11	7%	44%	46%	4%	6%	3.1x	2.1%
<b>Average</b>				<b>12x</b>	<b>13</b>	<b>11%</b>	<b>46%</b>	<b>40%</b>	<b>10%</b>	<b>8%</b>	<b>1.5x</b>	<b>1.4%</b>
<b>Mastercard</b>	<b>323.3</b>	<b>330.2</b>	<b>13.5</b>	<b>20x</b>	<b>25</b>	<b>18%</b>	<b>58%</b>	<b>63%</b>	<b>3%</b>	<b>4%</b>	<b>0.6x</b>	<b>0.6%</b>

## NTM EV / EBITDA



## Non-US Revenue Share



**Mastercard's premium is justified by its growth potential stemming from its investment in new technologies and emerging markets**

# DCF VALUATION



	2022E	2023E	2024E	2025E	2026E	2027E	2028E	2029E	2030E	2031E	WACC
EBITDA	13,495	15,685	18,049	20,773	24,115	26,940	30,003	33,239	36,689	40,357	<b>Capital Structure</b>
Less: D&A	531	625	716	821	918	1,023	1,135	1,255	1,383	1,518	
EBIT	12,964	15,060	17,333	19,952	23,198	25,917	28,868	31,984	35,306	38,840	Debt Weight
Less: Tax	2,362	2,745	3,159	3,635	4,220	4,714	5,250	5,817	6,421	7,063	Equity Weight
NOPAT	10,603	12,315	14,174	16,317	18,977	21,203	23,617	26,167	28,885	31,777	<b>Cost of Debt</b>
Add: D&A	531	625	716	821	918	1,023	1,135	1,255	1,383	1,518	Borrowing Rate
Less: CAPEX	(991)	(1,167)	(1,337)	(1,532)	(1,713)	(1,909)	(2,119)	(2,343)	(2,581)	(2,833)	Tax Rate
Less: NWC Changes	(916)	(946)	399	227	260	(889)	132	142	151	161	<b>Cost of Equity</b>
Unlevered FCF	9,227	10,827	13,953	15,833	18,442	19,428	22,765	25,221	27,838	30,622	Risk Free Rate
Discount Factor	0.97	0.90	0.84	0.79	0.74	0.69	0.64	0.60	0.56	0.53	Beta
PV of UFCF	<b>8,920</b>	<b>9,782</b>	<b>11,782</b>	<b>12,495</b>	<b>13,601</b>	<b>13,391</b>	<b>14,665</b>	<b>15,184</b>	<b>15,663</b>	<b>16,102</b>	ERP
											<b>WACC</b>

## Target Price Derivation

Exit Multiple Method		Gordon Growth Method	
Final Year EBITDA	40,357	Final Year UFCF	30,622
EBITDA Multiple	15.0x	LT Growth Rate	1.50%
Terminal Value	605,358	Discount Rate	0.53x
Discount Rate	0.53x	Terminal Value	565,119
PV of Terminal Value	318,332	PV of Terminal Value	297,163
PV of Cash Flow	131,585	PV of Cash Flow	131,585
Net Debt (Cash)	2,559	Net Debt (Cash)	2,559
Equity Value	447,348	Equity Value	441,419
Shares Outstanding	992	Shares Outstanding	992
<b>Target Share Price</b>	<b>\$451</b>	<b>Target Share Price</b>	<b>\$445</b>

## Scenario Analysis

		Long-Term Growth Rate								
		0.50%	0.75%	1.00%	1.25%	1.50%	1.75%	2.00%	2.25%	2.50%
WACC	9.00%	294	299	305	311	317	324	331	339	347
	8.50%	314	321	327	334	342	350	359	368	379
	8.00%	338	345	353	362	371	381	391	403	416
	7.50%	365	374	383	394	405	417	430	445	460
	7.00%	396	407	419	431	445	460	477	495	515
	6.50%	433	446	461	476	493	512	534	557	584
	6.00%	477	493	511	531	553	577	605	636	672
	5.50%	529	550	573	598	627	660	697	740	790
	5.00%	594	620	650	684	723	768	820	882	956

Mastercard's strong brand and constant innovation supports its intrinsic value, making it a compelling investment decision



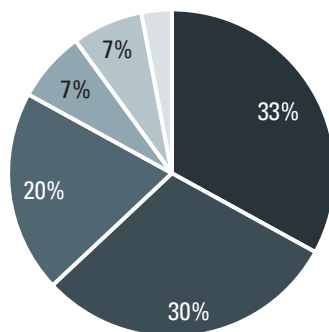
# CATALYSTS & RISKS



Catalysts	Likelihood	Description
Digital Payments Innovations & Tailwinds	<div> <div>↑</div> <div>↑</div> <div>↑</div> </div>	<ul style="list-style-type: none"> <li>Recent rapid digital transformation caused the volume and value of digital payments to increase</li> <li>Mastercard creating contactless payment alternatives including QR codes, cloud commerce, and more</li> </ul>
Open Banking Movement	<div> <div>↑</div> <div>↑</div> </div>	<ul style="list-style-type: none"> <li>Open banking can potentially benefit MA with an improved customer experience and efficient data usage</li> <li>MA's fintech acquisitions strengthen their position in open banking</li> </ul>
Increasing Demand for B2B Services	<div> <div>↑</div> <div>↑</div> <div>↑</div> </div>	<ul style="list-style-type: none"> <li>Traditional B2B methods are decreasing in favour of digitization - 25% of B2B payments are digital payments</li> <li>MA has created their Track Business Payment Service for buyers, suppliers, and Mastercard partners</li> </ul>
Risks	Likelihood	Description
Regulatory Challenges and Litigation	<div> <div>↓</div> <div>↓</div> </div>	<ul style="list-style-type: none"> <li>Heightened oversight of the payment space may result in added compliance burdens and costs for MA</li> <li>European Payment Initiative (EPI) made to offer a payments solution and manage cross-border transactions</li> </ul>
Digital Payments Industry Disruption	<div> <div>↓</div> </div>	<ul style="list-style-type: none"> <li>Significant technological developments in the areas of smart cards, contactless payments, blockchain technology, and e-commerce could negatively impact performance and limit future growth</li> </ul>
Highly Competitive Industry and A2A	<div> <div>↓</div> <div>↓</div> <div>↓</div> </div>	<ul style="list-style-type: none"> <li>MA faces competition in all categories of the payment industry including traditional and digital payments</li> <li>Growth of A2A transactions can potentially eliminate the need for intermediaries such as MA</li> </ul>

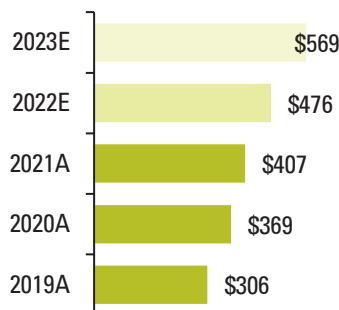
## Limited Exposure to EPI Region

- North America
- APMEA
- EPI Exposure
- LAC
- Other Europe
- UK



## Increased Investment in Software

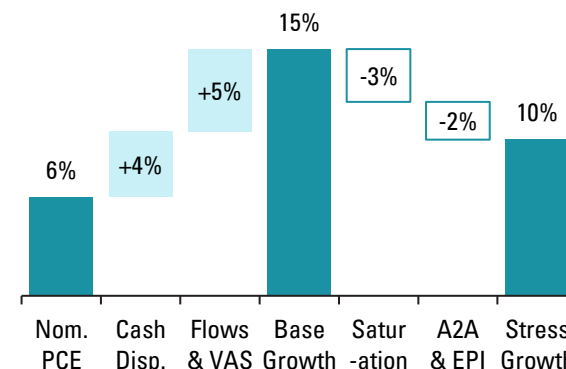
### Software Capex



### Acquisitions



## Resilience Against Risks and Optimism



Catalysts surrounding Mastercard firmly outweigh the mitigated risks

# CONCLUSION



## Investment Summary

### Digital Payment Industry Growth

Positioned well in an industry expected to see consistent growth in the coming years with a strong moat

### Value Added Services

Mastercard's value added services such as cyber-security will add new revenue streams going forward

### New Payment Flows

Payment flows from new sources such as B2B will help Mastercard capture greater payment volume

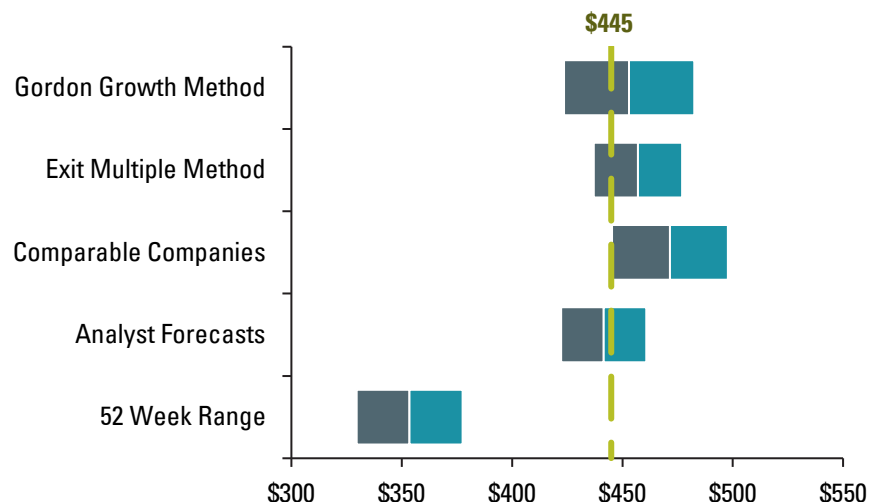
### Diverse Revenue Geographies

Mastercard is exposed to high-growth markets with 64% of revenues coming from non-U.S. sources

### Growing Demand Open Banking

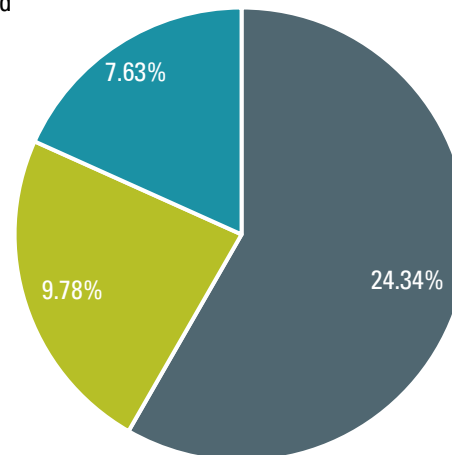
Mastercard's investments into fintech position them well to take advantage of the open banking movement

## Financial Valuation Target Price



## Ownership by Fund Type

- Open-end fund
- Other
- ETF



## Trajectory to Price Target & Beyond

2022

### Cross-Border Volume Recovery

*High-yielding flows return to normal post-pandemic*

2023

### Organic Growth of GDV and Card Volumes

*Mastercard continues to outpace peers*

2025

### Strategic Acquisitions in Value Added Services

*Continuous growth adds to client experience*

2030

### New Payment Flows Captured

*Mastercard captures 15% of the TAM for new flows*

2035

### Development of Emerging Markets

*Cash-to-card transition accelerates*

**Mastercard's external positioning and intrinsic valuation make it a low-risk investment with large potential upside**

Source: RBC Capital Markets, BNP Paribas, Evercore, Credit Suisse

Note: All figures in USD

# Appendix



**Michael Miebach**

Chief Executive Officer

Compensation: \$9.2M

Share Ownership: 35,544

Michael has been the CEO of Mastercard since January 2021. Before becoming the CEO, he was the Chief Product Officer from 2016 – 2020 and the president of the Middle East and Africa division from 2010 – 2015.



**Timothy Murphy**

Chief Admin Officer

Compensation: \$7.6M

Share Ownership: 37,476

Timothy has served as the company's general counsel for seven years. In his 20 years at Mastercard he has worked as Chief Product Officer, President of the company's U.S. region and Executive Vice President of customer business.



**Craig Vosburg**

Chief Product Officer

Compensation: \$7.9M

Share Ownership: 41,314

Craig has been the Chief Product Officer at Mastercard since 2021. Since joining Mastercard in 2006, he has worked as an MD until 2010, a group executive until 2014 and the president of the North American division until 2021.



**Sachin Mehra**

Chief Financial Officer

Compensation: \$5.1M

Share Ownership: 15,723

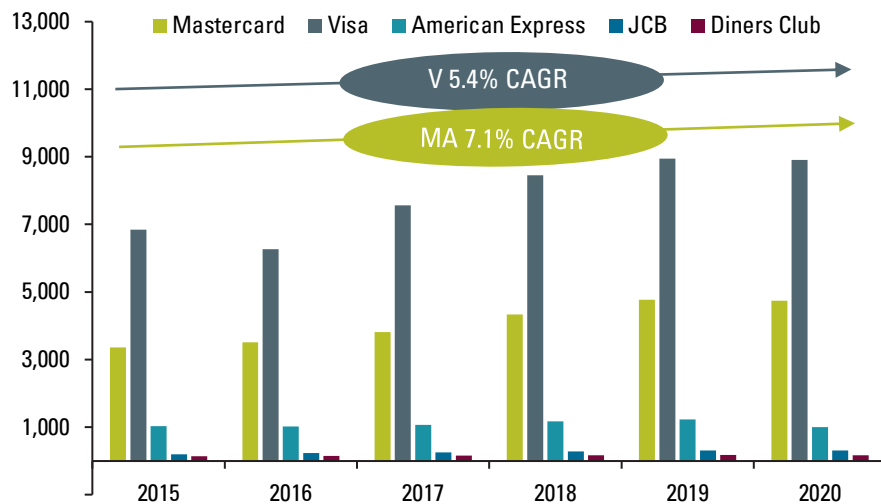
Sachin has been the CFO since 2019. Before becoming CFO, he was the Chief Financial Operations Officer since 2018 and group executive at Mastercard since 2010.

**Strong and experienced management team drives significant value for shareholders over the long term**

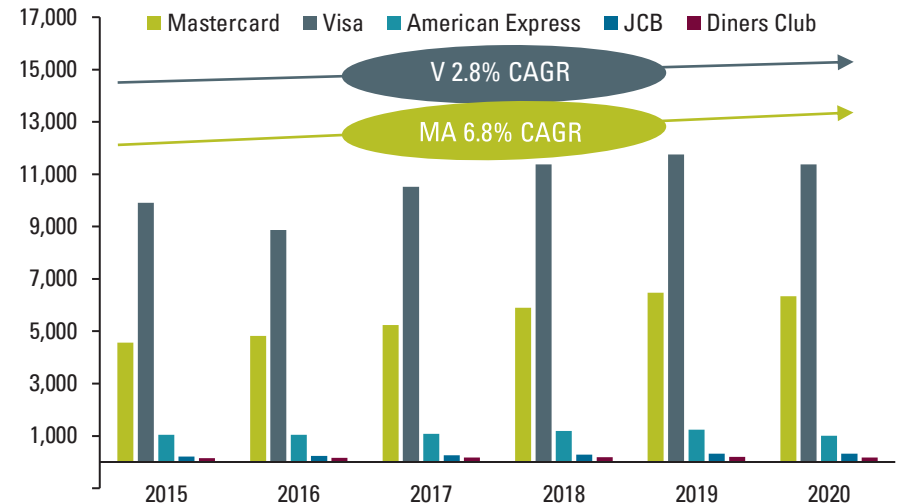
# KEY PAYMENTS NETWORK COMPETITORS



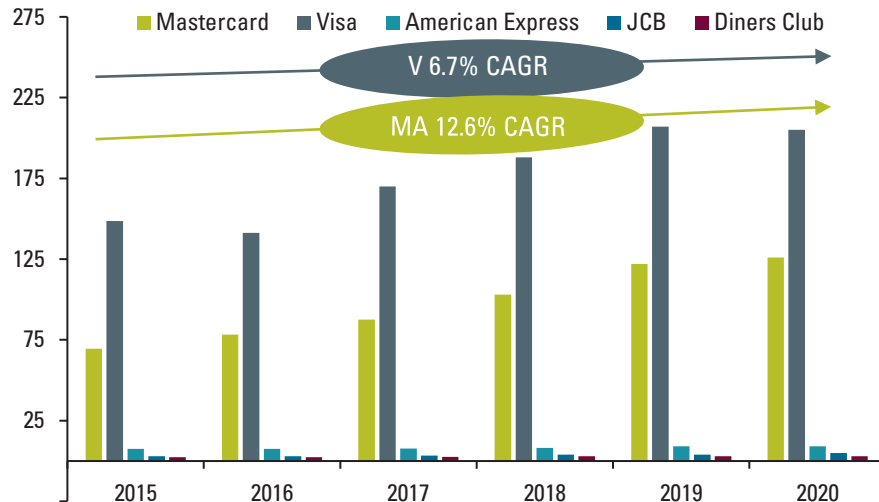
## Payments Volume (\$B)



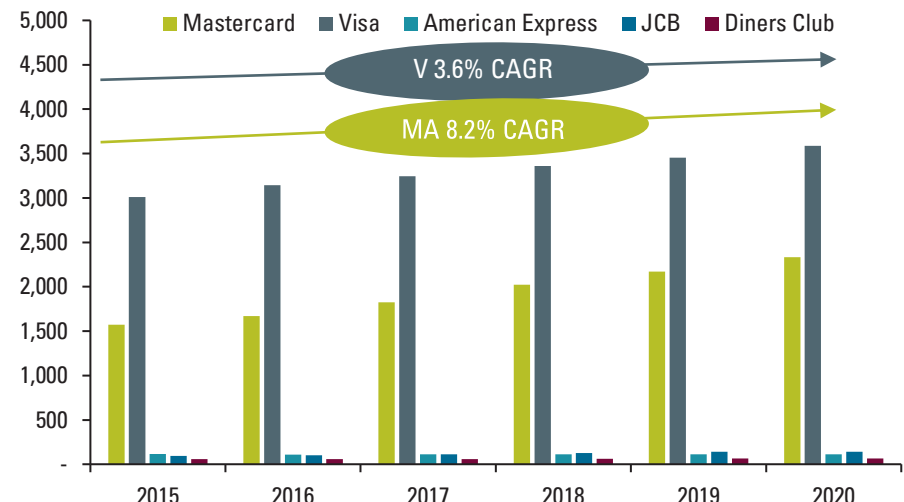
## Total Volume (\$B)



## Total Transactions (B)



## Cards (M)

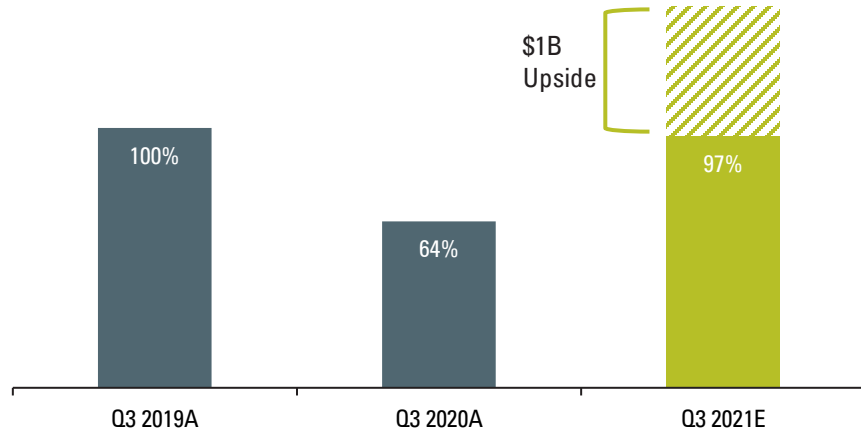


**Mastercard's performance has greatly outpaced Visa's, allowing them to gain additional market share over their greatest competitors**

# CROSS-BORDER VOLUME GROWTH

## Recovery Potential Driven by Post-Pandemic Travel

Mastercard Cross-Border Payment Flows (As % of 2019 levels)



## Contribution to Mastercard

Cross-border volumes are a meaningful contributor to Mastercard's core EPS growth

More than half of its historical variation in core EPS can be explained by changes in cross-border revenues

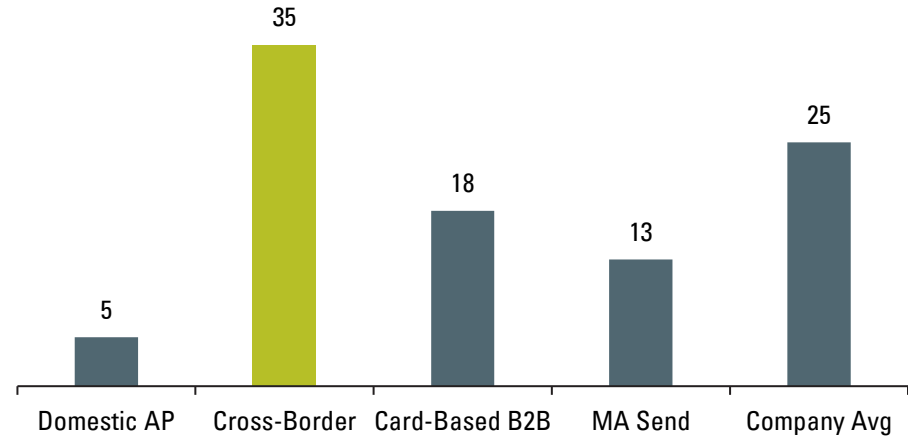
Cross-border revenue growth is driven by international passenger travel

Almost 2/3 of annual variation in Mastercard's cross-border revenues can be explained by changes in international travel

Mastercard can be considered a low-beta play on the recovery in international travel

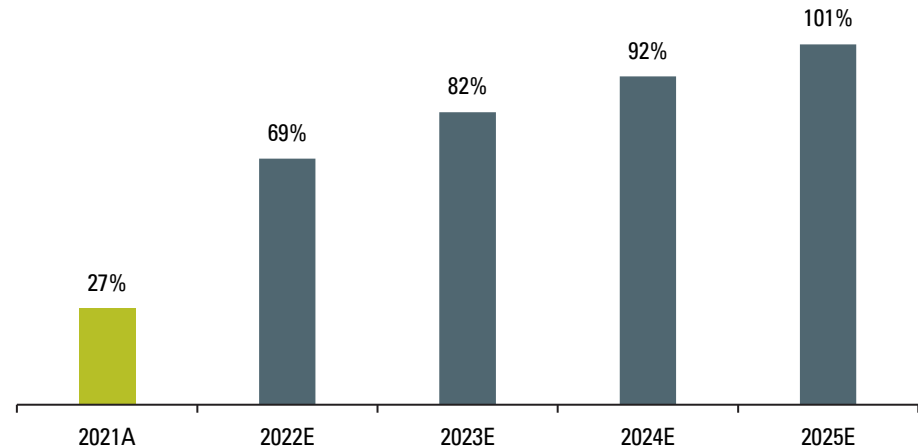
## Superior Margins on Cross-Border Transactions

Yield Comparison (bps)



## International Travel Recovery

Global Airline Passenger Numbers (As % of 2019 levels)

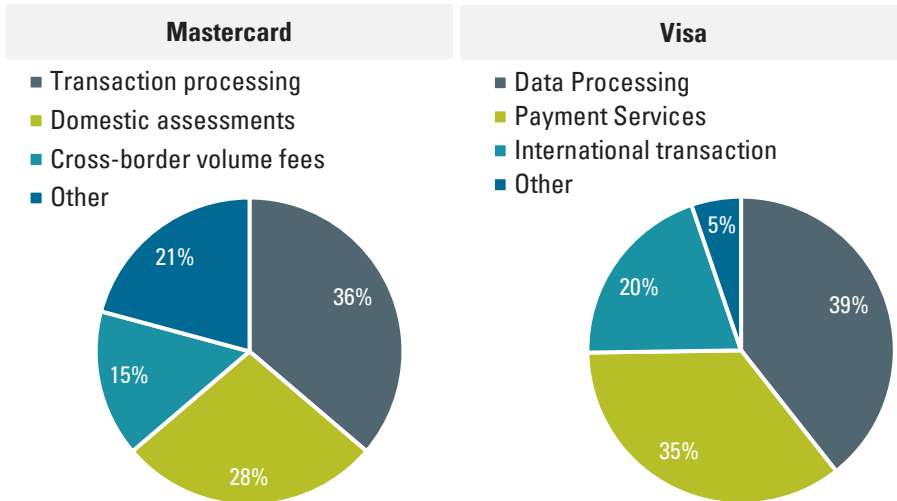


Recovery in cross-border payment volumes post-pandemic will provide meaningful upside to Mastercard

# MASTERCARD VS. VISA



## Gross Revenue Breakdown (FY 2021)



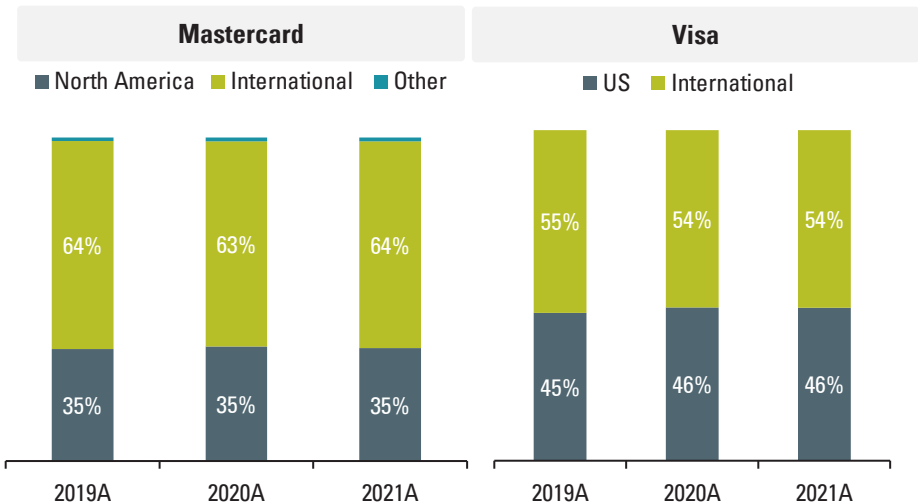
## New Flows Offerings

Mastercard	Visa
<b>Track Business Payment Service</b> Automates the exchange of payments data between Buyers and Suppliers to increase efficiency and improve working capital	<b>B2B Connect</b> Seamless bank-to-bank cross-border transactions that are predictable, secure and cost-effective through a centralized network that reduces the number of relationships needed
<b>Bill Pay Exchange</b> Simplifies bill payment & presentment	<b>Visa Direct</b> Fast payments & transfers to billions of endpoints globally (business payouts and P2P payments)
<b>Mastercard Send</b> Payments & transfers within seconds	

## Service Offerings

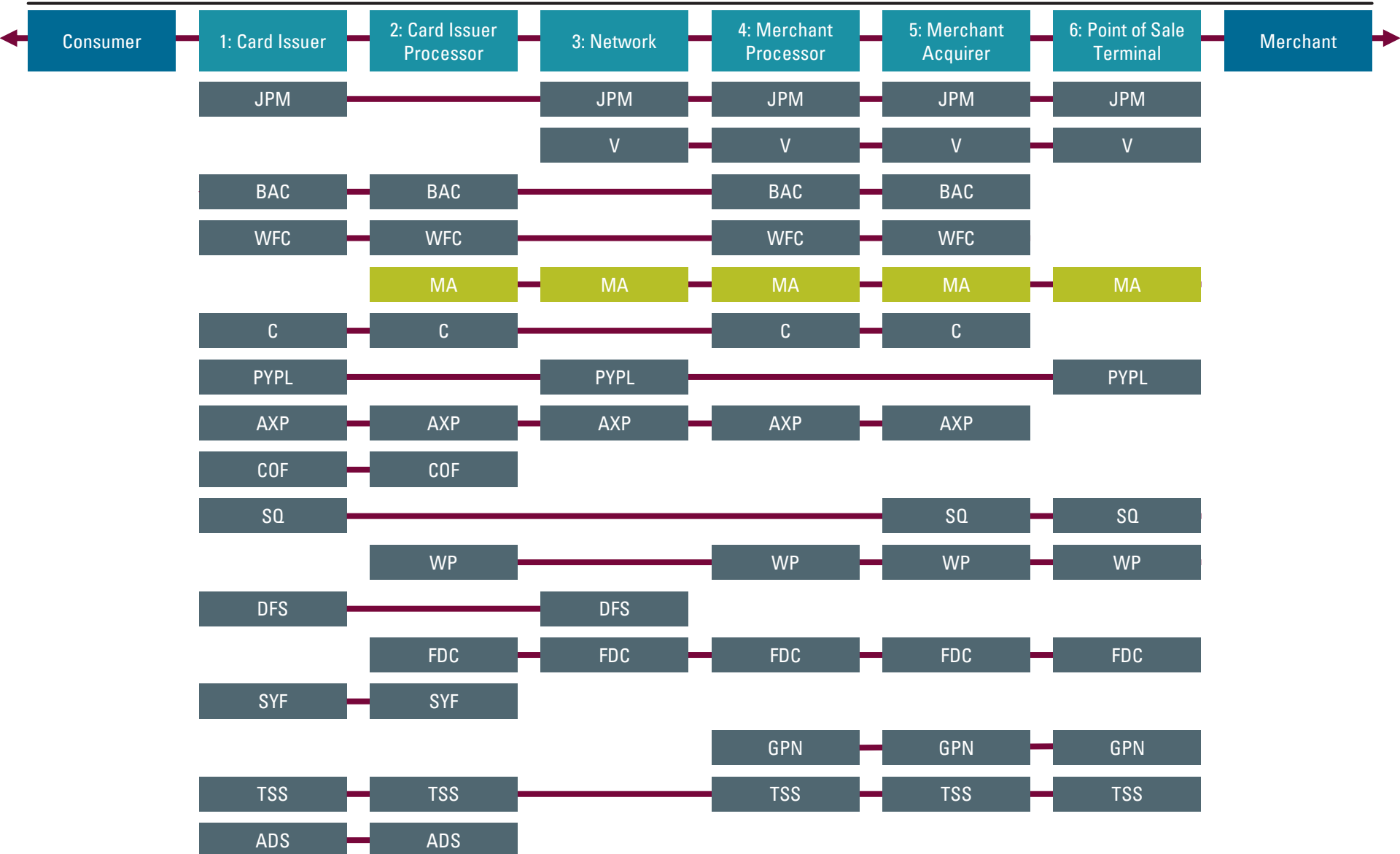
Mastercard	Visa
<b>Cyber &amp; Intelligence Solutions</b>	<b>Issuer Solutions</b>
<b>Insights, Analytics and Test &amp; Learn</b>	Call center, data analytics, campaign management, fraud & risk solutions
<b>Consulting &amp; Innovation</b>	<b>Acceptance Solutions</b>
<b>Managed Services</b>	Improve customer engagement, mitigate fraud, adapt to changes
<b>Issuer &amp; Merchant Loyalty</b>	<b>Risk &amp; Identity Solutions</b>
<b>Processing &amp; Gateway</b>	<b>Advisory Services</b>

## Geographic Revenue Split



**Mastercard offers greater diversification geographically and into value-added services, providing stronger mitigation against threats**

# PAYMENTS PLAYERS



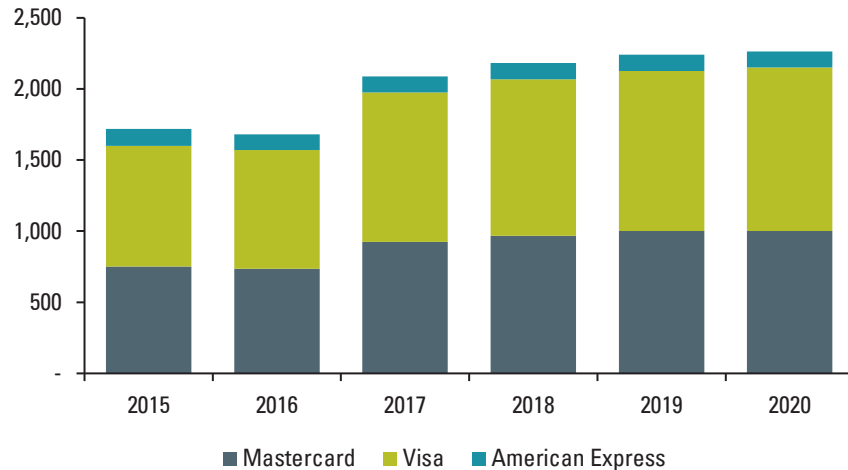
**Mastercard is one of the largest companies in the payments system**



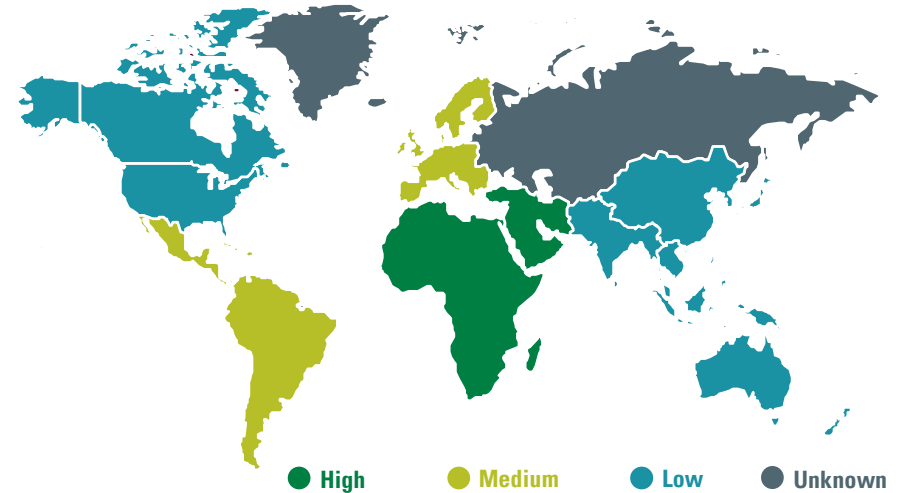
# DIGITAL PAYMENTS INDUSTRY



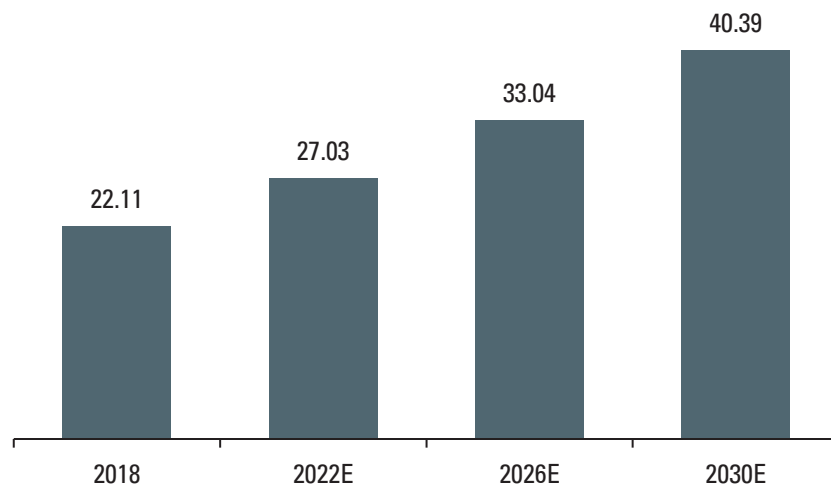
**Credit Cards Issued Globally (Millions)**



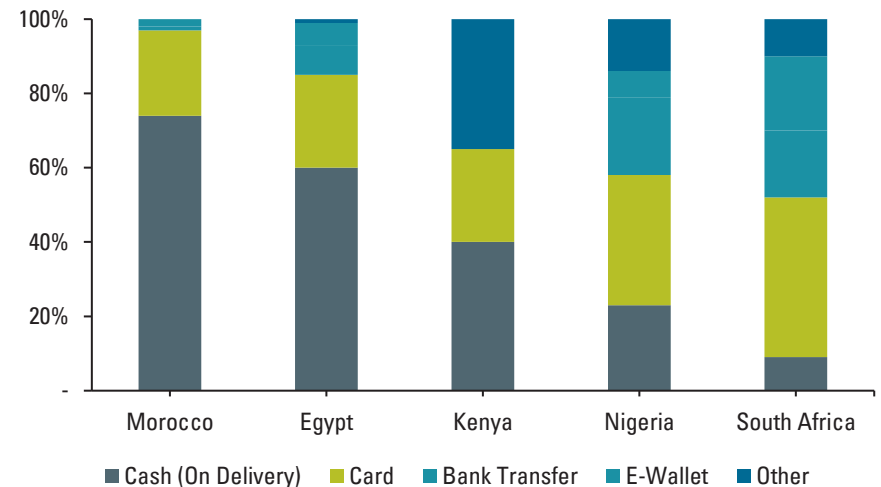
**Industry Growth Rate by Region**



**Projected Debit, Credit & Prepaid Card Volumes (Billions)**



**Distribution of Online Payment Methods in African Countries (%)**



**The digital payments industry is expected to grow steadily in the coming years, driven by global transaction growth and technological developments**

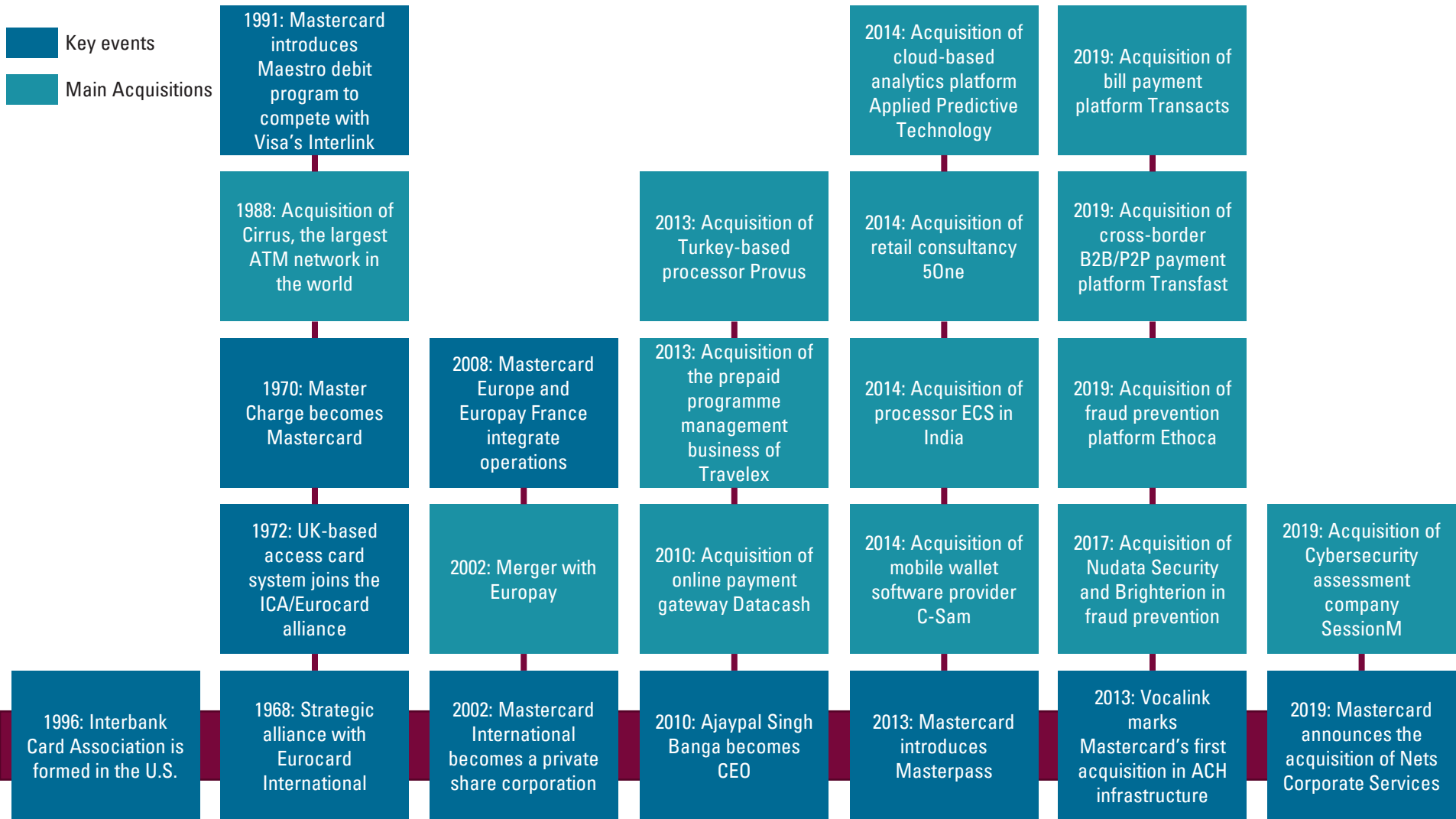
# KEY SHAREHOLDERS



Holder Name	Position (MM)	Latest Change (MM)	Position (%)	Institution Type	Country
Mastercard Foundation	104.16	▼ 0.31	10.74	Foundation	Canada
Vanguard Group	70.15	0	7.23	Investment Advisor	United States
BlackRock	65.71	0	6.78	Investment Advisor	United States
State Street Corp	35.53	▲ 1.51	3.66	Investment Advisor	United States
Capital Group Cos	29.95	▼ 2.77	3.09	Investment Advisor	United States
T Rowe Price Group	24.14	▲ 2.23	2.49	Investment Advisor	United States
FMR LLC	21.89	▼ 2.79	2.26	Investment Advisor	United States
Morgan Stanley	18.89	▼ 0.75	1.95	Brokerage	United States
JPMorgan Chase	17.11	▼ 0.96	1.76	Investment Advisor	United States
Geode Capital	15.15	▲ 0.42	1.56	Investment Advisor	United States
BNY Mellon	13.85	▲ 0.40	1.43	Investment Advisor	United States
Northern Trust Corp	10.76	▼ 0.05	1.11	Trust	United States
Wellington Management	10.63	▲ 3.20	1.10	Investment Advisor	United States
Janus Henderson Group	10.61	▼ 1.18	1.09	Investment Advisor	United Kingdom
Norges Bank	8.65	▼ 0.57	0.89	Sovereign Wealth Fund	Norway

The fifteen largest shareholders of Mastercard

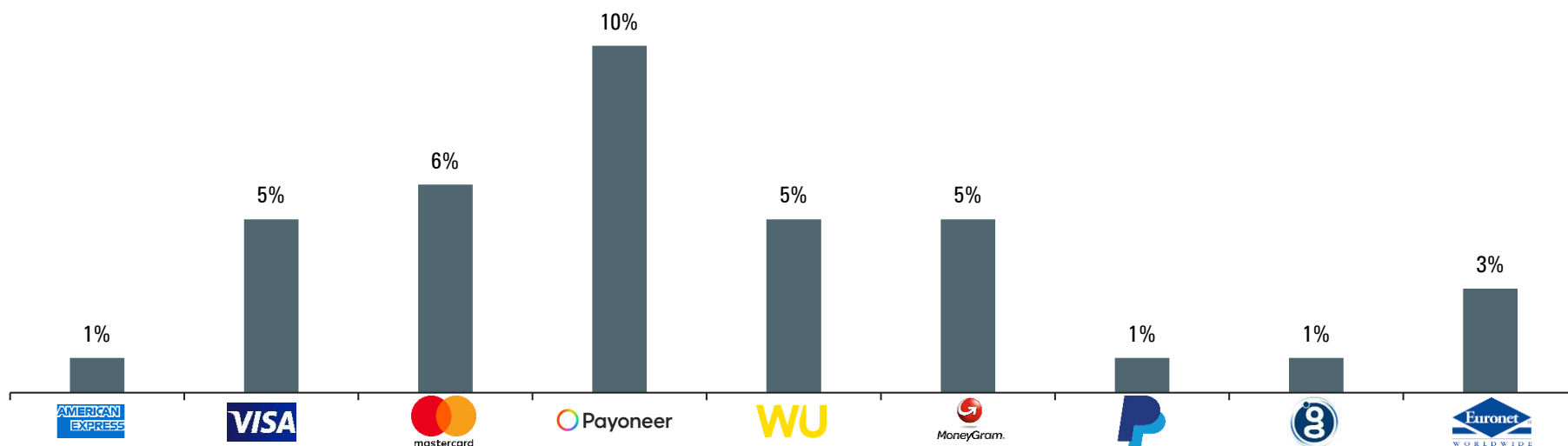
# ACQUISITION TIMELINE



History of Mastercard's key events and acquisitions connected to them

# EXPOSURE TO RUSSIA AND UKRAINE

## Estimated Revenues from Ukraine, Russia, Belarus



## Statement of Suspension of Russian Operations

March 5, 2022

It's with all of this in mind – and noting the unprecedented nature of the current conflict and the uncertain economic environment – we have decided to suspend our network services in Russia.

This decision flows from our recent action to block multiple financial institutions from the Mastercard payment network, as required by regulators globally.

With this action, cards issued by Russian banks will no longer be supported by the Mastercard network. And, any Mastercard issued outside of the country will not work at Russian merchants or ATMs.

We don't take this decision lightly. Mastercard has operated in Russia for more than 25 years. We have nearly 200 colleagues there who make this company so critical to many stakeholders. As we take these steps, we will continue to focus on their safety and well-being, including continuing to provide pay and benefits. When it is appropriate, and if it is permissible under the law, we will use their passion and creativity to work to restore operations.

Mastercard's exposure to current areas of conflict is relatively in line with peers

# DEBT & SECURITIZATION

## Mastercard Recently Issued Debt

Issuance	Value (US\$M)	Effective Interest Rate
2.00% Senior Notes Due November 2031	750	2.112%
1.90% Senior Notes due March 2031	600	1.981%
2.95% Senior Notes due March 2051	700	3.013%
3.30% Senior Notes due March 2027	1,000	3.420%
3.35% Senior notes due March 2030	1,500	3.430%
3.85% Senior Notes due March 2050	1,500	3.896%

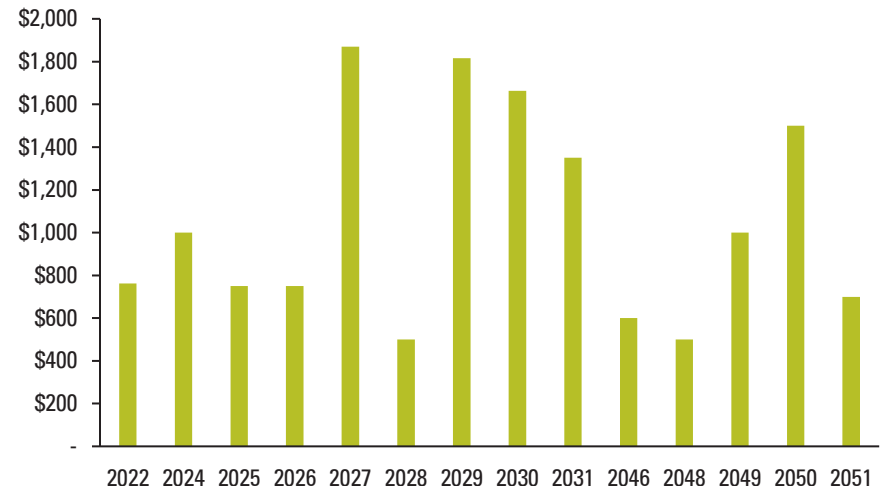
## Visa Recently Issued Debt

Issuance	Value (US\$M)	Effective Interest Rate
2.00% Senior Notes Due August 2050	1,750	2.090%
3.65% Senior Notes due September 2047	750	3.730%
4.30% Senior Notes due December 2045	3,500	4.370%
2.70% Senior Notes due April 2040	1,000	2.800%
4.15% Senior Notes due December 2035	1,500	4.230%
1.10% Senior Notes due February 2031	1,000	1.200%

## Funding Avenues

Commercial Paper Program	Credit Facility
Mastercard is authorized to issue up to 4.5 billion in outstanding notes with maturities up to 397 days from the date of issuance	Mastercard has an unsecured 4.5 billion revolving credit facility which expires in November 2023
Usage	
<ul style="list-style-type: none"> <li>The securitization programs are used to provide liquidity for general corporate purposes</li> <li>The company's available-for-sale securities primarily carry a credit rating of A- or better</li> </ul>	

## Mastercard Debt Maturities (US\$M)



Both companies issue debt in the form of senior notes and have programs to access liquidity for day-to-day operations

# KEY PARTNERSHIPS

## Mastercard Send Partner Program

Provides tools and ongoing support to drive innovation to meet evolving consumer expectations

Helps partners deliver more convenient and secure real-time digital payments to customers

Quickly embedding end-to-end real-time payments into customer journeys using Mastercard Send

Go-to-market collaboration, training and insights, technical support, industry expertise and positioning

Supporting 16 initial partners in accelerating and scaling their business

## Recent Partnerships

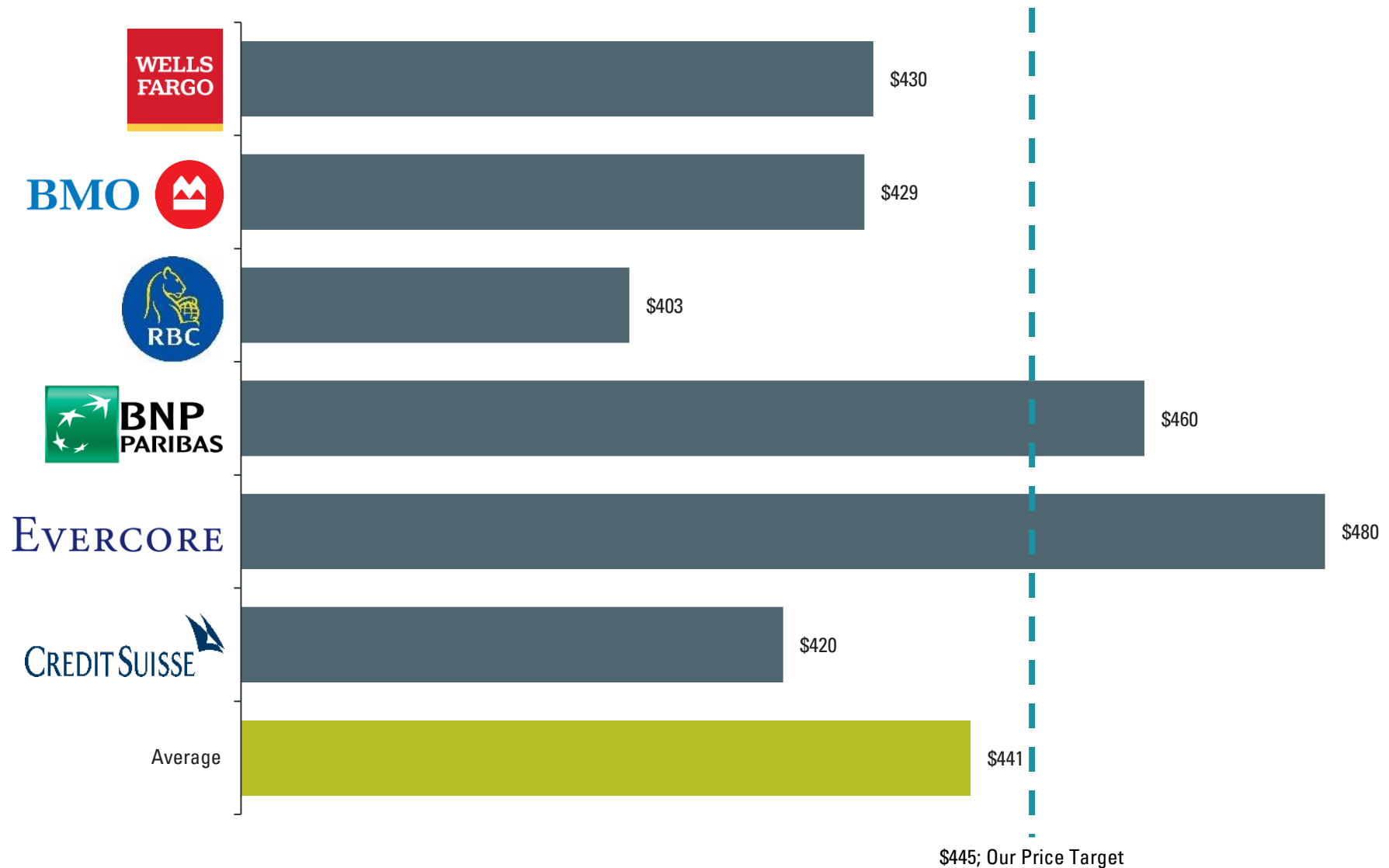


## Credit Card Issuers in Canada



Mastercard has a history of successful partnerships and continuously leverages its core capabilities to support smaller businesses

# CONSENSUS TARGET PRICES



**Our price target is slightly higher than the average which is justified by our expectation of future growth and low risk for the company**