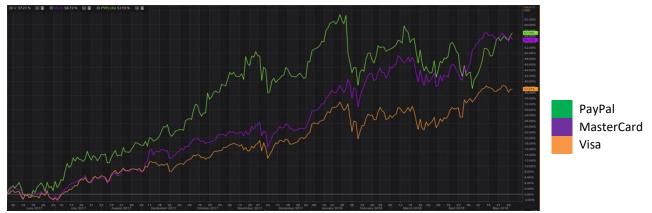
# Visa, MasterCard and PayPal: Strategies, Growth Prospects and Outlook



# **Industry Outlook:**

- Global non-cash transaction volumes have grown by 11.2% during the 2014–2015 to USD 433.1 billion driven by,
  - The sustained growth in personal consumption expenditures where people are spending more.
  - The gradual transition from cash/cheque to card payments where the worldwide transaction volume is divided into USD 70 trillion of cash & cheques and USD 25 trillion in card-based transactions.
  - Thus, there is a total addressable market of \$95 trillion where currently the card-based transaction penetration is only ~17%.
- Industry is expected to grow at a CAGR of 10.9% for from 2015 to 2020 with developing economies growing at 19.6%.
- E- and m-payments are expected to take around 32% of the market share with a CAGR of 10.5% during 2015–2020 reaching USD 726 billion by 2020.

Source: World Payment Report 2017 by Capgemini and BNB Paribas and UBS research

## **Key Market Players:**

- Visa Inc. currently leads the US market while MasterCard Inc. holds the second position with less than half of Visa's market share followed by tough competition from American Express; the same applies for the global market.
- Visa's quarterly dollar value of transaction is USD 2.7 billion compared to MasterCard's USD 1.4 billion according to the latest reports.
- The total number of Visa cards issued was 3.3 billion having grown by 4% yoy compared to MasterCard's 2.4 million cards having grown at a rate of 6% yoy.
- PayPal is a market niche player which currently focuses on e-commerce payments with its quarterly dollar value of transaction of USD 1.3 billion and 8.1 million active accounts.



### Comparison of Visa and MasterCard

MasterCard's recent quarterly performance indicates that the company's revenue is growing at double digits (31% yoy) driven by the strong growth in volume especially in the Europe and Latin America. Visa Inc. during the same period has grown at lower rate (13% yoy) compared to MasterCard. The payment industry growth lead by global macro-economic and consumption trends has contributed to the volume growth of both the companies which is also driven by the number of new card additions.

In terms of margins, Visa has been performing well compared to MasterCard despite its strong revenue growth which has reflected in the EBIT margins that has trickled down to the EPS growth. The non-Gaap operating margin of Visa Inc. for the latest reported quarter was 67% compared to MasterCard which reported 54.2% implying a better cost management strategy contributing towards the EPS growth of 30% yoy for Visa Inc. However, MasterCard's EPS grew by 49% as a result of a favorable effective tax rate.

GDV Local Growth										
All Mastercard Credit,										
Charge, Debit and Prepaid Programs	Q1'16	Q2'16	Q3'16	Q4'16	Q1'17	Q2'17	Q3'17	Q4'17	Q1'18	Q1'18
APMEA	12.9%	12.7%	9.8%	7.1%	7.8%	6.8%	7.8%	11.7%	13.5%	\$448
Canada	8.7%	10.9%	9.4%	9.5%	12.3%	10.2%	8.6%	9.5%	9.4%	39
Europe	18.3%	13.9%	4.5%	3.1%	1.3%	5.1%	15.0%	16.0%	18.6%	407
Europe adjusted for Article 8	20%	19%	17%	16%	14%	15%	16%	17%		102
Latin America	15.1%	15.4%	14.2%	14.5%	15.5%	15.4%	14.9%	16.7%	17.2%	996
Worldwide less United States	15.1%	13.4%	8.0%	6.3%	6.1%	7.0%	11.5%	13.9%	15.7%	419
WW less USA adjusted for Article 8	16%	15%	13%	11%	11%	11%	12%	14%		1,415
United States	9.9%	7.4%	4.8%	2.4%	1.9%	3.5%	6.2%	9.1%	10.5%	
Worldwide	13.3%	11.4%	7.0%	5.1%	4.7%	5.9%	9.8%	12.4%	14.1%	530
Worldwide adjusted for Article 8	14%	13%	10%	8%	8%	8%	10%	13%		194
										725
Mastercard Credit and Charge Programs										723
Worldwide less United States	8.6%	7.9%	6.2%	5.7%	7.2%	6.8%	8.8%	10.3%	12.2%	
United States	11.4%	6.8%	4.0%	4.2%	5.4%	6.6%	8.6%	10.0%	8.9%	466
Worldwide	9.4%	7.6%	5.5%	5.3%	6.7%	6.7%	8.7%	10.2%	11.3%	225
										691
<b>Mastercard Debit and Prepaid Programs</b>										001
Worldwide less United States	23.9%	20.7%	10.3%	7.1%	4.8%	7.3%	14.7%	18.2%	20.0%	
United States	8.6%	7.8%	5.5%	0.8%	-1.0%	0.8%	4.0%	8.4%	11.8%	
Worldwide	17.8%	15.9%	8.6%	4.8%	2.7%	5.0%	11.0%	14.9%	17.2%	

	Total	Growth						
	Volume	(Nominal						
	(\$ billions)	USD)						
All Visa Credit & Debit								
Asia Pacific	\$589	13.9%	8.8%	4.0%	0.1%	1.1%	6.7%	3.5%
Canada	66	13.7%	15.4%	11.8%	3.6%	13.2%	11.1%	6.1%
CEMEA	258	9.5%	10.3%	10.8%	12.2%	15.2%	10.7%	5.5%
LAC	254	5.8%	8.1%	7.4%	10.9%	17.9%	8.0%	4.9%
US	994	9.3%	8.6%	8.2%	11.1%	10.5%	9.3%	10.2%
Europe	556	20.5%	15.1%	9.4%				
Visa Inc.	2,716	12.2%	10.2%	7.8%	34.4%	35.0%	15.1%	26.7%
Visa Credit Programs								
US	\$461	10.2%	10.8%	9.1%	18.0%	20.0%	11.9%	17.2%
International	718	15.4%	12.5%	6.6%	28.3%	31.0%	15.0%	24.5%
Visa Inc.	1,179	13.3%	11.8%	7.5%	23.9%	26.3%	13.7%	21.5%
Visa Debit Programs								
US	\$533	8.6%	6.7%	7.5%	5.7%	3.5%	7.1%	4.9%
International	1,005	13.0%	10.2%	8.3%	78.6%	79.6%	21.6%	54.3%
Visa Inc.	1,538	11.4%	9.0%	8.0%	43.7%	42.4%	16.2%	31.2%

Analysts expected Visa's earnings to grow by 18.6% in its fiscal second quarter where Visa beat estimates by over 9% to nearly 29% yoy. Over the past nine quarters, Visa has beaten analysts' earnings estimates by over 7% on average, while revenue has topped estimates by approximately 2.75% on average. MasterCard also has a history of topping earnings estimates by a wide margin where MasterCard has beaten earnings estimates by an average of about 6.3%, while revenue has also beaten estimates by nearly 2.25% on average.

Identifier	Company Name	Revenue - SmartEstimate Growth (Next Yr/This Yr)	EBIT - SmartEstimate Growth (Next Yr/This Yr)	Earnings Per Share - Mean Growth (Next Yr/This Yr)	Price Close (usd)	Price Target - Mean (usd)	Price to Book	P/E (Daily Time Series Ratio)	Forward P/E (NTM) - Mean	Earnings Per Share - Mean (FY1, usd)	52 Week High	52 Week Low
V	Visa Inc	11.0%	13.6%	17.0%	131.28	143.03	8.63	37.66	26.21	4.50	132.50	92.80
MA.N	Mastercard Inc	12.5%	15.3%	16.4%	191.17	207.89	35.13	39.91	28.18	6.35	194.71	119.89
PYPL.OQ	PayPal Holdings Inc	15.5%	17.2%	20.6%	80.96	86.79	6.54	47.02	31.91	2.34	86.31	50.83
AXP.N	American Express Co	7.0%	11.2%	11.1%	101.10	109.22	4.43	15.69	13.35	7.24	103.24	75.98
DFS.N	Discover Financial Services	6.3%	4.7%	10.4%	76.00	86.44	2.46	11.41	9.43	7.73	81.93	57.50
FDC.N	First Data Corp	5.2%	5.8%	12.2%	19.28	22.00	5.32	15.47	12.66	1.45	19.85	14.74
WP.N	Worldpay Inc	9.7%	16.6%	18.6%	79.10	92.41	2.37	303.36	19.34	3.80	85.53	59.10
GPN.N	Global Payments Inc	9.7%	12.7%	16.1%	111.71	124.57	4.51	49.87	20.47	5.11	118.94	87.30

#### **MasterCard's Strategies**

MasterCard seems to effectively compete with Visa through differentiation and strategic acquisitions. MasterCard's acquisition of Applied Predictive Technologies three years ago has helped its merchant customers apply data analytics to their businesses which adds value to the merchant relationship. More recently, takeovers have added important capabilities like fraud detection and prevention through the use of biometric authentication and artificial intelligence, with cost reduction implications for MasterCard.

VocaLink, which is a MasterCard acquisition, provides instant electronic bank account transfers, known as Fast ACH, in key financial markets around the world. Most of Vocalink's revenue is accounted for in MasterCard's Other Revenues segment which grew to \$748 million, a 33% yoy increase. In the conference call, MasterCard's management stated that Vocalink expects to expand its services internationally, especially as countries begin to update their clearing houses. In Thailand, for example, Vocalink is powering PromptPay, a mobile payment system that enables bank transfers using a citizen ID number, got 40 million users signed up and ~USD 16 billion payment volume over the past six months. Vocalink also facilitates Pay by Bank app in the UK, which allows consumers to make purchases using a direct debit straight from their bank account at the point-of-sale.

MasterCard confirmed that it has won the Santander U.K. portfolio from Visa Inc. which could realize an annual volume of \$70 billion in the U.K according to a JPM analyst report. The transition adds about 10% to MasterCard's international debit book and simultaneously reduces Visa's international debit book by 3%. In addition, the company announced its win for exclusive network for PayPal's first consumer debit card in the U.S. providing access to PayPal accounts to make withdrawals from ATMs worldwide. The

company also announced a new deal for the U.K. Post Office travel money program, one of the largest consumer prepaid programs in the U.K. to be exclusively MasterCard branded.

The management expressed its focus in India in terms of the issuing side and merchant acceptance with digital technologies such as QR codes.

MasterCard seems to focusing on the micro lending opportunities utilizing QR codes in Africa which has a large accessible market. MasterCard in February announced that it will use Facebook Messenger to provide technology to small businesses in Africa and Asia to drive affordable acceptance of electronic and mobile payments. MasterCard has teamed up with solar energy company M-KOPA Solar, banks, and mobile network operators to enable payments and commerce for people who don't have access to banks in Africa which will enable consumers to pay for solar energy as they use it.

#### **Visa's Strategies**

Visa announced that IKEA in the U.S. has selected Visa as the network for their new co-brand program and also signed a multiyear debit issuing agreement with CIBC in Canada. In Asia, Visa is partnering with Citi and PChome to launch the new exclusive co-brand card in Taiwan.

The management in the conference call, also highlighted its progress on India, where digital and electronic payments continue to see explosive growth. CEO Al Kelly said that Visa was the clear leader in India, having over 50% market share in credit and debit with growing overall acceptance. Visa has been working closely with the Indian government to expand the use of QR codes with Visa Direct, where merchants only need a smartphone to accept card and digital payments. Kelly added that 450,000 merchants now had this capability. He concluded by calling India "a very exciting opportunity for us."

Regarding the Visa contactless technology, management highlighted that, 12 months ago, approximately 1 in 8 domestic face-to-face transactions ran compared to almost 1 in 5 transactions globally today. Visa's contactless penetration rate has increased by 9ppts to 37% in Russia this quarter whiles recording a 7 ppt increase to 56% in UK and 52% in Canada.

It is notable that the U.S is in the early stages of adopting contactless indicating huge market potential for market penetration in the coming years. The company has added 10 additional members to Visa contactless overt the past year which in total ads up to 56 of the top 100 merchants who have adopted the system in the U.S.

The acquisition of CardinalCommerce last year has enhanced Visa's authentication capability, reducing transaction latency and improving the customer experience for merchants. The company also partnered with a Miami-based fintech Novo Payment, a cloud-based platform that supports mass B2B disbursements and collections in Latin America and the Caribbean region which is Visa's latest deal focused on the B2B payments markets.

Further, the company expanded its partnership with Amazon Business, launching in Germany which brings together information from Amazon Business purchases and Visa's processing to helping business clients spend less time on purchase reconciliation.

In terms of other expansion strategies, the company's partnership with PayPal in the US has been extended to Asia and Europe, which eliminates ACH steering while also enabling PayPal users to cash out to their Visa card utilizing Visa Direct.

Visa also launched the national marketing campaign through its Olympics sponsorship featuring contactless this quarter. Spurred by the Tokyo Olympics in 2020, Japan's largest retailer, AEON, will introduce checkout terminals supporting Visa contactless payments at approximately 100,000 stores between March of 2019 and March of 2020, including supermarkets and drugstores nationwide. And Visa unveiled 3 limited edition wearable payment devices, stickers, badges and gloves that could be used for contactless payments in collaboration with LOTTE Card, the financial arm of South Korean-based retailer. Approximately 100,000 wearables were sold between November and March. The company expects more than 550 bank and merchant partners in over 100 markets to utilize its upcoming FIFA sponsorship in Russia.

Purely from a short-term perspective, the fact that Visa will get greater exposure from its promotion of the Olympic Games raises the probability of the stock price, however both the stocks are poised towards significant growth in the years to come.

## PayPal's Strategies

The payments company revealed its plan to work more closely with Google to roll out a dynamic payment button enhancing the company's competitive position. The service will provide customers with fast checkouts, cutting down the time to type in a password, billing, and shipping information.

PayPal also gave investors the update on its plan to monetizing Venmo which has seen an explosive transaction volume growth of more than 80% compared to the previous year. The company reported that as of May 2018, 11% of active monthly Venmo users have used some type of monetized transaction compared to roughly 0% at the beginning of the year. Venmo peer-to-peer payments is not linked to any credit cards and remain free, but PayPal has been charging for instant deposit, cobranding offers, and "Pay with Venmo," which allows customers to shop using Venmo.

Additionally, PayPal, under its banking license in Europe, partnered with Visa and MasterCard networks to enable consumers and businesses to use their PayPal funds to spend wherever Visa and MasterCards are accepted worldwide. The company's strategy to partner with competitors to leverage its capabilities in point-of-sale transactions widens its market from e-commerce payments to POS and financial transactions.

Further, Samsung and PayPal in last July, announced a strategic partnership where PayPal will become a payment method Samsung Pay wherever Samsung Pay is accepted, whether in-app, online and in-store and Braintree, PayPal's processing arm, will accept Samsung Pay as a method of payment in-app and

online. PayPal also secured a partnership in China with Baidu mobile wallet to be accepted by around 17 million PayPal merchants worldwide. Analysts expect more partnerships to continue for FY18 as part of the company's expansion strategy.

The diffraction strategy of PayPal is to effectively partner with all its competitors across all market segments like credit and debit cards, e and m-wallets, payment processing, banking and P2P and B2B platforms. PayPal can therefore effectively build a universal payments ecosystem where PayPal can be used by any bank, any device or any service. PayPal is building up capabilities offer an entire suite of services which other platforms or competitors lack which can become a source of competitive advantage for the company.

Total	payment volume:
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As reported	\$	131,449	S	114,045	\$	106,444	S	99,327	S	99,348	\$	87,403	S	86,208	S	81,056	S	81,523	S	69,738
Adjustment		1,066		1,179		1,356		1,312		1,363		1,492		1,555		1,503		1,579		1,579
Revised <sup>(4)</sup>	s	132,515	S	115,224	\$	107,800	S	100,639	S	100,711	\$	88,895	\$	87,763	S	82,559	S	83,102	S	71,317
Current quarter vs prior quarter		15%	í	7 9	6	7 %	6	- 9	6	13%	5	1%	5	6 9	6	(1)9	6	17%		
Current quarter vs prior year quarter		32%	í	30 9	6	23 %	6	22 %	6	21%	6	25%	5							

	December 31, 2017	September 30, 2017	June 30, 2017	March 31, 2017	December 31, 2016	September 30, 2016	June 30, 2016	March 31, 2016	December 31, 2015	September 30, 2015
Active accounts:										
As reported	227	218	210	203	197	192	188	184	179	173
Adjustment	2	2	2	2	2	2	1	2	2	2
Revised <sup>(1)</sup>	229	220	212	205	199	194	189	186	181	175
Current quarter vs prior quarter	4%	4 %	3 %	3 %	3%	2%	2 %	3 %	3%	6
Current quarter vs prior year quarter	15%	13 %	12 %	10 %	10%	11%				