

# Fintech 3.0 Update

# Payments

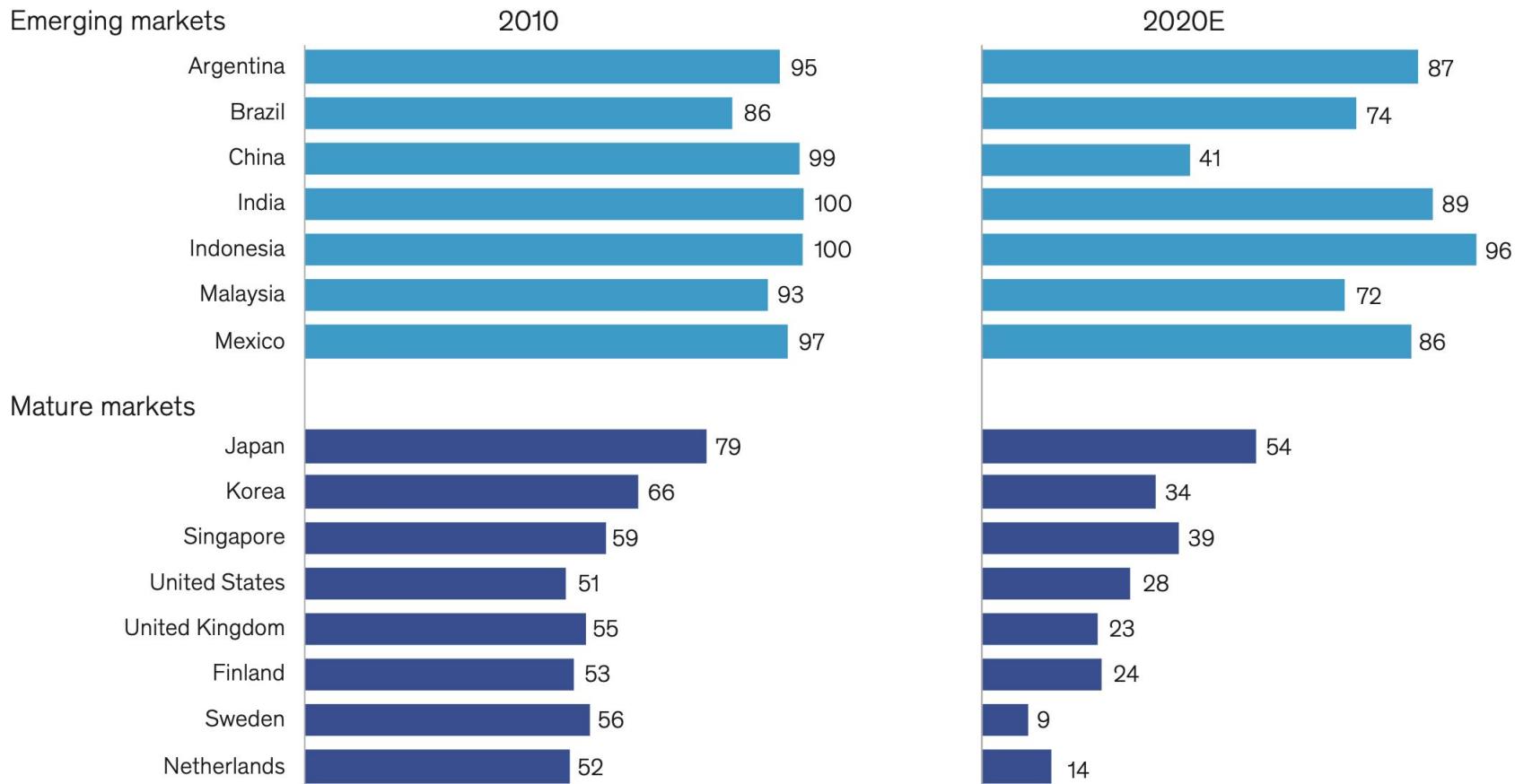
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**“Payments is a consolidating industry” (Autonomous)**

# Northern Europe has basically rejected cash

## Cash usage by country

Percent of cash used in total transactions by volume, %



# Northern Europe has basically rejected cash

## Cash usage by country

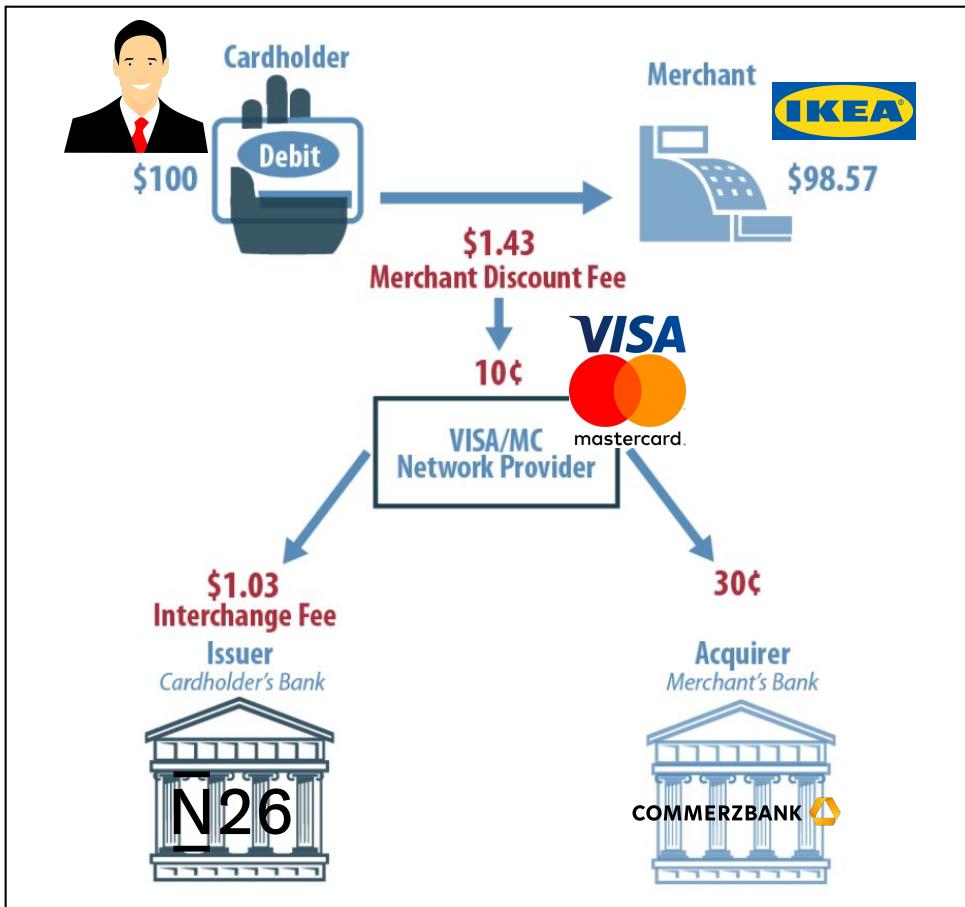
Percent of cash used in total transactions by volume, %



Estimates by the Bundesbank suggest that banknotes worth around €268 billion were in circulation in Germany in 2018. Of that amount, **roughly 20% was used directly for transactions**. The other, far larger share – somewhere in the region of **€200 billion** – was being **hoarded**, i.e. stored for an extended period of time by households and firms.

# How the four-party network works (physical transactions)

Figure 1. Illustrative Example of Four-Party Network



Source: The Congressional Research Service (CRS).

# Payment business models basics

## Payment gateways

Platforms where customers can pay for a product on a merchant's website. Payment methods include debit cards, digital wallets, credit cards and cryptocurrencies.

Traditional banks typically charge high fees for transactions, but **Fintech companies are starting to use a model that allows integrating all of these payment methods into one app** that online merchants can easily download and integrate on their website. Such payment apps are perfect for businesses selling their physical products or services to end-users.

## Payment processors

A payment processor is a company that **handles transactions so that your customers can buy your products**. That means the payment processing company **communicates and relays information from your customer's credit or debit card to both your bank and your customer's bank**. If there are enough funds in your customer's card and it is valid, the transaction will go through. And all of this all happens in a matter of seconds.

## Merchant account

Merchant accounts are **essential to businesses**, especially those that accept credit cards online. **Without a merchant account, you cannot accept money from a customer's credit or debit card because you have nowhere to put the money**. So a merchant account is a bank account that accepts debit and **credit card payments**. Without it, a business could not accept these payment forms.

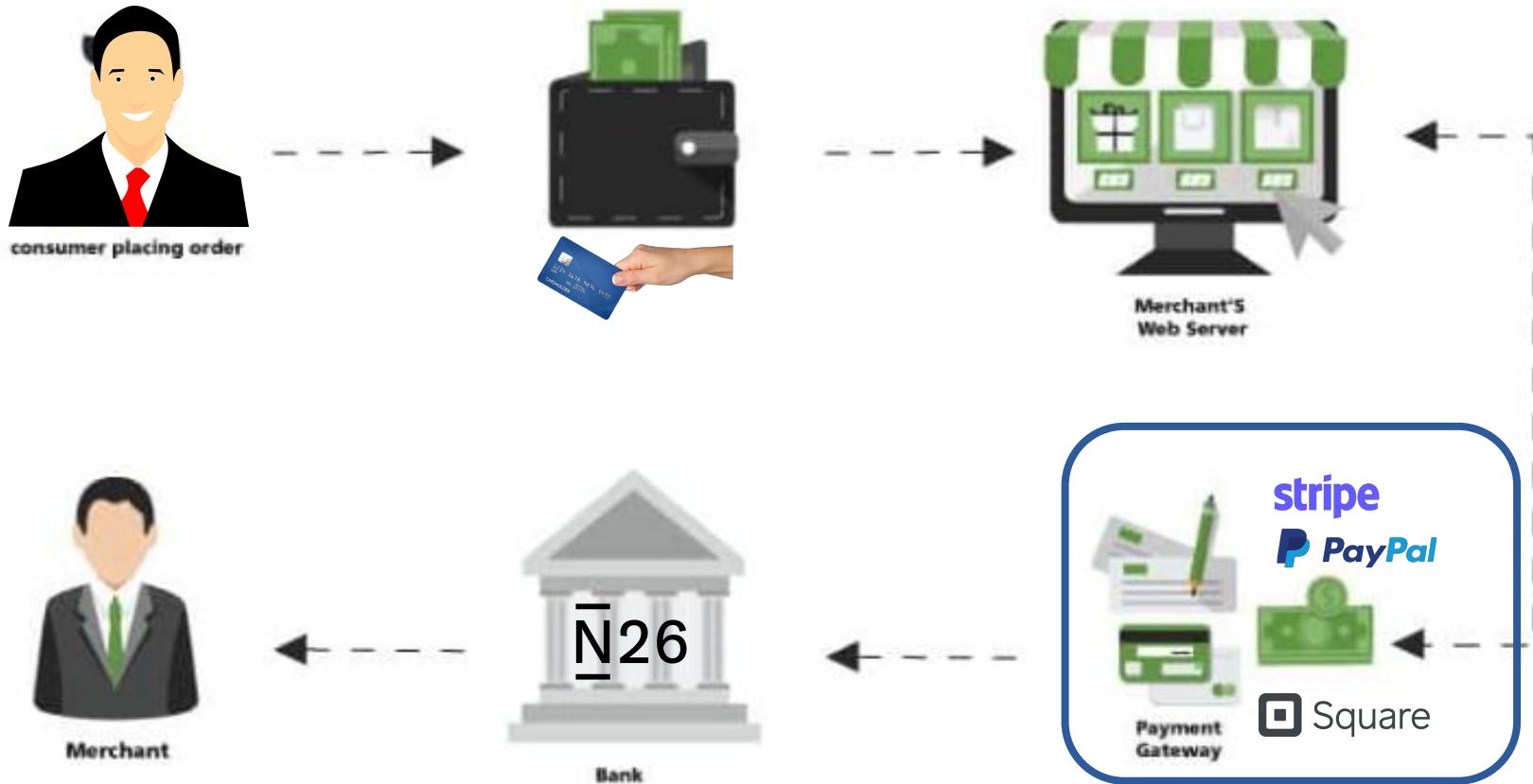
## Digital wallets

A **digital wallet provides a secure payment system that uses passwords for numerous payment methods and websites**. By using a digital wallet, users can fulfill purchases **easily and quickly** using online transfer technologies. It's a general practice to have digital wallets combined with mobile payment systems, allowing clients to pay with their smartphones. A few examples of digital wallets are American Express, Apple pay, Paytm, PhonePe, Ezetap, Freecharge.

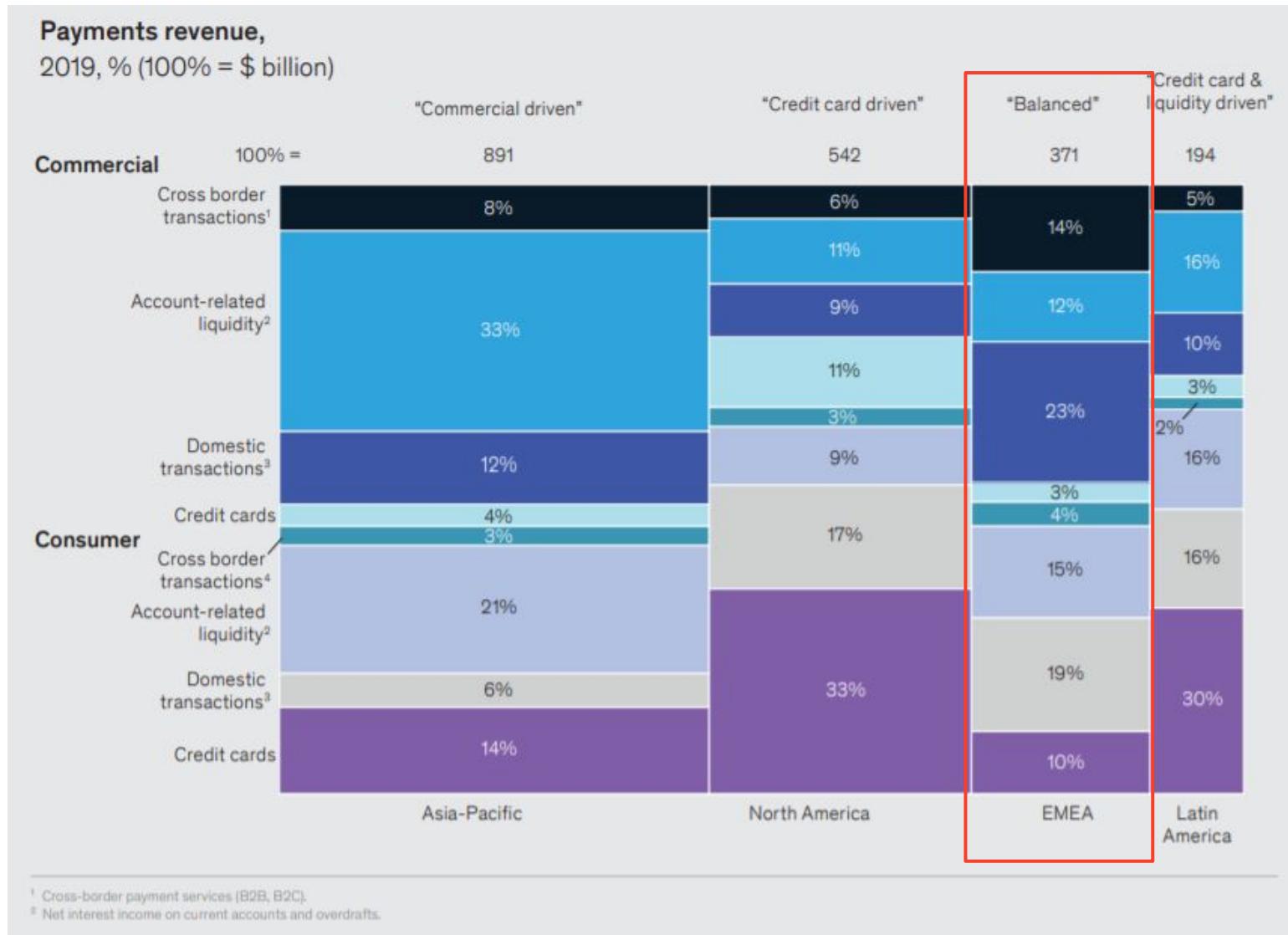
# E-commerce system

Step	Who	Value Creation	Regulation
Your browser	You	Tracking and data collection	PCI DSS SSL
Merchant	Ikea	Selling of product and smooth checkout	
Gateway	Stripe, PayPal, Adyen	Compliance and fraud detection	ISO 8583 EFT switches
Processor	Stripe, PayPal, Adyen	Compliance and fraud detection	E-money license
Card scheme	Visa, Mastercard	Network effect	
Your bank	N26	Fronts the money	Capital ratio

# Payment Process



# Payment revenues are commercially and consumer driven in Europe



# Payment companies continue to outperform other banking sectors in value creation

TRS performance of public companies<sup>1</sup>

Indexed to 100 = January 2009

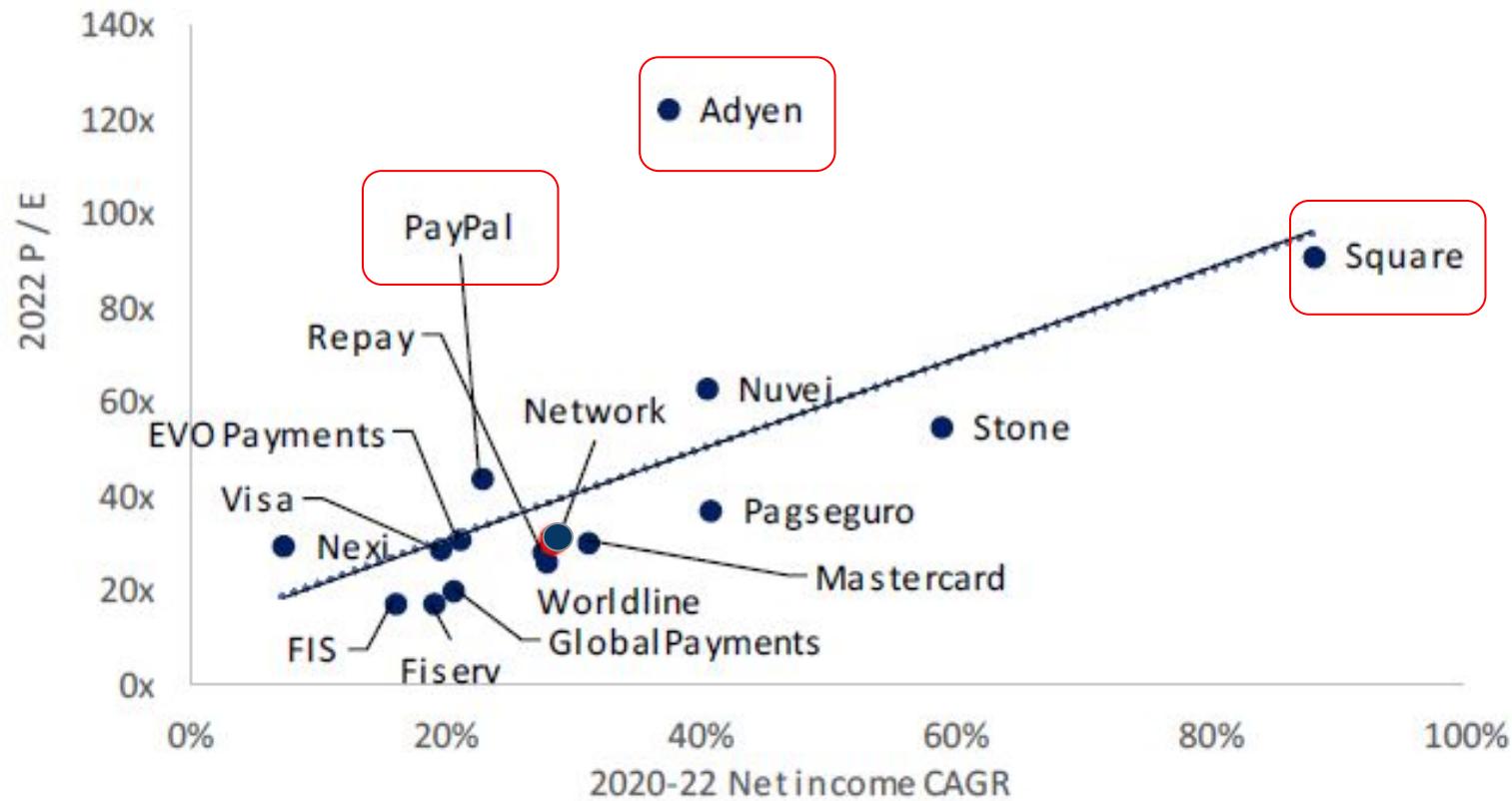


<sup>1</sup> Based on an analysis of public companies; custom indices (market-cap weighted) based on identified public European peers: payments N=27, retail banking N=20, asset management N=17, corporate banking N=5; 2019 data as of October.

<sup>2</sup> TRS CAGR for Jan 2009-July 2020.

Source: S&P Capital IQ; McKinsey analysis

# P/E Multiple versus Expected Earnings Growth



**Square's Net income CAGR is large for the following reasons:**

1. TAM is estimated to be \$160bn and growing
2. Company provides hardware (debit and credit cards) at rel. low prices and earns large margins on payment processing → allows it to expand into far more profitable businesses such as software and services
3. Software segment is very sticky → “lock-in” effects
4. Building new growth engines with credit services and the digital wallet Cash App
5. Competitive advantage in credit segment due to its access to all kinds of sales and inventory data from small merchants which allows it to make better credit risk decisions and provide superior customer experience

# Square

\*Cash App: Robinhood exodus incoming

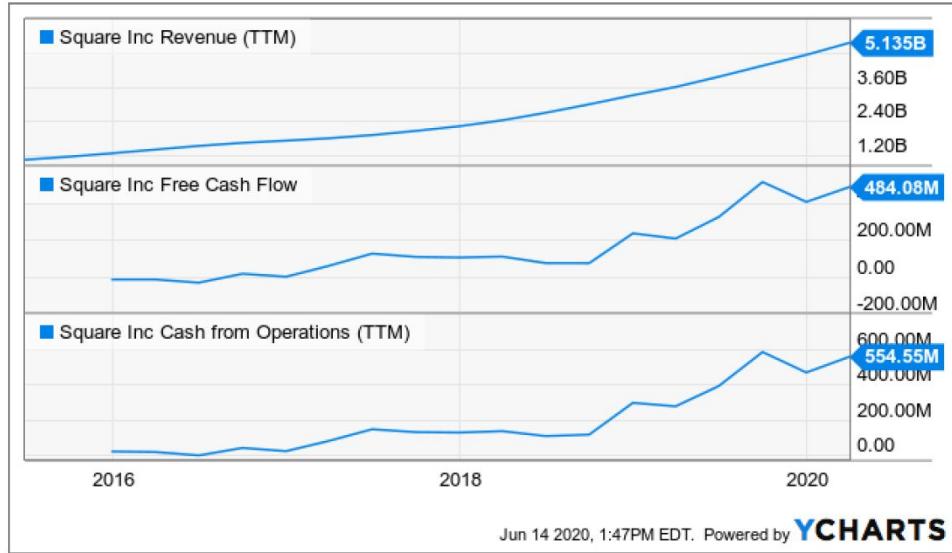
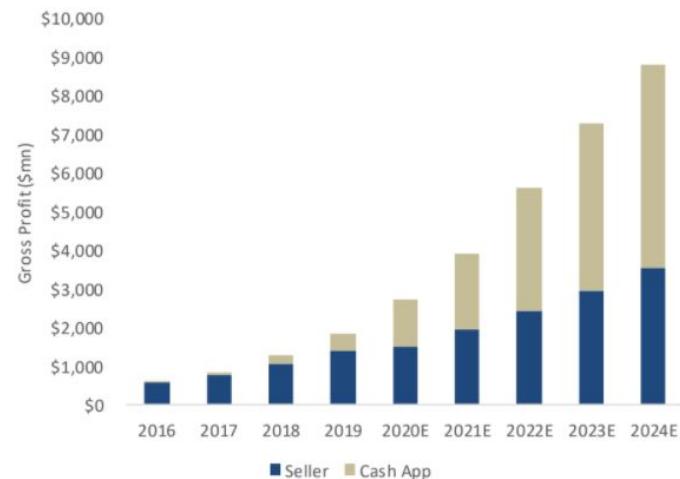


Chart 5: Gross profit contribution break-down 2016 – 2024E



Source: Company filings, Autonomous

in \$	SQ	PYPL	MA	V
Market Capitalization	38,050	182,120	298,981	410,283
Sales Growth 5Y	40.85%	17.24%	12.33%	12.59%
Sales Growth TTM	43.09%	14.90%	11.43%	10.20%
Sales Growth Projected	25.19%	17.08%	20.13%	10.36%
Enterprise Value to Sales	7.34	9.89	17.66	17.52

# Paypal vs Square

Based on Q3 2020, in million \$

<b>PayPal</b>		<b>Square</b>	
Company-Level Industry Statistics		Company-Level Industry Statistics	
Active Accounts (Includes Merchants)	361	Net Charge-Offs	223.1
		Estimated Net Charge-Offs	0
Total Payment Volume (TPV)	246691	Net Charge-Off Rate (%)	5.8
Volume per Active Account	683.354571	Total Card Volume	6151.7
TPV Growth (%), LC	36	Credit Loss Reserve Build (Release)	-15.4
Mobile TPV		Loss Provision	207.7
Venmo TPV	44000	Net Charge-offs	-223.1
Cross-Border TPV Growth (%), LC	16	Total Delinquency Rate (%)	4.7
		31-60 Days Delinquency Rate (%)	1.5
Transactions	4013	61-90 Days Delinquency Rate (%)	1
Transactions per Active Account (Annualized)	40.1	90 Days+ Delinquency Rate (%)	2.2
Transaction Revenue Rate (%)	2.05763486	Reward Miles Issued	1239.7
* Transaction Revenue Rate (%)	2.21288981	Reward Miles Redeemed	687.2
Processing Expense Rate (%)	0.82		
Loss Rate (%)	0.14	Balance Sheet & Cash Flow Metrics	
Net Take Rate (%)	1.097635	Avg. Managed Card Loans	15299.6
* Net Take Rate (%)	1.25289		
* Uses Total Revenue rather than Transaction Revenue			

Paypal is used as benchmark

# The cost of acquiring customers

Average cost of a customer per \$ of funding

## Cross-border

**AZIMO**

**WorldRemit**

**TransferWise**

## Neobank

**monese**

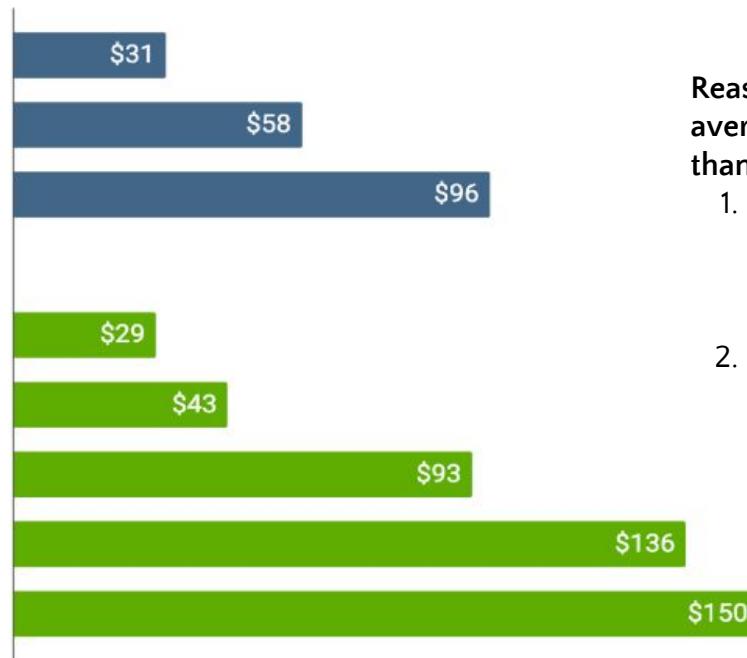
**Revolut**  
GLOBAL MONEY APP

**N26**

**monzo**

**STARLING BANK**

## Funding dollars per customer acquired



Reasons why Starling and Monzo average cost of a customer is higher than their peers:

1. Main focus on marketing and branding to increase customer growth not on development/acquisition of software to scale
2. More functionalities offered which are for free in the beginning

Source: FXC Intelligence Analysis  
Customers acquired as of latest major funding round

**FXCintelligence™**

“TransferWise, Monzo and Starling are investing a lot per customer – an indication of the quality of the product these companies are building and for the first two, the millions of customers they have obtained. Which means spending more may be better than spending less.”

# Paypal vs. Stripe

PayPal always looks like this

The screenshot shows a PayPal guest checkout interface. At the top right, there's a shopping cart icon with '\$217.50 USD'. Below it, the word 'English' with a dropdown arrow. On the left, there's a 'Have a PayPal account?' link and a blue 'Log In' button. In the center, the text 'PayPal Guest Checkout' is displayed above the message 'We don't share your financial details with the merchant.' Below this, there's a dropdown menu set to 'United States'. Further down are fields for 'Card number', 'Expires', 'CSC', and a dropdown for 'Country' which is also set to 'United States'. At the bottom, there are logos for Discover, MasterCard, Visa, and American Express.

Stripe is embedded however you want

The screenshot shows a Stripe payment form integrated into a website. It consists of several sections: 1. Contact information (with an 'Edit' link), showing an email address 'fulton.derek@gmail.com'. 2. Shipping and billing address (with an 'Edit' link). Under 'Shipping address', the details are: Derek Fulton, Chisel House, DT11 8HQ Hanford, Blandford, United Kingdom, +1 7046041814. Under 'Billing address', the details are: Derek Fulton, 719 Romany Road, Charlotte, North Carolina, 28203, United States. 3. Payment section. It includes a 'Credit card' field with a green placeholder bar for card number, a 'CVC ZIP' field, and logos for VISA, AMEX, and MasterCard. Below these are buttons for 'Klarna' and 'PayPal'. At the bottom is a large orange 'Place order' button. A small note at the bottom states: 'By placing the order you accept our [terms and conditions](#)'.

# Side-by-side analysis



Market share	64%	20%
Micro payment fees	\$1.00: 5% of \$1 = 5¢ and 5¢ + 5¢ = <b>10¢</b> \$5.00: 5% of \$5 = 25¢ and 25¢ + 5¢ = <b>30¢</b>	\$1.00: 2.9% of \$1 = 2.9¢ and 2.9¢ + 30¢ = <b>32.9¢</b> \$5.00: 2.9% of \$5 = 14.5¢ and 14.5¢ + 30¢ = <b>44.5¢</b>
Standard fees	2.9% + \$0.30 per transaction	2.9% + \$0.30 per transaction
Chargeback and reminder fees	\$20.00	\$15.00
Global availability and supported currencies	Available in +200 countries/regions and supports 25 currencies	Available in 26 countries/regions and supports 135 currencies
Payment methods accepted	Any major credit card, Paypal credit, any payment method that users can save (incl. eChecks)	All major debit and credit cards, as well as the following wallets: Alipay, Amex Express Checkout, Apple Pay, Google Pay, Microsoft Pay, Masterpass with Mastercard, Visa Checkout and WeChat

\* Square is the strongest competitor: while only showing 2% market share, they are showing considerable growth

# US Government decided Square and PayPal worthy of issuing PPP loans

Square PPP Loans Estimate					Core Loan Portfolio Stats				
# of Merchants					Cumulative Loan Originations				
% Applying for PPP					\$6.3 Billion				
Average PPP Loan Size					Cumulative # of Loans				
PPP Loan Value Originated					\$1 Million				
Loan Size	Square Mix %	Fee %	Fee Revenue \$	Interest Rate %	Interest Accrued %	Interest Income \$	Agent Fee %	Agent Fees \$	
≤350K	100%	5%	\$ 113.75	1%	67%	\$ 15.17	1.0%	\$ 22.75	
>350K - <2M	0%	3%	\$ -	1%	67%	\$ -	0.5%	\$ -	
2M - 10M	0%	1%	\$ -	1%	67%	\$ -	0.3%	\$ -	
<b>2020 Revenue Benefit:</b>					<b>\$ 106.17</b>				
<b>% of Current Consensus:</b>					<b>2.5%</b>				

PayPal PPP Loans Estimate					Core Loan Portfolio Stats				
Est. Loans As of 5/16					Cumulative Loan Originations				
Average PPP Loan Size					\$15 Billion				
SBA Round 2 Loans as of 5/16					Cumulative # of Loans				
PayPal Share					900,000				
Funds Remaining as of 5/16					Average Loan Size				
PayPal Total PPP Loan Value Est.					\$16,667				
# of Merchants					# of Merchants				
# of Merchants Loaned To					24 Million				
					305,000				
Loan Size	PayPal Mix %	Fee %	Fee Revenue \$	Interest Rate %	Interest Accrued %	Interest Income \$	Agent Fee %	Agent Fees \$	
≤350K	100%	5%	\$ 119.13	1%	67%	\$ 15.88	1.0%	\$ 23.83	
>350K - <2M	0%	3%	\$ -	1%	67%	\$ -	0.5%	\$ -	
2M - 10M	0%	1%	\$ -	1%	67%	\$ -	0.3%	\$ -	
<b>2020 Revenue Benefit:</b>					<b>\$ 111.18</b>				
<b>% of Current Consensus:</b>					<b>0.6%</b>				

# Bloomberg - PayPal

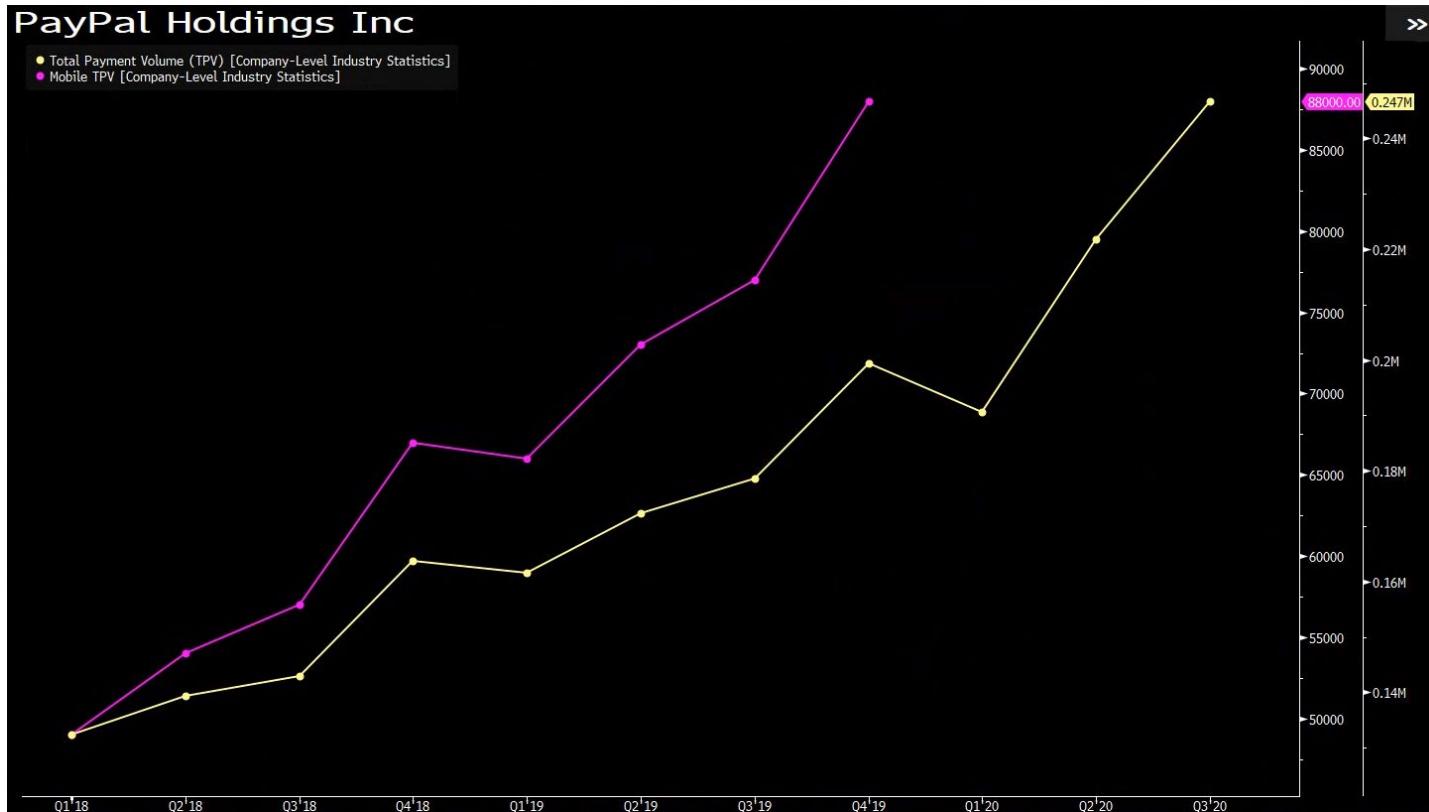
## Key Stats

In Millions of USD 12 Months Ending	2021 Y Est 12/31/2021	2020 Y Est 12/31/2020	Current/LTM 09/30/2020	2019 Y~ 12/31/2019	2018 Y 12/31/2018	2017 Y 12/31/2017	2016 Y 12/31/2016
Market Capitalization			274,539.1	126,883.4	98,721.7	88,344.0	47,640.3
- Cash & Equivalents			14,158.0	10,761.0	9,109.0	5,695.0	4,975.0
+ Preferred & Other			44.0	44.0	0.0	0.0	0.0
+ Total Debt			9,664.0	5,472.0	1,998.0	1,000.0	0.0
Enterprise Value			270,089.1	121,638.4	91,610.7	83,649.0	42,665.3
Revenue, Adj	25,441.3	21,422.7	20,299.0	17,772.0	15,451.0	13,094.0	10,842.0
Growth %, YoY	18.8	20.5	19.1	15.0	18.0	20.8	17.2
Gross Profit, Adj	13,592.5	11,719.7	—	—	—	—	—
Margin %	53.4	54.7	—	—	—	—	—
EBITDA, Adj	7,138.6	5,936.5	4,560.0	3,858.0	3,059.0	3,109.0	2,310.0
Margin %	28.1	27.7	22.5	21.7	19.8	23.7	21.3
Net Income, Adj	5,351.4	4,453.7	2,703.6	2,539.4	2,059.0	2,090.1	1,401.0
Margin %	21.0	20.8	13.3	14.3	13.3	16.0	12.9
EPS, Adj	4.55	3.79	2.28	2.14	1.71	1.71	1.15
Growth %, YoY	20.1	77.2	5.9	24.9	0.0	48.8	10.3
Cash from Operations			5,871.0	4,561.0	5,483.0	2,531.0	3,158.0
Capital Expenditures	-1,155.1	-888.8	-814.0	-704.0	-823.0	-667.0	-669.0
Free Cash Flow	5,940.3	5,346.6	5,057.0	3,857.0	4,660.0	1,864.0	2,489.0

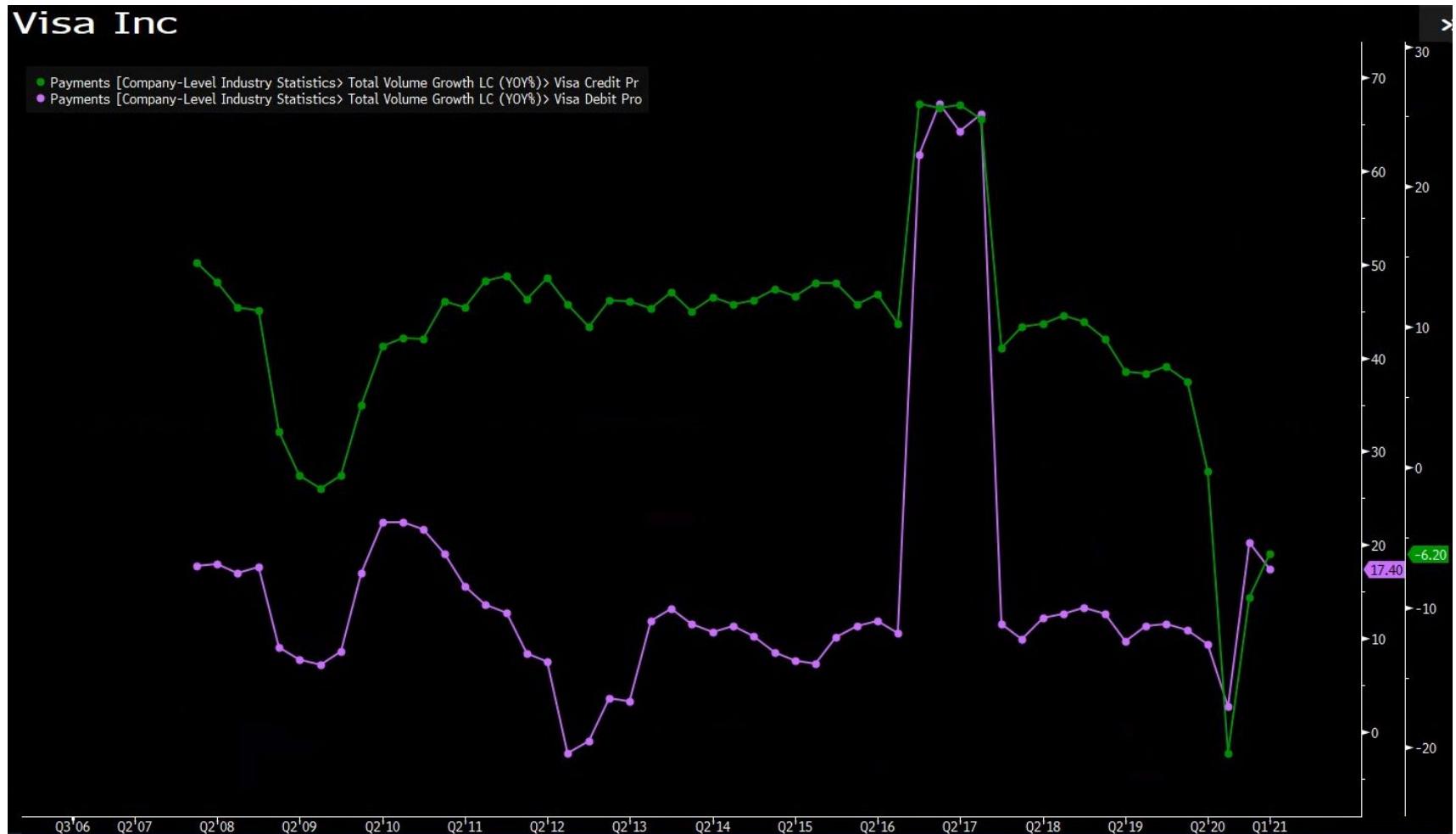
## Segments

In Millions of USD except Per Share 12 Months Ending	2019 Y 12/31/2019	2018 Y 12/31/2018	2017 Y 12/31/2017	2016 Y 12/31/2016
► Revenue	17,772.0 100.0%	15,451.0 100.0%	13,094.0 100.0%	10,842.0 100.0%
► Revenue - Supplementary Breakdown	17,772.0 100.0%	15,451.0 100.0%	13,094.0 100.0%	10,842.0 100.0%
► Operating Income	2,719.0 100.0%	2,194.0 100.0%	2,127.0 100.0%	1,586.0 100.0%
► Interest Expense	115.0 100.0%	77.0 100.0%	0.0	0.0
► Interest Income	197.0 100.0%	168.0 100.0%	85.0 100.0%	0.0
► Pretax Income	2,998.0 100.0%	2,376.0 100.0%	2,200.0 100.0%	1,631.0 100.0%
► Income Taxes	539.0 100.0%	319.0 100.0%	405.0 100.0%	230.0 100.0%
► Net Income	2,459.0 100.0%	2,057.0 100.0%	1,795.0 100.0%	1,401.0 100.0%
► Revenue Growth %	—	—	—	—
► Property/Plant/Equipment	2,172.0 100.0%	1,724.0 100.0%	1,528.0 100.0%	1,482.0 100.0%
► Goodwill	6,212.0 100.0%	6,284.0 100.0%	4,339.0 100.0%	4,059.0 100.0%
► Assets	51,333.0 100.0%	43,332.0 100.0%	40,774.0 100.0%	33,103.0 100.0%
► Liabilities	34,404.0 100.0%	27,946.0 100.0%	24,780.0 100.0%	18,391.0 100.0%
► Depreciation and Amortization	912.0 100.0%	776.0 100.0%	805.0 100.0%	724.0 100.0%
► Depreciation	701.0 100.0%	627.0 100.0%	649.0 100.0%	574.0 100.0%
► R&D Expenses	2,085.0 100.0%	1,831.0 100.0%	953.0 100.0%	834.0 100.0%
► Capital Expenditures	-704.0	-823.0	-667.0	-669.0

# PayPal: Mobile payment volume alongside total payment volume (BICO)



# Visa Payments Growth (green=credit, purple=debit)



# Adyen (winner)

Dutch payment company that allows businesses to accept e-commerce, mobile and point-of-sale payments.

The platform connects to payment methods across the world, including international credit cards, local cash-based methods and Internet banking methods and acts as a payment gateway, payment service provider and offers risk management and local acquiring.

More than 3,500+ clients and listed on Euronext stock exchange.

Value add for customers in countries that are almost cash-free like Netherlands, Sweden

## The good

Processed payment volume of over €159 billion in 2018

Profiting from rising e-commerce adoption

700% revenue growth and 500% profit growth in last 5 years

Single platform strategy -> does not rely on any third-party system besides the card networks

## The bad

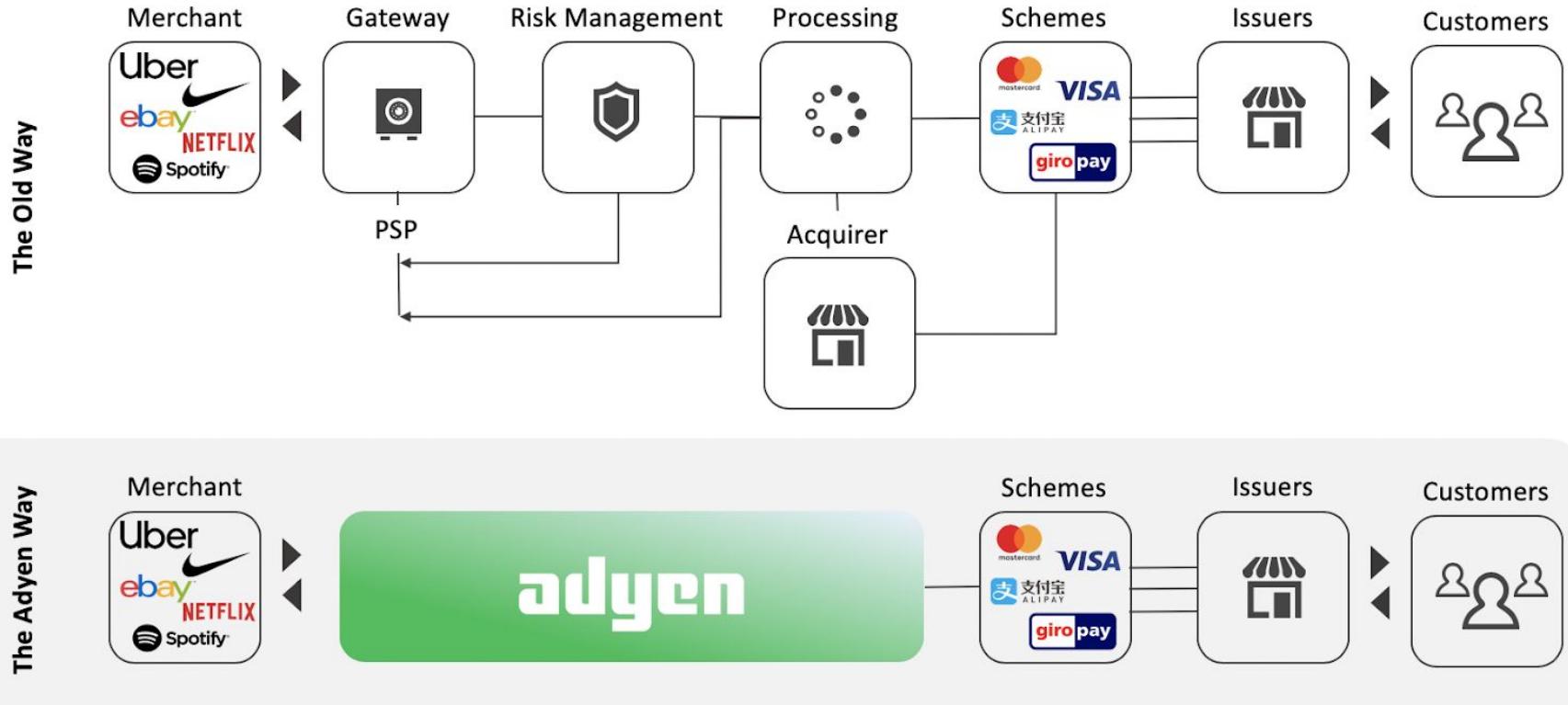
Intensifying competition with other payment providers such as Paypal, Square and Stripe

100% reliant on payment processing

## The verdict

**Synergy Potential: Adyen is the European payment provider. Their best bet is to become the “cashless” one like they are doing in Sweden and Netherlands. Some sort of e-Euro (probably impossible because regulation) or e-Krona would make them special because right now, they are slightly at risk of consolidation with other payments.**

# How Adyen is disrupting the payment industry



# Bloomberg - Adyen

## Segments

In Millions of EUR except Per Share		2019 Y	
12 Months Ending		12/31/2019	
	▼ Revenue	2,656.8	100.0%
	Settlement fees	2,372.6	89.3%
	Processing fees	176.1	6.6%
	Other services	93.4	3.5%
	Sales of goods	14.7	0.6%

## Key Stats

In Millions of EUR	2021 Y Est	2020 Y Est	Current/LTM	2019 Y~	2018 Y
12 Months Ending	12/31/2021	12/31/2020	06/30/2020	12/31/2019	12/31/2018
	Market Capitalization		53,276.3	21,974.6	14,039.6
	- Cash & Equivalents		2,093.3	1,758.4	1,246.2
	+ Preferred & Other		-38.6	0.0	0.0
	+ Total Debt		132.7	61.7	0.0
	Enterprise Value		51,277.1	20,277.8	12,793.4
	Revenue, Adj	953.8	680.7	2,656.8	1,652.9
	Growth %, YoY	40.1	-74.4	60.7	63.3
	Gross Profit, Adj	141.4	117.8	555.5	496.7
	Margin %	14.8	17.3	18.1	21.1
	EBITDA, Adj	544.2	380.4	294.4	279.3
	Margin %	57.1	55.9	9.6	10.5
	Net Income, Adj	400.0	254.7	189.9	204.0
	Margin %	41.9	37.4	6.2	7.7
	EPS, Adj	13.18	8.39	6.22	6.68
	Growth %, YoY	57.2	25.6	8.6	55.7
	Cash from Operations		732.1	529.5	384.0
	Capital Expenditures	-35.5	-23.0	-14.4	-15.2
	Free Cash Flow	494.8	312.6	717.7	514.3

# Adyen option volume tripled yesterday

## Adyen Option Volume Rises, Led by June 18, 1,800 Euro Puts

By Bloomberg Automation

(Bloomberg) -- Trading in options of Adyen NV rose to more than three times the 20-day average for this time of day, according to exchange data compiled by Bloomberg.

[Click here to see the company's most active options.](#)

- Options trading at 10:20 a.m. Amsterdam time totaled 669 contracts vs average of 183
- Calls reached 330 contracts on open interest of 15,152
- Puts reached 339 contracts on open interest of 25,624

The most active contracts include (American style):

- June 18, 2021 1,800 euro puts; 300 traded, 300 open interest
- June 18, 2021 2,080 euro calls; 300 traded, 300 open interest

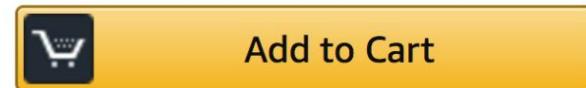
ADYEN NA Equity  
Graphic Dashboard»



# Trends toward simpler payments from commoditizing payment industry

## One-click payments

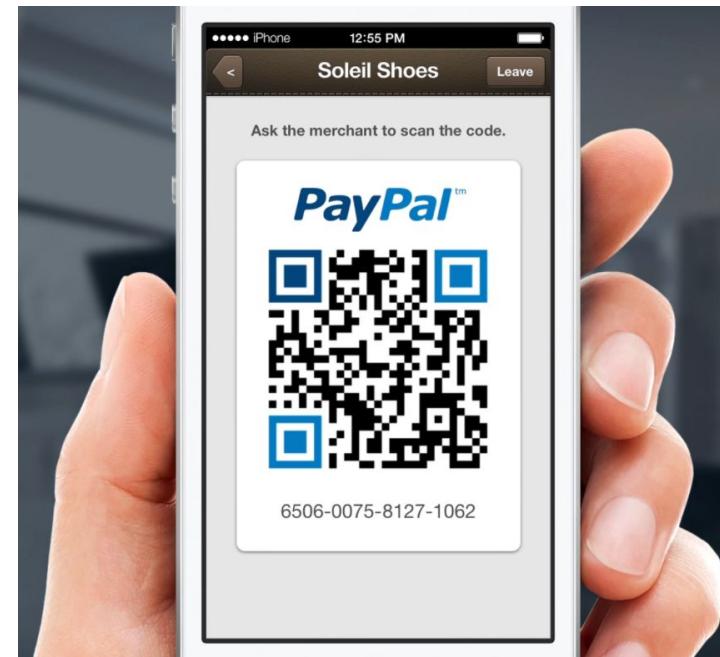
- Fast (one click)
- Amazon (one click)
- Fingerprint (one click)
- Card details autofill



— or 1-Click Checkout —



## Global plastic cards market lose \$3bn



# Fast

Australian-founded startup building platform-agnostic login and checkout services.

CEO Domm Holland said that Fast wants “to be the intermediary for all consumer interactions enabling one-click login, one-click payments, one-click data everywhere.”

The startup makes money by charging sellers a transaction fee of around 3% to process payments.

Received \$102 million in Series B funding round, valued at \$1bn

## The good

Compatibility - the products work on any browser, device or platform, delivering a “consistent, stress-free” purchasing experience.

## The bad

Will its competitors deride its security? “IT Security” (HCOB)

## The verdict

*Prime acquisition target for Stripe, Adyen, Paypal (sooner rather than later)*

# Other (public) payment companies on Bloomberg

PayPal Holdings Inc	
Alliance Data Systems Corp	Lufax Holding Ltd
AGNC Investment Corp	Mastercard Inc
Affirm Holdings Inc	MercadoLibre Inc
Ally Financial Inc	New Residential Investment Cor
American Express Co	OneMain Holdings Inc
Annaly Capital Management Inc	Pagseguro Digital Ltd
Capital One Financial Corp	PayPal Holdings Inc
Cielo SA	Qudian Inc
Discover Financial Services	Rocket Cos Inc
Federal Home Loan Mortgage Corp	Santander Consumer USA Holding
Federal National Mortgage Asso	Square Inc
Fidelity National Information	StoneCo Ltd
Fiserv Inc	Synchrony Financial
FleetCor Technologies Inc	Visa Inc
Global Payments Inc	WEX Inc
Intuit Inc.	Western Union Co/The
LendingClub Corp	Worldline SA/France

We can roughly estimate Stripe volume due to its duopoly with PayPal (online transactions only)

**Visa (online) + Mastercard (online) = PayPal (64%) + Stripe (20%)**

**Visa + Mastercard – PayPal = Stripe**

# Financing

2

# OakNorth (winner)

UK bank targeting small and medium-sized companies and providing business and property loans.

Serving “the missing middle” customers that are often overlooked and won’t find a loan elsewhere.

It provides a credit decision technology that uses forward-looking assessment, focusing on businesses’ growth potential and an alternative forms of collateral.

## The good

Unique credit decision technology and algorithm

“Lock-in” effects are high

Lean operating structure (handful of employees loan £Billions)

One of the few neobanks that already made a profit in the first year of operating

## The bad

Ceiling on their total market: there are only so many SMEs in need of credit

## The verdict

*Synergy potential: OakNorth has a secret sauce that has been insanely successful (37K%). Their credit algorithm is mathematical arbitrage. They have no reason to merge/acquire/sell because they are so lean, and the product is already scaleable (think PageRank).*

# Klarna (winner)

Offers payments for online storefronts, direct payments, post purchase payments and more. Their core service is to assume stores' claims for payments and handle customer payments, thus eliminating the financial risks for both the seller and buyer.

Largest private fintech startup in Europe

Truly disruptive business model that is redefining the e-commerce experience for millions of consumers and global retailers.

They grow alongside the increasing e-commerce and online payment shift.

## The good

Gained a banking license in Sweden, Germany and UK offering debit cards and savings accounts in Germany

Strong partner network

## The bad

Dependent on multiple technology providers  
(Default risk due to looser conditions than banks)

Might be bad for society

PayPal Credit, Affirm, other direct competitors

## The verdict

*Synergy potential: Klarna drives conversions at checkout. Because of this it takes a 3% cut, way higher than other acquirers. With their license they will now see the entire 3%. Klarna is essentially a highly compensated bank that takes on credit risk. They need to squeeze every algorithmic ounce out of their credit model and so would be ideal for a partnership or merger with any algorithmic credit scorers.*



[CONTINUE SHOPPING](#)

Sign In      Delivery      Payment      Thank You

## PAYMENT DETAILS

### Billing Address

Same as my delivery address

[Change Address](#)

Mr Keith aa  
Flat A, 3 Peter Street  
LONDON  
W1F 0AA  
United Kingdom  
0760123432



FREE DELIVERY



FREE RETURNS!

[FIND OUT MORE →](#)

### Promotion code and student discount

[Add a promotional code](#)

### Gift cards

[Add a gift card](#)

### Payment Details



New:  
[Try before you buy](#)



Pay later.  
Pay 30 days after delivery

- ✓ No credit application.
- ✓ No interest or fees if you pay within 30 days.
- ✓ You receive your goods before paying for them.
- ✓ Klarna will email payment instructions to you.

[Terms & Conditions](#)



Slice it.  
Pay over time

Klarna.

Please tick to confirm you have read and agreed to our [Terms and Conditions](#).

Save payment details?

[CONFIRM AND PAY](#)

### My Bag



Tencel Paperbag Mini Skirt  
Price: £32.00  
Size: 16  
Quantity: 1  
[Change](#) [Remove](#)



Past Time Check Mini Skirt  
Price: £32.00  
Size: 12  
Quantity: 1

### Delivery address

Mr Keith aa  
Flat A, 3 Peter Street  
LONDON  
W1F 0AA  
United Kingdom  
Your order will be delivered no later than  
**Tuesday 3 October 2017**

[Change](#)

Subtotal before Delivery £64.00

Free UK Standard up to 4 days £0.00

Total cost incl. delivery £64.00

[CONFIRM AND PAY](#)



### Pay Later

Try it first, pay it later. Klarna lets you receive your order first before deciding if you want to keep it or not.



### Slice it

Slice up the payments on your purchase so that you don't wait to buy what you need now.

# Klarna (continued)

- Sparkonto (savings account) in Sweden
- On a hiring rampage
- FCA beginning to regulate (UK)
-  Ant has 1% stake (2020)
- Largest private fintech in Europe

# Klarna (continued)

TECH

## PayPal takes aim at Klarna with 'Pay in 3' service for UK shoppers

PUBLISHED TUE, OCT 13 2020 7:01 PM EDT | UPDATED TUE, OCT 13 2020 7:01 PM EDT



Ryan Browne  
@RYAN\_BROWNE\_

SHARE

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### KEY POINTS

- PayPal is launching a “buy now, pay later” service in the U.K. that lets shoppers finance their purchases over three interest-free monthly instalments.
- The company is taking on the likes of Sweden’s Klarna and Australia’s Afterpay, whose point-of-sale loans have increased in popularity recently.
- It’s signed up a number of British retailers to offer the new service, including Crew Clothing, French Connection, Robert Dyas and Ryman.

# Klarna looks like a public bank on Bloomberg

39) <b>ADJ</b>	<b>Klarna Bank AB</b>	<b>IFRS 16</b>	?	Periods	5	<b>Annuals</b>	▼	Cur	USD
1) Key Stats	2) I/S	3) B/S	4) C/F	5) Ratios	6) Segments	7) Addl	8) ESG		
11) Adjusted	12) GAAP	13) As Reported	14) Reconciliation	15) SBC & Amort	16) Adj %				
In Millions of USD except Per Share				Last 12M		2019 Y~			2018 Y
12 Months Ending				06/30/2020		12/31/2019			12/31/2018
<b>Net Revenue</b>					<b>926.4</b>	<b>812.4</b>			<b>665.9</b>
+ Net Interest Income					<b>273.0</b>	<b>260.8</b>			<b>207.6</b>
+ Total Interest Income					<b>319.7</b>	<b>295.7</b>			<b>234.3</b>
+ Interest Income					<b>319.7</b>	<b>295.7</b>			<b>234.3</b>
- Total Interest Expense					<b>46.7</b>	<b>34.9</b>			<b>26.7</b>
+ Adjusted Total Non-Interest Income					<b>653.1</b>	<b>551.5</b>			<b>458.3</b>
+ Trading Securities G/L					<b>-6.6</b>	<b>-7.2</b>			<b>-3.2</b>
+ Trading Account Profits/Losses					<b>-6.9</b>	<b>-7.5</b>			<b>-3.0</b>
+ Investment & Loan Inc (Loss)						<b>0.0</b>			<b>0.0</b>
+ Other Income (Loss)					<b>0.3</b>	<b>0.4</b>			<b>-0.1</b>
+ Commissions & Fees Earned					<b>650.3</b>	<b>553.6</b>			<b>460.8</b>
+ Other Operating Income (Losses)					<b>9.7</b>	<b>5.1</b>			<b>0.7</b>
- Provision for Loan Losses					<b>253.2</b>	<b>197.1</b>			<b>90.5</b>
Net Revenue after Provisions					<b>672.9</b>	<b>615.3</b>			<b>575.3</b>
- Total Non-Interest Expense					<b>845.2</b>	<b>725.8</b>			<b>555.7</b>
+ Commissions & Fees Paid					<b>53.9</b>	<b>50.4</b>			<b>37.9</b>
+ Other Operating Expenses					<b>791.2</b>	<b>675.4</b>			<b>517.8</b>
Operating Income (Loss)					<b>-171.9</b>	<b>-110.5</b>			<b>19.7</b>
- Non-Operating (Income) Loss					<b>0.0</b>	<b>0.0</b>			<b>0.0</b>
+ (Income) Loss from Affiliates						<b>0.0</b>			<b>0.0</b>

# Klarna (continued)

3) ADJ		Klarna Bank AB	IFRS 16	?	Periods	5	Annuals	Cur	USD	▼
1) Key Stats	2) I/S	3) B/S	4) C/F	5) Ratios	6) Segments	7) Addl	8) ESG	9) Custom		
11) Adj Highlights		12) GAAP Highlights								
In Millions of USD except Per Share										
12 Months Ending				2019 Y~	2018 Y	2017 Y	2016 Y	2015 Y		
				12/31/2019	12/31/2018	12/31/2017	12/31/2016	12/01/2015		
 Net Interest Income				260.8	207.6	170.2	138.1	—		
 Non Interest Income				551.5	458.3	341.2	264.3	—		
 Net Revenue				812.4	665.9	511.4	402.4	—		
 Net Revenue, Excluding Commissions...				762.0	628.0	487.4	384.8	—		
 Provision for Loan Losses				197.1	90.5	58.7	49.6	—		
 Compensation/Salary Expense				217.7	168.4	136.1	126.0	—		
 Non Interest Expense				725.8	557.1	391.5	333.2	281.3		
 Net Income to Common				-91.6	11.9	40.4	13.3	5.6		
 Total Loans				3,347.6	2,356.1	1,696.2	920.4	—		
 Net Loans				3,171.6	2,250.2	1,696.2	920.4	—		
 Earning Assets				4,019.0	3,014.6	2,074.8	1,057.4	—		
 Total Assets				4,266.1	3,177.9	2,325.9	1,329.6	988.9		
 Total Deposits				1,314.2	1,642.3	1,038.2	642.6	—		
 Total Debt				1,189.4	451.9	328.8	115.7	—		
 Total Liabilities				3,233.5	2,632.3	1,807.4	1,041.6	195.4		
 Total Equity				1,032.6	545.6	518.6	288.0	266.2		
 Cash From Operations				336.9	102.5	9.7	62.2	—		
 Cash From Investing				-1,134.7	-755.8	-690.7	-11.0	—		

# Adyen + Klarna Partnership (Stripe close on heels)

## Supported countries

Country	countryCode	amount.currency	Pay now	Pay later	Pay over time
Austria	AT	EUR	✓	✓	✓
Belgium	BE	EUR	✗	✓	✗
Denmark	DK	DKK	✗	✓	✓
Finland	FI	EUR	✗	✓	✓
Germany	DE	EUR	✓	✓	✓
Italy	IT	EUR	✗	✗	✓
Norway	NO	NOK	✗	✓	✓
Spain	ES	EUR	✗	✗	✓
Sweden	SE	SEK	✓	✓	✓
Switzerland	CH	CHF	✓	✓	✗
The Netherlands	NL	EUR	✓	✓	✗
United Kingdom	GB	GBP	✗	✓	✓
United States	US	USD	✗	✗	✓

# N26



# N26 SWOT Analysis

## Strengths

- Strong customer base (7mn by End of Jan 2021)
- Increasing partnerships with leading industries across domains (e.g. Uber, Tier)
- Business model is focused on prioritizing customer experience
- More flexible and agile compared to traditional banks
- One of Europe's most valued and best funded brand

## Opportunities

- Explore other banking areas like trading, insurance, lending, etc.
- Expansion into new markets (e.g. Brazil and US) to increase customer base and market share

## Weaknesses

- Dependence on third-party providers for software
- Only 30% use N26 as their primary bank
- 70% of customers have a free account
- Not having profitability as a core metric may not be sustainable for long (operating losses tripled to €216.9 million in 2019)

## Threats

- Highly competitive market with Neobanks offering a similar range of products

# What is N26 doing to strengthen their position?

Operating losses tripled to €216.9 million in 2019. Reasons:

- now closed UK operations
- US launch
- tripled the team to 1,500 employees
- invested around €165 million in our European core markets in 2019



Profitability “in sight”

- N26 is planning to become profitable in 2021 or 2022
- When it becomes profitable it plans to go public according to founder Valentin Stalf
- The company tries to do that by expanding its premium accounts and focus on generating more revenue from each customer it already has, as well as introducing a new trading feature
- it is currently looking for potential takeover targets: trading and Know Your Customer (KYC) firms as well as fintech players that have a good customer base
- It recently hired Jan Kemper as its new chief financial officer (CFO). Kemper served eight years as Zalando's CFO and grew the start-up to a market valuation of €11 billion

# Quick Autonomous note on neobanks

**NEOBANKS: Life's better in America.** US neobank valuations continue to soar while European peers, previously thought of as leaders in the space, seem to be losing momentum, as per the FT. **Chime is currently valued at \$14.5bn while Monzo saw its valuation halve to £1.2bn last year.** The FT highlights higher interchange fees as a key advantage for US neo banks vs Europe. Despite Mastercard recently hiking its fees for UK purchases from the EU to 1.15% of the transactions, both the EU and UK post-Brexit generally operate a **fee cap of 0.2% while digital challenger banks in the US receive 1.5%** of the value on customers' purchases. **The result is that EU neobanks cannot rely on payments alone.** It also explains the rush to expand into the US with Monzo, N26, and Revolut considering US expansion a priority. These factors make the runway to building a profitable neobank much longer in the EU and requires either lending or product diversity. In Germany, neobanks and fintechs are particularly active and focus on differentiated business models to grow customers as outlined in Stuart's recent note ([click here](#)).

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# Backup

7

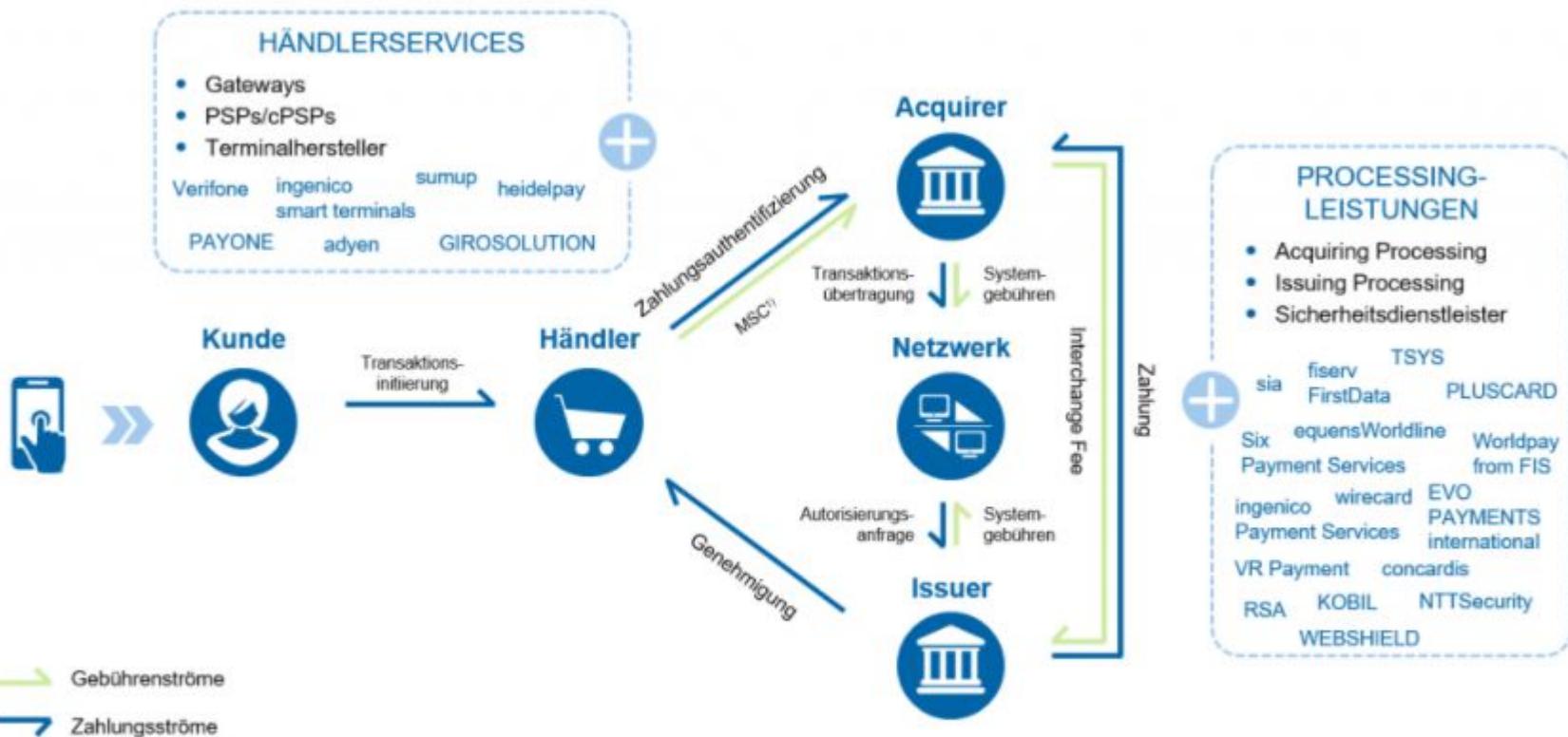
# Payments themes – TO DO

- **Isolate the business model**
  - we need a much better understanding of the tech capabilities
- Customer acquisition capability in payments – how are they acquiring customers?
- How are the banking dependencies?
- Look at credit creation models vs. setting of credit vs. Whitelabeling – N26
-

# Stripe whitelabels away all of these annual costs

## Ongoing

Category	Description	Approximate minimum cost	Chargeback management	Handle chargeback and evidence submission	£15 per dispute
Merchant onboarding and monitoring	One-time fees include £1–£2 for onboarding and initial risk review and £2–£3 for ID verification	£5 per month per account	Payouts and funds routing	Ensure merchants get paid out on the right schedule	£0.25 per transaction
	Ongoing monitoring system		Reporting and reconciliation	Generate and distribute 1099s or other tax forms as required (1099s cost as little as £5 per form to generate, but can incur up to £250 in fees if filed incorrectly)	£5–£255 per form £100,000 per year (1 finance FTE)
	Due diligence and risk management to ensure all sub-merchants stay in compliance	£250,000+ per year (1 FTE at £150,000 per year and 1 risk analyst at £100,000 per year)		Run platform-level financial close processes and financial audits as needed	
Risk monitoring and mitigation	Update risk systems on regular cadence		Annual PCI validation	Validate Level 1 PCI DSS compliance every year and re-validate any time changes are made to payment flows throughout the year	£200,000+ per year
	Maintain platform-level balances or reserves on sub-merchants to protect against credit risk		Renew payfac registration (and other licenses, if needed)	Re-register as a payfac with Visa and Mastercard (£5,000 per year each)	£10,000+ per year
	Operate or integrate with third-party systems to prevent and block fraud	£0.04–£0.10 per transaction		Renew money transmission licenses every 2 years	



1) Merchant Service Charge (Einzelhändlergebühr) enthält unter anderem die Interchange Fee, welche an den Issuer weitergegeben wird  
Hinweis: Beispiele stellen ausgewählte Dienstleister entlang der Prozesskette dar; kein umfassender Marktüberblick

Abbildung 1: Überblick Marktteilnehmer im Payment (am Beispiel einer Kartentransaktion)

# Paypal vs Stripe

Both Stripe (founded in 2011) and Paypal (founded in 1998) are internationally operating payment gateways/processors and act as intermediaries between merchants and the corresponding credit card networks or financial institutions in order to authorize and accept payments.



- easy-to-use payment gateway that offers multiple purchase options for today's consumers

## Products and services:

Smart Connect, PayPal extras Mastercard, eBay Mastercard, Cashback Mastercard, Shipping, PayPal Pools, Cash Card, Credit account, Coupons, Gift Card, Pay Later (UK)



- one of the leading software platforms for Internet companies and online retailers. Stripe processes billions of dollars in transactions each year for companies around the world.

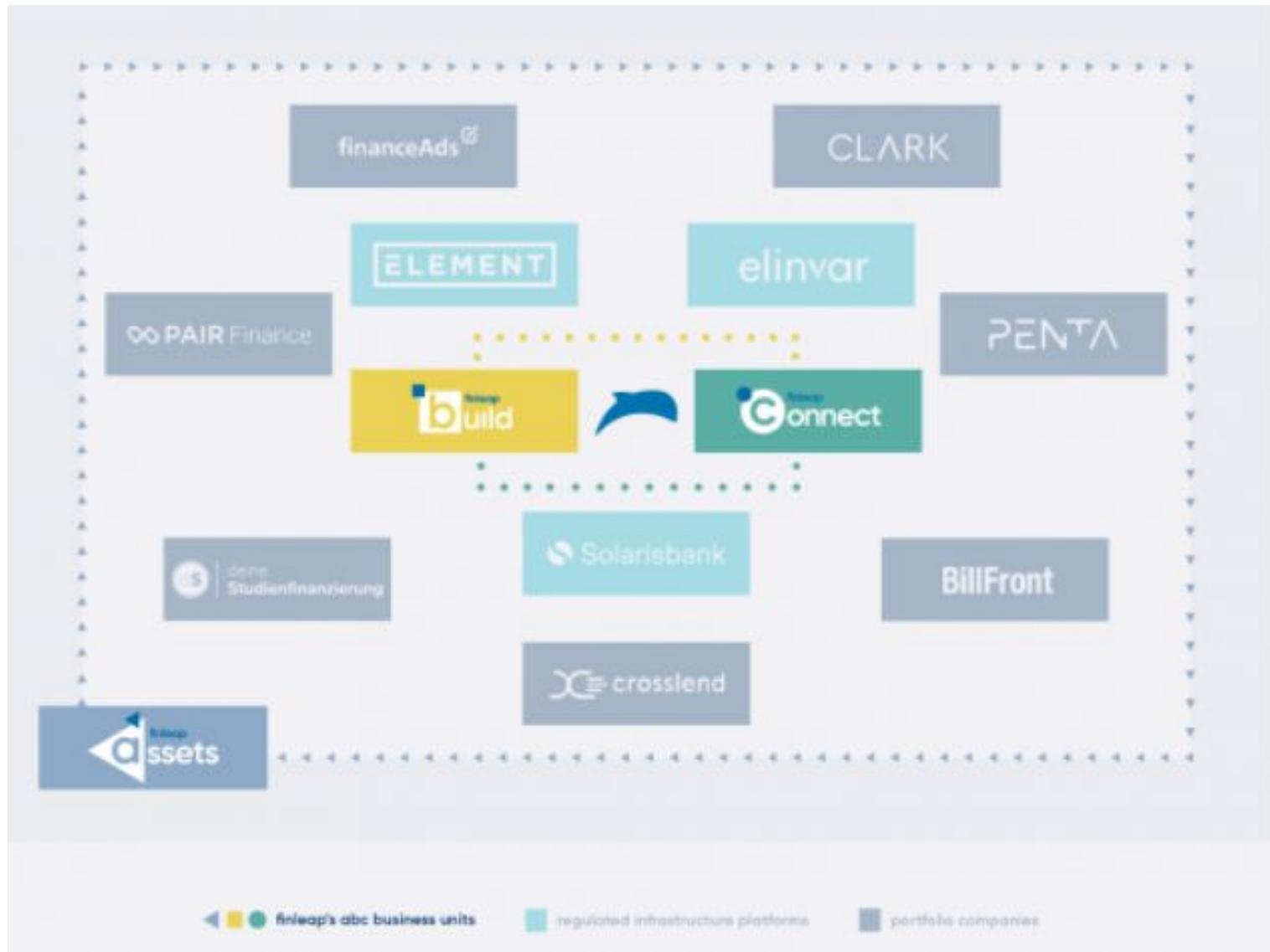
## Products and services:

Payments, billing, Connect, Sigma, Atlas, Radar (fraud prevention), Issuing, Terminal

## Competitors:

Alipay, Google Wallet, Wepay, 2Checkout, Quick2Sell, Dwolla, Braintree, Payza, ClickBank, TransferWise, Shopify Payments, Authorize.net, Skrill, Intuit, Propay, Zelle, Square, Popmoney

# Finleap ecosystem



# Template

## Fincog Benchmark On Challenger Banks' Features And Profitability

*comparison of challenger banks that are centered around debit- or prepaid cards, October 2019*

	Revolut REVOLUT	monzo MONZO	monese MONESE	N26 N26	bunq BUNQ	MOGO MOGO	LUNAR <sup>®</sup> LUNAR	nu NUBANK
<b>PROFILE</b>								
Founded	Jul-15	Feb-15	Oct-13	Feb-13	Mar-12	Aug-03	Aug-15	May-13
Legal Status	E-money Institution & Bank	Bank	E-money Institution & Credit Institution	Bank	Bank	Credit Institution, Mortgage Broker, Whitelabel Prepaid Card	Bank	Bank
Customer Segments	Retail & Business	Retail & Business	Retail & Business	Retail & Business	Retail & Business	Retail	Retail & Business	Retail (& waiting list for Business)
Number of Customers (M) <sup>1</sup>	7.0	3.1	1.4	3.5	0.035	0.900	0.130	12.0
Valuation (\$B) <sup>2,3</sup>	1.8	2.5	n/a	3.5	n/a	0.093	n/a	10.0
Total Funding (\$M) <sup>3</sup>	336	399	80	683	49	201	53	1,100
Home Country	UK	UK	UK	Germany	Netherlands	Canada	Denmark	Brazil
International Presence	EEA, Australia, Canada, Singapore, Switzerland, USA (+ expanding to 24 other countries worldwide)	USA (waiting list)	EEA	EEA, Switzerland, USA, (+ Brazil coming soon)	Fully active in Germany, Italy, Spain, France, Belgium, Ireland; expanding to rest of Europe	-	Norway, Sweden	Argentina, Mexico (waiting list for both)
<b>KEY FEATURES</b>								
Current Account (incl. Debit / Prepaid Card)	✓	✓	✓	✓	✓	✓	✓	✓
International Transfers	✓	✓	✓	✓	✓	-	-	-
Credit Card	-	-	-	-	-	-	-	✓
Savings Account	✓	✓	✓ <sup>6</sup>	✓	-	-	-	-
Investments	✓	-	-	-	-	✓	-	✓
Personal Loans	-	✓	-	✓	-	✓	✓	-
Residential Mortgages	-	-	-	-	-	✓	-	-
Business Loans	✓	-	-	-	-	-	-	-
Insurance	✓	-	✓ <sup>6</sup>	✓	✓	-	✓	✓
<b>FEES STRUCTURE</b>								
Free Current Account	✓	✓	✓	✓	-	✓	✓	✓
Premium Accounts	✓	-	✓	✓	✓	-	✓	-
Lending Rates (%) <sup>4</sup>	12.5% - 25% APR for Business Loans	3.7% - 19.5% APR on Personal Loans, and 0.50% per day for overdrafts (max. £15.50 p/m)	n/a	1.99% - 19% p.a.	n/a	5.9% - 45.9% for Personal Loans, 2.59% - 2.85% for 3-5yr Mortgages	0% - 46.6% for Personal Loans	28% - 80% for Personal Loans, 27%-45% for Credit Cards
Deposit Rates (%) <sup>4</sup>	0%	up to 1.50 %	up to 0.70% <sup>6</sup>	up to 1.48%	0.27%	n/a	0%	6.27%
<b>KEY FINANCIALS</b>								
Total Customer Loans (\$M) <sup>3,5</sup>	n/a	19.7	n/a	223.7	-	64.8	n/a	1,565.7
Total Customer Deposits (\$M) <sup>3,5</sup>	n/a	568.0	n/a	453.0	232.3	n/a	n/a	584.6
Total Income (\$M) <sup>3,5</sup>	n/a	11.3	-1.4	1.1	0.7	29.1	-2.6	19.1
Operating Cost (\$M) <sup>3,5</sup>	n/a	-73.6	-14.9	-35.0	-12.9	-32.3	-1.7	-176.2
Net Profit (\$M) <sup>3,5</sup>	-40.3	-58.0	-15.4	-35.3	-12.2	-16.5	-3.9	-24.1
<b>RATIO PER CUSTOMER</b>								
Valuation Per Customer (\$)	250	799	n/a	1,000	n/a	103	n/a	833
Loans Per Customer (\$)	n/a	6	n/a	64	-	72	n/a	130
Deposits Per Customer (\$)	n/a	183	n/a	129	6,636	n/a	n/a	49
Income Per Customer (\$)	n/a	3.63	-1.02	0.31	19.72	32.38	-19.78	1.59
Cost Per Customer (\$)	n/a	-23.76	-10.62	-10.00	-369.12	-35.90	-12.70	-14.68
Net Profit Per Customer (\$)	-5.76	-18.71	-10.98	-10.07	-349.40	-18.35	-30.28	-2.01

Notes:

1. Number of customers as per the most recent data available
2. Valuation as per the most recent funding round
3. Financial data converted to USD, based on the following exchange rates: GBP / USD = 1.23 ; EUR / USD = 1.10 ; CAD / USD = 0.75 ; DKK / USD = 0.15 ; BRL / USD = 0.24
4. Pricing of loans and deposits based on the home country
5. Financial data as per the most recent annual financial statements
6. Monese offers a marketplace with partners including insurance providers and has a partnership with Raisin for access to their savings marketplace. The deposit rate refers to the interest rate offered at Raisin

Sources: Company Websites, Annual Reports, Press Search, Fincog Analysis



# N26 - Company description

German neobank targeting mainly urban millennials. Has a strong customer growth of 600% in 2 years.

Offers fully digital and user-friendly banking that includes current accounts, credit and debit cards, deposit guarantee, direct debits and standing orders next to free currency exchange

Value add for young, digital savvy customers through integration partnerships with Wework, Lime, Zalando, Uber, etc.

Have 7mn customers by end of January 2021

## The good

Very strong customer growth

5mn+ clients (01.2020)

High monetization potential due to integration partnerships

Concentration through marketing and branding

Regularly adding new features to the offering: insurance and deposits

Sequentially entering new markets: US and Brazil

Backed by Peter Thiel

## The bad

Strong focus on customer acquisition, therefore still loss-making (**operating losses tripled to €216.9 million in 2019**)

N26 needs to have active clients (only 30% use it as their primary bank)

70% still have a free account

Dependent on software providers

Risk of money laundering and cyber attacks is higher than for traditional banks

## The verdict

*N26 has a strong customer growth but most customers still use the bank as their secondary bank or only have free accounts. The company has been criticised a lot in the past due to its management and had to deal with multiple technical errors.*

*The company should expand to other products and services to maintain its competitive advantage. In addition, it is also advisable for the company to acquire and/or invest in related software to prevent technical issues and to "lock-in" customers.*

# Insurance

3

# OscarHealth

US tech-driven health insurance company that was the first health insurance company built on a full-stack technology platform. The company focuses on the health insurance industry through telemedicine, healthcare focused technological interfaces and transparent claims pricing systems which would make it easier for patients to navigate  
Customers are 257,000 individual members and small businesses, has the “highest mobile engagement of any insurer”

## The good

Mobile app downloads that are approximately 9 times the average of other insurers

The combination of member engagement engine and full-stack technology platform enables the Oscar to help its members find high-quality care.

## The bad

Limited to US-presence only

## The verdict

*Synergy Potential: the company can leverage efficiencies and its revenue enhancing potential by partnering with insurances and health care fintechs.*

# Getsafe

is a fully digital insurance company based in Germany that allows people to cover themselves from their smartphone. Using technology, the company offers renters, legal and car insurance including coverage on accidental damage, personal possessions, home emergency, tenant liability, and legal protection. In Germany, Getsafe also offers automobile insurance as well as health insurance, and some other coverage segments.

150,000 customers

Many of their customers are said to be millennials who buying their first insurance policy.

## The good

Really targeting a niche “first-time insurers”

Average worth per insurance: €40

## The bad

No insurance broker license yet → difficult to innovate

Concentrated and complex market

High marketing costs

## The verdict

*Synergy Potential: Would be a prime target to partner (but not necessarily merge) with a Neobank like Vivid Money or N26.*

# Element

is a fully digital B2B insurance company based in Germany that provides its customers with Whitelabel insurance products, insurance licenses and state-of-the art technology.

Its insurance products include: Household items, private liability and customized insurance products; services comprise of REST APIs, BiPro APIs, Whitelabel customer portal, Cloud hosting, marketing videos and Whitelabel purchase flow

Belongs to Finleap ecosystem (also a member: Solarisbank)

The good

The bad

The verdict

*Synergy Potential: Would be a prime target to partner (but not necessarily merge) with a Neobank like Vivid Money or N26.*