

CASHLESS FUTURE 2019

# PAYMENT SECTOR TRENDS

The Digital Payments Revolution

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23th October, 2019

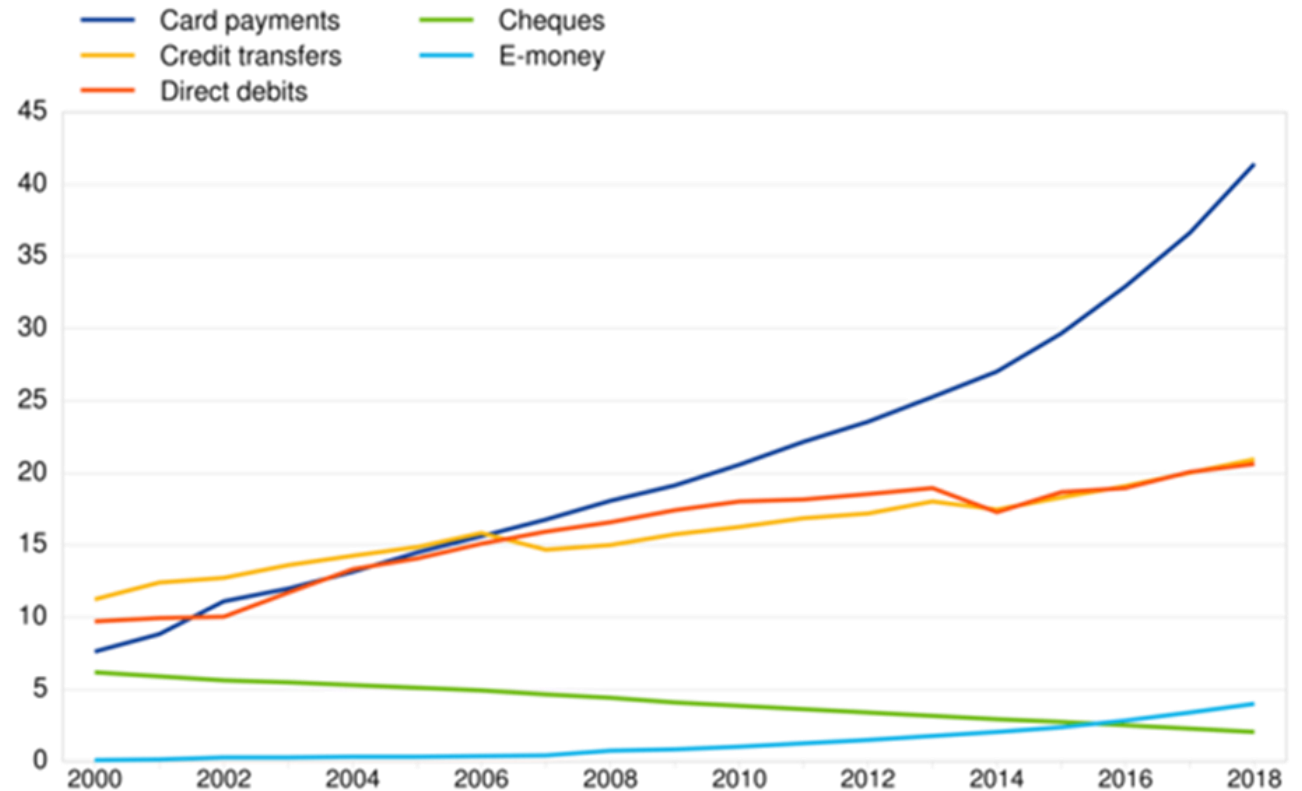
# KEY TRENDS

1. Cashless Payments Replacing Cash
2. Instant Payments Become Reality
3. Contactless Payments Go Mobile
4. Biometrics Replacing Passwords
5. eID Supporting Digital Economy
6. Security – Stays A Main Concern
7. BigData Analytics
8. Blockchain and Cryptocurrencies
9. Regulation
10. Fintech and Incumbents



# 1. Cashless Payments Replacing Cash

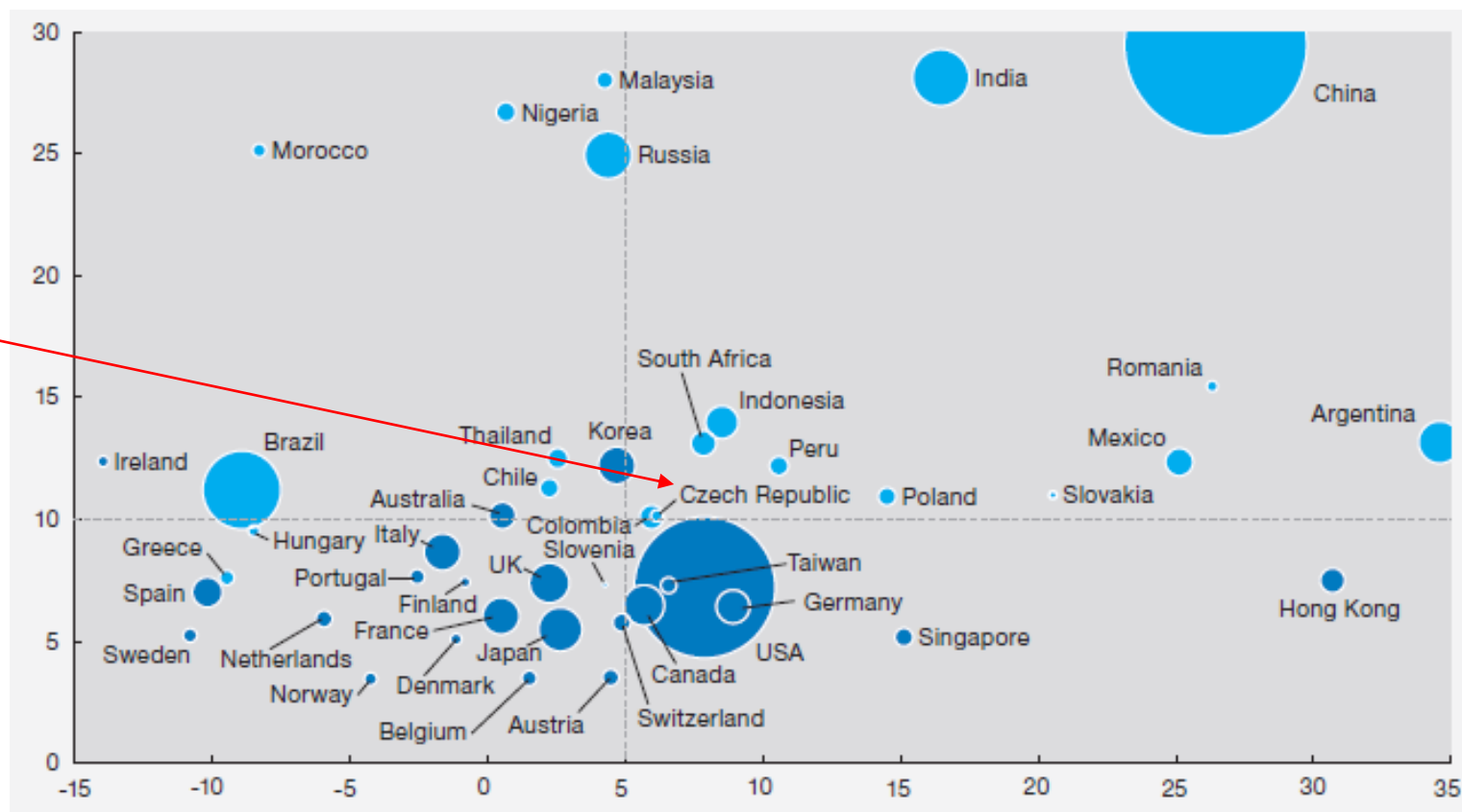
- Cashless payments replace cash since 2000
- Card payments dominate
- In DK and UK card payments over 70 %
- Cards offer „instant payment“
  - higher speed than bank transfers
  - more flexibility
  - worldwide availability
  - chargeback rights



Source: European Central Bank, Payments Statistics Report 2018

# 1. Cashless Payments Replacing Cash

## Payments Revenue Growth Rate 2016-2017



Czech Republic

# 1. Cashless Payments Replacing Cash

## Mastercard vs Visa



	2010	2018	+2018/ 2017
Volume	2,7	5,9	+14 %
Trans.	23	74	+17 %
Cards	1,6	1,9	+14 %

Notices: Volume (trillions of USD)  
Trans. (bil. trns)  
Cards (bil. pcs)

Source: Mastercard, Visa



	2010	2018	+2018/ 2017
Volume	5,0	11,2	+8 %
Trans.	45	124	+1 %
Cards	1,8	3,3	+1 %

**Czech Republic 2018**  
99 % cards c'less  
over 80 % c'less trns

## Czech Republic



Year	ATM trns	ATM vol	POS trns	POS vol
2018	15	65,677	50	82,711
2015	15	60,175	47	32,105
2010	17	63,586	24	22,000
2005	18	60,405	16	19,189
2000	4	9,600	1	1,800

Notices: ATM vol (CZK)  
POS vol. (CZK)

Source: Sdružení pro bankovní karty

# 1. Cashless Payments Replacing Cash

- Worldwide duopol: **Mastercard - Visa**
- **UnionPay** (China) leader in PRC, developing worldwide scheme and brand
- **American Express, JCB, Diners Club** – niche players
- **PayPal** – emerged in worldwide payment scheme



# 1. Cashless Payments Replacing Cash

## MOBILE ATM

From offering cash anywhere ...



## DEPOSIT ATM

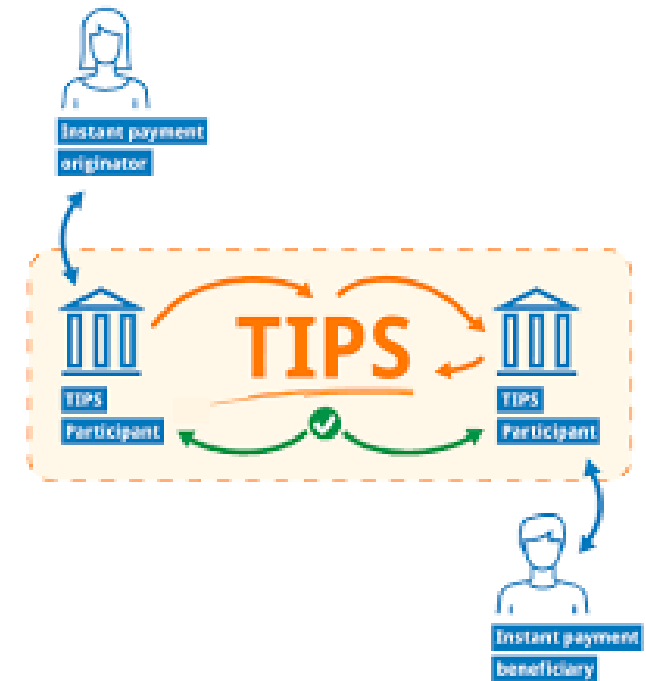
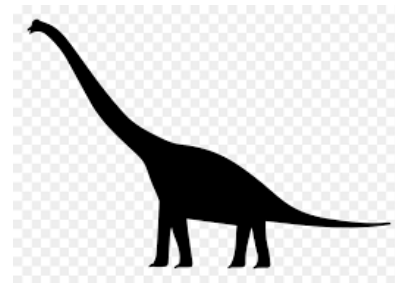


... to withdraw cash from circulation.

**Reducing cash whenever possible**

## 2. Instant Payments Become Reality

- On-line but slow bank payments give a business case to non-bank providers (Western Union, Travelex, Trusty ...)
- ECB – TARGET TIPS
- SWIFT - RTP
- ČNB – okamžité platby 2019



swish®



**Faster Payments**

**Trustly**



# 3. Contactless Payments Go Mobile

- 70 % of internet access go through mobile devices
- 20 % mobile users in EU and USA use Mobile Payments
- Mobile commerce accounts for 48 percent of digital-commerce sales globally (2017)
- It is forecasted to reach 70 percent by 2022 (tripling to \$4.6 trillion)



# 4. Biometrics Replacing Passwords

## Biometrics – Better Than Passwords

98 % rate fingerprint recognition as convenient

71 % rate facial recognition as convenient

92 % want biometrics to replace passwords

*Source: Mastercard*

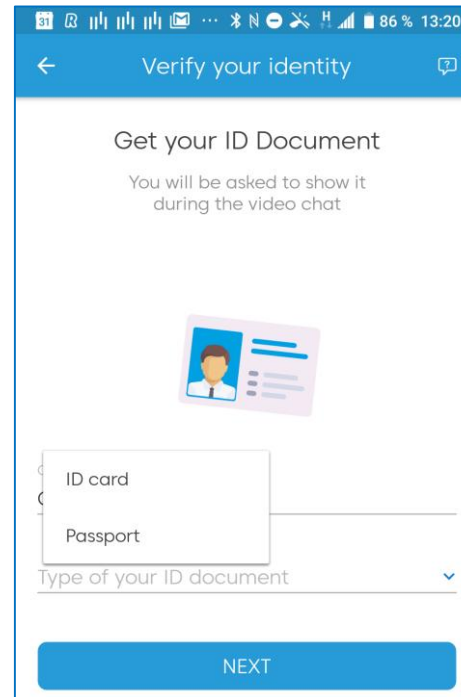


**Mastercard and Visa Fingerprint Cards Piloted**

# 5. eID Supporting Digital Economy

## eID

- Higher security:
  - High acceptance rate
  - Lower False Acceptance Rate
  - Lower False Reject Rate
- Real-time processing
  - on-line 24/7
  - within cca. 1 min.
  - on-line KYC checks
- Convenience
- Reducing time and costs



The screenshot shows a mobile application interface for identity verification. At the top, the status bar displays the time as 13:20 and battery level at 86%. The app header is blue with a back arrow, the text "Verify your identity", and a chat icon. The main content area is white and contains the heading "Get your ID Document" followed by the instruction "You will be asked to show it during the video chat". Below this is an illustration of an ID card. A dropdown menu is open, showing "ID card" and "Passport" as options. The label "Type of your ID document" is positioned below the dropdown. At the bottom of the screen is a blue button labeled "NEXT".



# 6. Security – Stays A Main Concern

It Is Estimated That There Will Be Over 6 Billion Internet Users By 2022 = 75 % of global population  
(in 2017, there are 7 billion people and 3.5 billion internet users)

The Most Expensive Computer Virus Ever  
(„MyDoom“) Caused \$38.5 Billion In Damages

As of May 2016, 600,000 Facebook Accounts  
Were Compromised Every Day

59 % of Employees Steal Data  
When They Quit Or Get Fired!

The End of 2017, Global Ransomware Damage  
Costs Expected To Exceed \$5 Billion



**Digital dependent economy needs  
protection against cyber crime**

# 7. Big Data Analytics & AI

- Big Data Analytics
  - Fraud Management
  - Credit Scoring
  - Personalised Offers ...
- AI
  - Data Analytics
    - up to 60 % higher quality
  - Fraud Prevention
  - Process Automation
    - costs savings (about 50 %)
    - productivity increase (about 60 %)

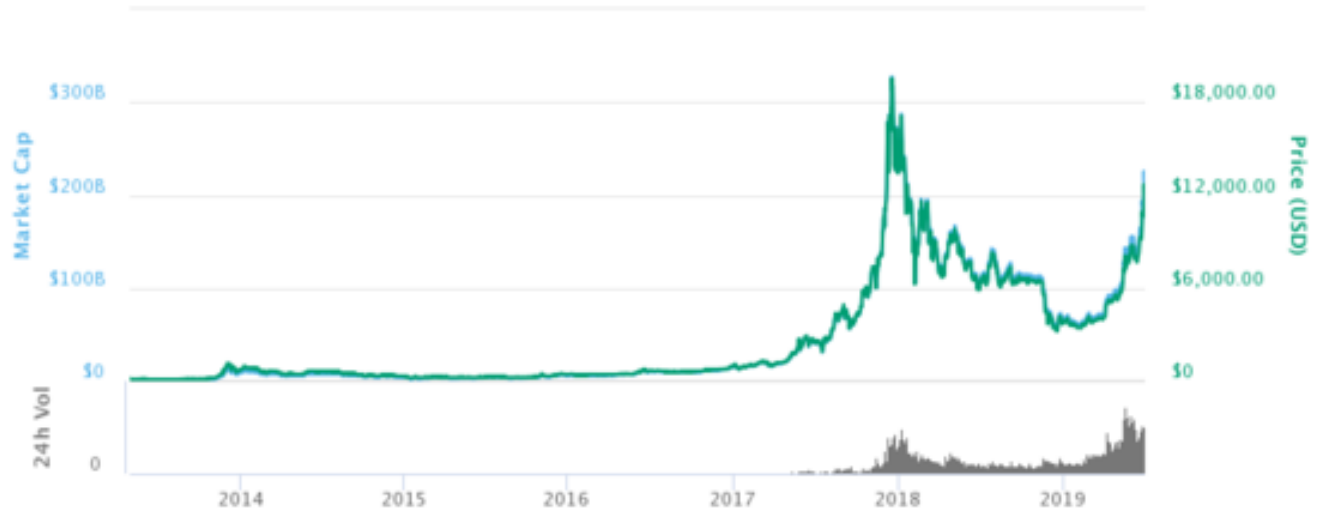
Bank of America Merrill Lynch  
Uses AI for Payments Reconciliation

Mastercard and Visa Use AI for Fraud Detection,  
Biometric Authentication and Data Science



# 8. Blockchain & Cryptocurrencies

- **Blockchain**
  - Higher security
  - Higher process speed
- **Cryptocurrencies**
  - Over 2,000 „cryptocurrencies“
  - Money or commodity?
  - „Cryptos“ not accepted by CEBs and payment schemes (a high volatility)



Bitcoin value chart – 2008 – 2019

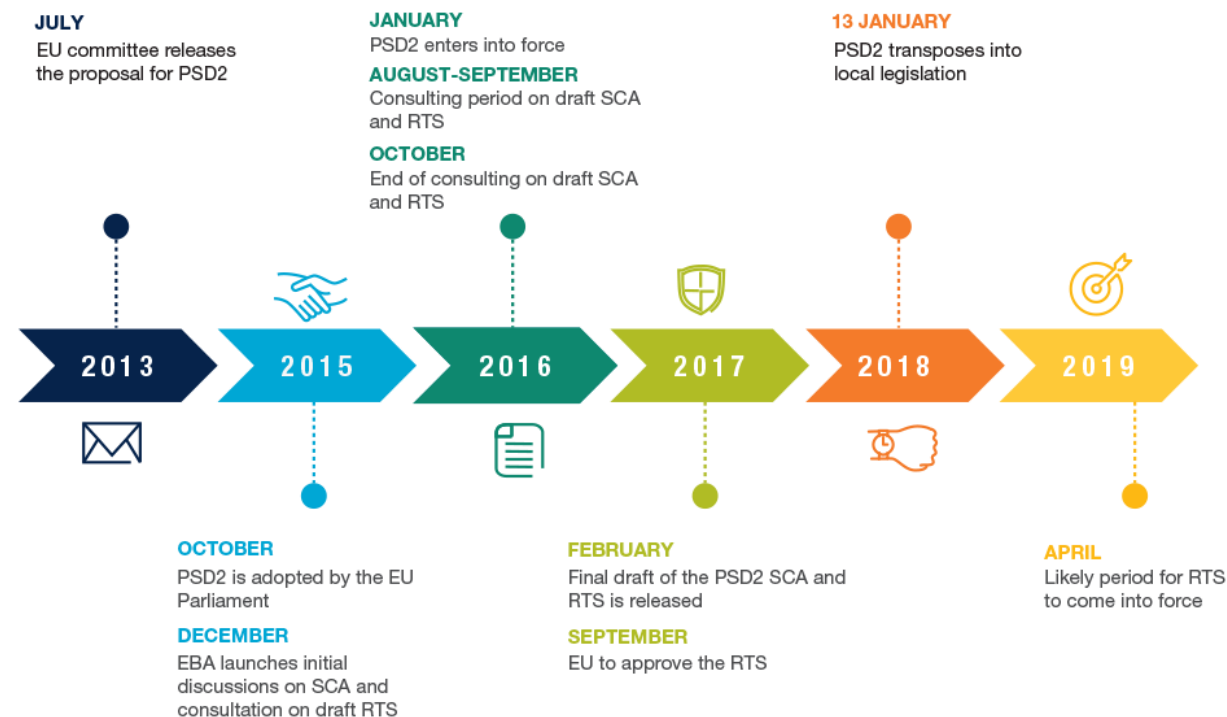
# 9. Regulation

## Main Purposes of PSD2

- Increase product offers
- Increase competition
- Increase security & customers protection
- Harmonise EU market

## Main outputs in EU:

- Open market (EMI, API ...)
- Lower Interchange Fees
- Lower cardholder liability
- Increased security – PSD2 SCA



Source: Caggemini Financial Services Analysis, 2017; SME Inputs

# 10. Fintech & Incumbents

## Why Open Banking and Fintech?

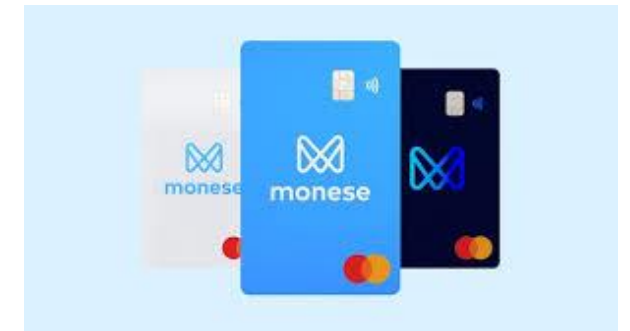
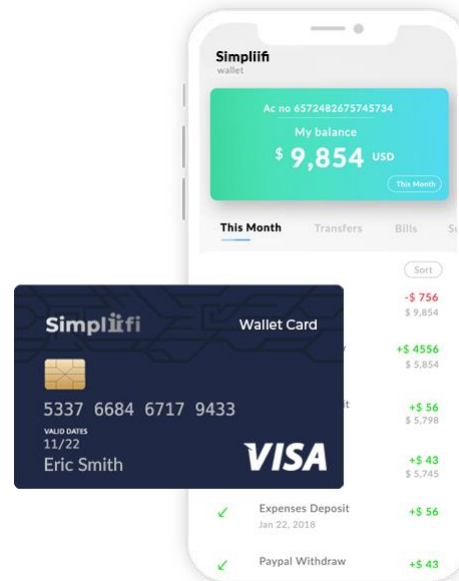
- Innovations
- Wider offer
- Better pricing
- Better product value
- Competition & collaborations with banks



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# Thank you for attention

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