

The background of the slide features several stacks of gold-colored Bitcoin coins. The coins are arranged in a way that creates a sense of depth, with some stacks in the foreground and others receding into the background. The lighting is bright, highlighting the metallic texture and the embossed Bitcoin symbol on the top of each coin. The overall composition is clean and professional, emphasizing the theme of digital currency.

# What drives virtual currency acceptance by retailers?

Nicole Jonker

Joint ECB/BdI “Digital transformation of the retail payments ecosystem”, BdI, Rome, 30 November – 1 December 2017

The views expressed in this presentation are mine and do not necessarily represent the views of DNB or the ESCB

# Virtual currencies often in the media

**Bitcoin turns out to be tough rascal**

De Telegraaf 13 March 2014

**Amsterdams lawyer Plasman not allowed to accept Bitcoin payments**

Parool 16 January 2014

Paying with bitcoins best in city of Arnhem

NOS op 3 27 November 2014

What if the Bitcoin bubble bursts?

The Economist Jun 3rd 2017

Bitcoin is like Tulipmania, says ECB vicepresident

Financial Times 22 September 2017

**Bitcoin nears \$10,000 mark as hedge funds plough in**

The Guardian, 27 November 2017



# What risks are associated with VCs?

## **Central banks/governments**

- Affect the functioning of the monetary system if used intensively
- VCs may drastically change the existing payment ecosystem by making banks superfluous

## **Banks/payment service providers**

- KYC/AML-difficulties

## **Consumers/retailers**

- No guarantees (no government backed deposit guarantee scheme)
- No compensation policy in case of fraud
- Exchange rate volatility

# Research question

- Which factors influence the retailer's decision to adopt VC-transactions?  
We distinguish between actual acceptance and adoption intention

- We focus on:

- 1) Consumer demand for VC transactions
- 2) Transactional benefits of receiving VC transaction relative to other means of payment
- 3) Facilitating conditions (non-financial learning cost)

2-sided market literature

Technology adoption literature

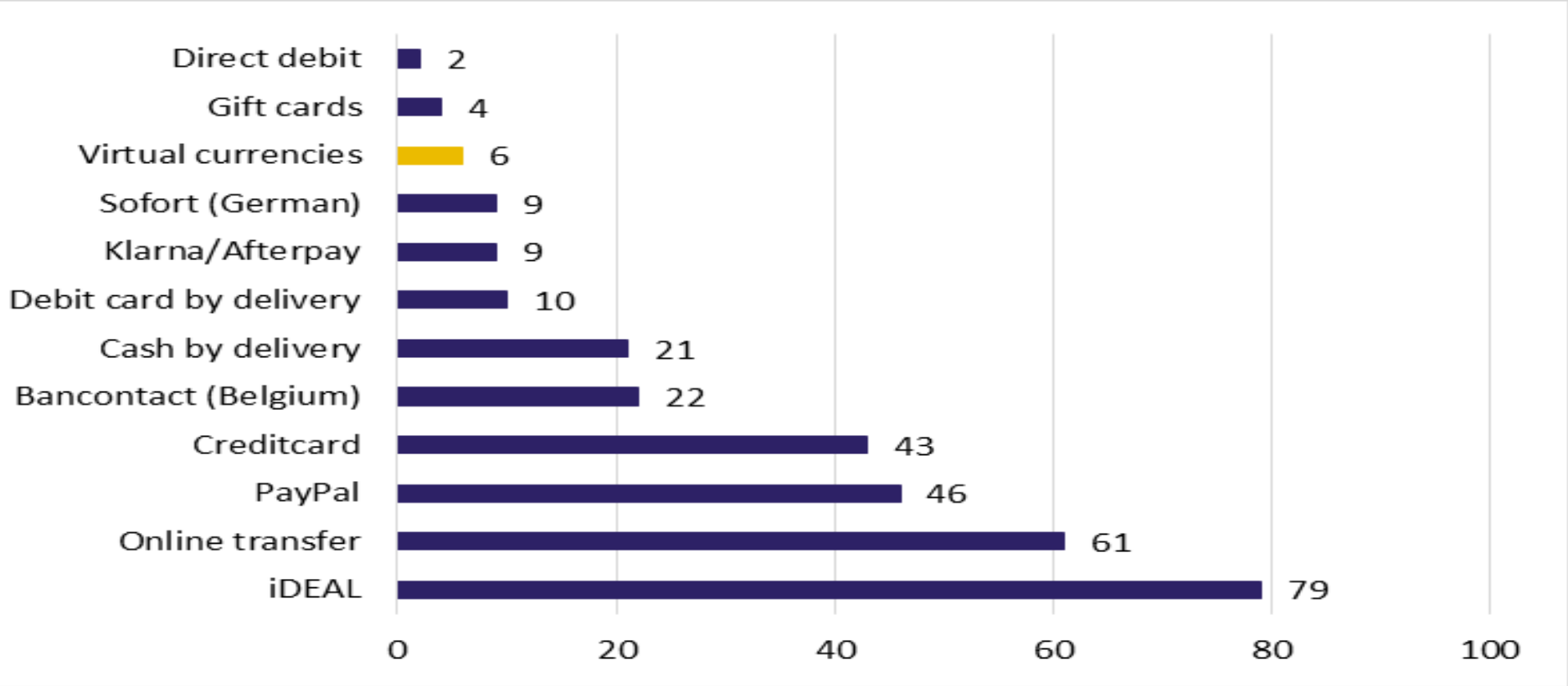
# Data

- VC Survey among e-retailers in the Netherlands
- Sources: company database REACH and Bitcoin acceptance list
- Research company Panteia collected the data (phone interviews) in Nov + Dec `16
- Net sample: 768 e-retailers

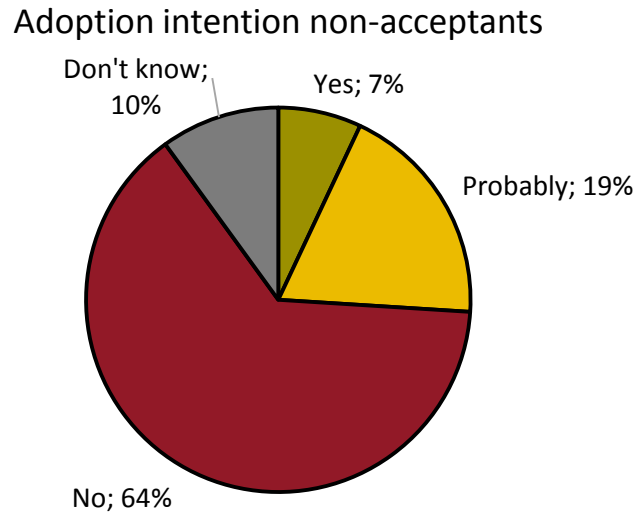
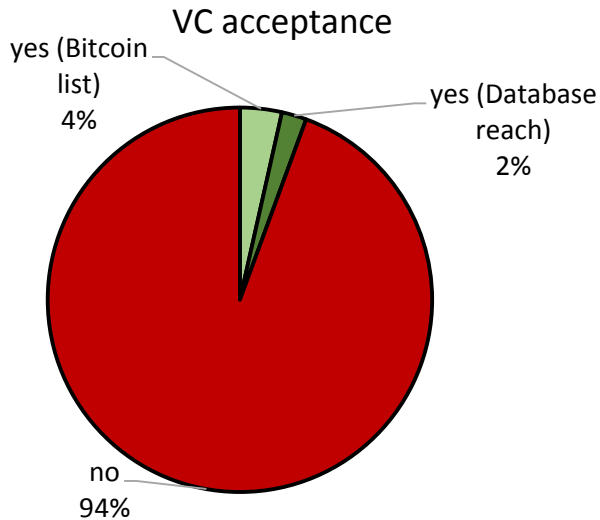
# VC Survey includes questions on

- Acceptance means of payment
- Adoption intention VC, reasons to accept or not accept VC payments
- Consumer demand: perceived adoption VC by online shopping consumers in general, characteristics retailer's customers (age, gender)
- Net transactional benefits: safety, trx. cost, labour time cost and exchange rate risks of VCs compared to five other means of payment
- Facilitating conditions: perceived ease of use, perceived compatibility with current working methods

# Actual acceptance rate VC fairly low,...



# ...but adoption intention is substantial





# Stated reasons highlight importance consumer demand

## VC acceptance

- |                                 |     |
|---------------------------------|-----|
| 1. To attract extra customers   | 42% |
| 2. Customers ask for it         | 23% |
| 3. Interested in new technology | 21% |
| 4. Low transaction fees         | 7%  |

Not stated: privacy customers, short transaction time, lower exchange rate risks euro versus other regular currencies

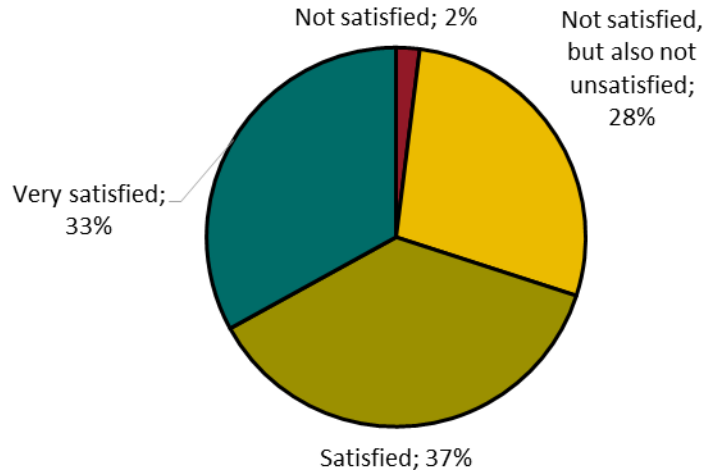
## No acceptance VC

- |   |     |
|---|-----|
| 1. Unfamiliarity with VC                | 58% |
| 2. Lack of customer demand              | 36% |
| 3. Not feeling the need for it          | 17% |
| 4. Lack of trust in VC                  | 16% |
| 5. VC acceptance not common in industry | 12% |
| 6. Safety concerns                      | 9%  |
| 7. Too complex                          | 5%  |

# Retailers positive about VC payments

In the sample there are 43 VC accepting retailers;

How satisfied are you with VC acceptance?



Top 5 reasons

1. Costs me little time
2. Fairly easy
3. Amount paid quickly on my account
4. Fast confirmation payment received
5. Low transaction fees

Association VC acceptance with criminal activities mentioned by one unsatisfied retailer

# Regression results *adoption intention* VC

## Positive impact adoption intention

1. Perceived consumer adoption VC in general
2. Relatively favourable transaction fees VC/other p.i.'s
3. Relatively favourable labour intensity VC/other p.i.'s
4. Perceived compatability VC with current working procedures
5. Usage services PSP
6. Sector: media or electronics (ref: other)
7. Firm age:  $\leq 5$  yrs (ref: age  $> 5$  years)

## Negative impact adoption intention

1. Mainly female customers
2. Exchange rate risks VC (volatility)
3. Age retailer

# Regression results *VC acceptance*

## Positive impact VC acceptance

1. Relatively favourable transaction fees VC/other p.i.'s
2. Relatively favourable labour intensity VC/other p.i.'s
3. Relatively favourable safety VC/other p.i.'s
4. Perceived compatability VC with current working procedures
5. Perceived ease of use VC
6. Usage services PSP

## Negative impact VC acceptance

1. Perceived consumer adoption VC in general
2. Mainly female customers
3. Exchange rate risks VC (volatility)
4. Age retailer
5. Firm size: 5- 19 persons (ref:  $\geq 20$ )

# Wrapping up

- VC acceptance currently very low among e-retailers, but may rise substantially
- Consumer demand, net transactional benefits and facilitating conditions drive adoption intention and current acceptance
- PSPs seem to facilitate VC acceptance by e-retailers
- PSPs foster competition and innovation in retail payments by lowering entrance barrier nonbanks
- Crucial limiting factor for VC acceptance: consumer demand

A hand is pointing towards a glowing Bitcoin coin. The coin is surrounded by a trail of particles, suggesting motion or a digital trail. The background is a blurred green field.

**Thank you for your  
attention**

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