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Fintech challenges at DNB

Evert Fekkes, Erus Schuurman

DeNederlandscheBank

EUROSYSTEEM

Market developments

Innovation and fragmentation

Game Changers: rules, schemes, technology

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PSD2
Open Banking

Instant
Payments

Tokenization,
Biometrics,
Mobile

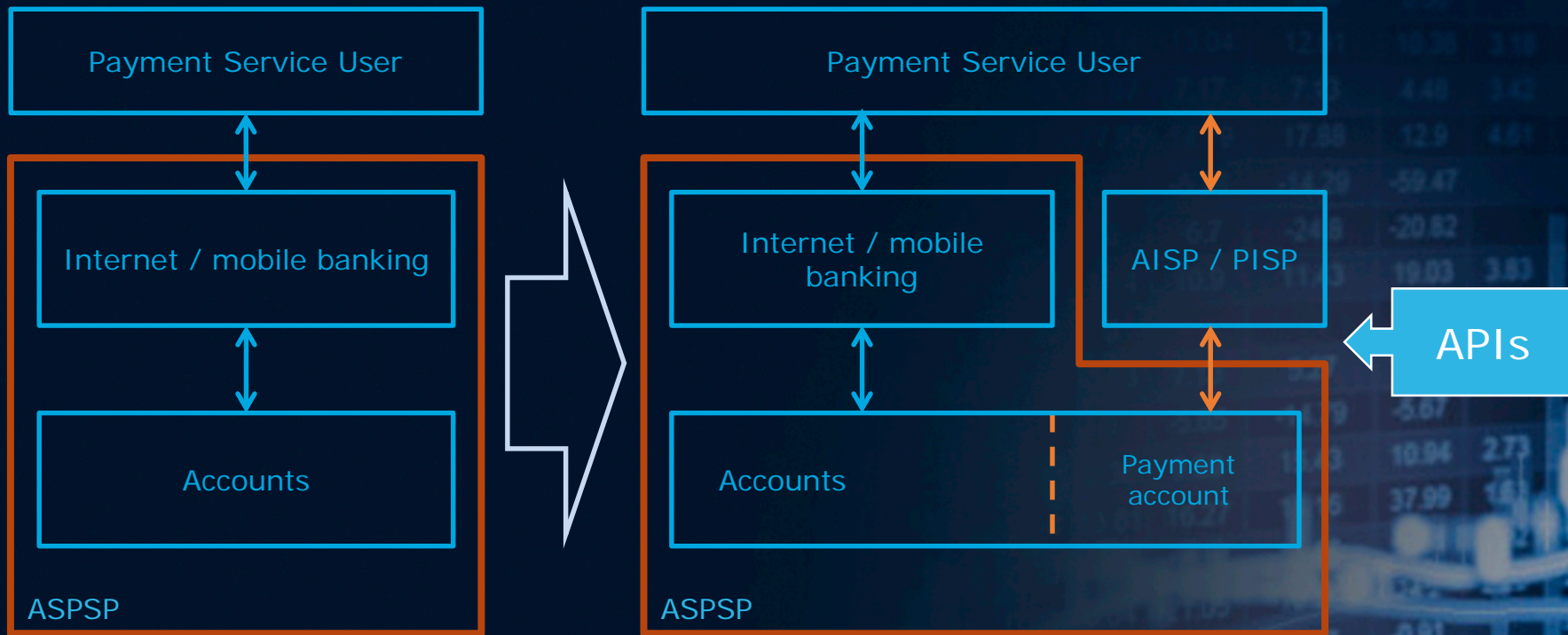
GDPR
Privacy

Data

CBDC

Identity

PSD2 – Access to the Account introduces two new roles



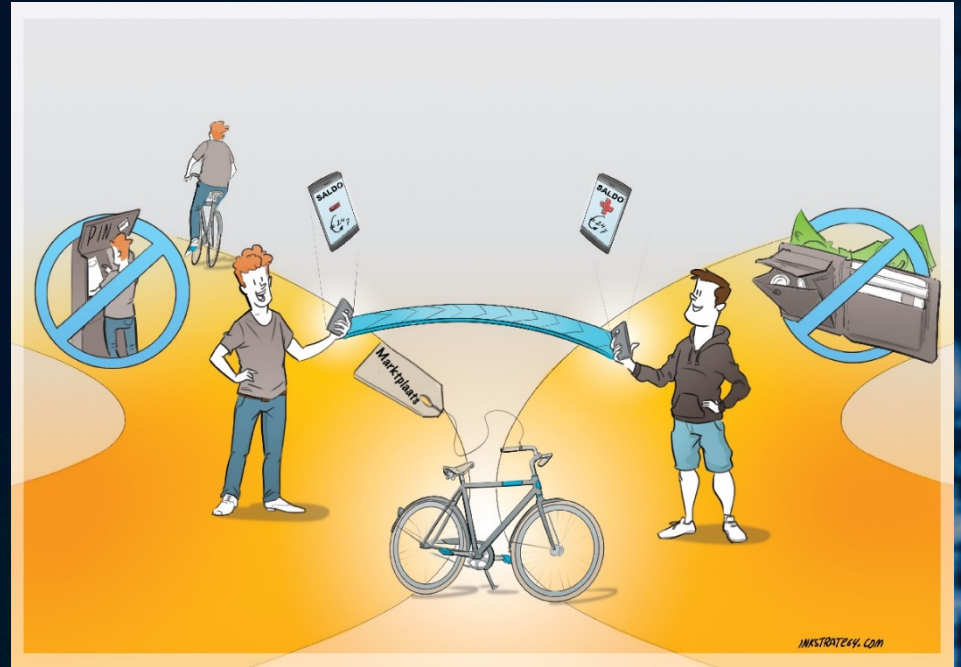
ASPSP
Account Servicing Payment Service Provider

AISP
Account Information Service Provider

PISP
Payment Initiation Service Provider

Instant payments: the new normal

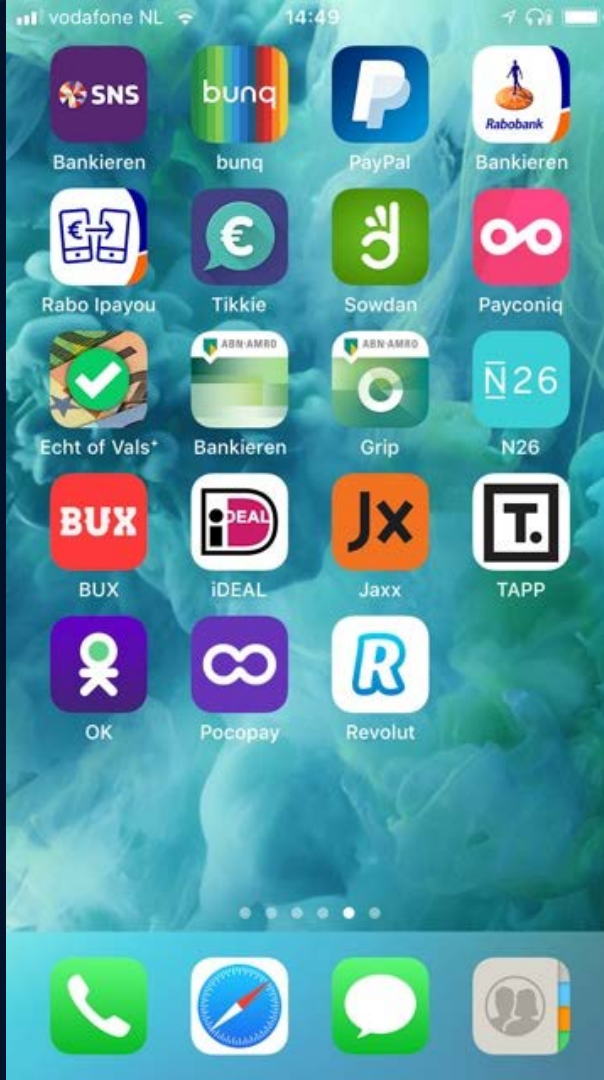
- 1 Always Open
- 2 Instant processing
- 3 Acknowledged





**PINNEN
JA GRAAG**





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Prudential supervision payment & e-money institutions

Approach and experiences

November 2019

De Nederlandsche Bank

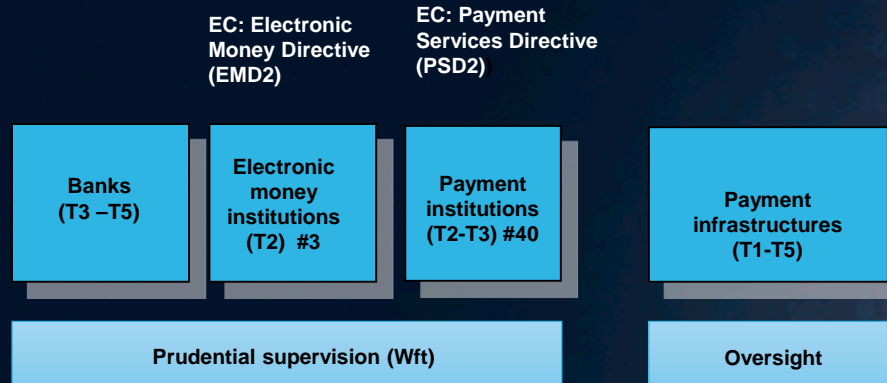
EUROSYSTEM

1.1 Retail payments sector:



fragmentation and highly competitive

1.2 Supervisory process



1.3 Retail payments sector: Licensing and notification process (Payment Services Directive 2)

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DNB good practice:

- Fit and proper assessment
- **Recovery and exit plan**

DNB challenges:

- Governance
- Safeguarding
- Outsourcing (global)
- Qualifying holdings
- Many applications (PSD2, Brexit, and new BigTechs)

1.4 Retail payments sector: Typology PIs and EMIs and authorisation process

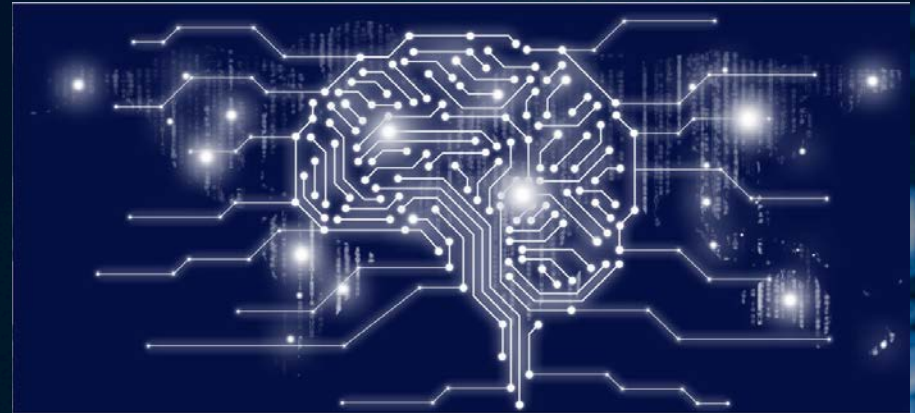
Business models of Payment institutions (based on eight payment services as defined in PSD2):

- Collecting payment service providers (merchant oriented)
 - Terminal focused service providers (merchant oriented)
 - FX payment service providers (merchant and/or consumer oriented)
 - Consumer finance service providers (consumer oriented)
 - New PSD2 services providers (merchant and/or consumer oriented):
 - Payment initiation service providers
 - Account information service providers
 - Cash money transfer service providers (merchant and/or consumer oriented)
- ➔ In total 48 licensed payment institutions (in total > EUR 200 billion payment volume in 2018)

2.1 Supervisory process: RAS

Five risk categories:

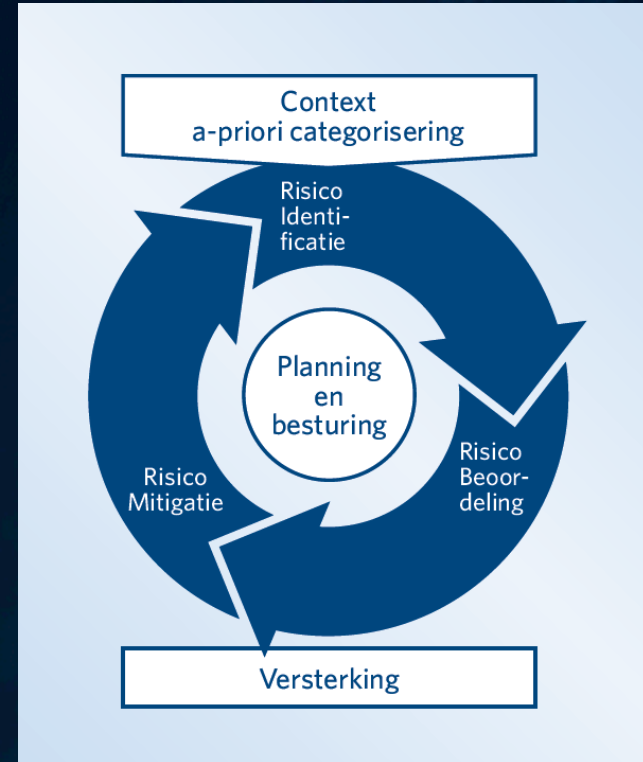
- Business model (risk)
- Financial risk (capital focused)
- Governance (risk)
- Operational risk
- Financial economic crime risk



2.2 Supervisory process (RAS)

RAS - process overview

1. Automatic scores based on prudential reporting and common knowledge
2. Evaluation of automatic scores
3. Challenge sessions with peer group institutions
4. Final RAS- and ID-card
5. Prudential supervisory plan (both sector wide thematic reviews as institution specific actions)



2.3 Supervisory process: RAS

Name of institution						
Institution DNB relation number						
Name(s) of supervisor(s)	Robbert					
T-class of institution	T3					
Date of review	2018Q4					
Review based on financials as of	2019Q2					
Risk categories	AS (t0)	ES (t0)	RC	AS (t-1)	ES (t-1)	Narrative. Please explain why you decided to (not) adjust the score in a maximum of 4 sentences. Examples: consideration of additional institution risks (e.g. FX / Liquidity / Chargeback risk), outcomes of on-site investigations / Risk Control Framework/ thematic reviews / PDR's, governance issues around stichting derdengelden.
Business model	3	4	n/a	4	4	
Financial risk	2	2	2	1	2	
Governance	1	3	3	1	2	
Operational risk	2	3	3	2	3	
Integrity risk	2	n/a	3	3	n/a	n/a
Overall risk score (AVG)	2	3	3	2	3	n/a

2.4 Supervisory process

Thematic reviews (partly based on RAS):

- Safeguarding of funds (2015/2016)
- Business model evaluation (2016, desk research)
- Recovery and exit plans (2017)
- Operational and security risk management under PSD2 (2018)

Prudential reporting

- Finrep/Corep twice a year
- Annual accounts

Signals and incidents

- Major incident guidelines under PSD2, see →
- Customer complaints
- Suggestions competitors

Criteria	Lower impact level	Higher impact level
Transactions affected	> 10% of the payment service provider's regular level of transactions (in terms of number of transactions) and > EUR 100 000	> 25% of the payment service provider's regular level of transactions (in terms of number of transactions) or > EUR 5 million
Payment service users affected	> 5 000 and > 10% of the payment service provider's payment service users	> 50 000 or > 25% of the payment service provider's payment service users
Service downtime	> 2 hours	Not applicable
Economic impact	Not applicable	> Max. (0.1% Tier 1 capital,* EUR 200 000) or > EUR 5 million
High level of internal escalation	Yes	Yes, and a crisis mode (or equivalent) is likely to be called upon
Other payment service providers or relevant infrastructures potentially affected	Yes	Not applicable
Reputational impact	Yes	Not applicable

3.1 Historical issues

A few examples:

1. Operational failure which results in safeguarding and capital issues
2. Non-compliant attitude and culture (AML and TF) driven by director and major shareholder
3. Continuous loss making resulting in capital deficiency
4. Lack of risk and compliance awareness within the board of directors
5. Exit (wind down) of payment activities

3.2 Typology PIs and EMIs and authorisation process

Not (yet) in scope of prudential supervision:

- Crypto currency issuers
- Commercial agents
- Crowdfunding platforms
- Physical gift cards
- Closed network gift cards

3.3 Recent/current developments

PSD2:

- More focus on operational and security risks
- Prevent cybercrime
- New types of licenses (Open Banking)
- Strong customer authentication
- New reporting

- Brexit
- Credit risk exposures (including counter party credit risk)
- Financial economic crime
- Data quality
- Sustainability

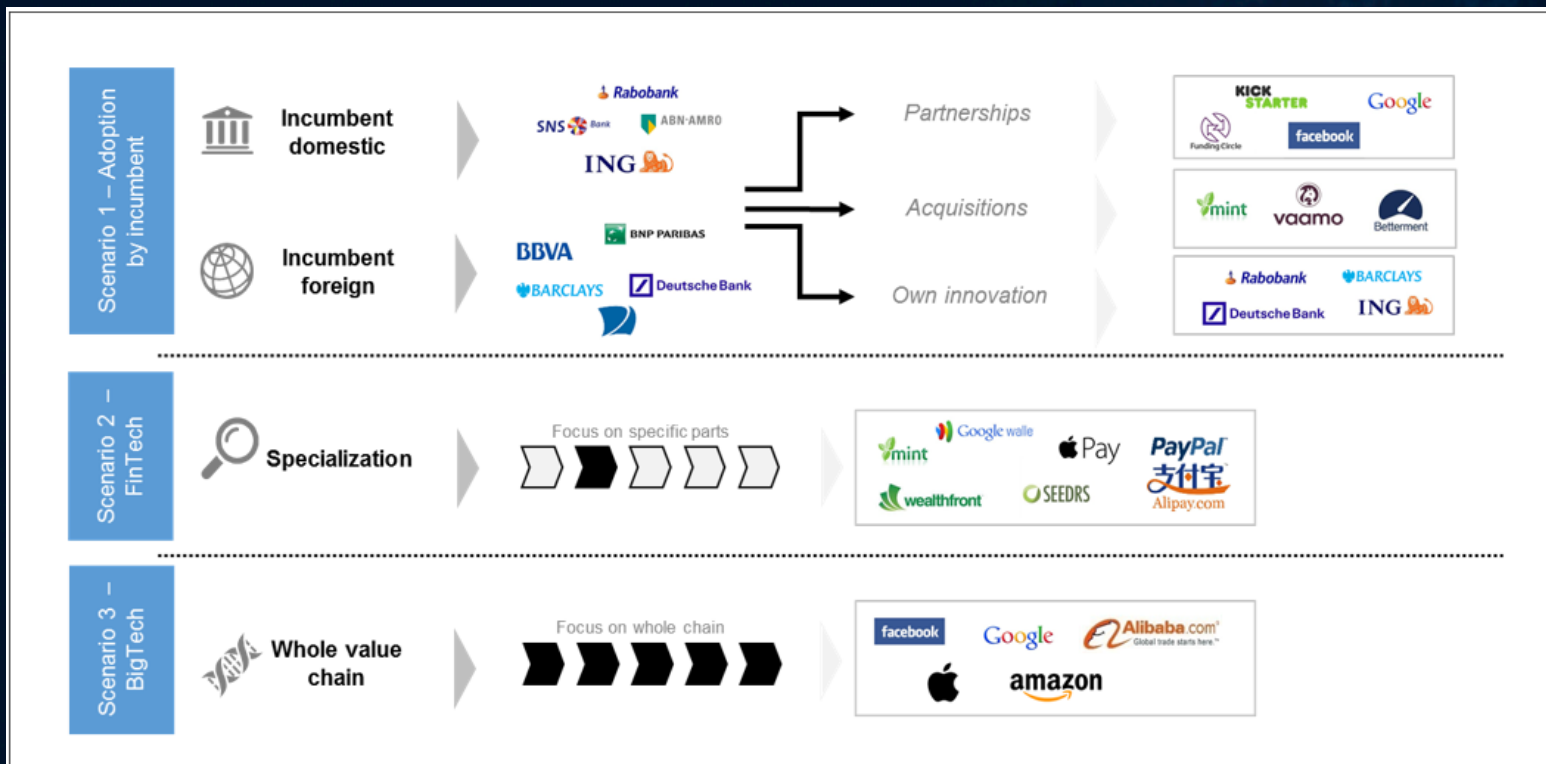


3.4 succesfull life cycle

From start-up, payment institution, licensed bank and succesfull initial public offering:



4.1 Developments – future scenarios



4.2 Developments – future scenarios



Technological developments



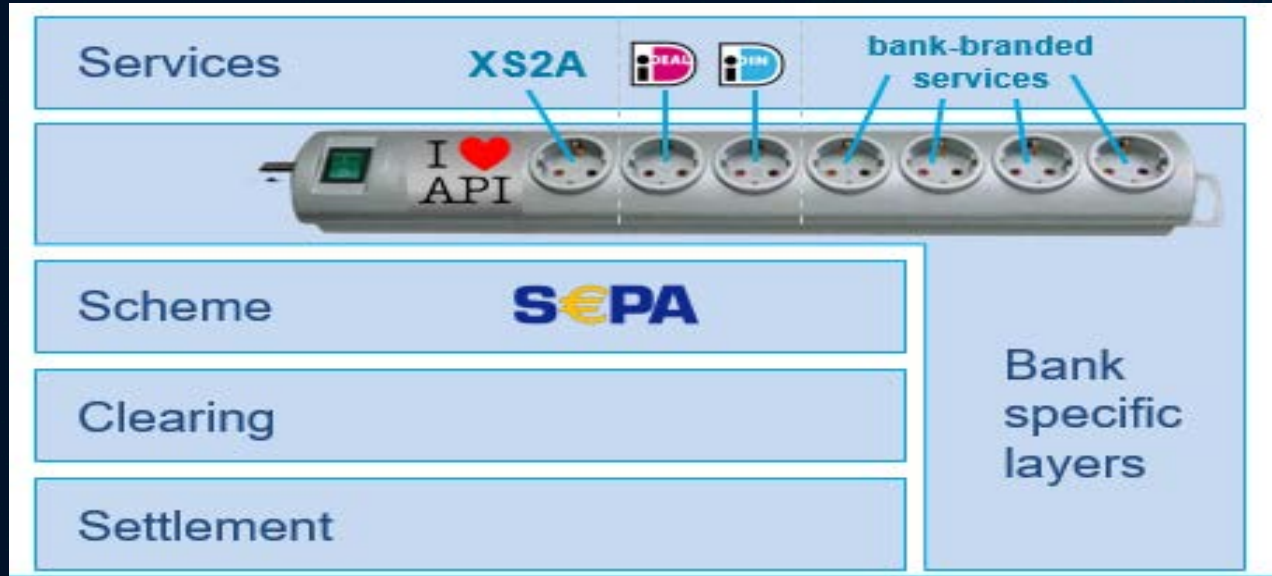
Changing consumer behaviour



Law and regulation

4.3 Open Banking – access beyond PSD2

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4.5 Developments – future scenarios



4.6 Developments - Traditional prudential supervision on banks and payment institutions

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Banks

Outsourcing

Technology



4.7 Developments - How are we going to supervise bigtech companies in retail payments?

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Big tech

Outsourcing



Banks and payment institutions



4.8 Developments - UBER in Payments

The Uber logo is displayed in white, bold, sans-serif capital letters on a black rectangular background. The letters are widely spaced and have a slight shadow effect.

Characteristics:

- Disruptive
- Platform economy, highly scalable
- Focus on growth
- Technology oriented, Not primary focused on attracting deposits or credit activities
- Culture, no financial background
- User oriented

4.9 Developments – Bigtech companies entering the retail payments market

- Amazon
- Google
- Facebook
- Apple

- Alibaba, Alipay
- Tencent (WeChat Pay)

4.10 Challenges from a supervisory perspective

- Proportionality
- Compliance to GDPR (European Privacy Law)
- CDD and transaction monitoring
- Differences between bank account, payment account and online wallets
- Regulatory / supervisory arbitrage
- Boots on the ground, no empty shells
- Direct access to clearing and settlement

5. Developments – smart supervisor



12.91	10.36	3.18	48.5
7.13	4.48	3.42	87.9
17.88	12.9	4.81	21.8
-14.29	-59.47		38.8
-24.8	-20.82		40.41
11.43	19.03	3.83	71.81
		3.31	
5.27	14.99		
-14.79	-5.67		
15.43	10.94	2.73	
18.16	37.99	1.81	
-0.77	-0.91		
9.55	7.72	2.81	4.3
-8.83	8.79		18.3
8.05	36.7	3.45	17.9
-3.27			