Fintech: opportunities and challenges for banks and regulators

Vienna, May 30th 2017
Agenda

- Fintechs: setting the scene
- B2B or B2C?
- Impact on sector economics
FinTech startups started the disruption wave and received a spectacular amount of funding

VC-backed global investment in FinTech

More than USD 50 billion of total funding since 2012

SOURCE: Pitchbook
EU27 represents 9% of global Fintech Investments


Percent

"I want the United Kingdom to lead the world in developing Fintechs. That’s my ambition – short and sweet" George Osborne, Chancellor of the Exchequer

~40% of Fintech companies in the US in 2014

SOURCE: CB Insights, McKinsey Panorama
52% of Fintech investments focus on retail banking

McKinsey Panorama FinTech Landscape, # of startups and innovations as % of database total

SOURCE: McKinsey Panorama FinTech database, Panorama Global Banking Pools
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- Impact on sector economics
The role of Fintechs in retail banking

Customer perspective—summary of long-term business vision

What? An ecosystem of services covering all sectors...

Who? ... provided by a large group of partners...

Where? ... offered via a B2C/B2B platform with deep intelligence...

How? ... accessible, omni-channel, fully personalized...

When? ... embedded into everyday life 24/7.

SOURCE: McKinsey & Company analysis
Customer expectations as to how we pay have changed radically over the last 15 years

Amazon illustration

Early 2000s
Card-entry

2010 – present
One-click checkout

Emerging since 2015
Omni-device

Future outlook
Auto-purchase

Customers
consciously chose
which card to use

Customers &
merchants now prefer
a “one-click”
checkout experience…

Digital shopping
moving to non-screen
based interfaces

Almost entirely takes
away consumer’s
involvement in the
payment process

1 Illustration for the US

SOURCE: McKinsey Global Payments Practice
~690 mobile payment Fintech attackers already identified across the Globe…

**Scandinavia**: reference market in payments behavior (highest cashless rate globally) and in mobile payment innovation in Europe

**North America**: 174 solutions

**Europe**: 242 solutions

**South America**: 54 solutions

**Africa**: 26 solutions

**Asia**: 165 solutions

**USA**: top global m-payments innovation market

**United Kingdom**: leading West European payment innovation hub

**Poland**: top CEE economy with versatile landscape of mobile payments players

**China**: leading role of online marketplace in m-payments

**Australia and Oceania**: 25 solutions

**North America**: 174 solutions

**Europe**: 242 solutions

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**USA**: top global m-payments innovation market

**United Kingdom**: leading West European payment innovation hub

**Poland**: top CEE economy with versatile landscape of mobile payments players

**China**: leading role of online marketplace in m-payments

**Australia and Oceania**: 25 solutions

**Size of the bubble indicate number of m-payments solutions identified within McKinsey database**

**Source**: McKinsey Panorama Fintech, 686 m-payment solutions
but where are we on the hype curve?

The “HYPE” phase
- Majority of B2C
- Next gen. wealth management
- Blockchain
- AI / Machine learning
- Anti-fraud and security

The “BUST” phase
- Robo-advisory
- B2C payments
- P2P lending

The “ENLIGHTENMENT” phase
- Majority of B2B ideas

Examples of winning banking strategy
- Follow trends
- Make small, early bets
- Manage public profile, investor communication
- Build partnerships, but not large investments
- Run arm’s length with innovators

- Pick up opportunities at the bottom
- Play “self-fulfilling prophecy” pipe deals
- Invest and divest actively
- Bring in top talent from failed companies
- Make major selected investments
- Deeply integrate into core operations
- Start second wave of acquisitions

SOURCE: McKinsey
Three reasons why now is the time to look beyond the B2C FinTech hype, and focus on the valuable B2B side

1. B2B FinTechs are centered around the major market drivers:
   - Cost
   - Control
   - Capital
   - Compliance

2. B2B FinTechs are centered around providing banks and other financial players with technology.

3. This year’s funding is expected to shift from angel to later-stage backing.

Touches all aspects of the FinServ value chain

Prone to partnership and collaboration models

Maturing industry.
Fintechs and banks are increasingly moving towards working together through partnerships

52% of the top 100 banks are already in active partnership with Fintechs...

Banks by innovation solution, % of banks¹

- Digital Capability Center: 30%
- Business idea incubation: 34%
- Business accelerator or program: 39%
- Separate digital bank: 23%
- VC/PE: 37%
- Bank-Fintech partnership: 55%

...While the share of FinTechs having a B2B business model has increased from 34% to 47%

Share of FinTechs² with a B2B business model

- 2011: 34%
- 2015: 47%

The share of B2C Fintechs working with banks has also been increasing through customer referrals and other setups

1 Based on a survey covering the top 100 banks; Percentage includes all banks that have initiatives in a certain category
2 Based on a sample of ~ 600 FinTechs included in the database

SOURCE: McKinsey Panorama FinTech
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- Fintechs: setting the scene in Retail Banking: setting the scene
- B2B or B2C?
- Impact on sector economics
Customer disintermediation targets the most profitable activity in banking – origination and sales account for ~60% of global banking profits

2014 revenue before risk cost, $ billion

<table>
<thead>
<tr>
<th>Core banking</th>
<th>Fee-based businesses</th>
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</thead>
<tbody>
<tr>
<td>Lending</td>
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<tr>
<td>CA</td>
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<td>Deposits</td>
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<td>Investment banking(^1)</td>
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<td>Transactions/Payments</td>
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<td>AM/Investments/Insurance &amp; Pensions</td>
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</table>

<table>
<thead>
<tr>
<th>Balance sheet provision</th>
<th>Origination/sales</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lending</td>
<td>1,239</td>
</tr>
<tr>
<td>CA</td>
<td>526</td>
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<tr>
<td>Deposits</td>
<td>174</td>
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<tr>
<td>Investment banking(^1)</td>
<td>136</td>
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<tr>
<td>Transactions/Payments</td>
<td>0</td>
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<tr>
<td>AM/Investments/Insurance &amp; Pensions</td>
<td>0</td>
</tr>
</tbody>
</table>

| Total revenues           | 2,075 (54%)       | 1,750 (46%)       |
| Total after-tax profits  | 436 (41%)         | 621 (59%)         |
| RoE                      | 6%                | 22%               |

1 Corporate finance, capital markets, securities services

SOURCE: McKinsey Panorama; Expert interviews
Fee-based businesses likely to experience the largest margin reductions

### Fee and margin reduction in revolutionary digitization scenario

<table>
<thead>
<tr>
<th>Percent</th>
<th>U.S.</th>
<th>U.K.</th>
<th>China</th>
<th>Japan</th>
<th>Eurozone</th>
<th>Other developed</th>
<th>Eastern Europe</th>
<th>MEA</th>
<th>Latin America</th>
<th>Other EM Asia</th>
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</thead>
<tbody>
<tr>
<td><strong>Retail</strong></td>
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<tr>
<td>Consumer finance</td>
<td>13.9</td>
<td>13.8</td>
<td>7.7</td>
<td>25.1</td>
<td>9.7</td>
<td>10.5</td>
<td>11.3</td>
<td>2.3</td>
<td>11.1</td>
<td>3.4</td>
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<tr>
<td>Mortgage</td>
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<td>5.1</td>
<td>1.0</td>
<td>4.4</td>
<td>3.7</td>
<td>3.2</td>
<td>1.0</td>
<td>0.2</td>
<td>1.6</td>
<td>0.6</td>
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<tr>
<td>Checking deposits</td>
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<td>0.6</td>
<td>0.9</td>
<td>0.3</td>
<td>0.1</td>
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<td>0.0</td>
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<tr>
<td>Term deposits</td>
<td>3.8</td>
<td>5.1</td>
<td>0.0</td>
<td>5.1</td>
<td>3.9</td>
<td>3.9</td>
<td>5.5</td>
<td>1.5</td>
<td>8.9</td>
<td>2.3</td>
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<tr>
<td><strong>Corporate</strong></td>
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<tr>
<td>Cash management</td>
<td>0.5</td>
<td>0.7</td>
<td>0.2</td>
<td>0.7</td>
<td>0.5</td>
<td>0.5</td>
<td>0.2</td>
<td>0.1</td>
<td>0.1</td>
<td>0.1</td>
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<tr>
<td>Corporate lending</td>
<td>0.7</td>
<td>0.9</td>
<td>0.8</td>
<td>0.7</td>
<td>0.7</td>
<td>0.7</td>
<td>0.6</td>
<td>0.1</td>
<td>0.1</td>
<td>0.2</td>
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<tr>
<td><strong>Payments</strong></td>
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<tr>
<td>Payments</td>
<td>17.3</td>
<td>23.6</td>
<td>8.6</td>
<td>23.6</td>
<td>18.1</td>
<td>18.0</td>
<td>8.6</td>
<td>2.3</td>
<td>3.6</td>
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<td><strong>WM</strong></td>
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</tr>
<tr>
<td>Asset/wealth management</td>
<td>16.6</td>
<td>21.7</td>
<td>3.9</td>
<td>21.7</td>
<td>16.6</td>
<td>16.6</td>
<td>3.9</td>
<td>1.1</td>
<td>1.6</td>
<td>1.6</td>
</tr>
</tbody>
</table>

Potential profits at risk and implied cost gaps in developed market banks

Changes in profitability from 2 secular forces, 2015-20

$ billion

<table>
<thead>
<tr>
<th>Profit 2015</th>
<th>Interest rate effect</th>
<th>Digital effect (revolutionary)</th>
<th>Pro-forma profit 2020(^2)</th>
<th>Mitigation</th>
<th>Pro-forma profit 2020(^2) after mitigation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Eurozone</td>
<td>88</td>
<td>-46 – -28</td>
<td>-28</td>
<td>15 – 33(^1)</td>
<td>26 – 55</td>
</tr>
<tr>
<td>United Kingdom</td>
<td>23</td>
<td>-7 – -7</td>
<td>-13</td>
<td>3 – 4(^1)</td>
<td>7 – 10</td>
</tr>
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<table>
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<th>Cost gap to reach</th>
<th>Gap $ billion</th>
<th>As % OPEX</th>
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<tbody>
<tr>
<td>2015 profits</td>
<td>-35 – -16</td>
<td>-10 – -5</td>
</tr>
<tr>
<td>8% cost of capital</td>
<td>-16 – 3</td>
<td>-5 – 1</td>
</tr>
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<td>10% cost of capital</td>
<td>-54 – -35</td>
<td>-16 – -11</td>
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<td>-14 – -12</td>
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<tr>
<td>8% cost of capital</td>
<td>-132 – -139</td>
<td>-38 – -36</td>
</tr>
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<td>10% cost of capital</td>
<td>-183 – -176</td>
<td>-50 – -48</td>
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<td>-11 – -12</td>
</tr>
<tr>
<td>8% cost of capital</td>
<td>-53 – -51</td>
<td>-41 – -39</td>
</tr>
<tr>
<td>10% cost of capital</td>
<td>-68 – -66</td>
<td>-51 – -52</td>
</tr>
</tbody>
</table>

1 In consensus and flat view, including evolution
2 Pro-forma 2020 profit is 2015 profit net of interest-rate and digital effects. Should profits grow strongly, banks will be better able to withstand the negative effects of low interest rates and digitization