Risk management - can we do better than our competitors?

Cost of risk - Bank

0.75% 0.75% 0.71% 0.62% 0.52% 0.75% 0.75% 1.00%

Cash loans [bn]

10.1 11.7 13.8 15.2 16.8 18.9 21.9

Data Scientist Teams
New competences in Risk division
Algorithm in credit policy
Flexible analytical environment
Online analytics

Access to the largest sets of data
Over 11 mn clients
2.5 bn transactions annually
Advantage due to intelligence

**Product scoring**
- Application
- BIK
- ROR

**Customer scoring**
- Application
- ClickStream
- Tags / MCC
- Deposits
- BIK
- BIGs
- ROR

**Machine Learning & Streaming analytics**
- Application
- BIK
- BIGs
- ClickStream
- Picture
- Sound
- Digital footprint
- Tags / MCC
- PSD2
- Deposits

+ supplementary data
+ access to unlimited data
+ advanced analytics
Corporate business
Advanced analytics
in risk assessment process

Client A

Client B

Bank Polski
Restructuring
Voice analysis – improvement in recovery process
Strategy of PKO Bank Polski: PKO Banking Platform based on four pillars

1. Mobile, connected, personal
   Digital banking model leveraging advanced analytics to provide personalized experience in Clients' everyday moments.

2. Open, innovative
   Leveraging open banking opportunities, strategic partnerships and cloud solutions to offer clients innovative solutions.

3. Digital and efficient
   Digital and automated processes with minimal manual handling requirements, no paper, no signature, fast and secure Bank in the cloud.

4. Shaping competences of the future
   Motivated and committed Team with competences tailored to new business challenges, working in agile methodology, using best in class technologies.

“PKO Banking Platform”
### Macroeconomic and banking sector forecasts

<table>
<thead>
<tr>
<th></th>
<th>CAGR 2016-19</th>
<th>CAGR 2020-22</th>
</tr>
</thead>
<tbody>
<tr>
<td>Real GDP</td>
<td>4.4%</td>
<td>3.6%</td>
</tr>
<tr>
<td>Nominal GDP</td>
<td>5.7%</td>
<td>5.5%</td>
</tr>
<tr>
<td>Investments</td>
<td>3.4%</td>
<td>3.1%</td>
</tr>
<tr>
<td>Private consumption</td>
<td>4.4%</td>
<td>3.7%</td>
</tr>
<tr>
<td>Unemployment rate (LFS)*</td>
<td>4.6%</td>
<td>4.0%</td>
</tr>
<tr>
<td>Nominal income of households</td>
<td>5.7%</td>
<td>6.7%</td>
</tr>
<tr>
<td>Inflation (CPI)*</td>
<td>1.3%</td>
<td>2.3%</td>
</tr>
<tr>
<td>NBP reference rate*</td>
<td>1.5%</td>
<td>1.5%</td>
</tr>
<tr>
<td>EUR/PLN*</td>
<td>4.29</td>
<td>4.31</td>
</tr>
</tbody>
</table>

**Source:** Statistics Poland, National Bank of Poland, Reuters, PKO Bank Polski forecasts.

<table>
<thead>
<tr>
<th></th>
<th>CAGR 2016-19</th>
<th>CAGR 2020-22</th>
</tr>
</thead>
<tbody>
<tr>
<td>Loans*</td>
<td>5.8%</td>
<td>5.5%</td>
</tr>
<tr>
<td>Consumer and other*</td>
<td>8.2%</td>
<td>7.3%</td>
</tr>
<tr>
<td>Mortgages PLN*</td>
<td>11.1%</td>
<td>9.6%</td>
</tr>
<tr>
<td>SMEs*</td>
<td>6.5%</td>
<td>4.3%</td>
</tr>
<tr>
<td>Deposits*</td>
<td>7.5%</td>
<td>6.6%</td>
</tr>
<tr>
<td>Private individuals</td>
<td>8.2%</td>
<td>7.6%</td>
</tr>
<tr>
<td>Institutional entities</td>
<td>5.0%</td>
<td>4.8%</td>
</tr>
</tbody>
</table>

**L/D**

<table>
<thead>
<tr>
<th></th>
<th>2019</th>
<th>2022</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>96.8%</td>
<td>93.6%</td>
</tr>
</tbody>
</table>

* Average of period

**Source:** Statistics Poland, National Bank of Poland, Reuters, PKO Bank Polski forecasts.
Banking sector headwinds in 2020-22

FX-denominated mortgages

Mounting pressure on personal costs

Sector divergence

MREL

Mounting consumer protection
Solid capital position

Capital requirements PKO Bank Polski Group (1)

<table>
<thead>
<tr>
<th>[%]</th>
<th>Minimum capital requirements</th>
<th>Minimum capital requirements for dividend pmt up to 50%</th>
<th>Capital structure</th>
<th>MREL</th>
</tr>
</thead>
<tbody>
<tr>
<td>14,8</td>
<td>12,7</td>
<td>14,8</td>
<td>18,0</td>
<td>23,0</td>
</tr>
<tr>
<td>16,9</td>
<td>14,8</td>
<td>16,7</td>
<td></td>
<td></td>
</tr>
<tr>
<td>18,0</td>
<td>16,7</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

(1) T1: CRR 6% + systemic risk buffer 2.9% + conservation buffer 2.5% + OSII buffer 1% + countercyclical buffer 0.005% + FX buffer for the Group 0.27% + ST buffer 0.66% 
T2: CRR 6% + systemic risk buffer 2.9% + conservation buffer 2.5% + OSII buffer 1% + countercyclical buffer 0.005% + FX buffer for the Group 0.36% + ST buffer 0.66%

Own funds above the dividend criteria (surplus capital amounting to PLN 2.2 bn).
PKO Banking Platform
2020 -2022
Financial and operational goals

- ROE: 12%
- Cost/Income: ~41%
- Net profit: > 5 mld PLN
- Cost of risk: 0.60%-0.75%
- Dividend payment: Ability to pay dividends