SECTOR ANALYSIS SERIES – CASHLESS PAYMENT INDUSTRY

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Rostyslav Dyuk, Chairman of the Board, Ukrainian Association of FinTech and Innovation Companies
OPENING REMARKS

Serhii Karpenko
Head of Strategy and Reforming Department,
National Bank of Ukraine Senior Director,
Capital Markets Policy
Sustainable fintech ecosystem development in Ukraine

Fintech strategy-2025

Serhii Karpenko, National Bank of Ukraine

Kyiv, 29 April 2020
Ukraine at a glance

- Population* = 41.9 mln
- Territory = 603,628 km²
- History – since 882 Kievan Rus’
- Capital – Kyiv (3 mln pop)

Credit ratings
- S&P*: “B” (stable)
- Fitch*: “B” (stable)
- Moody’s*: "Caa1“ (positive)

TOP export areas
- Metals (23%)
- Vegetable products (18%)
- Vegetable oils (10%)
- Machines (10%)
- Ready-made meals (7%)

Nominal GDP, bln US dollars**

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<tbody>
<tr>
<td></td>
<td>183</td>
<td>133</td>
<td>91</td>
<td>93</td>
<td>112</td>
<td>124</td>
<td>134,89***</td>
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Doing Business, position

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<td>112</td>
<td>96</td>
<td>83</td>
<td>80</td>
<td>76</td>
<td>71</td>
<td>64</td>
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- GDP* = 3.3%
- CPI* = 4.1%
- FDI inflow* = $1.82 bn
- Unemployment rate* = 8.7%

*2019
** World Bank Data
*** IMF
General overview of the economic*

Inflation, Consumer Price Index

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<td></td>
<td>0.5</td>
<td>24.9</td>
<td>43.3</td>
<td>12.4</td>
<td>13.7</td>
<td>9.8</td>
<td>4.1</td>
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*data as of 01.01. of the following year

Reduction in number of commercial banks

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<tr>
<td></td>
<td>180</td>
<td>145</td>
<td>117</td>
<td>96</td>
<td>82</td>
<td>77</td>
<td>75</td>
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Banking sector profitability, bln hryvnia

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<tr>
<td></td>
<td>1.4</td>
<td>-33.1</td>
<td>-66.6</td>
<td>-26.5</td>
<td>21.7</td>
<td>59.6</td>
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Exchange rate, dollar to hryvnia

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<tr>
<td></td>
<td>7.99</td>
<td>11.88</td>
<td>21.84</td>
<td>25.55</td>
<td>26.59</td>
<td>27.2</td>
<td>25.85</td>
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*data as of 01.01. of the following year
The value of noncash transactions accounted for 50.3% of all card transactions in 2019.
The payment infrastructure is constantly evolving, providing more options for noncash settlements.
Ukrainian IT in figures *

<table>
<thead>
<tr>
<th>Statistic</th>
<th>Details</th>
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<tbody>
<tr>
<td>Population</td>
<td>41.9 million of population</td>
</tr>
<tr>
<td>Internet use</td>
<td>63% of the population use the Internet regularly</td>
</tr>
<tr>
<td>IT-industry</td>
<td>IT-industry accounts for 4% of GDP</td>
</tr>
<tr>
<td>IT specialists</td>
<td>36 thousand of IT specialists graduate from universities annually</td>
</tr>
<tr>
<td>Mobile penetration</td>
<td>Ukraine takes the 4th place in the world in terms of contactless payments</td>
</tr>
<tr>
<td>Smartphone ownership</td>
<td>45% of adults have smartphones</td>
</tr>
<tr>
<td>Contactless payment support</td>
<td>79.4% of payment terminals support contactless payment</td>
</tr>
</tbody>
</table>

Sources: NBU, State Statistics Service, MEDT, IAU, Lead9|KMIC, World Bank 2019
Ukrainian fintech in figures

There are more than 100 fintech companies in the Ukrainian market.

The boom in the development of fintech in Ukraine falls on 2016-2019: 58% of companies were founded in the last 3 years.

In total, fintech companies employ more than 4000 people, 14% of companies have more than 75 employees each.

63% of fintech companies are self-financed.

Most fintech companies focus on corporate clients (SMEs and large companies - 37% each) and only 21% work for the mass segment of individuals.

Markets in which Ukrainian fintech companies operate: Europe (72%), post-Soviet markets (30%), the USA (21%), others (19).

Sources: UAFIC 2019 fintech catalog based on a survey of 110 fintech companies and banks
The Financial sector strategy 2025 is among the core NBU’s strategic documents

**VISION**
Integrated into the international space, an efficient, sustainable and competitive financial sector that is dynamically developing and provides a significant contribution to the sustainable and inclusive economic growth of Ukraine.

**MISSION**
The financial sector of Ukraine is a driver of sustainable and inclusive development of the Ukrainian economy and contributes to improving the well-being of citizens by ensuring efficient accumulation, distribution and circulation of financial resources.

The Fintech strategy-2025 is an element of the Financial strategy sector 2025

VISION
2025. In Ukraine, a fintech ecosystem has been established and operates to meet the needs of consumers, market participants, the state, related service providers and more. It is competitive and integral; investment attractive and profitable; technologically and legally protected; has advanced and balanced regulation; technologically open and accessible; provides synergies and empowers all stakeholders; powerful and innovative; secure and integrated into the global ecosystem.

MISSION
Forcing the development of innovations in the financial market for the emergence of quality and affordable financial services, enhancing the startup movement and effective competition in the interests of consumer protection through the development of the cashless-economy, improving the financial literacy and creation of a sustainable fintech ecosystem.
The fintech sustainable ecosystem's key fundamentals

The implementation of the Fintech strategy-2025 envisages the creation of a sustainable fintech ecosystem in Ukraine, based on the four key fundamentals: regulation & policies, demand, capital and talents.
A sustainable fintech ecosystem's model in Ukraine-2025

Source: NBU
## The Fintech strategy-2025 implementation will depend on the scope of the related projects

<table>
<thead>
<tr>
<th>The Fintech strategy-2025</th>
<th>Related projects</th>
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<tbody>
<tr>
<td>Mini-MBA programme “Digital finance 4.0”*</td>
<td>Cash circulation management</td>
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<td>The Regulatory sandbox concept*</td>
<td>NBU’s cyber defence centre launch</td>
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<td><strong>Cashless economy initiatives</strong>*</td>
<td>Financial literacy growth</td>
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<td>Expansion of payment instruments acceptance network</td>
<td>Protection of financial services’ customers</td>
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<td>Discussion with the market on the need to reduce the cost of non-cash transactions and increase the cost of cash</td>
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<td>Working with the institutional bodies on the acceptance of non-cash payments, including for public utility companies</td>
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<td>CBDC: e-hryvnya issuance</td>
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<tr>
<td><strong>Payment market development projects</strong></td>
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<tr>
<td>Projects focused on PROSTIR development</td>
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<td>Ukrainian payment infrastructure development (ISO20022/IBAN/SEP24/7)</td>
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<td>BankID development</td>
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<tr>
<td>Payment market infrastructure and oversight (PSD2)**</td>
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<tr>
<td>PROSTIR development</td>
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<td>Remote identification models</td>
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* - new elements or projects changed  
** - project’s scope offered to be changed  
*** - initiatives to be formalised

Source: NBU
The key product elements and Priorities for development of the Fintech strategy-2025

**The Regulatory Sandbox** - development and implementation of the full-fledged regulatory sandbox for rapid testing of innovative products and services.

**Mini MBA programme “Digital finance 4.0”** - the launch of an academic base with a focus on open banking is an element of the Fintech strategy-2025 and will help build a sustainable fintech ecosystem in Ukraine. The programme is scheduled on September.
The Fintech strategy-2025 indicators

Increase in the number of citizens holding a bank account or/and payment accounts at non-banking institutions (from ≈63% to 80%)

Increase in the percentage of SMEs that accept cashless payments – 38%* to 70%

The full-fledged regulatory sandbox launch - increase in the number of products and services that have been tested in a loyal regulatory environment from 9 applications (2019)** till 16-20 per year

The Fintech Market Capacity growth: from 5 till 20 companies in each key fintech field (e.g. regtech, insurtech, lending etc.)

Integration to global regulation environment – membership at Global Financial Innovation Network (GFIN – global regulatory sandbox)

Financial literacy of the Ukrainians' growth: finliteracy index growth from 11,6 till 12,5 (OECD research)

*Mastercard research
**NBU
KEYNOTE

Eunice Chu, FCCA
Head of Policy, ACCA Hong Kong
Understanding the Investment Fundamentals of the Online Payments Sector

By Eunice Chu
Head of Policy
ACCA Hong Kong
Historical development

- 1995
- 1999
- 2000
- 2004
- 2014
- 2020

Logos:
- Amazon
- PayPal
- 4G
- Alipay
- Samsung Pay
- 5G
Non-uniform Trend

Pace, format and depth of coverage vary quite widely

Germany | Japan | France | Russia | Canada | US | Sweden | Denmark | China

Think Ahead
Cashless is worth trillions

2023: digital payment by consumers → USD6.7 trillion
(exclude business to business)

2019: digital payment by consumers → USD4.1 trillion

Rosy picture ahead!
Good to invest?
1. Structural influences

- Population: age and spending patterns
- Bank account and card usage
- Levels of cashless activity
- Ease of access to the internet
- Smartphone penetration
2. Market Position

- Market concentration: customers vs merchants
- Barriers to entry
- Incumbent advantage
- Ease of adoption and use
- Compatibility with existing systems
- Customer retention programmes
- Operational restrictions
3. Demand drivers

Types of payment methods offered

Services to end-users

Size of payments/ transfers processed

Revenue mix by product type

Share of retail/ e-commerce market
4. Gauging performance

- Investment in infrastructure
- Growth in transaction value and volumes
- The monetisation of a company’s user base
- User privacy and cybersecurity
- Revenue, EBITDA, & net margins vs. user/transaction growth
- Inactive customers
- Use of data analytics for business growth
- Use of data analytics for fraud prevention
- Fee structures
- Level of value-added services
Thank you
PANEL DISCUSSION

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Danny Leong,
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Rostyslav Dyuk,
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THANK YOU