

# Raising Ukraine's productivity: banking sector as an engine for growth

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McKinsey & Company, Inc.

# Raising Ukraine's productivity: banking sector as an engine for growth

In cooperation with



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# Preface

*Raising Ukraine's productivity: banking sector as an engine for growth* is the result of independent research by McKinsey & Company and Finalta, conducted from September through December 2015.

The key objectives of the study were to provide banking market participants with insights on levers to raise productivity and to link improvements in the banking sector to broader efforts to revitalize Ukraine's economy.

The study leverages data collected from publicly available sources, proprietary information provided by leading local and international banks active in the Ukrainian market, and insights gained through interviews with industry insiders. The results are benchmarked against data and best-practice insights from McKinsey and Finalta, based on the work with more than 200 financial institutions in more than 50 countries around the world.

McKinsey & Company and Finalta would like to acknowledge the important contributions of the Independent Association of the Banks of Ukraine and the National Bank of Ukraine in facilitating the research.

# Acknowledgement of participants

The following Ukrainian banking organizations participated in the study:

- Alfa-Bank Ukraine
- Apeks-Bank
- Commercial Industrial Bank
- Credit Agricole Bank
- Creditwest Bank Ukraine
- First Ukrainian International Bank (PUMB)
- Megabank
- Independent Association of the Banks of Ukraine (NABU)
- National Bank of Ukraine
- Oschadbank
- OTP Bank
- Pravex-bank
- PrivatBank
- Prominvestbank
- Raiffeisenbank Bank Aval
- Sberbank
- UkrSibbank
- Unicredit Bank
- Universal Bank
- VTB Bank

# Ukraine's banking sector today



117

banks with total assets  
of USD 52.3 billion

210,000

employees

11,873 and 76,441

branches

ATMs and terminals



53%

of individuals have  
a bank account

3,200

active retail customers  
per branch

1.3 billion

retail transactions,  
30 transactions per  
person per year

89%

of retail payments and  
transfers in cash



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# Executive summary

In the face of immense political and economic challenges of recent years, the Ukrainian banking sector has made notable progress in introducing reforms and laying foundations for a more robust future.

With the initial measures to stabilize the economy and the banking sector under way, market participants are looking ahead to the next stage of transformation, which will include increasing market penetration, improving risk performance and raising productivity.

This report shows significant productivity gains are within reach of Ukraine's banks. Improved banking performance can contribute to a more robust and productive national economy. Measures to increase productivity in banking can also improve transparency, reduce informality, and increase access to capital for businesses and individuals.

The report is divided into three sections. The first explores the state of the banking industry, taking into account the current complex economic environment. Banks face multiple challenges in respect of liquidity, profitability and capital adequacy. They also show weaker market penetration and higher operating costs than peers in comparable economies.

Section two examines the underlying causes of relatively low productivity. The industry is beset by manual and paper-based processes and a high proportion of cash transactions. While there are some strong performing banks in Ukraine, there are many others who lag far behind.

The productivity challenges facing Ukraine's banking sector are significant, but not insurmountable, and the report encouragingly finds there are solutions at hand. These comprise longer-term structural reforms and more straightforward technological and operational fixes that could lead to sizeable quick wins.

Section three identifies four potential actions that banks, in cooperation with regulators, can take now to accelerate productivity gains and improve performance.

- **Accelerate digitization**, which would dramatically reduce cost-to-serve and cut operational risk. Examples of potential reforms include eliminating need for physical signature, enabling digital identification, digital archiving and reporting.
- **Eliminate “waste” in branch processes**, by reducing unnecessary paperwork, handovers and signatures, enhancing Internet and mobile services and migrating basic transactions to lower cost channels. Back-office functions currently distributed across branch networks should be further centralized.
- **Reduce share of cash transactions**, and increase electronic payments. The move should be supported by adoption of latest real-time payment technologies in C2B and C2C payments and expansion of card payment infrastructure, echoing global trends.
- **Build a shared services infrastructure**, to capture scale effects, increase productivity and spur automation. Increased consolidation would put pressure on sub-scale operators and help build a more dynamic and confident banking sector.



# Ukraine's banking sector: overview and key challenges

## Ukraine's banking sector severely impacted by the economic turbulence

Capital adequacy, liquidity and profitability have been severely undermined by recent economic instability, with the National Bank of Ukraine intervening in some 63 banking entities in 2014 and 2015. Return on equity across the sector ran at minus 30.8 percent in 2014.

Ukrainian bank loan volumes adjusted for non-performing loans amounted to 45 percent of nominal GDP in 2014, compared with 64 percent in 2010. The sector's depth is among the lowest compared to peers (Exhibit 1).

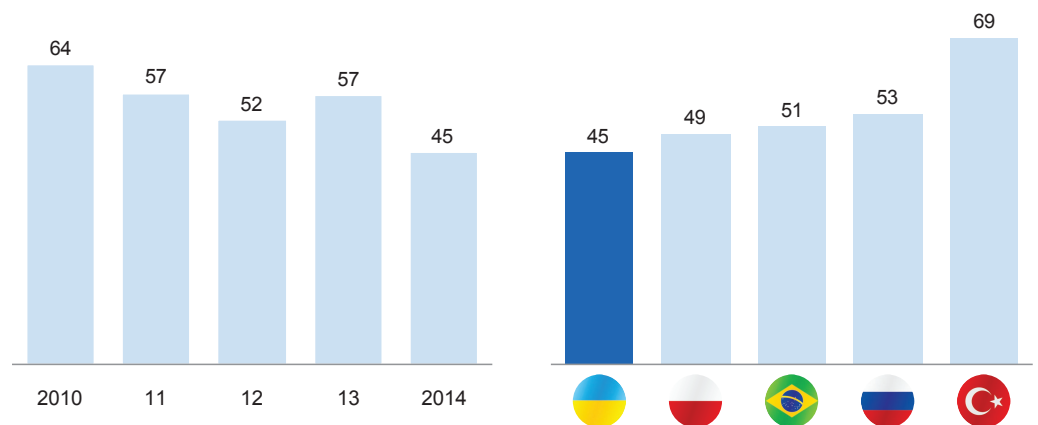
Exhibit 1

### Ukraine's banking sector depth is among the lowest compared to peers

Percent

Ukraine's net customer loans<sup>1</sup> to nominal GDP

Net customer loans<sup>1</sup> to nominal GDP, 2014



<sup>1</sup> Gross loans net of NPLs (90+ days past due) and excluding insolvent banks (for Ukraine)

SOURCE: National Bank of Ukraine and Websites of other central banks

## Weak market penetration

While physical access to banks is well developed in Ukraine, the extent to which the population uses banking services is surprisingly low.

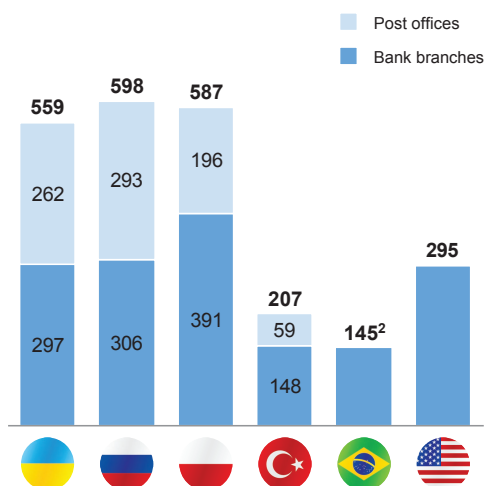
Ukraine has some 559 bank branches and postal offices that perform banking operations per one million people. That is comparable to Poland (587) and Russia (598), and substantially above Turkey (207) and Brazil (145).

In terms of ATMs and payment terminals, Ukraine has an extensive network, comprising some 1,772 terminals per million, compared with 533 in Poland and 599 in Turkey (Exhibit 2).

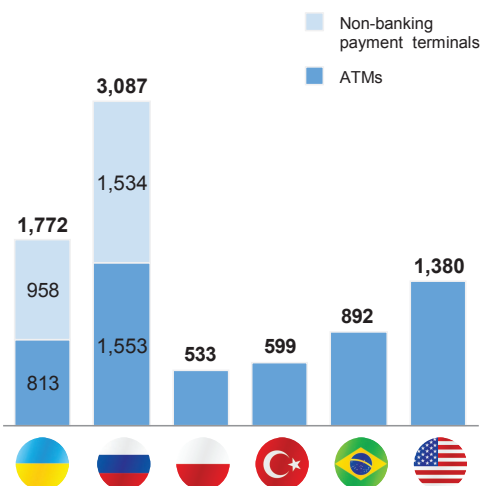
### Exhibit 2

#### Access to Ukraine's banking system is well developed

Number of bank branches and post offices<sup>1</sup> per million people, 2014



Number of ATM and non-banking payment terminals per million people, 2014



<sup>1</sup> Post offices that perform banking transactions

<sup>2</sup> Including Banco Postal

SOURCE: National Bank of Ukraine; Ukrposhta Website; Russian Post Website; central bank Websites

However, when it comes to penetration of banking products and services Ukraine lags its peers. Some 53 percent of individuals report having a bank account, compared with 57 percent in Turkey and 78 percent in Poland.

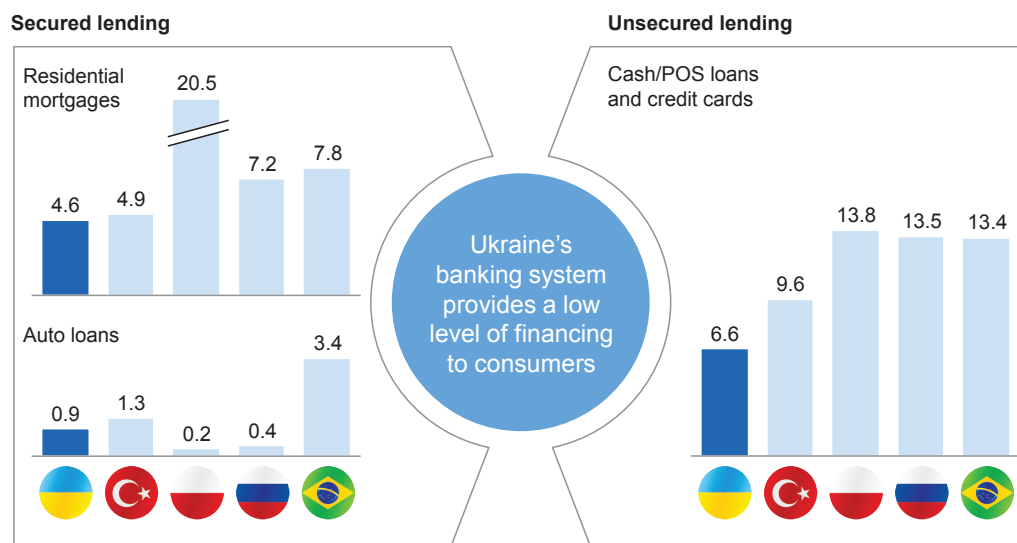
Similarly, consumer lending, a major source of earnings in comparable markets, has been substantially curtailed in recent years. Approximately 80 percent of banking sector's lending volumes are to the corporate segment.

Cash loan and credit card penetration are approximately half the levels in Turkey and Poland, with mortgage provision also weak (Exhibit 3).

**Exhibit 3**

**Unsecured lending and mortgages particularly lag behind those of peers**

Loan portfolio/GDP, percent, 2014



SOURCE: National Bank of Ukraine and other central bank Websites; McKinsey Panorama

**Despite efforts to optimize, operating costs remain high**

Despite efforts to trim operating costs, Ukraine's banking sector remains relatively inefficient, with the ratio of operating expenses to average assets at 4.4 percent in 2014, compared with 1.8 percent in Poland and 3.0 percent in Turkey.

High costs are partly attributable to the market penetration challenges highlighted above, with banks maintaining a high number of physical branches and ATMs relative to customer volumes, particularly in the context of Ukraine's shrinking economy.

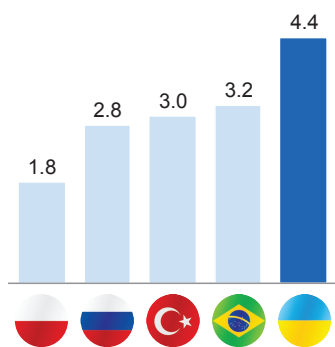
However, that is only part of the explanation. The other source of inefficiency is Ukraine's many smaller banks, which operate at twice or even three times the relative cost of larger peers (Exhibit 4).

## Exhibit 4

### Ukraine's banking sector suffers from high operating costs

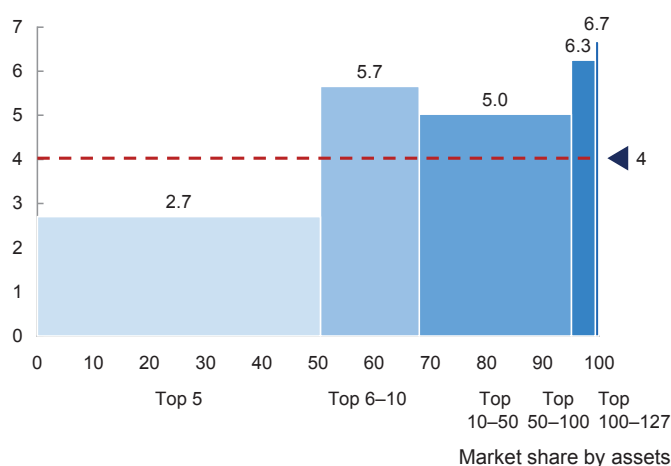
Percent

Opex to average assets, 2014



Banking sector cost curve<sup>1</sup>, 1H 2015

Opex<sup>2</sup> to average assets



<sup>1</sup> Banks operating from January to June 2015, excluding insolvent banks

<sup>2</sup> Annualized Opex

SOURCE: National Bank of Ukraine and other central bank Websites

### Consolidation has progressed but many sub-scale banks continue to operate

There has been substantial progress on Ukrainian market consolidation over the past five years and the top 10 banks now account for some 69 percent of banking assets, comparable to Spain, Poland and Romania. Still, numerous smaller banks continue to operate, with some 127 banks active in mid-2015, compared with 23 in Spain, 40 in Romania and 47 in Turkey.

### Low productivity, evidenced by large share of cash transactions and inefficient processes

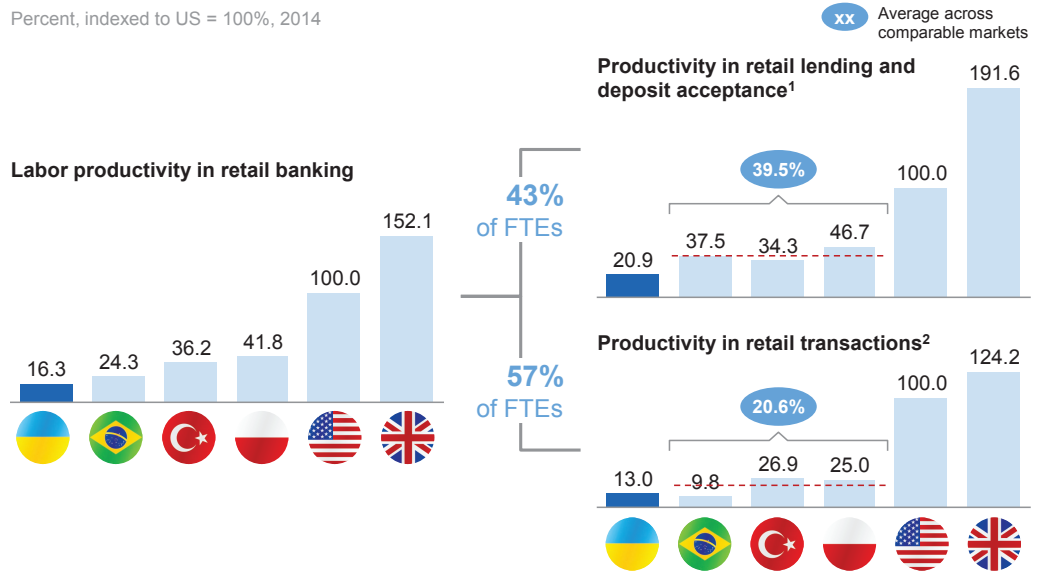
Of the around 210,000 people employed in Ukraine's banking sector (0.8 percent of the population) approximately two-thirds or 140,000 service transactions of private individuals, loans and deposits.

The banking sector's productivity levels are approximately 16 percent of those in the United States and 39 percent of Poland's. A key reason for the underperformance is low productivity in retail transactions (13 percent of US levels), caused by a high share of cash transactions and widespread manual processing of payments (Exhibit 5).

Exhibit 5

Ukraine banking sector's labor productivity is 39% of Poland's and 16% of that of the US

Percent, indexed to US = 100%, 2014



1 Adjusted for PPP at 2014 average UAH/USD exchange rate

2 Including card payments, transfers between retail accounts, retail payments to legal entities, electronic transactions, retail transactions through Ukrposhta (for Ukraine only)

SOURCE: National Bank of Ukraine; central bank Websites; statistics offices; data from participating banks; Economist Intelligence Unit



Свою Україну любіть,  
Любіть її... Во вреня мотє,  
В вѣтанню тяжкю тшугну  
За цїє Господя політє.

Во вреня мотє,  
В вѣтанню тяжкю тшугну  
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ТАРАС ШЕВЧЕНКО

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# Key drivers of Ukraine's productivity gap

There are three key sources of the productivity gap in Ukraine's banking sector. These comprise:

- **Complex paper-based branch processes and oversized networks.** Ukraine's branches serve on average two to three times fewer customers per branch than peers, suggesting that further footprint rationalization is required. Moreover, Ukraine's banks struggle with heavily regulated and paper-based processes. There is room to streamline, automate, and centralize non customer-facing activities.
- **High share of cash transactions.** Ukraine's branches appear saturated with basic cash transactions, the result of high informality in the economy and an underdeveloped bill payment infrastructure. On average, branches handle five to 10 times more cash transactions through tellers than peers. Digitizing utility bill payments, migrating cash transactions to ATMs and payment terminals and expanding POS terminal infrastructure are key initiatives to drive productivity.
- **Variation in performance among banks.** A heavy regulatory and cash transaction burden applies across the sector, but there remain significant variations in productivity levels among players. Better performing banks serve a far higher number of retail clients per branch, and are successfully migrating cash transactions to ATMs and electronic channels. The fact of uneven use of technology suggests productivity gains may be made by further consolidation.

Below the report considers these drivers of productivity

## 1. Complex paper-based branch processes and oversized networks

In response to the recent political and economic turbulence, Ukrainian banks have reported significant reductions in branch network staffing levels. Indicators of average numbers of employees per branch are among the lowest in the region: 6.4 full-time equivalents (FTEs) per branch versus 7.3 in Poland and 7.4 on average among Central and Eastern European banks.

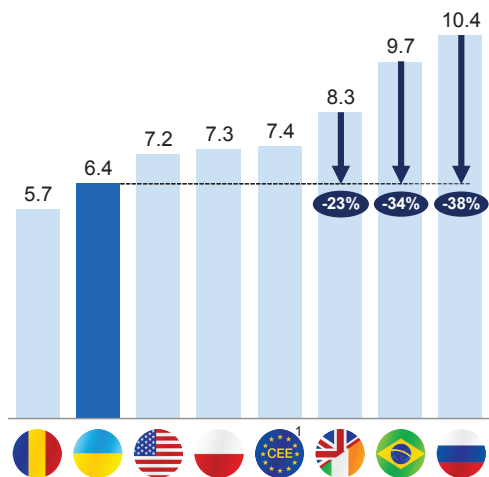
However, banks have been much slower to adjust network footprint. As a result, a Ukrainian branch on average now serves about two times fewer customers than peers in Russia, Poland and the US (Exhibit 6). In addition, product penetration in the retail segment is low, and the result is that many of Ukraine's branches are likely to be unprofitable. To boost productivity, banks should consider further rationalization of branch networks.

Exhibit 6

**Banks have reduced staffing levels in branches, but each branch serves fewer clients**

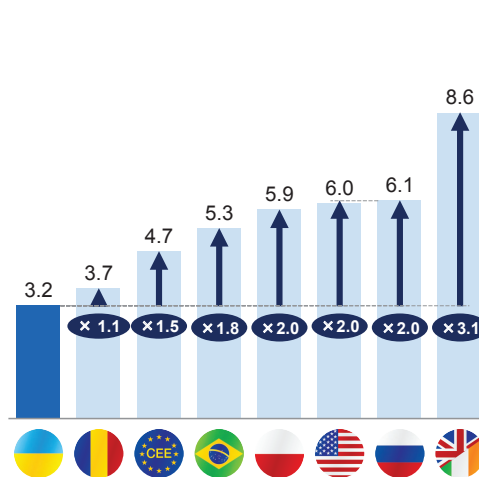
**Employees (excl. small business) per branch**

Branch headcount, excluding small business/  
number of branches, June 2015



**Active retail clients per branch**

Active retail clients/ number of branches,  
thousands clients per branch, June 2015



1 CEE includes Hungary, Poland, Czech Republic, Slovakia and Croatia

SOURCE: Finalta, participating banks

Improvements in employee productivity are also at hand. Currently, 64 percent of branch personnel are dedicated to low value-added service and back-office tasks, and just a third to sales-related activities. The proportion is the reverse of banks in peer markets such as Poland and Central and Eastern Europe, where 41 percent of personnel are dedicated to non sales-related activities.

Basic branch operations are heavily regulated and remain paper-based, with limited automation. For example, there are as many as 18 steps required to open a current account, around half of which could be streamlined and automated without any change in regulation (Exhibit 7). If regulatory changes were added, for example eliminating the need for physical signatures, even bigger productivity gains could be made.

Another opportunity lies in further centralization of non customer-facing activities, leading to staffing reductions and significant productivity improvements. The changes would also create a more consistent workload and increase skills in specialized areas.

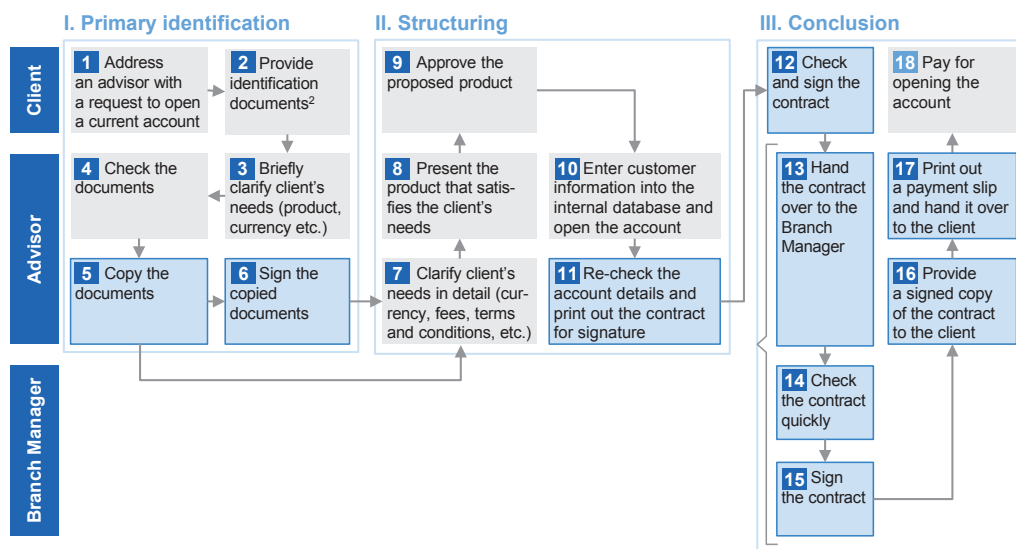
Exhibit 7

Routine branch processes are complex and time consuming

TOP 5 BANK

Procedure for opening a current account for a new retail client at a branch<sup>1</sup>

Areas for potential improvement



<sup>1</sup> Ukrainian citizens or permanent residents  
<sup>2</sup> Passport and identification code

SOURCE: Visits to branches

2. High share of cash transactions

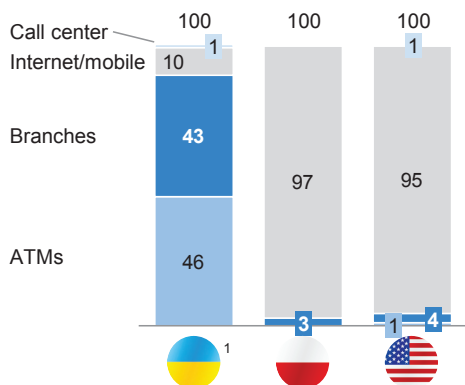
Ukraine's banks are inundated with cash transactions, including utility bill payments and cash deposits/withdrawals and transfers. As a result, some 89 percent of retail banking transactions are conducted in cash through branch tellers and ATMs, compared with 5 percent in the US (Exhibit 8).

Exhibit 8

Ukraine has a high share of cash transactions and high transaction costs

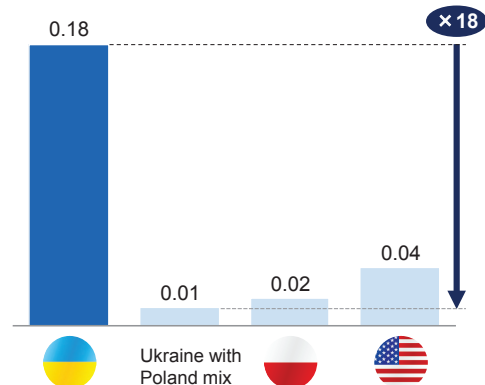
Retail payments and transfers split by channel

Percent, 1H 2015



Estimated average labor cost per transaction<sup>2</sup>

USD/transaction



<sup>1</sup> Average of retail payments and transfers including transfers between retail accounts and payments to legal entities and excluding cash-out transactions, cash deposits and card payments at points of sale based on the data from participating banks  
<sup>2</sup> Assuming banks do not incur any payroll costs on transactions performed through ATMs, Internet and mobile banking; calculated at 2014 average UAH/USD

SOURCE: Javelin Strategy & Research; American Banker; Finalta; participating banks

Despite Ukraine's extensive ATM and payment terminal infrastructure, there is a pervasive culture of transacting through branch tellers, and Ukraine's banks manually handle twice as many cash withdrawals than peers in other markets – 13 percent of the total versus 6 percent for Central and Eastern European banks. When it comes to cash deposits, 73 percent are handled via branch tellers, versus 49 percent in Poland and 33 percent in Russia.

There is significant potential to reduce cash transactions and manual handling in branches. As much as half of cashier/teller operations could be migrated to ATMs and terminals through increasing teller commissions and encouraging customers to use self-service. A critical enabler is a high service level and 24/7 availability of ATMs. Given the investments in ATM infrastructure, Ukrainian banks need to improve service availability of ATMs and terminals.

Utility bill payments represent another significant opportunity. Currently, there are no uniform standards for information exchange between the country's national and regional utilities and banks. It results in a significant cost for banks at the back end to settle payments with utilities. Also, few banks offer customers the opportunity to set up direct debit or standing orders for automatic payment of monthly bills.

As a result, banks handle millions of cash-based utility payments through ATMs, terminals, and branches. Such cash-based operations in Ukraine account for 59 percent of payments, compared with just 3 percent in Poland and 7 percent in Central and Eastern European countries (Exhibit 9).

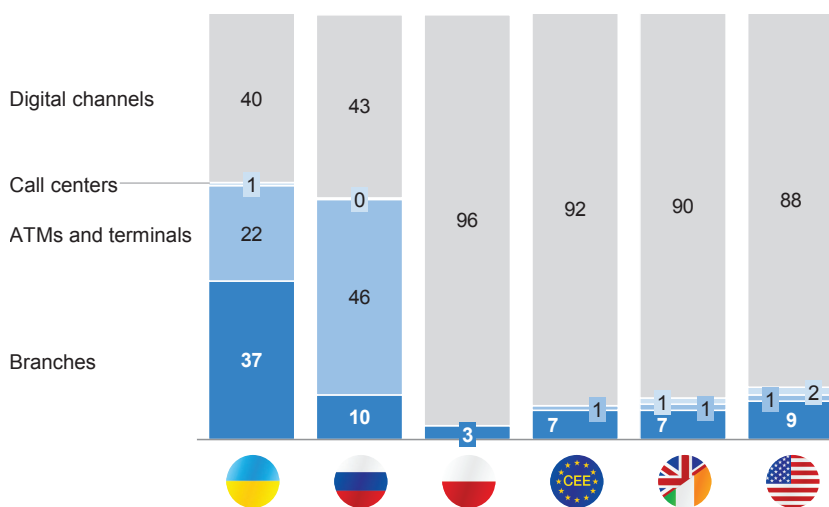
Based on experience in other countries, digitizing utility bill payments would not only increase banks' productivity but also reduce late payments to utility companies.

## Exhibit 9

### Utility bills are paid in cash and handled through branches and ATMs

#### Payments and transfers of individuals<sup>1</sup> (annual)

Payments and transfers in channel/payments and transfers in total, percent, June 2014-15



<sup>1</sup> Transfers between retail accounts, payments to legal entities from retail accounts, utility payments without account opening accounts

SOURCE: Finalta, participating banks

Going hand-in-hand with a high proportion of cash transactions is low usage of online and mobile banking services. Only 9 percent of retail customers in Ukraine use online banking and just 3 percent use mobile banking. That is in sharp contrast to Poland, where the percentages are 61 and 15 respectively. Online and mobile solutions for bill payments and transfers would give a major boost to productivity.

Ukraine's point of sale infrastructure is less developed than in comparable countries, with 4.5 card payment terminals per million people, compared with 8.9 per million in Russia and 10.3 per million in Poland. Potential reasons for the shortfall include a perception of high fees among merchants as well as merchant's and customer preference for cash. The industry and regulators must work together to address the situation which would also increase transparency and reduce informality in the economy (Exhibit 10).

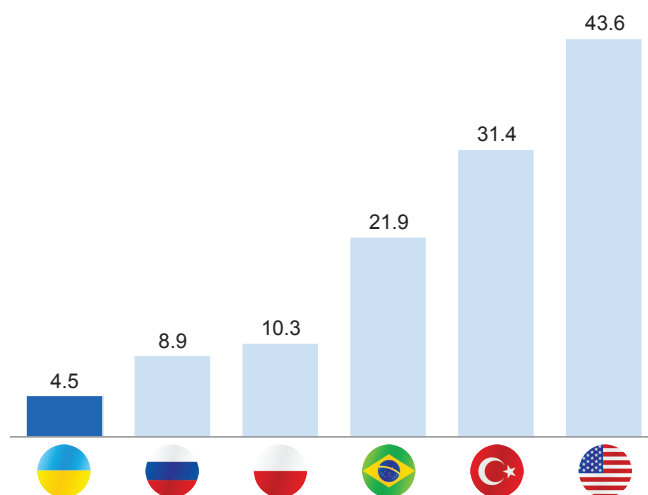
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## Exhibit 10

### Ukraine has the lowest penetration of POS infrastructure in its peer group

#### Number of POS terminals per 1 million people, 2014

Thousands of units



SOURCE: National Bank of Ukraine; Websites of central banks

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### 3. Variation in productivity performance

Productivity levels vary from bank to bank, and there is a sizeable opportunity to raise the bar across the industry by sharing best practice and promoting consolidation.

Better-performing banks handle nearly three times as many customers per branch than their worse-performing peers (Exhibit 11). Top performing banks have also been most successful in migrating cashier transactions to ATMs (Exhibit 12) and activating customers in digital channels (Exhibit 13).

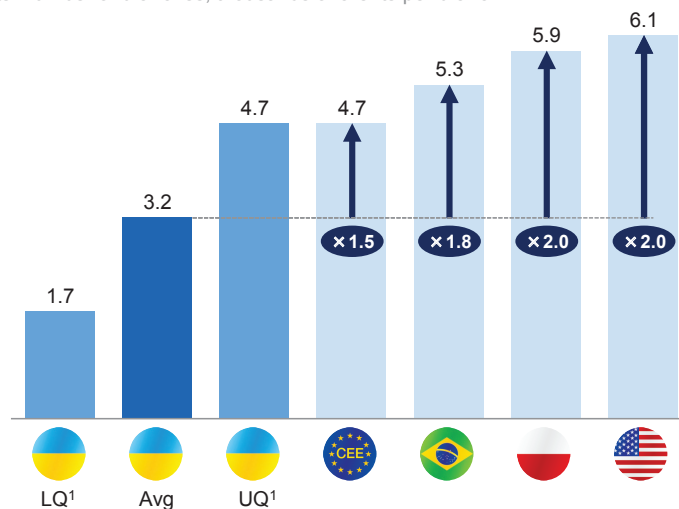
As the Ukrainian economy recovers, it is vital that the banking sector works to improve productivity. A failure to do so will likely lead to rising costs as the industry responds to increased demand and transaction intensity. For example, we estimate that to reach Poland's transaction numbers at current productivity levels an additional 100,000 employees would be required.

Exhibit 11

#### Top-performing Ukrainian banks serve nearly three times the number of customers per branch

##### Active retail clients per branch, June 2015

Active retail clients/ number of branches, thousands of clients per branch



1 LQ UA, UQ UA – lower and upper quartiles, defined as the 25% and 75% percent of the total distribution where the total distribution is 100%

SOURCE: Finalta, participating banks

**Exhibit 12**

**Better performing Ukrainian banks manually process fewer cash transactions at branches**

Percent, June 2015

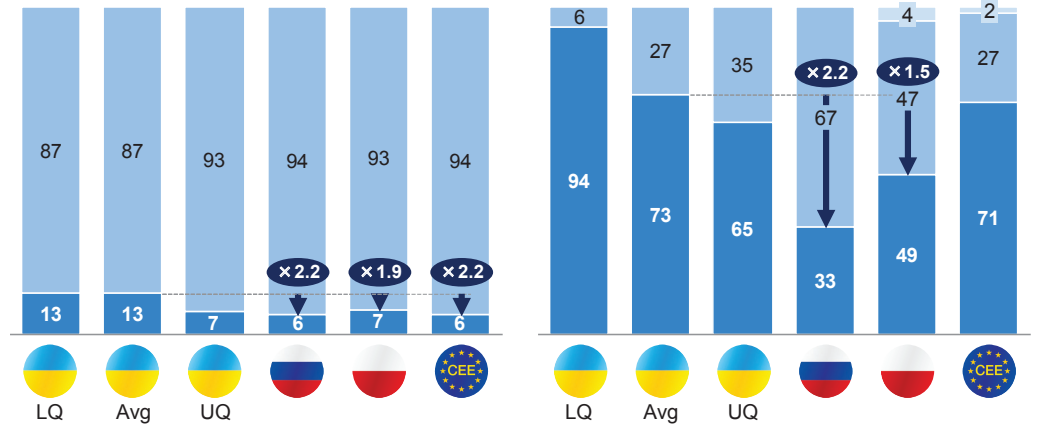
Other<sup>1</sup> ATMs/Terminals Branches

**Cash-out transactions (annual)**

Cash-out transactions in channel/cash-out transactions in total, June 2014-15

**Cash-in transactions<sup>2</sup> (annual)**

Cash-in transactions in channel/cash-in transactions in total, June 2014-15



1 Other includes the postal service and in-store outlets

2 Cash-in transaction also include utility payments for non-clients

SOURCE: Finalta, participating banks

**Exhibit 13**

**Better performing banks migrate more customers to digital channels**

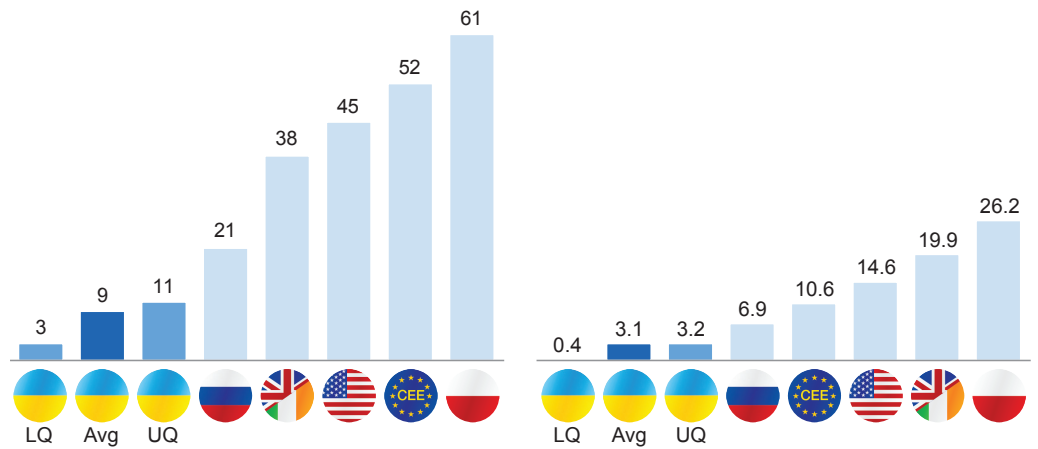
Percent, June 2015

**Share of retail clients active in online banking**

Active clients who accessed online banking in the last 3 months/active retail clients

**Share of retail clients active in mobile banking**

Active clients who accessed mobile banking in the last 3 months/active retail clients



SOURCE: Finalta, participating banks



# Actions to address the productivity gap in Ukraine's banking sector

The turbulent times of the past years has created an impetus for Ukraine's banking industry to transform. With initial steps to improve transparency and promote macroeconomic stability under way, regulators and market participants are now setting their sights on a more competitive and effective financial sector. Capturing productivity gains and reducing costs are core to that vision, which would also yield important benefits for Ukraine's economy more broadly.

With economic recovery, it is not inconceivable that transaction intensity could double relatively quickly. At current productivity levels, the banking sector would struggle to meet growing demand for transactions and other banking services. It is imperative that Ukraine's banks close the productivity gap to address the needs of a more dynamic economy, which Ukraine anticipates.

With new technological solutions and online business models available at lower cost, there is no better time to act. The fact that many Ukrainian banks are not burdened by legacy systems should be seen as a competitive advantage compared to peers in comparable economies, enabling Ukrainian banks to make a technological leap forward.

**To support productivity, policymakers should** focus their efforts on the following measures:

- **Overhaul regulations to remove barriers to digitization.** Regulations that require paper-based forms, signatures, physical document verification, archiving and dozens of reports should be amended to enable digitization in line with best practice. Most branch transactions are amenable to digitization. High priorities include eliminating need for physical signature, enabling digital customer identification, and electronic access to multiple databases to simplify identification and financial monitoring (e.g., BankID).
- **Reduce cash transactions.** Regulators can play an important role in sponsoring initiatives to reduce cash transactions. These may include supporting development of common standards for utility bill settlement, promoting electronic transfer of salary payments, stimulating merchant acceptance of cards and POS infrastructure, and creating transparency about the cost of cash transactions. Further, the regulator can encourage adoption of latest payment technologies, such as mobile payments and real-time settlement solutions between banks.
- **Encourage shared services infrastructure and consolidation.** Further consolidation of small and medium-sized banks would likely have a positive impact on productivity by eliminating sub-scale and less efficient players. In addition, Ukraine's regulators should support development of companies that provide outsourcing services to banks. Shared infrastructure can generate significant cost reductions in functions including call centres, debt collection, payment and card processing, ATM/POS network management and cash collection. Implementing cloud technologies would help reduce bank infrastructure demands, while the growth of outsourcing services would be an additional benefit to the wider economy by creating employment for thousands of people outside of major urban centers.

**With a view to improving productivity, bank management should** echo the moves described above:

- **Work with regulators to remove barriers to digitization.** Banks should work closely with regulators to implement new standards in areas such as electronic signatures, customer identification, financial monitoring, contracting and reporting. All basic transactions should be made paperless.
- **Simplify branch processes and optimize the branch footprint.** There is much potential, even within the confines of today's regulatory environment, to introduce "lean" principles in branches, including multi-tasking, part-time employment and simple task automation. In addition, some branch processes can be further centralized in regional or national processing centers, with the aim of doubling productivity. As regulators remove barriers to digitization, banks can implement programs aimed at digitizing the most common customer-facing operations. Further productivity gains can be realised by optimizing the branch network footprint.
- **Migrate transactions to electronic channels.** Banks should look to double the share of payments conducted via electronic channels. That can be achieved by developing a common standard for utility bill payments and salary payment transfers, enhancing the capabilities of remote channels (ATMs, Internet, mobile, call centers), expanding electronic payment infrastructure, educating consumers on the use of electronic channels and potentially introducing higher fees for in-person branch transactions.
- **Selectively pursue outsourcing and acquisitions to capture further savings.** There is significant potential for banks to support the creation of shared services infrastructure in areas including cash collection, ATM/POS network management, payment processing and data hosting. Banks may be best placed to start such initiatives jointly, reflecting the experience of other markets.

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Over the past decade Ukraine's banks have invested heavily in building a sizeable and highly accessible banking infrastructure. However, as Ukraine moves forward with the reforms, the country's banking sector urgently needs to improve productivity and efficiency. Now is an opportune moment for policymakers and banking leaders to focus on productivity improvement. In implementing reforms, new technology can be a key enabler of improved performance. A more vibrant and stable banking sector can become an engine for growth for Ukraine's economy.

# Appendix: Productivity calculation methodology

This section details the methodology, data sources, and limitations of McKinsey's productivity calculations in this study.

## Industry definition

To ensure the analysis is comparable across countries, retail banking is defined in terms of products and customers. The three main types of institutions providing retail banking services in Ukraine are: (1) state-owned banks, (2) foreign banks, and (3) private local banks. The scope of this analysis includes such retail banking products as individual loans, deposits and transactions. Transactions through post offices are also included. Products and services for small and medium-sized enterprises, mutual funds and insurance services are beyond the scope of the study.

## Methodology

Labor productivity is computed by dividing the aggregate output index by the corresponding labor input index. All calculations are based on 2014 data, with the US used as a reference point.

## Output index

McKinsey's retail banking output measure includes all major banking products and services offered to individuals. It is a quantity index based on: (1) number of transactions, (2) volume of term deposits and current accounts, and (3) volume of loans.

Transactions include card payments, transfers between individual accounts, retail payments to legal entities, electronic transactions and transactions through post offices (for Ukraine only). The number of transactions is generated from central bank websites and internal data of the National Bank of Ukraine.

The volume of term deposits and current accounts is measured as the outstanding balance of all term deposits and current accounts at the end of 2014, using data from central banks in benchmark countries. The volume of loans is measured as the sum of gross outstanding balances of residential mortgages and all types of personal loans, including branch loans, car loans, POS loans, credit cards, and overdrafts. Again, data is derived from central banks. Deposits and loans are measured by volume rather than number. For Ukraine, we make an adjustment by using the average UAH/USD exchange rate of 2014. For all other markets we use the exchange rate at the end of 2014.

As physical output is measured in terms of both number of transactions and monetary volume, the three output categories are consolidated into one. A total output index is obtained by aggregating three physical output categories with the average labor input required in all benchmark countries in 2014 for each unit of physical output.

## Labor input index

Total labor in retail banking includes the number of hours worked in a financial institution associated with the financial services defined above. Employment level in banking is

adjusted to the share of retail banking. The data is taken from official national statistics and Ukrainian banks participating in the study.

## Limitations

McKinsey's methodology is subject to limitations and future work will aim to enhance the methodology of output measures and increase the accuracy of labor input figures. The study does not adjust output estimates for quality, and output per product category can be subject to measurement challenges. Figures on labor input are estimated based on the data provided by participating banks and expert interviews, due to lack of official sources on the number of employees in retail banking. The use of market exchange rates rather than purchasing power parity exchange rates remains subject to methodological debate, because the extent to which differences in domestic prices reflect variations in utility benefit are not fully evident.

## Finalta methodology

To ensure comparability between countries and regions, Finalta follows a strict methodology. All data is collected from banks using a common set of definitions and then validated using a comprehensive methodology, which includes detailed cross-checks for the data points, comparing data between peer banks and paying specific attention to outlying data points.

Due to the need to maintain uniformity with Finalta's world-wide methodology, the definitions are not necessarily absolutely comparable with the National Bank of Ukraine or internal banks-participants' definitions; the numbers in Finalta's report could therefore be different from those that have become accepted in the market.

It is important to note that Finalta's figures are calculated as the averages for the banks participating in the study, not the market average, and these are simple (arithmetic) averages, meaning the data point of a small bank will have the same weight in the average as that of a big bank.

Where used, lower quartile is the middle number between the smallest number and the median of the data set, which splits the lowest 25% of data from the highest 75%. Upper quartile is the middle value between the median and the highest value of the data set, which splits off the highest 25% of data from the lowest 75%.

Below are core definitions used in the study:

- Retail active customer is an individual that initiated at least one debit transaction within last 6 months of the study (excluding automated transactions/prolongations) and/or held the balance more than 250 EUR and/or had an active loan – with no or no more than 90 days overdue.
- Retail branches include filials, additional offices, operating offices, operating cash desks outside of teller network and credit-cash offices. It excludes corporate branches, foreign branches and points of sale.



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