

Electronic pay systems

Crimea Federal University
Simferopol, Crimea

Prof. Olga B. Yarosh and
PhD. Dmitry Chudakov

OUTLINE

□ Part I.

- 1. Introduction.
- 2. Classification of electronic payment systems.
- 3. Debit payment systems.
 - 3.1. Electronic checks. Stages of payment.
 - 3.2. Electronic money. Stages of payment.
- 4. Market of electronic pay systems in Russia.
 - 4.1. Macroeconomic indicators.
 - 4.2. Acquiring.
 - 4.2.1 Acquiring Market
 - 4.3 Payment infrastructure.
 - 4.4. E-commerce market.
 - 4.5. Transactions.

□ Part 2 (to be continued by Dmitry Chudakov)



2. Classification of electronic payment systems

Electronic Payment System - is a system of payments between different organizations and Internet users in the purchase or sale of any goods or services via the Internet.



Classification of electronic payment systems:

- 1) debit (working with electronic checks and digital cash);
- 2) credit (working with the credit cards).

3. Debit electronic payment system.

3.1. Electronic checks. Stages of payment.

Debit payment systems - these are electronic payment systems, which are identical to their counterparts from offline that are ordinary checks and cash.

Electronic checks:

Electronic checks, such as NetCash, NetCheque, NetChex - analogues of paper checks.

There are two differences between electronic checks from paper:

- 1) the signature, which can be either electronic or paper;
- 2) issuance of checks.

Stages of payment:

1. Extract e-check, and its digital signature authentication of the sender.
2. Sending documents to the recipient. For safety and security agents checking account number can be blocked by the bank's public key.
3. Checking the authenticity of the signature.
4. Receiving the check payment system for payment.
5. Sending a product or service to the payer, withdrawal from his account.

3.2 Debit electronic payment system. Electronic money.

Electronic money - it is a means of payment, which exists only in electronic form.

Electronic money is divided into two types according to the type of media:

1. On the basis of cards - those systems that work with credit cards. The most famous representatives: Visa, CashMondex, CLIP, Proton, Mondex.

2. Based on the network - these are systems that work with digital cash. Most known systems: WebMoney, Yandex.Money, EasyPay.

Stages of payment by electronic money:

1. Create your own e-wallet
2. Install a web browser or application
3. Open Menu Account Management
4. Make the necessary operation



4. Market of electronic pay systems in Russia

4.1. Macroeconomic indicators

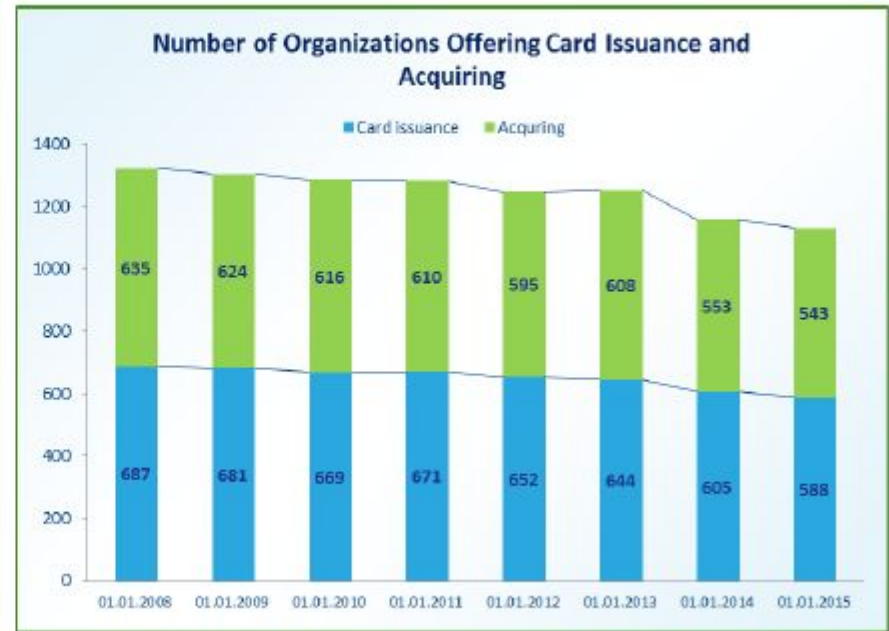
The Russian economy recession motivated the Government to revise major economic indicators for 2015.

Major Indicators	Old (official)*	New (official)*	Market analysts**
GDP /ВВП/	+1,2%	-2,5%	-2,7-5%
Inflation	+5,5%	+11,9%	+15%
Average ruble exchange rate	37,7 RUR/1 USD	60-62 RUR/1 USD	45-65 RUR/1 USD
Retail trade turnover	+1,9%	-8,2%	-10,9%
Population's real income	+2,1%	-6,3%	- 8,5%
Real wages	+0,4%	-9,6%	-

* Ministry of Economic Development of the Russian Federation, Bank of Russia

** Morgan Stanley, S&P, Gaidar Institute for Economic Policy, leading Russian economists

4.2 Acquiring.



In spite of the dynamic growth of cashless payments cash remains the main payment instrument.

Share of acquiring transactions is growing and represents 22% of all transactions.

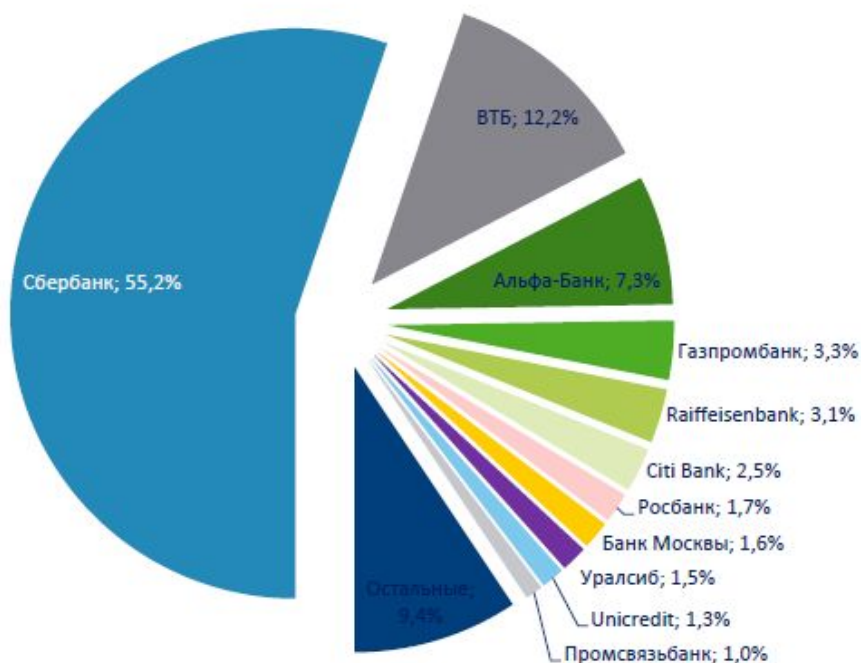
Number of credit organizations offering card issuance and acquiring services is decreasing.

- **Acquiring- range of services on reception of bank cards for payment at the point of sale**

Acquiring by banks - issuers Russia

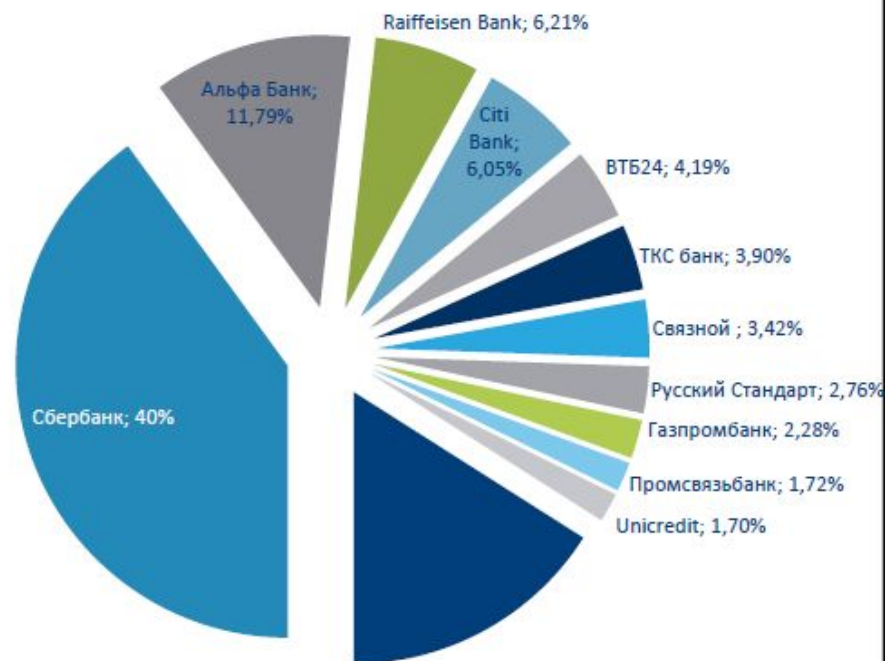
2014 г.

Структура эквайрингового оборота по картам VISA в разрезе банков-эмитентов

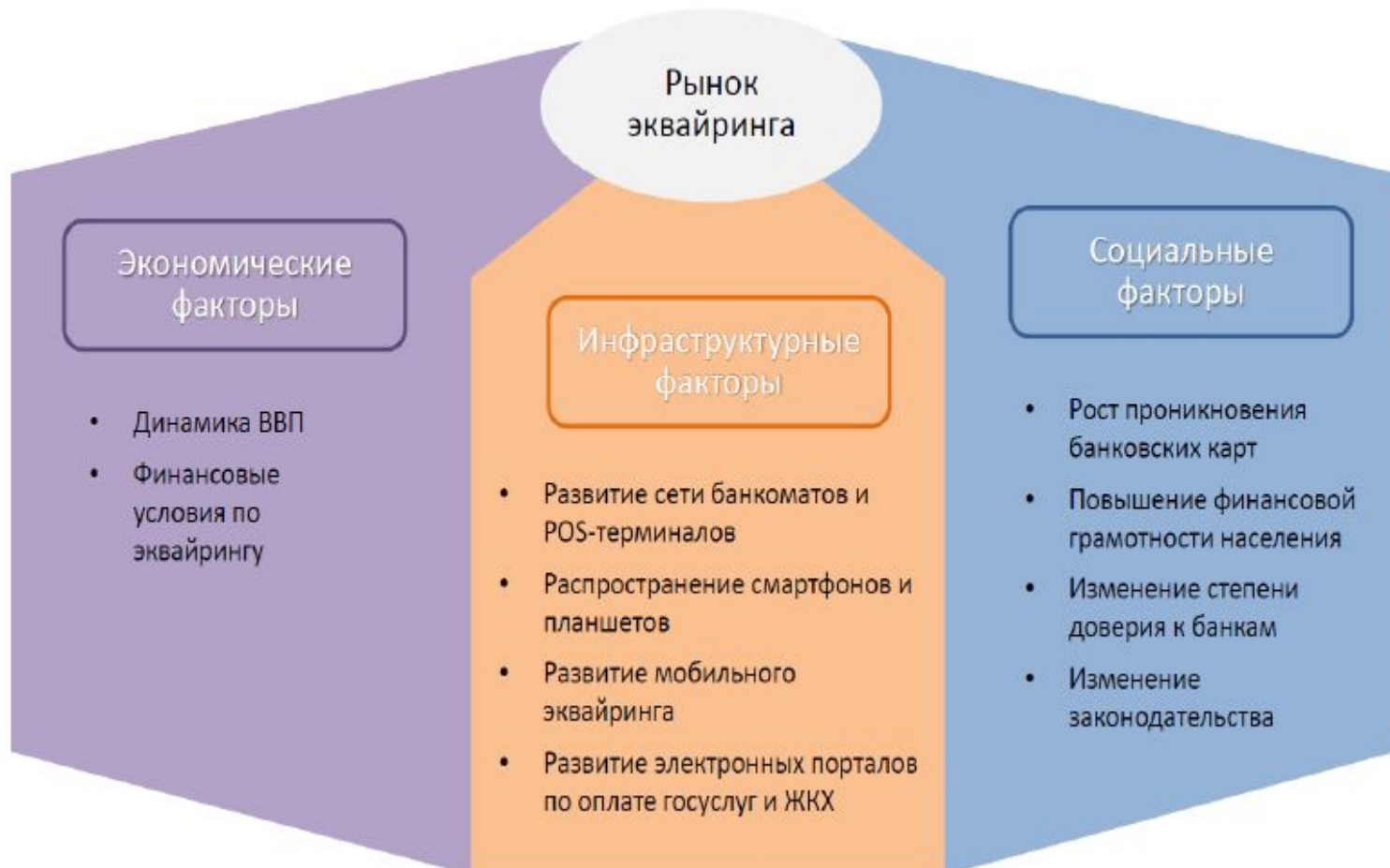


2014 г.

Структура эквайрингового оборота по картам MasterCard в разрезе банков-эмитентов



4.2.1 Acquiring Market



4.3. Payment infrastructure.

Платёжная инфраструктура России в цифрах



Развитость рынка платежей в России в сравнении с другими странами



▶ Date are taking from central Bank of Russia on 01.01.15 and

Global Payments Inc.



4.4. E-commerce market

25
млн.

активных онлайн-покупателей

7%

Среднегодовой рост отрасли в 2014-2018 гг.

195
млн.

заказов в интернет-магазинах в 2014 г.

7,7

онлайн-покупок совершает в среднем каждый покупатель



Способы оплаты в интернете в 2014 г, в %



4.5. Transactions



Данные: UCS

Fig. I Dynamics of the average transaction

Weekly turnover and number of transactions in Russia

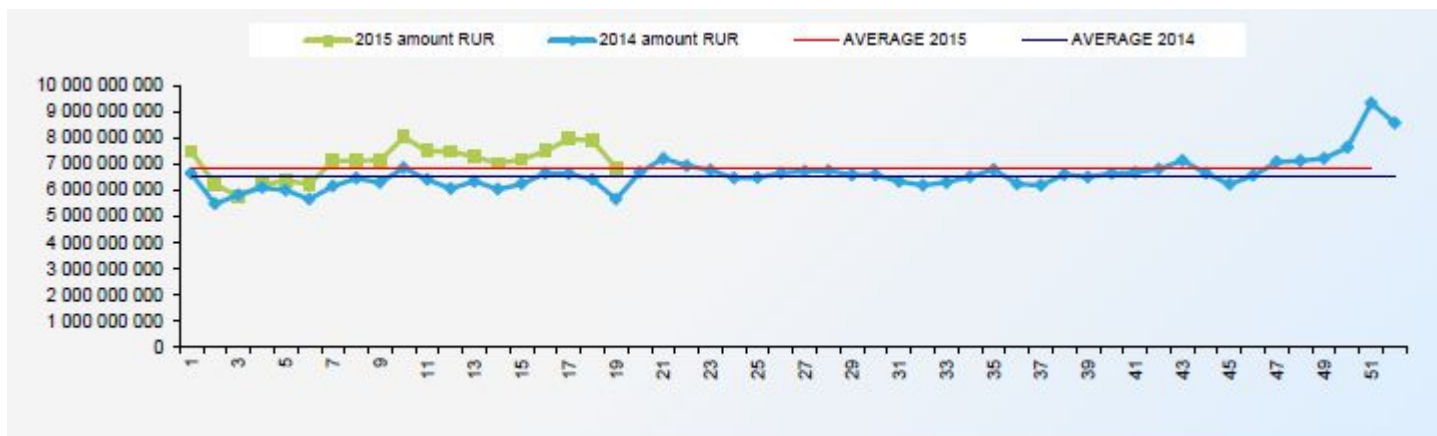


Fig 2. The dynamics of the turnover for the week

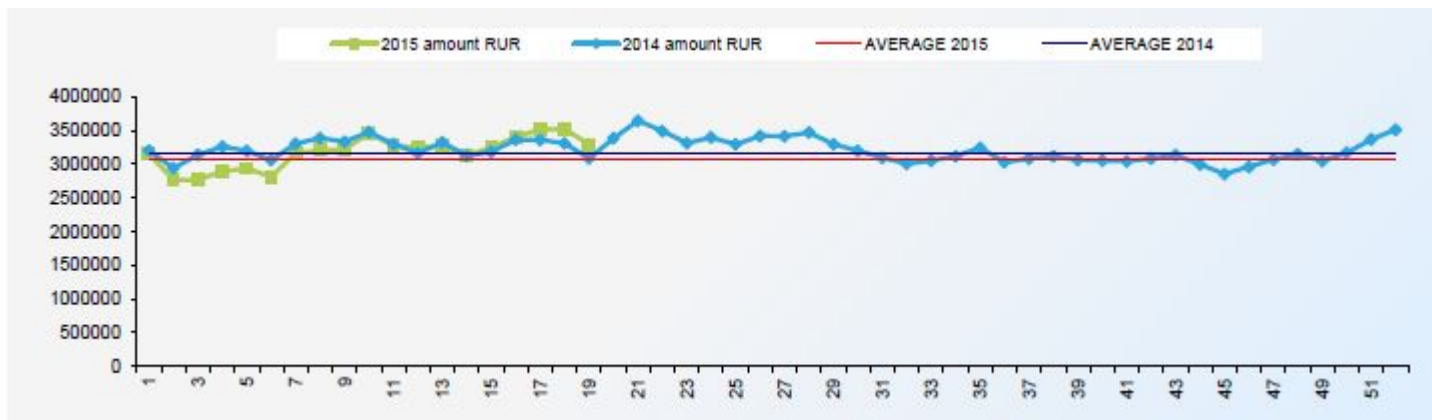


Fig 3. The number of transactions per week

PART II

(The second part will be representative by
Dimitry)

