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ALLOCATION OF LOSSES CAUSED BY UNAUTHORIZED PAYMENTS BETWEEN BANK AND CLIENT

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Abstract
This article focuses on rules for allocation of losses between bank and client in connection with card payment. It is stated that these rules on the one hand shall facilitate minimization of total losses and expenses for their prevention, on the other hand they shall ensure fair balance of interests of the contracting parties.

Costs reduction is achieved with the help of economically efficient loss allocation based on three principles: a) loss spreading; b) loss reduction; c) loss imposition. If application of all three principles provides the same result according to which the loss shall be assigned to the same party, then the proper loss allocation rules can be easily designed. If the results differ, then a comparative analysis of their economic effect is required to define which rule for loss allocation will allow reducing losses at most.

The article contains a comparative study of loss allocation rules provided by Truth in Lending Act, Electronic Fund Transfer Act, Directive (EU) 2015/2366 of the European Parliament and the Council of 25 November 2015 on payment services in the internal market, as well as provisions of the Federal Law of the Russian Federation on National Payment System.

The conclusion is made that the client should be assigned with loss risk to such extent which will facilitate his good faith in keeping the card and its details, as well as in regular monitoring transactions on the card. Other losses should be assigned to bank, which serve as incentive for bank to improve security of card payments.

Keywords: *Payment cards, unauthorized transactions losses at card payment, economically efficient allocation of losses, consumer protection*.

1. Introduction

When using a payment card the risk of money transfer based on the order of an unauthorized person increases considerably. This is due to the fact that the order comes to the bank through intermediaries (participants of the payment system). The bank has limited possibilities to make sure that the person giving the order is duly authorized to do so. Modes of fraud are diverse: making a copy of the card, using card details for shopping on the Internet, using stolen or lost cards.

Monitoring of unauthorized transactions with the use of payment cards is performed at the national and international levels. According to the data of the European Central Bank 17.3 million of unauthorized transactions for 1.8 billion Euro were performed in 2016 as a result of fraud with the use of payment cards issued in the territory of the countries covered by the Single Euro Payments Area[1].

Payment systems are continuously working on decrease of losses: they introduce new security methods for card details, launch additional services for identification of card holders, improve card reading equipment, etc. However it is hardly possible to exclude the risk of fraud with the use of payment cards because the more protection methods appear the more methods of their circumvention are invented.

As a result of third party illegal actions the bank incurs loss because the money is debited from the bank's correspondent account. Damages shall be compensated by the person who caused them. However, in practice it is difficult to prove the identity of the person responsible for the damages; brining him to responsibility causes considerable expenses which are often impossible to compensate. The fastest and easiest way for the bank to compensate the loss is to shift it to the client[2] (supposed payer) by means of debiting the client's account.

In civil law the contract is considered to be the general means to allocate losses between the parties. Parties are free to conclude a contract and to define its conditions. The rational parties are reasonably assumed to conclude a contract on mutually beneficial conditions. The party taking the risk of loss usually receives compensation (risk premium)[3]. However sometimes the rational choice theory does not work due to limited rationality or limited access to information of one of the contracting parties[4].

The client is typically deemed to be the weak party in the relations with the bank. There is always information and professional asymmetry in favour of the bank. As a result "profit-seeking 'sophisticated issuers' deliberately take advantage of 'imperfectly rational card-holders'"[5]. The client has no real possibility to influence the contract conditions in the process of bargaining, consequently, the bank almost always has the right to debit money from the client's account whether or not the transaction was duly authorized[6].

In many countries special acts are adopted to protect card holders. There are two laws in the United States of America which prescribe special rules for loss allocation between the

[1] European Central Bank. The Fifth Oversight Report on Card Fraud. URL=https://www.ecb.europa.eu/pub/cardfraud/html/ecb.cardfraudreport201809.en.html#toc1. Accessed 04 June 2019.

[2] The article focuses mostly on relations with consumers, that is why hereinafter the client will mean consumer unless otherwise specified.

[3] For the summary of the rational choice theory and its meaning for the legal analysis see: Ulen T.S. *Rational Choice in Law and Economics*, Encyclopedia of Law and Economics, 1999. URL= https://reference.findlaw.com/lawandeconomics/0710-rational-choice-theory-in-law-and-economics.pdf. Accessed 04 June 2019.

[4] On the issue of limitation of the rational choice theory application see: Michael J. Trebilcock, *The Limits of Freedom of Contract*, Harvard University Press, Cambridge, Massachusetts, and London, England, 1993

[5] Ali P.; Ramsay I.; Read C.; *Behavioural Law and Economics: Regulatory Reform of Consumer Credit and Consumer Financial Services*, 43 Comm L. World Rev., 2014, p.308.

[6] For instance in regulations of some Russian banks there is a condition that a transaction performed with the use of card and a PIN is admitted to be performed by the card holder and is not to be contested (Regulations for provision and use of VTB 24 cards (Public Joint Stock Company), URL=https://www.vtb.ru/personal/karty/tarify/. Accessed 04 June 2019).

bank and the client in case of unauthorized transactions: Truth in Lending Act[7] contains provisions for credit cards and Electronic Fund Transfer Act, for debit cards[8]. In 2018 the new European Parliament and Council Directive on Payment Services in the Internal Market (EU) 2015/2366 came into force[9]. Due to unification carried out in the EU, coherent legislation on card payments, including loss allocation rules, emerged in all EU countries. In the Russian Federation special rules for allocation of losses between the bank and the card holders are provided in the Federal Law on National Payment System enacted in 2011[10].

All the mentioned rules attempt to balance the interests of the client and of the bank. Their comparative study is of special interest as they are created in different legal systems and in different time periods. TILA and EFTA were adopted in the United States of America in 1968 and 1978 correspondingly. Directive 2015/2366 is actually a new revision of Directive 2007/64/EC[11] and slightly differs from the latter as regards the rules for refunding of unauthorized transactions. The Directive is to be implemented in countries with different legal frameworks, that is why it is designed to give freedom to national authorities when they choose forms and methods of its implementation[12]. The last to appear were the rules prescribed by the FL of RF on NPS. During their preparation TILA, EFTA and Directive 2007/64/EC were analyzed and considered, but eventually the Russian lawmaker created a unique method of allocation of losses.

This article focuses on the comparative study of provisions of all four regulatory enactments which allows revealing the similarities and differences between the adopted models of loss allocation, as well as to estimate their advantages and disadvantages. Part 2 gives an overview of the rules of TILA, EFTA, Directive 2015/2366 and FL of RF on NPS .

[7] Truth in Lending Act, Public Law 90-321-May 29, 1968 (hereinafter – TILA) URL=https://www.law.cornell.edu/uscode/text/15/chapter-41/subchapter-I). Accessed 04 June 2019. Together with adoption of TILA the Board of Governors of the Federal Reserve System adopted Regulation Z, ensuring performance of TILA (hereinafter – Regulation Z). URL=http://www.law.cornell.edu/cfr/text/12/part-226). Accessed 04 June 2019.

[8] Electronic Fund Transfer Act, Public Law 95-630-Nov.10, 1978 (hereinafter – EFTA) URL= https://www.law.cornell.edu/uscode/text/15/chapter-41/subchapter-VI). Together with adoption of EFTA the Board of Governors of the Federal Reserve System adopted Regulation E, ensuring performance of EFTA (hereinafter – Regulation E). URL=http://www.law.cornell.edu/cfr/text/12/part-205). Accessed 04 June 2019.

[9] Directive (EU) 2015/2366 of the European Parliament and the Council of 25 November 2015 on payment services in the internal market (hereinafter – Directive 2015/2366). Official Journal of the European Union L337/35. URL=http://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX%3A32015L2366. Accessed 04 June 2019.

[10] Federal Law of the Russian Federation on National Payment System, Rossiyskaya Gazeta No. 139 (hereinafter – FL of RF on NPS).
URL=http://pravo.gov.ru/proxy/ips/?docbody=&nd=102148779&intelsearch=%F4%E5%E4%E5%F0%E0%EB%FC%ED%FB%E9+%E7%E0%EA%EE%ED+%EE+%ED%E0%F6%E8%EE%ED%E0%EB%FC%ED%EE%E9+%EF%EB%E0%F2%E5%E6%ED%EE%E9+%F1%E8%F1%F2%E5%EC%E5. Accessed 04 June 2019.

[11] Directive 2007/64/EC of the European Parliament and the Council of 13 November 2007 on payment services in the internal market. Official Journal of the European Union L319/1. URL= http://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:32007L0064&from=EN. Accessed 04 June 2019.

[12] Article 249 of the Treaty establishing the European Community. *Official Journal P 325 , 24/12/2002.* URL=https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX%3A12002E%2FTXT. Accessed 04 June 2019.

Part 3 describes the principles of efficient loss allocation. Finally, Part 4 provides assessment of economic efficiency and fairness of the rules reviewed in Part 2.

2. Legislative Rules for Allocation of Loss between Bank and Client

2.1. TILA

In accordance with TILA, losses are assigned to the card issuer and only a limited amount of losses can be shifted to the client. The cardholder can be liable for an unauthorized use of the credit card for a sum not exceeding USD 50[13] and only if the card issuer proves that certain conditions were met, such as the card issuer duly notified the cardholder about potential liability, provided description of the means by which the cardholder could notify the bank about the card loss or theft, provided proper means for the ascertaining of the right to use the card[14]. The client can never incur liability to cover losses in excess of USD 50 according to TILA.

If unauthorized use of the card takes place after the card issuer was notified about the loss or theft of the card the client cannot be held liable for losses in all cases.[15].

2.2. EFTA

EFTA and its Regulation E provide for a complex progressive scale of limitations of consumer's liability in case of an unauthorized transaction. The amount of liability depends on several factors: ascertaining of the fact that the card was lost or stolen, proper fulfillment by the parties of their obligations to notify each other, the point in time when the losses occurred[16].

The consumer shall notify the financial institution, firstly, about the card loss or theft within 2 working days after becoming aware of the loss or theft, secondly, about unauthorized transaction, within 60 calendar days after receipt of the periodic statement.

If the consumer duly notifies the bank about the fact that the card was lost or stolen, his liability shall not exceed USD 50 or the actual amount of the unauthorized transactions performed prior to the notification (whichever amount is lesser)[17]. If the consumer notifies the financial institution about the card loss or theft in more than 2 working days but within 60 calendar days of receipt of the statement, then the consumer's liability shall not exceed USD 500[18]. If there is no notification within 60 days the consumer's liability for the transactions performed within 60 days shall be in the amount not exceeding USD 500 and for the transactions performed after the expiration of 60 days, unlimited[19].

If the card has not been lost or stolen and the consumer has notified the financial institution about an unauthorized transaction within 60 days, no liability is imposed upon the consumer. If the consumer has failed to notify the financial institution he shall incur liability

[13] 15 U.S. C. § 1643 (a) (1) (B)

[14] 15 U.S. C. § 1643 (a) (2)

[15] 15 U.S. C. § 1643 (a) (1) (E)

[16] The rules for losses allocation prescribed by Regulation E are presented schematically and clearly in the Consumer Compliance Examination Manual, prepared by Federal Deposit Insurance Corporation (FDIC) (VI. Deposits – EFTA, March 2019, URL= https://www.fdic.gov/regulations/compliance/manual/index.html. Accessed 04 June 2019).

[17] 12 CFR 1005.6 (b) (1)

[18] 12 CFR 1005.6 (b) (2)

[19] 12 CFR 1005.6 (b) (3)

for the unauthorized transactions performed after the expiry of 60 days and prior to the notification of the institution.

Amount of losses imposed on the consumer depends only on the time of notification about the card loss or theft and (or) about performance of the unauthorized transaction. Negligence on the part of the consumer (for example, writing the PIN on the card) does not affect the amount of liability that may be shifted on him[20].

2.3. Directive 2015/2366

The most complicated model is prescribed by Directive 2015/2366. The general rule is that the payment service provider shall immediately refund the payer the amount of unauthorized transaction, but in any event not later than by the end of the following business day after receiving the notice about the unauthorized transaction[21].

When an unauthorized transaction is the result of loss, theft or misappropriation of a card, the payer[22] may be obliged to compensate damages in the amount not exceeding EURO 50 but only if two conditions are met: the payer could possibly have detected the loss, theft or misappropriation of the card until unauthorized transaction took place and the loss was not caused by act or omission of an employee of the payment services provider[23].

If the payer acted with intent or gross negligence and for this reason failed to fulfill the obligations to use the card properly, to keep card details in secret, to notify the financial service provider about loss or misappropriation of the card or if the payer acted fraudulently he is obliged to reimburse the loss in full[24].

The client has no obligation to compensate losses if the payment service provider does not use strong customer authentication[25]. The same is true if losses occurred after the payment service provider has received the notice on card loss or theft[26]. Such losses shall only be compensated if they became the result of fraud on the part of the client[27].

2.4. Federal Law of the Russian Federation on National Payment System.

Article 9 of the FL of RF on NPS focuses on use of electronic payment devices including payment cards. The money transfer operator shall compensate the client for the amount of unauthorized transaction in three cases.

Firstly, when the transaction takes place after the client has notified the operator about loss of electronic payment device and (or) about its use without client's consent[28].

[20] Board of Governors of the Reserve System, Official Staff Commentary to Regulation E. 2001 URL= https://www.law.cornell.edu/cfr/text/12/appendix-Supplement_I_to_part_205. Accessed 04 June 2019.

[21] Article 73 of the Directive 2015/2366

[22] "payer" means a natural or legal person who holds a payment account and allows a payment order from that payment account, or, where there is no payment account, a natural or legal person who gives a payment order (Article 4 of the Directive 2015/2366)

[23] Article 74(1) of the Directive 2015/2366

[24] Article 74(1) of the Directive 2015/2366

[25] "strong customer authentication" means an authentication based on the use of two or more elements categorized as knowledge (something only the user knows), possession (something only the user possesses) and inherence (something the user is) that are independent, in that the breach of one does not compromise the reliability of the others, and is designed in such a way as to protect the confidentiality of the authentication data (Article 4 of the Directive 2015/2366)

[26] Article 74(3) of the Directive 2015/2366

[27] Article 74(2) of the Directive 2015/2366

[28] Part 12, Article 9 of FL of RF on NPS

Secondly, when the operator has not performed its duty to inform the client about a transaction[29]. The operator is obliged to inform the client about each transaction initiated with an electronic payment device sending a notice to the client[30]. However the legislator does not provide any specific rules for such notification. The bank therefore can include into a contract the rules that can be easily followed by the bank, whether or not they ensure actual receipt of the notice by the client[31]. For example, the frequent contractual condition is that the notice is deemed properly made if the information is available in the bank's office or on the Internet website of the bank. So the operator almost always properly fulfills its obligation to notify the client.

Thirdly, when the client is an individual and he has duly informed the operator about loss or unauthorized use of the card. The operator shall reimburse the amount of the unauthorized transaction if there is no evidence that the transaction was caused by the client's breach of the rules for the use of the card[32]. In the latter case the client shall loose his right for reimbursement whether or not such breach of rules occurred through his fault.

3. Loss Allocation Principles

3.1 General Description of Rules for Loss Allocation

Initially a bank incurs losses caused by the unauthorized transaction because the money is debited from its correspondent account. From an economic perspective there are several options to allocate losses between the contracting parties. Firstly, losses rest on the party that bears the initial loss. Secondly, losses are shifted to the other contracting party. Thirdly, losses are shifted to a third party "including the subsequent distribution of losses among several persons subjected to the similar risk"[33]. In the latter case the losses are initially imposed on one of the parties to the contract, which can then shift them to the third party.

Thus, there are three ways to allocate losses between the bank and the client: 1) losses rest on the bank; 2) losses are shifted to the client by requiring him to pay the damages (it is also possible to shift only part of losses to the client leaving the other part on the bank); 3) losses rest on the bank which has a right to shift them to other participants of the payment system.

Application of civil liability rules is a general way to shift losses to the counterparty. Liability can be fault-based or strict. In the first case the losses can be shifted to a debtor only if he breaks obligation with intent or negligence. In accordance with the strict liability doctrine a debtor is liable for damages caused by nonperformance or improper performance of

[29] Part 13, Article 9 of FL of RF on NPS

[30] Part 4, Article 9 of FL of RF on NPS

[31] Part 4, Article 9 of FL of RF on NPS

[31] The Central Bank of the Russian Federation explained that credit institutions have a right to chose any available way of client's notification, as well as to define a moment, in which notification on transaction with the use of electronic payment facility is considered to be received by the client, with the only limitation that at least one way of informing shall be free of charge for the client. See Letter of the Central Bank of the Russian Federation No. 172-T Recommendations for application of article 9 of the Federal Law on National Payment System, 2012. URL= http://www.cbr.ru/PSystem/P-sys/172-T.pdf, accessed 04 June 2019; Responses of the Central Bank of the Russian Federation to the questions concerning application of article 9 of the Federal Law on National Payment System, URL=http://www.cbr.ru/PSystem/P-sys/faq_9.pdf, accessed 04 June 2019.

[32] Part 15, Article 9 of FL of RF on NPS

[33] Kanev D.R. Losses allocation in civil law: Thesis for degree of candidate of legal sciences. – SPb, 2010. P. 67

obligations with or without the fault on his side. The losses are to be placed on the superior risk bearer in one of the following ways: if the creditor is the best risk bearer then the losses rest on him but if the debtor is the better risk bearer than he has to be liable for the damages suffered by the creditor. The general rule is that any risk is to be allocated to the party which is in the best position to avoid it or at least to reduce[34]. It requires "placing the loss on the party who can minimize the sum of loss avoidance costs and residual losses that remain even once cost-effective precautions are taken"[35]. Economically efficient risk allocation means that "the risk shall be imposed on the contracting party for which risk-related costs are lesser than those of the counterparty"[36].

3.2 Economically Efficient Rules of Loss Allocation

The rules for allocation of losses between the bank and the client shall, on the one hand, minimize the sum of losses and loss avoidance costs, and on the other hand, ensure a right balance of interests of the parties. Abiding by such criteria will facilitate development of retail electronic payments both because of the reduction of payment costs, and because of the greater clients' confidence in banks.

Economically efficient allocation of losses between the bank and the client is based on three principles: a) losses are imposed on the party that can achieve risk neutrality at the lowest cost (loss spreading); b) losses are imposed on the party that can reduce them at the lowest cost (loss reduction); c) the enforcement of assigned liability has to be as inexpensive as possible (loss imposition)[37].

When all three principles converge and identify one and the same contracting party as the superior loss bearer, then economically efficient rules for loss allocation can be easily designed. When the principles diverge the relative magnitude of each principle's effect on "the total cost of bearing, preventing, and adjudicating payment losses" [38] is to be detected.

3.2.1. The Loss Spreading Principle

In accordance with the loss spreading principle the losses are imposed on the party that can achieve risk neutrality at the least cost. Attitude toward risk depends on two conditions: "the relative size of the loss and the party's ability to spread it"[39]. Most clients are risk averse because the losses are large in proportion to their wealth and the client can hardly

[34] Agarkov M., *Bearer Securities. Selected Works on Civil Law. in 2 Volumes. Volume 1,* Center YurInfoR, Moscow, 2002. p. 122.

[35] Gillette C.; Walt S.; *Uniformity and Diversity in Payment Systems*, Chicago-Kent Law Review, Vol. 83, Issue 2, 2008, p. 529

[36]Arkhipov D., *Allocation of Contractual Risk in Civil Law. Economical and Legal Research*, Statut, Moscow, 2012, p. 58.

[37] These three principles were formulated by Robert D. Cooter and Edward L. Rubin in their article '*A Theory of Loss Allocation for Consumer Payments'*, Texas Law Review, Vol. 66, Issue 1 (November 1987), pp. 63-130. This article is one of the most prominent works devoted to the issue of economic analysis of rules for allocation of losses caused by third parties intervention into the relationships between the bank and the client. It is cited by most of the authors who consider this issue (see e.g. Weistart J.C. *Consumer Protection in the Credit Card Industry: Federal Legislative Controls*, Michigan Law Review, 1972, Volume 70, Number 8, pp. 1509 - 1512; Benjamin Geva, *Consumer Liability in Unauthorized Electronic Funds Transfers*, Canadian Business Law Journal, Vol. 38, Issue 2 (April, 2003), p. 237; Linds J. Rusch, *Reimagining Payment Systems: Allocation of Risk for Unauthorized Payment Inception*, Chicago-Kent Law Review, Vol. 83, Issue 2, 2008, p. 591).

[38] Robert D. Cooter, Edward L. Rubin, *op. cit.* note 32, pp. 84 – 85.

[39] Robert D. Cooter, Edward L. Rubin, *op. cit.* note 32, p. 71.

predict them and spread. The bank, on the other hand, is typically risk neutral as the losses are relatively small in comparison with the bank's resources and can be easily spread amoung the participants of the payment system, as well as other clients of the bank . Therefore, the bank can always achieve risk neutrality with lesser costs than the consumer. Of course there can be exclusions where the client is a sophisticated and wealthy person but this is irrelevant for drafting the general rule. Therefore, the principle of loss spreading points to the bank as the best risk bearer.

3.2.2. The Loss Reduction Principle

Following the loss reduction principle the losses are to be imposed on the party that can reduce losses at the lowest cost. If the losses can be reduced by both parties they can be divided between them. To reduce the losses the party should be actually able to avoid the losses and be responsive to the rules. Increase of amount of losses that are to be imposed on a person is only efficient as long as it causes the desired change of the person's conduct[40].

In contradistinction to the loss spreading principle the loss reduction principle allows both the bank and the client reducing the probability of losses taking precautions at a minimum cost.

The bank takes measures to increase security of payments and invests into the improvement of payment technologies. The bank is also more responsive, in comparison to the client, to liability rules because it has better knowledge of the law and ability to predict the consequences of its application.

The client can handle a card carefully, preventing misuse of the card or its details by third parties, promptly give notice to the bank in case of card loss or exposure of card details by third parties, check account statements and inform the bank as soon as possible about unauthorized transactions. But the capabilities of an average client should not be overestimated. For example, a cardholder typically does not regularly check an account statement taking a close look on all transactions included into the statement. Loss allocation based on this assumption will have no effect on the client's conduct and consequently will not reduce losses. Moreover, payment procedures are very complicated and most people are not able to understand what is happening inside "the Black Box"[41] and as a result of this to evaluate impact of their actions on possibility of losses[42].

[40] For instance, if a person does not change his conduct depending on whether he is liable for the damages in the amount of EURO 100 or 10 000, then assignment of losses on him in the amount exceeding EURO 100 does not comply with the loss reduction principle.

[41] Ramon P.DeGennaro compared the complicated relations of payment system participants, when performing card payment, with "the Black Box" (Ramon P.DeGennaro, *Merchant Acquirers and Payment Card Processors: A Look inside the Black Box,* Economic Review, Vol. 91, No 1, 2006, p. 32)

[42] A research made in 2007 in Harvard University clearly shows the limited capability of clients to react reasonably on the potential danger of obtaining data of payment card by third parties. Clients of one bank took part in the experiment: part of the clients used their real accounts, the other part - specially created for the experiment, and they knew about it. The task was to understand how client reacts on different preventive measures undertaken by bank to increase payment security. As the result it turned out that even when a message appeared at the monitor warning about fraud danger, 64% of clients with real accounts and 37% of clients with fake accounts terminated transaction performance. That means that awareness of actual danger of money loosing influenced just partially on the client's conduct. (Stuart E. Schechter *et al*, *The Emperor's New Security Indicators: An Evaluation of Website Authentication and the Effect of Role Playing on Usability Studies*, Feb. 4, 2007. URL= http://www.usablesecurity.org/emperor/emperor.pdf. Accessed 04 June 2019).

Thus losses should be shifted to the client to such extent that encourages his diligent and loss preventive conduct. Amount of losses imposed on the client should be sufficient to stimulate his diligence in keeping the card and its details, as well as in regular monitoring of transactions on the card, but not excessive to make him refuse from using a card. Other losses should be imposed on the bank to make it facilitate security of card payments. It is important to ensure that the client is provided with clear information about the risks, because only clear information can encourage the client to change his behavior.

After a bank has become aware about loss or misuse of the payment card he is the superior risk bearer in relation to any further losses because it can prevent them easily.

3.2.3. The Loss Imposition Principle

In accordance with the loss imposition principle the process of loss allocation shall imply minimum costs. Initially money is debited from the bank's correspondent account so there are no costs if the losses rest on the bank. At the same time the bank can easily and without additional costs shift losses to the client.

The only way to allocate losses efficiently is to design simple and clear rules of loss allocation between the bank and the client whose implementation will require minimal expenses. Complexity and expensiveness of the procedure of loss allocation make a party accept losses rather than prosecute the contracting party trying to shift them because this proves to be easier. As a result the above two principles of efficient loss allocation are violated because the losses rest on the person that can neither achieve a risk-neutrality with the lowest cost, nor influence probability of occurrence of such losses.

The risk of underenforcement is higher if the client is the one who should bring a claim against the bank. Firstly, expenses for legal proceedings are considerably higher for the client than for the bank. Secondly, the client can receive in the result of successful enforcement only compensation for the losses. The stakes for the bank are higher because it shall keep its good reputation and prevent emergence of undesirable case-law. A possible way to reduce negative effect of such imbalance is to put on the bank the burden to prove that there are sufficient grounds to impose liability on the client. At the same time requiring the bank to enforce liability through civil suits imply considerable expenses which "represent a deadweight loss to the participants in the payment system"[43]. For this reason an administrative enforcement can be preferable option.

4. Conformity of Legislative Rules with Principles of Efficient Loss Allocation

Application of the principles gives different result depending on whether or not the bank is aware of the loss and (or) misuse of the payment card. The losses occurred before and after client's notice to the bank are considered one after another.

4.1. Before Notice to Bank

4.1.1. TILA and EFTA

Under TILA rules the liability of the client for unauthorized transactions shall not exceed USD 50. The other part of the losses shall rest on the bank. EFTA provides the similar rules with the only difference that the client's liability can be increased to USD 500 or even to the full sum of unauthorized transactions if certain conditions are met.

[43] Robert D. Cooter, Edward L. Rubin, *op. cit.* note 31, p. 78.

In both cases it does not matter whether the losses are caused by the client's fault or accident. Loss allocation is based on the principles of authority that means that the loss "is allocated in accordance with principles of agency law and compliance with security procedures rather than by any reliance on negligence principles"[44].

Such approach to limit the liability of the client is criticized as contradicting to the loss reduction principle. The card issuer is "unable to distinguish the identity thief's use from authorized use" and "the finding of negligence implicitly suggests that the consumer was in a superior position to avoid the loss"[45]. The deviation from the economically efficient rules of loss allocation cannot be justified by necessity to provide higher protection for the consumers. The bank shall accept losses and consequently to spread them among all other clients increasing fees and charges. Protection of negligent consumers leads to the higher costs for non-negligent consumers which hardly can be considered as fair[46].

4.1.2. Directive 2015/2366

If an unauthorized transaction is caused by the payer's breach of one of his obligations (to use the card properly, to keep card details in secret, to notify the financial service provider about loss or misuse) and the payer acted fraudulently or negligently than he is liable for the full amount of losses. The fault-based rule complicates the procedure to shift the losses and therefore does not comply with the loss imposition principle. In such circumstances it is important to design an enforcement process which is easy and cheap. This task shall be resolves during implementation of the Directive on national level.

No-fault liability of the payer shall not exceed EURO 50 and possible only if the financial service provider uses the strong customer authentication. Such threshold is considered to be enough to encourage the payer diligently fulfill his most important obligations. At the same time the bank has significant incentive to use strong customer authentication. Such distribution of losses comply with the loss reduction principle.

4.1.3. Federal Law of the Russian Federation on National Payment System

The main difference between the FL of RF on NPS and other regulatory enactments is that the former presumes that the client initially incurs losses and receives right to shift these losses to the bank only in the limited number of instances under certain conditions. The bank evaluates at its own discretion whether these conditions are met. If the bank refuses to compensate to the client the amount of an unauthorized transaction the client can sue it. However considering the client's tendency to underenforcement the bank has little incentive to compensate damages to the client voluntarily.

The presumption that the client initially incurs the losses coupled with the difficult and expensive enforcement procedures leads to the fact that the losses rest on the client who is risk averse and has limited capacity to reduce the losses. Such rules contradict to two principles of efficient loss allocation: loss spreading and loss reduction.

The FL of RF on NPS makes no difference whether the losses caused by the client's fault or accident. The client is liable for the full amount of losses caused by his breach of the

[44] Clayton P. Gillette, Steven D. Walt, *op. cit.* note 13, p. 506. According to TILA an authority of a person to use a card can be actual, implied or apparent (15 U.S. C. § 1602(p)) and according to EFTA, only actual 15 U.S. C. § 1693a(12).

[45] Clayton P. Gillette, Steven D. Walt, *op. cit.* note 13, p. 535

[46]For this issue see Clayton P. Gillette, Steven D. Walt, *op. cit.* note 13, p. 529

rules for the use of the card. Such strict unlimited liability is against the loss reduction principle. The same is true for the rule in accordance with which the client is deprived of the right to compensate losses because he failed to notify the bank properly about the unauthorized transaction.

4.2. After Notice to Bank

All regulatory enactments contain the rule in accordance with which losses occurred after the bank has received a notification about loss or misuse of the payment card shall be imposed on the bank[47]. Such loss allocation complies with the loss reduction principle because after the bank has received notification it can exclude any further loss.

5. Conclusion

The loss allocation rules present the instance of the legislative intervention in the market justified by the necessity to protect the client who has limited rationality and bargaining power. To remedy the market failure the rules shall be economically efficient. The losses shall be allocated to the superior risk bearer.

The bank can always achieve a complete risk neutrality with lesser costs than the client (loss spreading), it can reduce the probability of losses (losses reduction) and no additional expenses are required to rest the losses on the bank (losses imposition). Consequently there are always strong considerations to leave the losses on the bank. At the same time a complete protection of the client from any losses can result in his unfair conduct which increases the total amount of losses. If the client is capable to reduce the probability of losses the rules encouraging his diligent conduct shall be designed (loss reduction).

Losses occurred before the bank became aware of the loss or misuse of the payment card should be divided between the bank and the client. The amount of losses shifted to the client shall be determined on the basis of the client’s capability to reduce the losses and his responsiveness to the rules. After the bank has received information about the loss or misuse of the payment card, it is in the superior position to prevent the further losses. To reach economically efficient allocation of losses clear and inexpensive enforcement procedure shall be created.

It is hardly possible to design the rules which perfectly comply with the principles of economically efficient loss allocation. However the serious derogation from the principles result in the transactions costs increase and even in the deadweight loss. The above legal enactments exemplify different modes of loss allocation between the bank and the client. Each of them has advantages and disadvantages. Directive 2015/2366 provides the rules which are best correspond to the efficiency principles. Other enactments significantly derogate from the principles without obvious justification.

[47] TILA (15 U.S.C. § 1643 (a) (1) (E)), EFTA (15 U.S. C. § 1693g (a)), Directive 2015/2366 (Article 74(3)), FL of RF on NPS (Part 12, Article 9).