

The effectiveness of Law enforcement: economic and legal analysis

Bahit Moldatyayevich Nurgaliev and Aiman Kudaybergenovna Kusainova

Karaganda University “Bolashak”, Erubayev str., 16, Karaganda, 100000, Republic of Kazakhstan

Abstract. Law and economy is one of the promising areas of research. The fact that the Republic of Kazakhstan moved to a market economy promoted the penetration of basic economic notions into criminal science and practice. Nowadays the questions of studying both general social consequences of crimes and economic justification for law enforcement costs seem quite urgent. The concept of using economic methods to study law is named “the economic analysis of law”. It is popularized for the research of issues connected with contemporary jurisprudence. In the article, the authors calculate the police effectiveness and detect that funding for police and its productivity are the correlated factors.

[Nurgaliev B.M., Kusainova A.K. **The effectiveness of Law enforcement: economic and legal analysis.** *Life Sci J* 2014;11(11s):511-515] (ISSN:1097-8135). <http://www.lifesciencesite.com>. 116

Keywords: law and economy, crime cost, cost and benefit, law enforcement, effectiveness

Introduction

For the majority of Kazakh researchers, economic questions do not concern directly the problems of law. While studying the problems of law, legal scientists rely mainly upon the analysis of the existing legislation and law-enforcement practice. At the same time they ignore the aspects of economic analysis which fully illustrates the cost and benefit of the carried out legal reform.

In view of contemporary law policy and legislation reforms in the Republic of Kazakhstan, it became necessary to use methods and approaches of economic science. At present, the scientifically based economic-legal methods become timely. They are used to analyze law enforcement, calculate the losses for state and society from crimes and detect the general trends and specificity of certain kinds of crimes.

Crime cost is not a simple notion. It includes economic, political, social, psychological and ideological factors. The cost is interesting as a historical fact: it can be considered as a certain system of social links which exist in the form of goods exchange [1]. There are many different definitions for the word “cost”. Business dictionary defines cost as a sum of money for which one can buy a certain amount of goods or service [2].

Social relations have an economic basis and their superstructure is political and legal. Social relations in the sphere of law enforcement and penal system are not an exception.

Western scientists have noticed long ago that jurisprudence and economics are connected.

On a large scale, crime problems have always been an object for interdisciplinary study. Criminology and sociology and also psychology and politology remain the dominant sciences for this

phenomenon. Economists joined the study of crime at a later date. We would like to show the contribution of economists, their theories for researching crime problems and the influence of these results on crime prevention and the efficiency of struggle.

Among western criminologists, a big significance belongs to scientific research aimed at studying the interconnection of economic and social factors with criminological situation. Economic and social factors include: growth of unemployment; the increasing number of people living below the poverty line; social inequality; loss of culture and others. First of all, these problems are studied by economic scientists. Sociologists and politologists also study a considerable set of problems. The attraction of economists, sociologists and politologists to crime problems makes it possible to obtain scientifically significant and reliable results. One of the first considerable works is the paper of well-known economist Gary Becker “Crime and Punishment: Economic Approach” [3].

The economic basis of law was also explained by Ronald Coase. In his research paper he proves that the legal system is based on the inequality of transaction costs to zero [4]. Not going into the details of his research, we can only note that the discovery of transaction costs phenomenon made by him helped economists to understand that the costs of market participants consist of product properties assessment, the differentiation of rights and the compulsion to respect them. This was the way to prove to them the dependence of economy on legal system and the opposite.

In our opinion, the problems concerning the assessment of economic efficiency of anti-crime measures are not studied well in contemporary Kazakh legal literature. There are almost no

fundamental research papers considering the questions of influence of economic factors on the work of law enforcement in struggle against crime.

Some issues connected with the influence of economy on jurisprudence, including law enforcement, are reflected in the works of such western scientists as R. Coase [4], Alon Harel and Keith N. Hylton [5], Richard B. Freeman [6], I. Taylor [7], Philip J. Cook, Jens Ludwig [8] and also Russian researchers: R.O. Dolotov [9], V.E. Kvashin [10], V.V. Kolesnikov and V.N. Bykov [11].

The movement to market relations created the necessity to enlarge the number of methods and approaches for studying the work of law enforcement bodies. For example, there are interesting methods of mathematic economic modeling, econometrics and the economic analysis of cost and benefit.

If they are used in Kazakhstan, one can see that the average growth of budget appropriations for law enforcement bodies is 20% per year. The necessity to raise costs is determined by the fact that the struggle against crime demands modern technical equipment, adequate financial compensation, legal framework updating and the application of intellectual property. That is why it is timely to analyze the costs for law enforcement bodies from the viewpoint of their effective use and effectiveness assessment.

This research analyzes the financial support for law enforcement bodies and the influence of social and economic factors on the effectiveness of their work. Besides, the goal is to define the term "crime cost" on the assumption of obtained conclusions.

Materials and methods

The initial research method is the dialectic method which substantiates the interdependence of all processes including those that run in economic and criminal spheres. Besides, the authors use the method of comparing the opinions of scientists about the studied problem.

Results and discussion

The Kazakh legal thought is in the scope of the traditional formal legal approach which does not take into account practical needs and the demands of economy and politics. Modern criminological researches quite rarely use such notions as "economic efficiency", "expenses", "costs" and "crime cost". As a result, legislative and law enforcement practice cannot analyze its legal decisions and enactments without analytical basis and scientifically substantiated suggestions.

Maybe, this method was used because criminal and criminal procedure legislation does not become an effective incentive for the struggle against

crime in Kazakhstan in spite of its innovative reforms.

In our opinion, the influence of economic laws on legal system is underestimated.

In global practice, there are two main lines of economic regulation. The first line is the influence of economic laws on economic system. The second line is the influence of economic laws on the relations not directly connected with economy [12].

The possibility to use the economic methods of analysis for law was first formulated by Jeremy Bentham. In his opinion, man aspires to the full satisfaction of his needs both in rightful behaviour and in case of a crime. Jeremy Bentham used a term which became popular nowadays: "crime cost". By this term, he meant the severity of punishment and its probability in case of a crime. So he thought that any man can decide whether to commit crime or not by making a calculation [13]. To be fair, it is worth noticing that economic incentives influence man's behaviour even when he does not realize it. For example, the majority of car users drive more risky when they are protected by safety cushions, ABS and seat belts. This phenomenon was described in 1975 by Sam Peltzman [14]. It was named "Peltzman Effect". A whole system of factors impacts law enforcement bodies: economic, socio-political, legal, ideological, psychological and organizational (administrative). Let us remind you that influence can be direct or indirect (mediated). In order to find out how economic factors influence the effectiveness of police, it is necessary to define effectiveness in general. As a rule, they mean by effectiveness the commensuration of obtained result with resources used to obtain this result. The diversity of functions performed by law enforcement bodies is the reason why the effectiveness of their work is measured by the whole range of indicators.

Police effectiveness is determined not only by the clearance rate and other indicators of police practice but also by the correlation between financial support and crime clearance, the index of confidence in police and the degree of satisfaction of police staff with salary, various rewards, labour conditions, etc. The majority of modern researchers are sure that norms should be used in such a way that gives the best result. Social factor is also highlighted. But as a rule legal goals are the cornerstone [15]. For example, the effectiveness of research is defined as a correlation between the quantity of detected crimes and the quantity of registered ones. This index is calculated by formula $DE = CD / CR$ (1), where DE is the detection effectiveness, CD is detected crimes and CR is registered crimes.

Still there is an approach when economic result as an index of police effectiveness remains in the background. Contemporary economic situation of movement to market economy in the countries of the post-Soviet area causes the necessity to use economic methods for the assessment of law enforcement work. At present, there is a task to minimize losses from crimes by working out economic indexes for the monitoring of police effectiveness. It can be made by exposing the correlation between the whole set of costs (means) with the results of their work

The assessment of effectiveness for any social activity is a complicated task, especially when we speak about public non-market services. In our case, it is the public security and legal order. The empiric research of effectiveness relied upon production proxy variables which correlated with the result that cannot be measured correctly. In the opinion of Miguel St. Aubyn, such variables can be: the quantity of finished cases; the quantity of arrests performed by police and the quantity of cases passed to the court [16].

The simplest way to calculate economic efficiency is to compare the total number of registered crimes and financial expenses for The Ministry of Internal Affairs. Calculation can be made by formula:

$$EE = CR / FC (2),$$

Where EE is economic efficiency; CR is registered crimes and FC is financial costs.

Let us represent as a diagram the costs of republic budget for the maintenance of the Ministry of Internal Affairs from 2007 to 2013 (Fig. 1) and the quantity of crimes registered by the Ministry of Internal Affairs from 2007 to 2013 (Fig. 2).

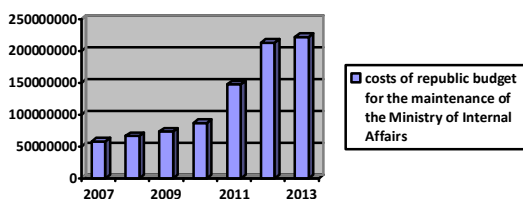


Figure 1. The costs of republic budget for the maintenance of the Ministry of Internal Affairs

The data represented in diagrams show how effective is the work of law enforcement bodies. Figure 1 gives an obvious characteristic to the republic budget concerning the maintenance of the Ministry of Internal Affairs. From 2007 to 2013 the costs for the Ministry of Internal Affairs increased almost four times.

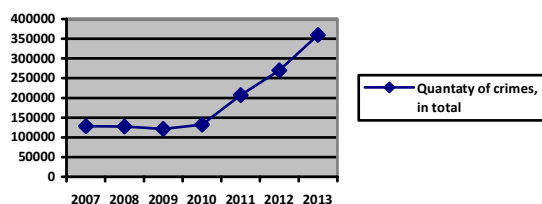


Figure 2. The quantity of crimes registered by the Ministry of Internal Affairs

During the considered period the number of employees reduced approximately by 20%. Beginning with 2010 the number of registered crimes grew. On the contrary, the effectiveness of investigations reduced from 2010 (Fig. 3). The economic efficiency of police work went down in 2010 but increased to the level of 2009 (Fig. 4). The evolution of investigation effectiveness and economic efficiency testify to the necessity to continue reforming the law enforcement bodies. Calculations show the effectiveness of law enforcement only in general sense. However, they allow making an idea about the work of law enforcement bodies.

Crime detection rate as an indicator of police effectiveness.

Calculations with the help of formula 1 give the following results: DE 2007 = 0.692; DE 2008 = 0.701; DE 2009 = 0.770; DE 2010 = 0.667; DE 2011 = 0.433; DE 2012 = 0.361; DE 2013 = 0.394.

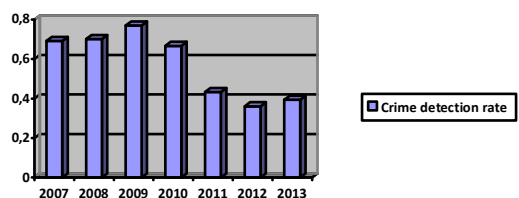


Figure 3. Crime detection rate (DE)

On the one hand, the obtained data show that the previous assessment system does not reveal objectively police effectiveness. On the other hand, statistical reports as an indicator remain probably the one assessment criterion for the effectiveness of law enforcement bodies (in Kazakhstan). Until a certain period, they stuck to the principle of “beautiful numbers”: a low quantity of crimes and a high rate of clearance. Due to this, the police of Kazakhstan continued the Soviet practice and concealed up to 25-30% of crimes (for example, the indexes in Figure 2 for 2007, 2008, 2009 and 2010). Situation gradually

changes. Electronic automated information system “Special accountings” show the real state of facts and the quantity of statements about crimes and delinquencies received from citizens. The introduction of criminal liability and personal responsibility of leaders (down to dismissal) for concealment and other infringements connected with the registration of crimes is a preventive action against such violations (for example, the indexes in Figure 2 for 2011, 2012 and 2013). In our opinion, this is a positive dynamics. Since mainly minor crimes are brought out of the shadow, their percentage increased, while the share of grave and gravest crimes reduced.

The State Program for Further Modernization of Law Enforcement System in the Republic of Kazakhstan for 2014-2020 was adopted in December, 2013. One of the main goals of this Program is to increase the effectiveness of law enforcement bodies. According to the Program, the effectiveness of work should be determined not only by quantitative factors. The plan is to introduce an index of public confidence similar to the global law enforcement practice.

We want to believe that current transformations in the law enforcement bodies of Kazakhstan have a complex direction. They must touch upon political, socio-economic, technological, informational and other aspects of their work.

Economic efficiency as an indicator of police work.

Under the movement to market relations, the law enforcement of the Republic needs a considerable financial support for their efforts to combat crimes. This problem exists not only in Kazakhstan but also in advanced countries. For example, the question of adequate financial support for the police of the Great Britain is brought up by well-known economists such as Leigh Drake and Richard Simper: “In recent years, the questions of funding for police become essential because it determines the effectiveness of police efforts” [17]. The experience of the Great Britain shows that proper funding, and particularly rewarding, increase the effectiveness of police [17]. The analysis of police effectiveness in India showed that it is not well-financed in spite of the fact that police expenses form a third part of total budget of the country [18]. Surender Kumar and Sudesh Kumar note that financial support plays an important role in the improvement of police work [19]. The funding of Kazakh law enforcement from the republic budget did not comply with objective reality. That is why they enlarged the republic budget for the Ministry of Internal Affairs of Kazakhstan. For example, during

the considered period from 2007 to 2013 (Figure 1) the budget was enlarged by 3.8 times. The necessity to increase the funding of law enforcement system is caused by the fact that in spite of the measures taken remains one of the reasons which contain reforms in social and economic areas. The increase of financial provision for law enforcement bodies created not only good conditions for the effective struggle against crimes and crime prevention but also the improvement of the maintenance and staffing for law enforcement. Besides, it increases their business activity in market relationships.

The main goal of the budget funding of law enforcement is the concordance of republic costs with the results significant for society. Article 4 of the Budget Code of Kazakhstan fixes the principles of the budget system in the Republic of Kazakhstan and defines the principles of effectiveness: the development and execution of the budget based on the necessity to obtain the best direct result by using the approved amount of budget funds or to obtain the direct result by using the minor amount of budget funds [20]. The implementation of this principle becomes simpler as p. 69 of the Budget Code contains the definition of words “direct result”. They mean by it the quantitative characteristic of state functions, powers and services within the limits of provided budget funds that fully depends on the work of organization which perform these functions, powers and services. So, the contemporary budgeting in Kazakhstan is aimed at the control of results.

The data obtained by formula 2 are represented below in diagram (Fig. 4).

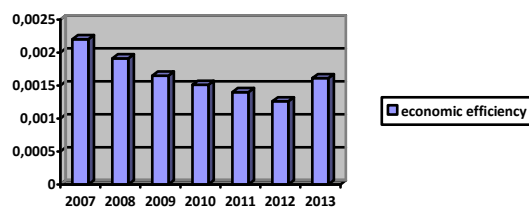


Figure 4. The economic efficiency indexes of the police (EE).

As we can see, the efficiency of the police changed in this period. Thus in 2007 the economic efficiency index was 0.0022, в-in 2008 – 0.00191, in 2009 – 0.00165, in 2010 – 0.00151, in 2011 – 0.0014, in 2012 – 0.00126 and in 2013 – 0.00161. So if we take into account the economic instability, economic crisis and inflation rate, it is possible to say that the means of the republic budget were assigned rationally and, as a consequence, the economic efficiency indexes of the law enforcement are high.

Conclusion

The research shows the significance of social-economic analysis of police work. This research is mainly based on the prospect of socio-economic methods. The effective use of republic funding for law enforcement is an urgent economic, legal and administrative problem of today.

The performed calculations of police work effectiveness show that reforms promote an intensive development of law enforcement bodies. The assessment system used in the article demonstrates that the increase of funding for law enforcement does not improve the crime rate in Kazakhstan. At the same time it stimulates the growth of investigation effectiveness. We used simple assessment methods for police productivity. For more complete assessment, one should use mathematic methods which can allow making concrete conclusions about the optimization of costs for law enforcement and about the costs and benefits of economic measures aimed at reducing crime.

So it seems important for further research to use innovative approaches for the effectiveness assessment of law enforcement using data of higher quality.

Corresponding Author:

Dr.Nurgaliev Bahit Moldatyayevich
Karaganda University “Bolashak”
Erubayev str., 16, Karaganda, 100000, Republic of Kazakhstan

References

- Vinnichenko, S.I., 1999. Cost as a condition for civil (business) contract. Date Views 03.03.2014. www.dissercat.com/content/tsena-kak-usloviye-grazhdansko-pravovogo-predprinimatelskogo-dogovora).
- A value that will purchase a finite quantity, weight, or other measure of a good or service. 1. Business Dictionary. What is price? Definition and meaning. 2014. Date Views 03.03.2014. www.businessdictionary.com/definition/price.html.
- Becker, G., 1968. Crime and Punishment: An Economic Approach. *The Journal of Political Economy*, 76: 169–217.
- Coase, R., 1960. The Problem of Social Cost. *Journal of Law and Economics*, 1, Date Views 03.03.2014. www2.econ.iastate.edu/classes/tsc220/hallam/Coase.pdf.
- Harel, A. and K. N. Hylton., 2012. *Research Handbook on the Economics of Criminal Law*, Edward Elgar Publishing, pp: 272.
- Freeman, R.B., 1994. "Crime and the Job Market," NBER Working Papers 4910, National Bureau of Economic Research, Inc., pp: 263.
- Taylor, I., 1994. "The Political Economy of Crime" In: Maguire, M., Morgan, R. & Reiner, R. *The Oxford Handbook of Criminology*, Oxford: Oxford University Press, pp: 265–303
- Cook, P.J. and J. Ludwig, 2010. *Economical crime control*. Cambridge, MA. Working Paper. www.nber.org/papers/w16513, pp: 1-39.
- Dolotov, R.O., 2012. Crime cost as a criminological indicator: some methodological aspects. *Criminological Journal* 3: 15-21. www.cj.isea.ru/pdf.asp?id=13278.
- Kvashis, V.E., 2008. Crime “cost” as a criminological problem. *Criminal Law*, 6: 94–102. www.cj.isea.ru/pdf.asp?id=13278.
- Kolesnikov, V.V. and V.N. Bykov, 2009. On the essence of economic approach to the fight against corruption as a threat to Russia’s security. Collection of scientific articles “Global Economic Crisis: the facts and overcoming ways”, Saint-Petersburg, The Institute of Business and Law. www.ibl.ru/konf/031209/68.html.
- Pozner, R., 2004. On the use of economic theory and the abuse of it in legal analysis. *Date Views* 21.02.2014 www.refdb.ru/look/2653364-pall.html
- Introduction to the principles of morals and legislation by Jeremy Bentham. Oxford. Clarendon Press. London, New York and Toronto. Henry Frowde. M VII. *Date Views* 21.02.2014. www.lf-oll.s3.amazonaws.com/titles/278/0175_Bk.pdf.
- Peltzman, S., 1975. The Effects of Automobile Safety Regulation. *Journal of Political Economy*. 83 (4): 677-726. *Date Views* 21.02.2014. www.jstor.org/discover/10.2307/1830396?uid=3738416&uid=2134&uid=2480777907&uid=2&uid=70&uid=3&uid=2480777897&uid=60&purchase-type=article&accessType=none&sid=21103886475447&showMyJstorPss=false&seq=2&showAccess=false.
- Varkova, S.A., 2013. The monitoring of legislation and law enforcement practice: the research of legaltheory. PhD thesis. Moscow.
- Aubyn, M. St., 2007. Law and order efficiency measurement – a literature review. ISEG Lisbon Technical University. Portugal, pp: 27.
- Drake, L. and R. Simper, 2003. The measurement of English and Welsh police force efficiency: A comparison of distance function models. *European Journal of Operational Research*: 147-165.
- Verma, A. and S. Gavirneni, 2006. Measuring police efficiency in India: an application of data envelopment analysis. *Policing: An International Journal of Police Strategies & Management*, 29(1): 125–145.
- Kumar, S. and S. Kumar, 2013. Does Modernization Improve Performance: Evidence from Indian Police Department of Business Economics, University of Delhi, Indian Police Service, pp: 21.
- The Budget Code of the Republic of Kazakhstan. December 4, 2008 # 95-IV. *Parliament Bulletin*, 2008, 21 (2525), pp: 93.

7/8/2014