SUMMARY OF THESIS

Zoltán Felméry


THEORETICAL FOUNDATIONS AND TECHNIQUES FOR MEASUREMENT

Ph.D. dissertation

Supervisor:
József Papp, PhD
Associate professor

Budapest, 2017
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1. Preliminaries and aims of the study

The aim of the thesis is 1) to identify the actors and coordination mechanisms existing in the Hungarian internal security sector, 2) to measure the extent of their involvement and 3) to review and analyse the economic-statistical toolbox that is necessary for the measurement. The demand for the review concerning involvement in the internal security sector is particularly important in case of two fundamental security creating mechanisms and actors: the law enforcement organization structure of the state operating among the laws of bureaucratic coordination and the private security sector operating among the laws of market coordination.

In case of internal security we tend to think that ensuring order is an obligation of the state solely. The statement – which was true in the socialist years – is not valid any more. After the change of regime numerous actors and mechanisms appeared in providing internal security. If there are more actors and mechanisms, it would be useful to ascertain the extent of the single mechanisms. Ultimately, the study is looking for the answer to the question: who we really owe thanks for being safe?

2. The content and methodology of the thesis

2.1. The content of the thesis

The introductory chapter of the thesis – in order to introduce the topic and raise attention – deals with general involvement in social tasks, the role of security in state-building, the „privilegization” of security by the state and the privatization. It contains a literature review regarding the above mentioned topics and the author’s reflection on this review [Chapter 1]. After that, the first part of the dissertation is concerned with the theoretical description of the internal security system. The system and the subsystems are described with the application of the logic model of János Kornai’s coordination mechanisms (Kornai 1983 and 1993). In point of internal security we identify five coordination mechanisms (bureaucratic-, market-, self-governing-, ethical- and aggressive coordination) and try to develop a typology that considers internal security actors (state, private security companies, social movements, supporters and violent organizations; in summary: the guardians) along the coordination mechanisms. Besides the guardians we designate the actors to be defended (the state, social groups, enterprises and individuals; in summary: the guarded). In addition, based on the legal classification of objects protected by law, we complement our typology and attach the object of guarding activity to the guardians and the guarded. We systematically attempt to designate and describe 1) the guardians, 2) the guarded, 3) the coordination mechanisms that influence the relation between the actors and determine the regularity
of the guarding activity, 4) the object of guarding activity and 5) an independent logic model referring to the internal security sector. The description of the internal security system is based on the beforementioned model and the justification for its use is based on assessments, literature, legal sources and interviews made with experts of the various sub-systems [Chapter 2]. In order to take into account information that can not be found in the literature, eleven semi-structured interviews were carried out with experts and leaders familiar with- and employed in the internal security system. Information gained from the interviews fundamentally contributed to the preparation of the logic model that describes the internal security system.

The second part of the thesis deals with the measurability of – through the theoretical review identified – coordination mechanisms. For this purpose we evaluate some traditional economic-statistical tools and elaborate on new solutions and estimations. Based on the various mechanisms, we examine internal security expenditures (expenditure and revenue statistics) and the number of employees and individuals – together: contributors – working and concerned in internal security services (employment and contributor statistics). In the former case – when the extent of expenditures is considered the indicator of involvement – 1) beside the review of the state internal security expenditures (in nominal and real terms and as a percentage of the GDP), 2) we quantify the private security expenditure of Hungarian individuals and enterprises based on the security companies revenue data and 3) try to estimate expenditures that are allocated to protection money collected by violent organizations. Whereas the use of resources of social movements and supporters is not associable (the activities are not monetarised), examination of these can not be achieved through expenditure statistics. In this case we consider the number of employees and individuals working and concerned in internal security as the indicator of involvement. We quantify the number of contributors connecting to the various coordination mechanisms, as well as the number of contributors connecting to the subsystems of the internal security system. Moreover, we share some thoughts in connection with the statistical analysis of crime. To diagnose the extent of the different actors’ existence, we put to use publicly available statistical figures, data from the Act of Budget, publicly inaccessible databases of professional organizations and estimates concerning all the data mentioned previously [Chapter 3]. Thereafter, we summarize and consider future research opportunities [Chapter 4].

In chapter 1-4 we use positive analysis. The last chapter contains the author’s normative thoughts about coordination mechanisms operating in the internal security system and about appropriate and welcomed existence of the different guarding actors.
In this regard, the last chapter is based on the values of the author and reflects subjective opinions. With this chapter we would like to stand up for the idea: a PhD thesis (based fundamentally on positive analysis) can also include normative statements, if the author draws the attention to them. On the other hand, we would like to convey the message that one can not dodge the responsibility of making a subjective statement about the topic and the author equally needs to tell something about himself and his standpoint. Beside the familiarization of scientifically verifiable statements, it is our undertaken goal that we would like to lay down those kind of mechanisms that we prefer in the configuration of internal security. Therefore, we wish to contribute to the transformation of the society’s image about the internal security system [Chapter 5]. The summary of the thesis contains only the most important thematic elements.

2.2. Research questions, methodology, hypotheses

The research activity of the thesis aims the description of the internal security system and the system operating coordination mechanisms. For this purpose, the following research questions concern us and from the statements of the thesis we wait answers to the below research questions.

RQ1: Which actors contribute to ensuring the security of the Hungarian society?

RQ2: What kind of regularities and patterns are typical to these actors? Based on the logic model of coordination mechanisms are we able to analyse the internal security system?

RQ3: How can we measure and evaluate the involvement of the contributing actors in internal security? The available economic-statistical tools are appropriate for this purpose?

RQ3a: Based on the available expenditure statistics, are we able to conclude the extent of involvement? The expenditure data as the indicator of involvement are acceptable?

RQ3b: Based on the available employment – and other contributor-concerning – statistics, are we able to conclude the extent of involvement? Is the employment/contributor data as the indicator of involvement acceptable?

RQ3c: Does the Unified System of Criminal Statistics of Investigative Authorities and Public Prosecution contain sufficient information about capacity constraints and existence of the state in internal security (especially in investigation)?
RQ4: To what extent do the different actors contribute to ensuring internal security?

Our research activity is a descriptive one: it is oriented to describe the internal security system. You can see from the research questions above that it ultimately tries to measure the involvement of the security ensuring actors. Nevertheless, it does not deal with the examination of the reasons and the cause-effect relations. In this respect it is not considered as an explanatory research. The purpose of the dissertation is not to review the causes but to present a toolkit for measuring the involvement.

Although in order to explore the possibilities of measurement our examination applies economic-statistical tools, it can not be qualified as a core quantitative research. We do not 1) apply primer quantitative measurements, 2) use econometric methods and multivariate data analysis and 3) examine relations between variables. In the thesis: economic statistics are simply used in a descriptive, quantifying and certifying manner. At the same time, the thesis can not be considered as a total qualitative research either: it does not apply action research, text-, narrative- or interview analysis. It is situated between quantitative and qualitative research activity. On the other hand, it is the combination of both. The purpose of the thesis is clear: we would like to characterize the internal security system.

In the thesis – for reasons explained in detail there – we do not formulate hypotheses concerning the actual extent of involvement. However, since the above research questions were not limited to the actual extent of involvement and the formulation of preliminary assumptions of the researcher traditionally can not be separated from a doctoral thesis (or only in a more justified case) regarding our research activity we formulate the following hypotheses:

H1: The state is not the only actor in internal security transactions. Furthermore, non-state actors also take part in internal security activities.

H2: Internal security transactions undertaken by the different actors can be described by common characteristics. The internal security system can be analysed on the basis of the logic model of coordination mechanisms.

H3: We are able to measure the extent of involvement with the available statistical tools (with estimations and corrections if required).

H3a: Based on the available expenditure data – in case of mechanisms that are characterized by monetarised transactions – we can draw conclusions about the extent of involvement.
H3b: Based on the available contributor data we can draw conclusions about the extent of involvement.

H3c: In case of the analysis of the Unified System of Criminal Statistics of Investigative Authorities and Public Prosecution – by ascertaining capacity limitation – we can draw conclusions about the extent of state involvement.

H4: The internal security involvement of the state and private companies is comparable by quantitative indicators.

2.3. Conceptual clarification

Security policy – the discipline dealing with security challenges of human societies – classifies the society threats according to their origin, size, scope, intensity, sector and dimension (Táлас – Gazdag, 2008; Gazdag, 2011; Hegedűs 2009). The various classifications listed in the thesis help us in the clear definition of our research area and research topic. In the thesis we only discuss local size – political – threats that do not exceed the boundaries of the state and threaten internal order and social coexistence of the society. We – rather simplistically – refer this as internal security. We limit the analysis to the guardian function of the society defined in the philosophical review of our writing to the function that ensures the internal order of social coexistence and protect the life and property of the community members. In conclusion: we focus on the function that conduces the avoidance of the Hobbesian state of war (Hobbes, 1970 [1651]). When we use law enforcement concepts: prevention and crime avertion as well as the preparation of criminal justice are considered as the object of our analysis. In the context of internal security we deal with 1) police services that are manifested in the defense of public order and security and 2) prosecutorial services that are supervising investigations (Diagram 1).

At the same time, in order to delineate the research topic correctly, all elements connected to other security interpretations are excluded from the analysis.

The concept of internal security used in the dissertation can not be equated with the concept of public order used by international statistics or legal science. Differences in conceptual clarifications are explained in detail in the dissertation.
3. Results of the study

3.1. The logic model of the internal security system

3.1.1. Coordination mechanisms

Transactions in the internal security sector can be examined through the regulatory effect of coordination mechanisms. Based on the logic model of János Kornai (Kornai, 1983 és 1993), in the thesis we deal with five coordination mechanisms. We analyse the bureaucratic-, the market-, the ethical-, the self-governing and the aggressive coordination and the main characteristics of these mechanisms (Diagram 2).

Diagram 1: The conceptual constriction of internal security

Diagram 2: Coordination mechanisms in the internal security sector
3.1.2. The guardian-guarded relations

The guardians that are involved in internal security are presented in the thesis based on historical examples. The author describes the traditional and current tasks of them, as well as the coordination mechanisms that motivate their activities. Five actors (state, private security companies, social movements, violent organizations and protective supporters) are identified and within these categories a) police, gendarmerie, municipal police, public prosecution-; b) private security companies-; c) civil self-defense organizations, neighborhood watch associations, self-defense initiatives of minorities-; d) paramilitary armies/extremist groups, organized criminal groups- and e) citizens' self-defense initiatives are examined. These organizations all provide internal security activities and/or articulate their involvement in them. Besides the guardians we designate the actors to be defended. In this case four actors (state, private companies, social groups and individuals) are identified. We also review the relationship between guardians and guarded (Diagram 3). According to the results of the thesis, it can be seen that guarded can not be simply classified based on the guardians.

Diagram 3: The guardian-guarded relations
3.2. Involvement in numbers

Following the identification of the guardians and the guarded, it is worth ascertaining the extent of internal security transactions carried out by the identified actors. We examine the disposable economic-statistical tools (expenditure, employment and criminal statistics) from a capability standpoint in order to fulfill the functions of the measuring instrument. Internal security government expenditures (percentage of GDP) and criminal statistics are only suitable for measuring state involvement and bureaucratic coordination. Expenditures expressed in absolute terms are only suitable for measuring mechanisms that are coordinating monetarised transactions. Employment statistics can be used theoretically to evaluate all actors and mechanisms.

3.2.1. Internal security government expenditures (percentage of GDP)

The use of the internal security government expenditure index is fairly widespread. Using the index we are theoretically able to ascertain how much expenditure is allocated to a social sector – in percentage of the GDP. In addition, we may think that knowing the extent of the consolidated general government expenditures allows us to ascertain state involvement. At the same time, the relation to GDP may result in international comparability. The index is used by statistical agencies (Eurostat, 2012; United Nations Statistics Division, 2014; UNESCO Institute for Statistics, 2013; KSH, 2014 and 2015); it is included in analyses and databases of supranational economic, financial, trade, health and environmental organizations (OECD, 2015; WEF, 2015; FAO, 2013; ILO, 2014; IMF, 2010); economic forecasts, competitiveness reports and other social indexes apply it as an indicator (EBRD; IMD, 2014; Heritage Foundation, 2015; Kopint-Tárki, 2009; Századvég, 2012) and it continuously appears in various social science analyses and yearbooks (Stockholm International Peace Research Institute, 2011; The International Institute of Strategic Studies, 2014). The references of the index in international (Poullier–Hernandez, 2000; Tanzi–Schuknecht, 2000; Tiffen–Gittins, 2004; Tanzi, 2011) and Hungarian (Szamuely, 2004; Györffy, 2006; Csaba, 2007; Csillag, 2009 and 2013; Juhász, 2010; Muraközy, 2010 and 2012; Pesuth, 2014) scientific publications also demonstrate the widespread use of it. Although the index is quantified and published in the dissertation, due to four methodological problems, we do not recommend the use of it (Table 1).
Table 1
Methodological limitations of the internal security government expenditure index

<table>
<thead>
<tr>
<th>Limitation</th>
<th>A brief summary of the limitation</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Arithmetical limitation</td>
<td>Government expenditures – as a general rule – are quite rigid in short term. In most cases, there are no conditions for a radical increase in expenditures from one year to another, while a significant cut always have a political price. On the other hand, GDP – that better resonates for changes in external environmental conditions – is less shock-resistance and therefore it can be characterized by extreme volatility even in short-term. It can be proved arithmetically that if the numerator of a fraction is quasi-robust, while the denominator is volatile, the value of the fraction shows strong fluctuations in a time line. Due to this fact, everyone who wants to apply the index needs to exercise caution and prudence.</td>
</tr>
<tr>
<td>2. Limitations concerning the interpretation of government functions</td>
<td>The international statistical methodology quantifies government expenditures by the functions of government. However, if we want to ascertain the expenditure index regarding public order and safety, we can not ignore the following problem of interpretation. For example it contains the expenditures of court of justice-, penitentiary- and fire department services. At the same time, it does not include the subventions/expenditures of civil protection that is definitely affected by internal security challenges. The author considers that a certain extent of disintegration is absolutely necessary. The disintegration makes those social phenomena discernible that are easy to lose track behind aggregations and average numbers that include numerous other activities.</td>
</tr>
<tr>
<td>3. Limitations concerning GDP</td>
<td>The problems of the GDP are reviewed by numerous writings. Last, the Stiglitz-Sen-Fitoussi report analysed these limitations (Stiglitz–Sen–Fitoussi, 2009). Limitations concerning the GDP primarily mean problems regarding the quantification of 1) wealth and development; 2) innovation, 3) non-product activities that are difficult to estimate, etc. The limitations of the indicator are illustrated in the thesis. Whereas the GDP – due to its limitations – in case of „stock-intensive” countries less-, while in case of „flow-intensive” countries more approaches real performance, the usability of it as a reference point is questionable.</td>
</tr>
<tr>
<td>4. Limitations concerning the interpretation of the index</td>
<td>In connection with the practical use of the internal security government expenditure index there is a problem that concerns the interpretation of it. The fact, whether state involvement is large or small, can not be evaluated solely in the light of the knowledge of the index. To be able to evaluate state involvement in the internal security sector, it is also necessary to recognize the extent and quality of „non-state” security activity. The extent of state involvement and bureaucratic coordination do not reveal much about the whole &quot;internal security portfolio&quot; in itself.</td>
</tr>
</tbody>
</table>
3.2.2. The absolute value of internal security government expenditures

As long as we do not use the internal security expenditure index, but focus on the absolute value of expenditures: 1) we do not face arithmetical limitations and 2) we can distance ourselves from the limitations concerning the GDP. At the same time, the above mentioned other problems (limitations concerning the interpretation of government functions and limitations concerning the interpretation of the index) still exist. In case of examining the absolute value of internal security government expenditures we can describe mechanisms that are characterized by monetarised transactions. The absolute value of internal security government expenditures in nominal and real terms are equally reviewed in the thesis (Diagram 4).

Diagram 4: Internal security government expenditures in nominal and real terms (2000-2014)

Internal security government expenditures are calculated as follows. The source of each expenditure data is the value recorded in the actual Budget Act. We fully calculate with public order ensuring law enforcement expenditures responsible for public order. We also consider state dotations allocated to the Nationwide Civil Self-Defense Organization. In addition – by 40 percent of the total costs spent to this purpose – we also take the prosecutorial investigation expenditures into account. When calculating expenditures, we need to take into account some restrictive conditions. On the one hand, at the calculation of law enforcement expenditures we pay respect solely to organizations, that 1) provide public order ensuring services as a core task, or 2) in some way can be linked to these services (they provide supporting services). On the other hand, due to the lack of publicly accessible distinguishable expenditures, all costs of the considered institutions are taken into account. The guidelines of calculation are...
discussed in the thesis in further detail. In 2014 the state spent 311.48 billion Forints on internal security. We consider this amount as the extent of bureaucratic coordination.

In order to ascertain the extent of market coordination and compare it to the bureaucratic coordination we need to quantify the value of private security services (in current prices) bought by both individuals and businesses. Expenditures afforded to private security services by individuals and businesses implicitly match to the aggregation of 1) the revenue of private security companies and 2) the value added tax of this activity. Using the publicly available statistics, we are theoretically able to this. The 80 sector of the statistical classification of economic activities (published in Hungary by the Central Statistical Office) includes companies that deal with security and investigation activities (KSH, 2013). However, official statistics have several methodological problems. The statistics contain numbers that are definitely misleading, due to the fact that these numbers include companies that nowadays do not provide security services, although registered private security in their scope of activity. As a result of this, official numbers equally include companies that 1) currently do not provide security services, 2) maintain security directorates and therefore provide security services, but not as their core activity (security services are provided in order to defend the various core activities) and 3) also provide additional – even security-related – activities besides security services. In order to filter out the above mentioned effects, we did not use the official statistics when calculating revenue figures. Instead, we used a database that contained the available financial data of the most important Hungarian private security companies. The database that is not publicly accessible was given to us by the Hungarian Personal-, Property-protection and Private Investigaton Professional Chamber. Using these data – with own estimations and corrections if required – we can state that the total net revenue of the Hungarian private security industry was 202.6 billion Forints in 2015 (Table 2). In this regard, the total value of private security services and market coordination is estimated about 257,32 billion Forints. Based on the above mentioned statements we can easily say that the idea that internal security of our society is fundamentally provided by the state, is quite simply not true. Internal security transactions that are typically financed by private actors make up the four-fifths of state resources spent for this purpose. Moreover, if we take into account that expenditures linked to the private security services – as a result of the extensive practice of present frauds in the industry – constitute only as lower estimates, it is also possible that the value of these services in reality exceed the state internal security expenditures.
Paramilitary troops and organized criminal groups were considered violent organizations by us. Transactions of the former are not monetarised, so the involvement of paramilitaries can not be examined through expenditure data (independently of the legitimate or legally prohibited existence). However, the extent of transactions carried out by organized criminal groups, the total sum of collected protection money, can be estimated (even if there is a huge margin of error). The starting points for us are the various research activities carried out at the end of the 1990s and early 2000s (Van Dijk és Terlouw, 1996 in Van Dijk, 2008, Kertész, 2001, Alvazzi del Frate, 2004). Based on these, about 1,5 percent of Hungarian private companies may pay protection money. We tried to reproduce this ratio and for this reason it is assumed by us that 4 percent of catering businesses and retail stores-, 2 percent of commercial accommodations and 0,4 percent of other small and medium sized businesses pay actually protection money. We also assumed that owners who are willing to cooperate with violent organizations may pay ten percent of their revenues in return for the protection. The total sum of collected protection money and the extent of aggressive coordination was estimated about 55,98 billion Forints (Diagram 5).

Table 2
Financial figures of private security companies (2015)⁵

<table>
<thead>
<tr>
<th>Year</th>
<th>Revenue (Billion HUF)</th>
<th>Balance sheet earnings (Billion HUF)</th>
<th>Equity (Billion HUF)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Average</td>
<td>Total industry</td>
<td>Adjusted total industry</td>
</tr>
<tr>
<td>2015</td>
<td>0,284</td>
<td>190,6</td>
<td>202,6</td>
</tr>
</tbody>
</table>

![Diagram 5: The estimated amount of paid protection money (2014)⁶](image)

We have seen before that in the examined period the extent of bureaucratic coordination was 311,48-,-, while the extent of market coordination was 257,32 billion Forints. The estimated extent of aggressive coordination – not suprisingly – is
noticeably smaller, but not at all negligible (Diagram 6). Internal security transactions linked to self-governing and ethical coordination mechanisms simply can not be measured by using expenditure data.

![Diagram 6: The extent of coordination mechanisms based on expenditures (2014/2015)](image)

### 3.2.3. The indicator of involvement: the number of contributors

In order to ascertain the extent of coordination mechanisms that exist in the internal security system, we can also rely on the number of contributors that are operating in the single subsystems. In case of the state and bureaucratic coordination employment data are ascertainable based on the Organizational and Operational Rules of the important organizations. In the absence of these Rules, data of budget documents, public information requests and other press releases were taken into account. The detailed documentation of the procedure followed by us is provided in the dissertation. During the involvement classification we were generous: if any "suspicion" arose about employees providing internal security services at least partially, they were all ranked into the involved categories. We can state that 45015 contributors are involved in the bureaucratic coordination of the internal security system (38494 people directly and 6521 people indirectly carry out internal security activities).

When quantifying the number of employees working in the private security sector we can rely on two sources. On the one hand, the official statistics cited above are still available. On the other hand, we can use the database of the Hungarian Personal-, Property-protection and Private Investigation Professional Chamber. The problems of official statistics mentioned above equally exist in this case. In addition, due to the fact that fraud and black employment is remarkable in the private security sector, the use of
the database – that contains only registered employees – is also not an option for us. As a consequence of this, we deduced the number involved in private internal security services from the number of attendance of a regulatory professional training. In this regard, we believe that according to our conservative estimation 61574 people worked in Hungary in 2016 as a security guard.

When ascertaining the extent of self-governing coordination mechanism that coordinates the internal security transactions of civil movements we – based on the regulation – calculated with the number of contributors at the Nationwide Civil Self-Defense Organization and the closely related Neighborhood Watch Association. The number of the former is about 52,000, while the latter has 15158 members. Therefore, the total number of contributors involved in self-governing coordination is 67158.

Furthermore, the number of violent organizations and the extent of aggressive coordination can be estimated. 1) Based on the Map of Hate Groups edited by the Athena Institute, it can be ascertained that active and in internal security activity involved extremist groups in Hungary contain 650 members (Athena Institute). In addition, the number of organized criminal groups involved in collecting protection money can also be estimated (with significant latency). Even the number of members in the most famous mafias is characterized by estimates that have an enormous margin of error. In case of Hungary, no one has ever tried to make such estimates earlier, as far as we can tell. Therefore, the domestic data should be generated from the available data of Slovakia and Czech Republic. According to estimations from 2011 there were approximately 100 groups and 3000 members in the Czech Republic, and 50 groups and 700 members in Slovakia (Michaletos, 2011). Maybe we do not distort much if we calculate with similar numbers as we experienced in case of Czech Republic – based on the central role of Hungary in the European distribution and coordination of organized crime. With this process we certainly do not overestimate the number of members involved in the Hungarian organized crime activities. It is assumed that every third organization and every third member carries out this type of activities. Therefore, the number of members who are involved in collecting protection money is estimated to be about 1000 people. As a conclusion of the above mentioned we can say that the extent of aggressive coordination mechanism, based on the total number of members engaged in paramilitary extremist- and organized criminal groups, is estimated to be about 1650 contributors.

Similar to what we have seen in case of expenditures, we are equally not able to ascertain the extent of ethical coordination that is based on the number of contributors,
since we do not know the number of protective supporters who prevent crimes from altruistic belief and thus provide internal security activities in the absence of any statistics. At the same time, the inability of measurement in the present should not mean the lack of ambition in the future. The registration of a crime in the Unified System of Criminal Statistics of Investigative Authorities and Public Prosecution gives us a theoretical opportunity to equally register the fact that a crime was prevented by the intervention of a protective supporter (it could have been registered that an internal security transaction was realized).

Based on an overview of employment/contributor statistics, it can also be stated that there are other substantive mechanisms in internal security besides bureaucratic coordination (Diagram 7).

![Diagram 7: The extent of coordination mechanisms based on the number of contributors (2015/2016)](image)

### 3.2.4. The statistical analysis of criminal acts

Theoretically, criminal statistics can be also used for evaluating state involvement. Due to the fact that by analyzing the number of crimes we can get a picture of state capacities and capacity limitation. In Hungary crimes are registered in the Unified System of Criminal Statistics of Investigative Authorities and Public Prosecution. Both the data and information found in the statistics and received during our personal interviews reinforce the assumption that the number of those crimes that are detected a year by the police is somewhere between 200 and 250 thousand. This number is practically independent of the structure of the organization system, the volatility of financing and the evolution of the total number of crimes. Comparing the appropriate data from 2008, 2009 and 2013, we can state that a reduction in the number of
registered crimes can not be associated with a decrease in the rate of undetected crimes (Diagram 8). On the other hand, due to the continuous manipulation of statistics, we have to conclude that the picture we can see in the USCIAPP has to taken with a grain of salt. At the same time, we solely would like to point out that a significant part of the internal security transactions of the state can be well estimated through the capacity limitation.

3.3. The internal security system

The internal security system is a complex system that as a set of several subsystems ensures the internal security of the society. There are well ascertainable connections between the subsystems that are discussed in detail in the thesis (Diagram 9). The system can be properly analysed along the logic model of coordination mechanisms. It can be clearly ascertained that actors involved in internal security transactions (guardians and guarded) along what kind of mechanisms carry out their activities. Based on the dominant mechanisms coordinating certain internal security transactions, the system can be divided into separate subsystems and the relationships between these subsystems can be described by scientific methods.
In order to ascertain the extent of the various coordination mechanisms and the involvement of various actors, the available economic-statistical toolbox is basically sufficient. At the same time, we need to raise awareness in connection with limitations. All methods are not suitable for evaluating all actors and mechanisms. In addition, the presence of counterfeiting and latency is significant, and our estimations may also include distortions. Based on the examination of expenditures we can state that the extent of bureaucratic and market coordination is approximately the same, while the estimated extent of aggressive coordination is noticeably smaller but also not negligible. Based on an overview of contributors, we can also conclude that there are more significant coordination mechanisms in the field of internal security. The assumption of the ordinary people that internal security is provided solely by the state is certainly not correct. The internal security of society is ensured by actors described above and the coordination mechanisms regulating their activities.

For intellectual honesty what has been said above should be complemented with the following idea. The different internal security tasks carried out by the various subsystems can not be matched entirely with each other. Guarding activities in many cases are similar, but in some cases show significant differences. Whereas internal security of the society is formed by all activities of the subsystems, in case of the measurement these specific activities should not be filtered out from the „portfolios” of the single subsystems. The specific tasks equally belong to the internal security
transactions of the subsystems and therefore they need to be measured and taken into account if possible.

Our research also proves that although the extent of involvement can be measured by quantitative indicators, the comparison on the level of the subsystems is limited and based on resource usage only. Some guarding activities are relevant in all subsystems, in case of these activities there is also opportunity to draw comparisons besides the quantitative measurement. However, other activities are only relevant in some subsystems and in case of these only quantitative measurement has legitimacy (there is no possibility to draw comparisons).

The evaluation of our research hypotheses is the following (Table 3).

<table>
<thead>
<tr>
<th>The number of the hypothesis</th>
<th>The content of the hypothesis</th>
<th>Evaluation</th>
</tr>
</thead>
<tbody>
<tr>
<td>H1</td>
<td>The state is not the only actor in internal security transactions. Furthermore, non-state actors also take part in internal security activities.</td>
<td>Accepted</td>
</tr>
<tr>
<td>H2</td>
<td>Internal security transactions undertaken by the different actors can be described by common characteristics. The internal security system can be analyzed on the basis of the logic model of coordination mechanisms.</td>
<td>Accepted</td>
</tr>
<tr>
<td>H3</td>
<td>We are able to measure the extent of involvement with the available statistical tools (with estimations and corrections if required).</td>
<td>Accepted</td>
</tr>
<tr>
<td>H3a</td>
<td>Based on the available expenditure data – in case of mechanisms that are characterized by monetarised transactions – we can draw conclusions about the extent of involvement.</td>
<td>Accepted</td>
</tr>
<tr>
<td>H3b</td>
<td>Based on the available contributor data we can draw conclusions about the extent of involvement.</td>
<td>Accepted</td>
</tr>
<tr>
<td>H3c</td>
<td>In case of the analysis of the Unified System of Criminal Statistics of Investigative Authorities and Public Prosecution – by ascertaining capacity limitation – we can draw conclusions about the extent of state involvement.</td>
<td>Accepted</td>
</tr>
<tr>
<td>H4</td>
<td>The internal security involvement of the state and private companies is comparable by quantitative indicators.</td>
<td>Rejected</td>
</tr>
</tbody>
</table>
4. List of publication by the author

4.1. List of publications by the author in the dissertation’s topic


4.2. List of other publications by the author


5. References


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1 In the thesis we deal with the dark-coloured elements.
2 The diagram contains the coordination mechanisms and the most important characteristics of them. The source of information: Kornai (1983 and 1993).
3 On the diagram we illustrated the guardians and the guarded. In relation to the various guardians the dark blue-coloured guarded can be interpreted (the dark blue shapes mark the existing relations).
4 The diagram shows 1) the internal security government expenditures in nominal and real terms and 2) the trends of expenditures between 2000 and 2014. Expenditures are expressed in billion Forints. In case of real term calculations expenditures are compared to the values of 2000. The source of data: in case of expenditure data the actual Budget Act; in case of inflation KSH.
5 The table shows revenue-, balance sheet earnings- and equity data of private security companies in 2015. The data are expressed in billion Forints. A total of 712 company data were used for calculations. However, due to the fact that 42 companies did not have sufficient financial figures, 670 companies were used in case of average and total industry calculations. At the same time, the adjusted total industry data are based on 712 enterprise figures. In this case, the missing 42 data were replaced by the average ones. The source of data: a database received by the Hungarian Personal-, Property-protection and Private Investigation Professional Chamber.
6 The diagram shows the estimated amount of paid protection money in 2014. The data are expressed in billion Forints. The method of calculation is described in detail in the thesis and briefly in the text of the summary of the thesis.
7 The diagram shows the extent of coordination mechanisms based on expenditures in 2014/2015. In case of bureaucratic coordination data from 2014, while in case of market and aggressive coordinations data from 2015 are illustrated in the diagram. The source of data is the same as previously indicated in the main text. The detailed designation of the sources can be found in the thesis. The detailed documentation is not possible due to the limitations of this summary.
8 The diagram shows the extent of coordination mechanisms in 2015/2016 based on the number of contributors. In case of bureaucratic and self-governing coordination data from 2015, while in case of market and aggressive coordination data from 2016 are illustrated in the diagram. The detailed designation of the sources can be found in the thesis. The detailed documentation is not possible due to the limitations of this summary.
9 The diagram shows the number of registered crimes and the rate of undetected crimes in 2008, 2009 and 2013. Undetected crimes are expressed in percentage. The source of data: Prosecutor General's Office (2014).
10 The diagram shows the subsystems and the dominant coordination mechanisms of the internal security system. The connections of the subsystems are also illustrated in the diagram.